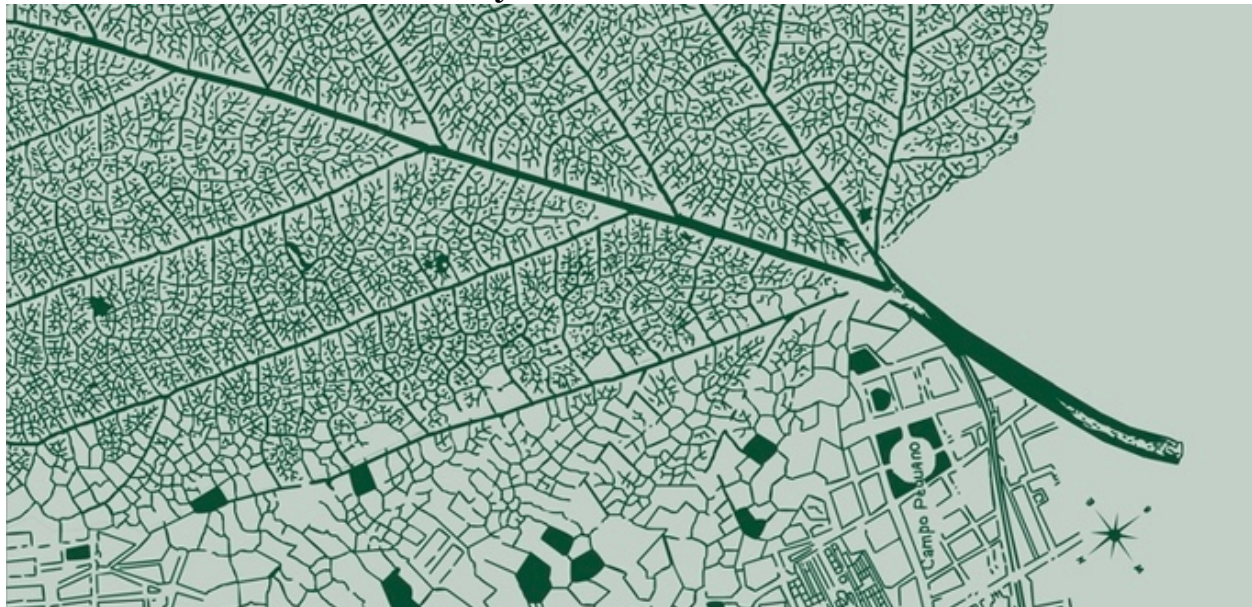


Geography 516
Urban Geography: Urban Natures
Tuesdays 1:40–4:40, LCH-B120



Instructor: D. Asher Ghertner
Office: B-238, Lucy Stone Hall
Office Hours: Wednesdays, 11am-1pm or by appointment
Email: a.ghertner@rutgers.edu

Course Introduction

Urban natures are variously described as decaying or fecund, moribund or overflowing, restricted or boundless, terminal or networked. As palimpsests and temporal assemblages of built form, communicative media, and ecological flow, cities are variously hailed as the solution to the global climate crisis or its deepest cause, the sites of concentrated ecological death or the wastelands from which new, even mutant, life can emerge. In the Anthropocene—the name given to our present era defined by a “great acceleration” of the production of waste combined with intensified human and non-human vulnerability to environmental change precipitated by that waste—cities evoke contrasting sentiments and political affinities. They also sit most exposed to the deepening uncertainties of environmental change, concentrating not just symbolic and economic functions—as “the urban” has been framed historically—but also vulnerabilities and violences. Cities place bodies in relations of collective dependence, but also expose them to heightened environmental and social risk, from extreme weather events to leaded water intake and industrial accidents.

In the face of what Rob Nixon (2014) calls the “centripetal force of the dominant Anthropocene species story”—a story of the human as collective ecological force—this course seeks to

understand urban space through more centrifugal stories that “acknowledge immense inequalities in planet-altering powers.” We do so by adopting an understanding of urban nature as both the ecological dynamics and material transformation of cities, as well as the shifting ecological imaginaries about the city. How do urban subjects become enmeshed in commodified nature that is at once intimate and local, collective and global? How have ideas about nature been used to entrench urban inequalities and produce eco-social difference? What are the environmental underpinnings of diverse urban citizenship claims that challenge these inequalities? How is the planetarity of ecological change magnified, elucidated, or countered in everyday sites of urban space making? By taking up political ecology’s historical focus on the relationship between social marginalization and ecological degradation, we consider urban marginality as a condition that both restricts livelihoods but also occasions new environmental experiments.

