
Indigenous cultures hold the keys to sustaining our planet. At COP15, will we finally be listening?

For these societies, the land is alive, a dynamic force to be embraced and transformed by the human imagination. Reciprocity, as opposed to extraction, is the norm

WADE DAVIS

CONTRIBUTED TO THE GLOBE AND MAIL

PUBLISHED YESTERDAY



Protesters interrupt a speech by Prime Minister Justin Trudeau at Dec. 6's opening ceremony for COP15, a United Nations climate conference in Montreal.

PAUL CHIASSON/THE CANADIAN PRESS

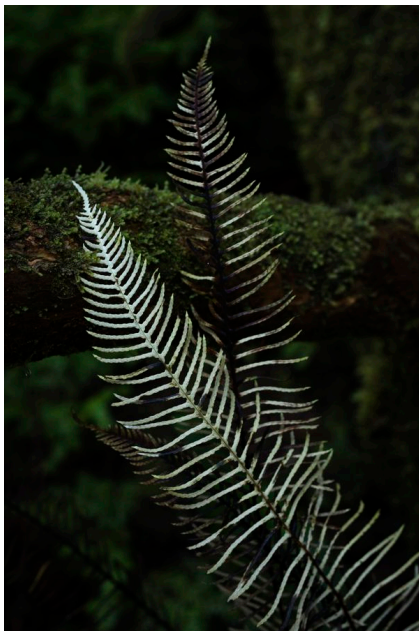
Wade Davis is the B.C. Leadership Chair in Cultures and Ecosystems at Risk and a professor of anthropology at the University of British Columbia. This essay was written with contributions from Cristian Samper, managing director and leader of nature solutions at the Bezos Earth Fund.

As the world gathers in Montreal for COP15 (the UN Biodiversity Conference), two renowned scientists, godfathers of conservation biology, will for the first time be attending in spirit alone. Tom Lovejoy, who in 1980 coined the term “biodiversity,” passed away last year on Christmas Day. Edward O. Wilson, whose impact on biology can only be compared to that of Charles Darwin, slipped away the following day. The blow to science brought to mind the deaths of Thomas Jefferson and John Adams, American founding fathers who both died on the Fourth of July in 1826. Lovejoy and Wilson had that kind of stature. They were friends and mentors to an entire generation of field biologists and plant explorers, all inspired by the examples they set as scientists, environmental advocates and activists who worked to protect the miracle of biological life, in every manifestation of its glory.

Biodiversity, as both Wilson and Lovejoy conceived it, is a measure of the abundance and fecundity of nature, quantified by the scientific identification and naming of species. To date, taxonomists have named some 400,000 distinct plants, 36,000 fish and 11,000 birds, along with a million insects, including 14,000 species of ants – 418 of which were first described by Wilson himself.

Though a brilliant taxonomist, and the world's authority when it came to ants, Wilson understood the limits of classification. He always looked beneath the surface of things. Just as the tip of an iceberg reveals but a part of the story, the physical appearance of any life form conceals a universe of inner potential. A single bacterium, as Wilson noted, possesses 10 million bits of genetic data; an insect possesses between one and 10 billion, depending on the species. If the information in just one ant were to be translated into a code of English letters and printed in a font of standard size, the string of letters would traverse a thousand miles. If the DNA in a human body were to be aligned in a single row, it would reach not just to the moon, but to 3,000 celestial spheres equidistant from the Earth.

In nature, life is never solitary. The essence of ecology is connection; the natural world is a web of complex relationships that transform individual species into elements of a whole, much as musical notes become meaningful when brought together as a symphony.



Ferns brush against a mossy branch in the old-growth forests of western Vancouver Island. MELISSA RENWICK/THE GLOBE AND MAIL

Take as but one example – for any biome will do – the old-growth forests on the west coast of Vancouver Island, homeland of the Nuu-chah-nulth First Nation. The trunk of a western hemlock tree supports branches festooned with as many as 70 million needles, all capturing the light of the sun. Pileated woodpeckers make their homes in the hollows of snags. Marbled murrelet birds nest in the moss, while rufous hummingbirds return each spring, their migrations timed to coincide with the flowering of salmonberries. Frogs with tails dwell in the forest streams, alongside lungless salamanders that absorb oxygen through their skin.

