IDEC
Taking the Lead

Pittsburgh - 2004
March 23-28

Conference Chair	**Wendy Beckwith** **La Roche College**
Abstract Review Coordinators	**Marie Gentry** **Nancy G. Miller** **University of Arkansas**
Abstract Editor	**Kristen Moore**

TABLE OF CONTENTS

Papers continued

POSTERS

THE REVIEW PROCESS

Abstracts included in this document were selected through a revised review process developed by the IDEC Task Force for Conference Paper Review. The most significant change is that the paper and presentation categories were collapsed into one. The poster category was retained, and a panel category was added. In addition, all categories used the same set of instructions and required the same submission components (an abstract and a 1500 word narrative). Likewise, reviewers used the same evaluation criteria for each. Finally, the quantitative scale for individual criteria was eliminated. Reviewers applied a number score at the end of the evaluation as a means of rating acceptability for presentation.

Each submission was blind-reviewed by three jurors. In cases where there was a discrepancy between scores, a fourth juror reviewed the abstract. Of 71 submissions, 55 were accepted. There were 41 papers, 10 posters, and 4 panels.

Reviewers, under the direction of Marie Gentry and Nann Miller, Conference Abstract Review Coordinators, University of Arkansas, included:

Cindy Beacham, West Virginia University
Denise Bertoncino, Pittsburg State University
Martha Burpitt, Meredith College
Carol Caughey, Oregon State University
Zane Curry, Texas Tech University
Betsy Gabb, University of Nebraska
Lucinda Kaukas Havenhand, Virginia Commonwealth University

David Matthews, Ohio University
Bridget May, Marymount University
Thea Scott-Fundling, Marymount University
John Turpin, Washington State University
Robin Wagner, Marymount University
Stephanie Watson, University Of Minnesota
Jennifer Webb, University of Arkansas

Definitions of entry categories, from the Call for Abstracts:

Paper

A paper is formal in structure and format. The goal may be to present a question or issue that is structured as conceptual, analytical, empirical research, or applied research and that is grounded in a systematic process and/or inquiry. The question or issue may be descriptive and/or prescriptive in analysis and involve interior issues of theory, education, pedagogy, practice, or the built environment. The author(s) presents issues or topics derived from a critical question or speculative subject matter, such as theoretical models, with the intention of advancing a treatise, position, or state of the interior design discipline or practice. Paper/presentations may be finite and conclusive, providing descriptive and/or conditional findings to the audience. Or, the paper/presentation may be directed toward a public discourse that provides critique and feedback to the author(s), enabling him or her to think reflectively and refine the work.

Panel

Panels are interactive and less formal in structure and format. The goal could be to stimulate interaction on a relevant topic or issue of interior design pedagogy, practice, theory, history, and/or criticism. The author(s) develops the background and framework to engage panel members and the audience in discussion and exchange, to stimulate creative thinking, and to garner additional insight and reflection by participants. Subjects that are innovative or creative or controversial in approach either as application or conceptual development of current issues or topics in interior-design education, pedagogy, professional practice, as well as theory, or criticism are appropriate as presentations.

Poster

A poster strives to foster exchange between members through visual images, text, or diagrams. This format offers experiential interaction and directs audience/author engagement or allows independent viewing. The author(s) develops visual information that expresses ideas or tracks a process relevant to interior design teaching, pedagogy, method/process, theory, practice, history, and criticism. The audience comments, questions, or seeks dialogue about the content or interpretation of the topic with the author(s) to advance the idea or further apply the process.

CLARITY IN DESIGNER-CLIENT COMMUNICATIONS: IMPLICATIONS FOR TEACHING

Cindy V. Beacham
West Virginia University

Purpose or Issue

The proposed presentation is based on a study that investigated the need for a tool or other means of support to enhance communication between design professionals and clients involved in the design of preschool spaces to improve projects. Communication is a key component in the success of every design project, yet use of "design language" or vernacular terminology used by interior designers and architects can both intimidate and confuse the listener if terms are not clearly explained (Cherry, 1999). This research attempted to investigate the issue of communications disparity and offer a suggested method of intervention to help both client and design professional. This area of research also has considerable implications for design teaching.

Guided by Gardner's Theory of Multiple Intelligences (1993) and Bronfenbrenner's Ecological Model of Development (1979), the following research questions were addressed: (a) Is a tool or support document needed to help educate and enhance communication between clients and design professionals in the early phases of designing a preschool facility? and (b) If so, what are the format and content issues that need to be addressed in developing such a tool?

Methodology or Process/Context

A multi-method data collection procedure was used including a focus group and individual interviews (n =20). Focus groups were held to determine broad issues identified by design professionals including interior designers and architects; and child development professionals including teachers, administrators, and child care center owners regarding communications throughout the design process. Once broad issues were identified, individual interviews were held with design and child development professionals to determine more in-depth elements of preschool design communications that need to be addressed. All participants had recent experience (within the past 2 years) with designing new preschool facilities. The study was conducted in the context of preschool design, but has implications for design communications in all specialty areas.

Summary of Results

The most noteworthy finding was that the perceptions of design professionals and clients regarding levels of communication, client education, and understanding of the project and procedures were dissimilar. Design professionals believed that they had communicated clearly with their clients, however clients felt that communication from the design professionals had been unclear and confusing, and that they received insufficient information to understand the design process or their responsibilities.

The primary implication of this study for design educators is the importance of including interpersonal communications in design education curriculum. Making conscious decisions to provide guidance in the classroom setting for students in both interpersonal skills and client education will reduce the discrepancy found between clients' perceptions and designers' perceptions of levels of communication in future professional interactions.

References

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.
Cherry, E. (1999). *Programming for design.* New York: John Wiley & Sons.
Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences*. (2nd ed.). New York: Basic Books**.**

COMPUTER ATTITUDES AND LEARNING STYLES OF INTERIOR DESIGN STUDENTS

Dr. Diane M. Bender
Arizona State University

Purpose

Computers impact every stage of the design process, from ideation to construction. In turn, they influence interior design education. As technology becomes more transparent in the learning process (Bates, 1995), knowing how computers impact student learning is imperative for interior design educators. Likewise, an individual's attitude toward computers may be affected by his experience with learning computer skills in the classroom. Research on learning style theory within the interior design discipline has increased in recent years. It been used as a framework for improving instructional methods with left-brain/right-brain activities (Nussbaumer, 2001), problem-solving in a Universal Design studio (Jones, 1990), and as a tool to understand two- and three-dimensional visualization skills in interior design students (Nussbaumer & Guerin, 2001). Students are drawn to specific professions that utilize a dominant learning style and having this learning style may even be a prerequisite to success in that chosen profession (Baldwin & Reckers, 1984). Teaching computer-based skills to multiple learning styles poses a challenge for today's interior design educators.

The purpose of this study is to investigate a relationship between computer attitudes and learning styles. Specifically, this investigation searches for a relationship between the dimensions of computer attitudes (computer anxiety/confidence, computer liking, and computer usefulness) as categorized by the Computer Attitude Scale developed by Loyd and Gressard (1984) and the types of learning styles (converger, diverger, accommodator, and assimilator) in Kolb's (1985) Learning Style Inventory. It is hypothesized that (a) a diversity of learning styles will be found in the sample population, (b) there will be a relationship between a student's dominant learning style and his computer attitude, (c) computer experience will influence computer attitudes, and (d) the student's year in the major and his age will influence computer attitudes, computer experience, and dominant learning styles.

Methodology

One-hundred forty-three interior design students at a major Southwest university completed a biographical data sheet, the Computer Attitude Scale, and the Learning Styles Inventory in the spring semester 2003. Descriptive statistics (frequencies and percentages) and inferential statistics (multiple two-way ANOVAs with the alpha level set a .05) were used to determine significant relationships between computer attitudes, learning styles, amount and type of computer experience, year in major, and other demographic variables.

Summary of Results

Results indicate the majority of interior design students included in this sample is divergent learners (71), with accommodators (33), assimilators (24), and convergers (15) also represented. This is consistent with past research, in which interior designers were classified as divergers, or the most creative of the learning style groups (Kolb, 1985). A significant shift in learning styles occurred between the first and last years in the major. Analysis currently is underway to assess any significant relationships among the main variables of computer attitudes, learning styles, and computer experience. Any significant or unusual findings will be related in the presentation. In addition, suggestions will be provided for teaching to multiple learning styles, integrating technology into individual course methodology, and incorporating technology into a typical interior design curriculum.

References

Baldwin, B.A. & Reckers, P. (1984). Exploring the role of learning style research in accounting education policy.
        Journal of Accounting Education, 2(2), 63-76.
Bates, A.W. (1995). *Technology, open learning and distance education*. London: Routledge.
Jones, L. (1995). Application of Kolb's learning theory as a framework for teaching universal design. *Housing and*

Society, 22(1&2), 62-75.

Kolb, D.A. (1985). *Learning style inventory: Technical Specifications.* McBer and Company.

Loyd, B.H. & Gressard, C. (1984). The effects of sex, age, and computer experience on computer attitudes.
        AEDS Journal, 18(4), 67-77.

Nussbaumer, L.L. (2001). Theoretical framework for instruction that accommodates all learning styles. *Journal of*
        Interior Design, 27(2), 35-45.

Nussbaumer, L.L. & Guerin, D.A. (2000). The relationship between learning styles and visualization skills among
        interior design students. *Journal of Interior Design*, 26(1), 1-15.

CHAIRS: INNOVATIVE DESIGN FROM HISTORICAL SOURCES

Noreen Connelly, ASID, IDEC
University of North Texas

Purpose

History in the broadest sense—period style, tradition, heritage, precedent, experience, custom—influences design thinking in myriad ways. Historical reference has been abundantly evident in all areas of design since the mid-1970s. This study examines the role of historical style and precedent in the creative process and uses chairs as the examples. In so doing, it is a synthesis of design criticism, theory, and method. The study asserts that there are numerous ways, which are not at all imitative, whereby the richness and diversity of history can enrich and expand our creative vocabulary.

Methodology

This study looks at Modern and Post Modern chairs designed in both Europe and the United States since World War II that demonstrate historical application. It considers each chair within the philosophical and theoretical framework of the design movements. It looks at the theoretical position on historicism within each movement. It compares contemporary chairs to their historical source or antecedent chairs in the areas of form, ornament, materials and technology.

This study addresses the issue of how designers use history by critically analyzing the techniques used by specific designers who have applied history and precedent in the design of specific chairs. It describes, in detail, how the study chairs are derived from and yet, remain very different from their historical sources. It looks at the impact of new materials and technology on form-giving. Essential to this study is the belief that an historical form interpreted in a new material can be a relevant innovation for consideration as much as an original form that utilizes traditional materials or construction techniques.

Summary

This study demonstrates that the designer's approach is very much influenced by style or movement. These two design movements maintain opposing positions regarding the use and value of history in form generation. Modernism has philosophical and theoretical objections to the use of history, yet, offers examples of historical application. The use of history in form generation in Modernism is the exception rather than the norm. The historical form is passed through a Modernist filter of order and precision. In contrast, Post-Modernism is expressly and overtly historicist. The use of

historical reference is primal. The execution is stylized and extreme. In the 20th century, the major movements used historical form in ways never used before that were absolutely unique and innovative.

The history of design and architecture in the twentieth century has demonstrated radical shifts with regard to historical application and the use of ornament. The aesthetic and philosophical position of the particular design movement is typically the major stylistic determinant. Social, cultural, political, economical and geographical conditions offer opportunities as well as provide constraints. New developments in technology, especially in the areas of materials and methods of manufacturing, have greatly influenced product design in the postwar period. The designer as form-giver is influenced by all of these factors. At the same time, designers are individuals with talent, imagination, and unique vision.

<div style="text-align:center">

PAPERS
Thursday, March 25
2:00-2:45 pm

</div>

WOMEN AND MODERNITY IN INTERIOR DESIGN: A CONCEPTUAL-THEORETICAL FRAMEWORK FOR HISTORICAL STUDIES

Carol Morrow, M.A., ASID, IIDA, IDEC
University of New South Wales
The Art Institute of Phoenix

Issue

This paper proposes a multi-dimensional framework that draws together alternate theoretical-conceptual understandings that are necessary for an analysis of individual and collective contributions of women who shaped interior design as a profession and distinct discipline in the early phases of its history. The author seeks to test and confirm the appropriateness of the framework as a valid methodology for historical studies of interior design. Ultimately, the findings are intended to define and explain the relationship between women and modernity in interior design.

Framework and Methodology

Adopting Hilde Heynen's (1999) conception of three levels of the modern as a springboard, this study explores overarching and interrelated aspects of modernization, modernism(s) and modernity that are relevant to a critique of women and their contributions to interior design. Multiple literature reviews include foundational issues of gender and profession that provide background to the study and offer theoretical features relational to critique of women and modernity in interior design. Modernization, the objective forces of the modern, is defined and explained generally, and more specifically, in relation to the position of women subject to time and place. The study identifies institutional structures and sub-systems of modernization that are forces in the emergence of interior design as a specialized domain for women. Modernism(s), the subjective forces of the modern, is defined and explained. Paul Greenhalgh's conceptualization of twelve features of modernism in design acts as a starting point for a number of modernist debates for design fields. Further critique examines various modernist and post-modernist stances on modernism's definition and relationship to modernisation and modernity. The synthesis of which offers a more complex and richer understanding of modernism in interior design. Modernity is defined and explained as 'the accumulating impact of the forces of modernization on individuals, societies and environments' by which social change is distinctively experienced. Modernity wavers marked by incessant change, ephemerality and fragmentation. At the same time, modernity embodies the more rational intentions and ideals of the *project* that came into focus during the 18th century as part of the intellectual efforts of Enlightenment thinkers. The project embraced notions of progress, universal liberation and a modernist avant garde who actively sought within differentiated realms of objective science, universal morality and law,

and autonomous art a break with history and tradition. Plural and diverse readings of modernity render multiple implications for an analysis of women and their contributions to the development of interior design.

Summary

The proposed multi-dimensional intends to recognize the early women historically as foundational leaders and acknowledge their contributions to professional development. Importantly, this conceptual-theoretical framework investigates the nature of social institutions and systems (as objective aspects of *modernization*) and those of human action (as manifested subjective features of *modernism*) that contribute to an explanation of women and *modernity* in interior design. The methodology identifies and explains forces of the modern that combined to give rise to contradictions and complexities in a field that is ever-changing; and reveals through the 'stories' of early women the ruptures, paradoxes, disunities, anomalies, and contradictions that are central to modernity in interior design.

References

Anscombe, Isobel. (1984).   *A Woman's Touch, Women in Design from 1860 to the Present Day*. London: Virago.
Attfield, Judy & Kirkham, Pat. (1989). *A View from the Interior, Feminism Women and Design*. London: The Women's Press Ltd.
Berman, Marshall. (1983). *All That is Solid Melts Into Air*: *The Experience of Modernity*. London: Verso.
Brown, Erica. (1982). *Sixty Years of Interior Design, The World of McMillen*. New York: Viking Press.
Callen, Anthea. (1989). Sexual Division of Labour in the Arts and Crafts Movement. In Attfield, Judy & Kirkham, Pat. (Eds.), *A View from the Interior, Feminism, Women and Design*, London: The Women's Press.
Campbell, Nina, & Seeboum, Caroline. (1993). *Elsie de Wolfe, A Decorative Life*. London: Aurun Press.
Esten, John & Rose Bennett Gilbert, R.B. (1990). *Manhattan Style*. Boston: Little, Brown.
Fisher, Richard B. (1978). *Syrie Maugham*. Dallas: Duckworth.
Forty, Adrian. (1986) *Objects of desire: Design and society 1750-1980*. London: Thames & Hudson.
Forty, Adrian. (2000) *Words and buildings: A vocabulary of modern architecture*. New York: Thames & Hudson.
Friedman, Arnold. (1986). Interior Design Education: a Hot Topic in 1986. *Journal of Interior Design Education and Research*, 12 (2), 5-8.
Frisby, David. (1985). *Fragments of Modernity: Theories of Modernity in the works of Simmel, Kracauer and Benjamin*. Cambridge: Polity Press.
Greenhalgh, Paul (ed). (1990). *Modernism in Design*. London: Reaktion Books Ltd.
Hanna, Bronwyn J. (1999). PhD Thesis, *Absence and Presence: A Historiography of Early Women Architects in New South Wales*. Faculty of the Built Environment, University of New South Wales.
Harvey, David. (1989). *The Condition of Postmodernity*. Oxford: Basil Blackwell.
Harwood, Buie. (1991). Comparing the Standards in Interior design and Architecture to Assess Similarities and Differences. *Journal of Interior Design Education and Research* 17(1), 5:18.
Heynen, Hilde. (1999). *Architecture and Modernity*. Cambridge, Mass & London: MIT Press.
Kerr, Joan. (1995). *Heritage, The National Women's Art Book*. Sydney: Fine Art Press.
Martin, Caren Samter. (1998). MA Thesis, *Professionalization: Architecture, Interior Decoration, and Interior Design as Defined by Abbott*. University of Minnesota.
Massey, Anne. (1990). *Interior Design of the 20th century*. London: Thames & Hudson Ltd.
Massey, Anne. (1995). The Myth of the Independent Group: Historiography and Hagiology. *The Independent Group: Modernism and Mass Culture in Britain, 1945-1959*. Manchester University Press.
McNeil, Peter. (1994). Designing Women: Gender, Sexuality and the Interior Decorator, c.1890-1940. *Art History*, 17(4) December, 631-657.
McNeil, Peter. (1995). Rarely Looking In: The Writing of Australian Design History, c.1990-1990. *Journal of Australian Studies*. 44 March, 48-63.
Piotrowski, Christine. (2002). *Professional Practice for Interior Designers*. Third ed., New York: John Wiley & Sons, Inc.
Potthoff, Joy K. & Woods, Bonadine. (1995). Content Analysis of Seven Introductory Interior Design Texts Published between 1986-1994, *Journal of Family and Consumer Sciences*. Summer 1995:59-64.
(1938). *Proceedings of the Round Table Discussions on Training for the Interior Architect and Decorator, Seventh Annual Conference*. Chicago, January, conducted by the Committee on Education of The American Institute of Decorators, 30 Rockefeller Plaza, N.Y.

(1939). *Proceedings of the Round Table Discussions on Training for the Interior Architect and Decorator, Seventh Annual Conference*. 22 March, San Francisco, conducted by the Committee on Education of The American Institute of Decorators, 595 Madison Avenue, N.Y.

(1940). *Proceedings of the Round Table Discussions on Training for the Interior Architect and Decorator, Seventh Annual Conference*. January, New York City, conducted by the Committee on Education of The American Institute of Decorators, 595 Madison Avenue, N.Y.

Smith, Jane, S. (1982). *Elsie de Wolfe: A life in the high style*. New York: Atheneum.

Smith, Terry. (1996). Modernism, Modernity. In Turner, Jane (Ed.), *Dictionary of Art*. (21) New York: Macmillan Publishers Ltd.

Turpin, John. (2001). 'Omitted, Devalued, Ignored', *Journal of Interior Design Education and Research*, 27(1), 1-11.

Varney, C. (1988). *The Draper Touch: The high life and high style of Dorothy Draper.* New York: Prentice Hall.

Wheeler, Candace. (1895). Interior decoration as a profession for women. *The Outlook*. Part1- April 6, 1895:559-560; Part II ñ April 20, 1895:649.

White, A.C. & Dickson, A.W. (1994). 'Practitioner's Perceptions of Interior Design, Graduate Education and Implications for the Future', *Journal of Interior Design*. 20(1), 27-35.

COMPUTERIZING THE BEGINNING DESIGN STUDENT

Carolyn Gibbs
California State University, Sacramento

Purpose/Issue

The presentation proposes an alternative approach to teaching Computer Aided Design software by integrating design thinking and problem-solving skills with the existing topic-based method of teaching CAD. This approach aims to expand the interior design student's knowledge of the software through problems that are grounded in existing building design examples.

In the past before Computer Aided Design drawing, our hands were the predominant means of visual expression in the design world. With the prevalence of computers, CAD now dominates as the primary tool for drawing in the architectural and interior design communities. However, very few designers actually "design" with this medium. The hand drawn sketch and diagram still represents the principal means of visual problem-solving in the design process.

In response to many questions and criticisms regarding the use of CAD as a creative tool, this presentation explores a new pedagogical learning tool that seeks to relate CAD instruction to the actual design process.

Process/Context

Teaching CAD software has predominantly been shoved off as a "technical skills" curriculum. Within the typical course framework one learns "how to draft properly" through the mastery of commands using a specific brand of design software. Two-dimensional course curriculums culminate their semesters with well-drafted floor plans, elevations and isometric drawings. Courses with advance content teach the three-dimensional tools. This is usually achieved through either the replication of an existing building or the drawing of a self-designed project.

The presentation will show how typical textbooks & courseware focus completely on the commands used in CAD software paying little attention to the essential core of the drawing and design technique process. Examples and tutorials are completely absorbed in the step-by-step "how-to" process method of learning. With the exception of some current publications, books are published with nuts & bolts or simplistic floor plans as recurring themes for students to practice their knowledge and skills in a rote fashion. Thus, the proposed alternative approach described here stems from a frustration regarding the simplicity of current CAD textbooks. The traditional "design studio" approach transferred to the computer lab is in many ways insufficient as it relies too much on the experience and design skills of the student for the improvement of computer skills.

Summary

This presentation will explore two alternative techniques to CAD instruction. It proposes that the integration of critical thinking into CAD instruction will not only build a student's design and construction vocabulary but also increase creativity and problem solving abilities that can transfer to upper level design studios.

References

Bertol, D. (1994). *Visualizing with CAD.* New York: Telos Publishing.
Bertol, D. (1997). *Designing Digital Space*. New York: John Wiley & Sons, Inc.
Feng, J. (2002). *Basic AutoCAD for Interior Designers Using AutoCAD 2002*. New Jersey: Prentice-Hall.
Frey, D. (2001). *AutoCAD 2002. No Experience Required*. Alameda: Sybex Publishing.
Shih, R. (2001). *AutoCAD 2002 Tutorial*. Mission: SDC Publications.

> **PAPERS**
> **Thursday, March 25**
> **2:45-3:30 pm**

INDIVIDUAL WORK STYLES AND FLEXIBILITY OF THE PHYSICAL SETTING

Roberta L. Kilty
Mei-Ting Lin
Michigan State University

Purpose

This study focused on User Perceptions of the Universal Plan strategy in relation to 1) business objectives, 2) work process, 3) Individual Work Styles, and 4) Flexibility of the Physical Setting. User Perceptions were measured to evaluate the effectiveness of the Universal Plan as one strategy for Management of high Churn rate and escalating costs.

Methodology

This was an exploratory study in a natural setting, non-experimental and cross-sectional in nature. A survey questionnaire was specifically tailored to Company X. The units of analysis included managers and employees of Company X, and technicians of Company W. An unfocused interview approach was used at the management level. Company X was selected as the discreet independent variable because it utilized the Universal Planning approach and was in close proximity to the investigators' institution.

A proportionate stratified random sampling technique based on gender and job function served to select one third of each group's total size, i.e., managers, employees, and technicians. The resulting sample size was 87 (13 managers, 69 employees, and five technicians).

The Executive Director of Company X and the Director of Buildings and Grounds supported the study by sending introductory letters requesting employee participation. Both directors were interviewed regarding organizational background. Additional open-ended questions were faxed to the Director of Buildings and Grounds.

The University's Human Subjects Committee approved the survey instrument. Respondents returned the completed, sealed surveys within one week to a collection box. A total of 74 subjects participated in the study with a return rate of 85% (12 managers, 57 employees, and five technicians).

Summary of Results

Consistency in user responses was proven using reliability analysis, paired sample T-tests, and cross tabulations. Descriptive statistics were used to describe respondents' perceptions. Inferential statistics (paired sample T-tests and independent sample T-tests) were used to evaluate group differences in relation t business objectives, work process, individual work styles, and physical setting flexibility. Cross tabulation was used to check manager response consistency for two specific questions.

Responses from managers and employees were inconclusive regarding the Universal Plan's effectiveness in relation to business objectives and work process. Managers and employees reported positive perceptions regarding individual work styles. Negative perceptions emerged regarding physical setting flexibility. Technicians' responses alone were inconclusive regarding physical setting flexibility.

The majority of employees (78.18%) had a positive perception of the Universal Plan's effectiveness on work styles. A significant difference [T-value (28.536 df), sig @ 0.008] was found between managers' and employees' mean values regarding Universal Plan effectiveness and individual work styles. No significant differences were found between managers', employees', and technicians' mean values concerning Universal Plan effectiveness and business objectives, work process, and physical setting flexibility. Written comments described crowded conditions and inconsistencies in Universal Plan application.

Experts demonstrate the Universal Plan's high flexibility in managing change. This study does not completely demonstrate the "move people, but not walls and furniture" concept. It does demonstrate that individual preferences and needs can be achieved with the Universal Plan, even though some experts feel otherwise.

References

Babbie, E. (1998). *The practice of social research*. New York: Wadsworth Publishing Company.

