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Animism in the Anthropocene

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Abstract

Following upon Bruno Latour's famous injunction that 'we have never been modern', Graham Harvey has recently added that perhaps 'we have always been animists.' With the massive ecosystem destruction that is underway in the Anthropocene, this realization could represent a necessary paradigm shift to address anthropogenic climate change. If the expropriation and destruction intrinsic to the modern division between a world of cultural values attributed exclusively to humans and a world of inanimate matter devoid of value has become untenable, then showing the illusory nature of this divide should open the way for a transvaluation of values capable of developing an animistic relational ontology to replace the dualisms of the Western paradigm. Developing the four traits typical of animistic cultures – personhood, relationality, location and ontological boundary crossing – a postmodern 'machinic animism' is defended as a new ecological paradigm for the Anthropocene.

Keyword

animism, Anthropocene, Félix Guattari, indigenous ecology, Bruno Latour, machinic animism, Viveiros de Castro

> *Je suis devenu un peu animiste, il m'arrive de dialoguer avec les oiseaux*. (Descola and Palsson, 1996)

I Introduction

In a play on Bruno Latour's famously destabilizing claim that 'we have never been modern', Professor of Religious Studies Graham Harvey has recently added 'but perhaps we have always been animists' (Harvey, 2014: 11). Indeed, these two comments are more closely linked than one might at first infer. It was the anthropology of non-Western cultures

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that inspired Latour's intellectual journey and his famous claim, since it is precisely this discipline that treats the empirical, the social and the linguistic as a continuous whole. It is through studying comparative anthropology that Latour was able to understand the nature of technology and undermine the dualities of subject and object, nature and culture,[1] natural science and social science. Because we cannot access the motivations and goals within other agents, modernity typically separated the human as active and the rest of matter as acted upon. Showing how a-modern cultures had no trouble attributing agency to objects, subjects, spirits and tools helped Latour to separate agency from its supposed cause in a uniquely human interiority characterized by intentionality and purposive action, and thus to look more objectively at the forms of agency at work in the world. It is time, Latour famously pointed out in in his book *We Have Never Been Modern*, to see ourselves the way we are able to see the natives of non-modern cultures, and to send ethnologists to study the modern tribe of 'scientific researchers or engineers'. The ethnologist (Latour himself) would notice that his modern informants adamantly refused to see their projections onto nature and would therefore conclude that 'For social reasons ... Western scientists require a dualist attitude' (Latour, 1993: 102). If Western scientists assumed one nature and many different cultures, non-modern peoples take for granted one culture and many different natures. This ideological reversal represents what Latour calls a 'bomb with the potential to explode the whole implicit philosophy so dominant in most ethnographers' interpretation of their material' (see Turner, 2009: 27). It is this bomb that we will be seeking to detonate by defending an animist ontology in which agency is attributed to all of life.

But if 'we have always been animists' then objectifying the world from the position of a subject was always merely a projection, a reification. Latour's a-modernism thus represents a 'return of the repressed' since we are now forced to acknowledge what was pushed below the surface to constitute what he calls 'the unconscious of the moderns' (Latour, 1993: 37). Indeed, studies in genetic and developmental psychology have shown that animism is a natural predisposition in the human being, unlearned only through a long process of socialization.[2] According to Kate Wright, the repression of animism in modern thinking represents a major pathology. An animistic renaissance could thus function as an alternative to and a cure for the divisions and dichotomies founded in the human exceptionalism at the core of modern values. It constitutes what Wright (2014: 278) calls:

> an attempt to address the systemic pathology of a species disconnected from the conditions of its world. Becoming-with offers a metaphysics grounded in connection, challenging delusions of

> separation – the erroneous belief that it is somehow possible to exempt ourselves from Earth's ecological community.

If animism has thus been repressed and unlearned, this is largely due to the modern categorization of animism as belonging to the primitive past of indigenous populations,[3] populations that would eventually accept the '*mission civilisatrice*' of the West and the forward march of progress (Rosengren, 2018). Anthropologist Marisol de la Cadena comments:

> A century ago, the idea of indigenous people as an active force in the contemporary world was unthinkable. According to most Western thinkers, native societies belonged to an earlier, inferior stage of human history doomed to extinction by the forward march of progress and history ... History has not turned out that way at all. Many tribal societies have indeed been wiped out by war, disease, exploitation, and cultural assimilation over these last centuries. But far from vanishing as the confident predictions once had it, native peoples today show demographic strength, even growth. (De la Cadena and Starn, 2007: 1)

Though there are still diehard modernists who continue to identify animism with the past, such views testify to what Gisli Palsson (1996: 69) has called 'environmental orientalism', the hubristic attitude of colonizers responsible for the desecration and oppression of peoples and ecosystems across the world. Equating animistic cultures with nature, such moderns saw animists as virtually sub-human, since they assigned social roles to the non-human world. Along the arrow of progress, such primitive peoples could be subjugated and expropriated just as natural resources were, or else educated to recognize the separation of nature from culture, and thereby enter the domain of humanity proper. Anselme Franke (2012: 169) explains how animism functioned for modernity as what he calls a 'negative mirror image' in order to construct its identity over and against an identity it could relegate to the primitive past.

In her book *Environmental Culture: The Ecological Crisis of Reason* (2001), environmental philosopher Val Plumwood calls this extirpation a 'remoteness' promoted by 'sado-dispassionate science', which uses an 'ideology of disengagement to wall itself off from ethics' (p. 53). Plumwood traces a continuous line between such remoteness from nature and a similar remoteness the male elite established between themselves and women, slaves and colonized others, who were deemed lacking in human reason, and thus part of exploitable nature. She writes:

> Many regimes, and many oppressions have since lent their colour to this hegemonic imaginary of reason and nature. In patriarchal

> thought, men represent reason and rightfully control the world as well as the dangerous emotionality, irrationality and reproductivity of women, who are 'closer to nature'. In the colonizing, racial supremacist version, it is inferior and 'barbarian' others who are closer to nature, an earlier and more primitive stage of our own rational civilization, who receive only benefits when more advanced masters of reason, the colonisers, come to take away their land to put it to proper, rational use. (p. 21)

It thus becomes impossible to separate anthropocentrism from other problematic centrisms, such as androcentrism, ethnocentrism and eurocentrism. All of these centrisms use a binary structure to exclude human and non-human others by isolating values to the realm of human reason alone. If such a model was useful for the Western conquest of the rest of the world and its expropriation of peoples and resources to produce what sociologist Jason Moore calls 'Cheap Nature' (low-cost food, labor-power, energy, and raw materials) (Moore, 2015: 53), in the age of the Anthropocene it is revealing itself to be nothing less than suicidal.

