

# **GARDEN IN THE MACHINE**

*Enclosing Nature, Landscape, and Other Planetary Forms*

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## *Enclosing Nature, Landscape, and Other Planetary Forms*

ARCH 3314 / 5301 History-Theory Seminar  
Fall 2021, TU-TH, 9:30-10:50am, Architecture Bldg, Room 801  
Texas Tech University College of Architecture  
Dr. Jeffrey S. Nesbit, H. Deane Pearce Chair

No longer do we only find the romance of *the machine in the garden*. Instead, isolated enclosures separated nature and redefined the garden entirely. Overlapped by cultural consumption and politics, planetary imagination stimulates a valuable framework for exploring environmental limitations over a technological foreground. Theories and design practices, including subjects found in science fiction, open critical questions on the status of our environment here on Earth. This seminar interrogates the role of the planetary landscape in a post-pandemic society to discuss enclosed forms of capital to the exclusive boundaries of territory and politics.



“Big Bertha” Apollo 14 lunar sample, Houston, Texas, 1971 (credit: NASA archives)

*“Our households have become spaceships, while urbanity has transformed into a constellation of “essential” places. Supermarkets, gas stations, hospitals, and pharmacies all now make up a defamiliarized, non-cohesive space, while everything else has obscured in a newly formed mental desert. The city today is a vast array of disconnected bedrooms, microcosms that come together in an abstract digital space, physically enabled by vital and essential data farms.”*

- Lydia Kallipoliti, 2000

## ARCH 3314 / 5301

### GARDEN IN THE MACHINE

#### *Enclosing Nature, Landscape, and Other Planetary Forms*

Overlapped by cultural consumption and politics, planetary imagination stimulates a useful framework for interrogating the human impact on environmental limitations over a technological foreground. The blurry lines between the engineered logic and cultural imagination are continually embedded and influenced by intuition in the cultural practices of capital enclosure. Urbanist and political geographer Edward Soja identify three primary drivers for what he calls "regional urbanization" in the post-Modern metropolis: the globalization of capital, creation of a new economy, and effects from the revolution in technologies (Soja, 2010). And yet, the scales of the infrastructural, regional, and planetary lenses have only made it more difficult to precisely translate in the design field. Topically organized each week, lectures begin on by demystifying the false dichotomy between nature and synthetic constructions. As lectures establish a series of descriptions for how nature and urbanism became enclosed, students will gain diverse concepts for how to think about the shape of the post-pandemic society and its impact on the design fields. From culture to questions of the environment, the notions of *architecture*, *city*, *nature*, and the *world* will continuously be challenged. Theories, design practices, and the forms of imagination, including science fiction, will open up critical questions on the status of our environment here on Earth.

*GARDEN IN THE MACHINE* gathers historical and theoretical material from experts across a range of disciplines, including architects, landscape architects, architectural historians, design theory scholars, geographers, historians of science and technology, and professionals at the intersection of architecture and the environment. Topics to be addressed in the course are focused on, more broadly, the following themes:

- > *Revealing* enclosed political and geographic boundaries;
- > *Reflecting* on historical episodes of enclosure and their impact;
- > *Interrogating* nature as a synthetic construction;
- > *Imagining* the role of enclosure in future design projections.

## **COURSE STRUCTURE**

The course is structured with a 1.5-hour lecture on Tuesdays, followed by a 1-hour discussion on Thursdays. \* It is expected to be actively engaged in both the lecture, readings, and weekly discussions. Across the semester students are expected to participate and develop their design research project. This research project will accumulate into a body of work to be disseminated in the form of a 15-minute presentation upon the end of the semester and contribute to a larger body of work collectively from the group.

## **READING DISCUSSIONS**

Each week, students are expected to have completed the readings prior to the Thursday meeting. In preparations for having effective discussions, one (or in some cases, two) student(s) will be assigned to lead the class in a discussion. Discussion leaders are asked to prepare a short 20-25 slides, including a carefully curated series of photos, quotes, critiques, and/or provocations to elevate the quality of discussion. The discussion slides and conversations are not meant to be a summary of weekly readings. Instead, slides should add to the content delivered from the weekly readings and lectures. A template for the discussion slides will be provided.

