
Climatology / Ideology

Climatology's understanding of climate is extremely biased and exclusionary, and is only one particular view among many. Building better alliances around climate action means recognizing that there are ongoing conflicts and tensions among different conceptions of what climate is.

What might the climate movements of the future be like? That depends on how different definitions of climate change interact. The unavoidable tensions dividing today's climate movements are also tensions among different *conceptions* of climate. **Building better alliances around global warming action means first recognizing that there are ongoing conflicts over what climate is.**

When educated classes in either North or South imagine that climate is defined by *climatology*, that itself is a problem for political organization. At no time has it been more urgent to wade into other understandings of climate, when so many people outside the scientifically-sophisticated intelligentsia – peasants, forest dwellers, fenceline communities, children and working-class aunties, to name a few – are ready to take many risks to find a way to move forward on the issue.

Climatology's View of Climate

Seen in world-historical perspective, climatology's understanding of climate is, at present, extremely **biased, narrow, exclusionary and even bizarre**. Two interconnected features of this understanding are of particular importance. First is the way **it locates the climate problem in molecules**, molecular movements and energy flows as objects in a **"nature" that has been politically divided off from "society."** Second is the reflexive political support it gives to certain archaic fictions of **expert management** as if they could be "solutions" to global warming.

Climatology aspires to divide a "nonhuman" nature (CO₂ molecules, cloud albedo, methane clathrates) from a "nonnatural" society (surplus extraction, labor unions, energy policy). And because it is accepted political practice for modern nation-states to use country-names to label different sectors of this space, it becomes permissible for climatology to identify a certain number of molecules as being emitted by, say, "China." The result is that climatology slips toward colluding in assigning causal responsibility for them to China. At the same time, **climatology is barred from tracing any responsibility for carbon dioxide molecules originating from the burning of coal within the borders of China to other countries whose companies have invested in facilities to take advantage of cheap Chinese labor.** To do so is agreed to lie outside the boundaries of climatology, and thus not to be "about" climate at all.

By the same token, climatology is licensed to use a lot of resources to assign numbers to the comparative "global warming potentials" of various molecules such as methane or nitrous oxide, even if there is no consistent physical basis for such numbers (1). But it isn't allowed to identify the relative global warming potentials of different capital investments or forest commons practices. No matter how obviously varying those potentials are, they are held to lie "outside" the study of the causes of climate change. Similarly, climatology is permitted to distinguish between molecules of CO₂ (carbon dioxide) and molecules of CH₄ (methane), but **is not allowed to distinguish between**

two subsets of CO2 molecules: “subsistence CO2” and “luxury CO2.” That distinction continues to be treated as irrelevant to climate change (5).

Once climate change has been identified with non-social molecule movements and energy flows, it becomes much easier to imagine that the response to it must lie in schemes of managing these essentially dead, inert units from “outside.” **Climatology also tends to simplify “humanity” into a managerial monolith standing off at some distance.** Climate action “based” on climatology – as so many environmentalists wish it to be – tends to shrink into advocacy of the control or expert “governance” of an external entity.

This form of advocacy tends to lump together policymakers, environmentalists and flood refugees on one side, while constructing an entirely nonhuman climate on the other, with the two linked only via an exceedingly narrow channel. This is followed by management responses from the human world to the climate (such as carbon pricing), guided by a climate scientist profession understood to have a privileged method for interpreting signals passing through this interface with nature while filtering out static from society (2).

This cosmovision has precedents in, for example, colonial forest management, which likewise tended to bracket capitalist practices as unquestionable and connected to a monolithic climate through an interface of scientific management. Under this regime, climate became climate *for* a blocklike colonial society – for rulers (to secure plantation productivity or nature conservation) but also for their workers (partly to keep them from rebelling). The effects, as historian Richard Grove (3) observes, “were frequently just as destructive or oppressive in their effects on indigenous societies as direct ecological destruction and appropriation of environments and common rights by private capital.” That observation can only be sobering for environmentalists who still hope that climatology can somehow by itself form a first rallying point for a global activism embracing all classes, races and genders.

