

REQUIREMENTS

1. Class Participation

You active and constructive participation is key to a good class conversation.

2. Reading Response

Responses are opportunities to articulate your position on the week's readings and arguments doubts about, or agreements and contentions with the arguments—in ways to engage the collective conversation and spur class discussion.

Please upload your responses (approximately 350-400 words) to Dropbox by Tuesday 10:00 pm.

3. Seminar Presentation

Each week, you will present, individually or in pairs, the material of that session:

Some prompts to get you started:

- a. Draw an overall ark or big picture of the session.
- b. Offer key questions to engage the discussion, drawing on your classmates' response
- c. Situate the authors in context (brief bio, fields of knowledge, methods, relevant work).
- d. Extract a citation or excerpt and guide the class through a deep reading of it.
- e. Identify urban (research) projects—issues and strategies of representation—relevant to the theme from the “Further Reading” and/or from your own personal research.

4. Urban Thing

In this semester-long research project, you will produce a story of an “urban thing” of your choice, one that you deem relevant and worthwhile. When we understand urbanism as a system of flows, which provisionally configures into forms, objects, territories, then an “urban thing” could be a creature, an artifact, a building, a neighborhood, an infrastructure, or any other human or non-human territory that is impacted by the forces of contemporary urbanism. Your mission here is to carefully choose the appropriate geographic scales and timescales through which to chronicle and represent your research and the various issues that transform across it. In this sense, the research project is not a rehearsal of established canonical knowledge in the field but an original inquiry into domains of knowledge that may have been deemed peripheral or external, and which might be particularly relevant to address now. Your operations of detection and description are connected inseparably with the definition of new practices of urbanism.

The research is conducted in both graphic and textual methods. Your goal by the end of the semester is to produce a set of nine drawings, each of which is to be supported by a caption of approximately 300 words. These are framed by a critical introduction and conclusion (approx. 500 words each).

The drawing is the primary tool of research, for you to represent how your thing of inquiry matters. The drawing “explodes” the urban thing—grounding it in geography, unpacking main issues and controversies. Drawings include territorial sections, exploded axonometries, relational maps, value diagrams, timelines, etc. Such graphic research makes visible relations amongst components, materials, typologies, actors, forms, structures, technologies, temporalities, scales across layers of the Earth.

The text analytically describes the urban thing to mobilize a relevant body of knowledge—within and beyond the design disciplines. You will draw on a variety of secondary sources: references

are particular to the geography-thing under examination and literature on urban theory— that helps situate your work in relation to the relevant themes and authors.

For smooth progress, pace yourself to a rhythm of one drawing per week, with the understanding that this is an iterative process and requires revisions and updates throughout the semester. Submissions interspersed throughout the semester will help incrementally and steadily advance your research towards the final submission.

The following submissions help to structure and advance the work.

9.18 THING

Identify your urban thing in one drawing with 300–word caption
Think of the drawing as one “thick description” that anchors the thing in place and makes visible the relevant information.

10.2 PROPOSAL

Drawings: 3 drawings+ 300–word caption for each drawing
Text: Abstract (500-word) that articulates your research hypothesis
Bibliography: a preliminary set of 10 key sources—books, journal articles, documents, reports —of immediate relevance to your urban thing.

11.6 OUTLINE

Drawings: 6 drawings + 300-word caption for each drawing
Text: Abstract (Revised, 500-word)
Text: Outline (1500-word). Outline your research, for each section to include key statement, keywords, relevant data, quotes, bibliographic sources, etc.
* The bibliographic sources are for you to outline your field of interest and flesh out your position in relation to relevant authors in the field.

12.4 DRAFT

9 Drawings + 300-word caption for each drawing Captions + abstract + draft
Drawings: 9 Drawings + 300-word caption for each drawing
Text: Abstract (Revised, 500-word)
Text: Paper Draft (3000 words)

12.18 FINAL

Submission: 9 Drawings + Captions + Paper + Bibliography

EVALUATION

30% attendance, class participation, and weekly reading responses
30% seminar presentations
40% research project

All assignments are due on the specified date. In case of illness or personal emergency, please communicate with TA regarding submission of late work.

GRADING DEFINITION

A. Exceptionally good performance demonstrating a superior understanding of the subject matter, a foundation of extensive knowledge, and a skillful use of concepts and/or materials.

B. Good performance demonstrating capacity to use the appropriate concepts, a good understanding of the subject matter, and an ability to handle the problems and materials encountered in the subject.