## **DESIGN RESEARCH PROJECT**

In pairs of two, students will apply lessons learned from the readings, lectures, and discussions to focus on a specific design research project throughout the course. Using examples from both built and unbuilt work(s), we will read deeply into topics in urbanism from the mid-19<sup>th</sup> century to contemporary pandemic society to better describe the disparity, or relationality, between nature, technology, and culture. Rather than providing an answer to an issue in the world, this research project should be considered more like investigative journalism. Through a series of carefully constructed drawings, the course will build an entire ensemble of enclosure types found in both historical and contemporary society. A taxonomy of drawings must include 10 “episodes,” or perhaps “instances,” where nature, landscape, urbanism, or the planet has become enclosed (see schedule below). The format of the drawings will follow a template given to the students within the first two weeks of the semester. Each drawing must be accompanied by a caption and a brief 150-word description. Graduate students enrolled under the cross-listed number will be required to write an additional short essay, to be determined in consultation with the instructor. The design research project will be delivered in two different, but related, mediums; (1) a presentation, (2) a drawing set. The presentation should outline the thematic frame described through a well-prepared 15-minute, presentation. It will be important to consider how your collection of drawings describes the world; economically, politically, environmentally, and/or culturally. The drawing set, or perhaps more specifically, the “taxonomy,” is then used as a collective course document to organize visual and textual materials and distill down the range and diversity of topics discussed throughout the course.

# SCHEDULE

## Wk 1 **DEMYSTIFYING NATURE'S DICHOTOMY**

Aug 24 Introductions / Schedule / Topics

Aug 26 Lecture

Readings:

⇒ Anne Whiston Spirn, "Reconstructing Nature: The Legacy of Frederick Law Olmsted," *Uncommon Ground*, ed. William Cronon (New York: W.W. Norton, 1996) 91-113.

## Wk 2 **WILDERNESS + THE ARCHAEOLOGY OF A PANDEMIC SOCIETY**

Aug 31 Lecture

Sep 02 Discussion, led by Student – Mason Davis + Cedric He

Readings:

⇒ Lydia Kallipoliti, *The Architecture of Closed Worlds: Or, What Is the Power of Shut?* (Zurich and New York: Lars Müller Publishers and Storefront for Art and Architecture, 2018).

⇒ Lydia Kallipoliti, "Zoom In/Out: Covid-19 and the Planetary Imaginary." in *At the Border, E-Flux* (A/D/O and e-flux, April 2020).

## Wk 3 **GARDENS, GREENHOUSES + THE MACHINE OF SEALED SIMULATIONS**

Sep 07 Lecture

Sep 09 Discussion, led by Student – Allison Green + Breagan Hightower

Readings:

⇒ Aleksandra Jaeschke, "Untitled," in *Nature of Enclosure: Session 2* (Barcelona: October, 2020). Listen [here](#).

⇒ Jeffrey S. Nesbit, "NASA's Enclosed Garden," in Ricardo Devesa and Marta Bugés, eds., *urbanNext* (Barcelona: Actar Publishers, 2020).

Wk 4 **AGROCULTURES: BIOLOGICAL SYSTEMS IN ARCHITECTURE**

Sep 14 Lecture

Sep 16 Discussion, led by Student – Saul Ortega + Julio Martinez

Readings:

⇒ Mae-ling Lokko, “All that Shimmers is Gold: Agrowaste Wastewater Treatment for Women Home-Based Enterprises in Ghana,” at The Sanctuary for Independent Media, April 14, 2018. Lecture [here](#).

⇒ Diana Agrest, *Architecture of Nature: Nature of Architecture* (New York: Applied Research & Design, 2019).

Wk 5 **BUBBLES, APERTURES + AIR HANDLING SYSTEMS**

Sep 21 Lecture

Sep 23 Discussion, led by Student – Jessica George + Angelina Garcia

Readings:

⇒ Peter Sloterdijk, *Bubbles, Spheres Volume I: Microspherology* (Cambridge: MIT Press, 2011).

⇒ Daniel A. Barber, “After Comfort,” in *Log 47: Overcoming Carbon Form* (November 2019): 45-52.

Wk 6 **CAPITAL ACCUMULATION + THE VERTICALLY ENCLOSED**

Sep 28 Lecture

Sep 30 Discussion, led by Student – Jonathan Hill + Andrew Muljana

Readings:

⇒ Harvey, David. “Globalization and Deindustrialization: A City Abandoned”. *International Journal of Politics, Culture, and Society*, 1996.

⇒ Mariano Gomez-Luque, “Vertical Worlds: on Capitalist Enclosure and Very Tall Buildings,” in *Nature of Enclosure: Session 6* (Barcelona: November, 2020).  
Listen [here](#)

Wk 7 **PLANETARY URBANISM + THE DISAPPEARING  
URBAN EDGE**

Oct 05 Lecture

Oct 07 Discussion, led by Student – Taylor Tavano + Aaron Garza

Readings:

⇒ Neil Brenner, “The Hinterland Urbanized?” in *Architectural Design*, 86: 118–127 (2016).

⇒ Neil Brenner, *Implosions/Explosions: Towards a Study of Planetary Urbanization* (Berlin: Jovis, 2014).

