

Lesson 2.1

Late Modernity and the Natural Environment



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Some Environmental Issues of the Past:

Irish Potato Famine - 1840's



Dust Bowl - 1920's and 1930's



USDA/Public Domain



Rothstein, Arthur, 1915-1985, photographer
Rothstein, Arthur, 1915-1985, photographer

In nineteenth century Ireland, absentee landlords, eager to maximize profits from cash crops, implemented monocropping and other techniques which eventually resulted in massive famine and human suffering. In the early twentieth century, landowners in Oklahoma and elsewhere in the American "Heartland" removed natural land breaks to facilitate extensive plowing, thereby exacerbating dust storms and other natural or weather-induced disasters.

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More Recent Environmental Events

- **Hurricane Katrina / Cancer Alley in 2005** caused devastation throughout the Gulf Coast states in the United States that will be felt for many generations.
- **Hurricane Sandy in 2012** affected the East Coast causing the debate to be raised again about Climate Change and its effect it has on natural disasters.
- **Flooding in 2015** created record-breaking flooding occurring in Missouri, Arkansas, Oklahoma, Texas and other surrounding states.
- **The drought of 2012 - 2015** which at its peak in July of 2012 was estimated to cover over 80% of North America.



AMR Ambulances during Hurricane Sandy. New York City
Photo by Susie Derkins

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What is an Ecosystem?

- A community of interdependent life forms, and of the non-living things that are important for those life forms to continue.
- An ecosystem can be healthy or sick.
- Smaller ecosystems can nest in larger, more complex, ecosystems.
- Ecologists warn of **overshoot** when the natural biodiversity is pushed beyond its limit.



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What is Ecological Imbalance?

- When a natural or human-caused disturbance disrupts the natural balance of an ecosystem.
- Examples of natural imbalances are volcanic eruptions, floods, or natural fires.
- Examples of humanly caused imbalances are water and air pollution, deforestation, mass farming, landfills, improper waste disposal, and global climate change.



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CAFOs (Concentrated Agricultural Feeding Operations)



CAFOs are designed to make money for the corporate owners in far greater amounts than any small farm could ever hope to make in the farmer's lifetime. They create intolerable conditions for the animals and introduce externalities that overwhelm them, the environment and the people who live around them.

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Then Vs. Now



Agrarian Lifestyle

- Most of the population lived in more rural settings
- Most people worked the land and water sources for their livelihood
- There was a greater interdependence on community and family

Vs.



Technological Lifestyle

- Large growth in population and migrating to industrial areas to dwell
- A larger dependency on industry and technology for jobs and for personal needs
- Higher Levels of consumption and environmental externalities

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What is Modernity?

Modernity is a whole system of interrelated processes that include:

- An increase in overall population and in **population density**.
- A rise in **industrialization** and a more complex form of **division of labor**.
- Decline in **traditional hierarchies** such as religion and feudalism.
- An increased reliance on **science and technology**.



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Features of Late Modernity

- An **unprecedented technological development.**
- Inability of norms to keep apace (particular problems of cultural lag).
- Population is larger than it has ever been before and continues to grow at an increased rate. Most of this increase being in urban areas.
- An ever increasing unequal balance of ecological exchange.
- **An ever increasing overall culture of consumption.**



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Environmental Problems of Late Modernity (two of the countless examples...)



Deforestation in Mexico
-Jami Dwyer



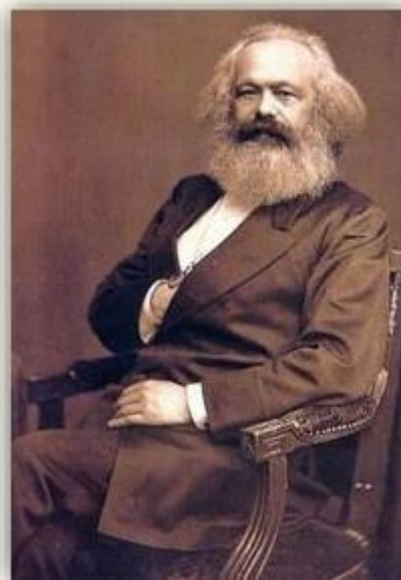
Beach erosion due to rising sea levels.
- USFWS Steve Hillenbrand

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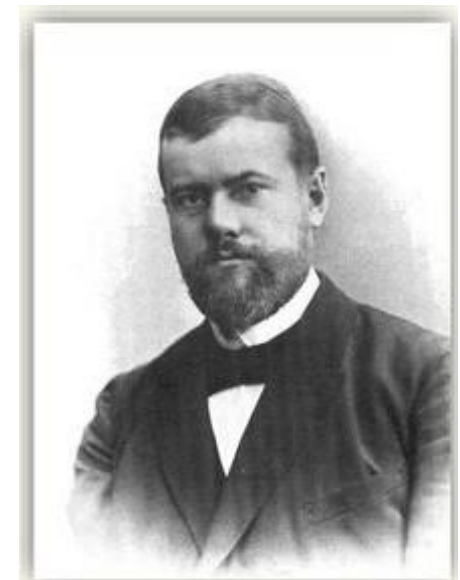
Major Influences in the Rise of Sociology and its interrelationship with the Environment



Emile Durkheim



Karl Marx



Max Weber

2

Karl Marx

- **Metabolic Rift** - refers to a big problem in how societies use natural resources.
- Refers to separation or gap in how we take things from nature and how we use them.
- In capitalism, resources are often taken from one place, which can cause problems and inequalities.
- **Alienation** - There is a separation amount people and between human kind and natural environment.