Becker, F. & Steele, F. (1994). *Workplace by design: Mapping the high performance workscape.* San Francisco: Jossey-Bass Publishers.

Becker, f. & Joroff, M. (1995). *Reinventing the workplace.* Georgia: International Development Research Foundation (IDRF).

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22. 723-732.

Davis, G., Thatcher, C. & Blair, L. (1993). *Serviceability tools: Methods for setting occupant requirements and rating buildings.* Ottawa: The International Centre for Facilities.

Davis, G., Thatcher, C. & Blair, L. (1993). S*erviceability tools: Scales for setting occupant requirements and rating buildings*. Ottawa: The International Centre for Facilities.

Herman Miller. (1998, September). *Churn in the workplace* [Online]. Available: http://www.hermanmiller.com/research/summaries/churn/index.html

Herman Miller. (1998, November). Southern California Edison drives into the future [Online]. Available: http://www.hermanmiller.com/research/casestudies/edison.html

Ryburg, J. (1996). Understanding the dynamics of churn. [Online]. Available: http://www.facilitiesnet.com/NS/NS3churnl.html

Ryburg, J. (1998). Taming the monster: Six strategies for controlling churn. *Facilities Design & Management*. 16-29.

Zelinsky, M. (1998). *New workplaces for new workstyles.* New York: McGraw-Hill.

UNDERSTANDING MATERIALITY AND SCALE THROUGH CHAIR DESIGN AND CONSTRUCTION

Brian Powell
University of Louisiana at Lafayette

Issue

Interior design students often produce studio projects that are conceptual or abstract in nature and are manifested in presentation drawings, scaled models and sample boards. While these projects provide places for human interaction with the environment they are not easily represented or manufactured to full scale. This presentation illustrates the process students used to design and make chairs as part of a course on human factors. The purpose of having students design and construct chairs is to expand their understanding of the anthropometric and ergonomic issues while applying the knowledge gained through their studies to a human-scaled physical object having weight, mass, texture and form.

Process

Second and third year interior design students and third year industrial design students take Human Factors as part of their design education. In the spring of 2002 and 2003 students designed chairs as part of this course in order to focus on anthropometrics, ergonomics, and other human factors. Students drew from class lectures in this lecture/lab course and applied learning directly to their projects. Lectures for both years were similar and included the following:

- Henry Dreyfuss's and Panero/Zelnik's work on human dimensions
- Sociologic studies on pleasure by anthropologist Lionel Tiger and industrial designer Patrick Jordan
- UC Berkeley professor Galen Cranz's studies that challenge traditional notions on the relationship of the human body and chairs

Students worked in groups of 4 to 6 throughout the semester during the lab time. The requirements and the results of the two years were different. In 2002 students were required to brainstorm, plan the product they would create, and describe how it would be presented. The results ranged from 2-dimensional drawings, quick time animations and small scale models. In 2003 students were required to produce full scale prototypes made with actual materials and finishes and usable for a specific client or group.

Results

Results from the two years of chair design in the interior design curriculum are positive. Students from both years had experiences that helped them better understand human dimensions and the dynamic nature of the seating process. However, the 2003 students gained knowledge through the experience of making. By constructing to a full scale chair with actual materials students had a greater understanding of detailing, materials, weight and gravity. Students also experienced a greater sense of satisfaction and recognition as the prototypes were displayed in the design building lobby gallery.

References

Cranz, G. (1998). *The Chair, Rethinking Culture, Body, and Design.* New York: W.W. Norton & Co.
Dreyfuss, H. (2002). *The Measure of Man & Woman*. New York: John Wiley & Sons.
Jordan, P. (2000). *Designing Pleasurable Products: An Introduction to the New Human Factors.* London: Taylor & Francis Books Ltd.
Mason, N. & Burrows S. (2003). Merging the Virtual and the Real: The Detailed Connection Between Product & Interior Design Education. *Abstracts from Interior Design Educators Council Annual Conference 2003,* San Diego, pgs 62-63.
Mason, N. & Burrows S. (2002) Teaching Interior Design Product Design Using Selected Competitions. Conference. *Interior Design Educators Council South & East Regional Conference Proceedings 2002,* New York, pgs 44-46.

Panero, J. & Zelnik M. (1979). *Human Dimension & Interior Space.* New York: Whitney Library of Design.
Perry, D. (1967). *The Concept of Pleasure.* Paris: Mouton & Co.
Tiger, L. (1992). *The Pursuit of Pleasure*. Toronto: Little, Brown & Co.

PAPERS
Thursday, March 25
2:45-3:30 pm

TOWARD A BETTER MOUSETRAP: A HYBRID FORMAT FOR DESIGN HISTORY

Dr. Patricia Williams
University of Wisconsin – Stevens Point

Purpose

This paper explores the creation of a course using the hybrid method of instruction for interior design history. Student understanding of non-Western design history was enhanced in three ways: 1) through active learning assignments, 2) by using web-based material, and 3) through the integration of traditional teaching methods with on-line work in a hybrid format.

Methodology

Hybrid teaching is not a matter of simply transferring a portion of a traditional course to the Web. The use of technology is secondary to the fundamental philosophical shift from an instructor-centered model of education to one that is learner-centered. Technology provides the instructor with a "better mousetrap" and a more convenient use of time for the students. It should not, however, be of itself a course objective. The hybrid method involves developing challenging and engaging online learning activities that complement face-to-face activities while also following the active learning approach. WebQuests can provide for the implementation of active learning and critical thinking. A WebQuest is an inquiry-oriented activity designed to focus on using information rather than looking for it.

In addition to the incorporation of active learning techniques and the use of internet-based material, the course must also: 1) develop an awareness of the historical relationships in Asia, 2) recognize the historical influence of the Far East on Western design, and 3) expand student understanding of the relevance of Asian design to contemporary design. In a successful course, active learning takes place enabling students to incorporate non-Western interior design concepts into their studio work *using cultural sensitivity*.

There are drawbacks reported in the use of the hybrid format: when working online, students may have problems scheduling their work, managing their time, and understanding the implications of the hybrid course module as related to learning. There is also a tendency for faculty to require students to do more work in a hybrid course than they normally would do in a purely traditional course. Another problem for faculty is the amount of time needed to initially create the course. The result for the untenured faculty member can be a course developed at the expense of activities needed for tenure purposes.

Summary

Hybrid courses may be the answer to improved learning for the interior design student in the twenty-first century. Perhaps the most encouraging aspect is the increase in discussion that occurs when compared to a traditional course format. More details concerning student feedback, instructor satisfaction, and content delivery will be reported in the presentation.

References

Dodge, B. (1995). *Some Thoughts About WebQuests*. [On line}Available: http://webquest.sdsu.edu/.
Martyn, M. (2003). The Hybrid Online Model: Good Practice. *Educause Quarterly*, 1, 18-23.

THE TULSA FIRE ALARM BUILDING: USING NATIONAL REGISTER OF HISTORIC PLACES IN NOMINATIONS IN INTERIOR DESIGN GRADUATE STUDY

Elizabeth J. Maxwell
Theodore J. Drab
Oklahoma State University

Issue

A case study identifying an application of historic preservation scholarship to the interior design curriculum, this paper discusses one graduate student's success in nominating a building to the National Register of Historic Places. Sweeten (1997) observes that historic preservationists are principally interested in preserving outstanding examples of architectural design, yet "their concerns extend into a myriad of economic, social, and political realms that have a significant potential effect on the fabric of American life" (p. 35). The multifaceted nature of the nomination process itself, coupled with the variety of experts that were consulted during the process, provided a rich educational experience, and resulted in the listing of the building in the National Register.

Process/Context

Owned by the Oklahoma branch of the American Lung Association, the Tulsa Fire Alarm Building was designed by Frederick Kershner in 1931, using the Art Deco style popular in the day. In an effort to make this project unique, Kershner employed Mayan motifs, most notably dragons, as important elements in the frieze that encircles the building. Searching for imagery that could take on some of the symbolic meaning that architects and designers in the late nineteenth century deemed so necessary (Parkinson, 1997), the architect employed the Mayan dragon image to suggest both the danger associated with fire and the method for fighting fire – dragon heads terminated in fire hoses.

In addition to exploring the fabric of the building itself, the project included a review of federal legislation that first encouraged and then sought to limit preservation and rehabilitation projects. While rehabilitation of "prime examples of America's cultural legacy" was made economically feasible by the incentives including the Economic Recovery Tax Act of 1981 (Murtaugh, 1997, p. 75), the Tax reform Act of 1986 sharply curtailed this spending, largely in response to the abuses of large investors and developers.

Summary

Because the National Register Nomination form offers such a complete format for research, it enables students to use description and context to organize the direction of their research. This is one experience that can be shared no matter the size and location of the learning institution because many areas across the country have sites that could be addressed through a student's completion of a National Register of Historic Places nomination. Overall, the profession validating body of research that can be gained for the field of Interior Design on a national level is an important reason for implementing this type of format in Master's Programs. Such steps would help make Graduate Education in this field an even greater success in the future.

References

Murtaugh, W. J. (1997). *Keeping time.* New York: John Wiley and Sons, Inc.
Parkinson, S. F. (1997). Les sept princesses: A Vienna discovery renews interest in the art and collaborative interiors of Margaret Macdonald. *Journal of Interior Design, 23,* 48-60.
Sweeten, L. (1997). Historic preservation. *National Forum, 77,* 35-38.

LIGHTING APPLICATION TOOL FOR ENHANCED CLASSROOM INSTRUCTION & STUDENT COMPREHENSION

Laura E. Prestwood
Texas Christian University

Purpose

The purpose of this presentation is to present an innovative approach to teaching lighting principles utilizing new technology as a instructional tool in a lecture and/or studio course of an interior design or architectural program. The presentation will demonstrate how the use of the Luxam Lighting kit as a teaching tool enhanced student comprehension of light in the built environment.

Methodology

Several weeks into the fundamental lighting course students were divided into teams. Each team constructed scale models in order to conduct daylight studies. The students then created interior lighting schemes for each model. In each case students documented the perceived design outcome and then the actual design outcome. The actual design outcomes were produced with the integration of the Luxam Lighting kit. The outcomes were used as a basis of comparison and study for the final design problem in which corrections to proposed design solutions were made and documented. Subsequent lighting design application problems resulted in more successful design solutions.

Summary

The utilization of the Luxam Lighting Kit resulted in students more effectively applying fundamental lighting principles to an interior application. Students learned to experience light and to predict the outcomes of their proposed lighting solutions thereby improving their comprehension of lighting application. Having the ability to predict design outcomes fostered creativity and adaptability of the design solution. The use of the lighting kit allowed students to experience light, save time in the design process, explore architectural options more thoroughly, and served as a bridge to subsequent design studios. Because the results from the survey indicated that the integration of the Luxam Lighting Kit was an effective means of instruction, a more expansion module for the teaching of advanced lighting principles is being integrated in order to integrate lighting design into all interior design studios. Ultimately, student success will be measured by the design solutions created for class assignments in the design curriculum.

References

Benton, C.C. (1990, May). Diminutive Design. Physical models in daylighting education and practice.

Lighting Design + Application, 4-5 and 16-17.

Boyce, P.R. (1987, May). Lighting research and lighting design bridging the gap.
Lighting Design + Application, 10-12, 50-51.

Davis, R.G. (1987, May). Closing the gap: Research, design, and the psychological aspects of lighting.
Lighting Design + Application, 14-15, 52.

FIDER Accreditation Manual. (2002). II-10 and II-11.

Gibson, K. (2001, October). IDEC Report. Byte Minded. Using computers for augmentation, not everything.
Interiors & Sources. Retrieved September 1, 2003, from
http://www.isdesignet.com/Magizine/Oct'01/idec.html

Kesner, C.W. (1987). A regional survey of lighting education resources among colleges and universities.
Journal of Interior Design Education and Research, *13*, 52-56.

> **PAPERS**
> **Thursday, March 25**
> **4:45-5:30 pm**

ATTITUDES AND PERCEPTIONS TOWARD CONCEPTS ASSOCIATED WITH AGING IN PLACE

Margot A. Olson
Carole Miller
Appalachian State University

Purpose

The purpose of this research was twofold: to obtain ratings of design concepts in interior design which will facilitate the idea of "aging in place" and to obtain opinions from adults, either in middle or late adulthood stages, about their feelings toward "aging in place." "Aging in place" refers to creating home environments which are adaptable to changing needs due to aging such that occupants can remain independent and stay longer in their homes before moving to specialized facilities for the aged or disabled population or before receiving specialized care or assistance in a home environment.

Methodology

Participants. Convenience samples were used to gather information for both research questions. Participants in the evaluation of concepts associated with aging in place were students, both enrolled in and not enrolled in interior design, at a medium-sized state university located in a rural setting. Participants whose opinions were surveyed concerning feelings towards aging in place were residents, aged 40 and older, of a rural but affluent community with a university and large vacation-home and tourist trade.

Instruments. Instruments associated with both research questions were constructed by the researchers. Both were revised through reiterative field-testing with subjects similar to the targeted respondents. The instrument associated with the ratings was designed for a summative score; that for the opinion survey was designed to provide crosstabulations.

Procedure. Groups of respondents were obtained and asked to complete the scale or survey. All respondents were given the same instructions and rationale for the research. University permission to conduct human participant research was obtained prior to data collection.

Data analysis. Data were coded and analyzed using SPSS, the Statistical Package for the Social Sciences. The following hypotheses with corresponding subhypotheses were investigated.

1. Many concepts that accommodate disabilities associated with aging are as appealing or more appealing than more traditional ways of designing interiors.
2. As age increases interest in designing or planning for adaptation of a home to meet needs associated with aging increases.

Summary

Information acquired from investigating the two research hypotheses which are the focus of this paper associated with aging in place is useful in suggesting teaching strategies in interior design education and in working with associated design professionals and trades in incorporating more universal and adaptive design principles into solutions for residential clients. The concepts of universal and adaptive design are considered important by the interior design community of both practitioners and educators. FIDER requires that "student work <u>MUST</u> demonstrate *understanding of universal design* concepts and principles" (Foundation for Interior Design Education Research, 2000, p. II-14). The question remains as to why universal and adaptive design concepts see so little application in practice. Yes, there are many models and prototype homes in the literature but where are the applications in practice? This research contributes to answering the question about perception of the concepts both in relation to specific applications and to attitudes about symbols of aging.

References

American Association of Retired Persons. (2003). These four walls... Americans 45+ talk about home and community. Retrieved June 16, 2003, from the worldwide web: http://www.research.aarp.org.

Miller, C. & Olson, M.A. (2003). Awareness of interior design considerations for aging in place. Roundtable presented at the South Regional Conference of the Interior Design Educators Council, Savannah, GA.

Foundation for Interior Design Education Research. (2000). *Accreditation manual.* Grand Rapids, MI: FIDER.

Leibrock, C.A. & Terry, J.E. (1999). *Beautiful universal design.* New York: John Wiley and Sons, Inc.

Olson, M.A. (2000). Residential design for the physically disabled. *ASID Pocket CEU.* Washington, D.C.: American Society of Interior Designers.

Pile, J. F. (2003). *Interior design.* Englewood Cliffs, New Jersey: Prentice-Hall.

THE PERSONAL SKETCHBOOK AS A PEDAGOGICAL DEVICE

Robert J. Krikac
Washington State University

Purpose

There is ample evidence of the validity of freehand sketching as a means of communication among peers, with clients, and more importantly as a method of thinking - visualizing ideas. It is also of benefit for the instructor to be able to establish the theoretical foundations for drawing strategies and to have personally experienced the work that the student is about to embark upon. Most introductory texts for freehand sketching do not give the student a complete grounding in perception, contour drawing, perspective, value and color. This presentation is a discussion of how the development

of a personal sketchbook using a sequential process that builds the student's confidence has been successful in foundation courses.

Process/Context

Studies have shown that interior design students employ a variety of learning styles and that this diversity requires instructors to employ a variety of teaching strategies (Watson and Thompson, 2001). Other researchers suggest that a constructivism teaching strategy could be developed to enhance visualization skills (Nussbaumer and Guerin, 2000). This presentation explores the development of a personal sketchbook as a constructivist strategy to enhance visualization skills in interior design programs. A variety of methods are shown to be successful in the development of freehand drawing skills and the ability to "see." Edwards (1989) notes that there are five basic component skills and charts a sequential process of developing perceptual skills: 1) the perception of edges, 2) the perception of spaces, 3) the perception of relationships, 4) the perception of light and shadow, and 5) the perception of the whole (gestalt) and has added to these component skills a chapter that introduces color into the drawing experience. Another noted educator, Paul Laseau (2001), presents a three-step process in the development of a freehand drawing: 1) structure, 2) tones, and 3) details. The author's experience of enhanced learning and visualization skills through freehand drawing inspired him to explore the personal sketchbook as a teaching strategy. Studying the work of noted educators such as Paul Lasseau (2001), Mike Doyle (1993), Frank Ching (2000), and Kingsley Wu (1990), the author began to relate his journey to the classroom. Freehand sketching exercises were developed and implemented in the spring of 2003 that followed a sequence of contour, value and color drawing as suggested by Edwards (1989), Laseau (2001) and Doyle (1993).

Summary

The students reported feeling that they had progressed greatly through this series of drawing exercises. In their subsequent fall studio, they are showing noticeable improvement in their freehand drawing skills over previous classes and are self-motivated to pursue freehand drawing with color in their design explorations. A number of recurring issues have been identified in the student work and methods to improve are suggested. One such concern was the need to improve cognition and incorporation of the picture plane in understanding composition.

References

Ching, F. D. K. (2000). Sketches from Japan. New York: John Wiley and Son.

Doyle, M. (1993). *Color drawing: A marker/colored pencil approach for architects, landscape architects, interior and graphic designers, and artists* (Rev. ed.). New York: John Wiley and Sons.

Edwards, B. (1989). Drawing on the right side of the brain (Rev. ed.). New York: St. Martin's Press.

Laseau, P. (2001). Graphic thinking for architects and designers. New York: John Wiley and Sons.

Nussbaumer, L. and Guerin, D. (2000). The relationship between learning styles and visualization skills among interior design students. Journal of Interior Design, 26(1), 1-15.

Watson, S. A. and Thompson, C. (2001). Learning styles of interior design students as assessed by the Gregorc Style Delineator. Journal of Interior Design, 27(1), 12-19.

Wu, K. (1990). Freehand drawing in the architectural environment. New York: Von Nostrand Reinhold.

THE "IDEAL" MOTEL: TRAVELING EXPERIENCES OF THE OLDER ADULT

Susan Ray-Degges   Robert A. Walther
Marci Paulsen   University of Maryland Eastern Shore
Greg Sanders
Mort Sarabakhsh
North Dakota State University

Issue

Older adults, more so than any other age group, travel for pleasure to distant exotic locations, to renew relationships with relatives, or near-to-home visits. Much of the information we have about the participation of older adults in hospitality activities has been limited to studies that explore the relationship between retirement and travel, marketing strategies encouraging mature consumers, or life satisfaction achieved through leisure activities rather than a concern for shaping environments that support changing physical needs. Little research exists that documents older adults' perception of how effective services, amenities, and facilities (e.g., restaurants, bars, hotels), used for hospitality activities, meet the changing needs of the graying population. The results of this study will enable members of the hospitality industry and design profession to be more responsive to the needs of the older adult population.

The four basic issues addressed by this paper: (1) what types of hospitality services are typically used by individuals 65 years of age or older and what factors contribute to the use of these services; (2) how satisfied are older adults with available hospitality services; (3) what barriers may or may not exist that limit older adults' access to hospitality services; and (4) what physical features of the environment are required to create a setting responsive to the needs of older adults.

Methodology

The project was implemented through the use of anonymous surveys completed by participants 65 years of age or older. The survey instrument was mailed to a random sample of 500 licensed drivers 65 years of age or older, selected from a sampling frame of 20,000 licensed drivers in a northern mid-western state. A total of 314 surveys were analyzed. The survey instrument, a combination of open-ended and closed-ended questions, included basic demographics, types of hospitality and tourism services used, factors that influence the use of these services, satisfaction with hospitality and tourism services used, barriers to service utilization, and types of physical design factors that determine accessibility to services.

Summary

Many travelers in the northern mid-western state may have limited access to travel to sites in the state, because of barriers created by architectural and physical features of lodging establishments. Participants were asked to identify various features of the physical environment for lodging establishments that would be essential, very important, desirable, or not important, based on his or her current physical needs. The larger number of physical health challenges experienced by the older adult, the greater likelihood the participant identified environmental features that impacted facility access (e.g., sheltered or covered entrances, automatically operated entrance doors, corridor handrails, nonskid entrance surfaces) and bathroom accessibility.

While information collected in this study can contribute to a better understanding of the market potential for the hospitality industry, the findings can also contribute to the potential for better service to the older adult population and more specifically to older adults that travel.

HOW MUCH COMMUNITY IN THE COMMUNITY? NEGOTIATING PRIVACY IN THE COMMON HOUSE

Maruja Torres-Antonini, PhD   Mary Joyce Hasell, DArch
Iowa State University   University of Florida

Purpose

This paper discusses the privacy issues that arose in the jointly owned spaces of an intentional cohousing community. It describes different strategies enacted by residents to establish and preserve a balance between the individual privacy needs of each resident and the collective desire for a sense of community.

Methodology

Preserving privacy—controlling access to, and disclosure about, the self (Altman, 1975)—is generally an issue for residents of intentional communities (Scanzoni, 2000), even for those without a set religious or political ideology. This is the case with cohousing, which is open, democratic, and diversity-oriented (McCamant and Durret, 1994). However, even in cohousing, the functions and meanings associated with the jointly owned spaces of the commons and the common house require emotionally-laden negotiations to determine individuality and community boundaries.

This paper reports on a two-year participatory action research (Whyte, 1997) involvement with a cohousing community. The researchers used experiential techniques and qualitative analysis of interviews as well as graphic and written data about the physical design. Along with the cohousing residents, researchers identified their intentions to create a sense of community through building and managing their built environment. Thus, the research question was—i.e., what effects do the design features of—and uses of—the physical spaces have on privacy and the creation of a sense of community?

Observed and reported behaviors representing participation, security, interaction and support where contrasted against the opportunities afforded by the built environment. These have been identified as key components of a sense of community (Franck and Ahrentzen, 1989) and in many ways pointed out as the goals of cohousing communities (Franck and Ahrentzen, 1989; McCamant and Durrett, 1994; Norwood, 1995). Environmental preservation and social advancement have been the subject of prior cohousing studies (Meltzer, 2000; Hasell and Scanzoni, 2000). By focusing on environment-privacy issues this research uncovered additional aspects of the creation of community.

Summary of Results

The research confirmed that supportive behaviors—helping and receiving help from neighbors—and participating in the creation, design, construction, and management of the community strongly contributed to creating and sustaining a sense of community among residents. However there is little evidence that specific physical features were essential to this process. Nonetheless, other community descriptors—not only unity and privacy, but also security and interaction—appeared to be more directly related to the layout, visuals, demarcation, and furnishing of the site and interior spaces. Throughout the study it was clear that territorial aspirations underlie many behaviors observed in the commons and the common house. Residents' urge for self-expression, desire or lack of desire for social interaction, and need for reserve or isolation required the use of personalization and privacy gradients as design strategies to reconcile individual and collective needs. Claims to the common house—considered as an extension of the private homes—and in particular the common dining room, led to contrasting views on their furnishing and interior décor. The extensive negotiations needed to find an interior design solution pleasing to all residents confirms that within collective environments such as a cohousing community, privacy exists in fragile equilibrium.

References

Altman, I. (1975). The Environment and Social Behavior: Privacy, Personal Space, Territoriality, Crowding. Monterrey, CA: Brooks/Cole.
Franck, K.Ahrentzen, S. (Eds.) (1898). New Households, New Housing. New York, NY: Van Nostrand-Reinhold.

Hasell, M.J., Scanzoni, J. (2000). Cohousing in HUD—Problems and Prospects. The Journal of Architecture and Planning Research, 17 (2, Summer 2000).

McCamant, K., Durrett, C. (1994). Cohousing. A Contemporary Approach to Housing Ourselves (2nd edition). Berkeley, CA: Ten Speed Press.

Meltzer, G. (2000) Cohousing: Verifying the Importance of Community in the Application of Environmentalism. The Journal of Architecture and Planning Research, 17 (2, Summer 2000).

Norwoood, K., Smith, K. (1995). Rebuilding Community in America. Housing for Ecological Living, Personal Empowerment and the New Extended Family. Berkeley, CA: Shared Living Resource Center.

Scanzoni, J. (2000). Designing Families. The Search for Self and Community in the Information Age. Thousand Oaks, CA: Pine Forge Press.

Whyte, W.F., Ed. (1997). Participatory Action Research. Newbury Park, CA: Sage Publications.

<div style="text-align:center">

PAPERS
Thursday, March 25
4:45-5:30 pm

</div>

STUDIO COLLABORATION: RECOMMENDATIONS FROM RESEARCH

Jennifer D. Webb, Ph.D.
Nancy G. Miller, Ph.D.
University of Arkansas

Purpose

The purpose of this study was exploration of teamwork in interior design studios. The objectives for the project include 1) a rationale for faculty planning, 2) a model depicting variables and relationships revealed through a literature search, and 3) a quantitative exploration of the role of training, feedback and team composition on student outcomes.

