THE CHRONICLE OF HIGHER EDUCATION

Climate Change Is a Social Issue

By Kari Marie Norgaard January 17, 2016

Jeff Roberson, AP Images Floodwaters from the Meramec River inundated Arnold, Mo., near St. Louis, in December.

If there were magic wands, I'd wave mine right now. When it comes to our collective work on climate change I would ask for a revolution of our shared imagination. Climate change challenges that imagination like never before. It seems impossible for most people to imagine the reality of what is happening to the natural world, impossible to imagine how those ecological changes are translating into social, political, and economic outcomes, and impossible to imagine how to change course.

If wildfire severity has already increased by 400 to 600 percent in the West, as Anthony L. Westerling and colleagues reported 10 years ago, what is that going to mean in my son's lifetime or yours? Can it really be true that ocean food chains face collapse due to acidification or that 314 bird species are seriously threatened in North America? Is there actually a relationship

between drought and political instability in Egypt? Now that we have a climate agreement for the first time, what exactly does each of us need to do at the local level to assure its success?

Imagination is power, especially in a time of crisis. Right now there are two specific kinds of imagination we need both in the interdisciplinary community of natural and social sciences and in the public at large. We need to be able to see the relationships between human actions and their impacts on the earth's biophysical system — call it an ecological imagination. And we need to be able to see the relationships that make up this environmentally damaging social structure. This second form of seeing is essentially what C. Wright Mills called a sociological imagination.

The scientific community has made great progress in developing our ecological imagination. Over the last four decades, atmospheric scientists and ecologists have provided increasingly clear and dire assessments of alteration in the biophysical world around which human social systems are organized. They have further laid out assessments of what reductions in emissions of heat-trapping gases are necessary to avoid catastrophic climate change. Yet despite those urgent warnings, the social and political response to climate change remains wholly inadequate. This more interdisciplinary, social-science-based challenge has been a harder nut to crack.

We sit on the brink of the most profound social dislocation since sociology's founding. Despite increasing calls for both interdisciplinarity and social-science knowledge, to date little social-scientific expertise has been brought to bear and too few sociologists, in particular, have been engaged in the conversation of how society can change course. Sociology, with its attention to the interactive dimensions of social order among individuals, social norms, cultural systems, and political economy, is uniquely positioned to be a leader in this conversation. Yet no leading North American or European sociologist serves on the Intergovernmental Panel on Climate Change, and a recent study by the International Social Science Council found that only 3 percent of publications in the field were by sociologists.

The solutions that are put forward in the most recent IPCC report, the National Research Council's "America's Climate Choices," and other high-profile reports emphasize the role of individual consumption and decision making in the absence of social context. Yet when individuals are detached from their social context, we cannot account for where values or beliefs come from, and thus how they might actually change.

The focus on individuals is more than a theoretical choice; it has the political function of leaving governments and corporations unaccountable. An individual can take shorter hot showers, but the U.S. military remains the biggest consumer of oil in the world. A symptom of how underdeveloped our sociological imagination is relative to our ecological imagination is the recent finding that more Americans can imagine the "end of the world" than can envision a switch from using fossil fuels or an economic order other than capitalism.

If we are to move forward in responding to climate change, sociological theory and insights are urgently needed. I see four reasons for the current gap.

- **Hierarchy within the sciences:** The "hard" natural sciences are taken more seriously than are the "soft" social sciences. They not only receive a much larger share of

government and institutional funds, but even when it comes to climate-related topics that are actually in social-science terrain — such as why climate change is happening or how we can respond — both journalists and policy makers continue to seek out natural scientists for expertise. Within the social sciences, economics tops the hierarchy and in turn represents a majority of social-science contributions. Recent studies on mentions in the *Congressional Record* by discipline are highly illuminating in this regard.

