

## Article

# The indigenous critique and the divided brain hypothesis: Ideas to postpone the end of the World

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### ABSTRACT

*The voice of Indigenous intellectuals on the conduct of the European conquerors, whenever and wherever in the Americas it has been recorded, consists of a thoroughgoing critique of the Europeans' genocidal and ecocidal proclivities. In recent times, the voice has taken on apocalyptic tones, emphasizing that the West's chronic disregard for nature imperils all of us, with Ayton Krenak's eloquent appeal for 'ideas to postpone the end of the world'. An astoundingly similar critique of the modern Western World's mindset based on neuroscience comes from the Scottish psychiatrist and philosopher Iain McGilchrist, whose Divided Brain Hypothesis proposes an explanation for what the West has become: an existential threat to human survival. Others such as Mignolo, de Sousa Santos, Bateson and Harries-Jones, have put forward ideas which align with this hypothesis, but the present essay brings these two currents together for the first time and proposes that it was the West's conquest of the Americas – its people and all their relations and onto-epistemes – that was a key factor in normalizing this mindset. To extend the metaphor, the conquest of the American hemisphere by the European hemisphere normalized the conquest of the right hemisphere by the left.*

**Keywords:** Indigenous, Divided Brain Hypothesis, Conquest of the Americas, Western mindset.

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**Consider, with two Indigenous intellectuals – one from Canada, one from Brazil – these reflections on a common hemispheric dilemma:**

*There's no equivalent in my language, Kanienké: ha, of the English term "natural resources"; the term in my language would be "all my relations".*

*How can we find a point of contact between these two worlds, which share the same origin but have drifted so far apart that today, we have, at one extreme, those who need a river in order to live, and, on the other, those who consume rivers as mere resources?<sup>2</sup>.*

<sup>1</sup>Ellen Gabriel, Kanienké: ha poet, artist and Kanienké: ha/Mohawk language custodian, speaking at a side event during a 2021 meeting of the United Nations Expert Mechanism on Indigenous Rights.

<sup>2</sup>Ailton Krenak, Brazilian Indigenous activist and leader, in *Ideas to Postpone the End of the World* (2020).

## **The Indigenous Americans' Critique of the European Cosmivision**

These two reflections illustrate two important themes for this essay. First, they point to the awareness, shared by Indigenous intellectuals in North and South America, of an epistemic gap between contemporary Indigenous Americans and their Euro-originated colonizers with respect to the relationship between humans and the natural world. One episteme attends to a forest or a river as an "I-thou" relationship, while the other attends to the natural world as an "I – it" relation, "things" to be commercialized in a market economy.

The second theme is that this gap is hardly noticed at all. And yet, records of Indigenous People of the Americas noticing this gap are numerous. Indigenous Critiques of the European cosmivision and its impact upon both human populations and nature constitute a substantial archive. Whether the author of the Critique lives in Kanienké: ha/Mohawk territory near Montréal, Québec in Canada or in Krenak territory in Espírito Santo in Brazil, the Critique resonates in similar ways throughout the hemisphere, and with increasing urgency and media resonance with the increase in public awareness of the existential threat of human-induced climate change.

What is to be done? Where can we look for "point(s) of contact between these two worlds" if, with Ellen Gabriel, we can see no benign translation to bridge the gap? And in what sense did they once "share the same origin, but have drifted apart"? This essay attempts a possible response to these questions, drawing upon two "ideas to postpone the end of the world": the Indigenous Critique and the Divided Brain Hypothesis.

The Indigenous Critique of the European Conquest of the Americas is the first place to begin to search for such ideas. The body of ideas which make up the Critique are central to human flourishing, are found up and down the hemisphere, and have been articulated in both Indigenous languages and the Euro-originated languages, for half a millenium. From *sumakkawsay/buenvivir* of the Aymara to the Wisdom of the Elder Brothers of the Kogi, or *mino-pimatisiwin* of the Anishinaabeg, the Code of Handsome Lake of the Haudenosaunee or the Inuit *Qaujimajatuqangiit* (IQ) of the Inuit<sup>3</sup>, Indigenous intellectuals from virtually all nations of the Americas have articulated alternative civilizational possibilities to

<sup>3</sup>Representative sources provided in bibliography.

those of the West's Late Modernity. This essay argues that unless the Indigenous Critique is heeded, there most probably won't be anyone, on the Western side at least, to attend millennial commemorations of Colón's arrival (1492) Cabral's (1500) or Cartier's (1534).

Fortunately, there are glimmers that the Indigenous Critique is being heeded, with the hope that points of contact may indeed be found. For instance, in her book *Finding the Mother Tree: Discovering the Wisdom of the Forest*, Suzanne Simard (2021), a Western-trained forest ecologist at the University of British Columbia, describes how she came to discover something unusual about the trees she was studying. It was a surprising finding that created a huge shift in her thinking: 'the trees are whispering to each other!'

Her western academic training had not prepared her for this. Even though her research had pointed her in the direction to start thinking that the trees were somehow connected, she "had been struggling with the idea of connectivity". Nevertheless, her research was clear: the trees adjacent to each other were communicating with each other through the soil, using networks of fungi called mycorrhizals. These networks of fungi were being used to send resources from healthy trees to trees in need. She also discovered that certain old-growth trees can recognize which of the many nearby seedlings are their own, and nurture them accordingly, and this led her to describe those trees as "mother trees".

But what surprised Professor Simard even more was that when she took on a new research collaborator, a graduate student who had grown up in one of British Columbia's Indigenous communities, and recounted her surprising findings to the student, the student replied, "we've always known about that; interconnectivity is part of our world view". In that brief moment, the "abyssal" gap between the two epistemes (Western and Indigenous) shrank. The barrier which blocked Indigenous traditional ecological knowledge from being respected melted away when their respective knowledge-holders were able to collaborate.

Collaboration, at least in my country, Canada, has by far been more the exception than the rule. Indeed, the state's drive to destroy all memory of the Indigenous millennial traditions of innovation led to the death of some thousands of Indigenous children. One of Canada's leading non-Indigenous historians, Ian McKay, reflecting on this period in the consolidation of the Canadian state following Confederation in 1867, has suggested that the establishment and consolidation of what he terms a 'liberal order framework,' was of such driving force that those figures in government and in the major Christian churches who led the country to establish Indian Residential Schools were indifferent to the death of Indigenous children forced to attend those grim institutions. Their stated goal was "to kill the Indian in the child" and to violently stuff what was left of the children into the normative epistemic box of the day ("vanguard Christian liberalism"), as required by a market economy in which "decidedly non-Lockean" Indigenous conceptions of land would be inconvenient. In McKay's words,

It was perhaps in the residential schools that the full utopianism of a vanguard liberalism came to the fore, for within these Christian/liberal manufactories of individuals, pre-eminent laboratories of liberalism, First Nations children were ‘forced to be free,’ in the very particular liberal sense of ‘free,’ even at the cost of their lives (2000, p. 640).

