

# SUSTAINABLE DESIGN

Ecology, Culture & the Human Built World – 2014

CENTRUM FÖR  
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## Sustainable Design – Ecology, Culture and Human Built Worlds

Date	Lecture
<b>22 January</b>	<p><b>Roll call and Sustainable Design Introduction meeting</b></p> <p>Margolin, Victor; <i>Design for a Sustainable World</i>, Design Issues Vol. 14 no. 2, MIT Press, 1998</p> <p>Margolin, Victor; <i>Global Expansion or Global Equilibrium? Design and the World Situation</i>, Design Issues Vol. 12 no. 2, MIT Press, 1996</p> <p>Latour, Bruno; <i>A Cautious Prometheus? A Few Steps Towards a Philosophy of Design (With Special Attention to Peter Sloterdijk)</i>, Proceedings of the 2008 Annual International Conference of Design History Society, 2008</p> <p>Recommended chapters from the course book:</p> <ul style="list-style-type: none"> <li>▪ <i>Chapter 1: What is Design? A Definition of the Function Complex</i> from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)</li> </ul>
<b>29 January</b>	<p><b>Introduction to Sustainable Development and Design</b></p> <p>Fuad-Luke, Alastair; <i>Scoping the Territory: Design, Activism and Sustainability</i>, chapter 1 in Design Activism: Beautiful Strangeness for a Sustainable World, 2009</p> <p>Ilstedt, Sara and Wangel, Josefin; <i>Designing Sustainable Futures</i>, Nordic Design Research Conference 2013</p> <p>Recommended chapters from the course book:</p> <ul style="list-style-type: none"> <li>▪ <i>Chapter 2: Phylogenocide: A History of the Industrial Design Profession</i> from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)</li> <li>▪ <i>Chapter 3: The Myth of the Noble Slob: Design, 'Art', and the Crafts</i> from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)</li> </ul>
<b>5 February</b>	<p><b>Biophilic Design</b></p> <p>Kellert, Stephen R.; <i>Dimensions, Elements, and Attributes of Biophilic Design</i>, chapter 1 in Biophilic Design, 2008</p> <p>Kellert, Stephen R.; <i>Ordinary Nature: the Value of Exploring and Restoring Nature in Everyday Life</i>, Proceedings 4<sup>th</sup> International Urban Wildlife Symposium, 2004</p> <p>Joye, Yannick; <i>Architectural Lessons From Environmental Psychology: The Case of Biophilic Architecture</i>, Review of General Psychology, Vol. 11, No. 4, 2007</p> <p>Orr, David; <i>Human Ecology as a Problem of Ecological Design</i>, chapter 2 in The Nature of Design, 2002</p>

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## 12 February Participatory Design in Urban Planning

Chick, Anne and Micklethwaite, Paul; *2.4 Participatory Design: from Designing for to Designing with*, chapter 2 in *Design for Sustainable Change: How design and designers can drive the sustainability agenda*, 2011

Calderon, Camilo; *Social Urbanism – Integrated and participatory urban upgrading in Medellin, Colombia*, chapter in *Requalifying the Built Environment: Challenges and Responses*, 2012

Hou, Jeffrey; *Citizen Design: Participation and Beyond*, chapter in *Companion to Urban Design*, 2010

Recommended chapters from the course book:

- *Chapter 7: Rebel with a Cause: Invention and Innovation* from *Design for the Real World: Human Ecology and Social Change*, Victor Papanek (1971)

## 19 February Art, Design and Ecology

Von Seth, Paula; *The Island of Perception* in Chapter 3: *Commons as a Model for Change from 'Commons in Capetown'*, 2012/2013, Resource/Lab Mejan Arc, Royal Institute of Art, Stockholm

Recommended chapters from the course book:

- *Chapter 10: Environmental Design: Pollution, Crowding, Ecology* from *Design for the Real World: Human Ecology and Social Change*, Victor Papanek (1971)

## 26 February Seminar I

Kelley, Tom and Kelley, David; *Dare - From Fear to Courage (extract)*, chapter 2 in *Creative Confidence: Unleashing the Creative Potential Within Us All*, 2013

Recommended chapters from the course book:

- *Chapter 4: Do-it-yourself-muder: Social and Moral Responsibilities of Design* from *Design for the Real World: Human Ecology and Social Change*, Victor Papanek (1971)

## 5 March Biomimicry

Benyus, Janine; *Echoing Nature*, chapter 1 in *Biomimicry – Innovation Inspired by Nature*, 2002

