The classical theorists have all been justifiably criticized during the past 40 years for ignoring the relationship of humans to their natural environment. In the current historical moment it might be useful to alter the intellectual agenda some and focus on the possible utility of the classical theorists' work as a heuristic tool for interpreting contemporary environment - society relations.
Common Points of Departure for Marx, Weber, and Durkheim

- All three were preoccupied with 'the Great Transformation' (Polanyi) that occurred with the industrialization and urbanization of Europe in the 19th century.
- All three of them applauded Darwin's work.
- They each produced a vast 'oeuvre', much of which we will not review.
- All three of them analyze the contexts (e.g. structures) that shape market exchanges.
The three theorists can be considered structuralists, but they focused on different types of structures

- For Marx, think about factories that convert natural resources into commodities through human labor.
- For Weber, think about norms, but also about offices that contain bureaucracies that enforce norms.
- For Durkheim, think about norms, but also about cities that house different kinds of occupational specialists with distinct sets of norms.
Karl Marx (1818-1883)
Marx conceived of societies largely as factories and cities that took in massive amounts of resources and used them to spew out a continuing stream of commodities and massive amounts of pollution.

- Factory owners engage in an insatiable drive for profits which they earn by exploiting both workers and natural resources.
- Technological changes (the forces of production) enhance profits.
- Large landowners, railroad barons, and shipping magnates stripped rural areas of their natural resources and sent them to cities where they were fed into factories that produced wealth for their owners and pollutants for entire communities of people. In this manner a metabolic rift developed between cites where resources and pollutants piled up and the countryside which was stripped of resources.
- People in capitalist societies, particularly in urban areas, became estranged from the natural world, so the rift has an experiential dimension.
What is a metabolic rift?

Marx subscribed to the theories of the German soil scientist, Justus von Leibig, who outlined "complex processes of metabolic exchange (in soils) in which an organism ... draws upon material and energy from its environment and converts these via various metabolic reactions into the building blocks for proteins and other compounds necessary for growth."

(Foster, 1999) Capitalism disrupts these processes, making agriculture unsustainable and creating a rift between humans and the earth. The most obvious example of this growing metabolic rift could be seen in the declines in soil fertility, sometimes referred to as 'soil mining', in most agricultural districts of the world during the late 19th and early 20th centuries.
How would Marx heal the metabolic rift created by capitalism?

- Marx talked about maintaining productive processes across the generations (e.g. Brundtland, 1986) in a 'future society of associated producers', but he never became more specific about what these social formations, the 'associated' part, might be. None of the 20th century socialist regimes (with the recent, possible exception of Cuba) took the goal of sustainability seriously.
New Theoretical Departures: Neo-Marxists on Environment - Society Relations

- **The Treadmill of Production** (Schnaiberg, 1980) and Jevon's paradox
- Uneven development and unequal ecological exchange: *World Systems Theory* offers a systemic view of metabolic rift, with contrasts in well being and ecological degradation between rural and urban places as well as between the colonies and the metropole. *Unequal Ecological Exchange* occurs in this system when the colony destroys the productive capacity of its lands to produce goods that sell to the metropole for a price that does not count, as a cost of production, the ecological destruction that occurs in the producing places in the colonies. France, Indonesia, and the oil palm trade, for example.
- Polanyi's *Double Movement Theory* (first despoliation, then repair) portrays the environmental movement as a response, like organized labor, to the excesses of capitalism.
In conclusion: Marx has proven to be, theoretically at least, a fertile seedbed of ideas for understanding, in particular, the sources of environmental degradation over the past 75 years.

References:
Karl Polanyi, The Great Transformation (1942)


Max Weber produced a vast array of work. He wrote comparative histories of the ancient Middle East as well as of India and of China. He produced an account of the early years of capitalism in *the Protestant Ethic and the Spirit of Capitalism* (1905) and finally in *Economy and Society* (1920) a political-economic account of the spread of capitalism around the globe. The environment figures in all of these analyses, sometimes only as a container for social transformations and quite frequently as an independent force, like a drought, that spurs change.
In *Economy and Society* Weber argues that the spread of capitalism has led to the progressive rationalization of human societies. Rationalization would include the creation of new technologies. For Weber capitalism is embodied as an accountant who wears eye shades. S/he is 'calculating, efficient, reduces uncertainty, increases predictability, and uses increasing amounts of non-human technologies' (Foster and Holleman). S/he owns the means of production and generates profits through the rational consideration of alternative courses of action. The state grows alongside capitalist enterprises and it exhibits similar qualities, with both of them creating bureaucracies.
The State: From traditional to rationally based authority (in bureaucracies)

Weber was the first theorist to accord an independent role to the state in the spread of capitalism, so people who view the state as a crucial vehicle for transforming society - environment relations will almost inevitably encounter Weberian ideas.

