

BODY CONSCIOUS DESIGN

Thursdays 2-5, Wurster 501A

This seminar prepares students to evaluate and design environments from the point of view of how they interact with the human body. Tools and clothing modify that interaction. Semi-fixed features of the near-environment, especially furniture, may have greater impact on physical well being and social-psychological comfort than fixed features like walls, openings, and volume.

Scott's *Architecture of Humanism* roots architectural theory in proprioception, the body's sense of mass, pressure, volume and orientation in space. Kinesthetics shaped Olmsted's approach toward landscape design. Reformers and therapists from prison authorities to birthing center planners believe in communicating their ideas through and into the bodily experiences of their inmates and participants. Aspects of building science pertaining to perception of comfort ultimately rest on culturally modified ideas about the body. Today designers can help redefine and legitimize new attitudes towards supporting the human body by, for example, designing for a wide range of postural alternatives and possibly designing new kinds of furniture.

This course covers these topics with special emphasis on chair design and evaluation. The public health implications of a new attitude toward posture and back support will be explored. The course will heighten students' consciousness of their own and others' physical perceptions through weekly experiential exercises. Students will produce three design exercises: shoe, chair, and a room interior. The required text is Cranz, *The Chair: Rethinking Culture, Body and Design* (WW Norton, New York: 2000 paperback).

COURSE SCHEDULE OF READINGS, ACTIVITIES & ASSIGNMENTS

*Readings on reserve in CED library, at ASUC bookstore, reader at Copy Central on Bancroft

Week 1
Jan 24

Introduction

Short class meeting. Receive course outline and create class e-mail list to be sent to Galen Cranz at galen@berkeley.edu. Each student should send me a short statement of 1-2-3 sentences about what you hope to get out of this course.

Assignment: Record where you sit and how many hours to the nearest 15 minutes you sit over the next 2 weeks. Bring this to class on Jan. 31.

I.
Week 2
Jan 31

The Body and Society

You will move on to the Media Center at Moffitt Undergraduate Library to view a short video on the role of proxemics in social life.

Begin reading:

Montagu, *Touching: The Human Significance of the Skin* (Chap. 1), pp 3-46

Recommended:

Ackerman, Diane, *The Natural History of the Senses* and
Lakoff, George *Metaphors We Live By*

Week 3

Feb. 7

Read and be prepared to discuss on Feb. 7:

-Elias, *The History of Manners*, pp 129-142 (natural functions) 143-152 (nose blowing); 153-168 (spitting); out of print, so read library reserve copy

-Melvin Konner, "Kick Off Your Heels," *New York Times Magazine*, 1988, pp. 30-31.

Experiential learning: Experiential learning: standing, foot, toes

Assignment: **Design a shoe that is not anatomically harmful and is culturally acceptable**

Photograph it in B&W; draw it analytically on 8 1/2 x 11 paper; write a paragraph about why you designed it as you did; paper your name on each sheet of paper; create a full-scale 3-D prototype (due Week 5).

II. The Environment and the Body

Week 4

Feb. 14

A. Society is Expressed in the Environment; Thereby, through the Environment, Society Shapes the Body

-Giedion, *Mechanization Takes Command*, pp. 258- 282 (reader)

-Rudofsky, *Now I Lay Me Down to Eat* (out of print; use copy on reserve) (skim)

-Rudofsky, *The Unfashionable Human Body* (library) (skim for illustrations)

-Wilmott, "The Body As Constructed Art, *The Structurist* 23/24 (1983-84): 64-6.

-Constantineau, "The Power of Posture," *McLuhan Studies*, Vol. 1, 1991, pp. 187-202.