But in our postcolonial and emancipatory age, the tables have turned, and 'new materialisms' (see Conty, 2018) and 'new animisms' (Halbmayer, 2012: 9) are gaining recognition as we do our best to repress and unlearn Cartesian dualities in order to heal our ailing planet. Anthropologist Viveiros de Castro expresses this reversal well:

> But now, in these poststructuralist, ecologically-minded, animal-rights-concerned times, everything has changed ... Instead of having to prove that they are humans because they distinguish themselves from animals, we now have to recognize how in-human we are for opposing humans to animals in a way they never did: for them nature and culture are part of the same socio-cosmic field. Not only would Amerindians put a wide berth between themselves and the great Cartesian divide, which separated humanity from animality, but their views anticipate the fundamental lessons of ecology which we are only now in a position to assimilate ... Formerly, it had been necessary to combat the assimilation of the savage mind to narcissistic animism, the infantile stage of naturalism ... now, as we have seen, animism is attributed once more to savages, but this time it is proclaimed ... as the correct (or at least 'valid') recognition of the universal admixture of subjects and objects, humans and nonhumans, to which we modern Westerners have been blind, because of our foolish, nay, sinful habit of thinking in dichotomies. (Viveiros de Castro, 2015: 240–1)

Latour himself is guilty of such a modernist bias in his book *Facing Gaia* (2013), where he insinuates that indigenous populations do not really respect nature, but rather their small size and inability to use technology to manipulate matter gives the impression of ecological respect that would better be understood as redundancy in terms of numbers and power. Latour writes:

> Maybe, if only we could be sure that what passes for a respect for the earth is not due to their small numbers and to the relative weakness of their technology. None of those so called 'traditional' people, the wisdom of which we often admire, is prepared to scale up their ways of life to the size of the giant technical metropolises in which are now corralled more than half of the human race. (p. 128)

But there are 370 million indigenous people alive today and they neither face the threat of disappearing due to modernization nor, when given the chance, have they chosen to 'scale up their ways' in mimickry of 'technical metropolises'. Anthropologist John Bodley makes clear that Westerners have become so ethnocentric and arrogant that they cannot imagine another culture having value for its members, and readily assume that such members desire Western modernization. But, if we were to ask the question: 'How do autonomous tribal peoples feel about becoming participants in the progress of commercial civilization?', we would have to acknowledge that tribal peoples:

> would rather pursue their own form of the good life undisturbed ... Indeed, it can perhaps be assumed that people in any autonomous, self-reliant culture would prefer to be left alone. Left to their own devices, tribal peoples are unlikely to volunteer for civilization or acculturation. [Instead], acculturation has always been a matter of conquest ... refugees from the foundering groups may adopt the standards of the more potent society in order to survive as individuals. But these are conscripts of civilization, not volunteers. (Bodley, 2014: 33–4)

Although today anthropologists speak of 'indigenous modernities' to reflect the fact that indigenous communities have adapted to modern tools, nation state sovereignty and capitalist economies in multifaceted ways, they continue to reject modern capitalist resource extraction and the placing of profit over shared kinship values intrinsic to animism. As anthropologist Dan Rosengren explains:

> Indigenous people have not succumbed to the temptations of the West; nor have they surrendered to the bliss of development and the

> capitalist market system that Westerners once thought inevitable ... On the contrary, they have now, at the beginning of the new millennium, achieved a position from which they challenge the powers and 'truths' of the conquerors not as minorities or locals or any other special interest group but as indigenous people ... From the refusal to accept the dictates of modern Western hegemony emerge visions of the world and its future that are not only in opposition to Western modernity but that also present alternatives that become increasingly attractive as the consequences of Western modernity becomes evident. (Rosengren, 2018: 98–9)

Now that we have become aware that the problems of overconsumption, accumulation, commodification and appropriation lie with technologically advanced peoples, instead of forcing indigenous peoples to modernize, we should be pressuring modern societies to reduce energy consumption, de-grow their economies and, perhaps even, learn to re-inhabit localities and re-form communities. Danowski and Viveiros de Castro (2017: 95–96) write:

> It seems to us that Latour fails to consider the possibility that the generally small populations and 'relatively weak' technologies of indigenous peoples and so many other sociopolitical minorities of the earth could become a crucial advantage and resource in a post-catastrophic time, or, if one wishes, in a permanently diminished human world. Our author does not seem prepared, himself, to accept the highly likely possibility that we – the people of the (capitalist) Core, the overweight, mediatically controlled, psychopharmacologically stabilized automata of technologically 'advanced' societies that are highly dependent on a monumental consumption (or rather, waste) of energy – that we, when the chips are down, might be the ones who will have to scale down our precious ways of living. As a matter of fact, if someone needs 'to be prepared' for something, that someone is us, the ones who are crowded together in 'giant technical metropolises'.

Since we now know that the West has never been modern, and no society has ever been primitive, anthropology can cease to function according to the illusory dichotomies of modernity and accept its new mission, 'that of being the theory-practice of the permanent decolonization of thought' (Viveiros de Castro, 2009: 4).

The irony of such a return of the repressed has not been lost on anthropologist Alf Hornborg, when he asks 'how shall we be able to reintroduce morality into our dealings with our non-human

environment, now that we have invested centuries of training and discourse into convincing ourselves that Nature lays beyond the reach of moral concerns?' (Hornborg, 2013: 30). Might such a reintroduction of morality entail a 'return' of sorts to pre-modern ways of thinking? If the West has always denied reciprocity and kinship with the natural world, is adopting such animistic views and attributing agency to the entire ecosphere feasible? If the illusory nature of the divide between nature and culture has finally been brought to light, and nature can no longer be made cheap, indigenous populations who never adhered to this divide in the first place can inspire an ontology not founded in human exceptionalism. Replacing the asymmetrical relation between nature and culture currently in place with a symmetrical one will require enlarging the scope of our values and thus of culture to the entire bio-sphere, and it will also require understanding the human species as an interdependent part of evolutionary natural processes. If Cartesian dualism has thus become implausible, it is perhaps time we sought to understand animism both anthropologically in terms of the dominant way of life of indigenous peoples and philosophically in terms of a new conceptual paradigm for the Anthropocene.[4] After using philosopher Bruno Latour's understanding of modernity as a general framework for a re-evaluation of animism in the introduction, Section II will develop anthropologist Viveiros de Castro's interpretation of perspectivism to describe the ontological presuppositions of indigenous animist societies, while Section III will elucidate philosopher Félix Guattari's notion of 'machinic animism' as a new ideology for the Anthropocene.