Traditional authority is modelled on authority within families. These arrangements are referred to as patrimonial states. With spread of rationalization states derive more of their authority from rationally based, more meritocratic processes like democracy.
Contemporary Weberian analyses in Environmental Sociology

- Development as the spread of meritocratic bureaucracies (Peter Evans). **Neo-patrimonial states** become obstacles to sustainable development. They exhibit high levels of corruption that hamper efforts like air pollution control in the developing world.

- **World society theorists.** Will there be global peer pressure after Paris to reduce ghg emissions? Similar political structures spread across the globe.

- The environmental state encourages processes of **ecological modernization** through the creation of new technologies. For example, the substitute of cleaner fossil fuels for dirtier ones (natural gas for coal).

- **The governance of global flows of commodities** through producer groups (sustainable oil palm roundtable). Regime theory in political science also has a Weberian cast to it.
Planning processes are interpretable in Weberian terms. Lewis Mumford, a mid-20th century planner and social theorist, made this connection explicit.

Planned reductions in GHG emissions, which we will hopefully see after Paris, would involve rationalized deliberations by multiple people, interest groups, and organizations at various societal scales. These activities recall Marx's 'associated producers deliberating about sustainability'.

It suggests that mobilization around issues of climate change may incline us towards corporatist forms of state-society relationships that link macro - meso - micro scale activities.
References:


Durkheim, like Weber, carried out a wide array of analyses, most famously his study of subcultural variations in the incidence of Suicide (1897), his work in the Sociology of Religion (1912), and his methodological treatise on the Rules of the Sociological Method (1895). We are going to focus primarily on the environmental implications of the Division of Labor in Modern Society (1893), Durkheim's doctoral dissertation and his first major publication in Sociology.
Durkheim argues that increases in human population density and overall population size intensifies competition between humans and that in turn leads people to specialize and trade the products produced through specialized activities. Occupations emerge as people become specialists in a particular activity. In this sense the emergence of a more pronounced division of labor between peoples derives from urbanization and globalization. It also stems to some degree from population increases. Durkheim is the only one of the three classical theorists to assign a prominent role to population change as a causal force. As with Weber, technological change (by specialists) plays a role in the overall dynamic driving urbanization and industrialization.
As Fred Buttel (1986) noted some three decades ago, Durkheim's division of labor theory has important implications for land use patterns. Just as people become more specialized, so landscapes become more specialized. For example, the landscape in and around Yosemite National Park has been developed as a place for people intent on a particular kind of recreation. Not so far away, in California's Central Valley farmers have created special areas of land devoted to the cultivation of almonds. Both of these landscapes are specialized in that they are devoted to delivering a particular product or, in the case of Yosemite, a particular service. Not surprisingly, the specialists who attend to these places are themselves quite specialized, in an almond growers association or in the National Park Service. Arts districts in cities and residential areas in suburbs represent other examples of specialized land uses that derive from divisions of labor.
Plans to change the land uses in these places typically meet with resistance from the specialists. They might be considered in some cases to be defensive environmentalists. Ranchers opposed to the Keystone pipeline or homeowners opposed to fracking would fit this profile of mobilized specialists. The specialists grouped around a particular land use and mobilized into organizations might be expected to play an outsized role in transforming landscapes towards more sustainable uses. Their role and those of other interested parties may take the corporatist societal form outlined above.
Coincident and Later Applications and Extensions of the Division of Labor Idea

- Central Place Theory (Von Thunen, 1864) - specialists thrive in central places.
- Human Ecology - Concentric Zones (Park, Burgess, Mackenzie, 1920s)
- Growth Machines and Processes of Residential Succession (Molotch, 1977)
References


(there has been less work on Durkheim and the environment than has been the case with Marx or Weber).
Conclusions

- If you are faced with figuring out the unevenness in environmental degradation, Marx, with his ideas of metabolic rift, probably offers the most useful theoretical apparatus.

- If your focus is ecological restoration, Weberian analyses with their focus on rationalization and state bureaucracies would appear to be a useful point of departure.

- Corporatist arrangements, derived in part from Weberian and Durkheimian analyses, would seem to provide a useful point of departure for thinking about both controlling and adapting to climate change.