The course is divided in three parts. Part I examines **Foundations** of urban political ecology: the production of space, urban metabolism, and environmental justice. Part II turns to the **Elements** of urban political ecology, considering the rich concepts and metaphors that have been developed in the political ecological study of key resource systems: Water, Air, Earth, Waste, and Shit. Part III considers **Compositions** of ecological flow and political practice, attending to how the materiality of resources and the urbanized systems governing their distribution become political infrastructures for contesting and producing new socio-natures: hydraulic citizenship, atmospheric attunement, toxic intimacy, racial ecology, and ruination.

Requirements

This course will be run as a reading-intensive seminar. Each week we will systematically discuss the argument, method, and presumptions of the key texts; present our ideas and questions to each other; and generally learn from the diverse backgrounds and perspectives we all bring. Accordingly, it is imperative that everyone comes fully prepared to participate. The goal is to foster a rich interactive and collaborative space open to diverse and divergent interpretations of text and method.

Each student will be expected to undertake the following:

- (i) To prepare a one-page **critical commentary** on each week’s readings and to post this commentary on the week’s forum on Sakai by the Monday evening (no later than 9 pm) prior to the Tuesday class.
- (ii) To **lead/chair two class discussions**, which involves a short (~10 minute) presentation of the key theoretical and conceptual issues pertaining to the readings of the selected week. This does not mean a summary of the authors’ main arguments or an expansive literature review. Rather, it means laying out key empirical, theoretical, or methodological contributions of the texts, and posing a set of questions to open up conversation. What shared themes, methods, critiques, or concepts emerge from the readings? What might we learn by asking questions posed in one text of an accompanying text? I will circulate a sign-up sheet during week 1 for you to choose the weeks you’d like to present. This will be done in groups of two.
- (iii) **To write a course paper** approximately 20 pages in length that deploys concepts from the

course in the analysis of an issue, debate, theme, or phenomenon of your choosing. This does not mean that one has to study urban natures explicitly, or have an environmental focus in your writing or research. Any project attentive to urban spatial dynamics, past or present, can be written about for this paper. The purpose of the paper is to demonstrate that you can leverage theoretical insights linked to the seminar to make an intellectually rigorous argument around an empirical or philosophical problem of your choosing. This paper can take the form of a research proposal, although it does not have to.

Assessment

Students will be assessed according to the following scheme:

Critical commentaries & presentations	35%
Classroom participation	20%
Course Paper	45%
Total	100%

Readings

Most readings will be posted on the course website on Sakai. We are reading a few monographs in their entirety, all of which are available at the Rutgers Bookstore (Barnes and Noble) in New Brunswick:

- Gandy, Matthew. 2014. *In the Fabric of Space: Water, Modernity, and the Urban Imagination*. MIT Press.
- Rosalind Fredericks. 2018. *Garbage Citizenship: Vital Infrastructures of Labor in Dakar, Senegal*. Duke University Press.
- Nikhil Anand. 2017. *Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai*. Duke University Press. (available as an Open Access book through:
<http://www.open.org/search?identifier=625674>

Seminar Outline

Week 1 (January 22nd) – Introduction

Background readings:

Raymond Williams. 1876. “Nature” and “City,” in *Keywords*. Oxford University Press.

Part I – FOUNDATIONS

“Practical activity writes upon nature.” - Henri Lefebvre, *The Production of Space*, p.117.

Week 2 (January 29th) – The Production of Space/Nature

Readings:

- Henri Lefebvre. 1991. "Social Space" and "Spatial Architectonics," In *The Production of Space*, pp. 68–228, Oxford: Blackwell Publishers.
- Neil Smith. 1984. "The Production of Nature," in *Uneven Development: Nature, Capital, and the Production of Space*. Athens: University of Georgia Press, pp. 49–91.
- Alex Loftus. 2012. "The Urbanization of Nature: Neil Smith and Posthumanist Controversies." In *Everyday Environmentalism: Creating an Urban Political Ecology*. University of Minnesota Press, pp. 1–20.
- Fernando Coronil. 2000. "Towards a critique of globalcentrism: Speculations on capitalism's nature." *Public Culture* 12 (2): 351–374.

Additional Optional Readings:

- Noel Castree. 2015. "Capitalism and the Marxist critique of political ecology." In T. Perreault, G. Bridge & J. McCarthy (Eds.), *The Routledge Handbook of Political Ecology* (pp. 279-292). London: Routledge.

