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## A Critical Examination of Capital, Slave Labor, and the Language of Profit in the Market for Sugar Ethanol

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A CRITICAL EXAMINATION OF  
CAPITAL, SLAVE LABOR, AND  
THE LANGUAGE OF PROFIT IN THE  
MARKET FOR SUGAR ETHANOL

*Geiza Vargas-Vargas\**

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*As someone who is a vaguely guilty white, Western European Brit, the rationalization is this: it was necessary for us to be strong. And how did we do that? We oppressed your people, we took your resources. But in retrospect, we realize we might not have done it quite right. But now we disapprove of you doing the same. And because of our slight guilt, we can't apologize. I once asked Mary Robinson, why don't we apologize? Why is that not a diplomatic tool? And she responded, 'well, you can't apologize for what you're still doing.'*<sup>1</sup>

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<sup>1</sup> Julia Ormond, actress and human rights activist, on supply chain slavery at the 2012 Oslo Freedom Forum (OFF 2012). Supply chain slavery is the idea that bondage is used at every stage of production in the supply of many goods globally. See Julia Ormond, Supply Chain Slavery, Address at Oslo Freedom Forum (May 8, 2012), (transcript available at <http://www.oslofreedomforum.com/blog/2012/05/08/julia-ormond-supply-chain-slavery/>). OFF 2012 is a conference that brings together policy makers, world leaders, and humanitarians on the issue of human rights in much the same way as the World Economic Forum in Davos, Switzerland brings together policy makers, global leaders, and capital markets leaders together on the issue of world finance and trade.

## INTRODUCTION

During the 1600s, sugar<sup>2</sup> represented one of the early fetishes<sup>3</sup> of foreign capital with a particular commodity, appropriated for its ultimate stimulation of pleasure in the European upper classes.<sup>4</sup> For the Europeans, sugar was a commodity of luxury, like diamonds or gold, with great social value but no intrinsic productive capacity.<sup>5</sup>

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<sup>2</sup> The sugar that is the subject of this article is derived from the sugarcane plant, as opposed to the sugar beet, through a crushing and extracting process. See F. Schneider Jr., *Sugar*, 4 FOREIGN AFF. 311, 311–20 (1926) (recounting history of sugar before “discovery” by Europeans).

<sup>3</sup> The term fetish is a powerful term, expressing multiple notions of fantasy, objectification, and illusion—concepts that are a strong subtext in this paper. The term fetish is derived in part from the Portuguese term *feitiço*, which was used to describe the fascination of religious objects for their mystical or magical powers. See William Pietz, *The Problem of the Fetish, I*, 9 RES: ANTHROPOLOGY & AESTHETICS 5, 5 (Spring 1985); Ruth Landes, *Fetish Worship in Brazil*, 53 THE J. OF AM. FOLKLORE, Oct.—Dec. 1940, at 261, 261. Karl Marx then adopted the term to signify the notion that commodities, the most fundamental building block of capital, are themselves magical as if naturally possessing value outside the value derived from human manipulation. See ROBERT L. HEILBRONER, MARXISM: FOR AND AGAINST 103 (1980). Here, however, I invoke the term for three reasons: First, the term here is homage to Marx. Second, I invoke Professor Anthony Farley’s usage, which articulates a certain race-pleasure derived from the African-American body, the “Black” body as subjugated object. See Anthony P. Farley, *The Black Body as Fetish Object*, 76 OR. L. REV. 457, 464–67 (Fall 1997). For me, and this is the third reason, the term signifies the historical obsession (the erotic and exotic perceptions) that Europeans have had with Latin America.

<sup>4</sup> See SIDNEY W. MINTZ, SWEETNESS AND POWER: THE PLACE OF SUGAR IN MODERN HISTORY (1985). Mintz is a professor of anthropology and a scholar of power and the human condition. He is a prominent scholar on the role of sugar in society, with his book at once critiqued and revered as a landmark piece. See also EDUARDO GALEANO, OPEN VEINS OF LATIN AMERICA: FIVE CENTURIES OF THE PILLAGE OF A CONTINENT 1–3 (1997). Sugar also has a unique place in Latin American and Caribbean history as creating sugar monocultures—economies dependent on the export of sugar.

