

Sandy Stannard

California State Polytechnic University San Luis Obispo

Senior Architectural Design Studio/ Senior Design Thesis Seminar

Fall 2007 Arch 481/492 (UG)

The projects represented in this submission are year-long, individual undergraduate thesis projects. Due to the nature of this type of individual project, the lessons are thus individual and are taught/learned individually (in response to the particular conditions of each unique project), even when there is commonality in the general expectations in terms of student output. Thus the broad "challenges" result in varying design responses from the students. They work closely with me as their instructor to arrive at solutions appropriate to their given project circumstance. Group learning happens as students observe their colleagues responses to their project circumstances (in class; at critiques; etc). In this way, these examples perhaps exemplify applied learning, as students apply their knowledge to the distinctive challenges of their chosen projects. As a result, this submission is presented more as a thoughtful "framework" of carbon neutral design issues (leading to a comprehensive design project) rather than as a list and description of project exercises.

Special Topic: Energy Simulation

Currently under development! [We continue to explore all the available tools. I greatly look forward to further expansion in this area]. Currently we are using Climate Consultant for site/climate analysis and HEED for residential projects. We are also doing mixed mode heating/cooling hand calculations (internal loads and cross ventilations strategies) for larger scale buildings. In addition, students do either computer solar analyses (to determine solar penetration for heating/cooling issues) OR daylighting models (for lighting quality). We are trying to get Ecotect started; and a handful of students attempted the Energy Plus plug-in for Sketch Up (no significant results to report as yet; project under way). All students are asked to use the carbon calculator available at buildcarbonneutral.org.



Studio KEY

Sandy Stannard

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TEACHING TOPICS PROFILED

1. Architecture + The Landscape

Demonstrate sensitive and appropriate site responsiveness (for both human appreciation and well-being as well as for the support of natural systems), according to project particulars. Through design, explore the meaning of "place."

2. Architecture + The Environment

Demonstrate ecological responsiveness (given the particular nature of each project). Climatically responsive design is the minimum requirement.

3. Architecture + Its Inhabitants

Through design trials, explore the nature and meaning of "venustas," while simultaneously balancing ecological design principles.

4. Architecture + Materiality

In the initial stages of their thesis development (while students are heavily engaged in writing and research), students are challenged with a 4-6 week "materials" charrette in which they are asked to design and construct a usable object that reflects some of the ideals that they are pursuing in their theses.

5. Architecture + Technology

During all phases of their projects, students are encouraged to utilize all available and appropriate technology to explore their ideas. They are required to do some 3D simulation modeling as well as energy performance modeling; in each case and in consultation with their instructor, they choose the tool appropriate for the task.

6. Architecture + Social, Cultural, Economic, Political Context

All students are challenged to consider the social, cultural, economic and political contexts of their chosen projects. As an instructor, I encourage students to select strategic projects, and then realize strategic solutions to those projects. No project is simply an object, or "building." Every project is full of portent beyond its mere physical presence.

7. Architectural Integration: The Paradigm of Architecture

All students are encourage to pursue design integration in their projects, as they attempt to balance all issues ranging from the poetic to the technical, while simultaneously staying focused on essential ecological design issues (which is always at the forefront).

Course	Course Week	Design Studio	Module	Teaching Topics
Companion course	1			Topic 1-2
	2			
	3			
	4			
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	6			
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Philosophy of CND Studio Instruction

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Preparing in the Present for the Future

Per the submission request, the philosophical statement is included but embedded. In this case, the statements are included at each sub-heading.

General Philosophy: Preparing in the Present for the Future

Buildings are among the more durable artifacts that a society produces with causal effects on the environment that far outlive their makers. As thoughtful, educated designers, we are the stewards not only of creating meaningful spaces for people but also for respecting the environmental setting of these places. Man's existence within the earth's fragile ecosystems (of which we are a part) calls for sensitive, responsive, appropriate design. It is our responsibility to search for a fitting co-existence, a symbiotic relationship that neither impoverishes the planet nor our human experience on it.

1] Architecture + The Landscape

Philosophy: Place-making is essential in the creation of meaningful architecture, no matter what the scale. Scale of settlement patterns and appropriateness of setting are vital issues in any successful architectural endeavor. The specifics of any given place, its genius loci, must be understood and respected. In addition to phenomenology and place, creating symbiotic relationships with the land should be the goal of all of our built artifacts.

2] Architecture + The Environment

Philosophy: Sensitive architectural solutions respect and should celebrate the environment. This includes an appreciation for the local (geographies, bioregions, seasons, micro-climates, etc.) as well as a response to the global (energy sources and resources, etc.). Because buildings are energy consumptive, this is an arena in which architects have the opportunity to innovate, with the aim of achieving "carbon neutral" buildings by 2030 as posed by the Architecture 2030 Challenge. Learning from the past, learning from other cultures, and taking advantage of technological innovations, architects can design resourceful, delightful environments.

3] Architecture + Its Inhabitants

Philosophy: Even the best sustainably designed environment will not be useful unless it elicits "delight" in its users. Creating spaces that allow people to experience joy, health, comfort, and well-being is essential. Exploring material tactility, thermal delight, and inspiring luminous environments are a few of many methods to this end, moving toward a multi-sensory architecture.

4] Architecture + Materiality

Philosophy: Materials are the basic building blocks of an architect's language. Exploring the poetic potential of structure and materiality is the goal here. Further, it is our responsibility to understand the pivotal cradle-to-grave-to-cradle issues related to material choices, with consideration for the energy consumption involved in extraction as well as recycling. Thus, a designer manipulating any given palette of materials must balance issues of material source with appropriate and inspiring form and structure.