Week 3 (February 5th) – Environmental Justice

Readings:

- David Pellow. 2017. "Critical Environmental Justice Studies." In *What is Critical Environmental Justice?* Polity, pp. 1–33.
- Laura Pulido. 2016. "Flint, Environmental Racism, and Racial Capitalism." *Capitalism Nature Socialism* 27(3): 1-16.
- Lindsay Dillon. 2014. "Race, Waste, and Space: Brownfield Redevelopment and Environmental Justice at the Hunters Point Shipyard." *Antipode* 46: 1205–1221.
- Amita Baviskar. 2003. "Between violence and desire: Space, power, and identity in the making of metropolitan Delhi." *International Social Science Journal* 55 (1): 89-98.
- Rivke Jaffe. 2016. "Urban Naturalisms." In *Concrete Jungles: Urban Pollution and the Politics of Difference in the Caribbean*. Oxford University Press, pp. 92–107.
- Sharad Chari. 2013. "Detritus in Durban: Polluted Environs and the Biopolitics of Refusal." In *Imperial Debris*, edited by Ann Laura Stoler. Duke University Press, pp. 131-161.

Additional Readings:

- Carl Zimring. 2015. "Thomas Jefferson's Ideal." In *Clean and White: A History of Environmental Racism in the United States*. New York University Press, pp. 9–26.
- Laura Pulido and Juan De Lara. 2018. "Reimagining Justice in Environmental Justice: Radical Ecologies, Decolonial Thought, and the Black Radical Tradition," *Environment and Planning E*.
- Tim Forsyth. 2008. "Political ecology and the epistemology of social justice." *Geoforum*
- Joan Martinez-Alier, Leah Temper, Daniela Del Bene & Arnim Scheidel. 2016. "Is there a global environmental justice movement?" *The Journal of Peasant Studies* 43(3): 731-755.
- D. Asher Ghertner. 2015. "Nuisance Talk." In *Rule by Aesthetics: World-Class City Making in Delhi*. Oxford University Press.

Week 4 (February 12th) – The Urbanization of Nature

Readings:

- Erik Swyngedouw. 1996. The City as a Hybrid: On Nature, Society and Cyborg Urbanization. *Capitalism Nature Socialism* 7(2): 65-80.
- Nik Heynen, Maria Kaika and Erik Swyngedouw. 2006. "Urban political ecology: Politicizing the production of urban natures." *In the Nature of Cities: Urban Political Ecology and the Politics of Metabolism*. London: Routledge, pp. 1-20.
- Matthew Gandy. 2004. "Rethinking urban metabolism: water, space and the modern city." *City* 8 (3): 363-379.
- Maria Kaika. 2006. "The Political Ecology of Water Scarcity: The 1989–1991 Athenian Drought." *In In the Nature of Cities: Urban Political Ecology and the Politics of Metabolism*. London: Routledge, pp. 157–172.
- Bruce Braun. 2005. "Environmental issues: writing a more-than-human urban geography." *Progress in Human Geography* 29(5): 635–650.

Additional Optional Readings:

- Michael Watts. 2000. "Political Ecology." In *A Companion to Economic Geography*, edited by T. Barnes and E. Sheppard. Oxford: Blackwell.
- Arturo Escobar. 1996. "Constructing nature: Elements for a poststructural political ecology." In *Liberation Ecologies*, edited by M. Watts and R. Peet. London: Routledge, pp. 46–68.
- Nik Heynen. 2014. "Urban political ecology I: The urban century." *Progress in Human Geography*, 38(4), 598–604.
- Bruce Braun. 2008. "Environmental issues: inventive life." *Progress in Human Geography*.
- Anne Rademacher. 2009. "When is Housing an Environmental Problem? Reforming Informality in Kathmandu." *Current Anthropology* 50:4, Pp. 513-534.

Part II – ELEMENTS

Week 5 (February 19th) – Water

Readings:

- Gandy, Matthew. 2014. *In the Fabric of Space: Water, Modernity, and the Urban Imagination*. MIT Press.
- Michelle Kooy and Karen Bakker. 2008. "Technologies of government: Constituting subjectivities, spaces, and infrastructures in colonial and contemporary Jakarta." *International Journal of Urban and Regional Research* 32 (2): 375-391.