Experiential learning: constructive rest position

Week 5

Feb. 21

guest: Jader Tolja, MD, Domus Academy of Design, and Dept. of Landscape Arch, Polytechnical University of Milan

-Giedion, *Mechanization Takes Command*, pp. 283-308 (reader)

-Rybczynski, *Home*, Ch. 4, "Commodity and Delight" (reader)

-Grier, Kathryn, *Culture & Comfort* (Chap. 1) (reader)

-Bloomer & Moore, *Body, Memory & Architecture*, Chaps. 1, 4-8 (on reserve)

-Scott, *Architecture of Humanism*, Chap. 8 (last chapter) (reader)

-Lyndon, D., "Five Ways to People Spaces," *Architectural Record*, Sept. 1975, pp. 89-94. (reader)

-Sennett, Richard, *Flesh and Stone*, pp. 60, 338-349, 355-376. (reader)

-O'Neill, Maire, "Corporeal Experience: A Haptic Way of Knowing," *Journal of*

Architectural Education, Sept. 2001, pp. 3-12. (reader)
-Franck, Karen and Lepori, Bianca, *Architecture Inside Out* (recommended)
-New collection to explore (recommended):
Body and Building: Essays on the Changing Relation of Body and Architecture

George Dodds and Robert Tavernor (Editors)

Experiential learning: Position of mechanical advantage

Assignment 2: **Design a chair** (due Week 8); full scale model; B&W photos, eloquent paragraph(s); analytic drawings 8 ½ x 11 with your name on each sheet.

III. Evaluating the Near-Environment: Somatic vs. Ergonomic Perspectives

Week 6
Feb. 28

A. Somatic Disciplines Defined

-Cranz, *The Chair, Part II: What's Wrong with the Chair?* Chap. 4, "A Body Mind Point of View"
-Michael Murphy, *The Future of the Body*, "Somatic Disciplines," pp. 386-414.
-Weisbach, Helene, "The Alexander Technique: a Tool for Transformation"
-*A Visual Encyclopedia of Unconventional Medicine*, "Rolfing," pp. 80-81.

Video, "A Way of Being: The Alexander Method," BBC Documentary

Experiential learning: freeing your neck

B. Ergonomics

Week 7

Mar. 6 -Cranz, *The Chair*, Chap. 3 "An Ergonomic Perspective"
-Grandjean, *Fitting the Task to the Man: An ergonomics approach*, Chap. 5, "The Design of Workplaces" pp. 41-62.
-Osborne, David, *Ergonomics at Work*, Chap. 9, "Seating and Posture," pp. 165-179.
-Stewart, Doug, "Modern Designers Still Can't Make the Perfect Chair," *Smithsonian Magazine*, 1988

Experiential: sensing sit bones; noticing heels; sitting at a desk to draft, read or write;

First chair designs presented to class on paper

Week 8
Mar. 13

C. The Chair As a Health Liability

-Mandal, A.C., "Changing Standards for School Furniture," *Ergonomics in Design*, April 1997, pp. 28-31.
-Paciornik Moyses MD , English synopsis of the value of squatting to healthy childbirth
-Kira, *The Bathroom* (on reserve; skim)

Experiential: foot reflexology; using environmental props, for example, the use of door knobs to aid squatting.

Full-scale chair presentations start

IV. So Why Do We Use Chairs?

A. Social History and Anthropology

Week 9
Mar. 20

Cranz, Chap. 1 "The Social Purposes of Chairs"

- Lucie-Smith, *Furniture: A Concise History*, Chaps. 1-6.
- Braudel, *The Structures of Everyday Life*, pp. 283-294, 303-311 (reader)
- Brownmiller, Susan, "The Contrived Postures of Femininity," *Ms*, March 1984, pp. 53-54, 94. (reader)

In-class activity: apply criteria for evaluation of chairs (*The Chair*, p.158)

Experiential learning: inherent mobility = cell and starfish; sleeping full scale chair presentations continue

Assignment 3: design an interior space that the supports the body in 5-6 different postures. For example, design the new study bays in CED library and design new reading stands for the library tables or another environment of your choice.

full scale if possible, others wise 1"=1' (first mockup due Week 11 with 2-3 paragraphs, annotated plans + sections; B&W photos; all on 8 ½ x 11 paper with your name on each sheet.)