Review of Literature

Accreditation boards and professional advisory groups dictate need for collaborative projects. It is the topic of scholarly discussion with an extensive body of literature including case studies and qualitative studies examining collaborative processes. Several broad areas have been identified in the existing research.

Collaborative environments should have well defined procedures (Alexander & Stone, 1997; Cracolice & Deming, 2001; Denayer, Thaels, Stoten, Vander, & Gobin, 2003; Dickson, 1997; Hillburn & Humphrey, 2002; Lerner, 1995; Peterson, 1996). Process aids focus and prevent lost time and disagreement over inconsequential matters. Team formation processes (Amey, 2000; Busseri, 2000), cohesion (Lewis, 1997; Russ & Dickinson, 1999), and trust (Huff, Cooper, & Jones, 2002) develop over time. Team composition can influence team process and outcomes (Huff, Cooper, & Jones, 2002; Strough & Cheng, 2000; Winter, Neal, & Wagner, 2001).

Case studies suggest that training is necessary for successful projects (McCorkle, et al., 1999; Berge, 1998; Lewis, 1997; Goodwin, 1999) and required for peer assessment (Bangert, 2001; Cheng, 2000). Training impacts student attitudes (Karsch, 2001), shared work loads (Peterson, 1996), and increased involvement and motivation (Phipps, 2001). Reinforcing skills produces higher achievement (Dickson, 1997; Busseri, 2000; Russ & Dickinson, 1999). Training enhances self-, peer-, and team-evaluation. Students found teamwork demoralizing, slowed work resulted without feedback (Brown & Knight, 1994), and absence of feedback exacerbated student failure (Ehrlenspiel, Giapoulis & Gunther, 1997). However, self-evaluation skills positively impacted students' learning ability (Brown & Knight, 1994) and regular assessments can improve team performance (Busseri & Palmer, 2000).

Frame Work and Model Development

The model (see Figure 1) integrates themes found in literature, present findings, and informal observation. Four factors, leadership training, self- and peer-evaluation, team composition, development of learning objectives and quality of outcomes have been combined with faculty and student input to comprise the model's independent variables. Informal and anecdotal observation resulted in three broad intervening variables identified as personal resources, program infrastructure, and team development. These broad categories of independent and intervening variables form hypothesis development and investigation.

Methodology

Interior design faculty holding IDEC memberships and subscribing to the listserv were solicited for participation. Students and faculty participating in team projects were eligible. Faculty requested 341 student instruments; 62% (n=213) were returned. Approximately 71% (n=15) of responding faculty returned instruments.

Faculty and student questionnaires were developed following a literature search and pilot study. The faculty and student questionnaires covered demographics, common collaborative practices, training, and perceptions of student attitudes, habits and best practices. Questionnaires were mailed to faculty who administered the questionnaire to students in a fashion similar to confidential course evaluations and were returned by mail.

Discussion and Summary

Exploratory statistical analysis of team environment (independent variable composed of learning objectives, team composition, training, and feedback factors) established firm correlations between some factors and demonstrates lack of support for findings in the literature in other areas. The literature provides a foundation for including team training and analysis from this research supports some findings in the literature.

However, analysis of data for this research project did not support the correlations reported in the literature between satisfaction of teamwork and use of self- and peer-evaluations. Further analysis and experimental research is necessary to understand all of the relationships depicted in the present model. This will be discussed with members of the audience and alternative hypotheses may be generated.

References

Alexander, M. W., and Stone, S. F. (1997). Student perceptions of teamwork in the classroom: An analysis by gender. Business Education Forum, 51(3), 7 – 10.

Amey, M. J., and Brown, D. F. (2000). Interdisciplinary Collaboration and Academic Work. Paper presented as the 25th Annual Meeting of the Association for the Study of Higher Education, Sacramento, CA, Nov 16 – 19.

Bangert, A. W. (2001). Peer assessment: A win-win instructional strategy for both students and teachers. Journal of Cooperation and Collaboration in College Teaching, 10(2), 77 – 84.

Berge, Z. L. (1998). Differences in teamwork between post-secondary classrooms and the workplace. Education & Training, 40(4/5), 194 – 201.

Brown, S. & Knight, P. (1994). Assessing learners in higher education. Philadelphia, PA: Kogan Page.

Busseri, M. A., & Palmer, J. M. (2000). Improving teamwork: The effct of self-assessment on construction design teams. Design Studies 21, (3) 223-238.

Cheng, W., and Warren, M. (2000). Making a difference: Using peers to assess individual students' contributions to a group project. Teaching in Higher Education, 5(2), 243 – 256.

Cracolice, M. S. & Deming, J. C. (2001). Peer-led team. *Science Teacher*, (68) Jan, Issue 1, 20-25.

Denayer, I, Thaels, K, Stoten, J. Vander, and Gobin, R. (2003). Teaching a structured approach to the design process for undergraduate engineering students by problem-based education. *European Journal of Engineering Education, 28* (2) 203-215.

Dickson, E. L. (1997). Structuring effective student teams. Journal of Public Administration Education, 3, 191 – 202.

Ehrlenspiel, K., Giapoulis, A. & Gunther, J. (1997) Teamwork and design Methodology: Observations about teamwork in design education. Research in Engineering Design, 9, 61-69.

Goodwin, M. W. (1999). Cooperative learning and social skills: What skills to teach and how to teach them. Intervention in School and Clinic, 35 (1).

Hillburn, T. B. and Humphrey, W. S. (2002, September/October). Teaching teamwork. IEEE Software, 72 – 77.

Huff, L. C., Cooper, J., and Jones, W. (2002). The development and consequences of trust in student project groups. *Journal of Marketing Education, 24* (1) 24-35.

Karsch, K. (2001). The Effect of Group Training on Adolescent Cooperative Learning Teams. Dissertation Abstracts International Section A: Humanities & Social Sciences, Vol. 61 (12-A), 2001 pp. 4672.

Lerner, L. D. (1995). Making student groups work. Journal of Management Education, 19(1), 123 – 125.

Lewis, J. (1997). Simply supreme teams. Women in Business, 49(2), 29 – 33.

McCorkle, D. E., Reardon, J., Alexander, J. F., King, N. D., Harris, R. C., & Vishwanathan, I. (1999). Undergraduate marketing students, group projects, and teamwork: The good, the bad, and the ugly? Journal of Marketing Education, 21(2), 106 – 117.

Peterson, M. (1996). A team-based approach to problem-based learning: An evaluation of structured team problem solving. Journal on Excellence in College Teaching, 7(3), 129 – 153.

Phipps, M., Phipps, C., Kask, S., & Higgins, S. (2001). University students' perceptions of cooperative learning: implications for administrators and instructors. Journal of Experimental Education, 24(1) 14-22.

Russ, R. Ph.D., & Dickinson, J. (1999). Collaborative design: "Forming, storming and norming." Journal of Interior Design, 25(2), 52 – 58.

Strough, J., & Cheng, S. (2000). Dyad gender and friendship differences in shared goals for mutual participation on a collaborative task. *Child Study Journal, 30* (2), 103 – 126.

Winter, J. K., Neal, J. C., & Waner, K. K. (2001). How male, female, and mixed-gender groups regard interaction and leadership differences in the business communication course. *Business Communication Quarterly, 64* (3), 43-58.

EMBRACING CREATIVE TENSION: NARRATIVES OF STRATEGIC LEADERSHIP IN DESIGN

Sheila Danko, M.I.D   Margaret Portillo, Ph.D.
Cornell University   University of Kentucky

Purpose

In any creative process there exists multiple points of tension between old ways of doing and new ways of thinking. As pioneering organizations promote change, these creative tensions surface as diverse needs, values, and goals between the individual, workgroup, and organizational levels collide. As a source of potential abrasion, successfully reconciling these tensions is where creativity and strategic leadership intersect.

According to Leonard & Strauss (1999), "If abrasion is not managed into creativity, it will constrict the constructive impulses of individuals and organizations alike. Rightly harnessed, the energy released by the intersection of different thought processes will propel innovation" (p. 78).

The purpose of the present investigation is to identify creative tensions and critical junctures in workplace design where leaders strategically harness and channel conflicts towards innovative solutions.

Methodology

This study adopts an interacting systems framework encompassing individuals, work groups, leaders, and climates for innovation (Scott & Bruce, 1994; Woodman, Sawyer, & Griffin, 1993). A systems approach accounts for creative behavior occurring across all organizational levels as individuals interact in their environment. At each level of the system, opportunities for triggering creative tension abound.

To target creative tensions occurring at numerous levels across this systems framework the investigators selected a narrative method. Narrative inquiry is particularly well suited to exploring multiple perspectives, interpersonal interactions, and tensions arising in organizations, narrative offers a powerful method of revealing the subjective experience, couched in a level of detail and context often missing in traditional case studies (Labov, 1982).

Five narratives illustrating creative tension points were constructed from on-site interviews with upper level management, employees, and designers of two different case studies: DreamWorks Animation Studio and Boston Financial headquarters. These two organizations were selected because they fulfilled the following criteria: Both facilities exhibit a strategic use of design, enabled interviews to be collected from multiple perspectives, and offered site accessibility.

The interview protocol was structured to tap into critical junctures in the design process and the resulting reactions to the built environment. All interviews were audio-taped and transcribed verbatim. Additionally, to assure validity in the interpretation process, each investigator independently reviewed the interview transcriptions to identify junctures were leadership embraced creative tensions. The ensuing narratives were constructed by the authors and draw heavily on the words of those interviewed, corroboration from other case interviews, and behavioral observations made at the project sites.

While unique situational factors frame each story, common leadership practices define characteristics of strategic design. These narratives, co-constructed from multiple sources of evidence, each focus on creative tensions in contemporary work life. Narratives speak to the process of negotiating and renegotiating conflicts and this form of scholarship has great potential for elucidating design meaning (Ganoe, 1999; Portillo, 2000).

Summary of Results

The resulting stories revealed specific leadership practices that embraced creative tensions as springboards for innovation in design. Recurring themes of strategic leadership across the five narratives include: (1) leadership choosing to design for intrinsic motivation over conventional organizational image. (2) leadership designing for process and not prestige, and (3) leadership designing for tangible evidence of values in the built environment. These findings provide insight into the meaningful alignment of values across all levels of the organizational system, and demonstrate insightful and strategic leadership.

Implications from these narratives suggest that an expanded partnership between executive management and designers could facilitate strategic solutions as creative tensions surface. Managing changing expectations will help to ensure that future workplace design is supportive and responsive to both individual and organizational needs resulting in a more humane workplace. "Every corporate leader and every leading designer must consider this part of their charge, part of their opportunity for leaving a legacy of change" (Danko, 2000, p. 19).

References

Danko, S. (2000). "Beneath the Surface: A Story of Leadership, Recruitment and Retention and the Hidden Dimensions of Interior Design" *Journal of Interior Design*, *26(2)*, 1-24.

Ganoe, C. (1999). Design as narrative: A theory of inhabiting interior space. *Journal of Interior Design, 25*(2), 1-15.

Labov, W. (1982). Speech actions and reactions in personal narrative. In D. Tannen (Ed.), *Analyzing discourse: Text and talk* (pp. 219-247). Washington D.C.: Georgetown University Press.

Leonard, D. & Straus, S. (1999). Putting your company's whole brain to work. In *Harvard Business Review on Breakthrough Thinking* (pp. 57-86). Boston MA: Harvard Business Press.

Portillo, M. (2000). (Ed.) Narrative Inquiry [Special Issue]. *Journal of Interior Design, 26(2)*.

Scott, S. G. & Bruce, R.A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal, 37,* 580-607.

Woodman, R. W., Sawyer, J. E. & Giffin, R. W. (1993). Toward a theory of organizational creativity. Academy of Management Review, 18 (2), 293-321.

INTERIOR DESIGN STUDENTS' PERCEPTIONS OF RESEARCH: VALUES, DEFINITIONS, AND IMPLEMENTATION

Joan I. Dickinson   Marilyn A. Read
Virginia Tech   Auburn University

John P. Marsden
University of Florida

Purpose

Because research distinguishes a profession from a trade school vocation (Becker, 1999; Dickson & White, 1995), establishing a solid base of knowledge for the interior design profession has emerged as a salient topic in recent years (Harmon-Vaughan & Wiens, 2001). However, few interior design practitioners truly understand the definition of research or utilize research findings when generating solutions (Dickson & White, 1993; Dickson & White, 1995). Instead, many practitioners base design decisions on past experience and/or preference (Becker, 1999; Dickson & White, 1993). Decisions based on a body of knowledge could supplement experience and empirically support design solutions (Guerin, 1992). Building upon work that has examined practicing professional's perceptions of research (Dickson & White, 1993; Dickson & White, 1995), this session investigates undergraduate interior design student attitudes regarding research. More specifically, third and fourth year undergraduate interior design students in Colleges of Architecture or Human Sciences at three different research universities (n = 89) were surveyed to compare their (a) perceived value of research in interior design practice, (b) perceptions of who should conduct research, (c) attitudes toward research in interior design education, and (d) definitions of research. It was hypothesized that students in a College of Human Sciences value empirical research more than students in a College of Architecture and that curriculum and college affiliation shape a pragmatic view of research.

Methodology

A survey instrument was developed that consisted of 1 open-ended question and 29 questions using a Likert scale where 1 equaled strongly agree and 5 equaled strongly disagree. Questions 1 through 21 were adapted from the Chenoweth and Chidister (1983) scale that measured landscape architecture attitudes toward research (r = .92). Questions 22 through 29 were adapted from the Dickson and White (1993) scale administered to interior design practicing professionals. Two interior design department heads reviewed the questionnaire for content validity.

Summary of Results

A total of 89 undergraduate students were surveyed from the three universities. The majority of the students were Caucasian (n = 79) and female (n = 84). The results indicated that overall, the students valued research for the profession regardless of their college or university affiliation. However, their definitions of research were pragmatic in nature, and they often regarded research as the gathering of information rather than the generation of new knowledge. Moreover, the students were also unclear on who should be conducting interior design research. As pointed out by Dickson and White (1993), educators often use the term research when referring to the simple gathering of information from soft sources. The fact that students have a practical viewpoint comes as no surprise. In direct contradiction to the hypothesis, college affiliation revealed that students who were in an architecturally based program seemed to better value research at the undergraduate level and seemed to better understand that research was meant to advance a profession versus those students who were housed in a College of Human Sciences.

References

Becker, F. (1999, Winter). Good medicine. *Perspective,* 56-62.
Chenoweth, R., & Chidister, M. (1983). Attitudes toward research in landscape architecture: A study of the discipline. *Landscape Journal,* 2(2), 98-113.
Dickson, A. W., & White, A. C. (1993). Are we speaking the same language? Practitioners' perceptions of research and the state of the profession. *Journal of Interior Design,* 19(1), 3-10.

Dickson, A. W., & White, A. C. (1995). The Polsky forum: The creation of a vision for the interior design profession in the year 2010. *Journal of Interior Design,* 20(2), 3-11.

Guerin, D. A. (1992). Issues facing interior design education in the twenty-first century. *Journal of Interior Design Education and Research,* 17(2), 9-16.

Harmon-Vaughan, B., & Wiens, J. (2001, Fall). Voices in design: What are we saying about research? *Perspective,* 42-45.

A HISTORY OF THE "DESIGN AND HUMAN BEHAVIOR" IDEA: IMPLICATIONS FOR INTERIOR DESIGN PEDAGOGY

Ben Jacks
Miami University

Purpose

"Design and Human Behavior," is an essential course in interior design programs, an assumed feature of many studios, and an integral part of FIDER accreditation standards and guidelines. But the history of the design and human behavior idea has gone largely unexamined. This paper argues that an examination of the intertwined popular and academic manifestations of the design and human behavior idea is critical to interior design pedagogy. Student perspective - and learning - within studios and courses depends upon recognition that "design and human behavior" is an idea with cultural origins and implications. The implications for teaching and courses of study extend in part from the recognition of the disciplinary and interdisciplinary origins of the design and human behavior idea.

Methodology

An interpretive, historical analysis of the design and human behavior idea, this paper relies on primary research in journals serving the relevant disciplines. Archival materials, recent literature from programs in architecture and interior design, and a range of secondary sources further illuminate the narrative description and interpretation. The authors experience teaching "Design and Human Behavior" underlies interpretive conclusions concerning pedagogical implications for students.

Summary

After World War II the design and human behavior idea gained a sense of urgency. Believing that the formal qualities of buildings were synonymous with the realization or destruction of human potential, designers and social scientists sought to codify the relationship between architecture and social activity through scientific research. Inspired by technological and scientific enthusiasm, leading practitioners articulated the idea of the impact of the environment on human beings at the 1947 Princeton University symposium, "Building For Modern Man," and issued calls for more research. Many people, including members of the United States federal government, by increasing funding for mental health, prominent cultural critics, by voicing concerns over suburbanization, and celebrated architects such as Richard Neutra, all helped to promote the notion that science could uncover the relationship between people and places. However, the design and human behavior idea has always been contested among academics. Frequently thought of as an aberration, a throwback to the activities of a few 1960s-inspired social scientists, design and human behavior research seems to possess little currency in programs in architecture at present. In interior design programs, the commitment to actual research is higher, but ironically, perspective on the broader implications of such research is lacking. Nevertheless, design and human behavior is an integral standard of accreditation, and an assumed part of

courses of study for interior designers. In the studio and classroom, awareness of the historical narrative - and the possibility of alternative narratives - yields perspective essential to instruction and student learning.

References

Barker, Roger G. (1968). *Ecological Psychology*. Stanford, California: Stanford University Press.

Belgrad, Daniel (2001). The Ideal of Spontaneity. In Mary Kupiec Cayton, et al. Eds, *Encyclopedia of American Cultural and Intellectual History,* vol.3: 65-74.

Bechtel, Robert B. (1997). Environment & Behavior: an Introduction, Thousand Oaks, California: Sage Publications.

Bizios, Georgia (1994, 1998). *Architecture Reading Lists and Course Outlines*, Chapel Hill, North Carolina: North Carolina State University, vol. 3, vol. 4.

Creighton, Thomas H. (1947). Form Still Follows Function, *Progressive Architecture*,December, 1947, 20.

Creighton, Thomas H. (1949). *Building for Modern Man*. Princeton, New Jersey: Princeton University Press.

Eckman, Molly; Clemons, Stephanie; Oliver, Barbara (2001). An Empirical Analysis of the Journal of Interior Design, Journal of Interior Design, Vol. 27, #2.

Gutman, Robert (1968). What Architecture Schools Expect from Sociology, *Journal of Architectural Education*, vol. XXII: 14-20.

Hines, Thomas S. (1982). *Richard Neutra and the Search for Modern Architecture*, London: Oxford University Press.

Hudnut-Beumler, James (2001). The Culture and Critics of the Suburb and the Corporation, In Mary Kupiec Cayton, et al. Eds, *The Encyclopedia of American Cultural and Intellectual History*, New York: Scribner, vol. 3:27-34.

Kett, Joseph F. (2001). The Culture of Self-Improvement, In Mary Kupiec Cayton, et al. Eds, *The Encyclopedia of American Cultural and Intellectual History*, New York : Scribner, vol. 3: 81.

Lavin, Sylvia (2001). Open the Box: Richard Neutra and the Psychology of the Domestic Environment, *A + U*, 371, p. 12-31.

Riesman, David (1950). *The Lonely Crowd*. New Haven: Yale University Press.

Wang, David (2003). Categories of ACSA Conference Papers: A Critical Evaluation of Architectural Research in Light of Social Science Methodological Frameworks, *Journal of Architectural Education,* vol. 56, #4: 50-56.

Ward, Tony (1970). Totalitarianism, Architecture and Conscience, *Journal of Architectural Education*, vol. XXV: 35-49.

Whyte, William H. (1953). How the New Suburbia Socializes, *Fortune*, August 1953.

<div style="text-align:center">

PAPERS
Friday, March 26
9:30-10:15 am

</div>

THE COFFEE SHOP AS A THIRD PLACE: IMPLICATIONS FOR PLACE ATTACHMENT

Lisa Waxman
Tom Anderson
Florida State University

Purpose

The purpose of this study was to see what qualities, both physical and social, encourage people to gather in *third places*, and develop an attachment to those places. Third places are not our homes or offices, but those other places we frequent that help get us through the day. For the purposes of this study, the third places chosen included three coffee shops.

Methodology

This study was qualitative in nature utilizing the techniques of observation and behavioral mapping, interview, and visual documentation. Observation and behavioral mapping of patrons in the coffee shops took place for a total of 75 hours, 25 hours in each of the three coffee shops. Fifteen in depth interviews were conducted with patrons of the coffee shops as well as the owners or managers.

Context

Attachment is a set of feelings that emotionally bind us to a place. "Places root us - to the earth, to our own history and memories, to our families and larger community" (Cooper-Marcus & Francis, 1998). Proshansky, Fabian, and Kaminoff (1983) state that place attachment involves the interplay of emotions, knowledge, beliefs, and behaviors in reference to a place. Social relationships may enhance the activity of people-place bonding. The social involvement of family, friends, community, and culture may be equally, or more important, than place alone (Cooper-Marcus, 1992).

A number of scholars and social commentators (Fleming and Von Tscharner, 1987); Lippard, 1997; Putnam, 2000) have been concerned that there is a decreasing ability of people to connect with their communities and the people who live among them. In the *Great Good Place* Ray Oldenburg (1999) expressed concern that neighborhood-gathering places are disappearing. Oldenburg calls these places *third places*, those places other than home or office that help get us through the day. Third places provided a place to connect with the people of our communities as well as a place to exchange ideas and news.

Findings

The findings have been broken down into four categories including a) physical design characteristics, b) characteristics of the patrons, c) activities, and d) feelings and attitudes regarding the coffee shop. In the category of physical design characteristics, findings were classified into subcategories including location of the coffee shop, layout, ambient conditions, and decorative features. Regarding patrons, subcategories included the types of people who frequent coffee shops, employees, and the characteristics of patrons. The activity category was subdivided into building knowledge, socializing, food and drink, special events, business activities, and passing time. Feelings and attitudes were collapsed into several subcategories including attachment to place/people, support system, territorial issues, home away from home, and the coffee shop as a place of trust and respect.

For many of the people who frequent coffee shops, their experience is about much more than coffee. This qualitative study reveals the value of these places in providing an opportunity for attachment to places, people and community, a potential support system, the opportunity to establish a territory, and a place to find trust and respect. Designers should be aware of the multiple services these places offer and how to best design them to support the needs to the patrons.

References

Altman, I. & Low, S. (Eds.). (1992). *Place attachment*. New York: Plenum Press.

Ahrentzen, S. B. (1992). Home as a workplace in the lives of women. In I. Altman & S. Low (Eds.), *Place attachment* (pp. 113-138). New York: Plenum Press.

Belk, R. (1992). Attachment to possessions. In I. Altman & S. Low (Eds.), *Place attachment* (pp.37-55). New York: Plenum Press.

Boschetti, M. (1987). Memories of childhood homes: Some contributions of environmental autobiography to interior design education and research. *Journal of Interior Design,* 13(2), 27-36.

Brown, B. & Perkins, D. (1992). Disruptions in place attachment. In I. Altman & S. Low (Eds.), *Place attachment* (pp. 279-301). New York: Plenum Press.

Chawla, L. (1992). Childhood place attachments. In I. Altman & S. Low (Eds.), *Place attachment* (pp. 63-84). New York: Plenum Press.

Cooper-Marcus, C. (1992). Environmental memories. In I. Altman & S. Low (Eds.), *Place attachment* (pp. 87-112). New York: Plenum Press.

Cooper-Marcus, C. & Francis, C. (1998). *People places*. New York: Wiley & Sons.

Crumpacker, S. (1993). The experience of school as place. *Dissertation Abstracts International, 53/08, 2610.*

Eshelman, P. & Evans, G. (2002). Home again: Environmental predictors of place attachment and self-esteem for new retirement community residents. *Journal of Interior Design,* 28(1), 3-9.

Fleming, R. L. & Von Tscharner, R. (1987). *Placemakers.* Orlando, FL: Harcourt Brace Jovanovich.

Hummon, D. (1992). Community attachment. In I. Altman & S. Low (Eds.), *Place attachment* (pp.253-276). New York: Plenum Press.

Kaplan, S. (1987). Aesthetics, affects, and cognition: Environmental preferences from an evolutionary perspective. *Environment and Behavior,* 19, 3-32.

Kaplan, S., & Kaplan, R. (1982). *Cognition and environment: Functioning in an uncertain world.* New York: Praeger.

Lippard, L. (1997). *The lure of the local: Sense of place in a multicentered society.* New York: The New Press.

Low, S. (1992). Symbolic ties that bind. In I. Altman & S. Low (Eds.), *Place attachment* (pp.165-184). New York: Plenum Press.

Oldenburg, R. (1999). *The great good place.* New York: Marlowe & Company.