5] Architecture + Technology

Philosophy: The appropriate use of technology should be the aim of any project. This includes not only the technology used in the design process but also in construction, operation, and maintenance. Use of appropriate simulation tools for design as well as performance will be part of studio activities

6] Architecture + the Social-Cultural-Economic-Political Context

Philosophy: All architecture is physically contextual (whether consciously conceived or not); it is also always political (whether consciously calculated or not). The primary goal should be to make architectural proposals that are strategic rather than reactive, appropriate to the space and time of the given situation. Particular topics and issues vary per project according to the project situation.

7] Architectural Integration: The Paradigm of Architecture

Philosophy: The ultimate aim of this topical sequence is to understand how our creative work reflects upon, questions, and relates to the broader field of architecture. Are we advancing the discipline or simply

replicating the past? Are we improving our relationship with nature, or settling for the status quo? Are we creating stimulating, responsible environments or? To paraphrase Corbusier, we should aim to make the bad difficult and the good easy.

Addendum

Naturally, these topical issues are not discreet and they should overlap. The iterative design process will be a guiding principle. "Architecture + Nature" projects cover a multitude of scales and uses in a variety of site settings.

Continuing the Conversation

Follow Up Discussion between
JW and SS

JW- What does it mean to studio pedagogy to teach carbon neutral design, and how do you validate such claims in the studio setting?

SS- Short, off-the-cuff comment: we are still in the investigative stages of "carbon neutral design." As accessible verification tools become more readily available, we will be more and more able to verify our claims. At this point, our goal is to aim for carbon neutrality and do our best to verify the claim. Even as I write this, with access to these better evaluative tools, students are getting closer such verification. Keeping this all in context is vitally important however: in my case, I am working with undergraduate students and within the limits of the academic time frame (which cannot be compared to a professional architectural project, for example). I am challenging my students to make the most effective use of the time and knowledge that they've got, applying all this toward the goal of carbon neutral design proposals.



10 Critical Issues / 10 Common Mistakes

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Ten Critical Issues for Carbon Neutral Design:

[Please refer to items #1-7 above]

Ten Student (and Mentor?) Mistakes Undermining the Goal of Carbon Neutral Design (in random order):

1. "True" evaluation (of energy performance, of carbon neutral design)
2. Over-complexity....of design solution
3. Over-simplification...of many project issues, including performance solution
4. Strategic choice and use of site and siting
5. Unrecognized potential of the uniqueness of all building surfaces (qualitative and well as performance properties)
6. Materiality (lack of understanding, in a multitude of ways)
7. Cradle-to-cradle issues (insufficiently considered)
8. Form driven solutions
9. Lack of consideration for the power (and location) of the sun (for so many potentially powerful reasons)
10. Lack of appropriate climate responsiveness

Supporting Material

COURSE MATERIALS

(PDF) Stannard Supporting Material Compilation

1. Thesis Prospectus
2. Syllabus
3. Thesis Abstract Submittal
4. "Elements:" a charrette exploration of materials, light, detail, craft, and ideas

PAPERS

STUDENT WORK

I can get samples of student writing but this will have to follow (will take a little more work to dig up...).

Can provide student SITE VIDEO samples if you would like....but I will need to get from you limitations (as to size, resolution, etc....)



Architecture + The Landscape

Sandy Stannard

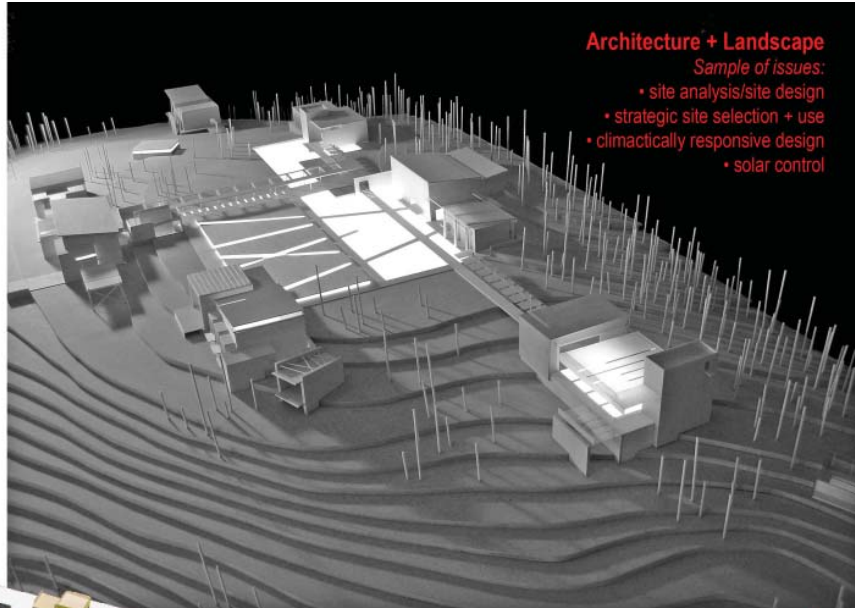
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1a

1b



1c

1d



1e



Philosophy

Place-making is essential in the creation of meaningful architecture, no matter what the scale. Scale of settlement patterns and appropriateness of setting are vital issues in any successful architectural endeavor. The specifics of any given place, its genius loci, must be understood and respected. In addition to phenomenology and place, creating symbiotic relationships with the land should be the goal of all of our built artifacts.