The Dominance of the Climatological View

It would be difficult to overestimate how hegemonic this treatment of climate change has become. At official meetings on global warming, for example, **climatologists empowered as spokespersons for “nature” are encouraged to leave the room after they “present the science”, so that policymakers empowered as spokespersons for “society” can get on with their discussions about how to keep capital accumulation going in a greenhouse world.** This rule is set out in black and white in, for example, the mandate of the Intergovernmental Panel on Climate Change (2013) to assess “the science comprehensively, without bias and in a way that is relevant to policy but not policy prescriptive.” This statement requires “the science” to be a singular object with sharp boundaries that can influence and be influenced by politics but that somehow comes out of completely distinct, nonpolitical processes.

Networks with names like 350.org reinforce these ignorance-producing dynamics, which see climate action as organized around climatology-guided management of molecule flows. **“Solutions” offered are rigorously limited to an excess of greenhouse-gas molecules** – or, rather, the “molecule-equivalents” dreamed up by climatologists working with the IPCC. Accordingly, the top priority for addressing climate change is not – for example – support for the wide range of already-existing social movements working to keep fossil fuels in the ground, with all of their complex concerns and goals.

The Damage Done

The 2015 UN Paris climate agreement, for example, set itself up as a passage-point through which a

unitary “international community” could formulate ways to hold global average temperature rise in a similarly black-boxed physical climate system to “well below 2° C above pre-industrial levels.” This was a **sign of the culmination of a process of separation of humans from their world.**

Paris’s climatology-based approach also helped keep spaces open for carbon markets. As has by now been extensively documented, such markets not only make global warming worse, but also undermine precisely those traditions of practice that will be needed most in order to turn things around. **Every forest people that has to turn over part of its territory to compensate for industrial emissions whose source it does not know is seeing its own climate-stabilizing land and forest practices undercut by climatology.** Every migrant that arrives in Europe or North America because she has been displaced by plantations of supposedly “carbon neutral” agrofuels is not only a victim of the view that one CO₂ molecule is equal to another in its effect on global warming, but also a person who is being deskilled in the practices needed to curb it.

Unsettling Climatology’s Dominance

Many climate activists wrap themselves in the mantle of climatology. But why shouldn’t a different strategy be possible? A strategy that, while respecting climatology’s achievements and rejecting denialism, also recognizes that **climatology is profoundly Other to – and, as currently constituted, generally threatening to – the knowledges and practices central to a liveable future?**

The key may lie in understanding that an Other need not always be an Enemy. And that even when it is, certain styles of encounter with it can lead to transformative outcomes.

Two overlapping approaches might help. One is to show how **climatology is an expression of only one particular history among many**, and that its procedures, terminology, assumptions, permissible conclusions and so forth have all been shaped by political conflict and political bias. The other is to **help open up dialogues between climatology and other understandings of climate** that can expose where previously-hidden conflicts lie and what might be done to acknowledge, confront and deal with them. Listening carefully to the nuance of the resulting arguments is itself a way of challenging climatological hegemony over climate movements and deepening respect for all, not just some, of the radically different sides of climate activism.

To understand climatology in this way is not to be ignorant or unappreciative of it, but, on the contrary, to understand better what it can and cannot do.

Exposing Climatology to Its Contemporary Interlocutors

Anyone who has listened to grassroots communities concerned about climate change in places like Molo in West Timor, the *paramo* of the Ecuadorian Andes, the central Indian forest belt, rural northern Thailand, the Brazilian Amazon, and also, often, central London or Los Angeles – will have noticed that their conceptions of the phenomenon tend to share a number of features not shared by climatology.

For one thing, the climate change stories told by many indigenous and peasant peoples tend *not* to revolve around how humans affect or are affected by the behavior of nonhuman objects such as carbon dioxide molecules or flows of energy. Likewise, the crucial turning point in such stories is *not* the moment when certain quantitative limits are breached, or when professional managers fail to contain the consequences.