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Max Weber

- Weber saw that with modernity came rises in formal rationality, levels of bureaucracies, red tape, rules, and regulations.
- **Ideal Types** - idea-constructs not built from perfect concepts or moral values but formulations that help put the seeming chaos of social reality in order.
- **Verstehen** - **deep cultural empathy**. Understanding the context of social action and the intent of the participants and putting understanding ahead of judgement.
- Some ideas become "legitimate" as they are accepted and internalized by a critical mass of people. While a person may or may not like it, organizing behavior around something is what lends it legitimacy.



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Emile Durkheim

- Durkheim articulated how modes of thought are profoundly shaped by the environments in which they arise.
- **Totemism** - "If we have taken primitive religion as the subject of our research," he insisted, "it is because it has seemed to us better adapted than any other to lead to an understanding of the religious nature of man, that is to say, to show us an essential and permanent aspect of humanity." -
- *The Elementary Forms of Religious Life* (1912 [13])
- **Social Facts** - "manners of acting, thinking, and feeling external to the individual, which are invested with a coercive power by virtue of which they exercise control over him." -- *The Division of Labor in Society* (1859 [52])



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Georg Simmel



Georg Simmel asked, "What is society"?

Studied **Social Network Analysis** and in particular how networks, and their size have an impact on how individuals respond and make decisions in these loosely constructed networks. This will become important in the study and development of the social environmental movements.

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William Ogburn

William Ogburn

Cultural Lag

- Human culture typically adapts to reflect material conditions such as natural geography, technology, and the constraints people encounter in making their livings. However, there tends to be a time lag between those material conditions and the cultural adaptations to them. That time lag may be measured in weeks, years, or even centuries.
- This accounts for potential mismatches between cultural attitudes towards the environment and actual environmental resources, particularly when there is rapid social change.



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Thought, Discourse and the Natural World

- **Symbolic Interaction** is the use and exchange of significant symbols, whether it is ideas or objects by individuals and groups which transforms the natural and social environments. Those symbols in turn derive largely from the culture of which we are part, and in which we act. A large part of a culture, in fact, is the set of symbols that the people in it share.
- **Phenomenology** questions how "social facts" such as class, structure, status, norms, roles, etc. come to be viewed as real in social constructions.
 - **Reification** is the perception that humanly created social arrangements are naturally occurring.
 - Ways of seeing the world become culturally embedded, and can hold on long after they are no longer adaptive.



2 Framing

Framing is the question of how issues are presented and perceived. An example of this is the tracking for natural gas.

- **Causes pollution**
- **Earthquakes have increased since tracking has increased**
- **Is not a provider of green jobs.**
- **Fracking provides jobs**
- **Produces natural gas which is cleaner than oil**



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Fracking and the Environment



"Rex Tillerson is leading the fracking revolution, just not in his backyard."- **Chris Hayes, Editor at large for the *Nation***

<http://www.thenation.com/article/exxons-pro-fracking-ceo-suing-stop-fracking-near-his-mansion/>

Click the picture by Ostroff Law to go to the video on the story about Exxon Mobile CEO suing to stop fracking by his home.

This video is 3:44 minutes long and requires an internet connection to view.



2

Contemporary Theories about the Environment

- **Unequal Ecological Exchange** Resources from one part of the planet can be moved in large scale out of their natural ecological niches. This often leads to the consumption of resources and the production of waste outpacing the natural ecology's ability to adapt.
- **Recursive Exploitation Theory** recognizes the multi-level, or fractal, nature of environmental problems. On the most macro level, well-connected and politically powerful nations enjoy a high ecological footprint at the expense of the poorer, less-connected and dependent nations and these relationships are replicate at lower levels, from the regional to the local.



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Contemporary Theories about the Environment

- **World Polity Theory** focuses on a growing uniformity of institutions across cultures and nations. With this uniformity comes a rise in bureaucratic structures that should, in the ideal, protect the environment.
- **Ecological Modernization Theory** sees the inevitability of the processes of modernity and advanced industrialization. It seeks to make the best of that situation by stressing environmentally responsible action.