C. Adequate performance demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple problems, and adequate preparation for moving on to more advanced work in the field.

D. Minimally acceptable performance demonstrating at least partial familiarity with the subject matter and some capacity to deal with relatively simple problems, but also demonstrating deficiencies serious enough to make it inadvisable to proceed further in the field without additional work.

ACADEMIC INTEGRITY

Massachusetts Institute of Technology students are here because of their demonstrated intellectual ability and because of their potential to make a significant research contribution to thought and knowledge. Students will also face many challenges. It is important for MIT students to become familiar with and adhere to the Institute's policies regarding academic integrity, which is available at [Academic Integrity at MIT: A Handbook for Students](#).

This includes AI generated work. Do not publish research results that rely on content generated through the use of a generative AI tool without disclosing the nature of the use of such generative AI tool in producing the content. Please familiarize yourself with the Institute [Policy of Using Generative AI](#).

WRITING AND COMMUNICATION SUPPORT

The WCC ([Writing and Communication Center](#)) at MIT offers free one-on-one professional advice from communication experts on a range of issues, including writer's block, academic and professional writing as well as all aspects of oral presentations. The WCC also helps with all English as Second Language issues, from writing and grammar to pronunciation and conversation practice.

The WCC is located in E18-233, 50 Ames Street. To guarantee yourself a time, make an appointment at: <https://mit.mywconline.com>

COMMUNICATION

I will reply to your emails promptly, usually within 24-48 hours, excluding weekends. My office hours are by appointment. Please cc TA on all communication.

STUDENT SUPPORT AND WELLBEING (S3)

Personal and medical issues can make it hard to focus on academics. If you find that something is getting in the way of your ability to attend class, complete work, or take an exam, you should inform us and contact a dean in Student Support Services (S3). The deans will provide you with support and help you work with us to determine next steps.

DIVERSITY

All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment, where individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations feel welcome.

If this standard is not being upheld, please feel free to speak with us.

SCHEDULE

WEEK	DATE	THEME	RESEARCH
W 01	9/4	Introduction	
W 02	9/11	The Urban and the Planet	1–5 images of an urban thing of your choice.
W 03	9/18	Drawing as Method	1 Drawing + Caption
W 04	9/25	Metabolism	
W 05	10/2	Urban Thing – 1	PROPOSAL: 3 Drawings + Captions + abstract + bibliography
W 06	10/9	Extraction	
W 07	10/16	Circulation	
W 08	10/23	Settlement	
W 09	10/30	Accumulation	
W 10	11/6	Urban Thing – 2	OUTLINE: 6 Drawings + Captions + abstract + annotated bibliography incorporated into text outline
W 11	11/13	Climate	
W 12	11/20	Financialization	
W 13	11/27	Data	
W 14	12/4	Urban Thing – 3	DRAFT: 9 Drawings + Captions + abstract + draft
W 15	12/11	No Class	
	12/18	Final Submission	

* The list of required readings is provisional and may be edited throughout the semester. Please refer to course Dropbox folder for the final weekly reading list.

W 1 9/14 Introduction

Presentation of course objectives and overview of expectations, research project, class moderation sign-up.

W2 9/11 The Urban and the Planet

Where is the “urban”? Beyond dichotomies of city and country, the urban is a differentiated planetary process which settles into patchy territorial forms. How do we engage the premise that the planet has been completely urbanized –its potential and limits– and what do we consider when we think together the urban and the Earth?

Response Due Midnight Tuesday, September 10 on the Course Dropbox folder.
Research Be prepared to share an urban-thing of your choice that you propose to work on this semester (5 images + captions)

> Browse

Diller Scofidio + Renfro, Laura Kurgan, and Robert Gerard Pietrusko. “In Plain Sight” (2018). [>](#)
Urban Theory Lab, Data-Spheres of Planetary Urbanization, 2021. [>](#)
Feral Atlas [>](#)
MIT Leventhal Center for Advanced Urbanism [>](#)
Penn McHarg Center [>](#)

>> Read

- Neil Brenner, “Theses on Urbanization?” *Public Culture*, 25:1 (2013), 85–114.
- Bruno Latour, “We Don’t Seem to Live on the Same Planet – A Fictional Planetarium,” in *Critical Zones - The Science and Politics of Landing on Earth*, eds. Bruno Latour and Peter Weibel (Cambridge, MA: MIT Press, 2020).
- Anna Tsing, “Introduction,” *Friction: An Ethnography of Global Connection* (Princeton University Press, 2014), 1–18.
- Anna Tsing, Andrew S. Mathews, and Nils Bubandt, “Patchy Anthropocene: Landscape Structure, Multispecies History, and the Retooling of Anthropology,” *Current Anthropology* Volume 60, Supplement 20 (2019): S186–S197.
- Achille Mbembe, “How to Develop a Planetary Consciousness,” *Noema Magazine*, January 11, 2022. [>](#)
- Rania Ghosn, “Geodesign, or, It Matters Earths Make Worlds,” *Log #60* (2024): 195–207.