Consider the example of Totonac scientists in the Huehuetla region of Mexico's Sierra Norte de Puebla, as explained by anthropologist William D. Smith (4). Like climatologists, the Huehuetla scientists have registered increased unpredictability in regional rainfall patterns and linked it to, for example, the drying-up of springs and destructive floods. But for them, unlike for climatologists, observing such changes without being aware of the historical embeddedness of the observations in the history of the ability to make and apply them signifies a breakdown in science itself. Such observations, if they are to be rigorous, need to track and take action concerning a historical loss of respect for springs, their spirits, and the good labor of communities that rely on both, together with a weakening of the agency of the water itself and its ability to chasten the disrespectful and hence preserve itself and the situated community whose solidarity is defined by it. **Good science, on such a view, sustains itself partly by being aware of its own biases and its situated nature** and cannot absent itself from discussions of topics such as respect, disciplined presence of mind, “good labor” and so forth. It does not try to replace that awareness – as climatology and an environmentalism that looks to climatology for validation are both prone to do – with a mythological origin story featuring priestly experts in mystical contact with a nonhuman, molecular infinite.

On this view of science, climate and climate change are not features of a “natural world” about which indigenous peoples have somehow come up with a competing “indigenous theory” that differs from climatology. **The heterogeneity involved is far more radical than that.** What happens when certain indigenous or peasant practices are thrown together with climatology, accordingly, is not a disagreement about how to interpret or manage the movements of carbon molecules, nor some kind of adversarial “politics of knowledge,” but something different in kind and more far-reaching.

Climatology, by contrast, tends to view critical political commentary about itself more simplistically, as evidence of deficiency or denial of the facts. What is lost to the wider world in such processes of short-circuiting is not only vital arguments that need to be had, but also the awareness that such arguments are possible. It is this lack of awareness – and not the divergences between climatological and non-climatological processes of thinking themselves – that turns differences among climate movements into conflicts. **When “climate justice” becomes no more than a matter of fair distribution of CO2 molecules,** abstract energy, effects of temperature change or carbon tax burdens – rather than of open debate about land, work, patriarchy, extraction, class, race, pollution and so on, **then strife over climate injustice is not going to be contained, but increased.**

The idea has to be embraced that **many climate movements are as deeply Other to one another as commons and enclosure movements of centuries past.** Claims that climate activists are “all on the same side” and should shut up about their differences and concentrate their fire on “common enemies” like oil companies or Donald Trump are retrograde and disempowering.

Climatologists who insist that it is their duty to policymakers to confine their research to following greenhouse gas molecules and energy transfers are not necessarily always your friends. Like most everybody else, they are ideologists who – even if usually unconsciously, and with whatever good intentions – are taking sides in profoundly intercultural struggles involving class, race and gender whose origins go back to long before the Industrial Revolution.

But you, too, have the right to participate in defining what climate change is. If other worlds are possible, then so, too, are other climatologies.

Larry Lohmann, The Cornerhouse

-
- (1) MacKenzie D. 2009. Making Things the Same: Gases, Emission Rights and the Politics of Carbon Markets. *Accounting, Organizations and Society* 34: 440–455.
 - (2) Rouse, J. 2002. Vampires: Social Constructivism, Realism and Other Philosophical Undead. *History and Theory* 41: 60-78.
 - (3) Grove, R. H. 1997. *Ecology, Climate and Empire: Colonialism and Global Environmental History, 1400-1940*. Cambridge: White Horse Press.
 - (4) Smith, W. D. 2007. Presence of mind as working climate change knowledge: a Totonac cosmopolitics. In Pettenger, M. (ed.), *The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses*. Aldershot: Ashgate: 217-34.
 - (5) Agarwal, A., and Narain, S. 1991. *Global Warming in an Unequal World*. New Delhi: Centre for Science and Environment.