Step onto the forest floor and beneath your boot will be nearly 300 miles of mycelia – fungal filaments that spread nutrients through the soil, pathways for chemical messengers that allow forest trees to communicate, as if a mother to a child. A patch of ground at your feet, a square metre of earth, supports some 2,000 earthworms, 40,000 insects, 120,000 mites, 120,000,000 nematodes (roundworms) and millions upon millions of protozoa and bacteria, all alive, moving through the soil, feeding, digesting, reproducing and dying.

Just as ecosystems, in their infinite complexities, remain mysterious, there is not a single species that science can claim to fully understand. Though roughly two million species have been taxonomically classified, most forms of life have yet to be named. Botanists alone discover 2,000 new species of plants every year. And yet, on every continent and across all the oceans, scientific efforts to catalogue creation cannot begin to keep pace with the speed at which we are destroying it.

Between 1600 and 1900, according to Wilson's estimates, about 75 species disappeared as a result of human activities. Since 1960, extinction has claimed upward of a thousand species a year. Wilson went to his death knowing that in the last decades of his life, a million species may have been lost, with an extinction event occurring every 13 minutes of every day for 25 years.

In the past century, agriculture has spread like a cancer, consuming nearly 75 per cent of the terrestrial surface of the planet. Industrial fishing fleets have scoured the seas. Primary forests (often referred to as old-growth forests) from the Amazon to New Guinea, Borneo to the boreal, have been cut and torched, transformed into fields, plantations and wastelands. In Madagascar, where more than 90 per cent of the native animal species are found nowhere else, less than 7 per cent of the original forest remains. The Atlantic forests of Brazil,

another centre of high endemism (referring to species found in a singular location on Earth), have been reduced to 2 per cent of their original extent.





Dark days for forests in 2022: Fires burn in Brazil's Amazonas state; wood is piled up at a commercial logging facility near Fort McMurray, Alta.; a farmer chops wood in Ankazobe, Madagascar, after the forest was burned for fuel and agriculture. EDMAR BARROS/AP; ED JONES/AFP VIA GETTY IMAGES; ALEXANDER JOE/AP

We are living through what many scientists have called the “sixth great extinction,” and the first to be caused exclusively by our species. But there is an important distinction to be made. Extinction, along with climate change, threatens all of humanity – but neither was caused by humanity as a whole. Instead, they came about as a consequence of a particular worldview, relatively new to the human experience and not shared by the vast majority of the peoples of the world. Understanding this dynamic is essential; it is the key that opens new realms of possibilities, generating the promise, in the words of Father Thomas Berry, of a new “dream of the Earth.”

All cultures are myopic, loyal to their own interpretations of reality. The names of many Indigenous societies translate literally to “the people,” the implication being that they, alone, count. Western society is culturally myopic as well, often forgetting that it represents not the authoritative apogee of civilization, but merely a contemporary worldview, and that modernity, as we conceive it, is but an expression of cultural values rooted in our history.

In our quest for personal freedom, we in the European tradition liberated the human mind from the tyranny of absolute faith, even as we freed the individual from the collective, which was the sociological equivalent of splitting the atom. In doing so, we abandoned our intuitions and turned away from myth, magic, mysticism and, perhaps most importantly, metaphor. The universe, declared René Descartes in the 17th century, was composed only of “mind and mechanism.” With a single phrase, all sentient creatures, aside from human beings, were devitalized, as was the Earth itself.

“Science,” as Saul Bellow wrote, “made a house cleaning of belief.” Phenomena that could not be positively observed and measured could not exist. The triumph of secular materialism became the conceit of modernity. The notion that land could have anima, that the flight of a hawk might have meaning, that beliefs of the spirit could have true resonance, was ridiculed, dismissed as ridiculous.

More significantly, the reduction of the world to a mechanism, with nature but an obstacle to overcome, a resource to be exploited, has in good measure determined the manner in which our cultural tradition has blindly interacted with a living planet.