Volstad, Nina Louise and Boks, Casper; *On the Use of Biomimicry as a Useful Tool for the Industrial Designer*, *Sustainable Development Vol. 20*, 2012

Recommended chapters from the course book:

- *Chapter 8: The Tree of Knowledge: Biological Prototypes in Design* from *Design for the Real World: Human Ecology and Social Change*, Victor Papanek (1971)

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## 12 March Cradle to Cradle design and the Circular Economy

McDonough, William; *The Hannover Principles: Design for Sustainability*, prepared for Expo 2000 The World's Fair, Hannover, Germany

McDonough, William and Braungart, Michael; *A World of Abundance*, Interfaces Vol. 30 no. 3, 2000

Scientific Applications International Cooperation; *Life Cycle Assessment*, chapter 1 in Life Cycle Assessment: Principles and Practice, 2006

May, Shannon; *Ecological Modernism and the Making of a New Working Class*, chapter 5 in New Directions in Sustainable Design, 2011

Recommended chapters from the course book:

- *Chapter 6: Snake Oil and Thalidomide: Mass Leisure and Phony Fads* from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)

## 19 March Sustainable Fashion Design

Fletcher, Kate, *Clothes that connect*, chapter 6 in Designers, Visionaries + Other Stories, 2007

Forum for the Future; *Fashioning Sustainability: A Review of the Sustainability Impacts of the Clothing Industry*, 2007

Recommended chapters from the course book:

- *Chapter 5: Our Kleenex Culture: Obsolescence and Value* from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)
- *Chapter 9: Design Responsibility: Five Myths and Six Directions* from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)

## 26 March Seminar II – Principles of Sustainable Design and formation of the project groups

Design for the Real World by Victor Papanek must be read before this seminar as we will use it as an input for discussion.

Recommended chapters from the course books:

- *Chapter 11: The Neon Blackboard: Design Education and Design Teams* from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)
  - *Chapter 12: Design for Survival and Survival Through Design: A Summation* from Design for the Real World: Human Ecology and Social Change, Victor Papanek (1971)
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## 2 April

### Systems thinking for Sustainable Design

Hansson, Daniel; *Unpacking Spinoza: Sustainability Education Outside the Cartesian Box* in Journal of Sustainability Education Vol. 3, March 2012

Spinoza, Baruch de; *The Worm in the Blood* from A Spinoza Reader: The Ethics and Other Works, edited and translated by Edwin Curley, 1994

Spinoza, Baruch de; *Physical Interlude* from Ethics Demonstrated in Geometrical Order. Translated by Jonathan Bennet, 2010 Pages 29-31

Tzu, Chang; *Autumn Floods* in Chang Tzu Basic Writings, translated by Burton Watson, New York University Press, 1996

Capra, Fritjof; Chapters 1 and 2 in *The Science of Leonardo: Inside the Mind of the Great Genius of the Renaissance*, 2007

## 6 April

### Weekend Workshop: The Design Process, Methods and Tools

Walker, Stuart; *Design Process and Sustainable Development*, chapter 4 in Sustainable by Design: Explorations in Theory and Practice (2006)

Brown, Tim; *Design Thinking*, Harvard Business Review, June 2008

Meadows, Donella; *Leverage Points: Places to Intervene in a System*, The Sustainability Institute, 1999

## 9 April

### Workshop I – Starting the project

Buchanan, Richard; *Wicked Problems in Design Thinking*, Design Issues Vol. 8 no. 2, MIT Press, 1992

Fulton Suri, Jane; *Informing our Intuition – Design Research for Radical Innovation*, Rotman Magazine, Winter 2008

Chick, Anne and Micklethwaite, Paul; *1.2 Design as an action or process & 1.3 Design as a concept or proposal*, from chapter 1 in Design for Sustainable Change: How design and designers can drive the sustainability agenda, 2011

IDEO; *Why do Human Centered Design?* Page 4-9 from the introduction in the Human Centered Design Toolkit

Delft Design Guide; *Problem Definition*, Part 2: Design Methods from the Delft Design Guide, 2010

Delft Design Guide; *WWWWH: Who, What, Where, When, Why, and How*, Part 2: Design Methods from the Delft Design Guide, 2010

Delft Design Guide; *2.2: Creating Product Ideas and Concept*, Part 2: Design Methods from the Delft Design Guide, 2010

NOTE: *Both the Human Centered Design Toolkit (<http://www.ideo.com/work/human-centered-design-toolkit/>) and the Delft Design Guide are great resources you can consult during the group project. The complete documents are available online, links will be provided through the Cemus Course Portal*