With the hemisphere reeling from five centuries of what Inuk activist and author Zebedee Nungak has called “colonialism on steroids”, and if the Indigenous Critique is not heeded and if therefore the end of the world can’t be postponed in the ways Krenak proposes, we should not be surprised to learn that some of the most impactful Indigenous literature today attempts to deal with the coming apocalypse. One award-winning young people’s novel by Métis author Cherie Desmaline, *The Marrow Thieves*, offers this post-apocalyptic vision:

In a futuristic world ravaged by global warming, people have lost the ability to dream, and the dreamlessness has led to widespread madness. The only people still able to dream are North America’s Indigenous people, and it is their marrow that holds the cure for the rest of the world. But getting the marrow, and dreams, means death for the unwilling donors. Driven to flight, a fifteen-year-old and his companions struggle for survival, attempt to reunite with loved ones and take refuge from the “recruiters” who seek them out to bring them to the marrow-stealing “factories” (DIMALINE, 2017).

Whether in response to actually-occurring genocide or to the intergenerational trauma in the wake of historical genocide, the Indigenous Critique of the Western Civilization<sup>4</sup> has always been present, and in at least one recently-published case, an early version this Critique had enormous impact on European thought.

The encounter which gave rise to took place in the early colonial period in Northeastern North America in the area of the Great Lakes, which was inhabited by a confederacy of peoples who called themselves Wendat, and who were referred to by the French colonizers as Hurons. The army of France’s *mission civilisatrice* were the Jesuits, learned scholars, excellent linguists and skilled debaters. In their encounter with the Wendat, they discovered not only a people who were equally skilled debaters, but a people who were able to articulate a brilliant critique of the society of the colonizers, their culture and customs, their beliefs, their hierarchical and undemocratic society, and – something which startled European society of the late seventeenth century Europe – the Wendat practice of social freedoms extended to all citizens, including women.<sup>5</sup>

One individual who articulated this critique in particularly powerful ways was the Wendat philosopher-statesman Kandiaronk. His ideas, expressed in recorded conversations a Frenchman, Baron de la Hontan, who had become fluent in the Wendat language during his years with the French army in Canada. When published in France in 1703, and later translated throughout Europe, the rational secular world view of the Wendat, eloquently presented in Lahontan’s translation,

<sup>4</sup>When using this phrase, especially with capital letters, one can’t avoid mentioning the anecdote attributed to Mahatma Gandhi who, when asked his opinion about Western Civilization, replied, “I believe it would be a very good idea”.

<sup>5</sup>The discussion of Lahontan’s published conversations with Kandiaronk and the their formative impact on the Enlightenment is based on Graeber and Wengrow (2021).

exploded into the intellectual circles of the *ancien régime*. It has been even suggested that the impact of the Wendat critique was instrumental in stimulating and shaping French Enlightenment intellectuals' critique of their own society and ideas of kingship, a critique which led in a direct line to the French Revolution.

There are myriad forms which the Indigenous Critique of European values has taken in the 500 years of contact. There were wars of resistance in every country in the Americas, even after the Great Dying brought on by European diseases for which Indigenous Peoples had no immunity. Among those who survived, voices were raised and have not ceased to be raised to express an awareness that an important aspect of the colonial violence and dispossession of land and dignity was the presence of a world-view which would be dangerous for both humans and their environments.

In some cases, so incommensurate are the two epistemes with respect to the relation between 'culture' and 'nature'. One side sees them as separable; the other intimately connected. But, as in the anecdote of Suzanne Simard and her 'mother tree', we also occasionally glimpse the outlines of the possibility of respectful collaboration between the two epistemes. Betweenness can flourish, if the requisite self-critical work is done by the Western knowledge specialist<sup>6</sup>.

Sometime the Critique is made as fraternal advice to stop destroying nature, as in the case of the Kogi people of the Colombian Sierra Nevada, who in 2011 adopted the guise of an older brother scolding a little younger brother in order to get him to mend his destructive ways.

But more typical is the complete absence of dialogue, as in the dark anecdotes with which we began this essay, one relating to Canada's colonial past, and the other to a post-apocalyptic future, with the common thread being that Indigenous children must die. In the first, they are killed by the mechanism the state used to transfer them from one civilization's world view to another, superior (Western) worldview. The second is the inverse – it is the Western world view that is risking the destruction of the planetary ecosystem, but the Indigenous world view, formerly deprecated, is now valued so much that the children who still retain it must be killed to allow Western children to steal their dream-permitting marrow. In neither story can betweenness exist.

This essay is a thought experiment which seeks to make contemporary sense of the historical collision between the two broad historic epistemic components of the hemisphere which came to be called America in order to join Ailton Krenak's quest to postpone the end of the world. The first part of the essay has brought forward examples of the Indigenous Critique, both historical and contemporary, and the next will attempt to look more deeply into the respective self-descriptions of the two epistemes, through an analysis of their respective origin stories.

<sup>6</sup>It is clear that the nature of 'the requisite work' for such specialists involves a reconceptualization of their field from a Traditional Ecological Knowledge (TEK) perspective and practices, which almost always is based on a balanced right hemisphere/ left hemisphere attention. "TEK includes sensitivity to change and *reciprocity*, that is a give-and-take relationship with nature that acknowledges a responsibility to care for and respect the rights of all living beings. Tewa anthropologist Gregory Cajete coined the term 'ecosophy'(...) to describe TEK and sees it as an epistemological way of living in the world. Unlike Western science, TEK observations are qualitative and long term and are about context and relationships (...) Most importantly, TEK is inseparable from a culture's spiritual and social fabric (...) This means that TEK (...) includes values that can help solve environmental problems. (...) TEK does not see nature and 'sustainability' through a Western materialistic command-and-control lens (...) TEK redefines sustainability as a *kincentric* view of nature (...) a way of relating respectfully to all life as kin and the earth as a nurturing mother. (EISENBERG *apud* MORGAN, 2021, p. 188-189).

## A comparison of the origin stories of the two hemispheres – Turtle Island and Militant Christian Europe

The comparison of their very different origin stories is a technique which has been employed by such Indigenous storytellers as Thomas King and Robin Wall Kimmerer to set the stage for a narrative exploration of how these very different epistemes got to be this way. In her book *Braiding Sweetgrass*, Kimmerer, who lives in the Great Lakes region, contrasts them as follows:

In the beginning, in the Great Lakes region of Turtle Island,<sup>7</sup> where I live, Indigenous peoples tell the origin story as follows: In the beginning, there was Skywoman, who came down from the sky and landed on the back of Turtle. She was carrying fruits and seeds from the Tree of Life, and with the help of the animals who were waiting for her to descend from the sky, and who found mud for her to plant the seeds in (that's another story). The seeds were planted and flourished, and the animals had plenty to eat. She had created a garden for the well-being of all<sup>8</sup> (KIMMERER, 2013).