As a boy, I was raised to believe that the coastal rain forests of British Columbia existed to be cut. This was the essence of the ideology of scientific forestry that I studied in school and practised in the woods as a logger. This perspective was profoundly different from those of the First Nations who have been living on Vancouver Island since long before European contact, and are still there today. If I was sent into the forest to cut the trees down, a Kwakwaka'wakw youth of similar age was traditionally dispatched during his Hamatsa initiation into those same forests to confront Huxwhukw and the Crooked Beak of Heaven, cannibal spirits living at the north end of the world, before returning triumphantly to the Big House, thus affirming the moral order of the world.



A forest defender searches the woods between Fairy Creek and Central Walbran on Vancouver Island. CHAD HIPOLITO/THE GLOBE AND MAIL

The point is not to suggest which perspective is right or wrong. Is a forest mere cellulose and raw material, or is it truly the domain of the spirits? Is a mountain a sacred place? Does a river really follow the ancestral path of an anaconda? Who is to say? Ultimately, these are not the important questions. What matters is the potency of a belief, the manner in which a conviction plays out in the day-to-day lives of a people, for in a very real sense this determines the ecological footprint of a culture, the impact that any society has on its environment.

A child raised to believe that a mountain is the abode of a protective deity will be a profoundly different human being from one brought up to believe that a mountain is an inert mass of rock ready to be mined. A Kwakwaka'wakw boy raised to revere the coastal forests as the realm of spirit beings will be a different person from a white Canadian child taught to believe that such forests are destined to be logged. The full measure of a culture embraces in both the actions of a people and the quality of their aspirations, the nature of the metaphors that propel them onward.

Herein, perhaps, lies the essence of the relationship between many Indigenous peoples and the natural world. Whether it be the Inuit in the Arctic, the Penan in the forests of Borneo, or the Mandjildjara in the deserts of Western Australia, through time and ritual these cultures, like so many others, have forged a relationship with the Earth that is based not only on deep attachment to the land but also on a far more subtle intuition.

Mountains, rivers and flora are not perceived as being inanimate, as mere props on a stage upon which the human drama unfolds. For these societies, the land is alive, a dynamic force to be embraced and transformed by the human imagination. Reciprocity, as opposed to extraction, is the norm; just as the Earth yields its bounty to people, so humans must pledge their fidelity to the Earth. The ethnographic record confirms that this is not wishful rhetoric; it's the actual way in which most Indigenous cultures have lived for all of their histories.

The most profound cultural insight of the Barasana and Makuna, for example, whose lives unfold in the forests of the Colombian Amazon, is the realization that plants and animals are but people in another dimension of reality. There is no separation between nature and culture. Without the forest and the rivers, humans would perish. But without people, the natural world would have no order or meaning. All would be chaos.

Maintaining the flow of generative energy, fomenting reciprocity among all forms of life, is the duty of the shaman, who is neither priest nor physician. He is a diplomat in constant dialogue with the spirit realm, with all the responsibilities of a nuclear engineer who must, if necessary, enter the heart of the reactor and reprogram the world. Shamanic sanctions and cosmology inform what is essentially a land management plan inspired by myth, with very real consequences both in terms of the way people live and the effect they have on their environment.



Arhuaco people speak at Colombia's foreign-affairs ministry on Dec. 2. JUAN BARRETO/AFP VIA GETTY IMAGES

To this day, the Kogui, Wiwa and Arhuacos – living in the mountains of Sierra Nevada de Santa Marta, which soar above the Caribbean coast of Colombia – remain true to their ancient laws: the moral ecological and divine dictates of the Great Mother, the Madre Creadora. In their cosmic scheme, people are vital, for it is only through the human heart and imagination that the Madre Creadora may become manifest. For the people of the Sierra Nevada, humans are not the problem but the solution. They call themselves the Elder Brothers. We who threaten the Earth through our ignorance of the sacred law are dismissed as the Younger Brothers. They believe and acknowledge explicitly that they are the guardians of the world, that their prayers and rituals literally maintain the cosmic and ecological balance of the planet. For generations, they have watched as outsiders have violated the Madre Creadora, tearing down the forests that are the skin and fabric of her body and poisoning Colombia's rivers – the actual veins and arteries of her life.

The Arhuacos make no distinction between the water found within the human body and what exists outside it. They see a direct relationship between urine, blood, saliva, tears and the water of a river, lake, wetland or lagoon. And in this, they are undoubtedly correct. Humans are born of water, a cocoon of comfort in a mother's womb. As infants, our bodies are almost exclusively liquid. Even as adults, only a third of our being has solidity. Compress our bones, ligaments, muscles and sinew, extract the platelets and cells from our blood, and the rest of us – nearly two-thirds of our weight – stripped clean and rinsed, would flow as easily as a river to the sea.

