Indigenous Knowledges, Anticipation and Artificial Intelligence Vanessa de Oliveira Andreotti, University of British Columbia Carl Mika, University of Waikato Hemi Hireme, University of Oulu

My work is situated within a collective called "Gesturing towards decolonial futures" (GTDF), which consists of Indigenous and non-Indigenous researchers, artists, educators and communities. Our work brings together concerns related to racism, colonialism, unsustainability, climate change, biodiversity loss, economic instability, mental health crises, and intensifications of social and ecological violence. We are attempting to enable healthier possibilities of (co)existence that are viable, but are unthinkable/ unimaginable within our dominant cognitive and affective frames of reference and desire.

How we sense reality and how we think about knowledge and being, including the ways we approach futurity, anticipation and technology are bound by specific modern-colonial grammars of intelligibility that are culturally located and limited. The GTDF collective is interested in practices and possibilities that have been exiled by these grammars, specially practices that set horizons of hope:

- beyond modern forms of social-economy (e.g. capitalism, socialism and anarchism)
- beyond nation states and borders as mediators of relations
- beyond separation between "man" and nature (anthropocentrism, patriarchy and separability)
- beyond a single rationality and story of progress, development and evolution
- beyond social mobility as the purpose of life
- beyond consumption (of goods, knowledge, relationships, experiences and critique) as a mode of relating to the world

Our decolonial perspective is informed and inspired by Indigenous analyses and practices that affirm that our current global problems are not related to a lack of knowledge, but to an inherently violent modern-colonial habit of being. This habit of being is marked by three denials and associated illusions:

- the denial of systemic violence and complicity in harm: the fact that our comforts, securities and enjoyments are subsidized by expropriation and exploitation somewhere else (illusion of benevolent protagonism),
- the denial of the limits of the planet: the fact that the planet cannot sustain exponential growth and consumption (illusion of progress and possibility of continuity),
- the denial of entanglement: our insistence in seeing ourselves as separate from each other and the land, rather than "entangled" within a living wider metabolism that is bio-intelligent (illusion of separation, superiority, unrestricted autonomy and individuality).

Indigenous scholars in our collective have insisted on the experience of "layered time", where time is, at same time, linear, cyclical, messianic, non-linear and non-existent, depending on the dimensional sphere one approaches time. Thus,, notions and experiences of temporality vary according to where one is observing from. Their stance is also non-anthropocentric, which means that human beings do not hold monopoly over knowledge production. In fact, human intelligence is perceived to be very limited in comparison to "metabolic intelligence". An analogy could be made with a bio-internet, where our current neuro-biology conditioned by modernity has a rudimentary operating system that can only run precarious and dangerous apps that have the power to cause our own extinction.

In this context, on the one hand, AI could be seen as mimicry of the same moderncolonial grammar that created the global problems we are facing today. If it was created by the logic of the dominant system, it can only reproduce this logic without access to the wisdoms of the exiled bio-intelligence.

On the other hand, if we take the non-anthropocentric aspect of Indigenous thought into account, AI could also be hacked by the bio-intelligence itself. One example of this possible hacking can be found in Pisac, Peru. Following the publication of the book "Hacking ..." by Pollock, there has been a sharp increase in tech companies from Sillicon Valley organizing Ayahuasca retreats for their workers with a view to improve creativity. I asked Maria Jara, a Quechua resident who has worked with us for 16 years, if she thought that their ancestral medicine was being unjustly commodified and

instrumentalized for the continuity of the (violent) modern-colonial system. Her response surprised me. She answered that, on the one hand, people who come to these retreats approaching avuelita ayhuasca as a product for consumption and self-actualization do not get the full deal of what this medicine can do for you – they get something that is very different from approaching the plant with humility, as a relative, as Quechua people have done since time immemorial. On the other hand, she said, the plant has its own agenda and if she wants to travel to the US and work through the tech companies she will. I wondered who is hacking who? And to what extent is AI really "artificial"? Despite Maria's response, our collective is very much concerned with the instrumentalization of Indigenous knowledges and practices for non-Indigenous consumption – we call this "sausagization". In Canada, this happens through forms of inclusion (in institutions or disciplines) that want to continue business as usual, but add some (sanitized) Indigenous content that will validate their sense of benevolence and universality.

We are interested in the possibility of Indigenous knowledges and practices to be able to offer what they want to offer to the wider collective on their terms. For this to happen, those of us socialized within the modern-colonial grammar will have to sit for a long time at the limits of knowing, to assess the problematic and violent patterns of knowledge and poverty production that are naturalized and normalized in what we perceive to be real and ideal, and then maybe start to consider what we have been missing out in relation to the bio-internet and our vital compasses. Changing what we think is relatively easy in comparison to changing what we (unconsciously)desire, what we fear and what we hope for. Reallocating desires requires the shrinking of egos and the shedding of arrogance and vanity – no small task. But once we learn to see ourselves as both cute and pathetic, we might be able to encounter the more advanced apps for the bio-internet that Indigenous people may be able to gift us (back). Conversations about anticipation and artificial intelligence could be very different then.

See also:

Andreotti, V., Mika, C., Ahenakew, C., & Hireme, H. (2017). Indigenous Knowledge Systems and Anticipation. Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making, 1-14.

Andreotti, V., Stein, S., Ahenakew, C., & Hunt, D. (2015). Mapping interpretations of decolonization in the context of higher education. Decolonization: Indigeneity, Education & Society, 4(1): 21-40

Andreotti, V., Stein, S., Sutherland, A., Pashby, K., Susa, R., & Amsler, S. (2018). Mobilising different conversations about global justice in education: toward alternative futures in uncertain times. Policy & Practice: A Development Education Review, 26, 9-41.

Stein, S., Hunt, D., Suša, R., & de Oliveira Andreotti, V. (2017). The educational challenge of unraveling the fantasies of ontological security. Diaspora, Indigenous, and Minority Education, 11(2), 69-79.