What Does Climate Change Do to Our Heads?

Contributed by Sanjay Khanna
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A small yet growing body of evidence suggests that how people think and feel is being influenced strongly by ecosystem transformation related to climate change and industry-related displacement from the land. These powerful stressors are occurring more frequently around the world.

A case in point: When researchers from the Centre for Rural and Remote Mental Health at the University of Newcastle in Australia conducted interviews in drought-affected communities in New South Wales in 2005, the responses suggested some of their subjects may have been suffering from a recently described psychological condition called solastalgia (pronounced so-la-stal-juh).

Solastalgia describes a palpable sense of dislocation and loss that people feel when they perceive changes to their local environment as harmful. It's a neologism that Glenn Albrecht, an environmental philosopher at the University of Newcastle's School of Environmental and Life Sciences, created in 2003.

Albrecht's work among communities distraught by black-coal strip mining in New South Wales' Upper Hunter Region convinced him that the English language needed a new term to connect the experience of ecosystem loss to mental health concerns.

"The sense of a home landscape being violated [by strip mining-related environmental damage] seemed to have disturbed the region's social ecology so much that the psychic or mental health of many people living in the zone of high impact was being affected," he says.

Albrecht's stunning insight? That there might be a wide variety of shifts in the health of an ecosystem—from subtle landscape changes related to global warming to desolate wastelands created by large-scale strip mining—that diminish people's mental health.

In Eastern Australian communities, where the toll of a six-year-long drought has been devastating, interviews with farmers provided additional momentum for the solastalgia concept.

In one such interview, a female farmer poignantly described the loss of her garden oasis. "Our gardens have had to die," she said, "because our house dam has been dry…. So it's very depressing for a woman because a garden is an oasis out here with this dust…you know, to come home to a nice green lawn is just… that's all gone, so you've got dust at your back door."

While persistent drought and open-pit coal mining may be extreme cases, if the environmental degradation of the past hundred years is any indication, our contemporary lifestyles, built on a dwindling resource base, have failed to acknowledge how much the mental health of people and ecosystems is interrelated.

This may imply that the unrelenting media focus on weather-related and economic aspects of climate change does not adequately take into consideration the challenge of mitigating the psychological impact of global warming. How might we feel when the heat is relentless and our surrounding environment changes irrevocably? How might our mental health be affected?

In a recent Wired magazine article on Albrecht and the concept of solastalgia, Global Mourning: How the next victim of climate change will be our minds, writer Clive Thompson sensitively characterized as “global mourning” the potential impact of overwhelming environmental transformation caused by climate change. Thompson cogently summed up Albrecht’s view of what solastalgia might look like were it to become an epidemic of emotional and psychic instability causally linked to changing climates and ecosystems.

Albrecht also emphasizes that feelings of melancholia and homesickness have previously been recorded among Aboriginal peoples in the Americas and Australia who were forcibly moved from their home territories by U.S., Canadian and Australian governments in the late nineteenth and twentieth centuries.

Sanjay Khanna: You speak of psychoterratic and somaterratic illnesses. What are they?

Glenn Albrecht: Psychoterratic illness involves the psyche or mind and terra or earth. So a psychoterratic illness would be an earth-related mental illness, where both nostalgia and solastalgia are examples of people being made “mentally ill” by the severing of “healthy” links between themselves and their home or territory.

Somaterratic illness, on the other hand, involves soma or the body and relates to damage done to the human body, its physiology and/or genetics, as a result of the loss of ecosystem health by, for example, toxic pollution in any given area of land.

SK: You note on your blog that there are antecedents to solastalgia.

GA: Yes, David Rapport, a past professor at the University of Guelph in Ontario, Canada, is a pioneer in the study of the health of natural ecosystems and their relationship with humans. In the 1970s, he described “ecosystem distress syndrome,” which was what happened when an ecosystem couldn't restore its balance after an external disturbance.

Once I fully appreciated this concept, I realized there must be a human equivalent to ecosystem distress syndrome, that is, a home environment so profoundly disturbed that it affected the balance of well being or the mental health of people within their social ecology.

The interviews of affected people I conducted along with Nick Higginbotham and Linda Connor in strip-mined areas of the Upper Hunter Valley showed that people’s sense of place was being violated and that this was profoundly disturbing them. Their home environment was being desolated and it seemed to us that the vital link between ecosystem health and human health, both physical and mental, was being severed.

SK: Can you tell us a little bit more about the origins of solastalgia?

GA: Solastalgia’s Latin roots combine three ideas: The solace that one’s environment provides, the desolation caused by that environment’s degradation and the pain or distress that occurs inside a person as a result.

Solastalgia brings into English a much-needed word that links a mental state to a state of the biophysical environment. The need for new concepts in the face of what is happening under climate change has seen other cultures develop new terms that have affinities with solastalgia.

The Inuit, for example, have a new word, uggianaqtuq (pronounced OOG-gi-a-nak-took), which relates to climate change and has connotations of the weather as a once reliable and trusted friend that is now acting strangely or unpredictably. And the Portuguese use the word saudade to describe a feeling one has for a loved one who is absent or has disappeared. The upshot is that under the pressure of climate change, your preferred climate and ecosystem might well be thought of as a lover gone missing or turned bad.

SK: How might your research impact on psychiatry and the diagnosis of psychoterratic illnesses such as solastalgia?

GA: Alongside five other researchers, our four-person team co-wrote a summary of our research on the mental health impacts of mining and drought for psychological and psychiatric professionals. The paper, Solastalgia: the distress caused by climate change, was published in Australasian Psychiatry, a publication of the Royal Australian and New Zealand College of Psychiatrists, in November 2007.