Additional optional readings:

- Alex Loftus. 2006. "The metabolic processes of capital accumulation in Durban's waterscape." In *In the Nature of Cities*, edited by Heynen, Swyngedouw and Kaika, pp. 173–190. Routledge.
- Malini Ranganathan and Carolina Balazs. 2015. "Water Marginalization at the Urban Fringe: Environmental Justice and Urban Political Ecology across the North–South Divide," *Urban Geography* 36: 403–423.
- Erik Swyngedouw. 2009. "The Political Economy and Political Ecology of the Hydro-Social

Cycle". *Journal of Contemporary Water Research & Education* 142: 56-60.

Week 6 (February 26th) – Shit

Guest seminar discussion with Lalit Batra, Minnesota Geography

Readings:

- Lalit Batra. Draft chapter from *Untouchable Labor and Sanitation Infrastructure in Delhi*.
- Stephanie Tam. 2013. "Sewerage's Reproduction of Caste: The Politics of Coprology in Ahmedabad, India." *Radical History Review* 116: 5-30.
- McFarlane, Colin. 2008. "Governing the Contaminated City: Infrastructure and Sanitation in Colonial and Post-Colonial Bombay." *International Journal of Urban and Regional Research* 32 (2):415-435.
- Renu Desai, Colin McFarlane and Stephen Graham. 2015. "The Politics of Open Defecation: Informality, Body, and Infrastructure in Mumbai." *Antipode* 36: 98-120.
- Peter Redfield & Steven Robins. 2016. "An index of waste: humanitarian design, 'dignified living' and the politics of infrastructure in Cape Town." *Anthropology Southern Africa* 39(2): 145-162.
- Brenda Chalfin. 2014. "Public things, excremental politics, and the infrastructure of bare life in Ghana's city of Tema." *American Ethnologist* 41(1): 92-109.

Additional Readings:

- Peter Stallybrass and Allon White. 1986. "Introduction," from *The Politics and Poetics of Transgression*. Ithaca: Cornell University Press.
- Osborne, Thomas. 1996. "Security and vitality: Drains, liberalism and power in the nineteenth century." In *Foucault and Political Reason: Liberalism, Neo-Liberalism, and Rationalities of Government*, edited by Andrew Barry, Thomas Osborne and Nikolas Rose, 99-122. Chicago: University of Chicago Press.
- Colin McFarlane and Jonathan Silver. 2017. "The Poolitical City: 'Seeing Sanitation' and Making the Urban Political in Cape Town." *Antipode* 49: 125-148.
- Simon Marvin and Will Medd. 2006. "Metabolisms of obe-city: Flows of fat through bodies, cities and sewers." In *In the Nature of Cities*, edited by Heynen, Swyngedwoud and Kaika, pp. 143-157. Routledge.
- Appadurai, Arjun. 2002. "Deep democracy: Urban governmentality and the horizon of politics." *Public Culture* 14(1): 21-47.

Week 7 (March 5th) – Earth

Guest seminar discussion with Dr. Mazen Labban, Visiting Professor, Rutgers Geography

Readings:

- Lewis Mumford. 1961. "Paleotechnic Paradise: Coketown." In *The City in History: Its Origins, Its Transformations, Its Prospects*, pp. 446-481, New York: Harcourt.
- Mazen Labban. Forthcoming. "Rhythms of Wasting/Unbuilding the Built Environment." In *New Geographies 10: Fallow*, edited by Mike Chieffalo and Julia Smachylo. Harvard University Press.
- Neil Brenner. 2013. "Theses on Urbanization." *Public Culture* 25 (1): 85-114.

- Martin Arboleda. 2016. "Spaces of Extraction, Metropolitan Explosions: Planetary Urbanization and the Commodity Boom in Latin America." *International Journal of Urban and Regional Research* 40: 96-112.
- Rajyashree Reddy. 2016. "Reimagining e-waste circuits: calculation, mobile policies, and the move to urban mining in Global South cities." *Urban Geography* 37(1): 57-76.
- Freyja Knapp. 2016. "The birth of the flexible mine: Changing geographies of mining and the e-waste commodity frontier." *Environment and Planning A* 48: 1889-1909.

Additional readings:

- Mazen Labban. 2014. "Deterritorializing Extraction: Bioaccumulation and the Planetary Mine." *Annals of the Association of American Geographers* 104(3): 60-576.