Proshansky, H., Fabian, A., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology,* 3, 57-83.

Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community.* New York: Simon & Schuster.

Riley, R. (1992). Attachment to the ordinary landscape. In I. Altman & S. Low (Eds.), *Place attachment* (pp.13-32). New York: Plenum Press.

Rubinstein, R. & Parmelee, P. (1992). Attachment to place and the representation of the life course by the elderly. In I. Altman & S. Low (Eds.), *Place attachment* (pp.139-160)*.* New York: Plenum Press.

Tuan, Y. F. (1980). Rootedness versus sense of place. *Landscape,* 24, 3-8.

Unger, D. G. & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of* Community Psychology, 13, 139-169.

PAPERS
Friday, March 26
9:30-10:15 am

TAKING THE LEAD IN COLLABORATIVE INTERNATIONAL INTERIOR DESIGN EDUCATION: FINDING THE COMMON GROUND BETWEEN DISCIPLINES

Donna Zimmerman
Kathe Miller Stumpf
University of Wisconsin-Stevens Point

Purpose

Many interior design programs offer an international study component to broaden students' perspectives globally, to inspire creativity and sensitivity of culturally dictated design, and to demonstrate the impact of designers on shaping historic and contemporary built environments. These are valuable experiences and can be enriched by collaboration with disciplines outside of, but complementary to, interior design. Collaboration in teaching has been encouraged across disciplines (Huber and Morreale, 2002). Such disciplines as sociology, business/economics and even natural resources have been successfully combined with interior design to provide students with a well-rounded experience and a critical eye for collaborative decision-making in interior design. The purpose of this presentation will be to explain the process of leading collaborative international travel seminars for interior design students with other disciplines. Findings from twenty case studies, spanning eighteen years, will be discussed. Questions posed about the process and findings will encourage audience participation in sharing their own experiences and insight.

Process/Context

The findings from twenty case studies indicate that there are three main considerations critical to creating collaborative international travel experiences that integrate relevant mutually beneficial information for both groups of students.

1. Identify compatible disciplines where acquired information would be mutually beneficial to both groups of students and their instructors. Specific examples of collaboration with sociology, graphic design, business/economics, and natural resource majors will be presented.
2. Determine relevant major theme for study with both disciplines and identify cities/places with sites that support major issues significant to the theme. A variety of western and non-western nations (Great Britain, Germany, France, Italy, Greece, and China) will be illustrated with examples of beneficial sites for collaboration.
3. Define the syllabus, course structure, and projects that generate knowledge and understanding of major issues under study. Considering the collaborative nature of the course, it is important that students "speak the same language" and therefore a glossary combining vocabularies of each discipline is essential. This type of course also allows an excellent opportunity to engage students in active learning as they are "on the road" experiencing new environments while interacting with the perspectives of a different discipline. The course description and objectives must also be able to draw students to participate and to receive sometimes controversial support from the sponsoring departments. Innovative projects will be discussed.

Summary

An interdisciplinary, international travel seminar can be an excellent learning experience and broaden student perspectives on their own field as well as that of another field, given that the collaboration is relevant and enriching to both sets of students. For interior design students, it provides a deeper understanding of the complexity of their field and how multidisciplinary forces impact design decisions. Integration of this international collaborative experience upon return to the academic studio will also be presented. Student design solutions were found to be more thoughtful, creative, and culturally sensitive as an outcome based on building confidence from an expanded knowledge base and from a deeper understanding of another discipline's perspective on design.

References

Huber, M. T. and Morreale, S. P. (Eds.) (2002). *Disciplinary Styles in the Scholarship of Teaching and Learning: Exploring Common Ground*. Menlo Park, CA: Carnegie Foundation for the Advancement of Teaching.

PAPERS
Friday, March 26
10:15-11:00 am

CRITICAL REVIEW OF INTERIOR DESIGN IN THE TWENTIETH CENTURY

Nancy Blossom
Kristi Marian
Washington State University

Issue

Interior design came of age in the twentieth century. Yet as the century came to a close, professional and academic leaders pleaded with the interior design community to demonstrate the value of the field to the public and to other professions. A critical review of the works and practices of interior designers in the twentieth century may bring an important new perspective to the debate by demonstrating the benefit of interior design practice to society.

At the advent of the twenty first century, interior design scholars and practitioners need to take a more thorough look at the history of the interior design profession in the twentieth century to 1) confirm the application of specialized knowledge in the field that indeed benefits society through practice, 2) claim the history of the interior design profession as distinct from that of architecture, furniture and other design disciplines and 3) develop a critical and evaluative analysis of the success and failures of interior designers as individuals and as a group.

Methodology

The first step in developing a historical database was to test available public information on individuals in various design disciplines (architecture, art, furniture, industry, interiors, lighting, textiles, etc.) by using multiple public sources such as textbooks, journals and the Internet. The search resulted in a list of over 400 names. The next step was to test methods for organizing the list, narrowing the focus and entering data on each individual. Three different formats were tested for storing and analyzing the data. The first comparative database developed in Filemaker Pro lists names of the all designers by name and profession. Next the group was narrowed to a database that lists only designers who are identified as interior designers or decorators. Finally a comparative database using the framework of the *Interior Design* Hall of Fame was developed. The second approach was developed in Excel format databases expanding the Hall of Fame data to 1) describe how many citations are available about each designer, the companies they work for, when they were accepted to the Hall of Fame and profession by training or education, 2) list in which journals (domestic or international) and how many times each designer has been published, and 3) list a detailed summary of journal entries, when each designer was published, in which journal, and how frequently. Finally Word documents were developed that contain all the citations gathered on Hall of Fame designers from journal entries, books, media (videos, slides) and Internet entries.

Summary

Challenges encountered in the first phase of the development of a historic database raise compelling questions about our understanding of the field and/or discipline of interior design. While there is no lack of information on individuals who practiced in the field of interior design, an incredible disparity of information is evident. Further it may be difficult yet, to claim the history of the interior design profession as distinct from that of architecture, furniture and other design disciplines. Did interior design come of age as a profession and academic discipline in the twentieth century?

References

Dickson, Ann Whiteside, & White, Allison Carll (1993). Are we speaking the same language? *Journal of Interior Design* 19(1), 3.
Dickson, Ann Whiteside, & White, Allison Carll (1994). The Polsky forum: the creation of a vision for the interior design profession in the year 2010. *Journal of Interior Design* 20(2), 3.
Dickson, Ann Whiteside, & White, Allison Carll (1997). Interior design criticism: developing a culture of reverence for the interior environment. *Journal of Interior Design* 23(1), 4.
Fowles, Dorothy L. (1992). Interior design education in the year 2000: a challenge to change. *Journal of Interior Design Education and Research* 17(2), 17-24.
Guerin, Denise A. (1992). Issues facing interior design education in the twenty-first century. *Journal of Interior Design Education and Research* 17(2), 9-16.
Greenwood, E. (1957). Attributes of a profession. Social Work, 2, 45-55.
Hasell, Mary Joyce, & Scott, Suzanne (1996). Interior design visionaries' explorations of emerging trends. *Journal of Interior Design* 22(2),1.
Holsti, Ole (1969). *Content Analysis for the social sciences and humanities.* Reading, Mass: Addison-Wesley.
Klay, W. E., Brower, R. & Williams, B. (2001). A community-oriented model of academic professionalism. *Metropolitan Universities: An International Forum*, 12(3), 41-50.
Margolin, Victor (1989). *Design discourse.* Chicago, Illinois: The University of Chicago.
Pile, John F. (2000). *History of interior design.* John Wiley and Sons.
Pile, John F. (1995). *Interior Design.* New York: Harry Abrams.
Schein, E. (1973). *Professional Education.* New York: McGraw-Hill.
Turpin, John C. (2001). Omitted, devalued, ignored, reevaluating the historical interpretation of women in the interior

design profession. *Journal of Interior Design* 27(1), 1.

Thompson, JoAnn Asher, & Guerin, Denise A. (2002). The challenge: transformation of interior design education and practice. Unpublished paper.

White, Allison Carll, & Dickson, Ann W. (1994). Practitioners' perceptions of interior design graduate education and implications for the future. *Journal of Interior Design* 20(2), 27.

CONNECTING THE CLASSROOM AND THE COMMUNITY: AN INTERDISCIPLINARY RETAIL SERVICE LEARNING PROJECT

Dorothy L. Fowles
Iowa State University

Purpose

Effective student learning is dependent on the personal relevance of the topic or activity. Service learning provides a rich context for relevance and learning. Service learning links the academic student work with real world problems and needs. The studio assignment is established by the identified needs of the community. Thus, service learning not only connects, but affects both parties: the community which receives the services and the students who gain a more personal appreciation for course content and an enhanced sense of civic responsibility.

The purpose of this paper is to analyze the learning benefits and difficulties of service learning projects in interior design education. Experiences from a five-year case study of student involvement in interdisciplinary, rural community retail outreach projects provide a basis for analysis of the pros and con.

Process/Context

Senior interior and graphic design students work in 3-4 person teams with 10-12 retailers in a small midwestern rural community. The design process involves four contacts with the retailers.

- An initial meeting with the instructor.
- An initial site visit to interview the client and document the existing conditions.
- A mid-point teleconferencing for discussion and feedback on design concepts and solution options.
- A final presentation of design proposals to the retailers and community leaders.

Early on, problems statements and objectives are faxed to the retailers for acceptance. At the end of the project, a team-developed report gives general retail design guidelines and specific ideas for each retailer in a richly illustrated format.

The retailers receive design suggestions to enhance the appearance of the individual stores and their main street/ town square area. Historic preservation, universal design, sustainable design, and economic considerations are integrated in the suggestions. The suggestions relate to the storefront design, signage, merchandise and window displays, lighting, floor plan, interior color schemes and material options, as appropriate for each store.

Summary

The results of the five-year experience show that this service-learning project strengthens students' ability to become active learners as well as responsible citizens. Personal values of the project include an appreciation of the relevance of

the course content to the real world and learning to focus on client values rather than personal preferences. Students gain self-confidence in dealing with clients and their real problems. They also gain a sense of professional civic responsibility.

Communication skills are honed during the project. Verbal clarity, tact and diplomacy with clients, a focus on client's values and perspective in both written and verbal presentations are skills that receive needed attention. Design creativity is challenged within real constraints such limited budgets, franchise and code regulations, construction constraints, and historic contexts. Interacting as a functioning team, especially with another design discipline provides additional learning opportunities.

The community retailers receive benefits as well. They change their limited stereotypic image of interior design. They become awareness of visual problems and gain expanded insights into potential solutions. The project provides a renewed interest in the potential of the main street area as a focus and identity for the town.

References

American Association of Higher Education. (2000). *Service-Learning Project*. Available:
    http://www.aahe.org/service/srv-lrn.htm.
Center for Public Service and Leadership Office of Service Learning. (n.d.). What is service learning Available:
    http://www.psynt.iupui.edu/cpsl/servhome.htm.
Cooper, M. (n.d.) *The Big Dummy's Guide to Service Learning*. Available:
    http://www.fiu.edu/~time4chg/Library/bigdummy.html.
Deasy, C.M. (1985). *Designing Places for People*. New York: Whitney Library of Design.
Grant, J. (1995). *A Budget Guide to Retail Store Planning and Designed, Revised 2nd edition.* Cincinnati, OH: ST
    Publications.
Sousa, D. A. (1995). *How the Brain Learns.* Reston, VA: The National Association of Secondary School Principals.

PAPERS
Friday, March 26
10:15-11:00 am

GENDER AND BIAS: SECRET DIMENSIONS OF THE TENURE LADDER

Linda Nelson Johnson
Dr. Janetta Mitchell McCoy
Arizona State University

Issue

Gender bias in evaluation of teachers' performance was found to be strongly evident in a pilot study of 146 design students at a state university. Since teaching evaluations are an important factor in most promotion and tenure decisions, this study may be relevant to understanding why female faculty tend not to be found at the top of the academic tenure ladder in American universities. The design department in one other similar university has been recruited to further test the findings.

Process/Context

For the initial study, a questionnaire was developed based on the evaluation instrument used by the pilot study college. The questionnaire was administered to first and fourth year students majoring in industrial, graphic, and interior design. The instrument contained 15 questions related to female instruction, 15 questions related to male instruction, and 15

questions related to the overall program with non-gender specific instruction. Of the students surveyed in the pilot study, 105 (72%) rated male instructors significantly higher than female instructors. Male instructors were given higher ratings on 14 of the 15 questions and received higher ratings than the overall program on 4 of the 15 questions. The program rated higher than female instruction in 13 out of 15 instances. First year students demonstrated greater gender bias in rating instructors than fourth year students, but still showed significant preference for male instructors.

Although no data was found to suggest this is a universal phenomenon, other disciplines have noted significant effects of student and instructor gender on teaching evaluations. These findings are often confounded with other predictors of students' evaluation of teachers' performance: grade expectations; teaching styles; teachers' personality traits; students' major and class standing; and perceived status of professor. Unfortunately, teaching evaluation questionnaires may support bias. For instance, questions with the most potential for such bias relate to teacher's overall performance and questions with least bias relate to formative assessment and learning outcomes. Many professors' annual performance, and tenure and promotion evaluations are partially based on course evaluation scores; the primary indicator is often the means of questions related to overall instructor performance and overall course quality.

Summary

Further testing of our findings includes repeating our initial test in another design program. Based on these findings, a new teaching and course evaluation developed to minimize students' gender bias will be tested and results compared. Removing gender bias from the teaching evaluation should result in more equitable ratings. This, hopefully, will begin to demystify some requirements for climbing to the top rung of the tenure ladder.

References

Ahrentzen, S. & Anthony, K. (1993). Sex, Stars, and Studios: A look at Gendered Educational Practices in Architecture. *Journal of Architectural Education*, 47, 11-29.

Basow, S. A. & Silberg, N. (1987). Student evaluations of college professors: Are female and male professors rated differently? *Journal of Educational Psychology*, 79, 308-314.

Basow, S. A. (1995). "Student Evaluations of College Professors: When Gender Matters." *Journal of Educational Psychology,* 87, 656-665.

Fredrickson, M. (1993). Gender and Racial Bias in Design Juries. *Journal of Architectural Education*, 47(1), 39 –49.

Sarkees, M. R. (1999). Misdirected backlash: the evolving nature of academia and the status of women in political science. *PS: Political Science and Politics*, March 1999.

Tatro, C. N. (1995). Gender effects on student evaluations of faculty. *Journal of Research and Development in Education,* 28, 169-173.

Worthington, A. C. (2002). The impact of student perceptions and characteristics on teaching evaluations: A case study in finance education. *Assessment and Evaluation in Higher Education*, 27, 49-64.

PROFESSIONAL LEGITIMACY IN INTERIOR DESIGN

Mary C. Sterling
Indiana State University

Purpose

A critical question in determining the legitimacy of any profession is the role and evolution of education for its participants and accreditation for its programs. Interior design has struggled for credibility and a unique definition among all of the disciplines providing shelter for the populace (Hildebrandt, 2001). Recognized legitimacy for interior design can be established through standardized educational protocol, program accreditation, and a significant body of catalogued research. The objective of this study was to identify categories, patterns, or themes of accredited schools of Interior Design in preparing for program review by the internationally recognized Foundation for Interior Design Education Research (FIDER).

Methodology

This qualitative study was precipitated by the decision of a four-year interior design degree program located in the mid-western US to pursue FIDER accreditation. Five benchmark schools were selected from within the Midwest and South regions as defined by IDEC. Through the administration of a one-on-one questionnaire, field interview, and observations some themes were identified.

The four institutions that agreed to participate in the study averaged 355 hours of departmental planning over a 12 to eight month period. The most helpful preparations were monies set aside for purchases and organizational advance work for the student display. Estimated budgets averaged $7,100 for the process.

Key elements such as student effectiveness, strong curriculum with a research base for classes and space planning, and having a specific mission and goals and addressing them through the program were cited as leading to FIDER accreditation. All programs conducted an alumni survey with advisory board members, employers, and alumni attending designated events during the FIDER site visit.

Specific recommendations for the program evaluation report (PER) included the creation of a matrix cross-referencing FIDER standards with courses and projects to courses. List jurors, guest lecturers, and field trips for each course.

Specific recommendations for the site visit included the suggestion that each course have an instructor notebook containing the syllabus, assignments, handouts, and exams. For the session with alumni, advisory board, students, and friends of the program use a lunch session or early afternoon rather than evening. On the Sunday of the site visit, have the faculty work in their offices making themselves available for questions while the site team evaluates the program. Follow the site visit guidelines exactly and use an on campus art gallery for the student exhibit. Make extensive use of signage for the exhibit with display tables exhibiting the instructor notebook, textbooks for each course, and student projects for each course.

Summary

In this study, the main themes identified were comprehensive curriculum development and assessment, adherence to all FIDER guidelines, building FIDER standards into the curriculum, organized presentation of the PER, and organized preparation for the site visit as formulas for a successful FIDER review.

Each of the four institutions studied are committed to professional legitimacy as defined by educating skilled designers, articulate leaders, and acute critical thinkers. Such programs dedicated to a rigorous professional curriculum turn out leaders in the field helping to legitimize design.

References

Baker, I. & Sondhi, L. (1989). Entry-level competencies and attributes needed by interior design graduates: A survey of top interior design firms. *Journal of Interior Design Education and Research, 15*(2), 35-40.

Birdsong, C. & Lawlor, P. J. (2001). Perceptions of professionalism: Interior design practitioners working for the top 100 firms. *Journal of Interior Design Education and Research, 27*(1), 20-34.

Coleman, C. (1999, Fall). A love story. *Perspective,* 68-72.

Eckman, M., Clemons, S., & Oliver, B. (2001). An empirical analysis of the journal of interior design. *Journal of Interior Design Education and Research 27*(2), 1-13.

Gerasimo, P. (2000, November). Protecting your right to practice – Get involved in 2001. *ASID ICON*, 40-41.

Hildebrandt, H. (2001). The rise of a profession: The evolution of interior design. *Perspective Neocon,* 74-81.

Madigna, M. J. (1998, March). Educating designers: Who calls the shots? *Interiors, 157*(3), 26-27.

Pressly, P. K. & Heesacker, M. (2001, Spring). The physical environment and counseling: A review of theory and research. *Journal of Counseling and Development 79*(2), 148-160.

> **PAPERS**
> **Saturday, March 27**
> **1:30-2:15 pm**

THEATRE AND ARCHITECTURAL INTERIOR LIGHTING: BRIDGING AND CROSSING THE DISCIPLINES THROUGH ACTIVE LEARNING

Dorothy L. Fowles
James Trenberth
Iowa State University

Purpose

The relationship of theatre and architectural lighting has been a frequent topic at lighting conferences as well as in professional publications (e.g., van der Heide, 1995). This relationship is dichotomous with apparent similarities, but basic differences. While practicing lighting professionals show increased interest in the interface between theatre and architectural lighting, this same exploration and integration has not occurred in lighting design education. An examination of this relationship is central to the interdisciplinary instruction in lighting presented in this paper. Descriptive analysis of the course is based on student and faculty input.

Process/Context

An advanced lighting course examined the dichotomous relationship between the two lighting venues from an interdisciplinary and cross-disciplinary perspective. The course involved faculty and students from interior and theatre design. Using interdisciplinary groups and an active learning paradigm, students experimented with the manipulation of light, color, and texture through a sequence of lighting simulation projects. Assignments progressed from static to non-static to crossover projects. The final project involved a temporary architectural lighting simulation of an administration building on campus. Seminar discussions focus on the analysis of designers' views and use of the expressive qualities of light. (Millet, 1994; Toy, 1997) A field trip to Chicago and Madison provides observation, interaction, and stimulation not readily available in (name of state). Student comments on the course were collected several times during the semester. The faculty kept a teaching commentary log during the semester.

Summary of Results

By the end of the semester students recognized the significance of their unique — and exciting — hands-on experience. Working in interdisciplinary teams provided students with a deeper understanding of the similarities and differences in the approaches, equipment, and orientation used by interior designers and theatre designers in developing a lighting design. The hands-on experience provided students with keen insights into the potential and limitations of light as a design element. The class discussions and readings provided students with a keen eye and deeper insights into the poetic potential of lighting. While primitive lighting equipment produced creative lighting solutions, students preferred more adequate equipment for greater manipulation of lighting effect.

References

Millet, M. S. (1994). *Light revealing architecture.* New York: Van Nostrand Reinhold.

Toy, M., ed. (1997). *Light in architecture: Architectural design profile no. 126.* London, England: Academy Group LTD.

Van der Heide, R. (1995, July). All the world's a stage: Theatrical effects beyond the proscenium. *Lighting Design+Application*, 25(7), 38-41.

> **PAPERS**
> **Saturday, March 27**
> **1:30-2:15 pm**

A MODEL FOR CONSTRUCTING KNOWLEDGE: INTEGRATING DIGITAL MEDIA IN DESIGN EDUCATION

David Matthews
Ohio University

Purpose or Issue

In the Spring of 2001, the author of this paper was awarded a $60,000 grant to develop a fundamentals course in "Design and Digital Media" that would meet the needs of majors in design and related disciplines as well as non-majors. This paper will present a model for a course that integrates technology, Constructivist theory, and critical intellectual criteria in a first-year design fundamentals course. The central purpose of the grant project was to develop a studio-based course that introduced core issues of fundamental design in the context of digital media. Foundation courses need to reflect the values and processes of learning found in advanced courses (Leamnson, 1999). The grant was written due to a number of existing courses that are "training grounds" for software, but these courses led to little critical understanding of the digital tools, design processes, or cultural context in a holistic learning experience as related to advanced courses in design. Courses currently exist on campus that "train" students in the specific use of software such as Photoshop, Illustrator, form-z and other similar graphic packages. The grant project was created in contrast to existing fundamental-level digital media courses related to design and aesthetics. This paper presents the model developed to create the course.

Process/Context

The new course proposed by the grant investigates fundamental design concepts and digital media in a method that integrates conceptual relationships between the formal elements of design, culture, and the conceptual bases of computational tools. The process of creating the course was a synthesis of educational theory and content from design and digital media. The following are core themes used to create the model:

Intellectual Criteria
Cultural Influences, Context, and Meaning in Design
Creating a Learning Environment for All Students
Formal Elements of Design
Computer as Unique Tool or Medium in Design
Competencies

The above organizational items are synthesized using Constructivist educational theories to provide a unified structure that would relate to both design-oriented students and non-design majors.

Summary

A Constructivist learning environment is created to maintain a non-linear, team-oriented design studio for design and non-design majors. The course emphasizes the intellectual activities of design, the significance of culture and meaning, individual learning strategies, formal elements of design, and digital media as a unique tool to create an experience that is relevant to a variety of majors. The course is to assist non-design majors that may interact with designers in future academic and professional settings. Design majors will experience activities that are based on intellectual criteria which they will use throughout their academic and professional career.

References

"Architecture and Abstraction." (1985). *Pratt Journal of Architecture*. New York: Rizzoli.

Benedikt, Michael. (1987). *For an Architecture of Reality*. New York: Lumen Books.

Bouman, Ole. (1996). *Realspace in Quicktimes: Architecture and Digitization*. NAi Publishers.

Brooks, J and Brooks, M. (1999). *The Case for the Constructivist Classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.

Carpenter, William J. (1997). *Learning By Building*. New York: Van Nostrand.

Elder, Linda, and Paul, Richard. (n.d.) *Universal Intellectual Standards.* http://www.criticalthinking.org/University/unistan.html.

Fleming, Neil. (n.d.) *Teaching and Learning Styles: VARK Strategies.* http://www.vark-learn.com/english/page.asp?p=booksoftware.

Hartoonian, Gevork. (1994). *Ontology of Construction*. Cambridge University Press.

Heim, Michael. (1998). *Virtual Realism*. New York: Oxford University Press.

Holtzman, Steven R. (1994). *Digital Mantras The Languages of Abstract and Virtual Worlds*. Cambridge, MA: MIT Press.

Leamnson, Robert. (1999). *Thinking About Teaching and Learning, Developing Habits of Learning with First Year College and University Students*. Sterling, VA: Stylus Publishing.

Levy, Pierre. (1998). *Becoming Virtual Reality in the Digital Age*. New York and London: Plenum Trade.

McCullogh, Malcolm. (1996). *Abstracting Craft: The Practiced Digital Hand*. Cambridge, MA: MIT Press.

Mitchell, William J. (1995). *City of Bits, Space Place and the Infobahn*. Cambridge, MA: MIT Press.

Negroponte, Nicholas. (1995). *Being Digital*. New York: Vintage.

"On Making." (1992). *Pratt Journal of Architecture*. New York: Rizzoli.

Pye, David. (1995). *The Nature and Art of Workmanship*. Great Britain: Press.

Rawlins, Gregory, J. (1997). *Slaves of the Machine the Quickening of Computer Technology*. Cambridge, MA: MIT Press.

Zeisel, John. (1986). *Inquiry By Design: Tools for Environment - Behavior Research*. New York: Press of University of Cambridge.

