



“To do things differently, we need to perceive things differently... We need to design macroscopes, as well as microscopes, to help us understand where things come from and why: the life story of a hamburger, or time pressure, or urban sprawl. Equipped with a fresh understanding of why our present situations are as they are, we can better describe where we want to be. With alternative situations evocatively in mind, we can design our way from here to there.

Macroscopes can help us understand complex systems, but our own eyes, unaided, are just as important. All over the world alternative models of organizing daily life are being tried and tested right now. We just need to look for them.”
(Thackara, J. (2005) *In the Bubble: Designing in a Complex World*. Cambridge: Massachusetts Institute of Technology. p.6)

In this project you are asked to research a zone of interest and synthesise your findings from this research in a written report and in a speculative design, or a series of design experiments. You will use design here as a means by which to critically reflect upon our current cultural practices, and to test out new ways of thinking and making. This report and your design experiments or propositions will summarise and synthesise how design-based critical thinking can make sustainable change.

These reports will be compiled together to form a digital resource for your class – a kind of macroscopic device that allows you to look for patterns in the way we live and that offers potential ways to make change in the way we think, design, make and act.

[you may suggest other areas if they are of interest to you]

Research areas and foci are as follows:

Environmental/ecological design:

Spatial design
Furniture / appliance design
Materials design - exterior
Materials design - interior
Energy generation design
Lighting design
Design of water collection or treatment systems or water using systems (showers/kitchen faucets etc)
Design of waste treatment systems
Design of heating, cooking and/or cooling systems
Design of food generation systems [eg Diller and Scofidio's eco-flow garden - <http://www.timesonline.co.uk/tol/news/uk/science/article2772942.ece>]

Biomimetic design:

Spatial design
Furniture / appliance design
Materials design - exterior
Materials design - interior
Energy generation design [eg flexible wind and solar leaves that cover external walls like ivy]
Lighting design
Design of water collection or treatment systems or water using systems (showers/kitchen faucets etc)
Design of waste treatment systems
Design of heating, cooking and/or cooling systems
Design of food generation systems

Appro-tech and minimal materials:

Spatial design
Furniture / appliance design
Materials design - exterior
Materials design - interior
Energy generation design
Lighting design
Design of water collection or treatment systems or water using systems (showers/kitchen faucets etc)
Design of waste treatment systems
Design of heating, cooking and/or cooling systems [eg the Pot in a Pot refrigerator]
Design of food generation systems

Report format:

Please use the **template** in the 224.302 folder – your individual report will be grouped with all the others as a digital resource.

Portrait, A4, in PDF format

[in the **HEADER** section at top of page: colour green, Helvetica, 24 font] **rethinking design**

[your research area and your focus within that: colour green, Helvetica / 16 font] **appro-tech: lighting**

[your name: Helvetica / 10 font] Kermit T. Frog

Report subject matter:

What/Why: Include an overview of the issues pertinent to your research section (what is regenerative design, bio-mimicry or appro-tech)

Who: reference people/entities/institutes working to develop policies or designs in these areas

How: show examples of work, designs etc being done to address the issues you have raised

Rethinking design: test out the issues through design, use your design work to critically reflect on current conditions and the potential for design to make radical change. Document your design response/s as a resource for others.

PROJECT REQUIREMENTS:

A well organised digital report and record of your design explorations. Include a bibliography that notes your text and web sources.

As we are going to put this together as a resource for use by the group please be aware of copyright issues – please use images with no copyright control, or at the very least note where you sourced these from so that we can try to get copyright releases prior to compiling the document as a PDF.

Report to be around 1500 words – however if you have a strong design focus which explores the issues and your ideas through design then the writing can be less (in the order of 1000 words)

ASSESSMENT:

The project will be assessed to the extent that:
the student has contributed to class discussions and critiques
has investigated a defined area of sustainable design
and has communicated the findings from this investigation in visual, written and designed material and in an oral presentation

LEARNING OUTCOMES:

On successful completion of this paper a student should be able to:

1. demonstrate confidence in, and contribute to, critical discussions on the relationship between current building practices and sustainability
2. define an appropriate area of focus, in sustainable spatial design, for investigation and enquiry
3. with some guidance, engage in a self-directed enquiry into this aspect of sustainable design and
4. communicate these findings through visual, written and designed material and an oral presentation

WEEKLY + SEMESTER SCHEDULE:

Refer schedule 302 on blog

REFERENCES:

Refer to the 302 paper outline for references.

CONTACT:

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