<sup>5</sup> Essentially, a commodity is the starting point of production, a thing (often a natural resource) that potentially has two independent types of value, which express two different phenomenon: intrinsic value (value of the thing in and of itself) and productive value (value as shaped by relationships). For Karl Marx, the commodity is the relevant starting point when critiquing capital because it is the simplest expression of the entire system.

Eventually, however, this quality of luxury diminished as sugar became accessible, and ultimately a necessity, to the masses primarily as a food source.<sup>6</sup>

The seductive qualities of sugar as commodity have evolved once again, as sugarcane has come to represent another possibility in the world of alternative fuels.<sup>7</sup> This article, for example, shows that

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HEILBRONER, *supra* note 3, at 96. For both philosopher Adam Smith and Marx, these reflect the concepts of use-value and exchange-value. For Smith, “Nothing is more useful than water: But it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.” ADAM SMITH, *THE WEALTH OF NATIONS* ch. 4 (1776); *see also* CHRIS HARMAN, *ZOMBIE CAPITALISM: GLOBAL CRISIS AND THE RELEVANCE OF MARX* 22 (2010). For Marx, “A commodity is, in the first place, an object outside us, a thing that by its properties satisfies human wants of some sort or another. The nature of such wants, whether for instance, they spring from the stomach or from fancy, makes no difference.” Karl Marx, *Capital*, in *THE PORTABLE KARL MARX* 437, 437 (Eugene Kamenka ed. & trans., 1983). The concept of value being intrinsic to a thing immediately appears in quite bluntly. *Id.* at n.3 (“Things have intrinsic virtue.”). Value, however, is a fictional concept and may or may not be characterized by the price that a good trades for. Productive value is considered to be value that is derived through the laborious process that transforms a thing into something with an exchange value that prior to the transformation was not present intrinsically.

<sup>6</sup> In *Sweetness & Power*, Mintz explains that the evolution of sugar, from item of “luxury” and “rarity” to what he calls a “mass-produced exotic necessity of a proletarian working class,” is a function of economic forces creating a specific social result:

As the *production* of sugar became significant economically, so that it could affect political and military (as well as economic) decisions, its *consumption* by the powerful came to matter less; at the same time, the production of sugar acquired the importance precisely because the masses of English people were now steadily consuming more of it, and desiring more of it than they could afford.

MINTZ, *supra* note 4, at 45–46. Raj Patel, a policy analyst and scholar, also recognizes the significant presence of sugar in the diet of the masses. *See* RAJ PATEL, *STUFFED & STARVED: THE HIDDEN BATTLE FOR THE WORLD FOOD SYSTEM* (2010) (exploring the cultural and systemic variables that are at once the basis for global starvation and obesity).

<sup>7</sup> The idea that there is value in sugar as fuel is not innovative. In a 1925 New York Times piece, Henry Ford made the statement that “ethyl

the value of sugar as commodity is no longer driven by sugar's characteristic as food, but is instead driven by sugar's potential to replace oil as energy.<sup>8</sup> Sugar has thus quietly reemerged as one of

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alcohol was the fuel of the future." *Ford Predicts Fuel from Vegetation*, N. Y. TIMES, Sep. 20, 1925, at 24. As it relates to Brazil, the case study in this paper, the series of energy crises in the 1970s prompted Brazil's government to consider alternative forms of energy, and it was then that the country began developing sugar ethanol for internal consumption. In my research for this paper, I came to understand the highly politicized and polarized nature of discussions surrounding ethanol. Groups seem to fall into two camps: (1) those that argue that we need to reduce our dependence on oil and clean fuel developed from biomass and (2) those that argue that the undesirable effects of biofuel, e.g., the direct (deforestation) and indirect (use of oil during global transportation) impact on the environment. The latter group also argues that the use of food for the purpose of making a car run is detrimentally affecting the food supply by making global food prices higher. The arguments are not necessarily aligned along political lines. See Robert Bryce, *Ethanol: Feed a Person for a Year or Fill Up an SUV?*, ALTERNET (Mar. 5, 2007), [http://www.alternet.org/story/48790/ethanol%3A\\_feed\\_a\\_person\\_for\\_a\\_year\\_or\\_fill\\_up\\_an\\_suv](http://www.alternet.org/story/48790/ethanol%3A_feed_a_person_for_a_year_or_fill_up_an_suv) (discussing paper published by conservative researcher arguing that ethanol cannot satisfy U.S. demand for fuel and that the issue of ethanol is a moral one, not a political, national security, oil-related one); see also *infra* note 16.