Week 8 (March 12th) – Trash

Guest seminar discussion with Dr. Rosalind Fredericks, Associate Professor, Gallatin School, NYU

Readings:

- Rosalind Fredericks. 2018. *Garbage Citizenship: Vital Infrastructures of Labor in Dakar, Senegal*. Duke University Press.
- Vinay Gidwani and Rajyashree Reddy. 2011. "The Afterlives of 'Waste': Notes from India for a Minor History of Capitalist Surplus." *Antipode* 43(5): 1625-1658.

Additional Optional Readings:

- Dipesh Chakrabarty. 2002. "Of Garbage, Modernity, and the Citizen's Gaze" in *Habitations of Modernity: Essays in the Wake of Subaltern Studies*. University of Chicago Press.
- Jo Beall. 2006. "Dealing With Dirt and the Disorder of Development: Managing Rubbish in Urban Pakistan," *Oxford Development Studies* 34 (1): 81-97.
- Sarah Moore. 2012. "Garbage matters: Concepts in new geographies of waste." *Progress in Human Geography* 36(6): 780-799.

Week 9 (March 19th) – No Class, Spring Break Week

Week 10 (March 26th) – Air

Readings:

- Latour, Bruno. 2005. "Air-condition." In *Sensorium: Embodied Experience, Technology, and Contemporary Art*, edited by Caroline A. Jones, 104-107. Cambridge, MA: MIT Press.
- Peter Sloterdijk. 2009. "Airquakes." *Environment and Planning D* 27: 41-57.
- Peter Adey. 2013. "Air/Atmospheres of the Megacity." *Theory, Culture and Society* 30 (7-8): 291-308.
- Graham, Stephen. 2016. "Air: Lethal Domes," in *Vertical*. New York: Verso.
- Kerry Chance. 2017. "Air: Coughing out the City: Everyday Healing in the Toxic Borderlands." In *Living Politics in the South African Shacklands*, pp. 63-84. University of Chicago Press.
- Jerry Zee. 2015. "Breathing in the City: Beijing and the Architecture of Air." *Scapegoat: Architecture, Landscape, Political Economy* 8: 46-57.

Additional Optional Readings:

- René Véron. 2006. "Remaking urban environments: the political ecology of air pollution in Delhi." *Environment and Planning A* 38(11): 2093-2109.
- Peter Adey. 2015. "Air's Affinities." *Dialogues in Human Geography* 5(1): 54-75.

Part III – COMPOSITIONS

Week 11 (April 2nd) – Hydraulic Citizenship

Readings:

- Nikhil Anand. 2017. *Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai*. Duke University Press.
- Manuel Castells. 1978. "Collective Consumption and Urban Contradictions in Advanced Capitalism." *City, Class and Power*. London: Palgrave, pp. 15-36.

Additional Readings:

- James Holston. 1999. "Spaces of insurgent citizenship." In *Cities and Citizenship*, edited by James Holston, pp. 155-176. Durham: Duke University Press.
- Ranganathan, Malini. 2014. "Paying for Pipes, Claiming Citizenship: Political Agency and Water Reforms at the Urban Periphery." *International Journal of Urban and Regional Research* 38 (2): 590-608.
- Yaffa Truelove. 2011. "(Re-)Conceptualizing water inequality in Delhi, India through a feminist political ecology framework." *Geoforum* 32: 143-152.

Week 12 (April 9th) – Atmospheric Attunement

Readings:

- Katherine Stewart. 2011. "Atmospheric Attunements." *Environment and Planning D: Society and Space* 29(3): 445-453.
- Nicholas Shapiro. 2015. "Attuning to the Chemosphere: Domestic Formaldehyde, Bodily Reasoning, and the Chemical Sublime." *Cultural Anthropology* 30(3): 368-393.
- Michelle Murphy. 2004. "Uncertain Exposures and the Privilege of Imperception: Activist Scientists and Race at the U.S. Environmental Protection Agency." *Osiris* 19: 266-282.
- Joel Lee. 2017. "Odor and Order: How Caste is Inscribed in Space and Sensoria." *Comparative Studies of South Asia, Africa, and the Middle East* 37(3): 470-490.
- D. Asher Ghertner. Forthcoming. "Airpocalypse: Distributions of Life Amidst Delhi's Polluted Airs." *Public Culture*.
- Mel Chen. 2011. "Toxic Animacies, Inanimate Affections." *GLQ: A Journal of Lesbian and Gay Studies* 17: 265-286.

Additional readings:

- David Livingstone. 1981. "The Moral Discourse of Climate: Historical Considerations on Race, Place and Virtue." *Journal of Historical Geography* 17(4): 413-434.
- Ben Anderson. 2009. "Affective atmospheres." *Emotion, Space and Society* 2: 77-81.

