Green modernization: reflections from Europe

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Reflections from Europe

There are strong arguments for the thesis that climate change will develop into the single most important global problem of the first half of this century. Rising sea levels; hurricanes and their devastating consequences; ongoing desertification in developing and developed countries; scarcity of water, the resulting "wars on water" and the tens of millions of environmental refugees; scarcity of food — the list of problems is endless.

According to British economist and former World Bank vice-president Nicholas Stern, the costs associated with the effects of climate change will rise to US$2.5 trillion by 2050.

Climate change confronts us with the consequences of modernity, with the consequences of the complex interplay between capitalism, industrialism, military power and the organization of politics in the form of sovereign national states. Climate change is one of the "routine consequences of modernity," and in tackling the problem, the basic question arises of whether we will be able to adhere to the institutional framework of modernity itself. Could the institutional structure that is part of the problem also be part of the solution? I will try to answer this question from a European Union perspective by dealing with three different solution strategies: ecological modernization, "green govermentality," and civic environmentalism.

Environmental Politics in the EU

In the global politics of climate change, the EU has always been a relative forerunner. The European Union has been one of the strongest advocates of the Kyoto Protocol, but it has not hesitated to look beyond 2012, the expiration date of the protocol's expiration. Earlier this year it decided that carbon dioxide (CO₂) emissions in the EU as a whole should be reduced by 20 percent by 2020, and by that year at least 20 percent of all energy used should be renewable. Some scholars have characterized this political model as...
one of the specific features of “normative power Europe,” or the non-military power of the very first cosmopolitan, post-national democracy in the world. “Normative power Europe” refers to an EU that actively promotes a series of normative principles (such as sustainable development) that are generally acknowledged within the United Nations system to be universally applicable.

In comparison to many countries, the level of climate change problem awareness in the EU is rather high indeed, although public opinion polls reveal significant differences among individual member states. In addition, the politics of climate change is one of the core policy fields through which the European Union at present tries to increase its legitimacy to the public, after decades of having been just a “common market” with a widely felt “democratic deficit.”

At least two other factors have contributed to the current prominence of environmental politics in the EU: green parties and environmental movements. During the 1990s, when important parts of EU environmental politics were taking shape, green parties were highly visible in the European and national member states parliaments, although they seldom received more than 10 percent of the vote. But by the turn of the century, three out of four of the largest EU member states—Germany, France, and Italy—had Green Party Ministers of the Environment. These ministers also represented their countries in the European Council of Environmental Ministers. Green party influence in other policy sectors, however, remained rather limited.

Environmental movements have played an even more prominent role in EU politics. Like those in the United States, European environmental movements have played a crucial role in putting environmental problems on the political agenda. They work by denouncing pollution of air, water, and soil as the joint result of our specific kind of social arrangements, and by presenting alternatives to unsustainable patterns of production and consumption. Solar and wind energy, public transport, (part-time) vegetarianism, and farming with reduced quantities of pesticides are just a few examples of regional trends brought about by these environmental movements. In Europe there has always been a close relationship between green parties and social movements. Both movements have consistently claimed that they envision a political structure in which the present neo-liberal order is only one of the different possible arrangements for organizing economic, social, and political life.

Strategies for Dealing with Climate Change

As for the question of how to deal with global environmental problems like climate change, Swedish political scientists Karin Bäckstrand and Eva Lövbrand cite three different social strategies: ecological modernization, green governmentality, and civic environmentalism. The distinct feature of ecological modernization is the compatibility of economic growth, a liberal market order, and environmental protection. Economic growth, the argument goes, does not necessarily result in ecological degradation. Bäckstrand and Lövbrand instead believe that capitalism and industrialization can be made more environmentally friendly. Examples of environmentally-friendly industrialization include emission rights trading, the development of “clean” technology and renewable energy, and the systematic application of the “polluter pays” principle. At first glance this market-oriented approach represents a win-win story: it underpins the experience of advanced industrialized countries and builds upon innovative technologies for integrated pollution control. It also encourages market-driven strategies that internalize environmental costs, as well as government progression toward more flexible, decentralized, cost-effective, and collaborative policy-making.

Recent past strategies of ecological modernization have resulted in impressive improvements. In most parts of Europe, air, water, and soil quality have improved because of cleaner car engines, coal mine shutdowns, wiser use of pesticides, and numerous other environmentally friendly practices.