Design/Performance Objective

Demonstrate sensitive and appropriate site

responsiveness (for both human appreciation and well-being as well as for the support of natural systems), according to project particulars. Through design, explore the meaning of “place.”

Investigative Strategy

Physical and digital modeling as appropriate for each given project.

Evaluation Process

Demonstrate learning and outcomes via digital and/or physical modeling as well as drawings at discussions, critiques and presentations. Demonstrate “place making.”

Architecture and Landscape

Site analysis/site design: strategic site selection + use; climatically responsive design; solar control

1a: Environmental Education Center, Alameda, CA. An example of the recycled use of military land. [Melissa Godfrey]

1b: Artists' Live/Work Housing, Orange County, CA. Infill urban site, exploring a balance of density and usable green space. [Phil Cardon]

1c: Cancer Rehabilitation Center, Angel Island, CA. Sensitive and effective site planning (to aid in the healing process). [Mark Fairman]

1d: Wellness Center, Indian Springs, ID. Exploring a design enhancement and site restoration of an abandoned site. [Nicholas Holmes]

1e: Wellness Center, Fresno, CA. Subtle manipulation of landscape for experiential as well as performance purposes. [Rodney Laurel]



Architecture + The Landscape (cont.)

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Evaluative Criteria

Demonstrate appropriate “place making” according to the specific project challenges. Outcomes vary due to the nature of individual thesis projects. As a minimum, projects was demonstrate appropriate and constructive response to solar use and control, in addition to sensitivity to the natural and cultural physical situations of the site situation. The projects must also demonstrate the effective and strategic use of the site in creating “delightful” space for people.

Cautions- Possible Confusions

For some students, the challenge in effective “place making” in terms of site use can be overcoming the urge to design an object in a field, as opposed to utilizing architecture to shape not only interior but also exterior space.

Duration of Exercise

The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Degree of Difficulty

Challenging.

References

Varies according to project.

McHarg, Ian, *Design With Nature* (Garden City: Doubleday/Natural History Press, 1969).

Portoghesi, Paolo, and Erika Young, *Nature and Architecture* (Milano: Skira, 2000).

Thompson, D'Arcy, *On Growth and Form* (London: Dover, 1992).

Wines, James, *Green Architecture* (Koln: Taschen, 2000).



House for a Craftsman, Bainbridge Island, WA. Site responsiveness and sensitivity.
[Matt + Natalie Grummer]

Revitalized use for an urban landfill. Interdisciplinary project (architecture + landscape architecture).
[Tracy Worth and Maria Lawler]



Architecture + The Environment

Sandy Stannard

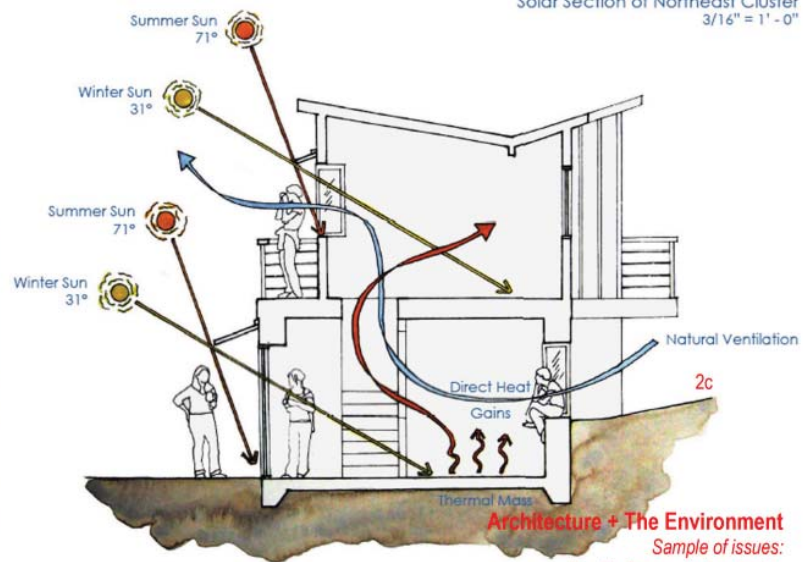
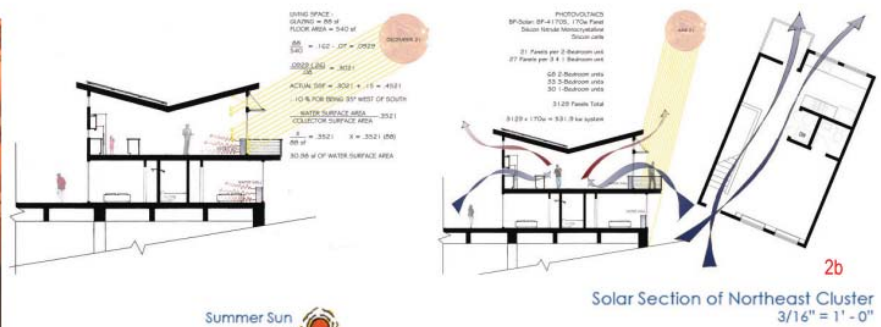
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2a



2d



Architecture + The Environment

Sample of issues:

- climatically responsive design
- passive heating and cooling
- solar control
- energy performance analyses

Philosophy

Sensitive architectural solutions respect and should celebrate the environment. This includes an appreciation for the local (geographies, bioregions, seasons, micro-climates, etc.) as well as a response to the global (energy sources and resources, etc.). Because buildings are energy consumptive, this is an arena in which architects have the opportunity to innovate, with the aim of achieving "carbon neutral" buildings by 2030 as posed by the Architecture 2030 Challenge. Learning from the past, learning from other cultures, and taking advantage of technological innovations, architects can design resourceful, delightful environments.

