

Changing the Atmosphere

*Anthropology and
Climate Change*



Prepared September 2017



AMERICAN ANTHROPOLOGICAL ASSOCIATION
Advancing Knowledge, Solving Human Problems

AAA Statement on Humanity and Climate Change

Climate change creates global threats that affect all aspects of human life, including our health, homes, livelihoods, and cultures, as well as our physical environment. Threats of this magnitude affect our stability—our sense of cultural identity, our well-being, and our security. As the discipline most clearly devoted to the human condition over time and space, anthropology offers important insights that can help create workable solutions to mitigate the impacts of climate change.

We put forth the following eight points for understanding the impacts of climate change from an anthropological perspective:

- 1

Climate change is a **present reality** that alters our physical environment and impacts human cultures around the globe. Climate change is not a crisis of the distant future or a myth. It affects us now, at home and abroad.
- 2

Climate change **intensifies underlying problems**—poverty and economic disparities, food and water security, and armed conflict—heightening these issues to the point of widespread crisis. Anthropologists predict climate change will accelerate migration, destabilize communities and nations, and exacerbate the spread of infectious diseases.
- 3

We can expect to see **widespread impacts on communities** as they face dislocation and pressure to migrate. Climate change will challenge peoples’ cultures and beliefs as their sense of safety and daily habits are undermined by an increasingly unpredictable relationship with their environment. People in both developed and developing countries will feel the pressures. Those who have directly depended on natural resources for centuries—in high latitude/altitude areas, low-lying island nations, coastal environments, and other biomes—will have their lives most disrupted.
- 4

While climate change affects all of Earth’s inhabitants, the **impacts will fall unevenly** and with particular weight on those already affected by existing vulnerabilities, including children, the elderly, those who live with handicaps and restrictive health conditions, and those who do not have sufficient means to move or change their lives. The most vulnerable will be uprooted or forced to move. As climate impacts intensify, public expenditures needed for emergency aid and restoration will escalate.
- 5

Specific human actions and choices drive climate change by emphasizing fossil fuel as the primary energy source, creating a **culture of consumerism**, and favoring land use practices that undermine ecological resilience. Anthropologists recognize that humanity’s actions and cultures are now the most important causes of the dramatic environmental changes seen in the last 100 years. We consider this period the Anthropocene.
- 6

The archaeological record reveals diverse human adaptations and innovations to climate stresses occurring over millennia, providing evidence that is **relevant to contemporary human experience**. The archaeological record shows that diversity and flexibility increase resilience to stress in complex adaptive systems, and that successful adaptations incorporate principles of sustainability.
- 7

Climate change is a global problem with local and regional impacts that **require local and regional solutions**. Successful adaptation to climate change varies by locale even within regions experiencing similar environmental pressures. Thus, it is important for there to be community involvement in crafting, determining, and adopting measures for adaptation, not solely global and national governance and plans.
- 8

Focusing solely on reducing carbon emissions will not be sufficient to address climate change—that approach will not address the systemic causes. Climate change is rooted in social institutions and cultural habits. **Real solutions will require knowledge and insight from the social sciences** and humanities, not only from the natural sciences. Climate change is not a natural problem, it is a human problem.

* Approved by the Executive Board on January 29, 2015



Anthropology and Climate Change

The American Anthropological Association’s (AAA) statement on Humanity and Climate Change, based on the final report of the AAA Global Climate Change Task Force, reveals eight ways the problems of climate change can be addressed from an anthropological perspective. Climate change is a present reality and an intensifier of current underlying global problems; its impacts are distributed in a markedly uneven fashion across and within societies. Perhaps most importantly, humanity’s decisions, actions and cultural behaviors are now the most significant causes of the dramatic environmental changes seen in the last century.

Climate Change Is Affecting Us Now: Every day brings more evidence of weather patterns intensified by global warming and sea level rise, the melting of polar ice caps at an accelerated pace, and communities displaced by floods, droughts, and slow-onset disasters like coastal erosion. In the US, most people acknowledge these changes but, at the same time, generally do not consider themselves vulnerable. They see these changes as geographically distant, and pose little threat in their lifetimes. Understanding and reconciling this disconnect is a cultural challenge.