>>> Further Reading

– Henri Lefebvre, “From the City to Urban Society” *The Urban Revolution* (Minneapolis, MI: University of Minnesota Press 2003 [1970]), 1-23.
– Neil Brenner and Christian Schmidt, *Implosions/Explosions: Towards a Study of Planetary Urbanization* (Jovis Verlag, 2014).
– Nicolas Goez, with Johanna Hoerning and Hillary Angelo, “Urbanization: A Contested Concept,” *Urban Political Podcast*, 2022. [>](#)
– Peake, L., Patrick, D., Reddy, R. N., Tanyildiz, G., Ruddick, S., & Tchoukaleyska, R. “Placing planetary urbanization in other fields of vision,” *Environment and Planning D: Society and Space*, 2018, 36(3): 374-386
– Achille Mbembe and Sarah Nuttall, “Writing the World from an African Metropolis,” *Public Culture* 16, no. 3 (2004): 347-372.
– Anna Tsing, “On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales,” *Common Knowledge*, 18(3), 2012: 505-524.

W3 9/18 Drawing as Method: Research, Media, Politics

Spatial representation—scale, viewpoint, and drawing conventions—are key to making visible and public the urban thing in question: to gather the relevant people around some issue of concern and to draw out the object of concern to the eyes and ears of those who have been assembled around it. How to represent, and through which medium, the (urban) sites and matters of concern?

Response Due Midnight Tuesday, September 17 on the Course Dropbox folder.
Research Represent your urban-thing in one original drawing + caption.

> Browse

Forensic Architecture [≥](#)

ZKM Critical Zones [≥](#)

World of Matter [≥](#)

Monsoon Multiplicities [≥](#)

>> Read

- Matthew Fuller and Eyal Weizman, *Investigative Aesthetics: Conflicts and Commons in the Politics of Truth* (Verso Books, 2021). [Skim: Introduction (1-30); Read: Chapters 1 “Aesthetics Beyond Perception” (33-42) & 7 “What is an Investigation?” (107-112)].
- María Puig de la Bellacasa, “Assembling Neglected “Things”,” *Matters of Care: Speculative Ethics in More than Human Worlds* (Minneapolis: University of Minnesota Press, 2017), 27–67.
- James Corner, “The Agency of Mapping: Speculation, Critique and Invention,” *Mappings*, Dennis Cosgrove, ed. (London: Reaktion Books, 1999), 214–25.
- Lindsay Bremner, Beth Cullen, Jonathan Cane, and Christina Geros, “Monsoon as Method,” *Cultural Geographies* 31.2 (2024): 249-270.
- Alexandra Arènes, Bruno Latour, and Jérôme Gaillardet. 2018. “Giving depth to the surface—an exercise in the Gaia-graphy of critical zones,” *Anthropocene Review* 5(2):120–135.

Select one book from the list below. Consider their research methods and media.

>>> Further Reading

- Alexandra Arenes, Axelle Gregoire, and Fredrique At-Touati, *Terra Forma: A Book of Speculative Maps* (MIT Press, 2022).
- Lindsay Bremner et al. *Monsoon as Method: Assembling Monsoonal Multiplicities* (Actar, 2022).
- Teresa Galí-Izard, *Regenerative Empathy: Complex Assemblages in a Shared Environment* (Harvard GSD, 2019). [≥](#)
- Xaveer De Geyter Architects, *After-Sprawl* (Rotterdam NAI, 2002).
- Adam Frampton and Jonathan Solomon, *Cities without Ground: A Hong Kong Guidebook* (ORO, 2012).
- ETH Studio Basel, *Switzerland – An Urban Portrait* (Birkhauser Verlag, 2005).
- Rem Koolhaas et al. *Great Leap Forward* (Harvard GSD/Taeschner, 2002).
- Momoyo Kaijima, Junzo Kuroda, *Made in Tokyo: Guide book* (Tokyo: Kajima Institute, 2001)

W4 9/25 Metabolism: Earth Work

The Earth is the source and scene of material movement. This session traces the concept of urban metabolism: a material process which overhauls a previous spatial organization to construct a new one, in ways that are dynamic and replete with friction. How might we revisit circulation amidst calls for material circularity in the midst of the climate emergency?