Round about the same mythic time as Sky woman was descending with her seeds and flowers, another young woman, named Eve<sup>9</sup>, was living in a beautiful garden with a tree. She was tricked by a serpent to taste the fruit in the garden and was banished forever for committing that sin. Sent away by God into exile, “she was made to wander in the wilderness and earn her bread by the sweat of her brow, not by filling her mouth with the sweet juicy fruits that bend the branches low. In order to eat, she was instructed to subdue the wilderness into which she was cast” (KIMMERER, 2013, p. 7).

When the children of Sky woman and Eve accidentally encountered each other, there was a period – very brief in some places (think of Hispaniola) a bit longer in others (think of the formation of the Métis Nation with alliances between French fur traders and Indigenous women along the Hudson Bay Company's fur trade routes in Northern Canada) of some form of mutuality. But the high watermark of respect for the Wendat Critique in French intellectual circles did not last; it was suppressed under a conservative reaction which sharply differentiated “the civilized” from “the primitive” and with the advent of Social Darwinism and scientific racism in the nineteenth century, the Indigenous critique was buried. In one form or another, the European Christian world-view of the children of Eve taking precedence over the world-view of the children of Sky woman<sup>10</sup>, to such an extent that the ecosophical world-views of the Indigenous Peoples of the Americas were displaced, dismissed, caricatured, marginalized and decried as primitive or “savage”. Indeed, much of that world view and the Critique which accompanied it went underground and in some cases was lost altogether since it was maintained through intergenerational orality. Much depended on the loss or maintenance of Indigenous oral languages as vectors of knowledge transmission, often with the responsibility for language and knowledge-transmission assigned to designated knowledge-keepers and artists and people like Ellen Gabriel.

<sup>7</sup>Turtle Island is the English translation of the term used, principally, by the Indigenous Nations in the Great Lakes region of today's Canada and United States, to refer to this region and, by extension, to North America as a whole. In the creation story, Sky woman landed on the back of a turtle, and the animals who saw her land dove underwater to bring up mud (thanks to the muskrat) so that she could start planting her garden on the turtle's back.

<sup>8</sup>Thomas King, the great Cherokee teacher and storyteller, at this point, would say “OK. You've heard the story. You can do with it whatever you want. You can use it to understand the world in a different way. You can tell your friends and children. You can forget it. But there's one thing you can't do. You can never say that you never heard it. You heard it now”.

<sup>9</sup>As the historian Harari points out, It is oddly fascinating that the word ‘Eve’ in many Semitic languages means ‘snake’ or ‘female snake’. He also notes that this is the only instance in the Bible in which the human and non-human (animal) worlds communicate, and he suspects that it represents the remnants of an ancient tale dating from a primordial ‘animist’ period before agriculture and the rise of monotheism (i.e. before 7,000 BC). This would mean that what became the Judeo-Christian World (‘the children of Eve’ in this essay) had been separated from creation stories linking humans and the natural world for some eight and a half millennia when they accidentally encountered the children of Sky woman (or Atabey's children, the Taino equivalent, in the case of Columbus) (HARARI, 2015, p. 90).

<sup>10</sup>The term “children of Skywoman” is used here as a stand-in

In Canada, due to a heightened awareness of the need for an honest reckoning of the injustices – historical and structural – of the colonial impact on Indigenous Peoples, due largely to the very public 2015 report of the Truth and Reconciliation Commission on Indian Residential Schools and the 94 Calls to Action which flowed from that study, Indigenous knowledge – and the Indigenous Critique – is publicly more available and sought after in mainstream society and media. But it's still a mixed bag: for each case of a Professor Simard collaborating with her Indigenous graduate student– there are ten reports of inherent Indigenous and treaty rights being disrespected by established interests, often associated with powerful extractive industries. The children of Eve and their belief in Mother Earth as a limitless source of natural resources are still very powerful, but thanks to the TRC Report referred to above, and to the United Nations Declaration of the Rights of Indigenous Peoples, the status of the Indigenous Critique, armed with rights and with the support of a growing segment of enlightened public opinion, provided the children of Skywoman with reason to hope that their Critique will not fall on deaf ears.

So, one critical part of the story of the two epistemes is certainly the story of how Eve's children in the guise of European explorers/exploiters<sup>11</sup> sought to usurp the worldviews of Skywoman's children from the 'new' hemisphere which they believed they had "discovered", and which they were bent on making their own.

### **The epistemic divide – can it be found in the 'how' rather than the 'what' of our thinking?**

Krenak's call for "points of contact" between those who look at a forest and see "our relations" and those who see "a commodity" will continue, but I wonder if the search will be successful if it continues to be expressed in 'clash of civilizations' terms. It may be successful among certain groups who are attuned to transforming their thinking, but I surmise that these groups are rarely those who make decisions about sustainable future of the planet. Therefore, this essay proposes that we explore new ground, a critique internal to the West, and I have no problem if it is seen as treading on metaphorical ground. Indeed, I would take it as a compliment, given that metaphorical thinking is a style of thinking which carries you across an implied gap. Without metaphorical thinking, it may be argued that we are only thinking with half of our brain, and not the most important half. More of this anon.

This essay begins with stories about one geographical hemisphere, Europe, colliding into another, the Americas, has cataclysmic results as seen from the Indigenous American side. But there is another hemispheres-in-collision backstory which needs to be told. It too has been told before, but not in the context of the epistemic collision between the two geographical hemispheres. To the best of my knowledge, this is the first time that this tale of the four hemispheres has been told.

for the multitude of creation stories across the Americas. To be used accurately, those Indigenous Peoples who would see themselves as inhabitants of "Turtle Island".

<sup>11</sup> This is perhaps the place to honour the Portuguese language for its fusion, in the noun *explorador* the two concepts, expressed in distinct words in English "explorer" and "exploiter", in Spanish *explorador/exploitor*, and in French *explorateur/exploiteur*.

The story which I want to tell is also epistemic, but rather than focussing on the “what” of the epistemes, the focus will be on the ‘how’ of each. It is a clash of epistemes, of value orientations, of “takes” on the world, and it is not distant from each of us, whether colonized or colonizer. What I want to do is to bring this second epistemic clash home to every reader, since because the clash of epistemes between the hemispheres of Europe and Indigenous America is analogous to and, in its strong form, parallel to, the division or clash between the brain hemispheres which we all carry around protected by our skulls.

**“Two worlds which share the same origin but have drifted so far apart” What could this mean?**

To come back to a phrase from Krenak’s thought, quoted at the beginning of this essay, where he describes the two worlds as “(worlds) *which share the same origin but have drifted so far apart*”. This is a very puzzling phrase? What could this “same origin” be? Some form of “peaceful common humanity”? How can the West/Indigenous Americas clash be seen as the product of a “drift apart” of two entities which (formerly) shared the “same origin”? It’s hard to discern much common ground between the Garden of Eden and the garden planted from the seeds brought by Skywoman, and the lessons they teach are so different in terms of the human relationship to nature. Perhaps the beginning of an answer to the puzzle can be found in a particular aspect of our common anatomy since possession of an anatomical brain – and a bicameral one – is something we humans all have in common.