<sup>8</sup> See Christine Bolling & Nydia R. Suarez, *The Brazilian Sugar Industry: Recent Developments*, in SUGAR AND SWEETENER: SITUATION AND OUTLOOK REPORT 14, U.S. DEP'T OF AGRIC., ECON. RESEARCH SERV., (Sept. 2001), available at <http://usda01.library.cornell.edu/usda/ers/SSS/2000s/2001/SSS-09-27-2001.pdf> (discussing ethanol as the primary use of cane sugar). In addition, a 2008 World Bank report very clearly recognizes a correlation between increased global food prices and the demand for food crops for the purpose of biofuel production. See Donald Mitchell, *A Note on Rising Food Prices* (Apr. 8, 2008), <http://image.guardian.co.uk/sys-files/Environment/documents/2008/07/10/Biofuels.PDF> ("Increased biofuel production has increased the demand for food crops and been the major cause of the increase in food prices.") (emphasis omitted). Furthermore, and perhaps more compelling to me, is the investment activity of both energy and food corporations in the alternative energy sector. For example, the homepage of DuPont Biofuels, a subsidiary of the chemical company DuPont, states, "We also are looking at ways to increase agricultural productivity, and enhance the attributes of certain crops that are most useful for biofuel technologies." See DUPONT BIOFUELS (Mar. 31, 2013), [http://www2.dupont.com/BioFuel/en\\_US/about/index.html](http://www2.dupont.com/BioFuel/en_US/about/index.html); see also Jim Lane, *Cargill to Open Brazil Biodiesel Plant this Month*, BIOFUELS DIGEST (Aug. 27, 2012), <http://www.biofuelsdigest.com/bdigest/2012/08/27/cargill->

the more sought after commodities because of its relevance in the production of alternative energy.<sup>9</sup> The fetish in sugar is no longer sweetness and luxury. Instead, the fetish has evolved as the market discovers that there are magnificent profit yields in biofuel.<sup>10</sup>

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to-open-brazil-biodiesel-plant-this-month/; Press Release, Monsanto Company, Monsanto Company and Mendel Biotechnology Announce Cellulosic Biofuels Collaboration (Apr. 28, 2008), available at <http://www.prnewswire.com/news-releases/monsanto-company-and-mendel-biotechnology-announce-cellulosic-biofuels-collaboration-57529502.html>. Ironically, Cargill announced the closing of its biofuel plant in Germany. See *Cargill closes a German biodiesel plant on overcapacity*, REUTERS (Nov. 7, 2012, 8:47 AM), <http://www.reuters.com/article/2012/11/07/cargill-biodiesel-germany-idAFL5E8M7BXX20121107>. In addition, later in this article I discuss joint ventures involving BP and Royal Dutch Shell most notably.

<sup>9</sup> See Bolling & Suarez, *supra* note 8; see also Constanza Valdes, *Brazil's Ethanol Industry: Looking Forward*, U.S. DEP'T OF AGRIC., ECON. RESEARCH SERV., (June 2011), available at <http://www.ers.usda.gov/media/126865/bio02.pdf> (examining the development of the sugar ethanol industry in Brazil and considering complications over the next ten years).

<sup>10</sup> The reach for profitability within the biomass industry extends dramatically into the realm of pharmaceuticals, seed cultivation, food, energy, intellectual property, the market for sequestration of greenhouse gases, and synthetic genomes. See Ted Agres, *Rescues Around the World*, SCIENTIFIC AM. WORLDVIEW: A GLOBAL BIOTECHNOLOGY PERSPECTIVE, 2009, at 28, available at <http://www.saworldview.com/files/dmfile/SAWorldview.pdf>. The article explores the ways in which companies are lobbying legislatures to provide significant tax credits, changes to accounting rules, or both, to foster investment. In the United States, for example, a Canadian trade association is trying to influence Congressional legislation that would "allow companies to accelerate net operating losses and to take research and development tax credits as a deduction against future earnings, but at a discount from what they otherwise would have been." *Id.* at 28. J. Craig Ventor, founder and CEO of Synthetic Genomics, Inc., a privately held company funded in part by BP plc, is said to have stated that "[w]hoever produces abundant biofuels could end up making more than just big bucks – they will make history . . . The companies, the countries, that succeed in this will be the economic winners of the next age to the same extent that the oil-rich nations are today." See DIANA BRONSON ET AL., ETC GROUP, EARTH GRAB: GEOPIRACY, THE NEW BIOMASSTERS AND CAPTURING CLIMATE GENES 52 (2011); see also SYNTHETIC GENOMICS, <http://www.syntheticgenomics.com> (last visited Sept. 29, 2012). Synthetic Genomics, Inc. is creating a market in innovation, specifically in the genetic modification of