II Indigenous Animism

As a conceptual system, animism entails four interrelated ideas: personhood, relationality, location and ontological boundary crossing. Graham Harvey (2006: xi) defines animism as the belief 'that the world is full of persons, only some of whom are human, and that life is always lived in relationship to others'. When constituted in terms of relationality, personhood is no longer the exclusive property of human beings. All animals are persons, meaning they all share consciousness and soul. In the terms of anthropologist Viveiros de Castro, to be a person 'is to be conscious and self-conscious, to act intentionally, with agency, and to communicate intelligently and deliberately' (Viveiros de Castro, 2017: 187). Thus Descartes' narcissistic motto, 'I think therefore I am', needs to be replaced in animistic cultures by the far more inclusive motto, 'it exists, therefore it thinks' (Viveiros de Castro, 2015: 187). All material forms are ensouled, and thus, in the words of Viveiros de Castro, 'subjectivity is not an exclusively human property, but the basis of the real' (cited in Melitopoulos and Lazzarato, 2012: 48).

According to this first characteristic, personhood is redistributed from the exclusively human domain to the entire bio-sphere (see Mbembe, 2017). Persons, bears and koalas, ants and nematodes all have their own complex cultures because nature is culture all the way down. Indeed, the idea of nature does not exist amongst indigenous peoples, for the entire environment is filled with cultural meanings invested in it by indigenous tribes. Anthropologist Deborah Bird Rose explains as follows:

> The evidence of life in action shows us that other beings have and follow their own ways. They have their own foods, foraging methods, forms of sociality and seasonality; they have their own languages and their own ceremonies. According to one Elder: 'birds got ceremony of their own – brolga, turkey, crow, hawk, white and black cockatoo – all got ceremony, women's side, men's side ... everything. (Bird Rose, 2013: 100)

Since all animals testify to personhood, what differs is embodiment, since different shapes, sizes, limbs and sensory organs embody consciousness or soulhood in different ways. Rather than supporting the mind/body dualism of modernity, such an animist attribution of subjectivity to all agents transforms the meaning of immanence, for 'subjectivity' and 'thinking' are not transcendent categories in animism but rather inhere in material bodies that transversally communicate with each other and co-constitute each other. As such, all entities, not just humans, have purposive agency and express themselves and, through enunciating, assemble and dissemble subjectivities and collectivities. Learning to recognize persons can thus cultivate an appreciation for the ways they reveal themselves and communicate with us but can also, according to anthropologists Danny Naveh and Nurit Bird-David, 'counteract the current destructive tendency to understand and engage with things/persons according to a utilitarian understanding' (Naveh and Bird-David, 2014: 37).

In an ironic twist to Anthropocene discourse, Viveiros de Castro has taken the study of animism a step further in his research on Amazonian tribes, when he claims that not only are all living beings subjects, but they are human subjects.[5] Since being human entails placing oneself at the centre of the world and interpreting the world in terms of one's own bodily form and needs, all animals take themselves to be human. For the jaguar, as the Runa people put it, blood is manioc beer (Kohn, 2013: 27). It is thus not nature that all entities share but rather humanity as the ability to interpret the world from a subjective point of view, for, as Viveiro de Castro puts it, 'the basis of humans and non-humans is humanity' (cited in Melitopoulos and Lazzarato, 2012: 48). Describing the Raramuri peoples in the Eastern Sierra Madres of Chihuahua,

Mexico, indigenous scholar Enrique Salmon calls this shared humanity 'a kinship ecology', when all the natural elements of an ecosystem are treated as kin. He explains as follows:

> In a previous world, people were part plant. When the Raramuri emerged into this world, many of those plants followed. They live today as humans of a different form. Peyote, datura, maize, morning glory, brazilwood, coyotes, crows, bears, and deer are all humans. Raramuri feel related to these life-forms much as Euroamericans feel related to cousins and siblings (Levi 1993). (Salmon, 2000: 1328–9)

It is this humanity as common ground that allows for a shared politics, because in enunciating, in expressing its humanity, each human is able to think itself beyond the boundary of the unitary and enclosed self of the Western tradition into a shared world. To refuse 'to see as' is thus a refutation of humanity, for it is precisely this ability that is humanity's defining trait. Viveiros de Castro writes:

> Typically, in normal conditions, humans see humans as humans, animals as animals and spirits (if they see them) as spirits; however animals (predators) and spirits see humans as animals (as prey) to the same extent that animals (as prey) see humans as spirits or as animals (predators). By the same token, animals and spirits see themselves as humans: they perceive themselves as (or become) anthropomorphic beings when they are in their own houses or villages and they experience their own habits and characteristics in the form of culture – they see their food as human food (jaguars see blood as manioc beer, vultures see the maggots in rotting meat as grilled fish etc.), they see their bodily attributes (fur, feathers, claws, beaks etc.) as body decorations or cultural instruments, they see the social system as organized in the same way as human institutions are (with chiefs, shamans, ceremonies, exogamous moieties etc.). (cited in Harvey, 2005: 470)

In such a worldview, humanity is both universal and subjective, since each species sees itself as the centre of the world and other species cannot occupy the deictic position of the 'I'. Yet each species knows that other species see themselves in a similar way, and thus all inter-relations are political, or function as what philosopher of science Isabelle Stengers (2002: 249) calls a 'cosmopolitics'. Politics cannot be limited to human beings as Plato's philosophy has bequeathed to us, but rather Stengers writes:

> should entertain the problematic togetherness of the many concrete, heterogeneous, enduring shapes of value . . . that compose actuality,

> thus including beings as disparate as 'neutrinos' (a part of the physicist's reality) and ancestors (a part of reality for those whose traditions have taught them to communicate with the dead). (p. 249)

Because human persons see peccaries as game, whilst for peccaries humans are dangerous predators, just as jaguars see human persons as game, and humans see jaguars as dangerous predators, all of these different perspectives must be taken into account when you live in a world that includes multiple desires and multiple intentions, multiple cultures and multiple modes of communication. 'It thus follows that every trans-specific interaction in Amerindian worlds is an international intrigue, a diplomatic negotiation, or a war operation that must be undertaken with maximum circumspection: cosmopolitics' (Danowski and Viveiros de Castro, 2017: 70–71).