A RETURN TO INTROSPECTION: TOWARDS THE CREATION OF 'FULFILLED' INTERIOR SPACES

Jill B. Pable, Ph.D., IDEC, IIDA
Gwen Amos
California State University, Sacramento

Purpose

Programming and understanding the needs of a built space's clients and users is commonly viewed as one of the most crucial components of a successful interior space solution. However, amongst the preeminent complexities of fact-finding, it is possible that designers and their clients are not confronting the full range of 'why' questions, nor harnessing the full potential of built space to enhance all aspects of personhood. The purpose of this inquiry, then, is to suggest that the spaces we design, beyond merely providing users with a functional, aesthetically expressive container for activity, may also at times serve as a change agent for the social betterment of ourselves as human beings. This is an admittedly lofty goal, yet history provides exemplars that frame this preliminary inquiry's description of certain spaces as 'fulfilled', as well as informs a discussion of the rightful place 'fulfilled' spaces might take in our daily life existence.

Methodology

A review of space psychology literature and history reveals western civilization's alternately embracing and rejection of introspection in its built spaces. And yet, as Bachelard describes, "inhabited space transcends geometrical space" (1964, p. 47). This collective information led us to consider the archetypal contrast between those spaces that promote this higher goal of thoughtfulness ("fulfilled spaces") and a figurative antonym ("filled spaces"). "Fulfilled" spaces are characterized by the goal of human experience, not physical objects. They are typically engaged in dialogue with their users, exhibit a hierarchy of intent, and question typical assumptions regarding the physicality of built space and their relationships to users. Our intent is not to classify all interior spaces as either 'fulfilled' or 'filled', nor to discredit spaces without higher thoughtful/ philosophical goals. However, we suggest that 'fulfilled' spaces may be a needed addition to the types of spaces we regularly experience as a society.

A tentative classification of philosophical goals associated with 'fulfilled spaces' includes
1. Explore meaning or connection to a physical place
2. Suggest an action or change an opinion
3. Heighten awareness of an issue or problem
4. Surprise and delight

Summary

The idea of fulfilled, introspective space implies that our daily architecture may hold powerful potential to elevate and inform our society, urging it to explore and improve upon its humanity. It is a humbling thought to remember that our built spaces may speak of our priorities, values and choices to future generations. Such messages can expand our understanding of ordinary places, give us pause, and prompt us to begin a most needed dialogue with ourselves.

References

Bachelard, G. (1964). *The Poetics of Space.* New York: Beacon Press.
Muschamp, H. Culture's Power Houses; The Museum Becomes an Engine of Urban Redesign. (1999, April 21). *The New York Times,* p. G1.
Studios Architecture. (2001, January). *Interiors*, 160, 108.

UNDERSTANDING WOMEN'S EXPRESSION OF SELF IN THE HOME: A MODEL FOR INTERIOR DESIGN

Lisa M. Vogel, Ph.D., IDEC
Oklahoma State University

Purpose

This paper will present a theoretical model of women's expression of self through the interior design of their residential interior environments. It will expand three theoretical perspectives from the field of sociology to the interior design body of knowledge: symbolic interaction theory (Mead, 1934); symbolic self completion theory (Wicklund & Gollweitzer, 1982); and dramaturgy (Goffman, 1959). Findings from this qualitative study further support prior research that established the home as a projection of our personalities (also see Cooper Marcus, 1995; Gunter, 2000; Searing & Clemons, 2001).

Method

The primary research design was based on Glaser and Strauss' Grounded Theory method (Glaser, 1978, 1992; Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1998). This method involves the systematic categorization of statements to understand and illustrate relationships between concepts. Through open, axial, and selective coding, the three steps of coding commonly used in the Grounded Theory approach, the researcher was able to identify, develop, and relate concepts in an effort to build theory (Strauss & Corbin, 1998). Twenty-two participants were interviewed in their homes. Participants were single, professional women who were homeowners and lived alone. Each interview lasted about 1.5 hours. At the beginning of each interview session, participants were asked to take digital photographs (with the researcher's camera) of areas of their home where they felt they had expressed their self well. They were then asked questions about how they choose to represent themselves with the objects, furnishings and other interior design features in their home; what images of themselves they communicate to others and to themselves; the meaning of items in their home; and whether placement of these items is considered when communicating self.

Summary of Results

Through the identification of representative objects, women determined what they wanted to convey to others and to themselves. According to symbolic interaction theory (Mead, 1934), these representative objects may be considered symbols if the messages they convey are understood by visitors to the home in the manner intended by the homeowner. As in symbolic interactionism, the self is given an important role in dramaturgy (Goffman, 1959). The self is "something of collaborative manufacture that must be produced anew on each and every occasion of social interaction" (Goffman, 1959, p. 253). These participants used their objects as visual cues to communicate to visitors stories about their personal characteristics, interests, accomplishments, memories, and significant relationships, so that others would attain the view of self they wished to communicate. Location of objects was used as a catalyst to solicit inquiry from others in an effort to ensure a common meaning. These same objects, or others placed in more personal areas of their homes, also reminded these women of who they were, thus supporting and reinforcing their own concept of self. A model illustrating the process participants used to express their self in their homes will be presented.

References

Cooper Marcus, C. (1995). *House as a mirror of self: Exploring the deeper meaning of home*. Berkeley, CA: Conari Press.
Glaser, B. (1978). *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.
Glaser, B. (1992). *Basics of grounded theory analysis: Emergence versus forcing*. Mill Valley, CA: Sociology Press.
Glaser, B. & Strauss, A. (1967). *Discovery of grounded theory*. Chicago: Aldine.
Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NJ: Doubleday Anchor Books.
Gunter, B. (2000). *Psychology of the home*. London: Whurr Publishers.
Mead, G.H. (1934). *Mind, self and society*. Ed. By C.W. Morris. Chicago: The University of Chicago Press.
Searing, E. E. & Clemons, S. (2001). Perception of sense of place and sense of self through design of the home.

Interior Design Educators Council Conference Abstracts, Chicago, IL: 22-23.

Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, UK: University of Cambridge Press.

Strauss, A, & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications.

Wicklund, R.A. & Gollwitzer, P.M. (1982). *Symbolic self-completion.* Hillsdale: Lawrence Erlbaum.

PAPERS
Saturday, March 27
2:15-3:00 pm

HOME DESIGN AND PERSONALITY TYPE

F. Duncan Case   Caroline Hill, lauckgroup
University of Nebraska-Lincoln   Adjunct at University of Nebraska and University of Texas

Carl Matthews
University of Texas at Austin

Purpose

Cooper argues that home is a mirror of self (1974, 1995). Dovey (1985) theorizes that home is intimately associated with personal identity. This study tested this relationship between self and home by comparing the personality profiles of 89 design students with the form and spatial characteristics of homes they designed.

Methodology or Process

In Fall 2000, 2001, 2002, and 2003 students in a 3rd year studio designed a home for themselves based on personality self-assessments. Each student completed a Myers-Briggs personality profile. They read selected literature on the relationship of home and self. Each prepared a research report describing important qualities of home, personality characteristics, and design attributes that appealed to them. Design attributes included formal organizing principles (e.g., Ching (1979); Clark and Pause (1996)) and pattern languages (Alexander et al; 1977). Using an existing structure, students created their designs using 3D Studio Viz.

Data from the research reports, personality assessments, and completed designs were analyzed. Personality was represented by four dichotomous variables: Extrovert-Introvert, Sensing-Intuiting, Thinking-Feeling, and Judging-Perceiving (Myers and McCaulley, 1985). Personality was also represented by four "temperament" types, derived from sub-groupings of these same variables: Guardian, Idealist, Artisan and Rational (Keirsey and Bates, 1984). Form properties were defined as follows: directness of entry, interior openness, separation of public/private space, color warmth, texture richness, emphasis of formal organizing principles vs. pattern language, and site orientation (front vs. rear). The research question examined whether certain personality qualities resulted in particular form choices.

Summary of Results

(Note: The following results are based upon the tabulation of the first two years of student work: 41 subjects. The IDEC presentation will include results from all 89 subjects.)

Of the four personality categories, two showed significant effects on form making, extroversion-introversion and sensing-feeling. Extroverts tended to create more direct entry sequences (Pearson r =. 37, p= .02), more open interior

spaces (r=. 49, p=.00), and less separation between private and public space (r=.30, p=.05) than introverts. Introverts tended to create indirect entry sequences, less open interior space, and incorporated more separation between public and private space. Perceiving personalities tended to create direct entry sequences (r=. 31, p=. 05) while judging personalities tended to create indirect entry sequences. Idealists avoided the creation of open interior space (r=. 31, p=. 05).

Sensing personalities were found to prefer symmetry (r=. 36, p=.02), thinking personalities complexity (r=.37, p=.018), and judging personalities grid (r=.33, p=.038). Among temperament types, Guardians tended to prefer asymmetry (r=. 32, p=.04) and progression (r=.35, p=.03).

In analyzing pattern language preferences it was found that Introverts and Judging personalities preferred "own room" (r=. 43, p=.01 and r=.3, p=.01). Intuiting and Feeling personalities preferred a "secret place" (r=.32, p=.04 and r=.34, p=.03). Thinking types liked an "entrance transition" (r=.40, p=.01). Judging types also liked "entrance transition" (r=. 6, p=.00) and "flow through rooms" (r=.36, p=.02). Perceiving personalities liked "half open walls" (r=.32, p=.04). Guardians preferred an "entrance transition"(r=.36, p=.02), artisans avoided "a room of ones own" (r=.39, p=.01) but liked a "bathing room" (r=.30, p=.05). Rationals liked a "secret place." (r=.51, p=.00).

References

Alexander, Christopher; Sara Ishikawa; and Murray Silverstein. (1977). *A Pattern Language.* Oxford University Press.
Ching, Francis. (1979). *Architecture, Form, Space, and Order.* New York: Van Nostrand Reinhold.
Clarke, Roger and Michael Pause. (1996). 2nd Ed. *Precedents in Architecture*. New York: Van Nostrand Reinhold.
Cooper Marcus, C. (1974). *The house as a symbol of self.* In J. Lang, C. Burnett, W. Moleski, and D. Vachon, Eds., *Designing for Human Behavior.*
Cooper Marcus, C. (1995). *House as a Mirror of Self*. Berkeley, CA: Conari Press.
Dovey, Kim. (1985). *Home and Homeless*. pp. 33-64 In Irwin Altman and Carol M.Werner, editors, *Home Environments*. New York: Plenum.
Keirsey, David, and Marilyn Bates. (1984). *Please Understand Me: Character and Temperament Types.* Del Mar, CA: Promethean Nemesis.
Myers, I.B. and McCaulley, M.H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator.* Palo Alto. CA: Consulting Psychologists Press.

<div style="border:1px solid black; background:#cccccc">

PAPERS
Saturday, March 27
2:15-3:00 pm

</div>

DEVELOPING A ROBUST DESIGN STRATEGY WITH SCENARIO PLANNING

Lynn Chalmers
University of Manitoba, Canada

Purpose

The purpose of the Minimal Tourist Design Studio Project was to encourage Interior Design students to use scenario planning as a strategy to move beyond predictable outcomes to solving complex design problems. By considering a range of creatively constructed possible future scenarios or stories, students were able to consider complex problems from a number of perspectives and arrive at a robust and sustainable solution responsive to more than one possible future scenario.

Process/Context

The project was generated by Youth Hostels International's desire to expand their capacity to accommodate an increasing youth tourist market, from 40 beds to 80 beds. Two possible sites were proposed on Main Street, existing hotels which were extremely run-down and located in a downtown district noted more for it's marginized aboriginal population than it's tourist potential. Students carried out research into transport, demographics, tourist destinations and statistics on crime. They searched plans and visited both sites. They created a photographic collage of Main Street, developed an historic time line, and interviewed local planning authorities, and interested owners and developers. We collaborated with city planning colleagues who talked about the rehabilitation of the city, single room occupancies and low cost housing. We also considered the clients' desire for the project to be 'green' and researched ways in which the design might respond to this request.

The next phase required an evaluation of the two sites under consideration with reference to the vast amount of information collected and charted, and considering the possible future scenarios for the Hostels International organization.

Scenario Planning is a collaborative process which constructs alternative stories about the future. Stories which express multiple perspectives on complex events. The process originates from war games and has been used widely in business to allow organizations to develop strategic plans that are responsive to rapid and unpredictable change. Stewart Brand believes the process has important implications for design and has described his use of the technique in his book 'How Buildings Learn'. We based our process on the methods loosely described there. We developed four named scenarios: Mobile Pods, Virtual Tourist, Boom, and Bust.

Summary of Results

The result was the selection of the least 'favoured' site due to its capacity to respond robustly to the various futures suggested by the planning process. Students succeeded in not only persuading themselves but in also persuading their clients that the best option for the future would be the more 'risky' site located on the edge of the tourist core. Their decisions were based on the buildings capacity for staged development, and its ability to accommodate fully the clients program with space over for expansion or leasing. The students then proceeded to design and detail components for a collaboratively established internal plan.

References

Brand, S.(1987). *How buildings learn: what happens after they're built.* New York: Viking Press.
Judd, D.R and Fainstein, Susan (1999). Global forces, local strategies, and urban tourism *The Tourist City*, New Haven: Yale University Press.
Schwartz, Peter.(1991). *The art of the long view: planning for an uncertain world.* New York: Doubleday Currency.
Zeisel, J (1984). *Inquiry by Design: tools for environment-behaviour research.* New York: Cambridge University Press.
Quality Standards Guide 2002, Hostelling International Canada (2001).
Hostel Design Manual, International Youth Hostel Federation.

VISUAL COMFORT ASSOCIATED WITH LAMP SHADE SHAPE AND COMPACT FLUORESCENT BURNING POSITION

Marie Gentry, Ph.D.
University or Arkansas

Zaidi Bin Abdullah, Ph.D.
Universiti Sains Malaysia

Purpose

To reduce energy consumption, the compact fluorescent lamp (CFL) has been designed to replace the incandescent lamp. However, reports of negative user reactions to CFLs are common. Attempts have been made to correct the problems and to increase the market for CFLs. Nevertheless, consumers are unlikely to replace standard incandescent lamps just because manufacturers claim CFLs are more efficient and can save money in the long term. The principal purpose of this study was to evaluate the combination of shade shape and CFL burning position for task illumination that is most comfortable for university students. The second purpose was to develop a semantic differential scale (Comfort Scale) to measure university students' visual comfort while reading under table lamps. The hypotheses were: (1) there is a difference in the overall comfort due to lamp shade shape, (2) there is a difference in overall comfort due to CFL burning position, and (3) there is an interaction between shade shape and CFL burning position based on the overall comfort of the university students and their responses to the Comfort Scale.

Methodology and Data Analysis

One hundred twenty university students volunteered to participate in the study; ninety responses from students with 20/20 or corrected vision were used for data analyses. For each of six experimental conditions, fifteen students performed a visual task and completed a Comfort Scale and a demographic survey. Round, square, and polygon shaped shades and a vertical and horizontal CFL were tested. A GE light meter was used to measure task illumination. Validity was determined by literature review, dissertation committee review, and factorial analysis. Reliability of the scales was determined by Cronbach's alpha. To detect comfort level differences for the students and to analyze task illumination, the Comfort Scale, and the demographic data, two-way multivariate analysis of variance (MANOVA), Tukey's Post Hoc test, and descriptive statistics were conducted.

Summary of Results

Varying shade geometry has a significant effect on visual comfort and light distribution. This study confirmed assumptions made by previous researchers about the effects of shade shapes on light distribution (Page, 1998). Likewise, findings supported other studies regarding the effect of CFL burning position on light distribution (Page, 1998; Siminovitch & Mills, 1995); it also added a new dimension that a table lamp retrofitted with a horizontally positioned CFL not only is more efficient than a vertically positioned CFL, it is also much preferred and perceived as more comfortable. Additionally, the study demonstrated that visual comfort and light distribution are affected by the interaction of shade shapes and CFL burning positions, confirming the assumption that CFL table lamp fixtures should be considered wholistically (Siminovitch et al, 1995; Page, 1998, Veitch, J.A, & Newsham, G.R., 1998).

The study emphasized that visual comfort associated with CFL table lamp systems is an important issue that should not be ignored. Lighting designers, lighting manufacturers and retailers, and lighting researchers need to provide information to consumers regarding the effects of shades and CFLs for table lamps. This information has the potential to increase consumers' support of the product and accelerate the penetration of CFLs in the marketplace.

References

Page, E. (1998). New research tool for energy efficient residential fixtures. *Lighting System Research*. [On-line]. Available: Internet. File: http://eande.lbl.gov/cbs/newsletter/NL7/ Gonio.html.

Siminovitch, M. & Mills, E. (1995, March). Dedicated CFL fixtures for residential lighting. *Lighting Design and Application,* pp. 28-32.

Veitch, J.A., & Newsham, G.R. (1998, Winter). Lighting quality and energy efficiency effects on task performance, mood, health, satisfaction, and comfort. *Journal of Illuminating Engineering Society.* pp, 107-124.

NEWS REPORTS OR LITERARY ESSAYS? DO PRESENTATION DRAWINGS AND RENDERINGS JUST RECORD WHAT HAS HAPPENED IN A DESIGN, OR DO THEY BECOME PART OF THE PROCESS?

Mark Nelson
University of Wisconsin-Madison

Purpose

This paper discusses two conceptual models for teaching presentation drawing and rendering. In one model, a rendering functions like a news article written after the event. In the other model, a rendering function like a literary essay, part of an ongoing dialogue shaping the events it discusses. The purpose of the paper is to compare and contrast how these models work when applied in the classroom setting, looking for the model that has greater impact on the design.

Methodology

The analysis of rendered illustrations created by two different groups of students is at the core of the study. Both groups of students had the same teacher (although they attended in different semesters), used the same textbooks, used pen-and-ink media, and followed the same general course outline when learning presentation techniques. However, one group prepared rendered presentation drawings based on a design from another course, with grading emphasis on technique (the news model). The other group of students prepared both presentations and designs at the same time, as part of the presentation techniques course, with grading emphasis on content (the literary essay model).

A narrative case study methodology based on reflective practice comprises the basis for the analysis. Items examined in the narrative include the process of creating the presentation drawings; the types of design issues addressed by the presentation drawings themselves, the grading emphases used to evaluate the presentation drawings and provide feedback, and the assignment structure for the presentation drawings. The goal is to see if either the news model or the literary essay model has a greater impact on the design outcome.

Providing background to the narrative case studies, discussion includes a brief look at the origins of presentation drawing and a discussion of presentation drawing and references a study that suggests ways to enhance visualization skills through teaching approaches. An analysis of basic presentation technique textbooks suggests two fundamentally different approaches, mirroring the two models for teaching presentation drawing discussed here.

Summary

The presentation drawings and renderings of the group following the news model addressed the technical problems of completing the drawing. However, they included design flaws that would have been resolved if discovered early enough in the design process, and the drawings had little effect on the design process. The range of design elements portrayed focused especially on form and geometry, with attention to lighting primarily as a graphic device.

The presentation drawings and renderings of the group following the literary essay model focused on how to communicate ideas, and served as a tool to aid in making design decisions while also identifying design flaws early in the design process. Drawings portrayed a wide range of design elements, in addition to form.

The literary essay model's success in fostering a process where the presentation drawings influenced the design seemed to be linked to the orientation of the instructional materials, the grading system emphasis, the format of the assignments, and the frequency and timing of preliminary presentation drawings.

References

Brandon, Lynn & McLain-Kark, Joan (2001). Effects of Hand-Drawing and CAD Techniques on Design Development: A Comparison of Design Merit Ratings. *Journal of Interior Design, 27(2), 1-13.*

Ching, Francis D. K. with Juroszek, Steven P. (1998). *Design Drawing*. New York: John Wiley & Sons, Inc.

Gill, Robert W. (1974). *Van Nostrand Reinhold Manual of Rendering with Pen and Ink*. New York: Van Nostrand Reinhold Company Inc.

Leonardo da Vinci (1989). Leonardo on Painting. Martin Kemp (ed.). New Haven: Yale University Press.

Nussbaumer, Linda L. (2001). Theoretical Framework for Instruction That Accommodates All Learning Styles. *Journal of Interior Design, 27(2), 35-45.*

Oles, Paul Stevenson (1979). *Architectural Illustration*. New York: Van Nostrand Reinhold Company.

Rich, Stephen W. (1984). *Rendering Standards in Architecture and Design*. New York: Van Nostrand Reinhold Company Inc.

PAPERS
Saturday, March 27
3:15-4:00 pm

ARAB AMERICAN MUSLIMS' HOME INTERIORS IN THE U.S.: CONFLUENCE BETWEEN CULTURE AND DESIGN

Cherif M. Amor, Ph.D.   Benjamin Schwarz, Ph.D.
Texas Tech University   University of Missouri-Columbia

Purpose

The home interior of Arab Muslim Americans in the United States offers interesting insights into both the role of tradition and the attachment to the homeland's culture in shaping the home interior's physical environment. The organization and appropriation of the home interior—*Al-majleess*, Arabian sitting, *al-madkhal*, doorstep, *atajmeel*, decorative elements, and *sutra*, privacy--evokes a sense of history, symbolizes the enduring values of the group, and above all constitutes an illustrative archetype rendering the Arab American Muslims' home interior as a place apart. A rooted, sensed need to reaffirm the attachment to the homeland's social and cultural values renders the home interior an intricate environment that deserves scrutiny. This paper addresses the role of the tradition and its influence in shaping the Arab Muslim immigrants' home interior's *physical* environment and the meanings associated with the resulting composition.

The purpose of this study finds impetus in the increasing need for studies that initiate diverse culture-based perspectives into design education. Learning experiences that develop consciousness of alternate points of view and appreciation of cultural diversity engender an enhancement of students' design creativity. Similarly, this study is motivated by the growing need for understanding Arab Muslims since the tragedy of September 11.

Methodology

The research design encompasses a qualitative investigation using a grounded theory approach of two Arab Muslim immigrant settlements in Chicago-Illinois and Dearborn-Michigan. Twenty households were studied in the sample population, ten households in Chicago and ten in Dearborn. The heterogeneity of the Arab Muslim immigrants necessitated the use of purposeful sampling. Participants were deliberately selected to provide important information related to income, date of immigration, early and recent immigrants, extended and nuclear families, Arab Muslim immigrants from the Middle East and North Africa, professional and blue collar workers, and both tenants as well as owners. Focus groups, interviews, and participant observation, including both social and physical contexts, constituted the different forms of data collection. This process, which is generally known as triangulation, consists of using different methods of collecting data from diverse settings and individuals. This reduces the risks that the conclusions will reflect only the systematic biases or limitations of only one specific method (Maxwell, 1996, p.69). Data were

analyzed using open and axial coding (Strauss & Corbin, 1990, p.62) which consists of breaking down, conceptualizing, and reconstructing data in new ways.

Summary

This analysis confirmed that cultural forces remain a pivotal role in influencing the design of the home environment. More importantly, this study resulted in pedagogic inspirations suggesting that in the Arab American Muslim house, secondary *symbolic* functions of the space are more important than the primary *utilitarian* functions, such as for instance, entering, gathering, eating, going upstairs, receiving, decorating, among other uses. Secondary functions illustrate the symbolic significance and communicative aspects of the built environment and are the result of a cognitive process whereby the physical setting acquires a connotation beyond its instrumental use.

References

Alkhazraji, K. M. (1997). *Immigration and cultural adaptation in the American workplace: A study of Muslim employees.* New York: Garland Publishing Inc.

Altman, I., & Werner, C. (Eds.). (1985). *Home environments: Human behavior and environments*. New York: Plenum Press.

Asojo, A. O. (2001). A model for integrating culture-based issues in creative thinking and problem solving in design studio. *Journal of Interior Design*, 27(2), 46-58.

Brower, S. (1989). Residents and outsiders perceptions of the environment. In S. Low & E. Chambers (Eds.), *Housing, culture, and design* (pp. 189-205). Philadelphia: University of Pennsylvania Press.

Dovey, K. (1985). Home and homelessness. In I. Altman & C. Werner (Eds.), *Home environments: Human behavior and environment* (pp. 33-64). New York: Plenum Press.

Haddad, Y. Y. (Ed.) (1991). *The Muslims of America.* New York: Oxford University Press.

Khan, M. (2002). *American Muslims: Bridging faith and freedom.* Beltsville, Maryland: Amana Publications.

Marcus, C. (1997). *House as a mirror of self: Exploring the deeper meaning of home.* Berkeley, CA: Conari Press.

Maxwell, J. A. (1996). *Qualitative design research: An interaction approach.* Newbury Park, CA: Sage Publications.

McCarus, E. (Ed.) (1994). *The Development of Arab American Identity.* Ann Arbor: The University of Michigan Press.

Moore, G. (1987). Environment and behavior research in north America: History developments and unresolved issues. In D. Stokols & I. Altman (Eds.), *Handbook of Environmental Psychology* (Vol. 2, pp. 1359-1410). New York: John Wiley & Sons.

Nimer, M. (2002). *The North American Muslim resource guide*. New York: Routledge.

Null, R. (1999). Teaching cultural diversity from a design perspective. *Interior Design Educators Council Conference Proceedings*, Tampa, Florida, 44-45.