Response Due Midnight Tuesday, September 24 on the Course Dropbox folder.

> Browse

Formafantasma, *Cambio*, 2020. [>](#)

Andrés Jaque/Office of Political Innovation, *Being Silica* (2021) and *Xolobeni Yards* (2023). [>](#)

Jane Hutton, 'Reciprocal Landscapes: Stories of Material Movements,' AA School, 2021. [>](#)

Kiel Moe, *The Berlage Sessions: "On Ecology,"* 2022. [>](#)

Charlotte Malterre Barthes, "Material World," *HEAD*, 2022. [>](#)

>> Read

- Erik Swyngedouw, "Metabolic Urbanization: The Making of Cyborg Cities," in *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*, eds. Erik Swyngedouw, Nike Heynen, and Maria Kaika. (London: Routledge, 2006), 26–40.
- Matthew Gandy, "Symbolic Order and the Urban Pastoral," in *Concrete and Clay: Reworking Nature in New York City* (Cambridge, MA: The MIT Press, 2002).
- Jane Hutton, "Introduction," in *Reciprocal Landscapes: Stories of Material Movements* (New York, NY: Routledge, 2020), pp. 1–22. + your choice of Chapter 2: "Range of Motions: Granite from Vinalhaven, Maine" or Chapter 3: "Rivers of Steel: Steel from Pittsburgh to — —"
- Michelle Buckley, "On the work of urbanization: Migration, construction labor, and the commodity moment," *Annals of the Association of American Geographers* 104, no. 2 (2014): 338-347.
- Julie Marin & Bruno De Meulder, "Wood(s): Imagining How a Materials Bank can Catalyze Circular Timber Flows in Leuven, Belgium," *Architectural Theory Review*, 25:1-2 (2021), 117-135.

>>> Further Reading

– William Cronon, *Nature's Metropolis: Chicago and the Great West* (W. W. Norton & Company, 1992).

– Daniel Ibañez and Nikos Katsikis, *New Geographies 6: Grounding Metabolism* (Harvard GSD, 2014).

– Daniel Ibañez, Jane Hutton, and Kiel Moe, *Wood Urbanism: From the Molecular to the Territorial* (New York: Actar Publishers, 2019).

– Kiel Moe, *Empire, State & Building* (New York: Actar, 2017).

– Sabine Barles, "The Nitrogen Question," *Journal of Urban history* 33 (2007): 794–812.

– Federico Savini, "The Circular Economy of Cities," *Turning up the Heat: Urban Political Ecology for a Climate Emergency* (Manchester: Manchester University Press, 2023).

W 5 10/2 Research Session

W 6 10/9 Extraction & its Afterlives

Extraction refers to technologies that mark out regions for the forced removal of raw materials and life, violently reorganizing the political and ecological life that underpin this arrangement. Extraction and its associated afterlives are not a mere effect, an unfortunate by-product or collateral damage of urban civility, but rather its founding act.

Response Due Midnight Tuesday, October 8 on the Course Dropbox folder.

> Browse

Central for Land Use Interpretation, *Texas Oil: Landscape of an Industry*, 2009. [>](#)

Imani Jacqueline Brown, *Follow the Oil* [>](#)

ArkDes, *Kiruna Forever* [>](#)

Canadian Pavilion at the 2016 Venice Biennale, *Extraction* [>](#)

>> Read

- Kathryn Yusoff, "Mine as Paradigm," e-flux journal: *Survivance*, June 2021. [>](#)
- Macarena Gómez-Barris, "Introduction," *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Duke University Press, 2017).
- Richard Misrach and Kate Orff, *Petrochemical America* (New York: Aperture Foundation, 2012), excerpts.
- Imani Jacqueline Brown / Forensic Architecture. [Environmental Racism in Death Valley, Louisiana](#) (2021). [>](#)
- Felipe Correa, "Epilogue: The Legacy of Resource Extraction Urbanism and the Future of the South American Hinterland," *Beyond the City: Resource Extraction Urbanism in South America* (University of Texas Press, 2016).
- Paulo Tavares, "Nonhuman Rights," in Anselm Franke, Eyal Weizman, and Forensic Architecture Project, eds., *Forensis: The Architecture of Public Truth* (Berlin DE: Haus der Kulturen der Welt, 2014). Read with, "Rights of Nature Articles in Ecuador's Constitution" [>](#)

>>> Further Reading

– Kathryn Yusoff, "Geology, Race, Matter," *A Billion Black Anthropocenes or None* (University of Minnesota Press, 2018).