My metaphoric link has a weak form and a strong form. Both forms emerge from the generally agreed-upon historical premise that the conquest of the Americas (and the “primitive accumulation” of wealth extracted by Europe, formerly something of a backward region when compared to the Arab world, India or China) was hugely instrumental in the “making of the modern Western capitalist world”.

The weak form is that the conquest of the Americas is astonishingly analogous to the historical conquest of the right hemisphere (and its “I-you” value orientations) by the left (with its very different “I-it” set of values).

The strong form is that the conquest of the Americas by European imperial powers is the catalytic historical event which favoured the conquest of the right hemisphere by the left and “the making of the modern world of the West” which, it will be argued, is a world in the thrall of a dominant left-hemispheric mindset stimulated by conquest and giving rise to an ecocidal utilitarian relationship to nature and non-Western ideas about the human-nature nexus.

First some background on the theory of what has come to be called The Divided Brain Hypothesis.



### Iain McGilchrist's *The Master and His Emissary*

For those unaware of the surprising idea that there is hegemonic struggle for power going on inside our skulls, Iain McGilchrist's groundbreaking 2009 book *The Master and his Emissary: The Divided Brain and the Making of the Western World* will be an eye-opener. It has produced as revolutionary a shift in our understanding about ourselves and our epistemic relation to the natural world as Professor Simard's discovery about whispering trees.

The difference is that, for McGilchrist, the left and right hemispheres of the human brain do not tend to whisper sweet nothings to each other through underground fungal networks; rather, they are engaged in a life-long (in each of us) and millennial-long (in Western culture) struggle to decide which of the two is the master and which is the emissary<sup>12</sup>. As the title of his book suggests, what we know as "the West" is a product of the original "master" – the right hemisphere – having been usurped by its former "emissary" (the left hemisphere). The result is a tyrannical hegemony of left-hemisphere thinking, rather than a balance between thinking with both hemispheres. Since the hemispheres have quite different "takes" on the relationship with the natural world and other humans – to be described below – the dominance of left hemisphere thinking can potentially result in a fatal imbalance in our relationship between humanity and the natural world, and the likelihood of an epistemological collision between those whose societies have come to adopt sharply differing hemispheric "takes" on the world.

#### The thesis

The thesis which I am going to propose is this: that the story of the conquest of the Americas is deeply implicated in the story of the conquest of the right hemisphere by the left, or the consolidation of that process which had its roots in pre-Conquest Europe. The two conquests are mutually constitutive of the European early modern imperial vision of the American hemisphere and its inhabitants as "things" to be grasped and exploited for competitive benefit. This behaviour was shockingly at variance with the traditional norms of culture contact in the Americas which generally sought to build a climate of mutual respect, reciprocity and non-interference. In northeast North America, the Haudenosaunee negotiated with the Dutch, and later the English, an agreement embodying these values, embodying a path which, it may be said, would be evidence of right hemisphere thinking. Contact yes, conflict and conquest no.

#### Our bicameral brain

All placental mammals' brains have two hemispheres. Why? The answer lies in their *differential attention*. As in the case of a bird pecking at kernels of corn, one eye focuses on the kernels to be eaten; the other

<sup>12</sup>The reference is to a story in Nietzsche, according to which a spiritual master, selflessly devoted to his people, attracted so many people to his domain that he came to rely on emissaries to carry his messages and see to the welfare of his domain. It came to pass, however, that 'his cleverest and most ambitious vizier... began to see himself as the master and used his position to advance his own wealth and influence.' The vizier was never punished for this, and 'the emissary became contemptuous of his master. And so it came about that the master was usurped, the people were duped, the domain became a tyranny, and eventually it collapsed in ruins.'

keeps watch out for predators. Have your lunch but try not to become someone else's lunch as you are having yours. The bird's two eyes are each specialized: one for an "open, receptive, widely diffused alertness with allegiances outside the self" (keeping an eye out for predators), and one "abstracted from the context" attentive to the task at hand (keeping an eye focussed on the corn kernels to be pecked).

The broad contextual vision is the job of the left eye and right hemisphere; the abstract, tool-like focus is the job of the right eye and left hemisphere. McGilchrist now makes the point that this asymmetry is not just a "functional" difference, but much more: it is a difference in the nature of the world which has come into being via my perception. The world of the left hemisphere is thing-like, a thing to be acted-upon, to be used and exploited, under my control and without independent agency, it is not just an Other, but an Other to be assessed for what it affords me for my benefit and flourishing. As commercially-driven powers, this was the European empires' default position when they first encountered the natural world of the Americas and its inhabitants.

The world of the right hemisphere, on the other hand, is a world with which potentially I am in relationship, an other with their own agency and own name, with the possibility of being connected to me into a "we". This was, I would assert, the cautious default position of the Indigenous American societies during the initial encounter, to the extent that time permitted them to develop a position.

The left hemisphere prefers the "already known" rather than the "novel"; it prefers not to need to learn in order to relate to the Other; the right hemisphere sees the world as fresh, novel, to be discovered and engaged with. It is comfortable with unpredictability and complexity. The left lives, secure in its preconceptions, while the right is flexible, willing to let the world unfold so that it can pay attention to what the world presents. The left prefers to turn the novel into the familiar, the already-known; the right, with its open attention style, tends not to categorize, to label, to reduce to language.

The world can be named (and it's the job of the left hemisphere to do just that), but the right hemisphere knows that the world which can be represented in words is not the whole world; the words that can be spoken do not exhaust the full meaning of the world which can be imagined.

### **Can the Divided Brain Hypothesis help to discover an answer to Krenak's question?**

In both cases, if this thought experiment has any traction, it could answer Krenak's question about a "point of contact". If the idea that each of us has in our heads the tools necessary to (a) acknowledge the extent to which we can see the degree to which we have been spoon-fed by our societies, schools, media, governments etc. to believe in the hegemony of left-brained thinking as "good", and (b) to personally and collectively start on a correction course, so that our episteme (our "how"

we think) and our value-orientations are restored in the direction of a balance between the two brain hemispheres in a way that will, among other things, encourage us to respect all the Indigenous peoples of the Americas for maintaining their value orientations and for agreeing to teach us what a balanced episteme between humanity and nature can look like. Incidentally, this might be one of the only ways to prevent the worst consequences of climate change.

The relationship between the stories of two hemispheres (one geopolitical, one neuropolitical) taking control of two other hemispheres (one geographical, one neurological) could be analyzed as two parallel stories whose common theme tells of the emergence of a particular “modern, Western” value orientation toward the relation between human beings and nature. I believe that, taken together, the two narratives recount the emergence of a powerful – and powerfully damaging – world view in which the primacy of human agency, rationality and control over nature over the last 500 years rose to become the dominant planetary paradigm. There is strong resemblance between the two tales of one hemisphere conquering another, and the purpose of this article is to draw attention to certain linkages between the two tales which stand out as surprisingly striking.

