

Prof. Charlie Hailey, PhD, RA

Meeting time: Tuesday, periods 7 - 9

Meeting place: TBD

[CLHAILEY@ufl.edu](mailto:CLHAILEY@ufl.edu)



**SUMMARY:** This seminar seeks to understand architecture along its edges, with a particular emphasis on climate, ecology, and place.

**INTRODUCTION:** One of the difficulties of climate change is the visualization of its effects. Architectural edges are places where inside and outside meet and where architecture encounters the changes occurring climatically and ecologically. The porch is an example; yet even there, much of the change remains invisible. This seminar looks closely at edge conditions (their microclimates, their mini-habitats, their 'critical zones') and deploys mobiles as tools (or, you might say, test cases) to understand climate and learn how architecture might respond, here on the cusp of what we build.

**THREE PHASES:** The seminar has three phases, which build on each other: 1. Researching edge conditions, mobiles (and other kinetic constructs), and the ecologies of architecture and sites; 2. Making a mobile (or stabile) that can be installed in a particular site (edge condition); and 3. Constructing a drawing that combines architectural context (edge) and insights from mobile (or stabile) installation.

1. *Research:* The preliminary research crosses disciplines, meshing architectural studies with ecology, climate and environmental science, place studies, botany, meteorology, environmental humanities, biophilia, life sciences, ecotone studies, and literature.
2. *Mobile:* The next phase focuses on the construction of a mobile or a stabile for a selected site location (edge condition). We will initially connect these constructs to precedents of Alexander Calder as well as contemporary kinetic artists. The construct you make will serve as a test case along architectural and environmental edges and microclimates.

The mobile can be suspended, or it might rest on the ground as a "stabile". Questions include: How does it respond to natural elements: wind, light, rain, fog, sounds, textures? Does it weather? Is it a kind of architectural weathervane? How does it engage with the human body? With its environment? Is it a kind of barometric tool? Is it heavy as well as light? How does it measure change? How does it register balance? Does it register differences close to the ground and higher in the landscape? How does it relate to time? Does it have memory?

NOTE: We will treat some seminar classes as Workshops to develop skills, work on process constructs, and refine details in making mobiles.

3. *Drawing:* The drawing combines the analytic and the speculative: 1. what we learned from the preliminary research and the mobile (or stabile) installation and 2. what you might propose architecturally for this edge condition. How does the drawing register what you have constructed and construed? How does it demonstrate your ideas about architectural and ecological edges? Does the mobile (or stabile) anticipate or point toward an architectural intervention?

NOTE: After this third phase, a short written document (500 to 750 words) will accompany the work and provide an opportunity for synthesis and reflection.

**MATERIALS:** Scope and scale will be up to you, but some basic materials will serve as starting points for the mobile: metal wire, pliers, sheet metal, awl, hammer, and drill. I can also provide tools (and materials) as necessary. During the first week of class, we will talk about materials and tools, so it's not necessary to pick up anything before class starts. Repurposed materials as well as innovative and alternative materials will be encouraged (e.g. photo-sensitive materials, etc.) For the drawing, the final medium will be a nice sheet of watercolor paper or other high-quality paper.

**ILLUSTRATIONS:** The images above are from the work of Alexander Calder. Left to right: Gordon Parks, "Alexander Calder's Hand and Mobile," 1952, gelatin silver print, Corcoran Collection; Alexander Calder, "Spines," 1940; Calder, "Gypsophilia," 1950; Calder, "Vertical Foliage," 1941. Next page: *Stabile*: Nonspace, 1950; Untitled, 1959; Blue Feather, 1948; Installation of *Calder*, Musée National d'Art Moderne, Paris, 1965 (photo by Gjon Mili).

**DETAILS:** The seminar work is specific to the site(s) you choose, but the situations and places can be readily extended to your own research (PILOT, studio work, etc.). A focus on the environmental situation in Florida will be encouraged for some projects, but insights will extend to broader geographic contexts and contemporary issues of climate change, environmental ethics, and built environments. The seminar meets History/Theory Elective requirements. Theoretical frameworks for the seminar include: place-making, environmental phenomenology, environmental humanities, liminality, repair, Bruno Latour's critical zones, and landscape ethnography.

