Writing Histories of Climate Change Syllabus (November 28, 2022)

HIST 15E / HISTSCI 1630

Harvard College/Graduate School of Arts and Sciences: 220075

Term: 2022 Fall Term

Course Instructors: Emma Rothschild (History) and Victor Seow (History of Science)

Meeting Time: Wednesday 12:45 PM - 02:45 PM

Location: Robinson Hall Conference Room

Office hours:

Emma Rothschild: Tuesday 2-3 and Wednesday 3-4, by appointment

Victor Seow: Tuesday 3-4 and Wednesday 3-4 (please sign up for a slot on Canvas)

Course Description: This course will draw on different approaches to writing histories of climate change and of its causes and effects. The approaches will include economic history, literature, environmental history, the history of science and technology, opinion writing, and micro-histories of particular places. Students will explore different ways of writing about climate as well as different ways of using supporting evidence ranging from quantitative data to visual sources. The course will be writing- and research-intensive, in that students will prepare short written response papers each week, based on evidence or data discussed in class. Students will revise four of the short papers as their final project for the course. There will be class discussion of different ways of writing, for scientific, policy, and popular audiences. Visitors to the course will include experts on several of the topics discussed, as well as a senior opinion editor who has agreed to talk to the class.

Requirements: Weekly responses, of which four will be revised as the final project for the course. Response papers are due on Tuesday 9/13, 9/20, 9/27, 10/4, 10/11, 10/18, 10/25, 11/1, 11/8, 11/15, and 11/29. A one-page proposal for paper revisions is due on 11/16. The revised papers are due on 12/7.

This course is capped at 30 students.

Tentative Schedule

1. 9/7 Introduction

writing prompt: How did climate change affect you in the summer of 2022?

2. 9/14 Methane

- T. Lauvaux et al., "Global assessment of oil and gas methane ultra-emitters," Science 375, 557–561 (2022) 4 February 2022
- https://histecon.fas.harvard.edu/climate-loss/methane/index.html
- https://histecon.fas.harvard.edu/1800 histories/index.html
- Jonathan Levy, Houston

writing prompt: A short history of one of the ultra-emitter methane sites located on the <u>1800 Histories</u> map, or another site of methane emissions. Please ensure that your write-up includes the name and coordinates of your site at the top. If you used a location from the methane map, you can click on the dot for the latitude and longitude. If you chose another site, you can use a service like <u>latlong</u> to determine this. Please also ensure that you upload a good, high-resolution image as part of your submission.

3. 9/21 Global Warming: A History of the Science

- Naomi Oreskes and Erik M. Conway, Merchants of Doubt: How a Handful of Scientists
 Obscured the Truth on Issues from Tobacco Smoke to Global Warming (New York: Bloomsbury,
 2010), "The Denial of Global Warming," 169–215.
- Joshua P. Howe, ed., *Making Climate Change History: Documents from Global Warming's Past* (Seattle: University of Washington Press, 2017), "Climate Change as Controversy" and "Historicizing Data," 145–208 and HD1–HD19.

writing prompt: Take one (or more) of the primary sources in Howe's <u>Making Climate</u> <u>Change History</u> and use this as the starting point or the basis for your piece of writing.

4. 9/28 Weather

- George R Stewart, Fire: A Novel (New York: Random House, 1948), pp. pp. 43-46, 84-86, 214-216, 285-287, 297-199, 318-321, 335
- Sunil Amrith, "Risk and the South Asian Monsoon," Climatic Change (2018) 151:17–28
- https://www.nytimes.com/interactive/2019/08/09/climate/city-heat-islands.html
- https://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html
- Peng Zeng et al., "Significant social inequalities exist between hot and cold extremes along
- urban-rural gradients," <u>Sustainable Cites and Society</u> 82 (2022), 103899

writing prompt: Write about a fire (or fire in general).

5. 10/5 Automobile Industry

- Francesca Russello Ammon, "<u>Grading Groves and Moving Mountains</u>," in *Bulldozer: demolition and clearance of the postwar landscape* (New Haven: Yale University Press, 2016), 97-139
- Emma Rothschild, "The Great Transpo Expo," New York Review of Books, July 20, 1972
- T. Ghate and S. Sundar, "Can we reduce the rate of growth of car ownership?" *Economic & Political Weekly*, 48, 23 (June 8, 2013), 32-40
- Tarini Bedi, "<u>Ecologies: Driving Work and the City</u>," in *Mumbai Taximen* (University of Washington Press, 2022), 57-85

writing prompt: Choose an image connected to the auto-industrial age (in any part of the world or at any time.) The image chosen should be the starting point for the paper.

6. 10/12 Fossil Fuels

- Victor Seow, Carbon Technocracy: Energy Regimes in Modern East Asia (Chicago: University of Chicago Press, 2021), "Introduction: Carbon Technocracy" and "Fueling Anxieties," 1–26 and 115–160.
- On Barak, *Powering Empire: How Coal Made the Middle East and Sparked Global Carbonization* (Oakland, Calif.: University of California Press, 2020), "Environment," 117–157.
- Christoph Rosel and Giulia Rispoli, Anthropogenic Markers: Stratigraphy and Context (Berlin: Max Planck Institute for the History of Science, 2022), "Combustion": https://www.anthropogene-curriculum.org/anthropogenic-markers/combustion

writing prompt: Pick one particular locale that has served as a site of fossil fuel extraction, transportation, or consumption and produce a piece of writing (of any sort, as always,

including fiction) that is attentive to this place and its relationship to carbon in the past (however near or distant).