For animists, such persons are defined relationally, our second trait, because they share their world with many other persons with whom they enter into complex forms of communication. Such a relational ontology entails that communication is always what Lévy-Bruhl called 'participation'. In a polis understood in a participatory framework, persons can never be understood in isolation and language is always dialogic. Because personhood is not understood in terms of ontological intrinsic essences, such relationality is essential for the constitution of a person.[6] As anthropologist Philippe Descola explains in reference to indigenous animist tribes in South America, 'the entities of which our universe is made have a meaning and identity solely through the relations that constitute them as such' (Descola and Palsson, 1996: 99). In a relational ontology, there is no way to justify intrinsic differences between nature and culture, us and them, since neither element has an intrinsic identity outside of its relation to alterity. In the words of anthropologist Anna Tsing, 'Human nature is an interspecies relationship' (Tsing, 2012: 144).

Persons exist only through their relations, because they are all dependent upon a shared ecosystem, or location, our third trait, that grounds and gives meaning to their communication. So all persons are relational, and all relations are situated, and the location determines the communication and thus the persons that depend upon it. A relational ontology is possible only because beings are immersed in specific and irreplaceable localities that allow specific beings, cultures and ecosystems to thrive. Harvey (2005: 186) explains how these concepts work together as follows:

> Animists' contributions to ecological thinking and acting are rooted in the firm insistence that not only is all life inescapably located and related, but also that the attempt to escape is at the root of much that is wrong with the world today. Animism's alternative promise is a celebratory engagement of embodied persons with a personal and sensual world.

Finally, the ability to cross ontological boundaries entails the ability to 'adopt the perspective of nonhuman subjectivities' in order to understand how they conceive of themselves as the centre of their own worlds. This ability, which is essential for empathy, and is wired into many animals via mirror neurons, allows a person to feel as, and think as, another. From the perspective of neurobiology, sharing intentional states is made possible because exactly the same neurons are activated in our brains when another person performs an action in front of us as when we perform the action ourselves (we have all experienced the spontaneous impulse to laugh when surrounded by laughter, and to sneeze when others sneeze). Political representation, as well as other forms of imaginative transference, develop out of this biological predisposition, making relationality constitutive of being human. 'Men, as social beings, live in a world that is humming with empathy, such that they permanently adopt, almost involuntarily, the perspective of others' (Breithaupt, 2009: 8).[7] Anthropologist Maurice Bloch is thus correct when he claims that 'the ability to ''read'' the mind of others' and thus to share intentionality is a biological trait of the human species correlated with the firing of mirror neurons in the F5 cortex, but he is wrong to isolate this capacity to the human species alone (Bloch, 2013). The sharing of intentionality with non-human others demonstrated in animist cultures has been widely corroborated by the science of ethology and the study of mirror neurons in other species (for animal cognition, see Bekoff et al., 2002, and the work on mirror neurons in chimpanzees and other apes, in Rizzolatti and Sinigaglia, 2008). John Zerzan (2012: 14–15) relates anthropologist Van der Post's astonishment when studying the bushmen in the Kalahari desert, who

> seemed to know what it actually felt like to be an elephant, a lion, an antelope, a steenbuck, a lizard, a striped mouse, mantis, baobab tree, yellow-crested cobra or starry-eyed amaryllis, to mention only a few of the brilliant multitudes through which they moved.

Although such a capacity is available to all beings to different degrees, those persons who master this ability to cross ontological boundaries are called shamans, the 'active interlocutors in transspecific dialogues' (Viveiros de Castro, 2005: 150).

Danowski and Viveiros de Castro (2017: 94) call such indigenous animists terrans and they claim that no matter how numerous (they cite 370 million indigenous peoples across 70 nations), such terrans will never replace the moderns, because they will never form a majority and become 'responsible for a hegemonic ideology that could control peoples'. That is not their role. Yet such peoples can launch what they call, citing Deleuze and Guattari, a 'resistance to the present' and create ' ''a new earth,'' the world to come' (p. 95). Danowski and Viveiros de Castro

understand such a project of 're-becoming indigenous' (p. 122) as one of 'uncivilization', characterized by 'a technology of slowing down, a dis-economy no longer mesmerized by the hallucination of continuous growth, a cultural insurrection (if the expression may be pardoned) against the zombiefication of the citizen–consumer' (pp. 97–8). Rather than testifying to backwardness, such a re-becoming indigenous delineates the possible 'subsistence of the future' (p. 123). Only such a new people can create a new world from the ruins we will have left them.

III Machinic Animism

What might it mean then, for us moderns, to re-become indigenous and become 'uncivilized'? Should we prepare darts for our blowguns and set up camp in a yurt or earthship in abandoned industrial zones or join the Zones à Défendre in France or the Earth Liberation Army elsewhere? This is certainly one way. But Westerners are also re-becoming indigenous in more subtle ways. If Westerners attribute personhood to their domestic animals, they must learn to attribute personhood to other living organisms as well. Because many moderns lack phenomenological evidence of consciousness and agency in other animals due to their isolation from natural ecosystems, they may require scientific confirmation of the animist recognition of other animals as intentional, purposive agents. Such evidence is now readily available. Developments in ethology, cognitive science and behavioral psychology demonstrate the intelligence, tool-use, consciousness and self-consciousness of many other animals (De Waal; Bekoff; Korsgaard; Oliver; Corbey; Godfrey-Smith; Coppens; Narby). Studies have been published showing consciousness (Seth et al., 2005) and 'core emotions' (Panksepp, 2005) to be intrinsic to all mammals equipped with a thalamo-cortico complex, and recognizing amniotes and octopi as capable of simulation and expecting consequences has enlarged the scope of conscious beings from mammals to all amniotes (Cabanac et al., 2009) and cephalopods (Merker, 2005; Edelman et al., 2009).