– Allison Margaret Bigelow, *Mining Language: Racial Thinking, Indigenous Knowledge, and Colonial Metallurgy in the Early Modern Iberian World* (UNC Press Books, 2020): 105–135.

– Rania Ghosn, *New Geographies 2: Landscapes of Energy* (Harvard GSD, 2010).

– Rania Ghosn, "Carbon Re-Form," *Log 47* (2019).

– Rania Ghosn & El Hadi Jazairy, "Hassi Messaoud Oil Urbanism," *New Geographies #6 Grounding Metabolism* (2014): 144–153.

– Eve Blau and Ivan Rupnik, *Baku: Oil and Urbanism* (Park Books, 2018).

– Neeraj Bhatia and Mary Casper, *The Petropolis of Tomorrow* (Actar, 2013).

– Pierre Bélanger, ed. *Extraction Empire: undermining the systems, states, & scales of Canada's global resource empire* (MIT Press, 2018).

– Carola Hein, *Oil Spaces: Exploring the Global Petroleumscape* (Routledge, 2021).

– Jeannette Sordi, Luis Valenzuela, and Felipe Vera eds. *The Camp and the City: Territories of Extraction* (Trento: ListLab, 2017).

W 7 10/16 Circulation: Infrastructure

Networks inscribe modes of circulation both in the form of systems, ideas, and codes that orchestrate how things operate as well as material objects in themselves – bridges, highways, tunnels, cables, bodies.

Response Due Midnight Tuesday, October 15 on the Course Dropbox folder.

>> Read

- Nikhil Anand, Akhil Gupta and Hannah Appel, “Introduction: Temporality, Politics, and the Promise of Infrastructure,” *The Promise of Infrastructure* (Duke University Press, 2016), 1–38.
- Jesse LeCavalier, “Logistics,” in *The Rule of Logistics: Walmart and the Architecture of Fulfillment*, 31–62. Minneapolis: University of Minnesota Press, 2016.
- Keller Easterling, “Introduction” and “Part 2: Highways,” *Organization Space: Landscapes, Highways, and Houses in America* (Cambridge, MA: MIT Press, 1999).
- Mitch McEwen, “Watercraft: Detroit Water Infrastructure and its Protocols of Sprawl and Displacement,” *Perspecta*, Vol. 50: Urban Divides (MIT Press, 2017), 44–60.
- Andueza, L., Davies, A., Loftus, A., & Schling, H. “The Body as Infrastructure,” *Environment and Planning E: Nature and Space*, 4.3, (2021): 799-817.

>>> Further Reading

- Paul N. Edwards, “Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnical Systems,” *Modernity and Technology*, ed. Misa, Bray and Feenburg (Cambridge: MIT Press, 2003): 185–202 and 220–225.
- Pier Vittorio Aureli, “Toward the Archipelago,” *The Possibility of An Absolute Architecture* (Cambridge, MA: MIT Press, 2011), 1–46.
- Matthew Gandy, “The Paris Sewers and The Rationalization of Urban Space,” *Transaction Institute British Geographers* (1999): 23–44.
- Ashley Carse, “Keyword: Infrastructure, how a humble French engineering term shaped the modern world,” in *Infrastructures and Social Complexity: A Companion*, edited By Penelope Harvey, Casper Jensen, Atsuro Morita (Routledge, 2017), 27–39.
- Clare Lyster, *Learning from Logistics: How Networks Change our Cities* (Basel: Birkhäuser, 2016).
- Ilka & Andreas Ruby (eds.), *Infrastructure Space* (Ruby Press, 2017).
- Deborah Cowen, *The Deadly Life of Logistics: Mapping Violence in Global Trade* (Minneapolis: University of Minnesota Press, 2014).
- Ross Exo Adams, *Circulation and Urbanization* (London: Sage Publications, 2018).
- Geoffrey Thun and Kathy Velikov, *Infra Eco Logi Urbanism: A Project for the Great Lakes Megaregion* (Park Books, 2015).
- Umberto Napolitano et al. *Paris Haussmann: A Model's Relevance* (Park Books, 2017).