Design/Performance Objective

Demonstrate ecological responsiveness (given the particular nature of each project). Climatically responsive design is the minimum requirement.

Investigative Strategy

Physical and digital modeling to investigate: energy performance, daylighting, solar control, qualitative explorations (in pursuit of "venustas"), etc.

Evaluation Process

Demonstrate learning from the digital and/or physical modeling for both qualitative and quantitative aspects of the project. Redesign. Remodel. Continue the iterative process until the project is complete.

Architecture + The Environment

Climatically responsive design; passive heating and cooling; solar control; energy performance analyses

2a: Hotel Avila "Living Machine". Living machine designed to serve an eco-hotel complex; whimsically designed and centrally located to invite eco-education of visitors to the hotel. [Michael Novak]

2b: Affordable Housing, Fremont, CA. Design section demonstrating passive design principles and calculations for thermal mass. [Jon Tsurui]

2c: Cohousing + Agri-Living, Sonora, CA. Design section demonstrating passive design principles [Tammy Straw + Carrie Lamastus]

2d: Cohousing + Agri-Living, Sonora, CA. Qualitative view of the cohousing units (to accompany 2c, the section). [Tammy Straw + Carrie Lamastus]



Architecture + The Environment (cont.)

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Evaluative Criteria

Demonstrate an ecologically sensitive design response that engages the environment in a proactive (rather than a reactive) manner. Demonstrate building performance through the use of physical and digital analysis, as appropriate for the scope and scale of the given project.

Cautions- Possible Confusions

Students' agility at demonstrating building performance is improving, particularly with improved access to appropriate performance modeling tools. Evidence of performance modeling earlier in the design process in order to elicit more responsive design proposals is the current emphasis (rather than modeling at the end of the process, as a method of simply recording the end result).

Duration of Exercise

The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Climate analyses and general performance goals due at week 10. Schematic performance models currently due at week 19, 22, 28, and 29. Final due week 30.

Degree of Difficulty

Challenging.

References (Partial List)

Guzowski, Mary, *Daylighting for Sustainable Design* (New York: McGraw Hill, 1999).

Heschong, Lisa, *Thermal Delight in Architecture* (MIT Press, 1979).

Kwok, Allison, and Walter Gronzik, *The Green Studio Handbook* (Architectural Press, 2006).

McDonough, William and Michael Braungart, *Cradle To Cradle: Remaking the Way We Make Things* (New York: North Point Press, 2002).

Mazria, Edward, "It's the Architecture, Stupid!" (*Solar Today*, May/June 2003, p. 48-51).

Mazria, Edward, *Passive Solar Energy Book* (Emmaus: Rodale Press, 1979)

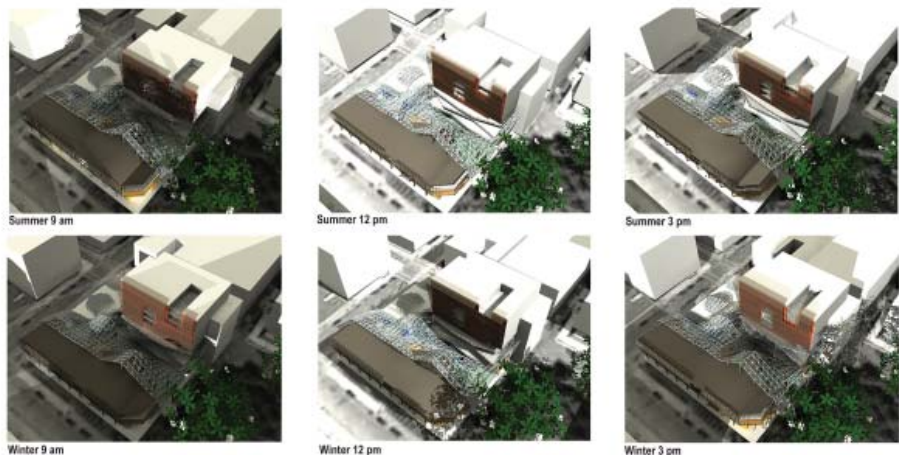
Millet, Marietta, *Light Revealing Architecture* (New York: Wiley + Sons, 1996).

Stein, Reynolds, Grondzik, Kwok, *Mechanical and Electrical Equipment for Buildings*, 10th Ed. (New York: John Wiley + Sons, 2006).

Wines, James, *Green Architecture* (Koln: Taschen, 2000).

Yeang, Ken, *Ecodesign: A Manual for Ecological Design* (Academy Press, 2006).

Homeless Youth Facility, Portland, OR. Sun study.
[Casey Owen]



Architecture + Its Inhabitants

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3a



3b

3c



3e



3d



Philosophy

Even the best sustainably designed environment will not be useful unless it elicits “delight” in its users. Creating spaces that allow people to experience joy, health, comfort, and well-being is essential. Exploring material tactility, thermal delight, and inspiring luminous environments are a few of many methods to this end, moving toward a multi-sensory architecture.

Design/Performance Objective

Through design trials, explore the

nature and meaning of “venustus,” while simultaneously balancing ecological design principles.