For example, the *Cambridge Declaration on Consciousness*, published by Cambridge University in 2012, indicates that:

> the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.[8]

This study was followed in 2017 by an INRA report on 'Animal Consciousness' published by 16 scientists, which concludes that:

> Livestock species, such as poultry, pigs, and sheep, exhibit cognitive behaviours that seem to imply levels and contents of consciousness that until recently were considered exclusive to humans and to some primates. That is even more the case for fish and invertebrates that until recently were not even considered as sentient ... It is thus likely that what matters to animals is rather similar to what matters to humans. We believe that human sentience is the capacity to suffer and to feel empathy for the suffering of others, and deserves ethical recognition... Therefore, the same should apply to non-human beings...[9]

Similarly, a plethora of books on plant intelligence are now widely available, in books with titles such as *Plants as Persons*, *Plant Thinking*, *The Revolutionary Genius of Plants*, *The Language of Plants*, *The Imagination of Plants*, *The Hidden Life of Trees*, *How Forests Think*, all of which point to the 'repression of the living' typical of Western philosophy and science (Coccia, 2018: 24). Botanist Mathew Hall gives the following reasons for the moral consideration of plants:

> Close observation of plant life-history demonstrates that plants are communicative, relational beings — beings that influence and are influenced by their environment. They also reveal that plants have their own purposes, intricately connected with finding food and producing offspring. Like other living beings, plants attempt to maintain their own integrity in changing environmental conditions. Plants display intelligent behavior in order to maximize both their growth and the production of offspring. (Hall, 2011: 158)

This moral inclusion of plants was confirmed by the Federal Ethics Committee on Non-Human Biotechnology (ECNH), when it published a scientific study in 2008 ascertaining that humans do not have 'unrestricted power over plants. We may not use them just as we please', not only because 'we may influence or even destroy other players of the natural world, and so alter their relationships', but also because 'individual plants have an inherent worth'.[10]

Though Western culture is still locked inside an identity myth founded in intrinsic essential qualities, much science has gone into undermining such a view and showing, whether in physics (Einstein, Prigogine, Bohm, McDaniel, Jeans, Sherrington, Wright, Rensch, Walker, Cochran, Bohm, Dyson, Rohm and Hameroff), biology (Margulis, Midgley, Clarke, Kauffman, Agar, De Quincey), or politics (Sandel, Walzer, MacIntyre and Taylor), that humans and all other life-forms are relational, their identities dependent upon the many agencies external to them. If most Westerners live in metropolises and virtual worlds that

alienate them from the ecosystems that sustain them, the importance of locality is the subject of a good deal of recent research, and many local movements are organizing themselves to defend the habitus and local solidarity over and against international corporations and states that seek shareholder or national profits over democratic cooperation and ecological renewal. Indeed, indigenous sustainability methods for biodiversity preservation have been introduced and discussed by the Intergovernmental Panel on Climate Change (IPCC) as well as Assessment Reports and the Convention on Biological Diversity (CBD) (see Mazzochi, 2020: 3). Many scholars have also been seeking to include Traditional Ecological Knowledge (TEK) in their academic research and promote indigenous sustainable practices such as traditional burning techniques, rotation of hunting areas, shifting cultivation and terrace farming (see, for instance, Cajete, 2000; Haila, 2000; Mazzochi, 2020; McGregor, 2004; Pierotti and Wildcat, 2000; Salmon, 2000; Sundberg, 2014).

As the natural sciences seek to prove animist presuppositions scientifically, and moderns come to realize that sentience, consciousness and culture are intrinsic to all of life, perhaps an animist ontology will become the new normal. But, in order for this to happen, the values of solidarity and kinship will need to replace economic competition and consumer satisfaction as the sole values of modern culture. In his book *The Three Ecologies* (2000), philosopher and psychoanalyst Félix Guattari expresses concern over this lack of solidarity in modern culture, and looks to animist cultures in order to cultivate kinship and develop a 'transversal' response he calls ecosophy.[11] In a passage written in 1989 that has come to sound almost eerie, he wrote:

> Now more than ever, nature cannot be separated from culture; in order to comprehend the interactions between ecosystems, the mechanosphere and the social and individual Universes of reference, we must learn to think 'transversally.' Just as monstrous and mutant algae invade the lagoon of Venice, so our television screens are populated, saturated, by degenerate images and statements. In the field of social ecology, men like Donald Trump are permitted to proliferate freely, like another species of algae, taking over entire districts of New York and Atlantic City ... How do we regain control of such an auto-destructive and potentially catastrophic situation? ... It is not only species that are going extinct but the words, phrases and gestures of human solidarity. (2000: 43–4)

Because indigenous peoples never objectified the non-human world, preferring to attribute subjectivity universally to all entities in order to

develop reciprocal and interdependent relations, Guattari (2000: 48) asks us to 'pass through animist thought' in order to develop a politics of nature in which subjectivation, and thus the political, inheres in all matter. By replacing behaviour with assemblage (*agencement*),[12] and conscious subjectivity with pre-conscious subjectivation, the world is constantly opening itself up to being politically reconfigured by human and non-human subjects in a shared world. Attributing spirit to all beings, like a Mexican *curandero* or a Bororo,[13] could help us, Guattari claims, to develop the solidarity that is so sorely lacking in the Anthropocene.

Rather than intrinsic essences and exclusive rationality, subjectivity is fluid, travelling from body to body by means of enunciation, or what Guattari called an a-signifying semiotics, whether gestural, aesthetic or linguistic. It is only when subjectivity is imprisoned within a dominant human form in order to further the ends of economic competition and state power that communication ceases and subjects lose their singularity and can no longer be transformed by their encounters with other subjects. 'We must ward off', Guattari (2000: 68) tells us, 'by every means possible, the entropic rise of a dominant subjectivity. Rather than remaining subject, in perpetuity, to the seductive efficiency of economic competition, we must reappropriate Universes of value.'