Nussbaumer, L. & Guerin, D. (2000). The relationships between learning styles and visualization skills among interior design student. *Journal of Interior Design*, 26(1), 1-15.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. (2nd ed.). Newbury Park, CA: Sage Publications.

Rapoport, A. (1985). Thinking about home environments: A conceptual framework. In I. Altman & C. Werner (Eds.), *Home environments: Human behavior and environments* (pp. 255-286). New York: Plenum Press.

Rowe, P. (1989). Dual aspects of tradition in Saudi Arabian urban housing development. In S. Low & E. Chambers (Eds.), *Housing, culture, and design* (pp. 303-335). Philadelphia: University of Pennsylvania Press.

Shumaker, S. A., & Conti, G. J. (1985). Understanding mobility in America: Conflicts between stability and change. In I. Altman & C. Werner (Eds.), *Home environments: Human behavior and environments* (pp. 237-251). New York: Plenum Press.

Strauss, A., & Corbin, J. (1990). *Basic of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.

TECHNOLOGY AS A TOOL FOR GLOBALIZATION: CROSS-CULTURAL COLLABORATIVE DESIGN STUDIO PROJECTS VIA VIDEO-CONFERENCING

Abimbola O. Asojo
University of Oklahoma

Purpose

This presentation illustrates cross-cultural collaborative design studio projects between University of Oklahoma and Technikon, South Africa via video-conferencing. The project requirement was for students to design low-income housing in South Africa and Nigeria. The goal of the project was to expose students to cross-cultural and global design issues.

Process

The requirements for the studio projects were a direct result of a cross-disciplinary field research from an anthropology and design perspective carried out in five slums and squatters in South Africa and Nigeria. The cross-disciplinary field research focused on social and design issues in slums and squatters in both countries. The major goal of the research was to design low-income sustainable housing in these settlements and the project offered an excellent opportunity to involve students in cross-cultural design. OU Interior design sophomores in a studio course responded to these issues by designing prototypes along with the students and professors of Technikon Pretoria, South Africa via video-conferencing.

In Spring 2001, students were presented precedent studies, results from the cross-disciplinary field research, and information on South African and Nigerian design aesthetics. Students had the option to select any one of the slums and squatter settlements studied. In the initial design stage students developed schematic sketches of their proposals and the students and professors of Technikon critiqued the design proposals in a video-conferencing session. Initially, most of the students design proposals were too elaborate for low-income prototypes and a lot of the stylistic influences were based on the style of the apartheid government in South Africa and on the colonial influences in Nigeria. OU students had difficulty researching traditional design precedents, since they are undocumented. After the video-conferencing session, the student redesigned their proposals after recognizing the need to respond to the cultural, climatic, and social issues discussed. The final designs were presented and critiqued in a session with interior design and architecture students and professors of Technikon, South Africa.

In Spring 2002, the project requirement was for students to design sustainable economical low-income housing in Kyaelitsha, a slum settlement in Cape Town, South Africa. In the first video-conferencing session, students and professors of Technikon presented a PowerPoint presentation that focused on South African design aesthetics and slums and squatters settlements. The final designs proposals were presented in a video-conferencing session. The design solutions developed were very successful, the recurring elements in the design solutions were traditional South African elements, pitched roofs, and natural forms.

Summary

The video-conferencing sessions enabled the students to develop a better understanding of the design problem. Prior to the sessions, OU students had difficulty understanding the ramifications of low-income housing in Africa and cultural issues in design. The South African faculty also mentioned it was an eye opening and thought provoking experience for their students, since they had to research undocumented traditional precedents. Overall the experience gave the students a wider perception of the built environment and a global perspective of design.

References

Asojo, A. and Harris, B. (2000). Preserving Cultural Legacies in Affordable Housing: Case Studies from South Africa

and Nigeria. *International Association of the Study of Traditional Environments/Working Paper Series, Preservation, Transformation, and the Making of Place* No. 125/1, Berkeley, CA: University of California, p. 57-71.

Denyer, S. (1978). *African Traditional Architecture.* New York: Africana Publishing Company.

Elleh, N. (1997). *African Architecture Evolution and Transformation.* New York: McGraw Hill.

Foundation for Interior Design Education Research. (2002). *Fider standards and guidelines: Professional level programs.* Grand Rapids, MI:Author.

PAPERS
Saturday, March 27
3:15-4:00 pm

EXPLORING PLACES THROUGH MEMORY, IMAGINATION, AND TIME: THE INTERIOR DOMAIN

Rula Awwad-Rafferty, Ph.D.
University of Idaho

Issue

Sets of conditions that enable place-student personal narrative to occur were implemented in an effort to engender a sense of place stewardship in education and practice. This presentation will highlight how critical exploring essential concepts of place, place making, and place attachment is in Interior Design pedagogy by reviewing examples from specifically re-designed courses such as Place Attachment and Conflict in the Holy Lands, The Latino Story; and Environment and Behavior, and senior level adaptive reuse studio.

Process

Relph (1976), states that "…a place is not just the where of something, rather place is a meaningful phenomenon." Such a meaningful phenomenon is complex and multifaceted; and often times contradict specialized knowledge. In each of the re-designed courses, the intent was to create a level of familiarity and intimate connection with disparate concepts and realms that were previously either unexplored or viewed from a single perspective. Each of the courses was to situate the interior design discipline in a larger context of interdisciplinary and multicultural pursuit. These courses initiated explorations of various significant places starting from naming a place within various cultural perspectives, geography and interior landscape in conflict areas, and how one may identify with place. The investigations were expanded to making of place as it impinges on, and thus changes, the context in which it is set and how subsequently the context itself is interpreted through sense of place and place attachment.

Four themes – projecting a relationship, philosophy of place, considerate interventions, and synthetic knowledge of place – address the relationship between setting and intervention, historical and theoretical analysis of constructed places, the life stories they give birth to, and the character of contemporary place making. These themes provided the standard for the content of each course. The students and the instructor were able to keep an open forum of translating intuitive experiences into cognitive concrete ideas and vice versa.

Delivery Methods

Immersion. Discussions during and following immersion both broadened then focused the reflections of students on each experience. On the surface some of the experiences did not appear to directly and explicitly connect with their interior design orientation. Talks were especially beneficial to exploring the non-material characteristics of place; genus loci; tacit knowledge of place, and explore their design implications.

Research and documentation. In addition to primary sources, the students were required to use secondary and untraditional data sources; first hand explorations, oral traditions, and invitations form outside of their discipline. The interpretations of the findings then were documented in a reverse type format.

Facilitation training. The complexity of issues related to place, place membership, placelessness, and power of design in place making necessitate utilization of a dialogue approach. Concepts on trial, Win-win scenarios and other approaches were incorporated to reduce the perception of risk in expressing one's opinion regarding "hot topics".
Community-based problem-solving and communication. Complex real community based problems were assigned in all of the courses. These problems included tracing the Mexican American impact on life in the US as documented through culture and design, designing a human rights education center in an area that is stigmatized as racist; and exploring Israeli Palestinian conflict over sacred structures. Town hall meetings, online connections and digital communication were utilized to facilitate sustained participation and communication of concepts, opinions, and design decisions. The sustainability of in/out of class participation further engenders the students and communities' receptive attitudes about place stewardship.

Summary

As design educators, researchers and professionals, we are to facilitate a learning environment where a sense of rooted-ness in place can emerge. In the revised courses, interdisciplinary and multicultural explorations, as well as communication with non-academic entities forged further alliances in understanding place and place attachment. Examples of students work, sustained collaboration with external entities, and extracurricular activities all point to the significant impact such an approach has on enhancing the learning and subsequent leadership role of interior design students in place stewardship.

> **PAPERS**
> **Saturday, March 27**
> **3:15-4:00 pm**

ASSESSING COMMONALITY AND DISTINCTION WITHIN THE KNOWLEDGE BASE IN INTERIOR DESIGN AND ARCHITECTURE

John Weigand
Miami University

Purpose

This presentation summarizes a research project, the intent of which was to assess commonality and distinction within the knowledge base in Interior Design and Architecture. Specifically, in conjunction with FIDER, the author identified 31 academic programs in Interior Design administratively aligned with programs in Architecture. Administrative alignment was defined as cohabitation of a common department, school, college, or similar academic unit, so as to provide significant opportunity to realize (or not realize) an appropriate level of intersection in the curricula. These programs were surveyed in an effort to quantify the overlap or distinction that ideally should exist between the disciplines, as well as the overlap or distinction that exists currently within the programs. Previous work has compared academic accreditation standards, professional certification, and requirements for internship across the career track (e.g. Harwood 1991). This project is unique in that it targets program administrators charged with implementing curriculum and course integration where academic content is significantly in common, and holding curriculum and courses separate where content is significantly distinct. In other words, this sample population is uniquely on the "firing line" relative to achieving an *appropriate* level of integration between these disciplines. This project is significant in that it can inform

curriculum assessment within aligned programs, inform programs exploring alignment, and contribute to the broader discourse relative to the intersection between Interior Design and Architecture.

Methodology

A survey instrument was developed that solicited both qualitative and quantitative responses. The central component of the survey asked respondents to assess commonality and distinction in the knowledge base using both FIDER and NAAB guidelines. Respondents were asked to evaluate each FIDER and NAAB standard on a five-point Likert-type scale that identified the specific content knowledge as fundamentally distinct to Interior Design or to Architecture, fundamentally common to both, or common to both but somewhat unique to one discipline or the other. This was completed across 100 FIDER indicators (Sections 1-8) and 37 NAAB standards. Respondents were asked to identify an *ideal* or appropriate level of intersection for each indicator, as well as a *current* level of overlap for each indicator within their program, given that a difference could exist between what was perceived as ideal and what actually existed. As a way of verifying an aggregate response to Q1, respondents were asked to gauge the *total* level of commonality and/or distinction between the disciplines across all indicators (Q2). The survey also investigated several corollary issues related to the general topic (Q3-Q8).

Results

Key findings include:

1. The intersection between these disciplines, as perceived by the sample group, is "significant" rather than incidental. Disciplinary distinction may be better defined by the scale at which one addresses standards rather than by an "ownership" of specific standards by one discipline or the other.

2. The ideal intersection between the disciplines is higher than that currently realized.

3. The amount of shared coursework/content decreases each year during the four-year curriculum, suggesting that common content is introduced early in the curriculum ("core" knowledge) and more discipline-specific content is introduced later.

References

Harwood, B. (1991). Comparing the standards in Interior Design and Architecture to assess similarities and differences. *Journal of Interior Design* 17(1):5-18.
Martin, C. (1998). Professionalization: Architecture, Interior Decoration, and Interior Design as defined by Abbott. *Masters Thesis*.
FIDER (2000). Professional Standards 2000. Grand Rapids, MI: Foundation for Interior Design Education Research.
NAAB (1998). Conditions and Procedures 1998. Washington DC: National Architectural Accrediting Board.

TOWARD A COMMON LANGUAGE: PROPOSED INDEX CATEGORIES TO ENHANCE DISSEMENATION/RETRIEVABILITY OF INTERIOR DESIGN SCHOLARSHIP

Stephanie Clemons, Ph.D
Molly Eckman, Ph.D.
Colorado State University

Purpose

Dissemination and retrievability of scholarship within a discipline and profession are necessary to define the body of knowledge. Effective dissemination/retrievability of scholarly work depends upon selecting appropriate index categories to describe a publication. The purpose of this research was to propose a revised categorization for systematizing scholarship dissemination/retrievability in the *Journal of Interior Design*. The expectation is that these categories would contribute to the process of developing a comprehensive list of key words that would be appropriate for all scholarly publications related to interior design. The proposed systemization of categories would contribute to the interior design discipline/profession by providing 1) consistency in subject matter categorization for interior design scholarship, 2) a common language within the shared body of knowledge of interior design that includes such disciplines as art, architecture, and social sciences, and 3) identification of overlaps and gaps of key words within related published scholarship in interior design.

Methodology

The analysis of proposed categories for systematizing interior design scholarship was conducted on three levels: journal (*Journal of Interior Design*), index (ARTb*ibliographies Modern and Ergonomics Abstracts*) and database (*Initiative for Architectural Research)*. This multilevel was adopted to strengthen the soundness of proposed categories in developing a common language for scholarship in interior design.

The first step in developing proposed categories for interior design scholarship was to analyze *JID*'s past and current key words and categories for published articles. The second was to use Marshall-Baker's (2000) framework to identify disciplines with scholarship that share a body of knowledge with interior design -- art, architecture, and social sciences. Researchers analyzed categories found in indices of scholarly work (*Ergonomics Abstracts, ARTbibliographies Modern)* and database (*IAR*) for those related disciplines and compared them to proposed *JID* categories. The third step was to evaluate the proposed scholarship categories by comparing them to "knowledge areas" identified by Guerin & Martin (2002). The final step was to propose subcategories to move toward the development of a common language for interior design.

Summary

Findings indicate that interior design has more common scholarship language with art, than with architecture and social science. In social science scholarship, interior design shares a great deal of common language related to such areas as hospitality, healthcare, and restaurant. The language interior design has in common with architecture reveals more exclusivity (e.g. computer technology, education, environment, history, and architecture). For example, *IAR* does not list a category referring to interior design. Common language increases the potential for collaboration both within the discipline and across related disciplines.

The body of knowledge in interior design will continue to require definition as new knowledge is added and refinement takes place. Systemized categorization contributes to a common language, which in turn enhances dissemination and retrievability of its knowledge base, thereby contributing to the development of the discipline and profession.

References

Eckman, M., Clemons, S. & Oliver, B. (2001). An empirical analysis of the *Journal of Interior Design. Journal of Interior Design*, 27(2), 1-13.
Guerin, D. & Martin, C. (2002). The definition and documentation of the interior design profession's body of

knowledge. *IDEC International Conference Abstracts* (pp. 49-50). Santa Fe, NM.

Marshall-Baker, A. (2000). Reformulating interior design. In S. H. Marshall(Ed.). *IDEC International Conference Abstracts* (pp. 87-88). Calgary, Alberta Canada.

MAJOR CROSSING: CAD FOR ARTISTS

Thomas Houser
Michael Oliveri
University of Georgia

Issue

This presentation covers a three-week course offered in the interim between spring and summer semesters. The course was developed for students from diverse backgrounds in the arts. It explores ways for artists and designers to use computer-aided design (CAD) as a basic three-dimensional design tool, in this case to conceptualize, model, and fabricate a piece of furniture. Further, this presentation identifies a way for an Interior Design program to become more fully integrated into a School of Art by providing a non-traditional service course.

Process

Faculty in interior design and digital media jointly offered this experience each of the last two years. The courses had no prerequisites. Forty-two students came from a wide variety of majors, including landscape architecture, sculpture, drawing and painting, interior design, digital media, art education, and even business. All students came with some degree of computer savvy. However, only interior design and landscape architecture students had CAD experience. Significantly, the six students from these two majors were the only ones familiar with the concept of working-to-scale.

Each course was launched with open discussions about the design process from concept through production. Students watched a video-tape of an ABC Nightline special report entitled "The Deep Dive: One Company's Secret Weapon for Innovation." On the tape, Ted Koppel tracked a week-long product design project undertaken by IDEO, a Palo Alto, California multi-disciplined design firm.

Students learned ways to combine computer-based and conventional hand drawing techniques to design and fabricate furniture. During the first year the course was offered, students had no limitations on materials used. This was changed during the second year when students were allotted one sheet of 4' x 8' x 3/4" plywood with which to build their furniture.

Throughout the three-week period, each student:
* sketched a dozen or so pieces of furniture, which were critiqued in class;
* explored several of their designs further using 3D CAD modeling techniques;
* decided upon one design to fabricate;
* created a CAD cut sheet file, plotted it at 1"=1'-0" and used the print as a template for a foam core model;
* made design and cut sheet revisions on the computer;
* prepared a CAD file for a CNC router to cut pieces of rigid insulation for a full-scale model;
* assembled the model and made more revisions;
* dimensioned the furniture in CAD; and
* routed out, sanded, assembled, and finished the piece of furniture.

Summary

Both faculty and students felt these courses were very successful. Course evaluations were high. A marker of their success was the reality that over 40 students applied to take the course the second time it was offered, although only 21 seats were available. Further, several sculpture majors, have taken additional directed studies that incorporated CAD and CAD-based fabrication into their art. Finally, the Interior Design program has felt a renewed sense of collegiality with faculty from other areas within the School of Art. Given the historic divisions felt between applied and fine arts, this last point is significant.

References

Fuad-Luke, A. (2002). *The eco-design handbook: a complete sourcebook for the home and office.* New York: Thames and Hudson Ltd.
Koppel, T. (Anchor). (1999, July 13). *The deep dive: one company's secret weapon for innovation.* (Broadcast tape). New York: ABC News "Nightline."
Zakas, S. (1979). *More furniture in 24 hours.* New York: St. Martin's Press.

> **PAPERS**
> **Saturday, March 27**
> **4:00-4:45 pm**

EFFECTIVE FLOOR PATTERNS AND TEXTURES FOR THE OLDER CLIENT: AN EMPIRICAL STUDY

Mitzi R. Perritt
E. D. McCune
Sandra L. McCune
Stephen F. Austin State University

Purpose

The use of large patterns in carpeting may pose a safety threat to the aged client (E. Brawley, personal communication, January 14, 2002). The inclination to use large patterns is understandable; they help to disguise inevitable stains, soiling, and wear of carpets in high-traffic installations, thus providing a life span double that of a plain carpet (Nielson & Taylor, 2002). However, large patterns with bold value contrasts may pose problems for elderly persons with visual impairments. Experts believe high contrasting patterns may be misinterpreted as shadows, changes in height, or as objects on the floor (IESNA, 1998). Thus, the suitability of large patterned carpets merits investigation.

Methodology

A purposive sample (Kerlinger, 1986) of 111 older adults was solicited from adult daycare facilities and retirement communities within a 27,000 square mile area. Respondents signed consents and provided demographic data. Respondent vision was assessed for depth perception (W. Bryan, personal communication, March 26, 2002), distance vision, color blindness (Vicron Optical, 2002) and visual field (Blasch, Wiener, & Welsh, 1997). Respondents walked a series of seven 4'x15' carpet paths, each depicting a different pattern: solid, mottled, mini-print, checkerboard, leaf, floral, or oriental. These patterns represented a range in motif size and value contrast while meeting the standards for an accessible floor surface (Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 1991). The researcher timed each walk and analyzed a videotaped recording to complete a rubric of observed deviant walking behaviors. A panel of experts, pilot study, and interview script enhanced study validity (Floyd, 1993).

Summary of Results

Significant differences emerged in walk time due to texture and pattern and in number of incidents due to pattern. In texture, slower walk times were associated with the pile texture. Within texture, patterns with large motifs and strong value contrasts were most problematic. For the four patterns with pile texture, the large oriental pattern prompted the greater number of incidents. For the three level-loop textures, the checkerboard pattern posed the greater challenge. Patterns receiving the shortest walk times and lowest number of incidents in each texture were the patterns having the smallest motifs and lowest contrast.

The flooring decisions of interior designers may play an influential role in older adult safety, independence, and socialization. While in general design practice, the use of large, bold patterns may prove helpful with flooring maintenance, such patterns are not appropriate for elderly users. Respondents in this study possessed acceptable visual acuity and still, the data documents a slower walk time and greater frequency of deviant walking behaviors when large patterns with bold value contrasts were used. Safer carpet choices for older clients include a) level-loop textures, b) solid or small patterns, or c) large patterns incorporating only low value contrasts.

References

Blasch, B., Wiener, W., & Welsh. R. (1997). *Foundations of orientation and mobility.* New York: NY: America
          Foundation for the Blind.
Floyd, J. (1993). *Survey research methods, (*2nd ed.*).* Newbury, CA: Sage Publications, Inc.
Illuminating Engineering Society of North America. (1998*). Recommended practice for lighting and the visual
          environment for senior living*. New York, NY: Author.
Kerlinger, F. (1986). *Foundations of behavioral research* (3rd ed.). New York, NY: Holt, Rinehart, & Winston.
Neilson, K. & Taylor, D. (2002). *Interiors: an introduction* (3rd ed.). New York, NY: The McGraw-Hill
          Companies, Inc.
Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities.
          Fed. Reg. 56,144 (July 26, 1991)(28 C.F.R. pt. 36).
Vicron Optical. (2002). *Vicron optical catalog 2002.* Glenview, IL: Vicron Optical.

<div style="text-align:center">

PAPERS
Saturday, March 27
4:00-4:45 pm

</div>

EXPLORING HUMAN SPIRIT IN INTERIOR ENVIRONMENTS: UNCOVERING LAYERS: LAYER ONE - THOUGHT PROCESSES SUPPORTING THE HUMAN SPIRIT CONNECTION

Rebecca J. Sweet; CID-VA, ASID
East Carolina University

Purpose

The goal of this study is to foster an awareness of and further exploration in the symbolic and meaningful language that represents the harmony and connection of the spirit of the designer (one who designs and/or builds interior environments) and the participant (client, an inhabitant of the space, or an interested viewer) of the interior environment, which is realized through a multi-layered, rigorous exploration of needs and aesthetic expression.

Human spirit in interior environments is a celebration of a connection between an artistic expression and an experience of place (Lyndon & Moore, 1994). The designer and the participant are unconsciously sharing a common language that describes the symbolism and meaning experienced in a particular place. What is the basis for a common language with which to discuss complex conceptual ideas (Venturi, 1998) and aesthetic qualities in design? What is so important about addressing meaning and a human spirit connection in interior environments? In a 1996 article in the *Journal of Interior Design,* Hassell and Scott document a discussion about emerging trends in interior design. One of the topics was *Environmental Poetics*. "This term refers to that unique component of designed environments that distinguishes merely functional spaces from places that affect the intellect and spirit of the inhabitants." (Hassell & Scott, 1996, p.12)

Uncovering the components of a language that addresses meaning, process and aesthetic expression (Malnar & Vodvarka, 1992) in the development of interior environments is the first step in understanding how to create these special places. Developing a common design language that celebrates cultural, creative and imaginative design ideas combined with design research, rigor, and human needs (Bloomer & Moore, 1977) could lead to the creation of poetic interior environments.

Process

Research is a design-based qualitative *empirico-inductive* approach (McMillan, 1997, p.13). This approach begins with an open-ended question seeking to understand the key to places that repeatedly connect designer and participant. Case studies of residential habitats cross cultures, centuries, and native builders vs. formally educated designers enabling identification of common themes. Diagramming and dialogue, models and matrices become key components in the comparison and synthesis of thematic similarities (Clark & Pause, 1996). Themes are grouped in 3 layers and developed in 3 separate studies: Layer One: Thought Processes, Layer Two: Design Processes, and Layer Three: Aesthetic Qualities.

Summary of Results

Layer One: Thought Processes that provide a connection to human spirit in interior environments has 4 components.
1. Nature-based concepts
       a. Organic architecture
       b. Art Nouveau
       c. Vesica piscis – fish-shaped image
       d. Proportional relationships
2. Mythology
       a. Culture and stories
       b. Myth and mystery
       c. Eastern influences
3. Psychology
       a. Collective unconscious
       b. Archetypes
       c. Humanistic psychology
       d. Play
4. Rational thinking
       a. Rigor
       b. Intent

These components are illustrated and explained through images from the case studies. Repeated appearance of these components in the designed environment are acting as carriers of meaning and relevance for the participants. Rational thinking assures order and cohesive design ideas and concepts that are understandable by the participant. The integration of the multiple thought processes introduced in Layer One is an important basis for the development of a common language to describe designs that "affect the intellect and spirit of the inhabitants" (Hassell & Scott, 1996, p. 12).

References

Alexander, C. (1979). *The timeless way of building.* New York: Oxford University Press.

Bloomer, K. C. & Moore, C. W. (1977). *Body, memory, and architecture.* New Haven: Yale University Press.

Campbell, J. with Moyers, B. (1988). *The Power of myth* (B. S. Flowers, Ed.). New York: Doubleday.

Chang, A. I. T. (1981, Paperback). *The Tao of architecture*. Princeton: Princeton University Press. Formerly printed as
    The Existence of intangible content in architectonic form based upon the practicality of Laotzu's philosophy
    (1956). Princeton: Princeton University Press.

Ching, F. D.K. (1987). *Interior design illustrated*. New York: Wiley and Sons.

Ching, F. D.K. (1995). *Architecture, form, space and order*. New York: Wiley and Sons.

Clark, R. H. & Pause, M. (1996). *Precedents in architecture* (2nd ed.). New York: Van Nostrand Reinhold Company,
    Inc.

Cowan, H. J…(et al) & T. Howells (consultant editor). (2000). *The world's greatest buildings: Masterpieces of
    architecture & engineering* (The Time-Life Guides). Sydney: Weldon Owen, Inc.

Engel, H. (1985). *Measure and Construction of the Japanese House*. Rutland, Vermont: Charles E. Tuttle Company,
    Inc.

Fujioka, M. (1983). *Kyoto country retreats: The Shugakuin and Katsura palaces.* Tokyo: Kodansha International Ltd.