The first peoples of Australia are not merely attached to the Earth, they are essential to its existence. Without the land, they would die. But without the people and their rituals, the Earth would also wither. In the Aboriginal universe, there is no past, present or future. In not one of the hundreds of dialects spoken at the time of European contact was there a word for "time." There is no notion of linear progression, no goal of improvement, no idealization of the possibility of change. To the contrary, stasis, constancy, balance and consistency are the ideals. Humanity's obligation is not to improve upon nature, but to sustain the world precisely as it was at the moment of creation.



Indigenous Australians and allies march in Sydney on Sept. 22, the country's national day of mourning for Queen Elizabeth II. JAIMI JOY/REUTERS

Imagine if all of Western intellectual and scientific passion had focused from the beginning of time on keeping the Garden of Eden precisely as it was when Adam and Eve had their fateful conversation. Clearly, had our species as a whole followed the ways of the Aborigines, we would not have put a man on the moon. But, on the other hand, had their convictions become a universal devotion, we would not be contemplating today the consequences of industrial processes that by any scientific definition threaten the very life supports of the planet.

In northern British Columbia, Alex Jack, a Gitxsan elder who passed away in 1999, was 43 years old before he had sustained contact with the settler society. He did not come from a tradition of literacy. His soul had not been crushed in the residential school system. He was a hunter, and his vocabulary was inspired by the sounds of the wild. Just as we can hear the voice of a character when we read a novel, he could hear the voices of animals. When Alex told a story, he did so in a way that the listener witnessed and experienced the essence of the tale, entering the narrative and becoming transfixed by all the syllables of nature. Every telling was a moment of renewal, a chance to engage in the dance of the universe.

Alex never spoke ill of the wind. When he hunted he spoke to the prey by name with praise and admiration. His grandmother was Cree, possessed of the medicine power, certain that language had been a gift to humans from the animals. As a Dakelh (also known as Carrier) elder told the Canadian anthropologist Diamond Jenness: “We know what the animals do, what are their needs. We were taught by the animals themselves. The priests say we lie but we know better. The white man writes everything down in a book so that it will not be forgotten, but our ancestors married animals, learned all their ways and passed on this knowledge from one generation to another.”

That Indigenous voices have been long ignored, their profound beliefs dismissed or ridiculed, is disturbing but hardly surprising. Settlement was never about stewardship. The devastation of the American landscape in the 19th century gave rise to a conservation movement that from inception considered people – Indigenous people in particular – to be part of the problem. Teddy Roosevelt, inspired by the ethic of John Muir, founder of the Sierra Club, conceived national parks as cathedrals of nature, wilderness monuments unblemished by humans. Just as the first colonists anointed the New World terra nullius (land belonging to no one, before proceeding through slaughter to make it so) Roosevelt and Muir called for the expulsion of any native living within the boundaries of their newly minted “parks.” Roosevelt regarded Indigenous peoples as a pestilence to be removed from the body of America. Muir was hardly more charitable as he lobbied for the removal of the Ahwahnechee from Yosemite.



Tadodaho Sid Hill, Chief of the Onondaga Nation, sits beside Mr. Trudeau at COP15. CHRISTINNE MUSCHI/REUTERS

In Montreal at COP15, Indigenous voices will be heard. Not as vestigial icons having at best a vague advisory role to play in contemporary life, but rather as nations very much alive and fighting not only for their cultural survival but also to take part in a global dialogue that will define the future of life on Earth. Eighty per cent of the world's remaining biodiversity is found on lands primarily inhabited by Indigenous peoples. Ninety per cent of the protected areas established in Canada in the past two decades have involved Indigenous partnerships and leadership.