How to relate the two stories? Could they be seen as two stories or one? Generally speaking, bringing them together in this essay for what appears to be the first time is still an exploratory project. However, what is striking is that there is a common pattern which emerges from the two stories, and it is this: in both cases, the story is one of the emergence of an inter-hemispheric imbalance from a prior state of relative balance. In this sense, we may be on the road to discovering a possible interpretation of Krenak’s vision that “the two worlds share a common origin”.

The outcome of each story is similar, and ends with the conquest of one hemisphere by another, with real-world consequences of which, together, have contributed to the destruction of the planetary ecosystem in the twenty-first century. Each story in its own right has largely been either suppressed and “not fully taught in schools” (as in the case of the conquest of the Americas) or the product of relatively recent research (as is the case of the story of the two brain hemispheres). Taken together, it is very possible that this essay will confront readers with a significant “unknown unknown”.

Indeed, I am not quite sure how to theorize the “surprisingly striking linkages” between the two stories. One way of exploring this relationship and its many undeniable resemblances and parallels would be through the means of *abduction* (“a form of hypothesis construction that permit[s] a lateral extension of abstract components of description” (077)] To my mind, there is enough connective patterning between the two stories; the one largely mental, and the other largely empirical and historical, as to bring them together in a way that suggests a mutual causation<sup>13</sup>. So, I would say that this essay can be read both as presenting

a “strong version” of mutual causality [but without asking “why these things happened”] and a “weak version” of abduction or analogous stories. Or both. Perhaps its value lies in the simple novelty of bringing these two storylines together.

### **Could the conquest of the Americas have triggered a left hemisphere *coup de cerveau*?**

The argument I am making depends crucially on the question: to what extent is the distinction between the hemispheres influenced by historical events? If we can assume that the two brain hemispheres can ideally function in a dynamic tension or counterpoint without losing our balance, can something happen to upset the balance, to trigger a kind of neurological *coup de cerveau* such that one hemisphere becomes dominant? Can the hemispheres become unbalanced, and more specifically can the hegemonic tendencies of the left hemisphere be emboldened of by some kind of momentous historical experience, which creates the proper conditions for a novel world view in which the left hemisphere is crowned ‘master’? And was the conquest of the Americas that very momentous historical experience?

I will argue that it was.

### **What can be known about the brain hemispheres before 1492?**

McGilchrist hypothesizes that in the historical development of European civilization, “things shuttled back and forth between hemispheres” and made its way in the world and with both narrow focus of objectivity when required by the left hemisphere, and broad subjective interrelatedness when required by the right hemisphere. Generally speaking there seems to have been a balance and the two “takes” on the world were ‘uncomplicatedly experienced as part of a relatively unified consciousness’ (262).

But not forever. As McGilchrist argues, the mindsets of the Western world before 1492 exhibited tendencies in both directions; the flowering of the Renaissance and its right hemisphere perspective, ‘with the newly discovered history, writings, arts and monuments of the ancient world, which opened eyes to the vibrancy of the living world’ (314). It was, “a tolerant, literary and humanistic age”, “the age of the explorer, a fascination of other peoples and their customs, a revelling in difference” (P. 237).

However, this was also a time in which another process “a rejection of the right hemisphere’s world” with the “cataclysmic” advent of the Protestant Reformation after 1517, which began a long, violent period – the Wars of Religion – “the first great expression of the search for certainty in modern times’ and ‘hatreds based on the absolute distinction between truth and falsehood”<sup>14</sup> (p. 315-316) and absolute incommensurability between Self and Other, all signs of increasing left-hemisphere domination<sup>15</sup>. The sixteenth century – the first century of the Conquest –

<sup>13</sup> Mutual causality is derived from cybernetic theory. “unlike linear or one-way causal mechanisms, mutual causal mechanisms exhibit a sequence in which the output from A modifies B, whose response becomes part of the subsequent input received by A”. (HARRIES-JONES, 2012, p. 175). If A and B are taken to be the two hemispheric stories, this formulation seems to work: the “news” from America modified the European mind, and encouraged the emergence of left-hemisphere thinking, which in turn brought modernist/rationalist/colonial frameworks of control over America, its natural and human geography and matrix of ecocide, epistemicide and genocide, which fed back onto the European sense of self and unbridled power.

<sup>14</sup> McGilchrist, 2019.

is the story of a “turn” toward rigidity and dogmatism against the earlier Renaissance right-hemispheric age. Revelling in human difference and “I-thou” relations was to be replaced by something else entirely, and the conquest of the Americas fed Europe’s emergent appetite of a practical, utilitarian “I-it” left-hemisphere view of the world.

The Age of Enlightenment, which dominated Europe in the 17<sup>th</sup> and 18<sup>th</sup> centuries, was still open, as we have seen in the account of Kandiaronk’s Indigenous Criticism, a time in which despite it being a time in European history in which science, capitalism, bureaucracy and dogmatic religion (all with their own urges toward mastery) came together, and conditions are created for the left-hemispheric view of the world to become hegemonic, the intellectual elite of France who embraced the Critique – Rousseau more than most - were aware of what values had been lost (p. 324). The figure of Descartes, with his radical doubt even about the existence of others, his mechanistic views of the universe, his denial of embodied experience as uncertain and unprovable, his view of nature as a *res extensa* and therefore in a different ontological category from the mind (*res cogitans*) is an example of a fully fleshed-out left-hemispheric onto-epistemology. True, not all European thinkers were as tightly-bound to left-hemisphere mindsets; thinkers of the German Romantic generation, such as Hamann saw that “this Cartesian world view would lead to devitalization, and in social terms, to bureaucratization” (335).

### **The Unbalancing of the Hemispheres in the Enlightenment: McGilchrist and Bateson**

Europe, then, as it modernized thanks largely to its having been successful in stealing whole continents<sup>16</sup> did so by letting itself be guided in all things by left hemisphere thinking. And the general character of the West which emerged is almost a caricature of a left hemisphere unhinged from its master: “The left hemisphere is competitive, and its concern, its prime motivation, is *power* (p. 209). It is ‘relatively distanced from fellow-feeling; given to explicitness; utilitarian in ethic; overconfident in its own take on reality; and lacking insight into its own problems....’ (p. 209).

The nature of the imbalance when the left hemisphere is in charge is this: “the value of the left hemisphere is precisely in making explicit, but this is a staging point, an intermediate level of the ‘processing’ of experience, never the starting point or the end point, never the deepest or the final level” (p. 209).