Week 13 (April 16th) – Racial Ecologies

Readings:

- Leilani Nishime and Kim D. Hester Williams. 2018. "Why Racial Ecologies?" In *Racial Ecologies*. University of Washington Press.
- Alex Loftus. 2019. "Political ecology I: Where is political ecology?" *Progress in Human Geography* 43(1): 172–182.
- Julie Sze. 2018. "Denormalizing Embodied Toxicity: The Case of Kettleman City," In *Racial Ecologies*.
- Julie Guthman. 2012. "Doing Justice to Bodies? Reflections on Food Justice, Race, and Biology." *Antipode* 46(5): 1153–1171.
- Sara Safransky. 2014. "Greening the urban frontier: Race, property, and resettlement in Detroit." *Geoforum* 56: 237–248.
- Pavithra Vasudevan. 2019. "An Intimate Inventory of Race and Waste." *Antipode*. doi:10.1111/anti.12501

Additional Readings:

- Nik Heynen. 2016. Urban political ecology II: The abolitionist century. *Progress in Human Geography* 40(6): 839–845.
- Laura Pulido. 2015. "Geographies of race and ethnicity 1: White supremacy vs white privilege in environmental racism research." *Progress in Human Geography* 39(6): 809–817.
- C. Grimmer. 2017. "Racial microbiopolitics: Flint lead poisoning, Detroit water shut offs, and the 'matter' of enfleshment." *The Comparatist* 41:19–40.

Week 14 (April 23rd) – Toxic Intimacies

Readings:

- Lauren Berlant. 2007. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33: 754–780.
- Gabriela Valdivia. 2018. "'Wagering Life' in the Petro-City: Embodied Ecologies of Oil Flow, Capitalism, and Justice in Esmeraldas, Ecuador." *Annals of the American Association of Geographers*.
- Kath Weston. 2017. "The Unwanted Intimacy of Radiation Exposure in Japan," In *Animate Planet*, pp. 71–104. Duke University Press.
- Elizabeth Roberts. 2017. "What Gets Inside: Violent Entanglements and Toxic Boundaries in Mexico City." *Cultural Anthropology* 32(4): 592–619.
- Vanessa Agard-Jones. 2014. "Spray." *Somatosphere*, May 27, <http://somatosphere.net/2014/05/spray.html>.

Additional Optional Readings:

- Jen Bagelman and Sarah Marie Wiebe. 2017. "Intimacies of global toxins: Exposure & resistance in 'Chemical Valley.'" *Political Geography* 60: 76–85.
- Cram, Shannon. 2015. "Becoming Jane: The Making and Unmaking of Hanford's Nuclear Body." *Environment and Planning D: Society and Space* 33(5): 796–812.

Week 15 (April 30th) – Ruin, Risk, and Repair in the Anthropocene

Readings:

- Clyde Woods. 2017. "Katrina Time and the Planned Abandonment Movement," in *Development Arrested: The Blues and Plantation Power in the Mississippi Delta*. University of Georgia Press.
- Bettina Stoetzer. 2018. "Ruderal Ecologies: Rethinking Nature, Migration, and the Urban Landscape in Berlin." *Cultural Anthropology* 33(2): 295–323.
- Cymene Howe et al. 2016. "Paradoxical Infrastructures: Ruins, Retrofit, and Risk." *Science, Technology, and Human Values* 41(3): 1–19.
- Shannon Mattern. 2018. "Maintenance and Care: A Working Guide to the Repair of Rust, Dust, Cracks, and Corrupted Code in Our Cities." *Places*, November.
- Austin Zeiderman. 2016. "Submergence: Precarious Politics in Colombia's Future Port-City." *Antipode* 48(3): 809–831.
- Daniel A. Cohen. 2016. "The Rationed City: The politics of water, housing, and land use in drought-parched São Paulo." *Public Culture* 28(2): 261–289.

Additional optional readings:

- Jonathan Silver. 2019. "Suffocating Cities: Climate Change as Social-ecological Violence." In *Political Ecology in the Anthropoco-obscene*, edited by Henrik Ernstson and Erik Swyngedouw.
- Harriet Bulkeley et al. 2014. "Contesting climate justice in the city: Examining politics and practice in urban climate change experiments." *Global Environmental Change* 25: 31–40.
- Kim Fortun. 2014. "From Latour to Late Industrialism." *HAU* 4(1): 309–329.

----- **Papers due May 10th** -----