Hale, J. (1994). *The old way of seeing.* Boston: Houghton Mifflin Company.

Hasell, M. J. D.Arch. & Scott, S. C. PhD. (1996). Interior design visionaries' exploration of emerging trends. *Journal of
    Interior Design*, *22*(2), 1-14.

Holl, S. (1998). *Intertwining*. New York: Princeton Architectural Press.

Lyndon, D. & Moore, C. W. (1994). *Chambers for a memory place.* Cambridge: The MIT Press.

Macaulay, J. (1999). Charles Rennie Mackintosh. *Arts & Crafts houses II*. London: Phaidon Press.

Malnar, J. M. & Vodvarka, F. (1992). *The interior dimension: a theoretical approach to enclosed space.* New York:
    Van Nostrand Reinhold Company, Inc.

May, R. (1976). *The courage to create.* New York: Bantam Books, Inc.

McCarter, R. (1999). Frank Lloyd Wright. *Twentieth-century houses.* London: Phaidon Press Limited.

McMillan, J. H. & Schumacher, S. (1997). *Research in education* (4th ed). New York: Addison Wesley Longman, Inc.

Pye, D. (1978). The aesthetics of design. *The nature and aesthetics of design*. New York: Van Nostrand Reinhold Co.

Robertson, R. (1995). *Jungian archetypes: Jung, Godel, and the history of archetypes*. York Beach, Maine: Nicolas-
    Hays, Inc.

Steele, J. (1993). Schnabel House: Frank Gehry. *Architecture in detail*. London: Phaidon Press Ltd.

Venturi, R. (1998 reprint). *Complexity and contradiction in architecture.* New York: Harry N. Abrams, Inc.
    (distributor).

| **PAPERS** |
| **Saturday, March 27** |
| **4:00-4:45 pm** |

NOT WHAT, BUT WHY AND HOW: A NEW PERSPECTIVE ON THE EVOLUTION OF RESIDENTIAL INTERIORS IN THE UNITED STATES

Terrence L. Uber, Ph.D.
Erin Bartholomew
Kendra Porter
Kent State University

Purpose

This paper is an historical investigation of the "Hows and Whys" of evolving residential design. Using data collected from primary design journals sources, this study will look at how design was presented and promoted in the popular literature from the post-war period of WWI through the post-war period of WW II.

The development of the physical design of the residential interior in the United States has been well documented. The design literature provides information on the stylistic details and changes through time, the people who were influential in contributing to these changes, and the effects of new materials and new technologies on design. The changes can be seen in the works of individual designers, as well as in the factory-made goods produced for mass consumption. However, little research has been done on how design was presented and promoted to the consuming public. Each period viewed itself as modern, but what did "modern" mean? How were new ideas promoted? And why were designs presented in these ways? What were the selling points for the designs that were promoted in the professional literature distributed to the general public? And who made those decisions? This paper analyzes articles and advertisements to address these questions. And in turn, it may provide today's designers with a new perspective on contemporary design literature.

Methodology

This paper is the result of an Undergraduate-Faculty Research Grant designed to provide undergraduate students with an opportunity to participate in a faculty-led research project. In conjunction with the faculty member, two undergraduate Interior Design majors performed historical research at libraries and archives, collecting primary data that was the basis of discussion and analysis for the investigation of this topic.

The articles analyzed in this paper were collected from primary sources dating from 1920 thru 1960. The initial list of sources was obtained from The Industrial Arts Index, a comprehensive index of journals including those related to architecture, home design/furnishings, interior design, dating from 1914. Additional sources were located in the archives of local libraries and historical societies. A large volume of articles was identified in the index. Only a portion of these could be located and used for the analysis contained in this paper.

Summary

The analysis of the articles revealed several interesting trends in the evolution of residential interiors. As expected, each period did perceive itself as being "modern." But the meanings of modern varied significantly. In the early 1920s, the design of kitchens and bathrooms was based on hygienic concerns and new technologies, while the rest of the house was primarily an "updated" traditional style based on European and Colonial American precedents. By the mid-1930s, function and aesthetics played equal parts in promoting new designs. Influence from the European "modern" movement was seen in the articles and advertisements. In the 1940s, post-WWII, function appeared to be the most important feature in the majority of design articles. But in each era, "modern" design was balanced by the tenacious grasp of historical design traditions.

References
(Selected Primary Sources)

Gillies, Mary Davis (1945). Mr. and Mrs. McCall know what they want . . .. Architectural Forum, 82, 105-8.
Gordon, Elizabeth (1945). House Beautiful: People want sensible things. Architectural Forum, 82, 119-26.
Honnold, Douglas. Bringing the Decorator into the House. California Arts and Architecture, 54, 14-15+.
Lilly, Gladys (1929). Color Completes the Modern Home. Building Age, 51, 58-9.
Nelson, George (1948). Beware of Trends. Interiors, 108, 96-9.
Nelson, George (1949). Problems of Design: Modern Decoration. Interiors, 109, 68-75.
Sanford, Juliet (1931). The Modern "Period" Rooms. Arts & Decoration, 36, 38-40.
Taylor, A. & A. Friedmann (1960). Psychology of Interior Design. Interior Design, 31, 137-9+.
Willson, Charles M. Color in Relation to Home Decoration. Arts & Decoration, 35, 32-3+.
----- (1920). Built-in Furniture. Building Age, 42, 28-32.
----- (1924). When Advertising's Theme is "The Home Beautiful". Printing Art, 44, 37-43.
----- (1926). A Man Will Listen to Anything Woman Says. Homes Charming, 3.
----- (1930). House Designs in Modern Spirit. Architecture and Building, 62, 55-9.
----- (1931). Laminated Plastics Dominate with Wood and Metal in Modern Furniture Design. Plastics and Molded Products, 7, 200-201.
----- (1935). Modernizing Ideas—Kitchens and Bath Rooms. American Builder, 57, 86-7.
----- (1945). Ideal Small Homes for Post-War. American Builder, 67, 82-3+.

PSYCHOLOGICAL EFFECTS OF LIGHTING: THE WORK OF JOHN FLYNN[1]

Carol C. Caughey, IIDA
Oregon State University

Joseph B. Murdoch, Ph.D., FIES
University of New Hampshire

Issue

The work of John Flynn on the psychological effects of lighting has lain largely dormant for more than 20 years. But the centrality of these issues to interior design has become increasingly important. Those who work in the design professions are among the first to acknowledge that, regardless of the planning and design of a space, lighting can enhance or ruin the desired effect. Lighting is such an important part of architecture and interior design that the subject is required in virtually all academic programs.

Process/Context

Designers and architects have long acknowledged that lighting affects productivity in the workplace and also in the home. Thus, the emphasis in lighting design, and in some cases its raison d'etre, was to improve productivity.
But during the 1960's and 1970's some researchers and designers began to notice and study the more subtle effects that lighting has on human behavior. They observed that lighting affects impressions such as spaciousness, pleasantness, and clarity; and it influences a person's orientation in a space (Flynn, 1972).
Prof. Flynn and his colleagues developed several types of experiments to explore various lighting configurations and which psychological effects they tend to elicit. Using four different statistical analysis techniques -- semantic differential scaling, factor analysis, multidimensional scaling, and behavioral mapping -- they identified some common types of lighting that appear to promote certain psychological impressions.
Flynn's philosophy of lighting design is discussed, descriptions of his experiments and his innovative research methods are presented, and his findings are discussed in the context of their application to interior design (Gordon, 2003).

Summary

Prof. John Flynn was not the first to recognize that lighting has psychological effects on the occupants of interior spaces. His work in identifying aspects of those effects, and types of lighting that elicit them, however, was seminal. His experimental techniques may be used by undergraduates. Two such experiments, based on Flynn's work but modified for student use, will be offered at the poster session.

References

Flynn, J. (1972, December to 1973, August). The psychology of light (series of 8 articles). *Electrical Consultant*, 88 (12) through 89 (7).
Gordon, G. (2003). *Interior Lighting for Designers* (4th ed.).   New York: John Wiley & Sons.

RESCUING THE ART OF GRAPHIC THINKING IN THE DIGITAL AGE

Sheila Danko, M.I.D.
Jason Meneely, M.S.
Cornell University

Purpose and Issue

A designer's ability to holistically approach problems has been linked to the development of creative solutions in interior design. Designers need to be wild dreamers as well as disciplined analyzers, capable of synthesizing both artistic and scientific modes of thinking into their processes (Goldschmidt, 1999; Lawson, 1990; Meneely, 2002). As designers graphically develop their solutions both generative and analytical drawing techniques become critical in supporting this creative synthesis.

Today, a vast array of digital drawing and visualization tools are available to the design profession. However, it is imperative to be mindful of how these drawing technologies can bias and influence one's thinking; especially when incorporated into the design processes of developing students.

Freehand drawing employed as a brainstorming technique continues to be vital to the design profession (Ching & Juroszek, 1998; Laseau, 1980; Rowe, 1987). However, with the technological appetite of today's digital culture, as students acquire CAD skills they typically gravitate to working predominantly on the computer. Bryan Lawson (2002) recently expressed concern over the increasing deficit of freehand drawing in student work:

Increasingly we have students learning from scratch to design with CAD rather than manual drawing…Amongst those of us who examine such students, there is a growing feeling that a worrying trend is developing…I have examined design in half a dozen universities in three countries. In each case I found examples of students combining impressive and convincing computer presentations with poor design…they might be original, but they are most certainly not good design (p. 329).

Addressing this mounting concern, this poster presentation: (1) identifies how prevailing digital drawing technologies can influence creative thinking processes in design, (2) explores the potential of digital sketching to promote more holistic thinking when partnered with the thinking processes encouraged by today's CAD systems, (3) documents an ongoing curriculum development project that is strategically implementing digital sketching into the design studio via interactive sketching tablets (see fig. a) and targeted teaching modules (see fig. b).

Process and Context

As paradigms shift from paper to screen many are questioning the capabilities of prevailing drawing technologies to support these diverse ways of thinking. On the one hand it is suggested that digital drawing technologies, such as CAD, offer diverse resources for visualizing, transforming, and translating design artifacts (Quantrill, 2002). "The Creativity and Cognition Conference series has revealed that many artists believe that they now have creative opportunities that they would not have had without the computer" (Lawson, 2002, p. 327). On the other hand there is concern that CAD systems can interrupt the flow of creative thinking since it is necessary to translate one's thoughts into an algorithmic sequence of computer commands (Lawson, 2002). Because creative thoughts can be so fleeting, such a delay from mind to media can be detrimental to early conceptual processes (Ching & Juroszek, 1998; Hanks & Belliston, 1990; Laseau, 1980).

Setting the stage for thoughtful analysis, Nardi and O'Day's (1999) metaphorical framework of an 'information ecology' will be utilized in our presentation to provoke reflection, thought, and dialogue on the present state of technology in design. Information ecologies are a "system of people, practices, values, and technologies in a particular local environment" (Nardi & O'Day, 1999, p.49). Coupled with this ecological framework, empiric and theoretic underpinnings of creativity scholarship will be presented, clarifying the pedagogical gap between prevailing digital drawing technologies and the holistic thinking processes used in design.

To encourage an open and thoughtful dialogue the poster will present student examples of digital sketching, a synopsis of the developed teaching modules, and suggest strategies for implementation. Finally, audience members will be

encouraged to sketch on one of the interactive sketching tablets and discuss the inherent ecological and educational implications of implementing new technology within design.

Summary

As rapidly emerging technologies continue to shift and redefine the design domain, we need to be critically aware of their ecological impact on essential thinking processes. Strategically analyzing digital design environments vis-à-vis frameworks of creativity and systems ecology permits us to take more informed and responsible actions in our technological relationships. In this way we can move beyond the mere logistics of how to use technology, and get at the deeper questions of *why* we choose to use technology, thereby clarifying our motivations, objectives, and values as a profession.

References

Ching, F., & Juroszek, S. (1998). *Design drawing*. New York: Van Nostrand Reinhold.

Goldschmidt, G. (1999). Design. In M. A. Runco (Ed.), *Encyclopedia of Creativity* (pp. 525-535). New York: Academic Press.

Hanks, K., & Belliston, L. (1990). *Rapid viz : A new method for the rapid visualization of ideas*. Los Altos, CA: Crisp Publications.

Laseau, P. (1980). *Graphic thinking for architects and designers*. New York: Van Nostrand Reinhold.

Lawson, B. (1990). *How designers think: The design process demystified* (2nd ed.). London: Butterworth Architecture.

Lawson, B. (2002). CAD and creativity: Does the computer really help? *Leonardo, 35*(3), 327-331.

Meneely, J. M. (2002). *Freedom and constraint in the design process : An empirical study of student profiles of creativity*. Unpublished Masters Thesis, University of Kentucky, Lexington, Ky.

Nardi, B., & O'Day, V. (1999). *Information ecologies : Using technology with heart*. Cambridge, MA.: MIT Press.

Quantrill, M. (2002). Drawing as a gateway to computer human integration. *Leonardo, 35*(1), 73-78.

Rowe, P. (1987). *Design thinking*. Cambridge, MA: MIT Press.

> **POSTERS**
> **Thursday, March 25**
> **7:00-9:00 pm**

SUSTAINABLE DESIGN RESEARCH AT THE FRESHMEN LEVEL

Linda L. Nussbaumer, Ph.D.
South Dakota State University

Purpose

Interior design students are required to develop an understanding of the concepts of sustainable design resources (FIDER, 2002), and as practitioners, interior designers should be applying these concepts. In fact, in time, sustainable design may become codified as fire safety is today (Calmenson, 1997). However, not all practitioners apply these concepts in part because they lack education (Haberle, n/d; Take Note, 2000). Thus, it is important for freshmen to develop an understanding of the sustainable design concepts. Instilling these concepts will equip them as practitioners to use sustainable design resources. Therefore, the purpose of this poster is to present a freshmen level project that develops a strong awareness of concepts of sustainable design resources. Using an active learning method, freshmen level students develop an awareness of sustainable design early in their educational career as well as develop research skills, presentation skills, and cooperation in teamwork.

The objectives of the student project are to 1) develop an awareness of the relationship between human organism and the environment, 2) demonstrate an awareness of sustainable options relative to the building envelope—construction, interior, and HVAC, 3) demonstrate an awareness of how the profession of interior design impacts the environment, 4)

develop an understanding of verbal and graphic presentation appropriate for a poster session, and 5) develop skills through active learning.

Methodology

This unit is taught at the freshmen level; therefore, students must develop an awareness of sustainable design. The lecture/discussion format is used to give students base knowledge of sustainable design. The first lecture involves the macro level: global impact and manufacturing processes and the micro level: human behavior, social environment, built environment. An emphasis is placed on indoor air quality and environmental. Discussion relates indoor air quality to human activities, finishes in the built environment, and social norms. The second lecture involves interior environmental control and support system: mechanical systems. This gives students a basis for understanding energy sources and heating and cooling methods used to control the indoor environment. Discussion relates the control of indoor environments to sustainable design and resources from the first lecture. Then, the project is assigned. Students are divided into groups of three. They are given a list of topics from which to choose (e.g., construction methodology—wood; construction methodology—water; interior finishes and furnishings—paint; interior finishes and furnishings—resilient floor covering; HVAC energy supplied to house—solar energy; HVAC energy supplied to house—wind energy, and so on). Next, they research their topic with specific questions that relate to the consumption of natural materials, options for conservation, and impact on interior designers. Students present their findings through a research paper and a poster session attended by students and faculty from the college. From this session, four are chosen to present at the university's Undergraduate Research Day.

Summary

Students found this project enlightening and a valuable learning experience. Particularly encouraging to students was the opportunity to share their research with students and faculty in the college. The poster presentation will show examples of student work.

References

Calmenson, D. W. (1997, January/February). As a matter of course . . . green design: Bill Reed and Penny Bonda look to green design as the norm. [On line] Available: http://www.isdesignet.com/Magazine/J_F'97/Cover.html

Foundation for Interior Design Education Research (FIDER). (2002). *FIDER Accreditation Manual*. Grand Rapids, MI: FIDER

Haberle, S. E. (n/d). *Go for Green.* [Online] Available: http://www.asid.org/design_basics/design_specialities/sustaniable.asp

_____, (2000, January/February). *Take note: Where is green design heading?* [Online] Available: http://www.isdesignet.com/Magazine/J_F'00/takenote.html

<div align="center">

POSTERS
Thursday, March 25
7:00-9:00 pm

</div>

STORIED DOORS: SEARCHING FOR A SENSE OF PLACE

Marlo Ransdell
University of Kentucky

Purpose

The purpose of this study is to examine sense of place related to site specificity. In this poster session, concepts defining place making will be evaluated through an analysis of a current community-based art installation. A framework will identify specific factors of place that are communicated in the end product.

Methodology

Steele (1981) defines sense of place as "a pattern of reactions that a setting stimulates for a person" (p.12). Designers can heighten the depth of meaning in the built environment by creating a sense of place. Sense of place relates to the inherent uniqueness of the site. A particularity of place may stem from the local topography, climate, light, indigenous materials, textures, or colorations of the surroundings (Kwon, 1998). Other ways to communicate a sense of place draw upon regional history, traditions, local customs, or even memories of place-specific events and people. Yet much ambiguity surrounds the definition of sense of place (Miller, Erickson, & Yust, 2001). To achieve greater clarity on this construct, Kwon (1998) developed a framework for evaluating criteria of site-specific art. The present study examines Kwon's variables of originality, authenticity, uniqueness, authorship, and criticality in relation to the *Dynamic Doors* public art installation in Lexington, Kentucky.

Dynamic Doors, a public art project sponsored by the Lexington Arts and Cultural Council, follows the success of recent community art projects such as Chicago's *Cows on Parade*, Cincinnati's *Big Pig Gig,* and Lexington's *HorseMania*.

Historical research was conducted on the East End of Lexington and the housing project that existed from 1935 to 2002. Prior to this time, Lexington's first racehorse track called this site home from 1826 – 1933. This historical information was collected through interviews with past and present residents of the neighborhood, as well as with archival data searches, and census data tracking. Also all 127 doors were photographed in their intended location during the exhibition and profiles on each designer in the exhibition were gathered. These profiles contained the designers' quotations on their concept, design process, and biographical information. Each door image and design concept was presented to a panel of community experts and classified according to the variables Kwon posed to the specificity of the place, in this case Lexington and the East End. Further, critical analysis of how these concepts fall into the site specificity continuum introduced by the Seattle Arts Commission will be shared.

Summary of Results

This poster session will highlight a range of doors in the data set and the way their concepts relate to the given placemaking variables. It will also show where these concepts fit into the specificity continuum. When studying concepts of place, design students and practitioners alike are challenged to define, design, and evaluate their work with greater precision and specificity. Findings from the *Dynamic Doors* study reveals factors impacting sense of place and the effective communication of a place concept. These findings offer a model for teaching design students to develop concepts related to site specificity through a process of questioning and evaluation.

References

Kwon, M. (1998). *Site specificity and the problematics of public art: Recent transformations at the intersection of art and architecture*. Unpublished doctoral dissertation, Princeton University, New Haven, CT.

Miller, N.G., Erickson, A. & Yust, B.L. (2001). Sense of place in the workplace: The relationship between personal objects and job satisfaction and motivation. *Journal of Interior Design*, 27, 35 – 44.

Steele, F. (1981). *The sense of place*. Boston, MA: CBI Publishing Company.

BARRIERS TO SPECIFYING GREEN/SUSTAINABLE PRODUCTS

Elaine Ross
Louise Jones
Eastern Michigan University

Purpose/Issue

The starting point for defining sustainable/green design is found in the definition prepared by the World Commission on Environment and Development (The Brundtland Commission, 1987), "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." There is not an endless supply of resources to create the built environment. Much of the waste and virgin resource use can be diminished by encouraging manufacturers, builders, and designers to make good design decisions for the benefit of the global society. According to William McDonough, a well-known architect and environmentalist, the companies that will succeed in the future are those that can produce and use sustainable products and services (Muoio, 1998). McDonough believes sustainable design is about creating clever ways to recycle, reuse, and reduce poorly designed products and processes. It's about "good design" not just sustainable design. Russell Perry, who often works with McDonough, believes sustainability adds value to a project and states "contrary to what many people think, it is not in conflict with other issues of design. Sometimes sustainability may make a project more difficult because there are more issues to consider, but the work is more satisfying and the clients appreciate the benefits" (Calmenson, 1997). How can manufacturers and design professionals be encouraged to develop, market, and specify products that are more environmentally viable? What are the barriers that inhibit design practitioners from specifying green/sustainable products for their projects?

Methodology

The goal of this study was to determine what issues design practitioners encounter when specifying green/sustainable products. Practicing interior designers, architects, and facility managers (n = 23) in a major metropolitan area in XX, participated in one of five focus groups to discuss the barriers they encounter when specifying green/sustainable products. Once all sessions were completed, the audio tapes were transcribed, researcher's notes were reviewed, and the data was analyzed using qualitative analysis methods to identify consistent themes.

Summary

In order for the design, building, and manufacturing industries to remain competitive and continue to grow and produce profits, they must address not only the economic issues but also the environmental consequences of their actions. Pressures from green organizations, legislation, and consumers are finally starting to influence the design community to take action to create and specify products with eco-friendly solutions. The non-random sampling technique used for this study precludes generalizing the findings to a larger population. However, the outcome provides important insights. Using this study to establish baseline data, a national survey should be conducted, using a random sample, in order to identify the barriers to specification of green/sustainable products. The study findings provide information that will be of interest to the manufacturers of green/sustainable products. If they respond to the issues raised, the future projects of interior designers, architects, and facility managers may be more environmentally responsible. As the major consumer of the world's resources, the US has a responsibility to lead the movement toward sustainable development. Those responsible for the built environment must equate green/sustainable design with "good design".

References

The Brundtland Commission. (1987). Our Common Future. Oxford: Oxford University Press.
Calmenson, D. W. (1997). On being sustainable designers. Retrieved May 5, 2002, from
    http://www.isdesignet.com/magazine/Apr'97/Install_MCD.html.
Miro, C. R., & Cox, J. E., (2000). Sustainable design and the high-performance building. ASHRAE Journal, 42(8), 24.

A PROGRESSION OF LEARNING IN LIGHTING: HANDS-ON MODEL BUILDING TO COMPUTER VISUALIZATION EXPLORATION

Les Rowland, March
South Dakota State University

Purpose

Interior Design students are required to demonstrate an understanding of lighting fundamentals in their studio design projects (FIDER 2002). Since the subject of light is a difficult topic to teach, a hands-on method of teaching was developed to enable students to explore lighting interior space. The purpose of this poster presentation is to introduce a method of teaching lighting that successfully engages students in lighting fundamentals. The method begins by introducing design concepts through hands-on model building and then evolves into performing lighting calculations and using three-dimensional computer modeling.

The objectives of using this method to teach lighting are to allow students to 1) explore how light interacts with different materials and surface finishes, 2) explore how light can be controlled by shielding, filtering, or reflection, 3) explore how the overall ambient light must be controlled to successfully create focal points, accents, or sparkle within a space, and 4) equate learned lighting strategies to technical lighting terminology and calculations.

Process / Context

The course is structured around two one-hour lectures and one two-hour lab each week. The format for the course is organized so that students explore the concepts and strategies discussed during lecture through assignments produced within the lab classroom. The course lectures and assignments begin with students exploring lighting concepts through hands-on model building. Once the lighting concepts are understood, the concepts are applied to the design of interior space. Students are given various interior design projects for which they develop lighting solutions. The lighting solutions are further developed into residential electrical/ lighting plans and commercial reflected ceiling plans. Students produce these plans after performing various lighting calculations to determine proper spacing and selection of luminaires. At the conclusion of the course, the lighting exploration comes full circle by returning to the exercise of modeling light using three-dimensional computer modeling.

The following project sequence is very important to the learning process.
- Project #1: Modeling Emotion with Light *(Students experiment with light in a poetic sense to grasp the expressiveness of light)*
- Project #2: Defining Interior Space with Light *(Students incorporate lighting strategies into preliminary design.)*
- Project #3: Design a Kitchen Lighting Concept *(This project supplements Junior Studio in the design of a residential kitchen. The lighting design culminates in a detailed residential electrical/ lighting plan.)*
- Project #4: Design a Commercial Lighting Plan *(A commercial reflected ceiling plan is developed. Computer modeling is used to visualize if the lighting strategy is successful.)*

Summary

Since the incorporation of this "hands-on" approach to understanding light, lighting design strategies are being incorporated into the early stages of studio design projects. Students have found that understanding lighting allows them to be successful at 1) integrating lighting strategies into design concepts and 2) selecting appropriate interior finishes, textures, and colors to reinforce desired lighting affects. Students have found this course challenging yet very fundamental to their interior design education. Examples of student work will be included in the presentation.

References

Foundation for Interior Design Education Research (FIDER). (2002). *FIDER Accreditation Manual*. Grand Rapids, MI: FIDER.