Investigative Strategy

Physical and digital modeling to investigate: daylighting, qualitative explorations (in pursuit of “venustus”), etc.

Evaluation Process

Demonstrate learning from the digital and/or physical modeling and drawing for qualitative aspects of the project. Redesign. Remodel. Continue the iterative process until the project is complete.

Architecture + Its Inhabitants

Ecological ethics and poetics; daylighting design; eco-education (through project programming)

3a: Multi-modal transit center, Los Angeles, CA. Design of a mixed use, eco-centric transit hub for LA. [Alex Kith]

3b: Youth Learning Center, South Los Angeles, CA. After-hours education center for south LA youths. [Dan Eppink]

3c: Mixed Use Environmental Education Center, Lake Tahoe, CA. Eco-centric design to promote ecological learning. [Brooke Ballachey]

3d: A Place To Be, San Luis Obispo, CA. Experiential design/build project. [Christine Moser]

3e: Wellness Center, Fresno, CA. Experiential design of a wellness center to promote well-being. [Rodney Laurel]



Architecture + Its Inhabitants (cont.)

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Evaluative Criteria

Through drawings, montages, models, video, and narrative, demonstrate an artful design proposal that sensitively responds to human needs in relation to the given project.

"Human need" relates not simply to comfort or serving a programmatic need, but also to an architectural proposal that elicits "delight" in its users.

Cautions- Possible Confusions

Duration of Exercise

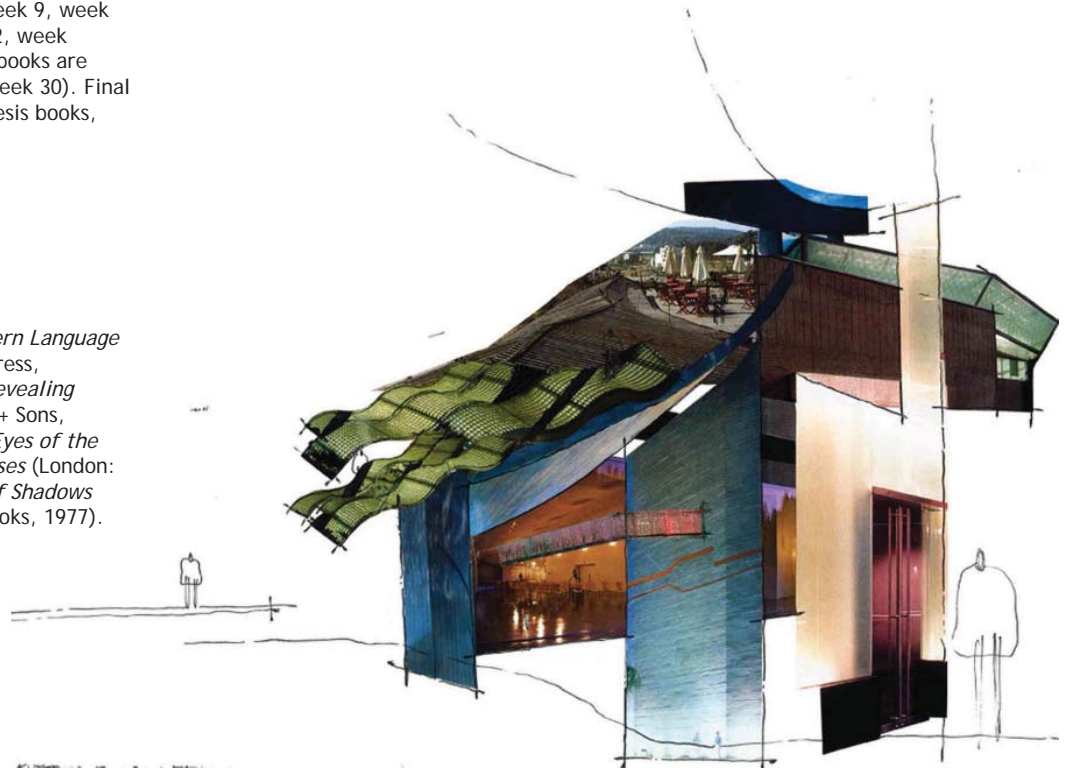
The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Degree of Difficulty

Challenging.

References (Partial)

Alexander, Christopher, *A Pattern Language* (New York: Oxford University Press, 1977). Millet, Marietta, *Light Revealing Architecture* (New York: Wiley + Sons, 1996). Pallasmaa, Juhani, *The Eyes of the Skin: Architecture and the Senses* (London: Architectural Association, 1996). ~~Walt Disney World~~ *Walt Disney World: The Art of the Imagination* (Stony Creek: Leete's Island Books, 1977).



Exploring humor as a healing art
[Kylie Gaines]

Architecture + Materiality

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Architecture + Materiality

Sample of issues:

- cradle-to-cradle thinking
- efficient yet poetic use of materials
- adaptability
- embodied energy



4b



4c



Philosophy

Materials are the basic building blocks of an architect's language. Exploring the poetic potential of structure and materiality is the goal here. Further, it is our responsibility to understand the pivotal cradle-to-grave-to-cradle issues related to material choices, with consideration for the energy consumption involved in extraction as well as recycling. Thus, a designer manipulating any given palette of materials must balance issues of material source with appropriate and inspiring form and structure.

Design/Performance Objective

In the initial stages of their thesis development (while students are heavily engaged in writing

and research), students are challenged with a 4-6 week "materials" charrette in which they are asked to design and construct a usable object that reflects some of the ideals that they are pursuing in their theses.