Wk 8 **INDIGENEITY, CARTOGRAPHY, + THE NATIONAL PARK  
SERVICE**

Oct 12 Lecture

Oct 14 Discussion, led by Student – Jesus Avila Mireles + Younggi Baek

Readings:

⇒ Mishuana Goeman, “Mark My Words: Native Women Mapping Our Nations (Minneapolis: University of Minnesota Press, 2013).

⇒ Mishuana Goeman, “Notes Toward a Native Feminism’s Spatial Practice,” in *Wicazo Sa Review*, 24:2 (Minneapolis: University of Minnesota Press, 2009) 169-187.

Wk 09 **FULLER’S SPACESHIP EARTH: THE ARCHITECTURE OF  
WORLDS**

Oct 19 Lecture

Oct 21 Discussion, led by Student – Hannah Soenksen + Zachary Duncan

Readings:

⇒ Buckminster Fuller, *Operating Manual for Spaceship Earth* (Carbondale: Southern Illinois University Press, 1969).

⇒ Hashim Sarkis, et al, *The World as an Architectural Project* (Cambridge: MIT Press, 2019).



## Wk 10 **CLOSED WORLDS + SCIENCE FICTIONS**

Oct 26 Lecture

Oct 28 Discussion, led by Student – Tanner Wilson + Matthew Phenix

Readings:

⇒ Paul Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge: MIT Press, 1996).

⇒ Ursula K. Le Guin, *The Wizard of Earthsea* (New York: Penguin Random House, 1968).

⇒ Rosalind Williams, *Notes on the Underground: An Essay on Technology, Society, and the Imagination* (Cambridge: MIT Press, 2008).

## Wk 11 **ENVISIONING AIR + PLANETARY IMAGINATION**

Nov 02 Lecture

Nov 04 Discussion, led by Student – Derek Williams

Readings:

⇒ Sean Lally, “Phasing Density,” 2020.

⇒ Joël Vacheron, “Spatial Imagery and Planetary Imagination,” in *Photographic Archive and Tools* (Kunsthochschule für Medien Köln in 2018) has been published in the catalog published as part of the Bienal de Arte Contemporânea da Maia'19 (2019).

## Wk 12 *STUDENT PRESENTATIONS*

Nov 09 Student Presentations, *specific time tbd*

Nov 11 Student Presentations, *specific time tbd*

## Wk 13 **NATURE OF ENCLOSURE: AN ARCHAEOLOGY OF THE FUTURE**

Nov 16 Lecture / Course Overview

Nov 18 No Class - ALL COURSE MATERIALS DUE

## Student Evaluation

Evaluation of student performance is based upon weekly course progress as well as product. Production and hard work are expected. Improvement and growth are key. The instructor conducts an expert review of overall student performance following major stages of the semester. This is not a quantifiable, exact, or mathematical assessment. It is based on years of experienced evaluation of student work. The following general criteria will be considered: (1) strength of idea; (2) articulation and development; (3) technical competency, clarity, and craft; (4) concise verbal/written presentation and the ability to ask relevant questions; (5) passion, commitment, dedication and work ethic. All requirements and deadlines must be completed in a timely manner. Extensions to due dates will not be granted. *Expect a substantial reduction of your grade for late or incomplete work.*

Discussion	20%
Presentation	30%
Project	50%
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<b>Total</b>	<b>100%</b>

## POLICIES (Pandemic Related)

**Face Covering Policy:** As of May 19, 2021, face coverings are now optional in TTU facilities and classrooms, and all other COVID-19 campus protocols have been lifted. It is HIGHLY recommended that those who have not been vaccinated for COVID-19 wear face coverings to help prevent the spread of the virus.

**Seating Charts and Social Distancing:** There is no longer a mandated social distancing protocol for classroom seating, but diligence is encouraged when indoors and not wearing masks. A seating chart might be used in the classroom to facilitate attendance, class interactions and other in-class engagement activities.

**Illness-related Absences:** Instructors of Record may revert to their pre-pandemic absence policies regarding illnesses but take into consideration the variant effects of COVID-19 on people when students report absence due to the virus (e.g., some may need extended days of absences and time to make up missed work).

**In-Person Office Hours:** It is highly recommended to have office hours remotely on Zoom. Office hours are by appointment only and a link will be provided in advance.

**Personal Hygiene:** We all should continue to practice frequent hand washing, use hand sanitizers after touching high-touch points (e.g., door handles, shared keyboards, etc.), and cover faces when coughing or sneezing.

**Potential Changes:** The University will follow CDC, State, and TTU System guidelines in continuing to manage the campus implications of COVID-19. Any changes affecting class policies or delivery modality will be in accordance with those guidelines and announced as soon as possible.

