

# GOOD TO THE LAST DROP? A CAREFUL CONSIDERATION OF COFFEE COMMODIFICATION

BY KELLE BYARD

Can you imagine your average morning routine without your regular cup of coffee? Many Americans cannot. This ubiquitous, hot beverage is so easily obtainable it is hard to conceive a bustling American lifestyle that does not involve its consumption. Around the world, coffee is highly sought beverage, with 1.6 billion cups being consumed each day. For me, an ideal cup of coffee has three ingredients: coffee, cream, and sugar. These are three commodities often taken for granted by society but have long-standing environmental histories that have been influenced by Western consumerism and imperialism that caused massive landscape changes and degradation. The contents of this ideal cup of coffee, therefore, is representative of the Anthropocene era due to their substantial impact on landscapes across the globe and the creation of complex anthropogenic processes.



These have altered world systems of commerce and the environment on a scale like never before.

Demand from the United States and Europe for dairy, sweetener, and coffee has dominated global systems of trade and extraction of these resources and caused significant degradation to forests and ecosystems within countries under their spheres of influence.

This is due in part to displacement of indigenous peoples, commodification of these ingredients, improvements in transportation, and technological innovation. Although each component to my ideal cup of coffee has its own special history, the ways in which they have impacted the people and the land connected to them intertwine. The harm that a simple cup of coffee has had on the environment of nations around the world in order to provide for the West's insatiable appetite is a defining feature in the era of humans.

The ability to enjoy a simple cup of coffee would be impossible without the imperialism that the New World was subjugated to by the United States and Europe. The domesticated cattle used for dairy, the plantation system, and the capital and labor necessary for the growth of each ingredient for this ideal cup of coffee was the result of New World dominion by Western power.

First, there was the ecological takeover by Europe. Alfred W. Crosby believes that a nearly automatic, biological process of conquering of the New World was completed via Old World flora and fauna, specifically their domesticated animals [1]. European domesticated animals and plants, like dairy cattle and ensuing weeds from crops, were able to adapt to the temperate areas of the New World quickly and were important sources of capital to the Europeans. This was the beginning of Western power in the Americas but also in countries like Australia and New Zealand. There is evidence of the continuation on ecological imperialism to this day. New Zealand's \$11.6 billion dairy industry [2] has led to negative impacts on freshwater, such as fecal contamination [3], nutrient accumulation [4], and soil compaction [5]. Likewise, to this day in Columbia, engineer organisms have maintained agricultural conditions in abandoned fields [6]. So, there is current evidence to support Crosby's claims, yet, this "biological takeover" would not have been possible without the globalization that has emerged within the Anthropocene. The environmental impacts of imperialism extend beyond this sense of an "automatic process"; the influence of Western markets completely transformed any lands they exploited.

The establishment of colonies in the New World is what first began the dispossession and migration of many indigenous people as the fight for property ownership became prominent according to Western laws. But, the introduction of cash commodity crops, like sugar and coffee, into the Americas further pushed indigenous peoples into the hinterlands and forced them to subsist on lower quality lands. One prominent region of colonization that exemplifies this is Mexico. Elinor Melville argues that for centuries agriculturalists exploited the fields in the region Valle de Mezquital, and that there is certain ecological evidence to conclude that these indigenous agriculturalists maintained balance between cultivation and the environment around them. However, Spanish colonials ultimately forced natives off the land for their use of the field for pastoralism [7]. The dispossession of peasants and indigenous people in favor of private property seizure is common in ecological imperialism and is demonstrated in the expansion of sugar and coffee in the Americas. Human values of economic prosperity

caused these drastic changes in land use. In Columbia, coffee became the leading industry as U.S. demand increased, and, in order to compensate, the Columbian government encouraged frontier settlement by offering up baldío land to settlers to produce coffee [8]. This was done at the expense of indigenous ejection. El Salvador, a small Central American country that became dominated by coffee, experienced severe environmental degradation, which also can be traced back to governmental responsibility [9]. The wealthy few had total control over the landscape and began to conquer indigenous subsistence farms, causing these farmers to become dispossessed [10]. Similarly, Cuba experienced the expulsion of native populations from their agricultural homesteads for sugar production. After Spain, the colonial ruler of Cuba, abolished slavery, freed workers became squatters in forests to avoid debts from centralized, hegemonic sugar planters [11]. Additionally, in the Philippines, peasants were ripped from their lands due to extra-legal title deeds and also were forced into the forest [12].