Tackling global environmental and climate change early on: Anthropologists have engaged with environmental change and how humans are affected and adapt to such changes, since the emergence of our discipline in the late 1800s. Anthropologists and other social scientists were among the first to take on climate change, listening to the knowledge of affected peoples, whether in the Amazon or the Arctic. Today, anthropologists continue to document the effects of climate variability and change on human societies, cultural perceptions, the connections between local and global processes, and the contribution of human actions to greenhouse gas emissions.

The role we play: Anthropologists contribute a substantial knowledge base that puts contemporary events and prospective future patterns in a long and comparative perspective across time and cultures. We work with physical and natural scientists to put people in the equation. **Climate change is not a natural problem; it is a human problem.** Anthropologists play a vital role solving this human problem and the AAA is poised to continue to support the work of our members in this area.

Methodology, Models and Other Tools: Through case studies and ethnography (being there, on the ground, at the local level), anthropologists contribute an understanding of people and climate change with deep knowledge of the context and effects. Anthropologists see that climate change is interpreted, explained, and lived in local contexts based on local knowledge, history, community and family resources, and political positioning. Anthropologists use cultural analysis and theory to understand the diversity of perceptions involving climate change. We link processes from individual and community

levels and connect them to other components of society (e.g., politics, power and governance) at various spatial (e.g., linking localities to regions) and temporal scales (e.g., examining current land cover in the context of past land use decisions). In order to understand island nations’ vulnerability to hurricane and typhoon events, we link smaller scale observations on household resources and income inequities to the islands’ colonial political context, extant subsidies and trade laws, and costs of imports for preparedness—linking the smaller-scale evidence with national and international political and economic context rooted in global trends. More recently, tools such as simulation modeling, geographic information systems (GIS), remote sensing and participatory mapping have enhanced integration of increased complexity into our studies.

The Anthropocene: An Integrative Opportunity for the Discipline: We now live in the “the Anthropocene,” the epoch in planetary history when natural patterns are substantially altered by human activity. Seen through this lens, the field’s many specialty areas each have important contributions to make:

- biological and medical anthropology are fundamental for understanding future human health issues under changing climate scenarios;
- cultural anthropologists study how climate change communication and knowledge transfer contribute an understanding of how people recognize and utilize new information;
- the fields of ethnoclimatology and ethnometeorology focus on how people perceive and understand weather and climate;
- environmental anthropologists study impacts of a changing climate on peoples’ lives, consumerism, consumption chains, energy demand and energy transitions, and adaptation to climate change policies;
- archaeologists make sense of how past societies dealt with changing climate regimes over millennia;
- and cultural anthropologists study contemporary experiences as people struggle with the changes brought by changing climate and ecosystems.

Engagement and Policy: Anthropologists today are active in climate change policy domains, as agents of change, for example, in developing climate change plans of federal agencies; drafting guidelines for Free, Prior and Informed Consent procedures (FPIC); identifying the needs and guidance for historic preservation under conditions of climate change; funding research on public health and community resilience against infectious diseases through public health agencies; and developing legislation for national carbon emissions policy. Anthropologists also study the underlying assumptions and impacts of the governance process at the global scale, under the UN Framework Convention on Climate Change, and national and state/provincial levels.

Anthropological Approaches to the Drivers of Climate Change

As humanity enters the Anthropocene epoch, we inhabit an increasingly unstable planet and are the dominant species. Reduced biological diversity, less ice mass at the poles, increasing ocean acidity, and rising sea levels are but some of the indicators of this epoch. These changes, in turn, affect human social and cultural systems, a feedback cycle that leaves many of the poor, both rural and urban, highly vulnerable. The globalization of markets provides new opportunities, but also creates novel stresses to local production and control over resources traditionally held by communities and indigenous groups, as local values and institutions are challenged by market conditions.

A growing consumer culture enables a global rise in standards of living, increasing demand for electricity and manufactured goods, and also drives greater carbon emissions. While many individuals and communities benefit from economic growth, others subsidize growth through providing cheap labor in oppressive conditions, with degraded local resources and growing income inequality. In short, we need to understand how greenhouse gas concentrations are generated, by which kinds of activities, and who benefits and who loses—the causes and the social impacts of that increase—and ways to ameliorate the situation.

