Narrative, Rhetoric, and Reality Of Climate Change Do We Need More?

Edit Antal*
Simone Lucatello**

REUTERS/Christian Charisius

Climate change is a complex, multi-dimensional, multi-layered phenomenon. Simply studying it involves a large number of disciplines, from the abstract and empirical to natural and social sciences. It not only uses scientific, technical, and humanistic language, but also traverses the discourses and practice of economics, politics, and religion. This explains in part its long list of interpretations.

We know that as a socio-political and economic problem, climate change is huge, profound, and long term, and that the possibility of getting global cooperation seems increasingly remote given the lack of agreement among the major polluters like the United States, Europe, Japan, China, and Mexico, among others. Parallel to this, the use of the term itself is beginning to become so generalized that it pops up in all political and social discourses, in economic plans, in the mouths of politicians, businessmen/women, social groups, and even in day-to-day existence.

In the field of international development studies, for example, that "change" is increasingly associated with the discourse on vulnerability, risk, and the material conditions of the poorest communities; and the concept "adaptation" is the new ideological "mantra" for environmental efforts. For example, changes in hydro-meteorological patterns in agriculture are considered the greatest threats for the survival of a

*Researcher at CISAN, UNAM.
**Researcher at the José María Luis Mora Institute.

large part of the world's population, and the question arises: How do we adapt to those changes, and how can we avoid massive migration linked to the climate?

Climate change has broadened the security paradigm, when it is compared with one of the main threats to the world: terrorism. So great is the concern about its effects that it has merited the attention of the Pentagon and the Central Intelligence Agency (CIA), to the point that several of their documents consider it a threat justifying military intervention scenarios to control global natural resources.

Naturally, there are different understandings of climate change, and above all, other ways of solving the problem are available. Because the term is in vogue, it is beginning to take on a life of its own in everyday existence. This can be seen when it is used as a synonym for catastrophe, risk, or any radical, unexpected change. It has become a semantic umbrella term, then, to justify complex, uncertain scenarios for the planet: hurricanes, droughts, floods, but also waves of refugees, struggles for control over natural resources, the design of security geo-policies, and apocalyptic religious outlooks. All this tells us that it is not just a matter of rising global temperatures, but rather it is something complex that is beginning to take root in many socio-cultural spheres. So, it is not only an indisputable fact, but also a "plastic idea" that makes it possible to cross different ideological spectrums and constantly renovate the dialogue between nature and culture, spaces in which we humans are central actors.[1]

The idea's plasticity means it can be understood not only as a phenomenon that alters the natural, physical space where we live, but also our social surroundings. In other words, climate change is a physical reality, but it also has socio-cultural meaning.

This issue of *Voices of Mexico* dedicates part of its pages to the reflection on this complex phenomenology. The article by Juan Carlos Barrón Pastor analyzes the role of the mass media in creating the public's perception of climate change, beginning with a warning against the risk that comes with generalization and simplification. In this case, manipulation, over-reaction, and exaggerations about climate change promote the idea that a phenomenon like Hurricane Sandy was an inevitable catastrophe and that there is very little that we can do to avert climate change's negative effects. This involves a call to society to remain passive, since it makes the public believe that the experts might be able to do something, but that we mere mortals cannot. However, we know that there is nothing more false than this, since the most effective measure for alleviating climate change is to change our way of life and to waste less dirty energy.

In the 20 years of international climate change regime, the definition has changed significantly, revealing at least three narratives: mitigation, adaptation, and the most recent, resilience.

Carlos Domínguez and Marie Karaisl, for their part, compare the role technology plays in the solution of the problems climate change poses to the Prometheus myth: they warn against the supposition that what is needed is alien to the natural and social sphere, and in addition, remind us that every kind of technology has both benefits and risks.

As Ruth Zavala Hernández explains in her article, the carbon footprint that we can easily quantify with the aid of an Internet site is another instrument proposed for fighting global warming. Nevertheless, if carbon footprint information begins to be reported on product labels, discriminatory attitudes can be generated among countries because those who lack alternative-energy-source technologies, like Mexico, would be at a clear commercial disadvantage. Both sides of the coin need to be taken into consideration: this measure is an easy way to create awareness about how much we pollute and as a result change our customs, but it is also an unfair barrier to international trade.

In the 20 years of international climate change regime, the definition has changed significantly, revealing at least three narratives: mitigation, adaptation, and the most recent, resilience. These changes have been spurred by the interests of the main stakeholders who at different times promoted the regime, both in its first phase, which led to the Kyoto Protocol, and later, in its second phase, whose aim has been —and actually continues to be— to determine where post-Kyoto negotiations go.

Generally speaking, we can say that the main direction taken has been to move from mitigation of greenhouse gas (GHG) emissions to adaptation to the impacts of climate change. This shift is also reflected in other areas, such as the growing promotion of carbon capture and sequestration instead of actual reduction of emissions, emphasizing methane and other gases previously considered less important than CO_2, favoring the regional over the global, and insisting on the importance of national inventories and policies over international ones.[2]

As we already mentioned, the first narrative focuses on mitigation, which means the direct or indirect reduction of the six main greenhouse gases through a process of technology and financial transfers. In this process, the main actors were undoubtedly the industrialized countries, who were expected to proceed in two possible ways: reducing their own emissions or applying flexible or market mechanisms that would allow for the reduction of emissions outside their borders to be counted as national reductions.

The big problem with this first narrative is that the real mitigation actions are too subject to the results and commitments of international negotiations and global agreements, like the now defunct Kyoto Protocol. The result has been political and ideological vagueness and a high degree of uncertainty.[3] On the other hand, regarding the transition toward new mechanisms of GHG-emission reduction through appropriate national mitigation strategies, we still do not have enough details about the procedures, funding sources, and methodologies to be able to consider them valid replacements for the previously existing mechanisms.