Investigative Strategy

Multiple iterations of physical modeling at a variety of scales. Broad consideration of materials encouraged. Discussion of all appropriate material, design, and design detail aspects: strength, durability, beauty, meaning, embodied energy, cradle-to-cradle issues, etc.

Evaluation Process

Final finished object submitted to local furniture competition and shown with thesis at every critique and exhibition.

Architecture + Materiality

Cradle-to-cradle thinking; efficient yet poetic use of materials; adaptability; embodied energy

4a: Adaptable storage furniture, constructed from a minimal materials palette. Material exploration of the ideas surrounding the design of a design/build HIV clinic for South Africa. [David Aine, Matt Ridenour]

4b: LED luminaire, Simultaneous energy efficient and poetic light exploration of the ideas surrounding a transit hub for Santa Barbara, CA. [Kelly Teich]

4c: Adaptable furniture, constructed from a minimal materials palette. Material exploration of the ideas surrounding a thesis about an eco-education center. [Brooke Balachey]



Architecture + Materiality (cont.)

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Evaluative Criteria

Full scale realization project. Design, construction, and exhibition of the final materials study (in the form of a usable object).

Cautions- Possible Confusions

Duration of Exercise

4-6 weeks.

Degree of Difficulty

References (Partial List)

Precedent studies as they relate to the individual projects.

McDonough, William and Michael Braungart, *Cradle To Cradle: Remaking the Way We Make Things* (New York: North Point Press, 2002).



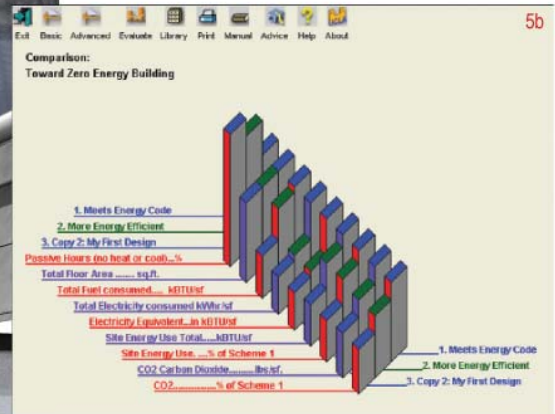
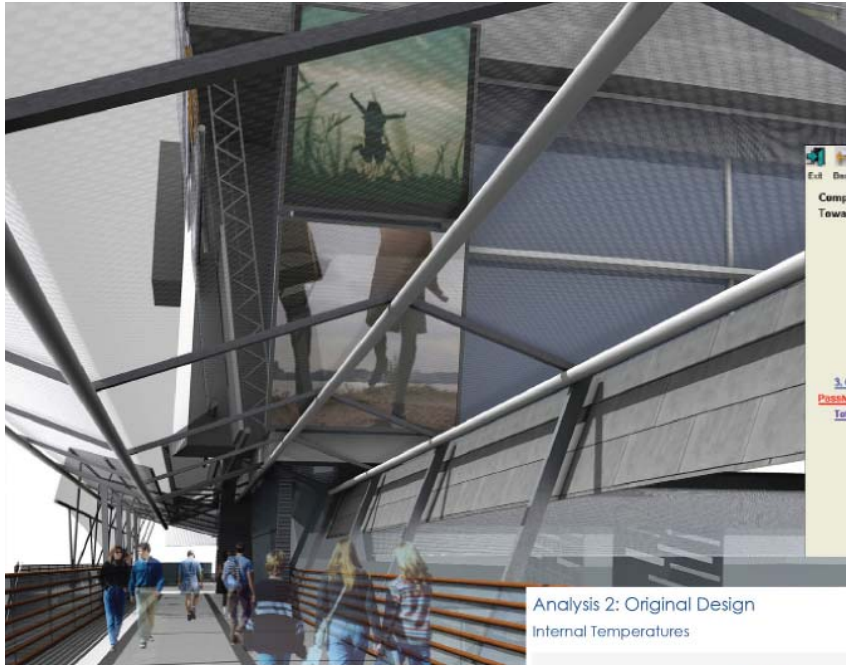
Table of re-used and found lumber exploring beauty and celebrating material performance. A materials exploration for a thesis involving the design of a retreat space in an extreme mountain climate. [Jon Webster]

Architecture + Technology

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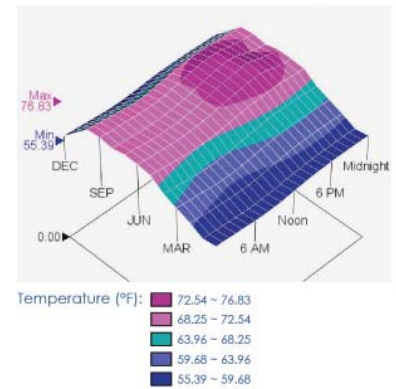
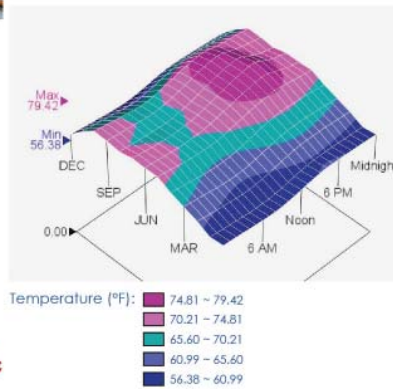
Analysis 2: Original Design
Internal Temperatures

Analysis 2: Fewer Windows
Internal Temperatures

Architecture + Technology

Sample of issues:

- energy performance analyses (quantitative)
- qualitative 3D modeling
- carbon footprint



Philosophy

The appropriate use of technology should be the aim of any project. This includes not only the technology used in the design process but also in construction, operation, and maintenance. Use of appropriate simulation tools for design as well as performance will be part of studio activities.