Each one of these examples of increased sugar and coffee growth had similar outcomes: degraded, eroding hill forests due to survival crop farming by dispossessed natives. Each country experienced this degradation, this pattern of desperation. The myth that indigenous peoples strove to conserve their environment should be abolished, for all people must survive using their environment. Warren Dean depicts the warring factions of the Tupi in South America, where losing tribes often retreated to the highlands of the Amazon and displaced hunter-gatherer groups living there [13]. They exploited this environment for agriculture, despite its lower productivity, in an attempt to replicate their previous living standards. This distinctly human tendency of conflict over natural resource usage is true amongst most peoples. Yet, the imperialistic nature of Western economies is especially harmful due to its massive scale, which drove many factions of people in many nations to starvation after abducting their lands to grow coffee and sugar. Never before has such analogous degradation been observed due to one species; this is a uniquely human imposition of destruction. So, it has been observed how initially Western imperialism forced native populations to degrade the environment. Yet, the actual cultivation of sugar, coffee, and dairy cattle also have caused significant changes in landscapes due to market demands from Europe and the United States. Richard Tucker, throughout his book *Insatiable Appetite*, describes how the pressure from foreign investment and Western demand increased the production of items like coffee and sugar. Each component of the ideal cup of coffee was commodified due to the Western consumers' craving for this beverage; therefore, their cultivation expanded.

Differentiation in sugar demand also was a cause of growth because different types of sugar, syrup vs. crystals, meant a different supply and refinement process that was increasingly being controlled by Europe [14]. Sugar became a common commodity rather than a specialized good. This commonness resulted in a surge of production, and in Cuba both U.S. government intervention and lack of regulation led to exploitation of their land for sugar. The Platt Amendment gave U.S. investors military backing to clear forests in Cuban lowlands to take advantage of the rich soils there [15]. After the first World War, the Lever Act allowed the U.S. government to control sugar marketing and production that boosted Cuban sugar production to the point that 25% of the world's sugar came from Cuba [16]. So long as virgin soil was available, the commodification of sugar was pursued, and deforestation persisted for no legal measures restricted its occurrence. Human values of economic prosperity and consumer demand that lead to a continuous control of sugar production by a government; it is emblematic of the Anthropocene because it again shows that human drive for economic prosperity leads to fundamental environmental change.

In middle-class America, in which overall coffee demand was high, Latin American coffee was preferred. Coffee's commodification was evident by its presence in fast food restaurants, supermarkets, and mass marketing; this led to the import of 3 billion pounds of coffee beans, 85% coming from Latin America in 1961 [17]. It is not difficult to imagine the sort of environmental damage this scale of demand caused. Species diversity was eliminated by felling old-growth forests in favor of coffee, and Andes mountain sides were stripped bare of their trees. The global coffee market, tied closely to Europe and North America, exhausted the Latin American land of nutrients and created patchwork farmlands treated with chemical fertilizers and pesticide [18]. This erasure of nature and replacement with human-marred landscapes in nations throughout the global South is physical evidence of the Anthropocene. Rich rainforests and biodiversity were supplanted by coffee trees to satisfy consumer wants in the West. Again, ecological imperialism maintained its authority over tropical landscapes.

In the rural United States, a different sort of change in consumer demand and commodification of dairy products led to environmental change. Waste from cream production, such as whey, seeped into waterways in the 1920s and '30s, causing sanitary issues that led to the phrase about odiferous "dairy air" [19]. Opposite to coffee and sugar, a decrease in dairy consumption and

lowering of commodity prices caused milk surpluses that resulted in excessive waste. This disturbed consumers, particularly recreationists [20]. Increase in demand is not always the cause in environmental degradation, because this water pollution of the 1920s and 1930s was a result of reduced consumption of dairy in the U.S. The variability of human consumption, but on an expansive, national (and sometimes international) scale means impacts ripple extensively among landscapes. As populations rise and so does consumer demand, the intertwining of human economy and the environment will only broaden.