W 8 10/23 Accumulation: Settlement

The fundamental act of settlement, or land appropriation, is one a tenant of the modern urban project. Seen as such, the degree zero of urban form is the camp (and the grid) and relies on the imagination of tabula rasa, extensive environmental transformations, and necropolitics – the use of social and political power to dictate how some people may live and how some must die. How might urban practices harbor anticolonial forms of life? And what might be some lessons from the history of tent cities as sites of protest?

Response Due Midnight Tuesday, October 22 on the Course Dropbox folder.

> Browse

Andrew Herscher & Ana María León, *Settler Colonial City Project* [≥](#)

Shoshan, Malkit. *Desert Futures*, 2022. [≥](#)

Alessandro Petti, *Decolonizing Architecture Art Research* [≥](#)

>> Read

- Rahul Mehrotra, Felipe Vera, and José Mayoral, *Ephemeral Urbanism: Cities in Constant Flux* (Santiago, Chile: ARQ ediciones, 2016), excerpts.
- Anselm Franke and Eyal Weizman, *Territories: Islands, Camps and Other States of Utopia* (Walther König, 2003), excerpts.
- Theo Deutinger, *Handbook of Tyranny* (Zürich: Lars Müller Publishers, 2018), excerpts.
- Salottobuono, *Manual of Decolonization* (Milano: A+Mbookstore Edizioni, 2010), excerpts.
- Winona LaDuke, Deborah Cowen, “Beyond Wiindigo Infrastructure,” *South Atlantic Quarterly* 119:2 (2020), 243–268.
- Mabel O. Wilson, “Provisional Demos: The Spatial Agency of Tent Cities,” *Design, Displacement, Migration* (Routledge, 2023).

>>> Further Reading

- Michel Foucault, *Security, Territory, Population: lectures at the Collège de France, 1977-78* (New York: Palgrave Macmillan, 2007), excerpts.
- Giorgio Agamben, “What is a Camp?” *Means without End: Notes on Politics* (Minneapolis: University of Minnesota Press, 2000): 37–45.
- Fazal Sheikh/Eyal Weizman: *The Conflict Shoreline: Colonialism as Climate Change in the Negev Desert* (Steidl, 2015).
- Manuel Herz, *From Camp to City: Refugee Camps of the Western Sahara* (Zurich: Lars Müller, 2012).
- Samia Henni, ed. *Deserts Are Not Empty* (Columbia University Press, 2022).
- Tobias Armbrorst, Daniel D’Oca, Georgeen Theodore / Interboro, *Arsenal of Inclusion and Exclusion* (Actar, 2017).
- Lateral Office, *Many Norths: Spatial Practice in a Polar Territory* (Actar, 2017).
- Stefan Al, *Villages in the City: A Guide to South China's Informal Settlements*, Hong Kong University Press, 2014.
- Danika Cooper, “Legacies of Violence,” *Landscape Citizenships*, eds. Waterman, T., Wolff, J., & Wall, E. (London: Routledge, 2021).

W 9 10/30 Externalities: Waste

The management of associated undesirable outputs is often relegated elsewhere, gradually and out of sight, dispersed across time and space, and typically not viewed as violence at all. How do designers address and reform such processes, design without displacement, or without waste, and begin the important work of repair, and reparation?

Response Due Midnight Tuesday, November 5 on the Course Dropbox folder.

>> Read

- Robert Smithson, "A Tour of the Monuments of Passaic, New Jersey," [1967] in *Robert Smithson: Collected Writings*, ed. Jack Flam (Berkeley, LA, London: University of California Press, 1996), 68–74.
- Charles Waldheim and Alan Berger, "Logistics Landscape," *Landscape Journal* 27, no.2 (2008): 219-246.
- Jennifer Gabrys, "Sink: The Dirt of Systems," *Environment and Planning D: Society and Space* 27 (2009): 666–681.
- Albert Pope, "Urban Implosion," *Ladders* (New York: Princeton Architectural Press, 1996).
- Rob Nixon, "Introduction," *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011).
- Françoise Vergès, "Capitalocene, Waste, Race, and Gender," *e-flux journal* #100, 2019. [≥](#)
- Hannah Le Roux and Gabrielle Hecht, "Bad Earth," *Accumulation*, *e-flux Journal*, August 2020. [≥](#)