Sugar as now financed and traded<sup>11</sup> derives its value in the modern market not just from productive capital (i.e., from the actual growing, processing, and trading of sugarcane). Value is also derived from the layers of complex (structured) financing arrangements that are intended to either mitigate risk or create a separate market in the trade of derivative contracts or energy trade agreements.<sup>12</sup> Thus, the sugar trade is one which represents multiple, complex layers of business and finance activity. Notwithstanding the complexities, however, sugar continues to represent power hierarchies that permeate social, political, and economic relationships.<sup>13</sup> The power of sugar in organizing society is phenomenal and unmistakable.<sup>14</sup>

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biomass and other organisms, so as to create synthetic forms of fuel. On the historical interest of foreign capital with natural resources, see also Antonia Darder, *Schooling and the Empire of Capital: Unleashing the Contradiction*, 50 VILL. L. REV. 847, 851 (2009) (“Then, as today, the empire of capital sought global conquest, through a singular political economy. While in an earlier time, conquest was focused on raw materials and natural resources for the expansion of industrial capabilities, global conquest today is tied to the control of labor, natural resources and the market place.”).

<sup>11</sup> Sugar as a raw commodity is traded on the New York Board of Trade as the Sugar No. 11 futures contract for physical delivery. The price of the contract is sensitive to changes in supply arising from problems with cultivation and production. Most sugar exports come from either Brazil or India. See Bolling & Suarez, *supra* note 8, at 14. Any time the crop in these countries is less than expected, as a result of weather conditions, harvesting issues, or equipment issues, the shortage is certain to trigger spikes in prices due to unsatisfied demand. For example, in May 2012, The Financial Times reported increased costs of production for sugar produced in Brazil, claiming that while Brazil is dominant in the industry, the country’s advantage is challenged as a result of variables ancillary to sugar production, including currency exchange rates and lack of investment in infrastructure. See Joe Leahy, *Brazil Sugar Production Costs Rise*, THE FIN. TIMES, May 15, 2012, <http://www.ft.com/intl/cms/s/0/7e4e89f4-9eab-11e1-a767-00144feabdc0.html#axzz21UpCvqW1>.

<sup>12</sup> For an examination of the role of derivatives and other financial instruments in managing risk in project finance specifically in the Americas, see Shalanda H. Baker, *Unmasking Project Finance: Risk Mitigation, Risk Inducement, and an Invitation to Development Disaster?*, 6 TEX. J. OIL GAS & ENERGY L. 273 (2010–2011).

<sup>13</sup> The notion of hierarchies, or of markets organizing society into clusters of empowered and disempowered groups, whether by class, race,



While this paper critically examines the relationship among capital, labor, and natural resources in the sugar ethanol market, I recognize the importance of foreign investment in creating jobs and increasing the standard of living in formerly colonized capital-scarce countries. I also recognize that a discussion of sugar ethanol is particularly complex because of the current dilemma that global economies face: continue dependence on a limited supply of fossil fuel (the burning of which will lead to catastrophic climate change),<sup>15</sup> or develop cleaner fuel methods that themselves create risks.<sup>16</sup>

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gender, etc., is an idea or theme that flows as a strong undertow or subtext in this paper.

<sup>14</sup> See MINTZ, *supra* note 4, at 45. See generally GALEANO, *supra* note 4; PATEL, *supra* note 6.