- **Scientific imperialism:** Natural scientists themselves believe the disciplinary hierarchy is justified, and tend to take on social-science problems themselves, rather than engaging actual social scientists. Just as the IPCC and other large-scale efforts tend to exclude social scientists, the boards of prominent university programs on "climate change and society" are led and staffed primarily by people with Ph.D.s in meteorology or ecology (and maybe one economist). Similarly, the editorial boards of recently launched interdisciplinary journals, such as *Anthropocene* and *Earth's Future,* are composed almost entirely of natural scientists.
- **Paradigm misfits:** Research on climate change began in the natural-science community, and its research frameworks and methodologies became the baseline. Certain social-science disciplines, such as economics and psychology, are better able to fit into the scientific models not only because they use individuals as the unit of analysis, but more importantly because they fit the existing political and economic paradigms.

By contrast, sociology raises questions about institutional and structural change in economic, political, and cultural systems. How do political interests shape the public discourse on climate solutions? In the wake of the 2015 Paris agreement, how can communities mobilize to put pressure on city governments, local employers, and federal entities? Can we tackle reducing our use of fossil fuels as a technical problem, or does it involve a fundamental reorganization of society? And, if so, how do we begin? Paradigms are not only about theory and methods, but which theory and methods support existing political and economic interests.

Paradigm misfits are presumably a big factor in why "Human Choice and Climate Change: An International Assessment," an important four-volume report produced by leading social scientists in 1998, disappeared into thin air despite endorsements at the time by leading climate scientists, and why neither the IPCC assessments nor other major reports, such as "America's Climate Choices," consider the importance of social organization in our current dilemma. Instead, individual and technologically focused solutions become the focus of those reports.

- **Sociology as usual:** But scientific imperialism and paradigm misfits are not the only barriers to developing a sociological imagination. Sociologists ourselves have been painfully silent on the implications of climate change for our theory and practice. Climate change has only once been the subject of a plenary session at the American Sociological Association meetings (in 2014) and has yet to be mentioned in a presidential address. Only a few sociologists outside of the subfield of environmental sociology have engaged their expertise on this issue. The American Sociological Association's Task Force on Sociology and Global Climate Change, after much effort from its leaders, released its important report "Climate Change and Society" at our annual meeting in August 2015 — a decade behind efforts by the British government and six years behind similar efforts by the American Psychological Association. But the session for its release was marked by a

> one-line announcement in the program. Even those of us who knew it was happening had a hard time finding information about how to attend. We sit on the brink of the most profound social dislocation since the founding of our discipline, yet all but a few are doing "sociology as usual."

There are historical reasons for sociology's short-sightedness. The discipline emerged at the height of the modernist myth that human beings had overcome natural "limits." It was presumed that the natural world was no longer a relevant influence on social outcomes. The central concern of this new discipline was to understand the novel forms of social order that were emerging with modern capitalism — especially those in rapidly growing urban areas. But as the social dimensions of climate change become evident — thanks in large part to a still-marginalized set of environmental sociologists — the lack of attention paid to this urgent situation by mainstream sociologists is appalling. Just as those in the scientific community struggle to see social structure, it is time now for sociologists to develop an ecological imagination.

Given those factors — and hoping that academic discourse can indeed influence public understanding or social policy — it would seem that our collective interdisciplinary task is twofold. First, the natural-science community needs to move beyond scientific imperialism and truly engage concepts and scholars in the social sciences outside economics — in short, to develop a sociological imagination. Our paradigms and methodologies are different, but they are urgently needed. Now is the time for natural scientists to read our task-force report, consult with sociologists on policy directives, and involve more sociologists and other social scientists on the IPCC, journal editorial boards, and interdisciplinary academic institutes.

Sociologists, in turn, need to more broadly engage the material and symbolic importance of climate change in our research agendas, learn more about the natural-science dimension of what we are up against, be more vocal in getting our research findings to the media, and even perhaps invite a few natural scientists to our meetings. In the face of the profound ecological and social changes in our world, the need for both an ecological and a sociological imagination — and for true interdisciplinary engagement — has never been greater.

Kari Marie Norgaard is an associate professor of sociology and environmental studies at the University of Oregon, the author of Living in Denial: Climate Change, Emotions, and Everyday Life *(MIT Press), and a contributor to "Climate Change and Society: Sociological Perspectives," the report of the American Sociological Association's Task Force on Sociology and Global Climate Change.*