The second narrative has focused on the concept of adaptation, which, despite being used since the early days of the international climate change regime, became stronger later, when the developing countries played a leading role in the working groups of the Intergovernmental Panel on Climate Change (IPCC). In this narrative, instead of reducing GHG emissions, the emphasis was on developing capabilities to adapt to changing natural conditions, above all in the more vulnerable countries. Adaptation of human systems is a process requiring the commitment of a broad gamut of stakeholders who act on multiple levels and in almost all sectors of society. It is necessary to analyze the current exposure to climate scares and stress as well as to a series of models of future climate-impact models. We have to determine the vulnerability of individuals, families, and communities, as well as their institutional, political, social, and bio-physical surroundings.

For now, as mentioned above, most of the world economic commitments to deal in the long term with the effects of climate change come together under the heading "adaptation," the new ideological "mantra" on the world development agenda, which traverses the Millennium Development Goals.

In their article, Clemente Rueda and Tamar Jiménez emphasize the architecture of international climate financing, arguing that the current international climate regime recognizes the economic asymmetry among countries. For that reason, in international negotiations, one of the recurring themes is an option that allows countries to implement mitigation activities and societies to adapt to the phenomenon in order to move toward economies with less carbon. However, recognizing that climate change is an asymmetrical problem, the big question underlying the analysis of the financial issue remains: Who has to pay the price of this change's adverse impacts and to what extent?

Mitigating and adapting to climate change also mean reorienting the inertia of our society's productive development to channel it toward being harmonious with the environment. Initially, analysts thought that this would involve a direct confrontation between the interests promoting economic "growth" and the conceptions about environmental, prevention, and protection needed for the struggle against and adaptation to climate change. However, the scientific information from the Intergovernmental Panel on Climate Change has made it clear several times that the enormous economic risks and costs that global warming is bringing the planet and the swift changes in the climate are much greater than the resources needed to implement mitigation and adaptation measures.[4]

Along these same lines, Citlalli Becerril-Tinoco's article about water use along the Mexico-U.S. border touches on a crucial aspect of the relationship between climate change and development. Existing models suggest that in the course of the next century, our planet will warm up between 1.4°C and 5.8 °C, depending on GHG emission levels. These changes in climate will affect both the quality and the quantity of water available for human beings and the environment, and that border is one of the regions of the world that may be most affected by changes in weather patterns, with all the political, economic, and social consequences that this implies.

Finally, the third narrative —we might say that it is currently the dominant one— is the narrative of resilience, intimately linked to complex systems. This concept is actually very much utilized in other fields of knowledge, like psychology, engineering, and ecology, among others. In the social sphere, it refers to developing capabilities at the level of local communities affected by climate change, capabilities

In international negotiations, one of the recurring themes is an option that allows countries to implement mitigation activities and societies to adapt to the phenomenon in order to move toward economies with less carbon.

that, although they may be defined in many different ways, generally refer to the possibility of dealing with external tensions and disturbances as a result of social, political, or environmental changes. These resilient forms of behavior often include the ability to cushion the change, organize, learn, and adapt. In a certain sense, the concept replaces the idea of sustainability because it is broader and indicative of how to achieve the goal.

Our section includes texts that allude to this concept, relatively new in its application to the socio-environmental sphere. Rafael Calderón-Contreras directly explains the importance of resilience in climate change policies and places it in its empirical context by analyzing the case of biofuels as alternative energy sources. Daniel Rodríguez Velázquez's article also mentions resilience in relation to the social and human implications of climate change through his criticism of techno-naturalist visions; and he argues for recovering a social-environmental focus that implies the democratization of public policies and the participatory construction of local capabilities: in other words, resilient communities.

The concept of resiliency also brings up a big question about the role of sustainable development, traversed fundamentally by climate change, since it is not very realistic to think about a sustainable world, because to achieve it, stable conditions are needed, which, because of the effects of the phenomenon itself, will no longer exist.

If in the future we have to prepare ourselves to deal with extreme climate events that will take many lives, destroy cities, infrastructure, and crops, and deplete our water sources, does it make sense to continue to use the discourse of sustainability? Or would it be worthwhile to discuss the current paradigm and recognize that under today's conditions, what we need is resilient development? VM

NOTES

[1] Mike Hulme, *Why We Disagree about Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge: Cambridge University Press, 2009), pp. 21-23.

[2] Edit Antal, "Introducción. El futuro del régimen del cambio climático y el papel de América del Norte en ello. Una perspectiva histórica y analítica," *Norteamérica, revista académica*, special issue on climate change, no. 7, 2012, pp. 5-33.

[3] Simone Lucatello and Daniel Rodríguez, comps., *Las dimensiones sociales del cambio climático. Un panorama desde México. ¿Cambio social o crisis ambiental?* (Mexico City: Instituto Mora/ENTS, UNAM, 2011).

[4] IPCC, *4th Assessment Report 2007* (Geneva: UNFCCC, 2007).

Climate Change and the Media
Revelations of Catastrophes

Juan Carlos Barrón Pastor*

INTRODUCTION

Practically all civilizations have believed that the world we know is transitory and provisional, and that all societies are temporary. Depending on their knowledge and relationship to the world, almost all cultures have created images and representations of their own destruction. Today, climate change is the fashionable possible end of our civilization, and the mass media have taken it upon themselves to use it to feed the recreation of the collective imaginary of destruction.

Climate change is widely considered one of the greatest challenges to humanity today and for many decades to come. This scientific concern has permeated practically all the dis-

*Researcher at CISAN, jbarronp@unam.mx