Cities & a just energy transition MIT 11.165/477, 11.286J

> David Hsu Associate Professor MIT DUSP

September 15, 2022

Materials for today

- Shalanda H Baker. Anti-Resilience: A Roadmap for Transformational Justice within the Energy System. Harvard Civil Rights-Civil Liberties Law Review, 54:48, 2019.
- Sandeep Pai et al. A systematic review of the key elements of a just transition for fossil fuel workers. Technical report, April 2020. URL.
- Erin Baker et al. A perspective on equity implications of net zero energy systems. Energy and Climate Change, 2:100047, December 2021. ISSN 26662787. doi. URL.
- Raimi et al. Policy Options to Enable an Equitable Energy Transition. Technical Report 21-09, Resources for the Future, April 2021. URL.



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"The national parks are the best idea we ever had. Absolutely American, absolutely democratic, they reflect us at our best rather than our worst." – Wallace Stegner



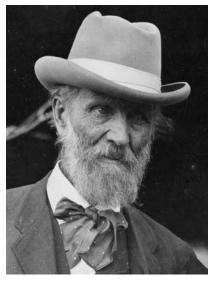
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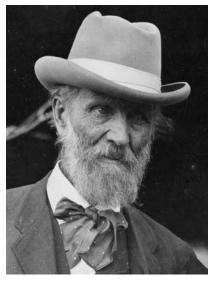
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Library of Congress, Public domain

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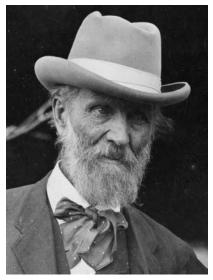
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- troubling racial beliefs also recently noted – are they typical for his time? Do they matter? How do they matter?

Frederick Law Olmstead, Jr.



John Singer Sargent, Public domain, via Wikimedia Commons

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- landscape architect: Boston Common, Emerald Necklace & the Fens, Prospect Park, Belle Isle Park, Biltmore Estate, U.S. Capitol grounds

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- Central Park and Seneca Village

Professor Robert Bullard



2012 Robert D. Bullard portrait: Dave Brenner, Flickr, CC BY 2.0, Wikimedia.

Summary of Community Disputes

Group (Year Founded), Location	Type of Dispute	Facility
Northeast Community Action Group (1979), Houston, TX	Solid waste landfill	Existing
Neighborhood Committee on Lead Pollution (1981), Dallas, TX	Lead smelter	Existing
West Dallas Coalition for Environmental and Economic Justice (1989), Dallas, TX	Lead smelter	Existing
Coalition for Community Action (1979), Alsen, LA	Hazardous waste incinerator	Existing
Concerned Citizens of South Central Los Angeles (1985), Los Angeles, CA	Solid waste incinerator	Proposed
Mothers of East Los Angeles (1985), Los Angeles, CA	Hazardous waste incinerator	Proposed
People for Clean Air and Water (1990), Kettleman City, CA	Hazardous waste incinerator	Proposed
West County Toxics Coalition (1989), Richmond, CA	Petrochemical refinery	Existing
Good Road Coalition (1991), Rosebud, SD	Solid waste landfill	Proposed

"Confronting environmental racism: Voices from the grassroots", 1993, South End Press.

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- US President Bill Clinton issues executive order 12898 (1994)
 - "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"

Environmentalists vs. environmental justice

Conflict & Justice

Green groups grapple with a history of racism and exclusion

The environmental movement in America has deep ties to the nation's history of systemic racism and white supremacy. Now, as Americans confront racial injustice anew, powerful green groups like the Sierra Club are beginning to reckon with their own histories of hate and exclusion.

Living on Earth August 11, 2020 · 2:30 PM EDT By Adam Wernick

Big green groups like the Sierra Club built their reputations on fighting to protect wilderness and nature, but have a mixed record of helping communities of color.

Credit: Andre Turcott/Flickr

A typical but important headline in 2020 (PRI)

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Cities & a just energy transition

Climate justice

- historical responsibility
- intergenerational equity
- disproportionate causes and burdens

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practices designed to create change in social systems

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Energy justice

• disproportionate access, harms, burdens

Disproportionate to who?

- Unions & workers
- Fossil fuel dominated communities
 - ▶ FF jobs create/support 2-5 other jobs (Marchand & Weber, 2018)
- Frontline/EJ communities

Surrounded by fossil fuels, they fear climate bill leaves them behind

By Sarah Kaplan August 27, 2022 at 7:00 a.m. EDT



Brandy Smith, left, and Arei Watson at the Prince Hall apartments in Port Arthur, Tex. (Tamie Kalifa for The Washington Post)

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The'JUST' framework

Heffron, Raphael J., and Darren McCauley. 2018. "What Is the 'Just Transition'?" Geoforum 88 (January): 74-77.

J		Justice	Justice takes the form of 3 forms of justice
	Т		Distributional
	R		Procedural
	A		Restorative
U	N	Universal	Universal takes the form of two universal forms of justice
	S		Recognition
	I		Cosmopolitanism
S		Space	Space brings in location, where are 'events' happening ? (in principle, at local, national and international levels)
Т	O N	Time	Time brings into transition timelines such 2030, 2050, 2080 etc. and also 'speed' of the energy transition (i.e. is it happening fast enough?).

Figure courtesy of Elsevier, Inc., <u>https://www.sciencedirect.com</u>.

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 - Cosmopolitan justice reinforces all of the above justice forms but states that the above forms of justice must apply universally to all human beings.

Politics Estimated % of registered voters who are worried about global warming

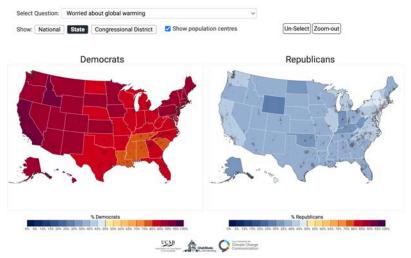


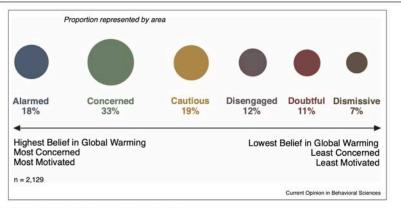
Figure from Yale Project on Climate Communication, "Dem. and Rep. views (2018)"

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Politics

Figure 1



Proportion of the U.S. adult population in the Six Americas in 2008.

From the Yale Project on Climate Communication, "Six Americas Study"

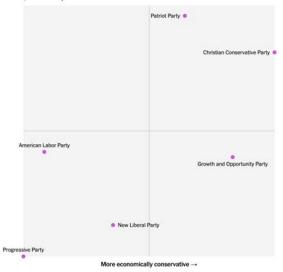
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Politics

† More socially conservative



NYT Quiz: If America Had Six Parties, Which Would You Belong To?

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avid	

Thursday: We're going to do a discussion exercise that requires you to argue for different energy policies based on different conceptions of justice!

MIT OpenCourseWare https://ocw.mit.edu

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