Understood in this light, we might surmise that modernity represents precisely such an entropic dominant subjectivity, caused by the rapid extermination of subjectivation as the possibility of becoming other and communicating otherwise. If such a reconsideration of humanity is to be taken seriously today, it will require the development of a transversal ecosophy, which is able to take into account the ways natures and cultures coincide and communicate, the many ways subjects become other to themselves through ontological trespassing. Guattari calls 'machinic animism' the ability of souls to reassemble and become other to themselves, and he sees the return of pre-Columbian polyvocal subjectivities as a fitting reversal of capitalist globalized unicity. He writes:

> And now it is Capital that is starting to shatter into animist and machinic polyvocity. Would it not be a fabulous reversal if the old aboriginal African subjectivities pre-Columbus became the ultimate recourse for the subjective reappropriation of machinic self-reference? These same Negroes, these same Indians, the same Oceanians many of whose ancestors chose death rather than submission to the ideals of power, slavery and the exchangism of Christianity and then capitalism? (Guattari, 2012: 15)

In this sense, 'machinic animism' can help us see the many ways that even today, and even in the West, we can reassemble our identities and cross ontological boundaries in order to 'see as another' today. Though we live in a world where the influence of the capitalist utilitarian system

has meant that students choose to study business instead of anthropology, engineering instead of philosophy, the humanistic disciplines are nonetheless built upon the capacity to 'see as other'. Indeed, not only theatre but reading itself, in the words of philosopher Frédéric Lordon (2016), 'is to leave the self'. We can practise such a transference through literature, for instance, and imagine ourselves as men or women, beggars or emperors, Maggie Tulliver or the Princesse de Clèves.[14] In this sense, studying the humanities can foster ontological boundary crossings similar to animistic traditions. Historian Dipesh Chakrabarty has claimed that:

> The questions of justice that follow from climate-change science require us to possess an ability that only the humanities can foster: the ability to see something from another person's point of view. The ability, in other words, 'to imagine sympathetically the predicament of another person'. (Chakrabarty, 2016: 378)

For Chakrabarty, a solution to the Anthropocene depends upon the ability to enter other embodiments and see the world from their perspective, an ability very similar to the ontological boundary crossing of animism.

We might indeed claim with novelist JM Coetzee that the humanities foster the inclusion of all other beings within humanity, just as indigenous animism does, and that such an inclusion is indeed constitutive of what it means to be human. Although his book *The Lives of Animals* (1999) does not directly address the Anthropocene, Coetzee imagines a world where non-human forms of life have been genetically and biologically re-engineered to serve human ends, and where such a loss of other ways of being in the world incurs a loss of humanity, because 'the sympathetic imagination' is dulled. To become human, for Coetzee, we must be able to 'think ourselves into the being of another', to be more than one. Thinking, that is to say, is always thinking alterity, and thus always about sharing a world. And if we can think ourselves into the fictional characters of literature, Coetzee's protagonist Elizabeth Costello claims that we can think our way:

> into the existence of a bat or a chimpanzee or an oyster, any being with whom [we] share the substrate of life ... There are people who have the capacity to imagine themselves as someone else, there are people who have no such capacity (when the lack is extreme, we call them psychopaths), and there are people who have the capacity but choose not to exercise it. (p. 35).

Sympathetic imagination, rather than rational calculation, is required to see things from the point of view of a jaguar, a flying ant, or a forest.

Indeed, such a capacity for ontological boundary crossing may very well be essential to politics as well. If such ‘thinking as’ is essential to thinking the polis and organizing ways of living together that can fulfil the human potential, it is because without the ability to put oneself in the place of the other, to see things from his or her perspective, one cannot develop moral judgements in a plural world of competing worldviews. In order to adopt universal norms that refer to and represent all persons equally, each normative concept must be considered from the points of view of all persons, irrespective of gender, ethnos, religious affiliation, political affiliation or even species. This ability to consider multiple points of view, to put ourselves in the place of others, is thus a requirement in order to sustain democratic governance. It is central in philosopher John Rawls’s veil of ignorance, by means of which a citizen is to apply the *epoché* to his or her own experience and status in order to imagine himself or herself in the place of others. And it is essential to what philosopher Hannah Arendt (2006[1977]: 241) calls representation, by which she means:

> making present to my mind the standpoints of those who are absent . . . The more people’s standpoints I have present in my mind while I am pondering a given issue, and the better I can imagine how I would feel and think if I were in their place, the stronger will be my capacity for representative thinking and the more valid my final conclusions.

For Arendt, because ‘political thought is representative’ through and through, such feeling and thinking in the place of others constitutes the very meaning of politics.

If politics has been considered a uniquely human sphere in Western modernity, this is due to the hegemony of symbolic communication. In order to develop a more inclusive cosmopolitics, we will need to master other semiotic systems, particularly biosemiotics (including zoosemiotics and phytosemiotics). If icons and indices are signs shared by all animals, and if biology itself can be interpreted as a semiotic system (cells and the genetic code are semiotic signs for Kalevi et al., 2011, and Barbieri, 2008), acknowledging such a biosemiotics will allow a cosmopolitics to include all social relations, not only those between human beings privileged by Arendt. If we have been witnessing the slow and unfinished attempts to include other human genders and ethnicities in political representation, relations with non-human beings, such as elephants, mountains and rivers, have been excluded from the political sphere, and relegated to science (which objectifies them) or to folklore, tourism, or ecology. Anthropologist Marisol de la Cadena addresses this political reductionism in her remarkable book on the Runa shaman Nazario’s

attempts to have his people's relationship with the mountain Ausangate recognized by the Peruvian state. She writes:

> Analogous to dominant science, which does not allow its objects to speak, hegemonic politics tells its subjects what they can bring into politics and what should be left to scientists, magicians, priests, or healers – or, as I have been arguing, left to dwell in the shadows of politics. Because mountains cannot be brought to politics (other than through science), Nazario's partnership with Ausangate is all but folklore, beliefs that belong to another 'culture,' that can be happily commodified as tourist attraction, but in no case can it be considered in politics. This exclusion is not just racism; it expresses the consensual agreement foundational to politics. The exclusions that result from it are disabled from their translation as political disagreement because they do not count – at all. (De la Cadena, 2010: 359)

Though Bruno Latour has called for the enlargement of democracy to include non-human others, he specified that these others required scientists to speak for them, thereby retaining the objectification of nature and the limitations of its potential political claims. If relations with non-human others are to be represented politically, all interlocutors (including Rosario and Ausangate) must be represented. For Rosario, blowing up Ausangate to find gold is wrong. The mining industry could reply to Rosario that mountains are not sacred and that, scientifically speaking, they are made of rocks, which have no sentience, and therefore are worth next to nothing as compared to the gold. But if Rosario were to retort that the Vatican is also nothing but a pile of dead stones, the modern would quickly retort that, indeed, to quote Viveiros de Castro (2019)'s brilliant example:

> the Vatican is made of stone, but it has a sacred value, in other words, it is not just stones. And the indigenous tribe would reply, it is the same for us at home, the mountain is made of stone, but it is not just stone.