Countries with higher standards of living, faster economic growth, and the largest populations contribute the majority of these greenhouse gases. Extraction, transportation, manufacturing, and disposing of a huge volume of consumer goods is directly tied to the increase of greenhouse gases (GHG) since the industrial revolution. Because of greater global economic integration, the impacts of increasing demand for consumer goods and consumption in one place are often transferred to communities far away.

Climate change drivers are highly diverse and complex. In order to halt climate change and develop sustainable adaptive strategies for the future, a systems approach linking people, the environment, and the economy is valuable. Systems thinking forces us to identify drivers and impacts with new specificity, to examine non-linear associations, to engage with new concepts, methods, and models that bridge many disciplines. Anthropology adds a holistic view of human society to the interdisciplinary toolbox and a substantive record of understanding human-environmental interaction over the long term.



“Electoral Campaign” art installation in Berlin, 2010.

Courtesy of the artist and photographer, Isaac Cordal.

Lessons of the Past

Anthropologists have undertaken archaeological research around the world on societies, past and present, illuminating behavior of the human species under extraordinary conditions; these investigations provide important insights to humanity's contemporary predicament with climate change and adaptation for more than two million years.

Humanity is now at a turning point, as what we face today is unprecedented in both pace and scope. Hominins, however, are a clever species. **In our 2.5 million years of experimentation with the world's environment, we have proven our ability to adapt to changing conditions.** We must draw on the ingenuity and rich empirical history of our species in what has always been a changing world.

Archaeologists have examined what hasn't worked in the past and what has worked in some cases, identifying multiple and interacting keys to sustainable societies. Fundamental lessons of sustainability from the past show that **diversity**, broadly, is key—just as it is for financial portfolios and nutritional needs. Monolithic strategies in the long-term increasingly become vulnerable as more and more people rely on a few practices rather than spreading the risk. Societies that invested heavily in one form of agriculture (monocrops) to sustain their urban centers and elite found that a changing climate destabilized the foundations of their political economy. Diversity, not just of living organisms but also of thought and practice, plays a critical role in ensuring resilience to systemic shocks.

Flexibility is another key lesson. Political flexibility—defined as a willingness to abandon dysfunctional infrastructure and modify social forms—offers important ways to address challenges. While some civilizations sustained themselves for thousands of years using renewable energy sources, we are finding that only 200 years of non-renewable energy use can threaten the planet. Some archaeologists have concluded that, broadly, reliance on non-renewable resources is patently unsustainable; but entrenched institutions (including political, spiritual, and distribution and collection systems) often resist changes, or change very slowly away from what has worked in the “past.”

We recommend looking to hybrid technologies that utilize the best of both contemporary innovations and those from earlier civilizations. Old-and-new solutions stimulate “tinkering” to arrive at innovations that may yield sustainable development efforts. They have many advantages: low-cost, low-impact, locally available materials, a local and motivated work force, and a source of local pride that strengthens community. Contemporary cultures facing water shortages, for example, can look to the past efforts at water management, such as traditional irrigation ditches and rain-capture techniques, distribution via gravity flow during dry seasons.

Climate change has often destabilized civilizations via food shortages, hunger, disease, and conflict. Given that some modern analysts predict large-scale conflict as food and water become scarcer in some regions, it is important to review parallel instances of past climate-driven scarcity and competition, as well as sustainability, to see how the past can directly inform the present. Archaeologists' work in the reconstruction of mobility patterns, estimates of population growth and land use analysis, settlement patterns, multi-scalar excavations (house to palace), and much more, provide us the means to tell the story of our past with an eye to our future. Today's archaeologists highlight successful strategies from the past that have been successfully used by many societies at all scales (household, community, local and national governments) and can demonstrate the utility of concepts (e.g., flexible vs. inflexible political systems and subsistence strategies). While the same strategies may not apply precisely to current conditions, careful examination of previously successful efforts can form the basis of new approaches.

The history of coupled human and environmental change combines the social sciences and the humanities. The archaeological record, in conjunction with documentary history, human knowledge, memories, language and literatures are combined with environmental, biological, and information sciences for an integrated understanding of the past. Comprehensive regional histories contain information about how people in those places and specific circumstances responded to climate extremes, whether it be migration, adopting the use of new plants, expanding their repertoire of wild foods collected and/or hunted, or abandoning current political institutions. The Classic Maya, for example, abandoned kings and centers by 900 CE after a series of prolonged droughts resulted in the failure of large-scale reservoir systems that served as the major foundation of political power. Most Maya emigrated in all directions and soon a different kind of political system emerged centered outside of the southern lowlands.