**SCHEDULE**

	Date	Class meeting information	Due for class	Milestones
Prelim. Research	January 14	Introduction		
	January 21	Discussion of Frames (theoretical and historical) and Precedents	Presentation of research	
	January 28	Discussion of Frames (theoretical and historical) and Precedents	Presentation of research and preliminary plan: mobile/stabile	Decide on site location for mobile/stabile
Making Mobile/Stabile Construct	February 4	In-class workshops related to mobile/stabile construction	Sketch study of proposed mobile/stabile	
	February 11	Continue in-class workshops and discussion of ongoing constructs	Process work for mobile/stabile constructs	
	February 18	Note that PILOT Midterm reviews may affect class schedule		
	February 25	Discussion of ongoing constructs	Process work for mobile/stabile constructs	Documentation of process work and preliminary on-site installation
	March 4	Discussion of ongoing constructs and possible site visits (when possible)	Process work for mobile/stabile constructs	
	March 11	Final discussion of mobile/stabile constructs & Discussion of drawing phase	Final mobile/stabile constructs due	Final mobile/stabile constructs
	March 18	No class (Spring Break)		
Drawing	March 25	Discussion and review of Drawings (in draft form)	First phase of Drawing	
	April 1	Note that PILOT Final reviews may affect class schedule	Continuing Drawing discussion if schedule allows	
	April 8	Continued discussion and review of Drawings & discussion of Writing	Second phase of Drawing & preliminary notes for Writing	
	April 15	Final discussion	Near final version of Drawing	Overall collection of process work, mobile/stabile, and Drawing iterations
	April 22	No class (Review Week)		
	May 1	Final documents due		Documentation of process, Mobile/stabile, Drawing, and Writing



**SARTRE ON MOBILES:** "...the mobiles have to have some source of mobility. In the past, Calder drove them with an electric motor. Now he abandons them in the wild: in a garden, by an open window he lets them vibrate in the wind like Aeolian harps. They feed on the air, breathe it and take their life from the indistinct life of the atmosphere." (Jean-Paul Sartre, "The Mobiles of Calder," 1946)

"...to create scales and harmonies of unknown movements...mobiles are at once lyrical inventions, technical, almost mathematical combinations and the tangible symbol of Nature, of that great, vague Nature that squanders pollen and suddenly causes a thousand butterflies to take wing, that Nature of which we shall never know whether it is the blind sequence of causes and effects or the timid, endlessly deferred, ruffled and ruffled unfolding of an Idea." (Jean-Paul Sartre, "The Mobiles of Calder," 1946)

## RESOURCES

Documents related to Tools, Techniques, Ecologies, and Histories of Mobiles/Stables will be available on a shared One Drive directory.

## GRADING (with expectations and outcomes)

10% Class Participation (active involvement in discussions and general attendance)

20% Research (depth of research, interdisciplinarity of research, documentation and presentation of research)

30% Mobile/Stable construct (application of research; connection to site, place, and environmental conditions; craft and attention to detail)

30% Drawing (link to construct; application of research; connection to site, place, and environmental conditions; craft and attention to detail)

10% Writing (critical reflection and synthesis of overall work: Research, Construct, and Drawing; and speculation about future directions)

## READING BIBLIOGRAPHY

### Mobiles and stables

Alexander Calder, *The Conquest of Time: The Early Years* (Knopf 2017)

Alexander Calder, *The Conquest of Space: The Later Years* (Knopf 2020)

Siegfried Giedeon, "The Hammock and Alexander Calder," in *Mechanization Takes Command. A Contribution to Anonymous History* (New York: Oxford University Press, 1948), pp.476-480.

Jean-Paul Sartre, "The Mobiles of Calder," 1946.