Our team has mused that people badly affected by solastalgia would benefit from a set of professionally developed diagnostic tools so that solastalgia could be listed as a condition that required diagnosis and professional attention.

We're happy for other people to take that challenge up and there are some academic psychiatrists who are interested in exploring these ideas further. However, given that key aspects of solastalgia are existential, the traditions of environmental philosophy and medical psychiatry may not come together so harmoniously. The melancholia of solastalgia is not the same as clinical depression, but it may well be a precursor to serious psychic disturbance.

That said, it's worth remembering that up until the mid-twentieth century, the medical profession viewed nostalgia as a diagnosable psycho-physiological illness in which, for example, soldiers fighting in foreign lands became so homesick and melancholic it could kill them.

Today psychiatrists would see the condition of rapid and unwelcome severing from home as post-traumatic stress disorder (PTSD), an outcome of an acute stressor such as warfare or a Hurricane Katrina.

Solastalgia on the other hand is most often the result of chronic environmental stress; it is the lived experience of gradually losing the solace a once stable home environment provided. It is therefore appropriate to diagnose solastalgia in the face of slow and insidious forces such as climate change or mining.

SK: Would you tell us a little bit about the transdisciplinary team that you participate on?

GA: Nick Higginbotham, a social psychologist colleague who specializes in epidemiology and health matters, is working to gather empirical data for our solastalgia research. He has developed a much-needed environmental distress scale (EDS) that teases out the specific environmental components of distress from all the other things that go on in a person's life. We will be using this scale in the new AUS$430K grant the team has received from the Australian Research Council to extend our earlier work by addressing "the lived experience (ethnography) of climate change" among people in the

Hunter Valley.

Linda Connor, an ethnographer and social and medical anthropologist, handles the ethnography or cultural experience of all this. So collectively we have empirical (Higginbotham), cultural (Connor) and philosophical (me) interpretations of health and climate change. Finally, Sonia Freeman, our research assistant, has co-authored a number of papers.

SK: What implications might the recent apology by Kevin Rudd, the new Prime Minister of Australia, to the “stolen generations” of Australian Aborigines have in relation to solastalgia?

GA: The apology by Kevin Rudd to the stolen generations is about seeking forgiveness for the government-sanctioned taking of Indigenous children from their families and from their home territories (their “country”) from 1909 until 1969. There have been profound mental and physical health impacts from this process and many of the remaining stolen generations are now ageing but with a 17-year shorter life expectancy on average than non-indigenous Australians. Those who are alive today may be experiencing genuine nostalgia for a once-sustainable past and solastalgia within contemporary pathological and depressed home environments.

SK: Do you see a relationship between the conquest of Indigenous peoples of the Americas and Australasia, the state of environmental degradation and the experience of loss that we are seeing today? If so, what is that relationship from your perspective and research?

GA: The answer is, yes, there is a relationship between the two colonial cultures: the two continents were colonized only by the systematic dispossession of complex and formerly sustainable Indigenous societies.

Traditional Indigenous cultures in the Americas and Australasia displayed a profound appreciation of the relationship between human and ecosystem health, something global culture is trying to rediscover under the label of sustainability.

Remnant aboriginal cultures are still being pushed aside by the dominant global model of economic growth and progress. Even today, their chronic health problems are likely related to social and political issues that are connected to ongoing dispossession.

I’ve had recent firsthand experience of the lives of Indigenous people leading semi-traditional lives in Northern Australia to see the importance of the connections between human health and ecosystem health. In Arnhem Land, Aborigines who live on what are called “outstations” have been able to maintain much stronger and healthier links to their traditional land. Their physical and mental health status is, as a consequence, much better than those whose links to their own land have been severed and who now live in crowded, dysfunctional communities.

SK: Some of the solastalgia symptoms you describe are similar to the loss of cultural identity, including the loss of language and ancestral memory. Loss of place seems an extension of this new global experience of weakened cultural identities and Earth-based ethical moorings.

GA: I have written on this topic in a professional academic journal and expressed the idea of having an Earth-based ethical framework that could contribute to maximizing the creative potential of human cultural and technological complexity and diversity without destroying the foundational complexity and diversity of natural systems in the process.

Our history shows that some people and cultures have a tendency to create pathological ways of thinking, but if we want to support a life-affirming ethic in the twenty-first century, we are in need of reform and change.

SK: In the context of accelerating environmental change, what would you say to young people about the planet they are inheriting? What does sustainability mean in the context of the overwhelming pace of environmental and economic change that we're seeing today?

GA: This is a tough one because the children of today face the double whammy of the escalating pace and scale of changes under the global forces of development and those of climate chaos. I've suggested to my own teenagers that what is happening is unacceptable ethically and practically and they should be in a state of advanced revolt about the whole deal.

From my perspective, supporting and maintaining the status quo is no longer a reasonable response to these big picture issues. At every point, we must challenge and refute this kind of thinking in a society that is clearly on a non-sustainable pathway.

Unfortunately, the lot in life of the youth today is to undo much of what has been done in the name of growth and progress in the last two hundred years. However, this does not mean a return to the past: As Herman Daly (the ecological economist) once said, you can have an economy that develops without growing.

On a personal level, I'm an optimistic, energetic philosopher and I believe that we must get our values more life orientated. I'm not willing to give up on encouraging change towards sustainability even in the face of what look like overwhelming negative forces.

The four-year grant recently awarded to our team will allow us to study the lived experience of climate change at a regional level. We're happy that we'll be able to start contributing data on how climate change is shifting culture, values and attitudes.

The next four years are critical. As a member of a research team, I believe that we're right at the leading edge of change research and we are very committed to supporting the network of ecological and social relationships that promote human health. There's hope in recognizing solastalgia and defeating it by creating ways to reconnect with our local environment and communities.

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