Design/Performance Objective

During all phases of their projects, students are encouraged to utilize all available

and appropriate technology to explore their ideas. They are required to do some 3D simulation modeling as well as energy performance modeling; in each case and in consultation with their instructor, they choose the tool appropriate for the task.

Investigative Strategy

Multiple iterations of digital modeling at a variety of scales (quantitative as well as qualitative). Presently working on earlier multiple iterations of energy modeling (including site solar access studies, which are required and particularly vital for some projects).

Architecture + Technology

Energy performance analyses (quantitative); qualitative 3D modeling; carbon footprint

5a: New visions for a college student center, San Luis Obispo, CA. Qualitative 3D modeling. [Dan Alameda]

5b: Cancer retreat, France. HEED energy performance modeling (exploring zero energy concepts). [Nica McCarthy]

5c: Cohousing + Agri-Living, Sonora, CA. HEED energy performance modeling (exploring simultaneous design alternatives). [Tammy Straw + Carrie Lamastus]



Architecture + Technology (cont.)

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Evaluation Process

Study models and finished models for both investigation and for presentation are required throughout the design process.

Evaluative Criteria

Qualitative and quantitative digital models of projects due at watershed moments of project development.

Cautions- Possible Confusions

Skill level with digital tools varies from student to student. A However, as students become more proficient, the tools are becoming more useful for both qualitative as well as quantitative (performance) analyses, rather than simply as recording devices for the final design.

Duration of Exercise

The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Schematic performance models currently due at week 19, 22, 28, and 29. Final due week 30.

Degree of Difficulty

Varies.

References



Circulation study for a mixed use, eco-centric multi-modal transit center, Los Angeles, CA. [Alex Kith]



Architecture + The Social-Cultural-Economic-Political Context

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Architecture + Its Inhabitants

Sample of issues:

- cradle-to-cradle issues
 - ecological ethics and poetics
 - eco-education
- (through programming as well as through demonstration)
- design for disassembly (DFD)

6a



Philosophy

All architecture is physically contextual (whether consciously conceived or not); it is also always political (whether consciously calculated or not). The primary goal should be to make architectural proposals that are strategic rather than reactive, appropriate to the space and time of the given situation.

Design/Performance Objective

All students are challenged to consider the social, cultural, economic and political contexts of their chosen projects. As an

instructor, I encourage students to select strategic projects, and then realize strategic solutions to those projects. No project is simply an object, or "building." Every project is full of portent beyond its mere physical presence.

Investigative Strategy

This inquiry begins with multiple short writing assignments (500 word abstracts) and one-on-one consultations with the instructor. Reading and research as well as discussion are essential to the process. Suggested readings range from directly on the thesis

Strategic Context

Christine Moser

cradle-to-cradle issues; ecological ethics and poetics; eco-education (through programming as well as through demonstration); design for disassembly (DFD)

6a: A Place To Be, San Luis Obispo, CA (but site could vary). A full scale design/build exploration of a personal retreat space, exploring new, experiential uses of discarded materials as well as design for disassembly (DFD) principles.



Architecture + The Social-Cultural-Economic-Political Context (cont.)

Sandy Stannard
California State Polytechnic University San Luis Obispo

Arch 481 Senior Architectural Design Project Studio/
Arch 492 Senior Design Thesis Seminar

topic, to more “poetic” explorations of the topic (from literature, art, music, dance, etc.). Cross-cultural references are encouraged. Intensive site investigations and documentation are required, as is a finely produced site/issues video.

Evaluation Process

Final presentations and final iterations of the thesis “book.”

Evaluative Criteria

Demonstration of sensitive response to the given social-cultural-economic-political situation of the given project challenge, through the thorough investigation of site issues (physical as well as human), through referencing appropriate precedents, and through the demonstration of applied learning as evidenced in the proposed design solution.

Cautions- Possible Confusions

Part of the thesis research (both as a collective in the thesis seminar and on an individual basis in response to the unique project challenge) involves raising students’ awareness of the broader socio-political implications of their design work, beyond the mere physical proposal of a building.

Duration of Exercise

The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Degree of Difficulty

Challenging.

References

Friedman, Thomas, *Hot, Flat, and Crowded* (New York: Farrar, Straus, and Giroux, 2008)

Orr, David, *The Nature of Design: Ecology, Culture, and Human Intention* (New York: Oxford University Press, 2002).

Wines, James, *Green Architecture* (Köln: Taschen, 2000).

Zelov, Chris, Ed., *Design Outlaws on the Ecological Frontier* (Easton: Knossus Publishing, 1997).