### Edge and Place

Basso, *Wisdom Sits in Places* (particularly first and last part of last chapter)

Bird, Eric. "Land and Sea Level Changes," Chapter 3, in *Coastal Geomorphology*

Casey, Edward. *The World on Edge*

Christopherson, Robert. *Geosystems: An Introduction to Physical Geography* (2006)

Clay, Grady. *Real Places: An Unconventional Guide to America's Generic Landscapes* (1994) Dana, Richard Henry. *The Seaman's Friend*

Desimini and Waldheim. *Cartographic Grounds: Projecting the Landscape Imaginary*

ETH Studio Basel, *Territory: On the Development of Landscape and City*, chapter on Florida: "On the Development of Landscape and City"

Goldsworthy, Andy. *Rivers and Tides*

Hailey, Charlie. *The Porch*

Haraway, Donna. "Carrier Bags for Critical Zones"

Harrison, Stephan and Steve Pile, Nigel Thrift. *Patterned Ground: Entanglements of Nature and Culture* (2004)

Howard, Luke. *Essay on the Modification of Clouds*

Keller, Lynn. *Recomposing Ecopoetics: North American Poetry of the Self-Conscious Anthropocene*

Kimmerer, Robin Wall. *Braiding Sweetgrass*

Kohak, Erazim. *The Embers and the Stars*

Latour, Bruno. *Critical Zones: The Science and Politics of Landing on Earth*

Lopez, Barry. *Home Ground* Macfarlane, Robert. *Landmarks*

Masoud, Fadi. *Terra-Sorta-Firma*

Mathur, Anuradha. *Soak: Mumbai in an Estuary*

McKibben, Bill. *The End of Nature*

McPhee, John. *Basin and Range*

Russo, Linda. *Counter-Desecration: A Glossary for Writing Within the Anthropocene*

Schama, Simon. *Landscape and Memory*

Stilgoe, John. *Alongshore*

Stilgoe, John. *Shallow Water Dictionary*  
Stilgoe, John. *What Is Landscape*  
Wilson, E. O. *Biophilia*

### Ecology

Gregory Bateson, *Steps to an Ecology of Mind*  
Felix Guattari, *Three Ecologies*  
OASE special issue, "Ecological Aesthetics"  
Chris Reed and Nina-Marie Lister. *Projective Ecologies: Ecology, Research, and Design in the Climate Age*  
Lydia Kallipoliti, *Histories of Ecological Design: An Unfinished Cyclopeda*

### Architecture and Environmental Studies

David Karmon, Architectural History and the Environmental Humanities: A Call for an Expanded Approach  
<https://www.platformspace.net/home/architectural-history-and-the-environmental-humanities-a-call-for-an-expanded-approach>  
Daniel Barber, Architecture in the Anthropocene, <https://ppeh.sas.upenn.edu/node/636>  
Kim Forster, Environmental Histories of Architecture, CCA, with extensive bibliography <https://www.cca.qc.ca/en/articles/87164/environmental-histories-of-architecture>

### Environmental Humanities

Stacy Alaimo, *Bodily Natures: Science, Environment, and the Material Self*, Indiana University Press, 2010.  
Jane Bennett, *Vibrant Matter: A Political Ecology of Things*, Duke University Press, 2010.  
Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable*, University of Chicago Press, 2016.  
Ursula K. Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*, Oxford University Press, 2008.  
Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*, Milkweed Books, 2014.  
Naomi Klein, *This Changes Everything: Capitalism vs. the Climate*, Simon and Schuster, 2015.  
Bruno Latour, *We Have Never Been Modern*, Harvard University Press, 1993.  
Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution*, Harper Collins, 1990.  
Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics*, Harvard University Press, 2009.  
Rob Nixon, *Slow Violence and the Environmentalism of the Poor*, Harvard University Press, 2013.  
Nicole Seymour, *Bad Environmentalism: Irony and Irreverence in the Ecological Age*. Minneapolis: University of Minnesota Press, 2018.  
Rebecca Solnit, *Savage Dreams: A Journey into the Hidden Wars of the American West*, University of California Press, 2014.  
Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton University Press, 2017.  
Raymond Williams, *The Country and the City*, Oxford University Press, 1975.  
Sources: <https://environmental-humanities.utah.edu/current-students/readinglists.php> and <https://notevenpast.org/environmental-humanities-five-non-history-books-i-recommend-from-comps/>