Indigenous peoples do not stand in the way of conservation. On the contrary, it is only with their support and engagement that we have any chance of achieving a key goal of COP15: protection for 30 per cent of the land and ocean surface of the planet by 2030. Their presence and authority remind us that there are indeed alternatives – other ways of orienting human beings in social, spiritual and ecological spaces. This is not to suggest a return to a non-industrial past, or that any culture be asked to forfeit its right to benefit from the genius of technology. It is rather to draw inspiration and comfort from the fact that the path we have taken is not the only one available, that our destiny, therefore, is not indelibly written in a set of choices that demonstrably and scientifically have proven not to be wise. By their very existence, the diverse cultures of the world bear witness to the folly of those who say that we cannot change – as we all know we must – the fundamental manner in which we inhabit this planet.

In the forests of Borneo, a Penan elder once asked me whether it was true that my people had gone to the moon, only to return with nothing but rocks and dust. Just rocks, I confirmed, 842 pounds altogether. My new friend, a nomadic hunter who kindled fire with flint, was on to something.

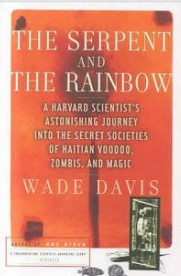
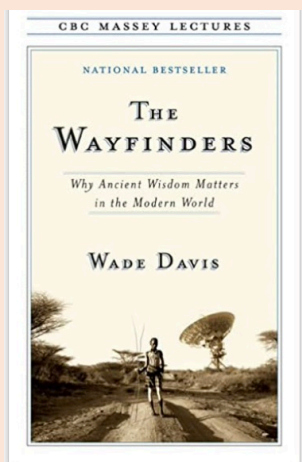
Think about it. We spend billions of dollars sending probes into space to search for water on Mars, or ice on the moons of Jupiter, while spending even more on industrial schemes here at home that compromise our rivers and lakes – the sources of fresh water, so rare in the solar system, that allow us to live. If a space mission were to find even the slightest evidence of life on some distant orb, the news would rock the world. Imagine discovering a blue planet teeming with millions of species. And yet, that's what we already have, right where we live: an Eden never to be replicated anywhere else in the universe.

On one of our many trips together, Tom Lovejoy quipped that anyone who thinks the economy trumps ecology should try counting their money with a

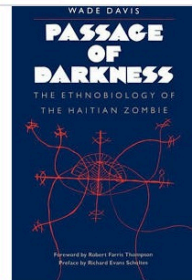
plastic bag tied tight over their head. I laughed, only to remind him of a strange cultural exchange I had been a small part of between Qatar and Colombia, wherein three Qatari princes went to visit the Amazon, and three Barasana shamans went to Qatar. I was there when the shamans arrived in Doha, utterly bewildered. That afternoon, as we went for an outing in the desert with our hosts, their eyes scanned the horizon for any signs of life. Their faces saddened in disbelief. No forests, no rivers, not a wild bird to be seen. When they returned to Bogota, one of their sponsors asked about their time abroad. “It was terrible,” one of them replied. “More terrible than terrible. Those people over there are so poor. All they’ve got is money.”

<https://www.theglobeandmail.com/opinion/article-indigenous-cultures-hold-the-keys-to-sustaining-our-planet-at-cop15/>

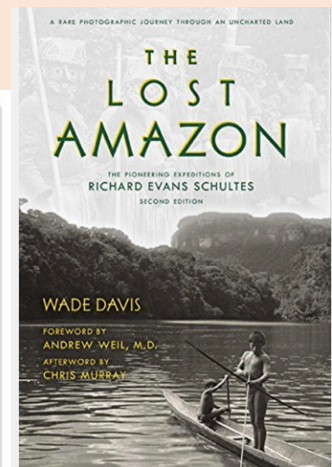
Few have roamed the Earth as widely, with as much breadth and depth of observation and participation, and eloquence of description, as Wade Davis, now back “home” at UBC.



The Serpent and the Rainbow by...



Passage Of Darkness by Wade...



Imagine the first Europeans to settle in Australia encountering the Aborigine, almost-naked, fly-ridden, wild hair and weathered skin, strange-eyed, looking half-starved without a roof over their heads or “a pot to p_ss in” (what the “poor house” Englishmen dreaded and had fled.) That the Aborigine lived immersed in “The Dream Time” more than temporal time—this made perfect sense in this context—meant nothing to Whites determined to make life into something different. The incredible achievements of Indigenous peoples living in extreme environments—Outback or Arctic—yet culturally and spiritually fully human, went contemptuously unrecognized beneath the outer poverty. TJB