The second strategy for dealing with global environmental problems is “green governmentality.” Green governmentality, as Bäckstrand and Lövbrand conceive it, epitomizes a global form of power tied to the modern administrative state and its relationship to what they deem “mega-science.” A worldwide techno-scientific infrastructure has developed that enables environmental experts to monitor and possibly manage large-scale developments.
like climate change. Satellite supervision of the earth's vegetation cover, advanced computer modeling of atmospheric and oceanographic processes, a global grid of meteorological stations, and carbon flux towers exemplify the resource-intensive infrastructure that expert groups use to study, monitor, and predict the trajectories of human-induced climate change. Green governmental, however, not only refers to the scientific but also to the political aspects of climate change. It alludes to global environmental regime creation, the Kyoto Protocol, the debates within the Intergovernmental Panel on Climate Change, and the regularly recurring Conferences of Parties to gradually strengthen the existing climate change regime.

Civic environmentalism, the third and final social strategy, appears in two different forms: a reform-oriented and a radical resistance version. Reformist civic environmentalism emphasizes the vital role of (transnational) civil society and affirms the rise of public-private partnerships between NGOs, businesses, and governments. These partnerships hold the promise of results-based environmental problem-solving. The way in which transnational environmental NGOs (ENGOs) are involved in global environmental regime negotiations also serves as a case in point. Sometimes these ENGOs are part of government delegations, where they also draft treaty text proposals and provide professional expertise to the negotiating parties.

Radical environmentalism, on the other hand, contests the structures of global environmental governance that revolve around the liberalization of markets and free trade. It manifests itself in "global justice movement" campaigns at WTO and World Bank meetings, as the politics of these intergovernmental organizations are supposed to maintain or even increase climate change and other forms of environmental degradation.

What does the relative influence of these three strategies to combat climate change look like in the European Union, and how has climate change altered the nature of politics in the EU? What long-term political effects are to be expected?

During the last decade and a half, the European Union has enthusiastically embraced ecological modernization as an EU-specific strategy to reduce climate change. After all, ecological modernization is the ideal strategy to combine both the EU target to become the most innovative economy in the world and the European Union's ambitious sustainability goals.

One illustrative example of ecological modernization is in the European politics of transport. In order to reach its trans-national economic targets, one of the core goals of the European Union has been to eliminate all kinds of barriers between individual member states. Transport infrastructure is a case in point. Fifteen years ago the Trans-European Transport Network (TEN-T) was initiated: existing national rail, road, and waterway infrastructure would be adapted into cross-border networks that could provide transport in Europe as a "post-national," single country.

With a total estimated budget of US$900 billion dollars by 2020, TEN-T is the largest infrastructure project in the world today. A pivotal part of TEN-T is the high-speed-train (HST) network—a network of high-speed passenger train links that brings the cities of Paris, London, Brussels, Amsterdam, and Frankfurt within less than four hours of traveling from one another. It is explicitly meant to discourage air and car traveling between these cities. In the years to come, the network

### Evaluating Emissions

**Country Scores on the Climate Change Performance Index 2008**

The Climate Change Performance Index (CCPI) is a measure of a country's impact on global climate change, taking into account current emission levels, as well as projected future emissions based on trends and policy responses. In 2008, Sweden scored highest (most favorably) on the CCPI and the United States scored second lowest, just above Saudi Arabia.
will be extended to cities like Berlin, Rome, Budapest, Madrid, and the Spanish costas. Apart from this extension, a similar HST-network for freight traffic is being created as well. Experiences in France, the initiator of the HST, show that a well-developed and affordable HST railway system could result in a considerable decline in medium-distance air and car traffic.

Although HSTs are often characterized as a successful and innovative form of ecological modernization, several factors nevertheless frustrate or even counteract their favorable impact on climate change. The EU must not only meet its ecological targets, but must also deal with economic priorities. Consequently, the TEN-T schedule not only includes HSTs but also airport extensions, thousands of kilometers of new motorways, and the resulting destruction of many valuable nature reserves. Additionally, numerous fiscal and trade policy regulations have left HST unable to compete with air traffic.

The example of HSTs thus clearly shows the possibilities, but also the basic limitations of ecological modernization. As sociologist Anthony Giddens has argued, in the age of modernity, science and technology contribute to the ongoing development of society at both the national and global level. Due to science and technology, society can remain dynamic.

However, as Michel Foucault has shown, the choice between different technologies is anything but free; it is decisively influenced by economic and political conditions and interests. Like in Washington, DC, the EU road lobby, oil lobby, air traffic lobby, and car lobby are many times more powerful than the environmental lobby could ever be. The hegemonic technology of transport in Western countries, and increasingly also in non-Western ones, is structured around the private car and the airplane, rather than around trains and other forms of public transport. The only way to structurally change this hegemony would be to finance massive investments in public transport, while also passing substantially higher gasoline and kerosene taxes in order to cover all environmental costs caused by car and air traffic.

What is the relationship between the European Union and green governmentality, the second of the three ways to combat climate change? Up to now the global political community has reacted to climate change by creating a weak global environmental regime. After all, in terms of problem-solving, the Kyoto Protocol is best described as a compromise of compromises. Some of the most relevant countries in the world have not ratified it, and the promises of long-term regime strengthening are rather bleak indeed.

