

Emerging Ecologies: Architecture + the Rise of Environmentalism

ARCH 630 Teaching Module by Suzan Hampton

Prepared for Prof. John Trefry

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Summary of Module

The theme of this module will be to discuss the political, cultural, and economic influences on the organic architecture movement and how this early green building movement from the 1960s-2000 continues to inform sustainable design today.

The Tuesday class session will explore many of the architectural ideas and projects included in the Museum of Modern Art's vanguard *Emerging Ecologies: Architecture and the Rise of Environmentalism* exhibition which was on display from September, 2023 through January, 2024. With Prof. Trefry's OK, I'd like to hold the Tuesday class either at the Medicine Wheel at Haskell University, or at Delaware Street Commons cohousing where I was a resident for five years.

In keeping with the established class format, the Thursday class will feature an approximately 35-45 minute student group PowerPoint presentation followed by a discussion about some of the themes presented. The theme of the presentation will provide a socio-political-economic foil to the subject matter of organic architecture.

Teaching Module on Tuesday

Turn On, Tune In, Drop Out versus Crisis, Control and Withdrawal

Two themes prevalent during the zeitgeist of the early organic architecture movement were the counter-culture, back-to-the-land movement, and the dystopian, control-means-safety movement. Both movements were responding to a sense of rapid change and lack of control in terms of environmental issues, overpopulation, and the Cold War.

The Turn On, Tune In, Drop Out theme will explore architectural experimentation and solution-seeking via community-building, and via a revived focus on people living in harmony with nature. Topics will include the back-to-the-land movement, Indigenous protests, the Summer of Love, the psychedelics experimentation at Harvard, and the anti-Vietnam War movement.

The Crisis, Control and Withdrawal theme will tackle architectural experimentation and solution-seeking by means of mechanically oriented and controlled, self-contained, withdrawn environments. Topics will include the space race, the Arab oil embargo, and computerization and digital technologies.

Key Architectural Precedents: Ancestral Puebloan sites, Larry Halprin, Paolo Soleri, Buckminster Fuller

Other Architectural Precedents: Sim Van de Ryn, Frank Lloyd Wright, Haskell Wetlands Medicine Wheel, Charles Correa, Hassan Fathy, Taos Earthships

Tuesday Discussion Questions

1. Technological, withdrawal, or integrative solutions: what are your thoughts about architectural or environmental design approaches to addressing and correcting some of the negative impacts of climate change using these methods?

2. How do these methods reflect different intellectual or design traditions? (Euro, Indigenous)
3. What are the challenges of each path forward, both in the short and long-term?
4. What needs to change for architects to move along each path successfully?
5. Scenario: developer wants to cost-engineer an innovative, eco-friendly solution you designed for a greywater re-use system in an apartment building to save \$100,000 on the budget. You don't want to lose the contract. What are some strategies you might consider to advocate for the smarter solution and the greater good, taking the short- or long-term view, or both?
6. Is concrete sustainable? Discuss in cradle-to-cradle terms.

Thursday Student Group Presentation and Discussion

The presentation assignment is still being finalized but it will be either:

- a) "Turn Up the Heat" - the Cold War investigating topics like the Arab Oil Embargo, the Space Race, the population explosion, aliens, protest movements, and the arms race including nuclear arms research and development at Los Alamos National Labs
- b) "#becausescience" dealing with the evolution of Western contemporary science, and how science and the scientific method came to be considered "truth" in Western thought. Topics for exploration may include creationism vs. evolutionism, the discovery of DNA and rise of genetics, and stem cell research.

Potential Readings (will choose 2)

***Emerging Ecologies - Architecture and the Rise of Environmentalism.* New York: The Museum of Modern Art, New York. Chan and Wagstaffe, 2023. Foreward and Curator's Statement.**

During the 1960s, as Western notions of endless progress and growth gave way to concerns over industrial pollution, resource depletion and ecological limits, attitudes toward the environment became social, political and ideological. Published to accompany the first expansive survey of the history of environmental thinking in architecture, *Emerging Ecologies: Architecture and the Rise of Environmentalism* looks at the role architects have played in defining our understanding of "nature" and the "environment," specifically during the rise of environmental discourse. The richly illustrated publication presents over 45 architectural contributions—from Eleanor Raymond and Mária Telkes' groundbreaking work on solar houses to Buckminster Fuller's world resource management system and the environmental symbolism of Emilio Ambasz—to explore the role designers played in both promoting ecological concerns and in outlining the very terms of this nascent field. Through an introductory essay by curator Carson Chan and brief texts on each of the featured projects, *Emerging Ecologies* documents the proximity between ecology, design and statecraft, allowing readers to take stock of historic milestones as architecture confronts today's climate emergencies.

