

Interview Questions

While there's no shortage of climate change skeptics, many other people around the world are coming to grips with it. The Paris Agreement, which India recently ratified, was a big step in the right direction at the highest level. Yet, as you say, recognition of the problem is not the same as comprehension. Do you feel that we still haven't understood the dire implications of what you call the Great Derangement, making it too late for us to reverse climate change?

A. Whether or not it is too late to reverse climate change is a question best answered by scientists. The consensus seems to be that some very serious impacts are inevitable – and indeed we are seeing them unfold around us already. I certainly do think that most of us have yet to contend with what these changes portend for the future.

Follow-up: You write that global inaction on climate change is not due to denialism or a lack of planning; rather, it's because the status quo is more important for us. Would you also say that there should be a more effective way to get the message across? People are not panicking, perhaps because they cannot envision a transformed world. Even the term 'climate change' is not scary. You note that some experts prefer terms like 'catastrophozoic' and 'the long emergency.'

A. I don't think messaging is the problem really. The reality is that it's almost impossible for most of us to take adaptive measures as individuals.

In the Southeast (where we live), some coastal communities felt the brunt of Hurricane Matthew. While the damage here was much less than in places like Haiti, it was yet another instance of the increasing dangers people face when they choose to live near the water. You mention your own family's experience in India. Do you think, as the average temperature rises and people move inland, we'll see the end of beach/coastal communities as we know them?

A. People living on the coast, or close to flood-prone rivers, will certainly need to act to protect themselves. Unfortunately, for most people, moving presents many practical obstacles. How do they dispose of their houses? What do they do about their mortgages? And so on.

Follow-up: Living inland doesn't necessarily mean people are better off, as you note. As global warming continues, what sort of problems will inland communities experience in the near future?

A. Many inland communities are already having to deal with drought, 'rain bombs', flooding, intensifying wildfires and so on.

Coastal communities have thrived because of trade and cross-cultural influences. They're usually bountiful—and in our era, as you point out, "proximity to the water is a sign of affluence and education." So it was surprising to read in your book that people didn't always live close to the water. In fact, they feared it. When did people in India and elsewhere start losing this fear?

A. In India, and in most other Asian countries, people were hesitant to build near the sea until quite recently. Nor are 'sea views' prized everywhere. In Indonesia, in most traditional communities, people build their houses facing away from the sea.

You look at climate change from various angles—literary, historical and political. You say that the biggest impediment for us to make change as individuals is that we don't get how the climate change crisis is also a crisis of culture? Specifically, would it be the culture of consumption?

A. Yes, consumption and culture have been very closely linked for some time now. Consider the romance with the automobile that has long been a feature of American life. Today it is very much a feature of Indian and Chinese life as well.

India's East Coast has long been more vulnerable than the West Coast. So it was astonishing to read that the cyclonic activity, while decreasing by 31 percent in the Bay of Bengal, will rise by 46 percent in the Arabian Sea. Is it solely because of the increase in average temperature? Are there any accurate projections on when this will start happening? Are Indians even aware of it?

A. This is a prediction of an important research paper (Murakami, Hiroyuki et al: *Future changes in tropical cyclone activity in the North Indian Ocean projected by high resolution MRI-AGCMs*, **Climate Dynamics** 40: 1949-1968, 2013). The predictions are based on models that assume a time horizon extending to the end of this century. But cyclonic activity in the Arabian Sea is already intensifying (as this article in Forbes magazine points out: <http://www.forbes.com/sites/marshallshepherd/2015/11/06/again-why-is-the-arabian-sea-suddenly-getting-these-cyclones/#6107d9d285fc>). These developments

will have very serious implications for India because so much of our industrial and commercial infrastructure is concentrated on the west coast.

A fascinating point you make is how, as we became more individualistic and materialistic, we've lost that sense of interconnectedness with nature. Nevertheless, I'm wondering why you think religious groupings may be able to address issues like climate change and inequality. As we increasingly turn to science and technology to find solutions, more and more people these days distrust organized religion—which can sometimes be at odds with science.

A. I think Pope Francis's encyclical is perhaps the single most important development on the climate change frontier. We can only hope that other religious groups and figures will start waking up to this issue.

You point out how we all remember where we were when 9/11 happened. But natural disasters, even when they're huge, don't leave a lasting impression. So are we reaching a point where one day we'll be able to say, as you put it, "Where were you when the Larsen B ice shelf broke up?"

A. Maybe not the Larsen B ice shelf, but I think we're certainly reaching some sort of inflection point. The other day on the New York subway, I heard five separate conversations on Hurricane Sandy.

Finally, you write how the distribution of power in the world lies at the core of the climate crisis. While that's true at the macro level, what's the biggest challenge we face at the micro level, where we as individuals can make the right choices on how we lead our lives? Where can we cut back to make a difference, even if it seems insignificant in the larger scheme of things?

A. There are many things that we can and should do as individuals. Some of them are obvious, like cutting back on consumption, wasting less, being careful with water usage etc. But it's perhaps even more important to try to bring these issues to the attention of politicians and leaders at the municipal, state, and national levels. At the same time, at a personal level, we can also examine our own priorities and prepare for the unexpected.