Coloniality and Western Science: An Unbroken Relationship

Blakely Browne

Student Number 24664154

University of British Columbia

The act of creating knowledge, though seemingly devoid of power relations in Western science, due to its "thesis of value-neutrality" (Whitt, 2009, p.219), is highly political, as sociopolitical histories tend to decide what epistemologies are deemed legitimate, whose voices are heard, whose are silenced, and within these relations, whose are valued (Brown, 2018). Here in Canada, or more broadly, the Global North, ideas of land, land-use, and our relations to non-humans are very evident, as they manifest in material structures such as our housing markets (notably in the presence of private property), our modes of food production (Driver, 2013), and our domestication of and use of animals for both labor and as food sources (Brown, 2018). Dating back to colonial encounters, it is evident that certain images and written works detailing imaginative geographies, or "representations of place, space and landscape that structure people's understandings of the world, and in turn help to shape their actions" (Driver, 2013, p. 246) prevailed, and that these continue to influence imaginations of what Latin America is today. Colonialists saw Indigenous groups of what we now call Latin America as "backward" or "primordial" (National Geographic, 2013), due to a lack of formal Western agriculture or land-usage. Consequently, we can argue that from these colonial encounters came the birth of a relationality based in the Self and Other, synthesizing the dichotomies that separate theories of interaction between humans and non-humans in the Indigenous and non-Indigenous worlds today. As is argued by Julie Runk in her article discussing the Wounaan of Panama and their relations to the realm of the other-than-human, from this relationality stems a framework that has come to dominate the knowledge making practices of the West in the current day, that of an arborescent logic (2009). This logic, sustained through "hierarchical, dichotomous relationships that are static" (2009, p.458) serves to continue the Othering and persistent distinction between

the Self and Other, which may manifest in other binaries such as the human-nature, urban-natural, and human-non-human ones that are so common today. I am most interested in this human-nature dichotomy, and the ways in which it is reproduced in the present day, largely through the imposition of Western sciences. In this paper, I seek to analyze the ways in which the pursuit for scientific knowledge within the Amazon continues and perplexes colonialist relations between the Global North and South, devaluating and disengaging Indigenous epistemologies while reproducing human-nature dichotomies.

In his article describing a visit to the Brazilian Amazon, Hugh Raffles discusses the ways in which Indigenous individuals he encountered had what he terms "intimate knowledge", or a knowledge of land and surroundings grounded in the "lived experiences of everyday life" (2002, p.326). In this, he draws reference to the ways in which one Indigenous man, Moacyr, knew about a deep *pião* root system enabling trees to access deep water reserves prior to an investigation by Western scientists who had hypothesized but not known of their existence. Along with Moacyr, Raffles met others whose local, relational, and radical understandings of the world, seemed to transverse the "hierarchies of knowledge", displaying how power dynamics that define "what counts as science", serve to silence the "descriptive... anecdotal… [and] mythic" (2002, p.331). These alternate modes of knowledge production serve as representations of "other understandings and forms of looking at the world" (de Sousa Santos, 2012), drawing us to think more critically about the "so-called universalism of [Western] thought", while simultaneously highlighting the ways in which these "epistemologies of the south" (2012), which are formulated in what could be considered an informal, irrational method of knowledge creation through the lens of Western science, are very much valid. Here, I argue, the labelling of

Indigenous knowledges as subaltern, compared to those of "rationalized" non-Indigenous perspectives, draws attention to a distinctly colonialist framework of Northern epistemologies that can be seen to exist as a current form of Western imperialism. This classification of Indigenous knowledges as irrational or insignificant is further problematized when we see Western science continuously reaching to these Southern epistemologies in order to secure and obtain certain knowledges deemed valuable to the Western world. Laurelyn Whitt draws attention to a very visible aspect of this epistemological imperialism, detailing the ways in which Indigenous knowledges are generally considered threatened on a world scale, yet the only interests being taken to preserve them are through "biocolonialist research initiatives" (Whitt, 2009, p.221), interested in extracting knowledge held as valuable to a Western framework (knowledges that will proceed to contribute to Capitalism). Whitt draws on many examples of this biocolonialism, or the "commodification of knowledge and of genetic resources" that act as a "continuation of the oppressive power relations that have historically informed the interactions of western and indigenous cultures" (2009, p.1). Models of this lie in the adoption of medicinal plants into Western pharmaceuticals, such as the coca leaf and cinchona, or the use and preservation of Indigenous genetic material by institutions such as the Human Genome Diversity Project, as resources for future study on human genome diversity. This is further complicated when we see the ways in which this scientific imperialism holds value only in profitable knowledges, but is not preoccupied with acknowledging, respecting, or aiding in keeping knowledge making practices from which these understandings are developed alive.