<sup>15</sup> The issue of biofuel is an extremely political and polarizing one. One can find as much research that pushes for biofuel as a viable substitute for fossil fuels as one can find research that concludes that biofuels (1) cause volatility in the commodities and global food markets, (2) are marginal in their greenhouse gas emissions as compared to fossil fuels, and (3) harm the environment. For example, in 2008 the World Bank released a report by two of its economists that argued “the effect of biofuel on food prices has not been as large as originally thought, but that the use of commodities by financial investors (the so-called ‘financialization of commodities’) may have been partly responsible for the 2007/08 spike.” John Baffes & Tassos Haniotis, *Placing the 2006/08 Commodity Price Boom into Perspective 2* (The World Bank, Policy Research Working Paper No. 5371, 2010). This report was wholly contradicted by the release of a “secret” internal memo written by a researcher at the World Bank, which articulated great concern for the massive impact of biofuel on food prices. See Mitchell, *supra* note 8 (stipulating that this is a “[d]raft, not for citation or circulation” and that “[t]he views expressed in this paper are those of the author and should not be attributed to the World Bank or its Executive Directors”); see also Aditya Chakraborty, *Secret Report: Biofuel Caused Food Crisis*, THE GUARDIAN (July 3, 2008), <http://www.guardian.co.uk/environment/2008/jul/03/biofuels.renewableenergy/print>; Richard G. Luger & R. James Woolsey, *The New Petroleum*, 78 FOREIGN AFF., Jan.–Feb. 1999, at 88 (arguing in favor of biofuels—largely second generation fuels derived from bacteria and yeast feeding off sugar—because they reduce prospect of war, which necessarily arises from oil dependence; also finding that biofuel is compatible with existing infrastructure); A.C. Bedford, *The World Oil Situation*, 1 FOREIGN AFF. 95, 96 (1923) (examining U.S. dependence on oil in 1923).

<sup>16</sup> See C. Ford Runge & Benjamin Senauer, *How Biofuels Could Starve the Poor*, 86 FOREIGN AFF., May–June 1997, at 41, 47 (“[B]iofuel industry has long been dominated not by market forces but by politics and the interests of a few large companies.”); see also Isabella Kenfield, *Is Ethanol*

Notwithstanding these complexities, the thesis of this paper is that the sugar ethanol market, as a means of alternative energy, effectively recreates colonial patterns of forced labor, natural resource degradation, and inequitable North-South distribution of the costs and benefits of ethanol production. I argue that we cannot give these externalities a “pass” simply because there is a pretext of being “green.”<sup>17</sup> I use this discussion to argue for a correction in how neo-classical economics defines value and profit.

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To communicate this thesis, this paper is organized into three parts. In Part I, I examine forced labor on sugarcane plantations and the illusory notion that this practice is not tantamount to slavery because workers are “free” to contract with their employers. I argue

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*the Solution or the Problem?*, ALTERNET (Mar. 12, 2007), [http://www.alternet.org/story/49138/is\\_ethanol\\_the\\_solution\\_or\\_the\\_problem](http://www.alternet.org/story/49138/is_ethanol_the_solution_or_the_problem) (expressing the idea that agribusiness in Brazil reaffirms the Portuguese colonial model of economic growth and that “[b]iofuel production in Brazil ‘reproduce[s] and legitimize[s] the logic of occupation of rural areas by multinational agribusiness, and perpetuate[s] the colonial project to subvert ecosystems and people to the service of the production and maintenance of a lifestyle in other societies’”); Charles R. Pouncy, *Food, Globalism and Theory: Marxian and Institutional Insights into the Global Food System*, 43 U. MIAMI INTER-AM. L. REV. 89 (2011) (examining how world hunger is created by corporate agendas and ideologies relating to food distribution and not supply); Carmen G. González, *The Global Food Crisis: Law, Policy, and the Elusive Quest for Justice*, 13 YALE HUM. RTS. & DEV. L.J. 462, 462 (2010); Carmen G. González, *Cluster 1: Theoretical Perspectives Introduction: The Global Politics of Food*, 43 U. MIAMI INTER-AM. L. REV. 77, 77 (2011) (“The immediate causes of skyrocketing food prices included rising petroleum prices, adverse weather, burgeoning meat consumption, diversion of agricultural land to biofuels production, and financial speculation in agricultural commodity markets.”).

<sup>17</sup> Kenfield, *supra* note 16 (“‘The problems with [sugarcane’s] production today are very similar to the problems it generated hundreds of years ago,’ says Maisa Mendonça, Director of the São Paulo-based NGO Rede Social. Sugarcane fieldworkers endure some of the hardest labor in the world.”); see also Jenna Scatena, *Ethanol Is a Disaster, But What About Other Fuels?*, ALTERNET (Jan. 11, 1999), [http://www.alternet.org/story/118436/ethanol\\_is\\_a\\_disaster%2C\\_but\\_what\\_about\\_other\\_biofuels](http://www.alternet.org/story/118436/ethanol_is_a_disaster%2C_but_what_about_other_biofuels); Nicole Colson, *Corn, Incorporated: The Ethanol Scam*, ALTERNET (Jul. 14, 2008), [http://www.alternet.org/story/91343/corn%2C\\_incorporated%3A\\_the\\_ethanol\\_scam](http://www.alternet.org/story/91343/corn%2C_incorporated%3A_the_ethanol_scam).

that the formal equality created by the labor contract masks the substantive inequality created by the coercive and exploitative circumstances surrounding employment in the sugar plantations. While the sugar ethanol industry may create market opportunities for emerging economies like Brazil, it also perpetuates the legacy of slavery.