Transportation and technology innovations exponentially increased the impact of coffee, sugar, and dairy as commodities, expanding the area of their influence and the quality of products that consumers expected. The most impactful transportation establishment was railways. Land was carved into parcels with the introduction of railways, and the limitations of time and geography melted away with the swiftness of train travel. “The railroad broke this age-old restrictive relationship between biological energy and movement,” according to William Cronon, and this breakage served to further land exploitation and change [21]. Railways eliminated the need to wait for a certain season in order to transport goods because of their reliability, and they became “second nature” in these countries: inherently integrated into the geography of each. The railways were a driving force for economies of superpower nations in Europe and North America. “Yankee” businessmen could travel into the hinterlands of nations like Brazil, Colombia, Cuba, and other countries, using railways in order to invest in large tracts of land to grow sugar and coffee [22]. Railways connected American-owned estates and sugar centrals, which meant there could be vast distances between farm and factory [23], thereby opening up the lands of countries to further, frequent exploitation. Similarly, within the United States, the interstate highway system allowed dairy to be ferried from once-isolated farms to urban centers. These refrigerated tank trucks made it possible for dairy farmers to sell higher quality products throughout the nation [24]. Human innovations in transport and technology have made my ideal cup of coffee more accessible, of higher quality, and more of a devastating environmental commodity.

Anthropogenic control over lands tightened with the implementation of this efficient transportation system, and the pattern of this control is present throughout nations under Western dominion.

The coffee industry shows no signs of slowing, especially when cafes like Tim Hortons, Biggby Coffee, and Starbucks come out with new concoctions every month. In order to savor the delicious, satisfyingly bitter taste of a good cup of coffee, the complex global web must continue to hold fast and will thus continue impacting processes of production. When considering the gross input for one drink, and the hundreds of years of ecological change on a global scale, one cup of coffee symbolizes innumerable entwinements between humans and nature. The physical changes to global landscapes used for coffee, sugar, and dairy farming are obvious, imposing, and flagrant. There are other implications to this ideal cup of coffee as well, such as the emission of 340 grams of carbon [25] or 200 liters of water for a single drink (26), but the profoundly human impacts on forests, fields, and people themselves make the ideal cup of coffee the ideal representative of the Anthropocene. Every morning that we make a fresh pot of coffee, we may be unintentionally aiding the continuation of environmental degradation and perpetuating the popular drink as a symbol of the Anthropocene. Maxwell House may argue that its coffee is “good to the last drop,” but as history reveals, and current practices point out, it’s not good for everyone.

## Works Cited

- Berners-Lee, Mike, and Duncan Clark. “What's the Carbon Footprint of ... a Cup of Tea or Coffee?” *The Guardian*, June 17, 2010. Date accessed April 22, 2018 <https://www.theguardian.com/environment/green-living-blog/2010/jun/17/carbon-footprint-of-tea-coffee>
- Clay, Jason. “How to Think About Your Grande Latte on a Finite Planet,” *The Guardian*, August 12th 2011. Date accessed April 22, 2018 <https://www.theguardian.com/sustainable-business/key-questions-finite-planet>
- Cronon, William. “Rails and Water” in *Nature’s Metropolis: Chicago and the Great West*, London: W. W. Norton & Company, 1992.
- Crosby, Alfred W. “The Overseas Migration of Western Europeans as a Biological Phenomenon.” in *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*, 55-93. Cambridge University Press, 1986.
- Dean, Warren, “Humans Invade: The First Wave,” in *With Broadax and Firebrand*, 20-40. University of California Press, 1995.
- Foote, Kyleisha J., Joy, Michael K., and Russel G. Death. “New Zealand Dairy Farming: Milking Our Environment for All Its Worth.” *Environmental Management*. Vol. 56. (2015): 709-720.

McKey, Doyle, Rostain, Stéphen, Iriarte, José, Glaser, Bruno, Birk, Jago J., Holst, Irene, and Delphine Renard. "Pre-Columbian Agricultural Landscapes, Ecosystem Engineers, and Self-organized Patchiness in Amazonia." *Proceedings of the National Academy of Sciences* 107, no. 17 (April 12, 2010): 7823-7828. Accessed April 22, 2018.

doi:10.1073/pnas.0908925107.