Fuller, Buckminster. *Operating Manual for Spaceship Earth.* Zurich: Lars Muller, 1st Edition, 1969.

Initially published in 1969, and one of Fuller's most popular works, *Operating Manual for Spaceship Earth* is a brilliant synthesis of his world view. In this very accessible volume, Fuller investigates the great challenges facing humanity, and the principles for avoiding extinction and "exercising our option to make it." How will humanity survive? How does automation influence individualization? How can we utilize our resources more effectively to realize our potential to end poverty in this generation? He questions the concept of specialization, calls for a design revolution of innovation, and offers advice on how to guide "spaceship earth" toward a sustainable future. *And it Came to Pass – Not to Stay* brings together Buckminster Fuller's lyrical and philosophical best, including seven "essays" in a form he called his "ventilated prose", and as always addressing the current global crisis and his predictions for the future. These essays, including "How Little I Know", "What I am Trying to Do", "Soft Revolution", and "Ethics", put the task of ushering in a new era of humanity in the context of "always starting with the universe." In rare form, Fuller elegantly weaves the personal, the playful, the simple, and the profound.

Halprin, Lawrence. *The RSVP Cycles: Creative Processes in the Human Environment. Choreographic Practices.* Bristol: Intellect, Volume 5, Issue 1, 2014.

Developed with his wife, dancer Anna Halprin, designer Larry Halprin considers scoring as a way to make creative processes visible and to describe and structure interactions between participants in community movement practices. This article demonstrates one way to diagram the analysis of elements of the creative process, and aids in creative group collaboration. This reading was included because many aspects of choreography and dance resemble the architectural design process. Halprin's choreographic diagrammatic system has transferable value as applied to communicating about architecture and urban public space design to non-designers. This system contains many principles that are also transferable to individual-and-group design activities that may constitute part of my research such as design/build architecture, social practice art, partnership models, and community-driven design.

Larsen, Soren C. and Johnson, Jay T. *Sacred Ground. Being Together in Place – Indigenous Coexistence in a More Than Human World.* Minneapolis: University of Minnesota Press, 2017.

Being Together in Place explores the landscapes that convene Native and non-Native people into sustained and difficult negotiations over their radically different interests. Using ethnographic research and a geographic perspective, this book shows activists in three sites learning how to articulate and defend their intrinsic and life-supportive ways of being—particularly to those who are intent on damaging these places. *Being Together in Place* offers a radical vision of decolonization grounded in Indigenous peoples' ontologies of land and place. It's a crucial intervention that weds the best insights from critical Indigenous studies to geography in exciting and transformative ways.

Larsen, Soren C. and Johnson, Jay T. *Ceremony Is Protest, Protest Is Ceremony. Being Together in Place – Indigenous Coexistence in a More Than Human World.* Minneapolis: University of Minnesota Press, 2017.

Van de Ryn, Sim. *Design for an Empathic World—Reconnecting to People, Nature, and Self.* Washington, D.C.: Island Press, 2013.

Sim Van der Ryn is a world leader in the field of sustainable architecture. In his work, Sim shows us that buildings are not objects but organisms, and cities are not machines but complex ecosystems. Sim came to see the shifting patterns in nature and how these patterns profoundly affect how people live and work in the structures we build and he explores how architecture has created physical and mental barriers that separate people from the natural world, and how to recover the soul of architecture and reconnect with our natural surroundings.

Van de Ryn, Sim. *Design for Life: The Architecture of Sim Van der Ryn.* Utah: Gibbs Smith, First Edition, 2005.

Sharing his years of experience as a teacher and using his building designs as examples, the author shows us that buildings are not objects but organisms, and cities are not machines but complex ecosystems. *Design for Life* illustrates how Van der Ryn came to see the shifting patterns in nature and how these patterns profoundly affect how people live and work in the structures we build. Van der Ryn explores how architecture has created physical and mental barriers that separate people from the natural world, and how to recover the soul of architecture and reconnect with our natural surroundings. Appointed California State Architect by then-Governor Jerry Brown, Van der Ryn introduced the nation's first energy-efficient government building projects. His vision heralded a Golden Age of ecologically sensitive design and resulted in the adoption of strict energy standards and disability access standards for all state buildings and parks. Van der Ryn has helped inspire architects to see the myriad ways they can apply physical and social ecology to architecture and environmental design.