## **POLICIES**

### Academic Regulations

For all Matters Consult the Texas Tech University 2021-2022 Undergraduate and Graduate Catalog

### Civility in the Classroom

Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class, resulting in an absence. Statement of Ethical Principles

### Academic Integrity Statement

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work they have not honestly performed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension. Academic integrity is taking responsibility for one's own class and/or coursework, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University Quality Enhancement Plan, Academic Integrity Task Force, 2010] Students must understand the principles of academic integrity and abide by them in all classes and/or coursework. Academic integrity violations are outlined in the Code of Student Conduct, Part X, B3 of the Student Handbook. If there are questions of interpretation of academic integrity policies or about what might constitute an academic integrity violation, students are responsible for seeking guidance from the faculty member teaching the course in question. "Academic dishonesty" includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor(s) or the attempt to commit such an act). TTU Academic Catalog: Academic Integrity

### Attendance

Student are allowed up to two unexcused absences during the semester. Arriving late to class, working on anything other than class work and departing early will be considered as absences. Absence due to religious observance: The Texas Tech University Catalog states that a student who is absent from classes for the observance of a religious holy day will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence Notification must be made in writing and delivered in person no later than the 15th class day of the semester. Absence due to officially approved trips: The Texas Tech University Catalog states that the person responsible for a student missing class due to a trip should notify the instructor of the departure and return schedule in advance of the trip. The student may not be penalized and is responsible for the material missed. Whether an absence is excused or unexcused is determined solely by the instructor except for absences due to religious observance and officially approved trips described above. Students are responsible for attending class.

### Religious Holy Day Statement

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

### Disabilities

Students with disabilities will find numerous programs designated to coordinate academic accommodations and promote access to every phase of university life. Such programming is coordinated through Student Disability Services. SDS personnel oversee and coordinate programs to ensure accessibility on an individual basis to students with disabilities. Texas Tech strives to provide all students equal access to a college education and support in adjusting to the college experience. Prospective and current students interested in receiving more information regarding programs for students with disabilities should contact: Student Disability Services, 335 West Hall, 806.742.2405 or visit online at [www.studentaffairs.ttu.edu/sds](http://www.studentaffairs.ttu.edu/sds). Email: [sds@ttu.edu](mailto:sds@ttu.edu)

### Grading

The grades used, including plus and minus, with their interpretations, are A, excellent; B, good; C, average; D, inferior (passing, but not necessarily satisfying degree requirements); F, failure; I, incomplete; and W, withdrawal (not to be confused with a drop). The letter R designates a course repeated to remove an I. The grade of I is given only when a student's work is satisfactory in quality but, due to reasons beyond his or her control, has not been completed during the regular semester. The studio professor reserves the right to refuse to grade work that is incomplete, extremely late, does not meet requirements, is substantially inferior in quality, or is poorly displayed. Any work submitted after the time and date scheduled will receive a reduction in grade, unless the circumstances-documented illness or death, unusual acts of nature, family crisis-warrant consideration by the faculty and constitute a valid justification. As per University policy, all work submitted to the professor becomes the property of the University.

### Reporting Illness and Deaths

In case of an illness that will require absence from class for more than one week, the student should notify his or her academic dean. The dean's office will inform the student's instructors through the departmental office. In case of class absences because of a brief illness, the student should inform the instructor directly. Other information related to illness can be found in the Student Handbook. The Center for Campus Life is responsible for notifying the campus community of student illnesses, immediate family deaths and/or student death.

### Discrimination, Harassment, and Sexual Violence

Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other Title IX violations are not tolerated by the University. Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online: <http://www.depts.ttu.edu/titleix/>

### LGBTQIA Support Statement

Within the Center for Campus Life, the Office serves the Texas Tech community through facilitation and leadership of programming and advocacy efforts. This work is aimed at

strengthening the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and sustaining an inclusive campus that welcomes people of all sexual orientations, gender identities, and gender expressions. Office of LGBTQIA, Student Union Building Room 201, [www.lgbtqia.ttu.edu](http://www.lgbtqia.ttu.edu), 806.742.5433

#### ADA Statement

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as possible to make necessary arrangements. Students must present appropriate verification from Student Disability Services during the instructor's office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services office in 335 West Hall or call 806-742-2405

#### TTU Statement of Ethical Principles

Texas Tech University is committed to the values of mutual respect; cooperation and communication; creativity and innovation; community service and leadership; pursuit of excellence; public accountability; and diversity:

[http://www.depts.ttu.edu/officialpublications/catalog/\\_EthicalPrinciples.php](http://www.depts.ttu.edu/officialpublications/catalog/_EthicalPrinciples.php)

#### Retention of Work

The college of Architecture reserves the right to retain, exhibit, and reproduce work submitted by students. Work submitted for grade is the property of the college and remains as such until it is returned to the students.