Melville, Elinor. "Environmental and Social Change in the Valle del Mezquital, Mexico, 1521-1600." *Comparative Studies in Society and History*, Cambridge University Press (1990): 24-53.

Mintz, Sidney. *Sweetness and Power* Markham: Viking Penguin Inc, 1985.

Smith-Howard, Kendra. *Pure and Modern Milk*. New York: Oxford University Press, 2014.

Tucker, Richard. "The Last Drop: The American Coffee Market and the Hill Regions of Latin America." in *Insatiable Appetite*, 179-225. University of California Press, 2000.

Tucker, Richard. "America's Sweet Tooth: Cane Sugar Transforms Tropical Lowlands." in *Insatiable Appetite*, 7-41. Rowman & Littleman Publishers Inc, 2007.

[1]. Alfred W. Crosby, "The Overseas Migration of Western Europeans as a Biological Phenomenon." in *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge University Press, 1986), 109

[2]. Kyleisha J. Foote, Michael K. Joy, and Russell G Death, "New Zealand Dairy Farming: Milking Our Environment for All Its Worth." *Environmental Management* 56 (2015): 709

[3]. Foote et al., "New Zealand Dairy Farming," 713

[4]. Foote et al., 713

[5]. Foote et al., 715

[6]. Doyle McKey, Stéphen Rostain, José Iriarte, Bruno Glaser, Jago Jonathan Birk, Irene Holst, and Delphine Renard. "Pre-Columbian Agricultural Landscapes, Ecosystem Engineers, and Self-organized Patchiness in Amazonia." *Proceedings of the National Academy of Sciences* 107, no. 17 (April 12, 2010): 7823-828. Accessed April 22, 2018.

doi:10.1073/pnas.0908925107.

[7]. Elinor Melville, "Environmental and Social Change in the Valle del Mezquital, Mexico, 1521-1600." *Comparative Studies in Society and History*, Cambridge University Press 32, no. 1, (1990): 24-53.

[8]. Tucker, Richard. "The Last Drop: The American Coffee Market and the Hill Regions of Latin America." in *Insatiable Appetite*, (University of California Press, 2000): 203

[9]. Richard Tucker, "The Last Drop:" 214

[10]. Richard Tucker, "The Last Drop:" 219

- [11]. Richard Tucker, "America's Sweet Tooth: Cane Sugar Transforms Tropical Lowlands." in *Insatiable Appetite*, (Rowman & Littleman Publishers Inc, 2007): 14
- [12]. Richard Tucker, "America's Sweet Tooth:" 40
- [13]. Warren Dean, "Humans Invade: The First Wave," in *With Broadax and Firebrand*, (University of California Press, 1995): 30
- [14]. Sidney Mintz, *Sweetness and Power* (Viking Penguin Inc, 1985): 32
- [15]. Richard Tucker, "America's Sweet Tooth:" 17
- [16]. Richard Tucker, "America's Sweet Tooth:" 18
- [17]. Richard Tucker, "The Last Drop:" 198
- [18]. Richard Tucker, "The Last Drop:" 208-210
- [19]. Kendra Smith-Howard, *Pure and Modern Milk*. (New York: Oxford University Press, 2014), 95
- [20]. Kendra Smith-Howard, *Pure and Modern Milk*: 96
- [21]. William Cronon, "Rails and Water" in *Nature's Metropolis: Chicago and the Great West*, (W. W. Norton & Company, 1992): 80
- [22]. Richard Tucker, *Insatiable Appetite*
- [23]. Sidney Mintz, *Sweetness and Power*: 13
- [24]. Kendra Smith-Howard, *Pure and Modern Milk*: 99
- [25]. Mike Berners-Lee and Duncan Clark, "What's the carbon footprint of ... a cup of tea or coffee?" *The Guardian*, June 17th, 2010, <https://www.theguardian.com/environment/green-living-blog/2010/jun/17/carbon-footprint-of-tea-coffee>
- [26]. Jason Clay, "How to think about your grande latte on a finite planet," *The Guardian*, August 12th 2011, <https://www.theguardian.com/sustainable-business/key-questions-finite-planet>