Even the European Union, one of the strongest defenders of an effective global regime, has extremely modest ambitions. According to the IPCC, in order to keep the rise of temperature below two degrees Celsius by 2050, a global reduction of CO₂ emissions of 60-80 percent by 2050 is necessary. A 20 percent reduction by 2020 represents the highest feasible political target in the EU, but at a global level, this reduction would have a very limited contribution to long-term problem-solving. The primary instruments to reach the target are closely linked to the ideas of ecological modernization: the development of a European Emission Rights Trade System (ETS) and the application of the Clean Development Mechanism (the transfer of clean technology to developing countries). However, up until now the ETS has failed, as some of the most energy-consuming sectors are excluded and widespread non-compliance is expected.

The third and final way to deal with global climate change is civic environmentalism. Civic environmentalism, as shown above, appears in two different forms: as transnational civil society activity, and as a grassroots effort.

In the past few decades, transnational civic environmentalism has taken over a substantial number of the roles and functions that were formerly performed by political parties: articulation of interest and demands, political mobilization, and political communication. With respect to topics like global climate change, political parties have lost a substantial part of their credibility. They are perceived by the public to be part of the problem, rather than a viable solution. Transnational civic environmentalism manifests itself in global environmental NGOs such as Greenpeace, the Foundation for International Environmental Law and Development, and World Wildlife Fund, which are involved in the processes of decision-making, implementation, and monitoring of global environmental politics. Global ENGOs do not have any formal rights to the processes of governance cover different territorial levels (global, regional, national, local), the same applies to the
activities of environmental organizations. In contrast to political parties, which mainly operate at the national level, environmental groups contain the organizational structure to suit these new needs. Several of them (e.g. Greenpeace and Friends of the Earth) not only have global and regional branches, but also national and local ones.

Political Effects

How might the processes described above influence electoral politics in the European Union? And what would a movement from below look like? An answer to these questions necessarily remains speculative.

In this article it has been argued that neither ecological modernization nor green governmentality is effective enough as a strategy to adequately deal with climate change. Current economic and political arrangements cannot provide the institutional changes that are needed. Civic environmentalism is not completely embedded in the existing institutional structure and, consequently, it is the only remaining anchor on which to reflect about future trends in electoral politics in the European Union. Three observations could be made in this respect.

First of all, apart from the Greens, none of the existing political parties are programmatically suited to adequately deal with climate change. All of them are firmly rooted in the institutional principles of modernity, among which is a self-evident orientation to economic growth and the routinely resulting climate change.

Second, climate change will develop into an issue that directly and intrusively affects the lives of hundreds of millions of individual citizens, not only in developing countries but also in the European Union and the United States. Hurricanes, floods, droughts, and shortages of drinking water are just a few of the consequences that are to be expected. It is unlikely that citizens will remain passive.

Third, climate change might develop into a primary social divide, both at the global as well as the national level, resulting in the emergence of massive social movements. A main dividing line might emerge between, on the one hand, those who adhere to the maintenance of the existing order of modernity and whose main strategy will be adaptation to climate change, and, on the other hand, those who will focus on mitigation of the basic causes.

Large-scale processes of social movement mobilization are extremely difficult to predict. However, according to cultural sociologist Karl-Werner Brand, this kind of mobilization primarily occurs during periods of cultural crisis, as a form of “cultural criticism” or “modernization critique.” In modern history, Western countries like Germany, Britain, and the US have experienced three such waves of protest: the 1830s-1840s (constitutional revolution, large scale resistance against slavery); the 1890-1900s (electoral reform, first feminist wave); and, finally, the 1960s-1970s (the era of the “new social movements”).

A wave of cultural criticism may start optimistically and end pessimistically, like the most recent new social movements wave, but it may also take the opposite course: a pessimistic start and an optimistic end, as occurred in the 1890-1900 wave. Brand suggests that a causal relationship exists between the nature of the start of a wave (optimistic or pessimistic), and the state of the economy (long-term boom or recession).

Although this kind of analysis provokes numerous objections and qualifications, it is tempting to connect the currently emerging cultural crisis, caused by climate change, to the possibility of a large-scale social mobilization process. To put it more strongly: it is improbable that the next wave of mobilization will not be connected to climate change. The question is when it will occur. The tried-and-tested ways of dealing with climate change (ecological modernization, green governmentality) will be exhausted soon. Political parties have lost their credibility, and environmental and other social movements seem to be the only social actors representing the widespread fear of the public. The nature of the next wave of social mobilization will be determined by the interplay between developed and developing world movements and organizations, between global events and national action campaigns, and, ultimately, between the politics of climate change and a climate change of politics.