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Thomas Robert Malthus

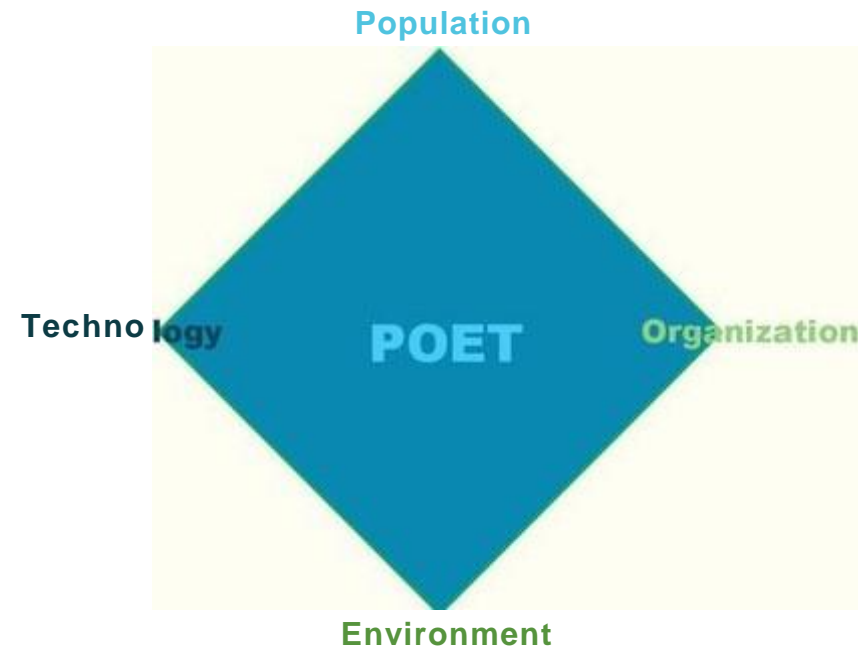


Coined the term "overpopulation" and he thought that overpopulation would put a strain on the ability to provide the basic necessities, and would ultimately lead to a world on the brink of an apocalypse, accompanied by the "Four Horsemen" of: war, famine, plague and pestilence. Various thinkers have adopted a Malthusian approach.

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The POET Model

- Developed by Otis Dudley Duncan, human ecologist.
- It focuses on *Population*, human *Organization*, the natural *Environment*, and *Technology*.
- Explores how all four components are interrelated and function in concert with the other. Each of the other variables affects, and is affected, by the others.



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What is IPAT?

- An equation, first developed by Paul R. Ehrlich and John P. Holdren, that formulates what *Impact* humanity has on the environment.
- Its key components are *Population*, *Affluence* and *Technology*.
- IPAT Equation: $I = P \times A \times T$
- This (and variants, such as "STIRPAT") has inspired important empirical research.
- One promising model, is POETICAA. **POETICAA** stands for population, organization, environment, technology, illness and health, culture, affluence and addressing problems historically. This acronym serves as a convenient schema for many of the important considerations to keep in mind when thinking about the environmental and human interface.



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Rachel Carson



"If, having endured much, we have at last asserted out "right to know," and if by knowing, we have concluded that we are being asked to take senseless and frightening risks, then we should no longer accept the counsel of those who tell us that we must fill our world with poisonous chemicals; we should look about and see what other course is open to us."

- **Rachel Carson, *Silent Spring* (1962)**

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Some Other Notable Environmental Thinkers

- Thomas Homer-Dixon, *Environment, Scarcity and Violence* (1999)
- Thomas Friedman, *Hot, Flat and Crowded* (2008)
- Sandra Steingraber, *Living Downstream* (1997)
- Michael Bell, *Farming for Us All: Practical Agriculture and the Cultivation of Sustainability* (2004)
- Thich Nhat Hanh, *Love Letter to the Earth* (2013)
- Jane Goodall, *Harvest for Hope: A Guide to Mindful Eating* (2005)



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What Is?

Institutional Disarticulation:

- the logic of one institution (such as the economy, for example) does not dovetail with the logic of other institutions (the polity and civil society, for instance).
- When institutions don't link well with each other, inefficiencies creep into the system. This, in turn, can lead to serious problems when trying to address environmental problem, because the various institutions are working at cross purposes.
- From the individual, through the mesa-level of institutions, to the planetary, problems arise in late modernity that present tremendous challenges to ecological sustainability.



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Summary

- Important figures in sociology such as **Karl Marx, Max Weber and Emile Durkheim developed key concepts that social thinkers use to make sense of the problems and complexities of modernity, and point the way toward addressing them.**
- **Karl Marx theorized and addressed topics such as metabolic rift and alienation.** He discussed his theory about those that are a part of the bourgeoisie class who made demands on the proletarian class through labor and taking of their resources for capitalistic gain. By taking resources from one group or area and redistributing them among more affluent populations, he believed it would bring about an alienation of consumers from the productive process.
- **Max Weber introduced ideas such as ideal types and Verstehen.** He influenced many different theories and he stressed the importance of culture with a particular focus on how ideas and ethics associated with them can influence outcomes in the material world.
- As societies continue to get bigger and more complex, their institutions tend to become more differentiated and specialized. While this has some positive features, it also tends to lead to a situation that Weber predicted over 100 years ago - institutions developing a life of their own, following their own logic.