In Part II, I analyze the impact of sugar ethanol production on the relationship between the Global North and the Global South. I consider the business and legal context in which foreign capital is pouring funds into Brazil's sugar market, and argue that the allocation of power and wealth is distorted as (1) the capital source continues to be powerful, and largely foreign, interests, and (2) those with access to the asset or resources continue to be local, powerless, and easily displaced landowners or farmers. The ethanol market and ensuing sugar trade represents a troubling paradox. In Brazil, foreign capital provides the necessary stimulation to develop a stagnating ethanol market. However, such growth is at a cost as (1) natural resources (e.g., sugarcane and the Amazon) are exploited, (2) the value and wealth generated by the trade continue to benefit a foreign minority, and (3) inhumanity continues to define the labor conditions. As discussed herein, the business and legal environment in Brazil is one that welcomes and is dependent on foreign capital.

In Part III, I consider the structures that reproduce colonial-era inequities. While the market has discovered and produced a new source of energy, one that will potentially remove the world's dependency on oil, the language and conduct that structures the opportunity and capital environment remains the same. By language and conduct, I mean the (1) neo-classical definition of profit, which I posit is purposely misinformed or misdefined so as to minimize the value of labor and at once subordinate human beings to the imperatives of capital; and (2) idea that profit (as misconstrued) is the sole agenda of private business with externalities (e.g., interference with food supply, destruction and pollution of the environment, and poor working conditions) as acceptable collateral damage. In regard to the Global North's control of global markets, this enables a small minority to reap the benefits of the sugar ethanol industry while externalizing the costs of such industry on the people and the natural environment of the Global South.

In rethinking profit, and perhaps ultimately rethinking capitalism,<sup>18</sup> the challenge is to overcome the problem of whether the change that is being proposed will actually produce a difference in how rights are recognized and how resources are allocated.<sup>19</sup> Notwithstanding the highly theoretical and abstract nature of my position, I believe that a change in language and conduct is the important beginning.

#### I. BLOOD TRANSACTIONS<sup>20</sup>: SUGAR AS THE NARRATIVE OF BONDAGE

*For in a very concrete way Europe has stuffed herself inordinately with the gold and raw materials of the colonial countries: Latin America, China, and Africa . . . . Europe is literally the creation of the Third World. The wealth which smothers her is that which was stolen from the underdeveloped peoples.*<sup>21</sup>

The historical narrative of sugar as a sweet thing is the narrative of slavery.<sup>22</sup> It is the narrative of bondage—of subjection. By determining that entire populations—selected by darkness of skin tone—were inferior to whiteness, whiteness was able to define itself as superior. And when the market for sugar was created, and

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<sup>18</sup> See Lynn Stout, Address at the University of California Santa Cruz Conference on Rethinking Capitalism: Social Risk, Human Capital, and Financializing Inequality (Apr. 30, 2010), available at <http://rethinkingcapitalism.ucsc.edu/post/category/rethinking-capitalism-conference>.

<sup>19</sup> R.H. COASE, THE FIRM, THE MARKET, AND THE LAW CH. 7 (1988).

<sup>20</sup> The title for this section of the paper is inspired by the passage in Frederick Douglass's narrative in which he describes the violent disciplining (i.e., bloody transaction) of his Aunt Hester by the plantation master, Colonel Lloyd, for her indiscretion, namely being seen with another slave, a male, named Ned Roberts. Colonel Lloyd whipped a naked Aunt Hester, yelling at her, "D—d b—h." FREDERICK DOUGLASS, NARRATIVE OF THE LIFE OF FREDERICK DOUGLASS, AN AMERICAN SLAVE 18 (1845).