Although the value of the Vatican is not in the stones, destroying the stones would nonetheless also destroy its value. And in the same way, the sacrality of Ausangate does not lie in the individual stones, yet destroying these stones would indeed breach the sacrality of the human–mountain relation. Destroying the mountain also destroys a culture and a way of life. By shifting the focus away from the scientific truth and toward the pragmatic concern that giving sacrality to the mountain is a way of protecting the mountain and the cultures it enables, the truth becomes

a secondary attribute of justice and flourishing. Such a cosmopolitics can be a powerful tool in decolonizing not only anthropology but also the natural sciences.

Now that the climate crisis has brought ecological concerns to centre stage, the extraordinary eco-literacy of indigenous animists has led ethnologist Thomas Karl Alberts to speak of an 'indigenist-environmentalist alliance' (Alberts, 2015: 131).[15] If 'land is synonymous with the very life of indigenous populations', according to the 1500-page UN study of indigenous peoples from 35 different communities compiled by José Martinez Cobo (UNCHR, 1983b: paragraphs 50; 56; 73; pp. 196–7, cited in Alberts, 2015: 102–3, 205), the destruction of their homelands by mining and logging corporations has led them to organize to protect their own lands, but also to fight more generally against climate change and environmental destruction. Speaking at the First Congress of South American Indian Movements in Cuzco in 1980, Julio Carduño, a Mexican Indian leader, made this struggle quite clear. He said:

> Perhaps what most unites us is the defense of our land. The land has never been merchandise for us, as it is with capitalism, but it is the support for our cultural universe ... There can be no economic interest superior to the necessity of preserving the ecosystem; we do not want a bonanza today at the cost of a desolate future. (cited in Bodley, 2014: 192)

Similarly, Yanomami Shaman Davi Kopenawa, known as 'the Dalaï Lama of the rainforest', was asked to address the UN in 1992, where he told moderns:

> Stop the destruction, stop taking minerals from under the ground, and stop building roads through forests. Our word is to protect nature, the wind, the mountains, the forest, the animals, and this is what we want to teach you. The leaders of the rich, industrialized world think that they are the owners of the world. But the *shaboris* [shamans] are the ones that have true knowledge. They are the real First World. And if their knowledge is destroyed, then the white people too will die. It will be the end of the world. This is what we want to avoid. (Davi Kopenawa, cited in Alberts, 2015: 154)

Such indigenous struggles for ecological sustainability led to 14 indigenous organizations and 24 ONGs signing the Indigenous and Environmentalist Alliance for an Amazon for Humanity in 1980, and subsequently forming the Alliance for the Environment, a network of organizations struggling to protect all the living beings of the Amazon basin (Alberts, 2015: 151–2). More recently, the Tebtebba Foundation in

the Phillipines, as well as Indigenous Partnership on Climate Change and Forests, and Indigenous Peoples Global Network on Climate Change and Sustainable Development (IPCCSD), have been amongst the largest ecological organizations in the world, operating in 16 countries.

Such work has been taken up in the field of the law in 'indigenous governance systems' as well as 'Earth jurisprudence' and 'wild law' (Cormac Cullinan), which adhere to laws where 'the Earth itself is the source of law' (Hosken, 2011: 25– 6, cited in Alberts, 2015: 136). Such a non-anthropocentric legal basis has enabled animist communities to give legal personhood to non-human entities such as rivers (New Zealand's Whanganui river, India's Ganges and Yamuna rivers, the Vilcabamba river in Ecuador, as well as the Atrato and Amazon rivers in Colombia). In these cases, the rivers were indeed allowed to defend themselves in court, with the help of 'negotiators' or 'legal guardians', who were in all cases interlocutors and not Western scientists. In the case of the Whanganui river, its negotiator, Gerrard Albert, defended the river as an ancestor:

> we consider the river an ancestor and always have ... treating the river as a living entity is the correct way to approach it, as an indivisible whole, instead of the traditional model for the last 100 years of treating it from a perspective of ownership and management. (Roy, 2017)

The Vilcabamba river defended itself as plaintiff, with the help of legal guardians Richard Frederick Wheeler and Eleanor Geer Huddle, calling for its own right to 'exist' and to 'maintain itself' over and against the Loja government, which wanted to build a highway that would interfere with the river's flow. The river won. Ecuador decided to recognize the intrinsic value of its ecosystem legally in its constitution in 2008, establishing in article 255 the principles of 'harmony with nature, defense of biodiversity and the prohibition of private appropriation for use and exclusive exploitation of plants, animals, microorganisms, and any living matter' (cited in Avelar, 2013: 270). Bolivia then similarly passed the Ley de Derechos de la Madre Tierra (Law of the Rights of Mother Earth) in 2010. These examples reveal the political implications of ontological boundary crossing, which will need to both stretch and deconstruct legal categories.

Rosario can think with the Ausangate mountain, just as the Maori can think with the Whanganui river, and the Runa can think with the forest (Kohn, 2013). It is this ability to 'think with' that allows us to 'live with' rather than over and against, the natural world. In a world 'humming with empathy' (Breithaupt, 2009: 8) we can adopt the perspective of both human and non-human persons. As part of our biological evolution and the social nature of our species, empathic 'thinking with and as another'

can explain our capacity for political representation and help us to learn 'appropriate etiquette and protocol' from animists (Harvey, 2006: 19) in order to open our political worlds to non-human persons and ecosystems.