>>> Further Reading

- Vittoria Di Palma, *Wasteland: A History* (Yale University Press, 2014).
- Max Liboiron, *Pollution is Colonialism* (Duke University Press, 2021).
- Alan Berger, *Drosscape: Wasting Land in Urban America* (New York: Princeton Architectural Press, 2006).
- Joel Tarr, *The Search for the Ultimate Sink: urban pollution in historical perspective* (University of Akron Press, 1996).
- Tsing, A., Swanson, H., Gan, E. and Bubandt, N., eds. *Arts of Living on a Damaged Planet*. (University of Minnesota, 2017).
- Mira Engler, *Designing American's Waste Landscapes* (John Hopkins University Press, 2004).
- Rania Ghosn and El Hadi Jazairy, *Geographies of Trash* (Actar, 2015).
- Matthew Gandy, "Unintentional landscapes," *Landscape Research*, 41.4 (2016): 433-440.
- Antoine Picon, "Anxious landscapes: From the ruin to rust," *Grey Room*, 1, (2000): 64–83.
- Meredith Tenhoor and Jessica Varner, "Mattering Toxics and Making Toxics Matter in Architecture and Landscape Histories," *Aggregate: Toxics*, 2023. [≥](#)
- Shannon Mattern, "Maintenance and Care," *Places Journal*, November 2018. 2023. [≥](#)

W 10 11/6 Research Session

W 11 11/13 Climate, Risk, Resilience

Climate change creates extreme types of risks such as river flooding, coastal erosion, wildfires – many of which are deployed along existing uneven lines and further exacerbate them. What does it mean to be resilient and to practice urban climate transformations equitably?

Response Due Midnight Tuesday, November 12 on the Course Dropbox folder.

> Browse

Naomi Klein & Kate Orff, *Drain: Planning for Climate Change* [≥](#)

Kate Orff / Scape Studio (see “Public Sediment”) [≥](#)

Rockefeller Foundation, *100 Resilient Cities* [≥](#)

Resilient by Design: Bay Area Challenges [≥](#)

MIT Urban Risk Lab [≥](#)

MIT LCAU, *Moving Together* [≥](#)

Cooking Sections, “The Offsetted,” e-flux, 2017. [≥](#)

>> Read

- Lawrence J. Vale, “The Politics of Resilient Cities: Whose Resilience and Whose City?,” *Building Research and Information* 42.2 (2014), 191-201.
- Anuradha Mathur and Dilip da Cunha, *Mississippi Floods: Designing a Shifting Landscape* (Yale University Press, 2001).
- Kian Goh, “Urban Waterscapes: The Hydro-Politics of Flooding in a Sinking City,” *Int. J. Urban Reg. Res.*, 43 (2019): 250-272.
- Rosetta Elkin, *Landscapes of Retreat* [≥](#)
- Lizzie Yarina, Miho Mazereeuw & Larisa Ovalles, “A retreat critique: Deliberations on design and ethics in the flood zone,” *Journal of Landscape Architecture* 14:3 (2019): 8-23

>>> Further Reading

- Barry Bergdoll, *Rising Currents: projects for New York's waterfront* (New York: Museum of Modern Art, 2011).
- Ross Exo Adams, “Notes from the Resilient City,” *Log* 32 (2014): 126–139.
- James Graham et al., *Climates: Architecture and the Planetary Imaginary* (Columbia Books on Architecture and the City, Lars Müller Publishers, 2016).
- Jesse Keenan, and Claire Weisz, eds., *Blue Dunes: climate change by design* (Columbia Books on Architecture and the City, 2016).
- Fadi Masoud, *Terra-Sorta-Firma: Reclaiming the Littoral Gradient* (New York: Actar, 2021).
- Mohsen Mostafavi, *Ecological Urbanism* (Lars Müller, 2010).
- Kate Orff, *Toward an Urban Ecology* (Monacelli Press, 2016).
- Kian Goh, *Form and Flow: The Spatial Politics of Urban Resilience and Climate Justice* (MIT Press, 2021).
- Anuradha Mathur and Dilip da Cunha, *SOAK! Mumbai in an Estuary*, 2009.
- Marco Ferrari, Elisa Pasqual, and Andrea Bagnato, *A Moving Border: Alpine Cartographies of Climate Change* (New York: Columbia Books on Architecture and the City, 2019).

W 12 11/20 Financialization

Financialization manifests as the increasing size of the financial sector relative to other economic sectors in urban development. Urbanization is an agent of surplus capital absorption and finance capitalism, in which housing, and debt play a key role, as made evident in real estate market crises. What might designers do against property alienation?

Response Due Midnight Tuesday, November 19 on the Course Dropbox folder.