Seemingly inherent to Western sciences is a system of dichotomous thinking, as externalized observation and taxonomy, rather than intimacy and interaction, lead to the reproduction of binaries and tropes of Othering (Brown, 2018). This logic resists and lacks in its

ability to create spaces of relational knowledge, missing what Raffles calls the intrinsic "placefullness" that is found in "specific ideas of locality" (2002, p.328). These place-based Indigenous knowledges, such as those of the Wounaan and Emberá, lend themselves to be located in rhizomic logics, rather than arborescent logics, as they are more apt to "emphasizing connection and heterogeneity, as well as dynamism" (Runk, 2009, p.458), while recognizing social connections as foundational to their cosmology, valuing relationships between all human and non-human components of the world around them. Runk contrasts these forms of knowledge making by drawing attention to modes of dichotomous thinking practiced in Western conservation practices in the Amazon, which tend to dichotomize land as forested or deforested, and respectively natural or cultural (2009, p.462). The power relations at play lend to the development of a "Western bias on trees, peripheral consideration of other knowledge systems, and a materialist bias [facilitating] the work of conservation science" (2009, p.462). This dichotomous thinking, lacking locality, has penetrated Western epistemologies to create erasures in natural history, as terms such as "untouched" or "pristine" are utilized on spaces in which there have been historical human connections. These dichotomous, taxonomical relationships that Western sciences apply to land, defining natural landscapes as devoid of humans, serve to continue supporting colonialist logics and knowledge making practices, and in turn, Western conservation practices lose multi-faceted relationships with what they attempt to conserve, instead serving to reproduce imperialist hierarchies of power as they seek to protect that which they don't completely understand.

Concluding, I have argued that Western sciences, predominantly interested in extraction and conservation within the Amazon, serve to reproduce and reengage tropes of colonialist relations between the Global North and Latin America, as Southern epistemologies are silenced

and deemed illegitimate, while Western epistemologies rise to dominate discourse surrounding what we define as nature, and our relations to it. Western science, and its interests in the Amazon prove to bring about questions as to how and in what ways coloniality persists through the present day. Whitt brings attention to the ways in which capitalist interests in the Amazon have re-integrated colonialist actions, replacing the commodification of "Indigenous lands and tangible resources" with the commodification of "Indigenous knowledge and genetic resources" (2009, p.220), while simultaneously assigning alternate human-nature relations to these spaces, which serve to sideline Indigenous understandings of the world. Through these interactions, we see how this new form of Western imperialism complicates modern ideas of depoliticized science, and draws us to further question the ways in which coloniality has imposed itself into contemporary times.

References

Brown, S. 2018, January 23. Lecture.

de Sousa Santos, B. [ALICE CES]. 2012, September 28. Spaces of Transformation: Epistemologies of the South https://www.youtube.com/watch?v=UzecpSzXZOY

Driver, F. 2013. Imaginative geographies, in (eds.) Paul Cloke, Philip Crang, and Mark

Goodwin, Introducing human geographies, third edition. New York: Taylor and Francis, pp. 234-248.

National Geographic [Little Dread]. (2013, May 8). *Guns Germs and Steel - Conquest 2/3 HD* [Video File]. Retrieved from https://www.youtube.com/watch?time_continue=189&v=iR8OaVDB3_E

Raffles, H. 2002. Intimate Knowledge. International Social Science Journal 54(3): 325-335.

Runk, J. V. 2009. Social and river networks for the trees: Wounaan's riverine rhizomic cosmos and arboreal conservation. American Anthropologist 111(4): 456-467.

Whitt, L. (2009). Science, Colonialism, and Indigenous Peoples: The Cultural Politics of Law and Knowledge. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511760068