- 7. 10/19 Long Histories (with guest, Professor Shane Bobrycki)
 - Baillie, M G L. "Suck-in and Smear: Two Related Chronological Problems for the 90s." *Journal of Theoretical Archaeology* 2 (1991): 12–16.
 - Büntgen, Ulf, Vladimir S. Myglan, Fredrik Charpentier Ljungqvist, Michael McCormick, Nicola Di Cosmo, Michael Sigl, Johann Jungclaus, et al. "Cooling and Societal Change during the Late Antique Little Ice Age from 536 to around 660 AD." *Nature Geoscience* 9, no. 3 (2016): 231–36.
 - McConnell, Joseph, Michael Sigl, Gill Plunkett, and Jørgen Peder Steffensen. "Extreme climate after massive eruption of Alaska's Okmok volcano in 43 BCE and effects on the late Roman Republic and Ptolemaic Kingdom." *Proceedings of the National Academy of Sciences* 117, no. 27 (2020): 15443–15449.

writing prompt: What is the causal relationship between climate change and historical change? Choose a case of premodern climatic change and discuss the possible societal effects.

- 8. 10/26 China: Dams (with guest, Professor Arunabh Ghosh)
 - World Commission on Dams. "Executive Summary" in *Dams and Development: A New Framework for Decision-Making*. London: Earthscan, 2000. [Download the report here]
 - Dai Qing. "The Struggle to Publish *Yangtze! Yangtze!* In China," in *Yangtze! Yangtze!* by Dai Qing, 2-12. London: Earthscan.
 - Mulligan, M., van Soesbergen, A. & Sáenz, L. GOODD, a global dataset of more than 38,000 georeferenced dams. Sci Data 7, 31 (2020).
 - Arundhati Roy. "The Greater Common Good." Frontline June 1999.

Optional

o Covell Meyskens. "Dreaming of a Three Gorges dam amid the troubles of Republican China." *Journal of Modern Chinese History*, 15:2, 176-194.

writing prompt: A new dam has been announced on the ---- River, near ----, as part of the transition to green energy in the United States. Comment on the proposal, as a person affected by the decision.

Note: Choose the location of the proposed dam, and choose the identity or identities of the person affected (such as farmer or other local resident, planner, local politician, journalist, hydrological engineer, environmental activist, international development consultant, climate scientist.) The comment could be from an individual, or could take the form of a short dialogue between two people with different perspectives on the dam.

- 9. 11/2 China: Power and Pollution (with guest, Professor David Yang)
 - Chen, Yuyu, Avraham Ebenstein, Michael Greenstone, and Hongbin Li (2013), "Evidence on the impact of sustained exposure to air pollution on life expectancy from China's Huai River policy." Proceedings of the National Academy of Sciences 110, no. 32): 12936-12941.
 Paper here and Research summary: here.
 - Greenstone, Michael (2018), "Four Years After Declaring War on Pollution, China is Winning," on the New York Times (link)
 - He, Guojun, Shaoda Wang, and Bing Zhang (2020), "Watering Down Environmental Regulation in China," The Quarterly Journal of Economics, 135 (4), 2135–2185. Paper here.

• New York Times (2021), "Why a Chinese Company Dominates Electric Car Batteries" (link)

writing prompt: Write about an episode (anywhere and at any point in history) in which a government has had a dramatic impact on environmental or climate issues.

11/9 Opinion (with guest, Indrani Sen)

Two op-ed pieces, both about flooding, but one in agricultural Pakistan and one in NYC:

https://www.nytimes.com/2022/10/10/opinion/pakistan-floods-flood-crisis.html https://www.nytimes.com/2021/09/28/opinion/hurricane-ida-new-york-city.html

Explainer on methane by Bloomberg's Hayley Warren and Akshat Rathi.

https://www.bloomberg.com/graphics/2021-methane-impact-on-climate/

For the class discussion, two NYT opinion pieces:

<u>Postcards From a World on Fire</u>, a special project by the NYT Opinion section (best viewed on mobile)

The New World: Envisioning Life After Climate Change, by David Wallace Wells in the NYT Magazine (best viewed on a desktop computer browser)

writing prompt: Choose one of these two options:

1. Write a pitch for a 1000-word opinion essay, laying out clearly an argument, thesis, idea, or new perspective on climate change. The pitch should make clear why this opinion matters, and why readers should care. Please include three possible headlines for the essay.

OR

2. Write an opinion essay on any aspect of climate change that has been discussed over the course of the semester.

/Should be of no more than 1000 words/

11. 11/16 Hope

Catriona McKinnon, "Climate Change: Against Despair," *Ethics & the Environment* 19:1 (Spring 2014): 31–48.

Rebecca Solnit, *Hope in the Dark: Untold Histories, Wild Possibilities*, 3rd ed. (Chicago: Haymarket Books, 2016 [2004]), "Everything's Coming Together While Everything Falls Apart (2014)," 126–136.

Bathsheba Demuth, "Living in the Bones," *Emergence Magazine* (September 16, 2021): https://emergencemagazine.org/essay/living-in-the-bones/

writing prompt: Write a piece in any form about a person (real or imaginary; historical or contemporary) who has had a positive effect in relation to the causes or consequences of climate change in one locale.

12. 11/30 Economic History, Climate, and the Environment