Mar. 27

SPRING BREAK: no class meeting

Week 10
April 3

B. Style History

- Cranz, Chap. 2 "Elements of Style"
- Lucie-Smith, *Furniture*, Chaps. 7-8.
- "Sit: A Catalogue of Modern Chair Design" from SIT Exhibition, March 22-24, 1982.
- Greenberg, Allan, "Design Paradigms in the Eighteenth and Twentieth Centuries," *Via* Vol. 3, 1977, pp. 65-81.
- Greenspan, "The Most Uncomfortable Chairs" *H&G* Jan '89
- Rybczynski, Home Chap. 9, "Conspicuous Austerity"

Experiential: crawling, homolateral & cross-over

C. Manufacturing (and Storage)

Week 11
Apr. 10

- Jevnaker, "Make the World a Better Place to Sit In," *Design Management Journal*, Fall 91, pp. 48-54.
- Lucie-Smith, *Furniture*, Chaps. 9-10. (book, not in reader)
- Caplan, Ralph, "How Chairs Behave" *Psychology Today*, February 1983, Nov. 5 pp. 46-52.
- Cranz, "Reinterpreting the Windsor Chair," *Furniture Studio*, (The Furniture

Society: 2005), pp. 86-91.

Recommended: Kohler, *American Chairs: Form, Function and Fantasy* (Sheboygan, WI, 1978), NK 2715J54, 1978. (book on reserve, not in reader) or a book on the American studio furniture movement of your choice that you would report on to the seminar (for extra credit).

Experiential: eyes: yoga for headaches; Bates palming; Feldenkrais unlocking

Assignment 3a: Scale model of place of your choice (study bays in CED library? reading stands? workspace? Theatre? Café?) that you plan to redesign according the principles of BDC. (due Week 15 or 16)

V. Possibilities for a Change

Week 12
April 17

A. Educational and policy approaches toward body conscious design

-Cranz, Chap. 5 "The Chair Reformed" and Chap. 6, "Beyond Interior Design"

-Colomina, B., "Intimacy and Spectacle: The Interiors of Adult Loos," *AA Files* 20, pp. 5-14.

-Huse, D., "Restructuring and the Physical Context: Designing Learning Environments," *Children's Environment* 1995 12 (3), 290-310.

-Gardner & Kelly, *Back Pain in Children and Young People* (2005) p 1- 12.

-Consider the work of designer Verner Panton online

Assignment 3b: write a clear expository paragraph about why you have designed the place of your choice (study bays in CED library? reading stands? workspace? Theatre? Café?) as you have. (due Week 13).

Week 13
Apr. 24

A. Educational Approaches, cont.

-Levine, Donald, "The Liberal Arts and the Martial Arts," *Liberal Education*, 1984, pp. 235-251.

-Don Levine, *Powers of the Mind: The Reinvention of Liberal Learning in America*, (University of Chicago Press, 2006) discusses importance of bodymind learning in liberal education of the future.

-Linden, Paul, *Compute in Comfort* (recommended)

Paragraphs, photos, drawings regarding your designs at architectural scale due; pinup in class

Experiential: observation skills (see through the "myth" of self we each project)

Seminar brainstorm about how to mount a "campaign for better seating"

(see website of that name.uk) or the spread of "Body Conscious Design"

Week 14

May 1 **B. Changing Attitudes Towards Interiors at Home, Office and in Public; the Challenge of Cultural Lag**

FIELD TRIP (to Knoll Furniture Showroom, San Francisco and Back Design at San Pablo and Ashby, Berkeley). Write up your notes in 1-2 pp and send to all seminar members, including me, by Sunday April 30.

-Cranz, Galen with Cha, EunAh, "Body Conscious Design in a "Teen Space: Post Occupancy Evaluation of an Innovative Public Library," *Public Libraries*, Sept/Nov. 2006, pp. 48-56.

-check out Peter Opsvik's website at <www.opsvik.no>

-recommended new book: Malnar and Vodvarka, *Sensory Design* (University of Minnesota press 2004) "What if we designed for all our senses?"

Week 15

May 8

C. Re-forming Architecture, Interiors, and Public Spaces

Student presentations of library proposals with invited guests. Final report and proposals due

Experiential: how to survive reviews?

Course summary and evaluation