McGilchrist identifies three aspects in which the left hemisphere has the means to dominate the right. First, it controls language, logic and linearity; it is the hemisphere that speaks. (p. 228) The holistic right hemisphere needs the left to get its message out, but if the left is not listening, or is no longer in touch with the right, the only speech will be linear argumentation, logical and coherent but not “mine” since it hasn’t been authorized by the right, the hemisphere of “my own” perspective (p. 229).

<sup>15</sup> Ronald Wright (2008) observes that this has been a fundamental characteristic of the United States since its founding; despite being a country ‘of the West’, its history is unique in that it never experienced the Enlightenment.

<sup>16</sup> Richard Wright’s formulation (1992).

There are three contemporary non-Indigenous thinkers who have fought against the left-hemisphere's hegemony and whose writings run parallel to the Indigenous Critique and the Divided Brain Hypothesis, without necessarily referring to their work in those terms. We will call on them to enrich our search, inspired by Ailton Krenak, for "ideas to postpone the end of the world".

### **Harries-Jones on Bateson and the need for a balance through recursive epistemology**

Peter Harries-Jones is a Canadian anthropologist, biosemiotician and leading contemporary interpreter of the work of Gregory Bateson, the British-born anthropologist and philosopher of systems thinking and learning. There are remarkable parallels between Harries-Jones' Batesonian critique of Enlightenment thinking and that of McGilchrist in that in a similar way to McGilchrist's call for a rebalancing of the hemispheric relationship to counter the emergence of left brain hegemony, Harries-Jones refers to as a need of 'recursive ecological epistemology'.

It's important to emphasize that the term "epistemology" in both Harries-Jones and McGilchrist is not about "the what of knowing, but the how of knowing". In other words, epistemology is a reflexive study of learning how we come to know whatever it is we happen to know.

Also, in a similar way to McGilchrist wishing for the left hemisphere to "refer back" to the right for a broad, non-mechanistic understanding, Harries-Jones calls for "an epistemology of the self", by which he means not one which is constantly striving to self-control through conscious control of external circumstances – a very left-hemisphere approach – but rather one which involves an exercise in higher order learning to transition from one episteme to another. It is "a type of learning that occurs rarely in life because it requires individuals to take account of their moving from one system of relations to another" (43). The refusal of an alcoholic to recognize a broader system of which the self is a part (or the refusal of a left-hemisphere extractive industry executive to recognize that nature is not merely a commodity) leads to what the Greeks called *hubris*. "A healthy self requires several levels of understanding in order to achieve stability, and not all of these are achieved from an autonomous self" (44). "A stable self requires much more than a single level of awareness that purposive conscious control provides. It requires a multi-level setting, that which the West calls 'unconscious' or 'preconscious' aspects of mind" (44). And which McGilchrist calls urgently-needed hemispheric re-balancing.

Where McGilchrist speaks of hemispheric balancing as a kind of right-left-right dance, where the right hemisphere "as master" initiates thought, runs it by the left "emissary" for a narrow-focussed common sense assessment, and then takes a final holistic look at the idea again from a broad (presumably non-market value) perspective, Bateson

too in his early career worked on a three-stage epistemology in which “data” were noticed to by the observer, then “explained” using available explanatory principles or rules of thumb for provisional “explanation”, which would be followed up by a screening for value, encompassing cultural assumptions, unconscious biases, Western cultural myths and so forth. In this last stage, Bateson was, in effect, beginning to explore what the right hemisphere does when it receives “packages of provisionally-explained data” from the left hemisphere, using what he called deutero-learning (second-order learning). What both McGilchrist and Harries-Jones are both suggesting is that the duality of the two hemispheres/the duality of perception and processing of information need to be brought into balance through a triadic “recursive” epistemology.

Could it be that the right hemisphere has the function of reminding the left hemisphere of our responsibility to nature? Could it be that deutero-learning could be glossed as “checking in with the master-hemisphere” before chopping down that tree or displacing an Indigenous village in order to plunder its mineral deposits? Without the active presence of the master hemisphere, ecological order is impossible to imagine, let alone achieve in the real world.

Harries-Jones sees our survival at stake, quoting Bateson:

Our survival depends on our understanding that not only are we coupled to how we conceptualize ecological order but also to how we have embodied in our patterns of relationship our epistemological ideas of nature (HARRIES-JONES, 2012, p.123).

In the history of the Enlightenment, the ecological order was seen by Europeans through the lens of a pre-ordained Christian duty to exercise dominion over both nature and non-Christian humans. The Doctrine of Discovery, expressed in the papal bulls of the late fifteenth century makes this clear. The real world of technology and the zeitgeist which developed and crystallized in the European mindset as they took control of the riches of half a planet was not one which promoted reciprocity with either the Peoples of the Americas or with nature. Perhaps no one has explored this ‘dark modernity’ with more clarity than Walter Mignolo.

### **Mignolo on ‘dark modernity’ and Schmitt on Eurocentric *nomos***

Walter Mignolo is among those critical Latin American thinkers who have shaped contemporary ideas of the link between modernity and coloniality; his concept of “border thinking” can be read as the need to think with both hemispheres (in both senses of the term), and he deploys it in his life-long project of articulating strategies of thinking/doing decoloniality. And the story of “modernity” cannot be told without the story of the “darker side of Western modernity”: coloniality (MIGNOLO, 2011)<sup>17</sup>.

<sup>17</sup>Mignolo saw the “darker” side of the Renaissance already emerging in the sixteenth century, particularly evident in the imposition of alphabetic literacy on previously oral Indigenous languages. The imposition of “the book” as a cultural icon, the role of Nebrija’s Spanish grammar with the inscription “language has always been a consort of empire”, and the forced development of “linguas generales” such as Colonial Nahuatl and Pastoral Quechua are examples of “colonial semiosis”, which can be seen as left-hemispheric since it imposed “superior” Western conceptions of the sign over “primitive”, “pagan” Indigenous ones. “The Darker Side of the Renaissance” (1995).

Left-hemispheric “we-it” rationality with its utilitarian market-value outlook on the world, as it became untethered from the compassionate “we-you” values of the right hemisphere, came to see the world as a storehouse of tradeable goods, whether the goods were humans or casks of wine. Mignolo (6) notes the economic and epistemological changes taking place under modernity: “*the dispensability (or expendibility) of human life and of life in general*”. He cites Eric Williams, who dates this change in consciousness to 1688 – the date of the Glorious Revolution in England, with slaves emerging as a new tradeable good in the years following the deposition of the Catholic Stuarts and their replacement by the Protestant William of Orange.