We can avoid repeating mistakes of the past by informing the public, politicians, and policy makers about the abiding importance of long-term sustainable practices. We can merge top-down and bottom-up approaches in dealing with both large, global problems and local environmental and social conditions. In the face of intensifying problems, our responses increasingly are to “trade up on the scale of vulnerability,” often producing detrimental, unintended consequences for peoples far away from the end users. The necessary longer-term responses, however, may depend on politicians, corporations, and communities rising above the seductive short-term gains and gathering together for the longer-term goals of sustainability and resilience.

Adaptation, Vulnerability, and Resilience

Three concepts have emerged over the last four decades that today frame the challenges presented by climate change and humanity's responses to it: adaptation, vulnerability, and resilience. The concepts of vulnerability and resilience address the degree to which a society is adapted to the hazards and risks of its natural and social environments, including the effects of climate change. Both vulnerability and resilience refer to the conditions in which people live that render them either susceptible or resistant to environmental hazards, and therefore, also address the concept of adaptation.

The relationship between vulnerability and resilience is not linear, but interactive. That is, reducing vulnerability may or may not increase resilience, but it also may create other forms of vulnerability. For example, adaptations based on technology or resettlement may create risks, exposure and vulnerability as unintended consequences of the intervention. Indeed, increases in conditions of vulnerability and/or reductions of resilience are leading to situations that exceed capacities to adapt, bringing about irrevocable and permanent losses.

As currently practiced, most climate change adaptation does not address the real challenges to the underlying conditions creating vulnerability. Meeting this challenge requires questioning the beliefs, values, commitments, loyalties, and interests that have created and perpetuated the structures, systems, and behaviors that drive climate change. Indeed, current definitions of climate change adaptation are positioned far more to accommodate change rather than to challenge the causes and drivers, leaving current development approaches essentially unchallenged.

The three concepts are also intertwined with the questions of adaptation and development. They have proved important in our understanding climate change effects, but as yet have failed to produce widely adopted policies or practices that have significantly reduced greenhouse gas emissions, or risk, or losses from climate change in much of the world. A growing number of anthropologists advocate that we must look for solutions which generate policies that creatively articulate multiple perspectives among global actors on the causes, effects, adaptations, resiliencies and vulnerabilities associated with climate change that are embedded in global, national and local priorities and practices of development.



Gradual inundation and loss of forests and farmlands on the Chesapeake Bay (U.S.). It is projected that over 40,000 acres of agricultural lands, forests, and wetlands will be lost in the next 25 years with the encroachment of saline waters.

Community-Centered Approaches to Climate Change

People perceive, understand and respond to change based on their individual and community-shared cultural perspectives. Anthropologists tend to work at community levels and a major focus of investigation and facilitation in climate change research is centered on impacts from and responses to climate change at the community scale. Historically, anthropologists were among the first to document the extensive nature of climate change in communities, from tropical islands, river deltas, arid deserts to northern latitudes and the Arctic. For example, Elders in the Arctic, residents with the longest history of observation, have consistently reported changes in caribou, insects, sea mammals, and ice conditions directly affecting their subsistence.

Climate change poses a diverse set of impacts and challenges for communities. These impacts range from the direct effects of weather and climate fluctuations, either just outside the ecosystem's "normal" ranges or to extremes that push the human adaptive capacity to its limits, to the large-scale transformations in the biosphere that threaten critical ecosystem services and functions upon which all life depends. One of the defining characteristics of the impacts of climate change on communities is that they are place-specific and path-dependent. In other words, the ecological (or biogeophysical impacts)

impacts, and a community's vulnerability to those impacts, will vary significantly from one location to another. Communities will be differentially affected, depending on their relationship to the environment and the contextual political and socioeconomic conditions that mediate that relationship. In other words, efforts to reduce vulnerability and adapt to impacts of a changing climate should be centered on communities as place-based or locally-organized social entities.