### General reading:

Berghaller, Hannes et al. "[Mapping Common Ground: Ecocriticism, Environmental History, and the Environmental Humanities.](#)" *Environmental Humanities* 5.1 (2014): 261–76.  
Castree, Noel. "[The Anthropocene and the Environmental Humanities: Extending the Conversation.](#)" *Environmental Humanities* 5.1 (2014): 233–60. Web.  
Heise, Ursula K., and Allison Carruth. "[Introduction to Focus: Environmental Humanities.](#)" *American Book Review* 32, no. 1 (February 24, 2011): 3–3. doi:10.1353/abr.2010.0067.  
Holm, Poul et al. "[Humanities for the Environment-A Manifesto for Research and Action.](#)" *Humanities* 4.4 (2015): 977–92.  
Wood, Peter and Rachelle Peterson. "[Eh? The Rise of the Environmental Humanities Movement.](#)" *National Association of Scholars*, June 20, 2014. (Source: <https://guides.lib.umich.edu/c.php?q=700712&p=4971692>)

UVA Press Series: <https://www.upress.virginia.edu/series/USN/>

Ursula Heise, Jon Christensen, Michelle Niemann, eds., *The Routledge Companion to the Environmental Humanities*, Routledge, 2017. <https://www.routledge.com/The-Routledge-Companion-to-the-Environmental-Humanities/Heise-Christensen-Niemann/p/book/9781032179292>  
J. Andrew Hubbell, John C. Ryan, *Introduction to the Environmental Humanities*, Routledge, 2022. <https://www.routledge.com/Introduction-to-the-Environmental-Humanities/Hubbell-Ryan/p/book/9780815391937>  
Jeffrey Cohen, Stephanie Foote, *The Cambridge Companion to Environmental Humanities*, Cambridge University Press, 2021. <https://www.cambridge.org/core/books/cambridge-companion-to-environmental-humanities/4274B930FCFF8B301403114FBC027A81>  
Robert S. Emmett and David E. Nye, *The Environmental Humanities: A Critical Introduction*, MIT Press, 2017. <https://mitpress.mit.edu/9780262534208/the-environmental-humanities/>

### Other Sources:

[https://edgeeffects.net/faculty-favorites-environmental-humanities-spring-2021/Environmental-Humanities-\(Open-Access\)](https://edgeeffects.net/faculty-favorites-environmental-humanities-spring-2021/Environmental-Humanities-(Open-Access))  
[Resilience: A Journal of the Environmental Humanities](#)

### Class attendance

Attendance is mandatory for each class. After three absences, each subsequent absence will reduce your final grade by one letter. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

### UF Grading Policy

Information on UF's grading policy can be found at the following location: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

### Grading Scale

The grade scale ranges from A to E, with + and – assigned as necessary:

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Numeric Grade	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59
Quality Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

### Academic Honesty

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. Plagiarism/misrepresentation: There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance.
2. Multiple submissions of the same or similar work without prior approval. If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.
3. Falsifying information

Examples include:

- misrepresenting reasons why work cannot be done as requested
- changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the “real world” may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)
- altering work after it has been submitted
- hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

### Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the [Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### Online Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu>.

## Student Work Archives

Students will be asked to upload all documents to Canvas at the end of the semester. A final grade cannot be assigned until all work is uploaded.

## Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

## Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

## Campus Resources

### **Health and Wellness**

#### **U Matter, We Care:**

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.

**Counseling and Wellness Center:** [counseling.ufl.edu/cwc](http://counseling.ufl.edu/cwc), and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

#### **Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or [police.ufl.edu](http://police.ufl.edu).

### **Academic Resources**

**[E-learning technical support](#)**, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu).

**[Career Resource Center](#)**, Reitz Union, 392-1601. Career assistance and counseling.

**[Library Support](#)**, Various ways to receive assistance with respect to using the libraries or finding resources.

**[Teaching Center](#)**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

**[Writing Studio](#)**, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

#### **[Student Complaints Campus](#)** **[On-Line Students Complaints](#)**

## Changes and Revisions

This syllabus is subject to change. Any changes will be posted to CANVAS.