> Browse

Chicago Architecture Biennial, “The Available City” [≥](#)

REAL Foundation [≥](#)

ARCH+ 231 (Spring 2018): The Property Issue [≥](#)

Buell Center, Foreclosed: Rehousing the American Dream [≥](#)

Architects against Housing Alienation [≥](#)

Who Builds your Architecture? [≥](#)

CCA, How to: Not become a developer [≥](#)

Frederick Engels, The Housing Question [≥](#)

> Watch

Pier Vittorio Aureli, The Opposite Shore [≥](#)

Chris Marcinkoski, The City that Never Was [≥](#)

David Harvey, GSD Lecture [≥](#)

New Affiliates, Testbeds [≥](#)

>> Read

- David Harvey, “The Urban Process under Capitalism,” *The Blackwell City Reader*, 116–124.
- Sara Stevens, ““Visually Stunning” while Financially Safe,” *Ardeth*, 2020.
- Reinhold Martin, Jacob Moore, Susan Schindler, *The Art of Inequality: Architecture, Housing, and Real Estate. A Provisional Report*, (New York: GSAPP, 2015). [**SKIM**]
- Pier Vittorio Aureli et al., “Promised Land: Housing from Commodification to Cooperation,” 2019. [≥](#)
- Interboro, “However Unspectacular: The New Suburbanism”
- Jack Self and Shumi Bose, *Real Estates: Life without Debt* (London: Bedford, 2014), excerpts.
- Jill Desimini, “From Planned Shrinkage to Formerly Urban: Staking Landscape Architecture’s Claim in the Shrinking City Debate,” *Landscape Journal*. 2014 33:17-35.

>>> Further Reading

– Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (Princeton Architectural Press, 1995), excerpts, TBD.

– Andrew Herscher, “Unreal Estates,” *The Unreal Estate Guide to Detroit* (Ann Arbor: University of Michigan Press, 2012).

– Christopher Marcinkoski, *The City That Never Was* (New York: Princeton Architectural Press, 2015).

W 13 11/27 Data, Code, Information

Response Due Midnight Tuesday, November 26 on the Course Dropbox folder.

> Browse

Data + Feminism Lab, MIT [≥](#)

Civic Data Design Lab, MIT [≥](#)

Senseable City Lab, MIT [≥](#)

Center for Spatial Research, GSAPP [≥](#)

Ali Fard, Grouding the Cloud [≥](#)

Farzin Lotfi-Jam, "Scales of Realtime," *Transmediale*, 2023. [≥](#)

>> Read

- Ruha Benjamin, *Race after Technology: Abolitionist Tools for the New Jim Code* (Cambridge, UK; Polity, 2019), excerpts.
- Laura Kurgan, *Close up at a Distance: Mapping, Technology, and Politics* (Brooklyn, NY: Zone Books, 2013).
- Shannon Mattern, "City Console," *A City Is Not a Code: Other Urban Intelligences* (Places Books. Princeton: Princeton University Press, 2021), 18–50.
- Sarah Williams, "More Than Data: Working with Big Data for Civics," *I/S: A Journal of Law and Policy for the Information Society* 11, no. 1 (Spring 2015): 181-[iv]
- Orit Halpern, Jesse LeCavalier, Nerea Calvillo, and Wolfgang Pietsch, "Test-Bed Urbanism," *Public Culture* 25.2 (2013): 273-306.
- Nicholas de Monchaux, *Local Code: 3,659 Proposals About Data, Design & the Nature of Cities* (Princeton Architectural Press, 2016).

>>> Further Reading

- Constantinos Doxiadis, "Ekistics, the Science of Human Settlements," *Science*, Vol. 170, No. 3956 (1970): 393–404.
- Ali Fard and Taraneh Meshkani, *New Geographies 7: Geographies of Information* (Cambridge: Harvard University Press, 2015), 77–83.
- Sarah Williams, *Using Data for Public Good* (Cambridge, MA: The MIT Press, 2020).
- Farzin Lotfi-Jam, "Infrastructures of urban simulation: Digital twins, virtual humans and synthetic populations," *The Routledge Handbook of Architecture, Urban Space and Politics*, edited by Nikolina Bobic and Farzaneh Haghighi (London, Routledge: 2022).
- Dietmar Offenhuber and Carlo Ratti, eds. *Decoding the City: Urbanism in the Age of Big Data* (Basel: Birkhauser, 2014).
- Antoine Picon and Carlo Ratti, *Atlas of the Senseable City* (New Haven: Yale University Press, 2023).
- Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: Public Affairs, 2019).

W 13 12/4 Final Presentation

W 14 12/11 No Class