Exploring local and global culture. Youth hostel, Los Angeles, CA.
[Vivian Ngo]

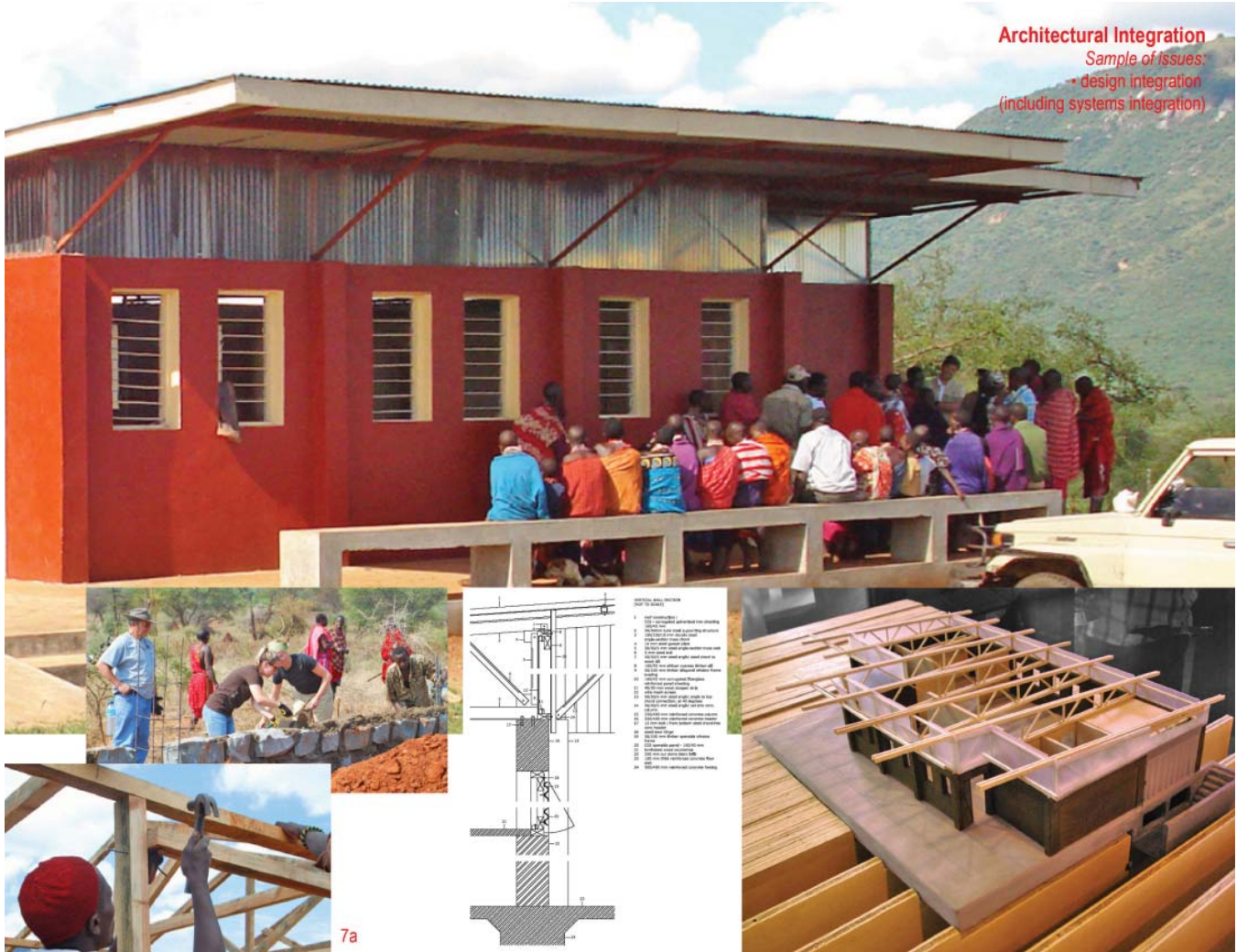


Architectural Integration: The Paradigm of Architecture

Sandy Stannard

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Architectural Integration
Sample of issues:
- design integration
(including systems integration)

Philosophy

The ultimate aim of this topical sequence is to understand how our creative work reflects upon, questions, and relates to the broader field of architecture. Are we advancing the discipline or simply replicating the past? Are we improving our relationship with nature, or settling for the status quo? Are we creating stimulating, responsible environments or? To paraphrase Corbusier, we should aim to make the bad difficult and the good easy.

Design/Performance Objective

All students are encourage to pursue design integration in their projects, as they attempt to balance all issues ranging from the poetic to the technical, while simultaneously staying focused on essential ecological design issues (which is always at the forefront).

Investigative Strategy

Writing; reading; designing; re-designing; drawing; modeling (of all types and all scales); discussion; and multiple critical presentations.

Architectural Integration

David Aine + Matt Ridenour

Design integration (including systems integration)

7a: Project HOPE: a design/build HIV clinic for a rural South African community. This two person project is an example of architectural integration as it spans the range of issues from poetic to realistic, finally realizing built form on its site in Africa.



Architectural Integration: The Paradigm of Architecture (cont.)

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Evaluation Process

Final presentations and final iterations of the thesis "book."

Evaluative Criteria

Demonstrated sensitive and appropriate response to the defined thesis situation (through models [of all types and scales], drawings, montages, narratives, videos, etc. Thorough presentation of design solution at two final public reviews and in the third (and final) iteration of the thesis book.

Cautions- Possible Confusions

Duration of Exercise

The duration of the entire thesis sequence is 30 weeks. Projects are continuously reviewed and publicly presented, including watershed presentations at: week 9, week 13, week 16, week 19, week 22, week 28, and week 29. Three thesis books are required (week 10, week 20, week 30). Final projects are documented in thesis books, due week 30.

Degree of Difficulty

Challenging.

References

Varies according to project. Contemporary and historic precedent research referencing pertinent architectural projects is essential to this process.

Off-grid and site responsive Passenger Ferry Terminal, Berkeley, CA. Space transforms according to tidal shifts. [Brian Weller]