This distanced utilitarian left hemisphere ethic can also be seen reflected in Mignolo’s perception of the establishment of a new legal order realized in the new map-making practices after 1500. After that date, he argues, maps began to reflect a change from a world before 1500 which was polycentric and non-capitalist to a world “which after 1500 entered into a process in which polycentrism began to be replaced by an emerging monocentric civilization (e.g. Western civilization)” (28). Drawing upon the work of Carl Schmitt, who emphasizes that the discovery of the Americas (which he adds was “made without visas issued by the discovered peoples”) give rise to the emergence of a Eurocentric *nomos* (legal order) justifying appropriation of Indigenous lands, via such legal fictions as the Doctrine of Discovery and *terra nullius*. In this context, Mignolo cites the “colonial semiotic” example of early maps which sought to represent the new legal order and its linear thinking such one representing the imaginary line drawn by Pope Alexander VI in 1494 in the Treaty of Tordesillas, dividing the Americas between Spain and Portugal.

Maps and laws and borders are much beloved of the left hemisphere. In Batesonian thinking, while maps may be very useful at times, it’s important not to confuse them with what they were intended to represent. They are not “the real, embodied, empirical, to-be-experienced thing”, but they can represent it. However, very soon after first contact, we see that “the real, embodied thing” was beginning to be swallowed up by its Eurocentric representation, and the left hemisphere’s hegemony advanced accordingly. “The map is not the territory” (Korzybski’s famous maxim, taken up by Bateson) is not referred to, as far as I am aware, in Mignolo’s writings, but his association of map-drawing and the establishment of colonial order is clearly consistent with the thesis of this essay: that the discovery of America led to a proliferation of new practices of control and representation, which are consistent with the emergence in the sixteenth and seventeenth centuries of the hegemony of left hemisphere thinking, uninhibited by considerations of the legal orders of the inhabitants of the land over which the Western European Christian powers were beginning to spread their own “fairy dust”<sup>18</sup> of ownership to lands stewarded and cared for by other people for thousands of years.

<sup>18</sup> The term comes from the Anishinaabe legal scholar John Borrows, and his assessment of the status of the British Crown’s “magical” claims to have established the principle of “Crown Land” throughout Canada.



Walter Mignolo draws on Anibal Quijano's model of the "colonial matrix of power" to describe what I am calling, after McGilchrist, the establishment of the hegemony of the left hemisphere. Each of the facets of the matrix are left-hemispheric in the extreme:

1. Western Christians had come to understand 'nature' as separated from 'culture', especially after Bacon's *Novum Organum* (1620) in which he stated that nature was 'there' to be dominated by Man (11). Even before the Industrial Revolution, Western Christians disqualified any coexisting concepts of knowledge ['all our relations' or 'a gift from the Creator' or 'pachamama / mother earth'], while engaging in an economy of resource extraction for a new type of global market" (11).
2. The concept of labour was changed to mean 'enslaved' 'forced' or waged labour in an economy of accumulation. Human life became a commodity – toward the left-hemisphere utopian ideal where utility is the principal value. And where – in Carney's contemporary formulation<sup>19</sup> – values of the market (left-hemisphere) were allowed to dominate non-market (right-hemisphere) values.
3. Next, It was the Industrial Revolution which enabled the left hemisphere to make its most audacious assault yet on the world of the right hemisphere (387). It did so by producing a manufactured world 'out there' which replaced 'the Other' and 'created a world in the left hemisphere's own likeness' (386). The world which people started encountering became filled with "identical entities, rectilinear in shape, endlessly reproducible, mechanistic In nature, certain, fixed, man-made" (387). "Nature" through the left-hemisphere lens, becomes a provider of "natural resources"; water has become a bottled commodity, as a marker of left-hemisphere progress and modernity.

<sup>19</sup> See Carney M. for a full discussion of „ the distinction between market values and non-market value

### **Sousa Santos on the suppression of personal experience as a reliable source of knowledge**

Boaventura de Sousa Santos sees the establishment of the Eurocentric "cognitive empire" based on hegemonic rationality as "epistemicide" and, in a formulation which closely parallels that of other thinkers, he notes one of its key features: the discrediting of personal experience (and especially the experience of subaltern peoples in the Global South). This way of understanding the effect of the conquest of the Americas and its depreciation of Indigenous epistemologies is in keeping with McGilchrist's view that personal experience is the preferred domain of right hemisphere, but has effectively been driven underground by the cognitive empire. Experience, with its flexible and complex perceptions was cast as ide and replaced with fixed formulations and mechanical, explicit laws erected as a "single perspective, self-proclaimed as objective,

rational and scientific”, an arrogant episteme (with two main competing variants: the Protestant and the Catholic of the Counter-Reformation) coming into force at the very time that Europeans were encountering the world views of the Indigenous Peoples of the Americas and ensuring that they would not flourish, except much changed and at best syncretically allied to a triumphant Christianity.

McGilchrist refers to the effect on modern consciousness of the European wars of religion, in which “the necessity for the Enlightenment of certainty and ‘transmissibility’” (337), entrenched each version of Christianity in its own dogma. This passion for certain truth militated against dialogue, “betweenness” and “relationship” and, in the Lord’s name, was ever ready to annihilate the other side. At the same time, each side projected a certainty about the future, an optimism even, convinced as they each were that the future was already prophesied by their doctrine.

Sousa Santos sees this proleptic (or teleological; there is an overlap) rationality as a dominant characteristic of the new hegemony of Enlightenment consciousness. Both spiritual and materialist teleologies proliferated, pointing to a *telos* of Judgement Day or moral perfection. Perhaps the spread of clocks and clockwork intimated that the new scientific method would “simply open and illuminate the great clockwork set in place by Providence as God saw fit to let humans share in admiration of His handiwork” (Wright 10).

However, once the right hemisphere has been marginalized, with personal empirical experience eliminated as irrelevant, the effect was doomed to turn out badly. As the philosopher Leibniz said at the time, in a phrase which sounds like a right-hemisphere voice speaking its truth about a world dominated by left-hemisphere “inevabilist” thinking:

if the future is necessary and what must happen happens regardless of what we do, it is preferable to do nothing, to care for nothing, and merely enjoy the pleasure of the instant (SOUSA SANTOS, 2014, p. 165).

We have seen earlier that the left hemisphere is obsessively and narrowly “presentist”, preferring immediate utility above all else, since its decontextualized style of attention is limited to what is useful in the here and now. A shrinkage of attention to both space and time. And yet, paradoxically, the left-hemisphere, without the compensating right hemisphere with its openness to melancholy, sadness, and awareness of death, generated a new sort of compulsive optimism about the future. The future as seen by a left hemisphere deprived of time-depth or responsibility for its actions is only an extension of the pleasures of the present. An optimism which manifested itself in one of the strongest and most damaging left-hemispheric concepts to emerge from the Enlightenment was the idea of endless progress.

## Conclusion

This essay argues that not only did the seizure of half a planet provided such riches to Europe for it to incorporate the new hemisphere and its stolen riches into a new civilizational Gestalt (“the West”) but also that this victory established a neuropolitical mindset which has been the default way of being in the world ever since, despite a sustained Critique from the Indigenous Peoples of the Americas and the counter-hegemonic views of many Western thinkers.