WHAT'S A NAME GOT TO DO WITH IT: INTERIOR DESIGN, INTERIOR ARCHITECTURE, INTERIOR DECORATING, INTERIORS

Dr. Kathe Miller Stumpf
University of Wisconsin-Stevens Point

Purpose

What's a name got to do with it? A name is important in many ways for identity and boundaries. With many names being used for the design of interiors today, confusion is created when defining skill areas and economic territories. Controversy abounds in the fields of design, professional and educational, over the name used by people when designing interiors. The purpose of this poster is to provide an open forum for discussion between the presenter and the audience. The poster will present views from various program chairs of interior design programs and will combine their expertise in dealing with this issue in areas of accreditation, faculty, professionals, review boards, and the university administration. Participants from the audience will also be invited to also share their expertise. A history and rationale for the use of a variety of terms will be presented and provide the framework for the discussion. An objective analysis of advantages and disadvantages will be presented.

Process/Context

During the Town Hall Meetings and other information meetings at recent Interior Design Educator Conferences, the topic of proper nomenclature for the field of interior design has been debated. An organized approach to the discussion is needed along with collecting all the views on the subject. An objective framework (given as a handout at the session) involving history and rationales for a variety of names will be used to guide the discussion. Global viewpoints will be taken into consideration as well as those from different design disciplines, including architecture.

The name issue needs to be systematically confronted and shared in an objective manner and this poster discussion will encourage all views.

Summary

Name identification and definition gives an important sense of belonging and attachment. Ideas are shared within groups and controversial political efforts between disciplines can stifle creativity for designing for the betterment of the people in environments. Resolving the name issue is necessary and to do this, agreement needs to start within the leading organization of interior design – Interior Design Educators Council. This poster will attempt to share views that are accumulating on this name issue within an objective framework as a start towards consensus on naming our design discipline.

THE ABILITIES CHALLENGE EVENT (ACE): AN AWARENESS EXPERIENCE

Julie Temple
Western Carolina University

Purpose / Issue

The purpose of this poster is to highlight a campus event developed through interdisciplinary and community collaboration, with the purpose of increasing awareness of environmental barriers faced by individuals with disabilities. The Challenge consisted of a series of simulation stations in which the participant experienced a variety of disabilities including mobility, vision, hearing, and communication difficulties. Features of this event making it unique among disability simulations include 1) the campus-wide nature, 2) the exhibitors from the regional community, and 3) the organization of and hosting by an inter-disciplinary committee.

Methodology / Process

Faculty members in the disciplines of interior design, physical therapy, and health and human performance collaborated with community organizations including the Center for Independent Living, the Division of Services for the Blind, and the Center for the Deaf, to develop the event. The goals of the event were to 1. identify barriers in the environment that limit independent living experiences, 2. experience barriers to participation in routine daily activities, and 3. identify resources on campus and in the community that offer assistance. Each organization was charged with designing a simulation or activity that would challenge participants and enhance their understanding of the specific disability. Faculty members arranged for student volunteers and participants as well as the logistics of time, place, and equipment needs.

Funding for the event came from monies from each faculty member's college and a micro-grant from the graduate school. Early in the spring semester 2004, the event will take place again, this time funded through an internal $2,500 grant awarded to the ACE committee, the Collaborative Education Experience Award 2003-2004.

Summary of Results

The ACE Challenge consisted of five simulation stations. The "Vision Challenge" simulated tunnel vision, color blindness, and cataracts. The "Hearing Challenge" simulated ordering from a restaurant menu through the use of sign language. The "Dexterity Challenge" simulated lack of fine motor skills and writing by the use of the mouth. The "Communication Challenge" presented the use of a "talking" computer. The "Obstacle Course" challenged participants to open a door, use a ramp, and perform a tight turn using a wheelchair. In addition to the simulations, two stations allowed the experience of various assistive technology devices.

Upon completion of ACE, participants were asked to answer a short questionnaire. One hundred percent of 61 respondents yielded a "Strongly Agree" response to the questions, "ACE increased my awareness of environmental barriers experienced by people with disabilities" and "ACE increased my awareness of community resources for people with disabilities". Each participant was also awarded a certificate indicating that they had "ACED" the "ACE" Challenge.

This spring, the questionnaire is revised to reflect specific behavioral measures of student awareness. Back in the classroom, students will be engaged in reflective discussions and written narratives revolving around their personal experience in the event. Students will gain a better understanding of the physical (intrinsic) and environmental (extrinsic) needs of persons with disabilities, and have access to a larger network of resources and support for persons they will help in their respective professions upon graduation.

RECYCLED CARPETS – ARE THEY COMPETITIVE?

Stephanie A. Watson   Mary M. Warnock
University of Minnesota   University of Arkansas

Purpose and Issue

The reduction in landfill requirements and an increase in consumer demand for recycled carpet and products with recycled carpet components are spear heading the development of more post-consumer carpet recycling technologies. One example is the BASF 6ix Again@ program in which more than 20 commercial mills in the United States and Canada are participating. Reclaimed nylon 6 carpet yarns are reprocessed into recycled commercial carpets (BASF Corporation, 1997). Another example is the Enviro-Tech System that recycles plastic containers (PET) for tufted carpets (Mohawk Carpets, 2000).

If recycling of products is to be acceptable to the American consumer, those end products produced and labeled as recycled must be sturdy enough to undergo everyday wear and tear. Recycled carpets should not be an exception. No matter the source, recycled or virgin, the ability of a carpet to retain a good appearance is the true measure of its effective life (Yeager & Teter-Justice, 2000). Carpet appearance steadily changes with traffic wear at different levels. Key factors affecting appearance loss include shading, loss of tuft definition, soiling and staining, fading, and loss of pile height. Therefore, the purpose of this study was to compare recycled and newly manufactured nylon and polyester carpets as to weight, pile, tufts/in^2, color change, percents compression and recovery, and thickness following Tetrapod use and soiling.

Method

The physical characteristics of four carpet types were assessed before use of the Tetrapod Walker, after use of the Tetrapod Walker, and following use of the Tetrapod Walker plus soiling. Each of the independent (carpet and treatment) and dependent (weight, pile height, tufts per inch^2, colorimeter analysis, thickness, compression, and recovery) variables were examined.

Nylon and polyester carpets produced by regular and recycled manufacturing processes were selected for experimental purposes. They were representative of residential and commercial interior carpets currently available in the U.S. market.

The Tetrapod produced simulated mechanical wear on the respective carpet types. Statistical design of project was completely randomized with a 2 x 2 x 3 (Carpet Type x Method x Test Group) factorial structure. Statistical significances between means were separated using a Fisher's least significant difference at .05. To determine mean color change values for experimental carpets as expressed by L, a, and b reflectance values, a MANOVA two-way factorial design was used.

Results

Findings from this study show that the recycled nylon and polyester carpets are just as good, if not better in some cases, as the newly manufactured carpets. Although both recycled carpets performed well, the recycled polyester carpet performed the best. Results show that the recycled polyester carpet, as compared to the other carpet types in this study, exhibited less color change, maintained original tufts per inch^2, and experienced a greater percent compression and recovery of yarn structures based on Tetrapod use and soiling. In answer to the consumer question, "Are recycled carpets as good as newly manufactured carpets?" The answer is "yes."

References

BASF Corporation. (1997). *The 6ix again program.* [On line] Available:
        www.basf.com/businesses/fibers/sixagain/program.html.
Mohawk Carpets. (2000). *The Mohawk PET polyester story.* [On line] Available: www.Mohawk-

carpet.com/PETStory2.html.

Yeager, J. I., & Teter-Justice, L. (2000). *Textiles for residential and commercial interiors.* New York: Fairchild Publications.

CIRCUMVENTING THE CHALLENGES: RESEARCH WITH OLDER ADULTS

Jennifer D. Webb, Ph.D.   Naz Kaya, Ph.D.
Nancy G. Miller, Ph.D.   University of Georgia
G. Marie Gentry, Ph.D.
University of Arkansas

Purpose

The purpose of this presentation is to share practical knowledge of data collection with older persons. Practical considerations are seldom addressed in research methods texts. This presentation summarizes challenges of a group of researchers working with older adults and offers recommendations synthesized from the literature and from those experiences.

Review of Literature and Context

Gerontological research is a challenging subset of social research. Experienced researchers have developed criteria for working with older adults. Lawton and Herzog (1989), Schaie, Campbell, Meredith, and Rawlings (1988), and Gubrium and Sankar (1994) have edited volumes detailing research methods, sampling, generalizability, and other methodological concerns.

Recruitment can be difficult (Shaughnessy, 2002), and obtaining permission to approach older adults in supportive environments is problematic. Changes in living arrangements or health status can undermine research goals (Shaughnessy, 2002). Adapting instruments and collection methods may be required (Resnick, 2000).

These volumes do not provide practical strategies for working with this population. For interior design researchers, data collection can become physically and emotionally taxing. This presentation summarizes six researchers' experiences with older adults.

Methods

Data collection for a project addressing older adults' privacy behaviors in assisted or independent living environments was the reference point for this report. Researchers conducted 75 structured interviews, consisting of scaled questions, that lasted one to three hours. Researchers recorded reflections about the data collection process and other concerns repeatedly observed. Narratives were then analyzed for themes.

Summary of Results

Analysis of the researchers' narratives was classified into three categories: physical limitations, cognitive abilities, and recruitment/retention.

Physical limitations primarily address sensory losses. Hearing loss requires the environment be free of echo or other noise. The researcher should enunciate, speak slowly, and sit where the subject can see his/her mouth. Word questions carefully, use simple sentences, and avoid long stems or qualifiers to facilitate communication.

Diminished ability to see clearly and to hold a writing device may determine collection methods. Font style and size are critical if instruments are self-administered. Consent forms may also become problematic; older adults will not sign forms they cannot read. Fatigue may be an issue; therefore, questions should be focused and non-repetitive.

Cognitive ability addresses short-term memory, verbal functioning, and ability to focus on the task. Maintaining focus during interviews becomes problematic when reminiscing occurs. Abstract questions may be difficult to explain.

Recruitment and retention are challenging. Recruitment strategies include: presentations to organizations, physician referrals, voter registration records, fliers and posters, or direct mailings. Multiple techniques may be necessary to achieve recruitment goals. Retention issues are confounded by changes in living arrangements, illness, or death even in short-term studies. Flexibility in process and over-subscription of participants are often required. Because participants appreciate making a contribution, communicating the research goals, protocols, and potential benefits can increase participation.

Conclusions

Working with older adults can have rewards beyond completing the study. Life stories can motivate and uplift researchers; painful memories can remind you that all lives have highs and lows. Working with older adults often requires an emotional investment. However, ample time for data collection, judicious scheduling of difficult participants, debriefing with fellow researchers, and applying these practical strategies will enhance project outcomes.

References

Gubrium, J. F. and Sankar, A. (1994). Introduction. In J. F. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (vii-xvii). Thousand Oaks, CA: Sage Publications.

Lawton MP, Herzog AR, Hendricks JA, eds. (1989). Introduction. In M. P. Lawton, A. R. Herzog , & J. A. Hendricks (Eds.), *Special research methods for gerontology*. Amityville, NY: Baywood Publishing Co.

Resnick, B. (2002). Measurement issues with older adults: *One scale doesn't fit all*. (On-line). Available from: stti.confex.com/stti/sos13/ techprogram/ paper_11514.htm

Schaie, K. W. (1988). Methodological issues in aging research: An introduction. In K. W. Schiae, R. T. Campbell, W. Meredith, & S. C. Rawlings (Eds.), *Methodological issues in aging research* (pp. 1-12). New York: Springer Publishing Co.

Shaughnessy, M. (2002). *Recruitment and retention of older adults in clinical research*. Available from: stti.confex.com/stti/sos13/techprogram paper_11513.htm

EXPLOITING THE FIDER REVIEW PROCESS FOR MULTIPLE BENEFICIAL EFFECTS

Migette L. Kaup
Barbara G. Anderson
Peggy Honey
Kansas State University

Purpose

Preparing for an accreditation or re-accreditation review by the Foundation for Interior Design Education Research (FIDER) is a major undertaking. All accredited programs must comply with the FIDER standards and must document compliance in their Program Evaluation Report (PER) and Display of Student Work. Preparing for a FIDER review provides the unique opportunity to showcase a program's strengths and address its weaknesses. This panel presentation discusses the case study of a step-by-step process implemented by a FIDER accredited interior design program to exploit the FIDER review experience for multiple beneficial effects. Throughout the presentation, the audience will engage in small-group discussions and quick brainstorming sessions to develop strategies for applying this process to other interior design programs as they prepare for FIDER review.

Process

The five major steps used by the case study faculty to thoroughly evaluate the program and prepare the necessary documentation for FIDER review were as follows:

Step 1: Identifying Future Direction of Design Education
Step 2: Are We in Step with Peer Institutions?
Step 3: Getting Down to It: What are we "Really" Teaching?
Step 4: Assessing Program Strengths and Weaknesses
Step 5: Charting the Future

Summary

Preparing for FIDER accreditation or re-accreditation gives programs the opportunity to showcase their program. Also, the external review is significant in the current climate of assessing higher education. The process explained in this presentation can be used to document both student learning outcomes and a program's efficient and effective use of resources in lean economic times. With the FIDER standards as a benchmark for outcomes, a review of each course and the way in which it supports the curriculum can provide evidence that a program is being fiscally responsible with limited resources while providing a substantial education for students.

References

Blossom, N., Matthews, D., & Gibson, K. (2002). Linking interior design education and practice. *IIDA's Perspective,* Spring, 24-29.

Cramer, J. P. & Yankopolus, J. E. (2002). *Almanac of Architecture & Design* (3rd ed.). Norcross, GA: Greenway Communications.

Foundation for Interior Design Education Research (2003). *FIDER Accreditation Manual.* Grand Rapids, MI: Author.

Fowles, D. (1992). Interior design education in the year 2000: A challenge to change. *Journal of InteriorDesign Education and Research, 17* (2), 17-24.

Guerin, D. A. (1992). Issues facing interior design education in the twenty-first century. *Journal of Interior Design Education and Research, 17* (2), 9-16.

Seilingo, J. (2003, July 15). National tests of college students' learning by me on the way, policy analysts say. *The Chronicle of Higher Education.* Retrieved July 15, 2003, from http://chronicle.com/daily/2003/07/2003071501n.htm.

Thompson, J. A., & Guerin, D. A. (2003). The challenge: Transformation of interior design education and practice. *IIDA's Perspective,* Summer, 31-33.

FORMULATING INTERIOR DESIGN FOR ARCHITECTURE AND OTHER ALLIED DESIGN STUDENTS: A PANEL DISCUSSION

Jean Edwards
University of Louisiana at Lafayette

Panelists:
Stephanie Clemons
Colorado State University

Henry Hildebrandt
University of Cincinnati

Anna Marshall-Baker
University of North Carolina - Greensboro

Issue

The author has been challenged to develop a new upper-level elective course for architecture and allied art and design majors to serve as an introduction to interior design. The potential also exists for the course to be offered as an elective in a newly established Masters of Architecture program. This challenge represents an opportunity for this interior design educator to proactively present the discipline of interior design to students of these other disciplines rather than reactively defend interior design as defined by others. To make the most of this opportunity, the author is proposing to assemble a panel to consider and discuss the issues of content and format for this course.

Process

Discussion will focus on fundamental questions as to the nature of interior design, and how best to present it as a critical discipline and practice to students in allied disciplines. The author will act as moderator. Three other interior design educators will serve on the panel and respond from their particular viewpoints to questions posed by the moderator. Among the questions to be addressed by the panel (and, indeed, by the course) are: Is interior design a science, an art, or a service (Dickson & White, 1994; Hasell, 1993; Hasell & Benhamou, 1988; Marshall-Baker, 2000 and 2001)? What role does (and should) decoration play in the theory and practice of interior design (Abercrombie, 1990; Hing, 1999? How do gender issues factor into the perception of interior design as a discipline (Havenhand, 2002; Turpin, 2001)? What is the desired relationship between architecture and interior design, and how has that relationship changed over time (Kurtich & Eakin, 1996; Malnar & Vodvarka, 1992)? How do we as educators define the discipline of interior design and how does this definition vary from the public perception and the perception of other design professionals (Dickson & White, 1994 and 1997; Hasell & Scott, 1996)? Finally, what do we as interior design educators want future architects and other design professionals to know about interior design and its practice?

The moderator and the panelists represent varied backgrounds that reflect the multi-disciplinary character of interior design. The educational backgrounds of the group include fine arts, architecture, education and the social sciences. Two of the panelists hold PhD degrees and the third is an architect. The moderator has MFA degrees in painting as well as interior design. Together, the group represents a balanced cross section of the interior design education community: The programs in which they teach are similarly varied. Each brings a unique perspective to the discussion as well as broad experience in curriculum development. All are active members of IDEC and have presented regularly at the annual conferences.

Summary

The final fifteen minutes of the presentation will be opened up for audience discussion and input. The author anticipates that this panel discussion will arouse lively debate, not only between the panelists and the moderator, but also with the audience. In addition to the verbal discussion, audience participants will be asked to complete a questionnaire concerning the questions that have been raised during the presentation. Results of the questionnaire will be made available via e-mail to those requesting the outcome.

References

Abercrombie, S. (1990). A philosophy of interior design. New York: Harper & Row, Publishers.

Dickson, A.W. and White, A.C. (1994). The Polsky forum: The creation of a vision for the interior design profession in the year 2010. *Journal of Interior Design,* 20, 3-11.

Dickson, A.W. and White, A.C. (1997). Interior design criticism: Developing a culture of reverence for the interior environment. *Journal of Interior Design,* 23(1), 4-10.

Hasell, M.J. (1993). Interior design theory and research: A paradigm shift. *Journal of Interior Design,* 19(1).

Hasell, M.J. and Benhamou, R. (1988). Interior design: A dynamic systems view. *Journal of Interior Design, Education and Research,* 14(2), 13-22.

Hasell, M.J. and Scott, C.S. (1996). Interior design visionaries' explorations of emerging trends. *Journal of Interior Design,* 22(2), 1-14.

Havenhand, L.K. (2002). Looking through the lens of gender: A postmodern critique of a modern housing paradigm. *Journal of Interior Design,* 28(2), 1-14.

Hing, A. (1999, Summer). [Letter from the editor]. IDEC Record, 1.

Kurtich, J. and Eakin, G. (1996). *Interior architecture.* New York: Van Nostrand Reinhold.

Malnar, J.M. and Vodvarka, F. (1992). *The interior dimension: A theoretical approach to enclosed space.* New York: Van Nostrand Reinhold.

Marshall-Baker, A. (2000). Reformulating interior design. In Marshall, S. (Ed.) Abstracts of the Interior Design Educators Council International Conference, 87-88.

Marshall-Baker, A. (2001). Interior design: What is it? What should it be? Unpublished lecture, University of Louisiana at Lafayette, Feb. 12.

Turpin, J.C. (2001). Omitted, devalued, ignored: Reevaluating the historical interpretation of women in the interior design profession. *Journal of Interior Design,* 27(1), 1-11.

PANELS
Saturday, March 27
3:15-4:00 pm

PEDAGOGY TO TRANSITIONING TO AN ONLINE STUIDO: VARIOUS APPORACHES TO E-LEARNING

Elena J. Kays, Ph.D, NCIDQ   Rose Mary Botti-Salitsky, ABD, NCIDQ
Art Institute Online   Mt. Ida College

Purpose

This panel session deals with the multitude of challenges and successes in constructing effective studio courses in the online environment. The panel will address successful theories and actual applications of various asynchronous and synchronous formats applied to the online studio. This interactive presentation promotes healthy dialog among studio instructors and instructional designers to existing approaches and honest debate about studio models in the new online environment.

Methodology

The latest National Center for Education Statistics (NCES) survey stated that 3.1 billion students are currently enrolled in distance education courses (Waits, et al, 2003). In addition, 90% of institutions offering distance education courses used asynchronous computer-based instruction (Waits, et al, 2003). One of the most important contributions by design educators to the art and science of pedagogy is the "studio method." A highly interactive and student centered environment, it is at its best an energetic, collaborative community of creative and expert thinkers and self-regulated

problem solvers (Botti-Salisky & Kays, 2002). It is the ideal place to search for solutions to design problems. The rapid development and spread of e-learning creates enormous opportunity for interior design educators to bring the power of studio learning to the online environment. At the same time, the online medium presents serious challenges to the studio educator.

In order to create a successful design studio in the virtual environment, Mitchell (1995) asserts going beyond the simplistic view that bodily presence is replaced with telepresence. Mitchell stated, "What it's actually likely to produce is a considerably more subtle and complex redistribution of functions." The virtual design studio is not a physical replacement for the grounded studio but a totally new environment to explore. Mitchell suggested that the remaining fragments of the grounded studio still exist in cyberspace but are recombined to form new patterns.

As we begin to expand and develop alternative technological approaches to online studio development within our educational systems, new approaches will begin to evolve. Platforms such as WebCT, Blackboard, VClass, Intralearn, NetMeeting and instant messaging will be discussed as to their use within the development of online studio education. Design theory will be discussed as a new paradigm of interacting evolves within the applied arts and online teaching (Botti-Salitsky, 2003). The integration of diverse platforms will foster a virtual community allowing for a new definition of studio education to evolve. The panel participants work with various colleges and universities in the public and private sectors employing the latest technology in distance education. The panel participants were involved in all phases of the virtual studio, from the research phase, the instructional design phase, application, evaluation, and assessment.

Summary

The studio method has already provided educators with a successful student-centered learning environment. E-learning provides an entirely new medium to translate some of the studio methods and experiences to optimize learning in a totally new environment. The technology is only a tool that can convey the ability to create a rich, organic, and highly collaborative experience. The online environment can provide a flexible framework that helps build learning communities and facilitates a dynamic, self-organizing system (Kays, 2002).

References

Botti-Salitksy, R.& Kays, E. (2002). *A theoretical framework for sustainable online environments: A comparative study.* Paper presented at the IDEC , Interior Design Educator Council, Santa Fe, New Mexico.

Botti-Saltisky, R. (2003). *Virtual critique in the evaluation process of art and design curriculum.* Unpublished manuscript, Capella University.

Kays, E. (2003). Architecture and Instructional Design: An Emergent Model for E-Learning. (Doctoral dissertation, Capella University, 2003). *Dissertation Abstracts International.*

Mitchell, W. J. (1995). *City of bits, space, place, and infobahn.* Cambridge, MA: The MIT Press.

Waits. T., Lewis, L., & Greene, B. (2003). *Distance education at degree-granting postsecondary institutions: 2000-2001.* (NECES 2003-017). Washington, DC: National Center for Educational Statistics.

FILM AS A DESIGN TOOL

Matthew L. Dunn
Louisiana State University

Purpose

Over the next few years, the students entering design schools will have never known a time without computers, the internet, video games, CDs, MTV, and DVDs. Their world is visually and technologically driven. Can new instructional methods/tools be developed that are imbedded with traditional design techniques but also harness the use of new technology? How will students react when they are asked to give up their mouse and printer for a pencil and sketch book? This presentation investigates the use of film in the design studio as a methodology for gaining broader understanding of everyday vernacular design that students sometimes take for granted.

Methodology

The first step was to understand what film offers. Where photography captures only one instance/frame, film presents the opportunity to experience a space over time, a layering of multiple instances. If film was used as a measuring device, its base unit would be frames (one instance). A series of frames would be an event. It is not an exact measure. One must define when an event begins and ends. Life can then be defined as a series of events which cross in and out of the events of others, producing shared experiences.

One film produced during this investigation looked at using film as a tool for "measuring" a site. The proposed project was for a light rail transit stop on Main Street in Houston, Texas. Photographs offered limited information about how the space worked in the larger context site. It was important to understand movement and internal/external influences, while also looking at where the space fit in the community. The film "measures" a 2.5 mile stretch of Main Street, starting from the museum district and ending at the edge of downtown. It was shot to duplicate the experience one might have riding a metro bus. Three films are imbedded into one and run simultaneously. The middle video captures the view looking directly down Main Street. The left and right videos capture the views looking to the left and right sides of the street (see attached graphics p1-2).

The film allowed a better understanding of the movement through the larger context and helped identify the areas that would be feeding the space. The video/drive was one event and repeated viewing allowed for the identification of points where the event crossed with someone else's event, producing a shared experience. This was one of the main concepts taken from the film and carried over into a design for the transit stop.

Summary

If art imitates life then it could be said that film captures life. Life sometimes blurs outside of one's peripheral vision and we become indifferent to the architecture of the everyday. Film is one way of engaging the new visually driven generation. It allows students to capture segments of life and then step back to view beyond their periphery. New layers of information are obtained each time the film is viewed. These layers provide students the ability to make more informed design decisions by better understanding the space as a whole and its position in a larger context.

References

Arnheim, Rudolf (1989). *Film As Art*. University of California Press.
Braudy, L., Cohen, M. (1998*). Film Theory and Criticism: Introductory Readings*. Oxford University Press.
Manovich, Lev (2002). *The Language of New Media*. MIT Press.
Monaco, James (2000). *How to Read a Film: The World of Movies, Media, and Multimedia: Language, History, Theory*. Oxford University Press.

• NOTES and CONTACTS •

• NOTES and CONTACTS •

• NOTES and CONTACTS •