Communities are comprised of diverse individuals and are therefore intrinsically heterogeneous and are commonly divided according to demographic and socioeconomic characteristics, such as gender, economic status, education, or ethnicity. Anthropologists engaging in climate research recognize the diversity of different perspectives within communities on approaches to climate change. Thus, anthropologists often see multiple, overlapping groups that are relevant in engaging communities in climate. Anthropologists also examine the cross-scale links that run through communities, from individuals and households on up to international NGOs, and among communities that may be widely dispersed across the globe such as the Alliance of Small Island States—an entity that gives small island nations around the world a united voice at the UN.



Siberian Sakha communities exchange local and scientific knowledge on local climate change effects.

Credit: Susan A. Crate.

Interdisciplinary Research

Much of the work in the climate change field has been interdisciplinary, whether it consists of academic research, applied research, or direct participation in policy and programs. One could argue that the work of climate change is inherently an interdisciplinary endeavor, since it stems from two crucial insights: First, that societies have affected the natural world via unprecedented greenhouse gas production and land use practices which alter Earth's climate; and, second, that nature has affected societies via by creating shifts in temperature and precipitation, in turn changing food production, natural hazards, health risks, water availability and other aspects of human life.

One of anthropology's most significant contributions to climate change research is discerning how narrative frames information to sustain public dialogue about climate change. In this way, anthropology reinforces the integration of science and politics, to show how climate change impacts cannot be separated from the social, political and economic conditions in which communities are embedded.

The two key areas to which anthropology has contributed in interdisciplinary research are ethnography and local knowledge; and, the integration of human and natural systems. Additionally, anthropologists act as interlocutors of community perceptions and scientific data about local change.

Ethnography and Local Knowledge

Since global climate change has strikingly different effects and contexts from one locale to the next, anthropologists involved in interdisciplinary endeavors can link the perceptions and understandings of local and expert groups. The reporting of observations by local peoples living in the world's more climate sensitive areas was one of the seminal entries into anthropological research on climate change. As anthropologists shared this experience and as other anthropologists' sensitivities to similar observations and witness by their field collaborators increased, the possibilities of knowing how a global process can result in a diversity of realities on the ground became increasingly clear. In these ways anthropological investigations could work as a type of "ground-truthing" for global and regional models, and point to the importance of down-scaling these models.

Anthropologists also show that discussions of climatic and other environmental changes are not merely about natural phenomena, but also about social, political, moral and religious systems. Anthropologists have contributed to the study of climate change by bringing forward the issue of cultural difference which lie both between and within Western and non-Western cultures.

Integration of Human and Natural Systems

Anthropologists study a number of linkages between human and natural systems. Of particular importance are the human activities that generate greenhouse gases, the ways in which different groups perceive and understand climate change, the varying impacts of climate change on people around the world, and the diverse societal mechanisms that drive adaptation and mitigation. In short, we need to use qualitative approaches to understand fully how humans interact with a complexity of change in the contemporary world.



Peruvian elder explains medicinal plant uses with regional anthropologist.

Credit: Susan A. Crate.

Research Frontiers

We face a number of research frontiers. Anthropological theories and methods engage different human populations (residents of different regions of the world; natural and social scientists; policy-makers, officials, and other members of state and civil society institutions) who engage with changing environments and who draw on systems of representations and meanings (different cultures; science; legal and political discourses) to understand and act upon these environments.

Models

Climate scientists use global and regional climate models to make projections about climate, based on assumptions about atmospheric trends, temperature trends, soil moisture, changing biomes, effects on humans and human systems, and effects of mitigation efforts and policies—all at different levels and which result in a number of scenarios. Human societies and human interactions and behaviors are notoriously difficult to model and to design, especially given the variability in practices and cultures globally. Nonetheless, anthropologists can work at an incipient level, to review and utilize new and grounded assumptions about the types of data and the relationships between them that go into the human modeling and how the human information interfaces with biogeophysical modeling and climate modeling.

Resilience

Anthropologists can add to interdisciplinary climate studies using a resiliency framework (based largely on ecological constructs), by showing how cultural factors play a role in adaptive success and highlighting the dynamism of adaptation. Anthropologists question the underlying assumptions of resilience theory, because it doesn't deal with questions of inequities and lack of resources; and at the same time refine the definition of what "resilience" means to communities and individuals. Anthropologists are adding research on concepts of social networks, how social capital strengthens webs of reciprocities, obligations, and how these work to support sustainable communities in the face of climate hazards, such as sea level rise.