The argument draws on a new understanding of brain hemispheres, associated with the work of Iain McGilchrist, according to which the “modern world” of endless growth, self-adulation and exceptionalism needs to be understood (but will not be understood by those in its thrall) as the fulfillment, almost to the point of caricature, of an epistemic fantasy project conducted on an experimental group whose left hemispheres are required to operate on its own after being surgically detached from, the right hemisphere. We are, in a metaphorical sense, victims of a hemispherectomy.

Formulated in this way, the essay offers a response to Ailton Krenak’s question “How can we find a point of contact between these two worlds?” The question was posed in a way to refer to external actors – Indigenous Peoples as one world, the nation states of the Americas as the other. We are proposing that the search should also be an inward search, if we understand the Divided Brain Hypothesis to be saying that a search for this “contact point” must include an examination our own ways of thinking. The Hypothesis may also help respond to Krenak’s further statement that the two worlds “share the same origin but have drifted apart”. This essay proposed that an exploration of how they drifted apart and how they might be brought together again would be a crucially valuable “idea to postpone the end of the world” It is one of history’s terrible ironies that the “coming together” of Europe with the Americas resulted in an abyssal “drifting apart”<sup>20</sup> (Figure 1).

Eviatar Zeruband writes that the European “discovery” of the Americas did not happen on that moment on October 12, 1492, when the sailor Rodrigo de Triana sighted the island of Guanahani, and told his captain, who was certain the land was Asia. The process of discovery took decades more: decades before European cartographers settled on a name for the new concept, and three centuries more before the geographical contours of the hemisphere were fully mapped.

<sup>20</sup> An image of what “coming together” would look like could include a consideration of the meaning of the Two-Row Wampum metaphor. (see Figure 1) The wampum is a beaded belt, about a metre long, with two blue stripes running the length of the belt, on a white background. The belt is interpreted as a river, along which the two parties to the treaty, whose paths are represented by the blue stripes, are travelling in parallel. They are separated by “trust, peace and mutual respect”, represented by the white spaces between them. It expresses the agreement negotiated between the Haudenosaunee and the Dutch in 1613 in what is now New York state that the parties agree not to interfere with each other’s boats but also not to drift apart and to maintain trading relations, but with an assurance of non-interference in the two parties’ internal affairs. As a thought experiment, the two-row metaphor could be extended to represent the two brain hemispheres, but the left hemisphere would need to agree not to dominate, and to be a faithful servant to the right hemisphere. An Indigenous colleague of mine has jokingly suggested that a catamaran or outrigger canoe might work as a metaphor, with the right hemisphere as the main canoe and the left as a useful operational extension.

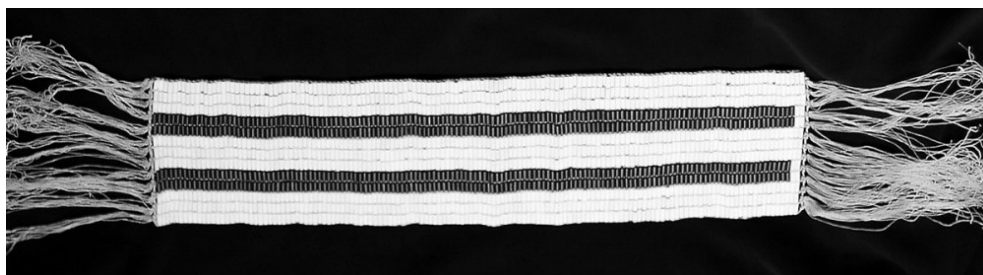


Figure 1. An Image of the Two-Row Wampum Treaty of 1613.

But “the map is not the territory”<sup>21</sup>, and it is only in recent decades that the Indigenous Peoples of the Americas have been in communication with each other and for example school groups of Inuit are able to travel to Guatemala or Perú on study tours to discover their many commonalities. It was only in 2007 that under the banner of UNESCO, the Indigenous Peoples of the Americas and the World came together to approve the final draft of the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP), and now we are witnessing in Canada and in other countries processes of ratifying the Declaration and the long and difficult path forward to bring the laws of each nation-state of the Americas (and their icy cannibal hearts<sup>22</sup>) into alignment with the articles of UNDRIP (as a minimal set of standards for the flourishing of Indigenous Peoples inside nation-states which they don’t control)<sup>23</sup>.

For this to occur at any time during this century, those with a default modus operandi of left-hemisphere dominance will need to start to learn the value of listening wisely to their local version of the hemisphere-wide Indigenous Critique and see the imperative value of stepping back from actions with potential world-ending consequences, in order to restore to their rightful leading place a right-hemispheric perspective, with its abundance of ideas to postpone the end of the world, as Ailton Krenak has called for, and which I am sure Ellen Gabriel would endorse.

But this America has yet to be discovered.

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<sup>21</sup> A favourite saying of Bateson’s, although the originator was the Polish-American scientist Alfred Korzybski. The contrast is between the physical “thing” (which can be mapped in an objective “I-it” way) and, on the other hand, the “territory” implies a relation between humans and/in nature as an “I-thou” relation). The left hemisphere sees the non-human world as an external mappable thing; the right hemisphere sees this world as “the home of all my relations, human and non-human”.

<sup>22</sup> This formulation I owe to my wonderful Anishinaabe colleague at Glendon, Maya Chacaby, Miigwetch Maya.

<sup>23</sup> This formulation I owe to Mary Simon, Inuk leader and (as of 2021) Canada’s Governor-General.

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### **A crítica indígena e a hipótese do cérebro dividido: Ideias para adiar o fim do mundo**

#### **RESUMO**

*A voz dos intelectuais indígenas sobre a conduta dos conquistadores europeus, sempre e onde quer que nas Américas tenha sido registrada, consiste em uma crítica completa das inclinações genocidas e ecocidas dos europeus. Nos últimos tempos, a voz assumiu tons apocalípticos, enfatizando que o desrespeito crônico do Ocidente pela natureza põe em perigo todos nós, com o apelo eloquente de Ayton Krenak por “ideias para adiar o fim do mundo”. Uma crítica surpreendentemente semelhante ao mundo ocidental, baseada na neurociência, vem do psiquiatra e filósofo escocês Iain McGilchrist, cuja Hipótese do Cérebro Dividido propõe uma explicação para aquilo que o Ocidente se tornou: uma ameaça existencial à sobrevivência humana. Outros, como Mignolo, Sousa Santos, Bateson, Harries-Jones, apresentaram ideias que se alinham com essa hipótese, mas este ensaio reúne essas duas correntes pela primeira vez e propõe que foi a conquista das Américas pelo Ocidente – seu povo, seus recursos naturais – que foi um fator-chave para normalizar essa mentalidade. Para estender a metáfora, a conquista do hemisfério americano normalizou a conquista do hemisfério direito pelo esquerdo.*

**Palavras-chave:** *Indígenas, Hipótese do Cérebro Dividido, Conquista das Américas, Pensamento ocidental.*

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