Such 'thinking as other' will need to be explicitly cultivated in the world of the Anthropocene and in the solutions developed to address it. In a world where wild animals and indigenous communities are being pushed to extinction, we may be left with no alterity to imagine at all. This was indeed the dream of the Tyrell Corporation in the sci-fi film *Blade Runner*. The Tyrell Corporation produced androids 'more human than human'. The 'more human' trait entailed precisely an utter lack of empathy, particularly empathy toward non-human forms of life. Philosopher James Stanescu expresses the stakes of this lack well:

> These androids are completely interchangeable with humans, except for one test. This test measures a person's empathy, particularly their empathy toward other animals. These replicants have managed the feat of cutting the human away from the animal. And this is the promise that the Tyrell Corporation is making with their slogan, 'More Human Than Human': to produce a humanity that is disconnected from the finitude of humanity's very real animality. (Stanescu, 2013: 144–5)

However ironic, the 'new age of the human' might very well herald a world inhabited by a mono-species more human than human. Such an android 'more human than human' heralds a loss of the humanity we share with all other 'earth beings' (De la Cadena, 2015). To respond to such a loss, we may need to cultivate a form of machinic animism that would privilege solidarity over technological manipulation and put into practice an ontological boundary crossing alongside specialized learning. Perhaps such a revalorization, capable of incorporating the perspectives of other thinking subjects into a shared cosmopolitics, will be capable of providing us with the sympathetic imagination capable of making the Anthropocene era truly human.

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Notes

1. Now that mosquitoes are DEET resistant, and the heavens punctured by an ozone hole, there is no nature that is not cultural. This is indeed the view of the inventors of the term Anthropocene, climate scientists Crutzen and Schwägerl, when they tell us to 'remember, in this new era, nature is us' (Crutzen and Schwägerl, 2011: http://e360.yale.edu/features/living_in_the_anthropocene_toward_a_new_global_ethos). Similarly, Ulrich Beck (1992:

81) writes: 'At the end of the twentieth century nature *is* society and society is also "*nature*". Anyone who continues to speak of nature as non-society is speaking in terms from a different century, which no longer capture our reality'. Political scientist Elmar Altvater writes: 'The separation of nature and society that characterizes modern thought since Descartes has no basis in reality – only a basis in the European rationality of world domination' (Altvater, 2016: 149).

2. Ethnologist Charles Stepanoff writes as follows:

> If, for ethnologists, animism is an ontology linked to particular cultural contexts, from a psychological point of view, it is a fundamental psychological disposition of our species. It is only under the effects of a long training that we are able, in modern societies, to repress, blunt and finally forget it. (Stepanoff, 2019: 49, my translation).

3. I follow Juanita Sundberg (2014: 34), who herself follows Shaw, Herman and Dobbs, in defining the term 'indigenous' 'to refer to groups with ancestral ties/claims to particular lands prior to colonization by outside powers' and 'whose nations remain submerged within the states created by those powers'.
4. This idea of a 'philosophical animism' was inspired by philosopher Val Plumwood:

> Val Plumwood was, at the time of her death, working to articulate just such an account of human and nonhuman sentient life that would be defensible philosophically and that could engage dialogically with indigenous peoples' animism. The term she used was 'philosophical animism', and in her words, this project 'opens the door to a world in which we can begin to negotiate life membership of an ecological community of kindred beings' (Plumwood 2009). (Bird Rose, 2015: 131)

5. Although Viveiros de Castro's research has met with wide approval within the field of anthropology, his research focus is the Amazon basin, and other anthropologists have pointed to other animist cultures that do not always humanize all other beings. For several examples of other ontological taxonomies, see the articles by anthropologists Mathias Lewy and Laura Rival in volume 29 (2012) of the journal *Indiana*.
6.

> The mode of participation makes it impossible to conceive of beings and things in isolation. It makes unthinkable the conception of identity as the selfsame, just as it does the strict division of an 'inside' and an 'outside' ... Knowledge, therefore, is inherently dialogic, not monologic. Knowledge is never knowledge *about*, but always knowledge *with*, a process constituting both knower and known. (Franke, 2012: 171)

7. However promising such an engagement between philosophy and cognitive science may be, the naturalization of consciousness should not be adopted too readily. It is important not to reify the brain as some cognitive scientists tend to do, essentializing it (as was done with the 'selfish gene') outside of its

symbiotic relationality to the entire organism and its environment. Furthermore, experience should not be reduced to brain function, as has become typical of much reductionist science. Reducing experience to behavior entails a significant loss of reality as it is actually lived.

8. See: http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf
9. This study was requested by the European Food Safety Authority (EFSA): https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2017.EN-1196
10. See: https://www.ekah.admin.ch/inhalte/ekah-dateien/dokumentation/publikationen/e-Broschure-Wurde-Pflanze-2008.pdf
11. 'only an ethico-political articulation which I call ecosophy between the three ecological registers (the environment, social relations and human subjectivity) would be likely to clarify these questions' (Guattari, 2000: 28).
12. Deleuze and Guattari (2013: 179) write: 'But what we are saying is that the idea of assemblage can replace the idea of behaviour, and thus with respect to the idea of assemblage, the nature–culture distinction no longer matters.'
13. Guattari (2000) writes:

    > I am more inclined to propose a model of the unconscious akin to that of a Mexican Cuandero or of a Bororo, starting with the idea that spirits populate things, landscapes, groups, and that there are all sorts of becomings, of haecceities everywhere and thus, a sort of objective subjectivity, if I may, which finds itself bundled together, broken apart, and shuffled at the whims of assemblages. The best unveiling among them would be found, obviously, in archaic thought. (cited in Melitopoulos and Lazzarato, 2012: 240)

14. And though we can never totally incarnate a raven, since humans will always project human complexity from the perspective of the human body, human plasticity is such that we can indeed approximate other life forms. Magician, philosopher and shaman apprentice David Abram (2011: 251) was indeed able to join a raven in flight:

    > And I'm balancing, floating utterly at ease in the blue air. As though we're not moving but held, gentle and fast, in the cupped hands of the sky. Stillness. Through a tangle of terrors I catch a first sense of the sheer joy that is flight. Falling, yet perfectly safe. Floating. Floating at the heart of the feathered thickness that is space. Aloft at the center of the world mandala, turning it beneath us, the whole planet rolling this way or that at the whim of our muscles.

15. Alberts (2015: 132) points out that such an alliance has replaced the 'noble savage' of yore with the 'ecological Indian' in order to 'articulate a critique of anthropocentric mastery of nature'. The idealization of the 'ecological indian' is just as problematic as that of the 'noble savage' and continues a longstanding tradition of moderns speaking *for* the indigenous, but though indigenous scholar Deborah McGregor states that this 'boils down to extracting knowledge from Aboriginal people' (McGregor, 2004: 397), things are slowly changing, and the voices of indigenous shamans and scholars are being heard today.

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