Adaptation

Anthropologists contribute to the understanding of global economic and political systems by showing the pervasive effects of frameworks that appear to be universal, technical and neutral. Anthropologists can also demonstrate that the idea of adaptation is shaped by many sectors of society rather than by experts alone.

Habitability

The concept of habitability draws on several strands of research, including the study of the natural parameters that allow human life on earth and the examination of international environmental discourses and institutions that underscore the threats that climate change brings to the continued suitability of specific regions, such as the Arctic and low-lying islands, for human settlements. The interactions of scientific, political and cultural notions of habitability are a fertile area for anthropological research.

Decarbonization

The cultural politics of decarbonization is another critical area for anthropologists to engage. What will decarbonization, now addressed primarily from the perspective of economics and global- to national-level politics, mean for everyday practice, future imaginaries, forms of resistance and co-optation by ordinary people in local communities, as they begin to respond to the need to transition to low carbon cultures?

Reshaping the relationship between people and their carbon-intensive lifeways entails a shift in habitus, and anthropology is the appropriate discipline to both document and support such transitions.



Nearly 30 percent of Dutch commuters always travel by bicycle, and an additional 40 percent sometimes bike to work.

Credit: Ed Liebow

Alternative Consumption and Lifestyle Patterns

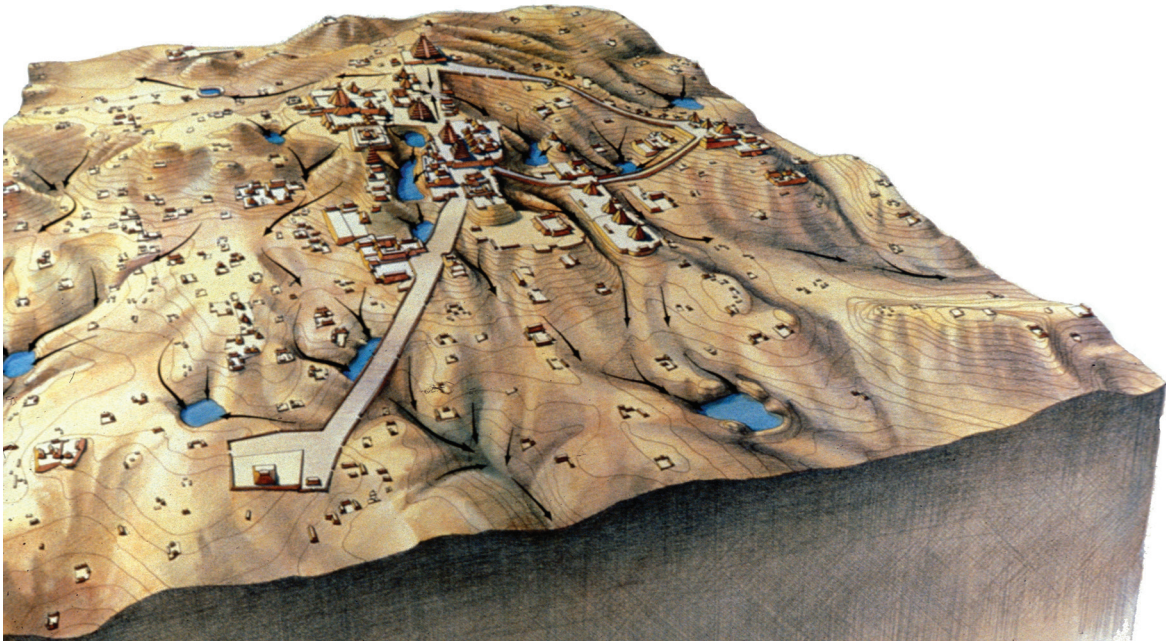
Anthropologists also have a long and distinguished record of studying alternative and utopian communities such as eco-villages, slow cities, transition towns, and local currencies, and popular movements like vegetarianism, simple living, food sovereignty, slow food, survivalism, the Occupy movement, and environmentalism of all stripes. We need to bring together this scattered scholarship into a careful assessment of the potential for this activism to have a major effect on consumption and production, and therefore on greenhouse gas emissions.

Political Realignments and Migration

The rise of mitigation and adaptation frameworks in policy circles has created substantial shifts regarding livelihoods, resource management and patterns of residence, favoring some agendas and actors and displacing others. These processes represent opportunities for anthropologists to conduct research and to engage with a variety of groups.

The Culture of Science

Drawing on longstanding engagements of anthropology with Science and Technology Studies, a number of anthropologists have begun to study the natural scientists who engage in climate change research, tracing the interactions within scientific communities and between scientific communities and other institutions; a number of opportunities exist for further work in this area.



Gravity-fed water storage and distribution system, [Classic Period, 200-800 CE], Tikal, Guatemala.

Credit: Vernon Scarborough

Research within the anthropology of science seeks to examine the influence of social, cultural, and political contexts on the production of scientific knowledge, including the analytical frameworks, research methods, and circulation of results. It can also serve to deepen the understanding of the reception and use of climate science within policy and social settings.

Ontology

In recent years, a number of anthropologists—drawing on earlier work within the discipline on animism, cultural models, and epistemology—have used the word “ontology” to indicate the radical differences between modern Western science and other cultural systems. Though the word “ontology” refers broadly to philosophical questions of existence and the status and categories of objects, anthropologists often employ it to indicate that other cultures attribute sentience, purposiveness, intentionality and morality to animals, natural phenomena, and other entities unrecognized by Western science.

Within environmental anthropology, a number of researchers on biodiversity conservation have shown that many protected areas contain resident populations who view their relations with animals in terms very different from the ways that biologists and policy-makers do. This area offers possibilities for future anthropological research.

Looking to the Future

The American Anthropological Association’s Task Force Report comes at a time when the initial promise of science-driven, global scale approaches to govern our atmospheric commons has failed to stem GHG emissions. Although the IPCC process has generated increasingly high-confidence reports documenting the urgency of the earth’s predicament, and has shown that the anthropogenic cause of that predicament is undeniable, international actions in response by the UNFCCC and Council of Parties (COP) are only slowly changing the ground-rules of commitment and participation in the fight against emissions. COP-23 is a landmark agreement, and the test will be in how the actions that derive from its decisions are implemented. In the process of years of international deliberations, it is clear that long-lasting solutions require actions beyond global, top-down solutions to include local, bottom-up ones.

This creates both opportunities and responsibilities for anthropology and for the social sciences overall. We suggest a transfer of the focus of climate-related science and policy attention to meso- and regional scales in an effort to re-orient adaptation strategies to “place,” where they happen—grounded in the localities, communities, societies and settings where they are needed. The Task Force Report identifies multiple contributions that anthropology makes to the understanding of global climate change science and policy and offers the following conclusions:

- Anthropologists have traced the diversity of human adaptive responses throughout human history, both before and during the Anthropocene context, with attention to migration, emergence of complex societies, transformation, and collapse.
- With skills in the cultural, holistic, and contextual domains, anthropologists recognize local-level adaptations across all temporal scales and at the meso- and regional scales, and therefore can contribute to much-needed efforts towards adaptation.
- We assert that by refocusing adaptation discussions on sub-state levels, anthropologists can do our part—not only by clarifying how adaptation is decided in local and regional contexts, but also by identifying means to strengthen interactions across various levels.

- Anthropologists were among the early observers to call attention to the differential impacts of climate change on people across the globe, and to point out the fundamental environmental injustice of climate change: that it has affected the vulnerable, marginal, and otherwise disadvantaged peoples the most, though these are the same peoples who have contributed the least to the accumulation of GHGs.
- As anthropologists we understand that a changing climate is one of the many drivers of social change in the set of globalized processes affecting cultures and their interactions with their environments.
- Anthropologists engage with communities to understand how they speak about and are affected by local climate change impacts; anthropologists work to identify the path-dependent vectors of vulnerability that are instrumental in facilitating adaptive capacity.
- Recent anthropological work points to the need to focus attention on the ethics, language, practices, and policies/ politics of transitioning to a low-carbon society, including the resistance these changes will inevitably entail.



The new normal. Flooding of coastal infrastructure and croplands in low-lying areas.

Credit: Kathleen G. Clendaniel

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