<sup>21</sup> FRANTZ FANON, THE WRETCHED OF THE EARTH 102 (Constance Farrington trans., Grove Press 1982) (1963).

<sup>22</sup> I use the term narrative to convey something more, perhaps beyond mere story. It is the location of language and of experience.

appropriated by the European upper classes, it also created complex layers of superiority and inferiority.

The colonialism-era sugar trade further defined relations between classes, and certainly global hierarchies, particularly in terms of how the Global North<sup>23</sup> (namely, Europe) saw itself against the Global South (Latin America, Africa, India, and Middle East). For the Global North, specifically Europe and then the United States, Latin America became the locus for capital accumulation.<sup>24</sup> A passage in *Sweetness & Power* where Robert Mintz quotes British theorist John Stuart Mill powerfully clarifies the extent to which human superiority became defined through the commodity trade, including sugar:

There is a class of trading and exporting communities, John Stuart Mill wrote, on which a few words of explanation seem to be required.

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<sup>23</sup> My use of the terms Global North and Global South is informed by the LatCrits, a group of activists and scholars that create and engage in theory and praxis motivated by anti-subordination principles. See [www.latcrit.org](http://www.latcrit.org). The geographic areas that define the Global South have historically been described, or defined, as Third World, underdeveloped, developing nations, and in finance as “emerging markets” because instability raises the prospect of significant returns on investment. See David M. Trubek, *From Humanitarian Assistance to Professional Education: Fifty Years of the Wisconsin Law School’s Engagement with the Global South*, 30 WIS. INT’L. L.J. 1, 3–4 (2012); see also Enrique R. Carrasco & Sean Williams, *Emerging Economies After the Global Financial Crisis: the Case of Brazil*, 33 NW. J. INT’L L. & BUS. 81 (2013). For me, these are all descriptions and definitions that suggest inferiority. Global North and Global South are geographic delineations, which at once reflect political and international relations.

<sup>24</sup> GALEANO, *supra* note 4, at 2, 78. Galeano also addresses “internal colonialism,” the unequal class relations that arise within the colonialism phenomenon. About Brazil, he writes:

In various ways the Northeast is the victim of internal colonialism for the benefit of the industrialized south. Within the Northeast, the *sertão* region is subordinated to the sugarcane belt which it supplies, and the latifundios in their turn are subordinated to processing plants that industrialize sugar production. The ancient institution of the individually owned sugar estate is in crisis: the central mills have devoured the plantations.

*Id.* at 63.

These are hardly to be looked upon as countries, carrying on an exchange of commodities with other countries, but more properly as outlying agricultural or manufacturing estates belonging to a larger community. Our West Indian colonies, for example, cannot be regarded as countries with a productive capital of their own . . . [but are, rather] the place where England finds it convenient to carry on the production of sugar, coffee and a few other tropical commodities.<sup>25</sup>

The tone and perspective of Mill's comment indicates an element of disdain and superiority—a sense that the countries that become targets of English colonialism are not considered sovereigns and are certainly not to be respected as equals. Instead, Mill seems to indicate, they are locations for exploitation and theft. Very telling was the fact that the local population did not benefit from the generation of profit on the sugar plantation—a thesis that is relevant today.<sup>26</sup> In a discussion about his experiences in Puerto Rico—Mintz articulates that while the natural resource was located on the island, the end result was intended for consumption elsewhere:

Of course, the sugar was not being produced for the Puerto Ricans themselves: they consumed only a fraction of the finished product. Puerto Rico had been producing sugar cane (and sugar in some form) for four centuries, always mainly for consumers elsewhere, whether in Seville, in Boston, or in some other place. Had there been no ready consumers for it elsewhere, such huge quantities of land, labor, and capital would never have been funneled into this one curious crop . . .<sup>27</sup>

The attitude that is reflected here is that a target be it a country, an individual, or natural resource is necessarily reduced to whatever use-value need be extracted from it. For example, the local

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<sup>25</sup> MINTZ, *supra* note 4, at 42.

<sup>26</sup> See PATEL, *supra* note 6, at 190 (“While the refrain ‘Brazil has become an agricultural exporting giant’ is true, the accompanying and tacit implication, that the majority of Brazilians have benefited from this new-found global status, is false.”).

<sup>27</sup> MINTZ, *supra* note 4, at xviii–xix.

environment (e.g., the Amazon) is not a necessary part of our environment to be protected; rather, it is another source from which wealth can be extracted. People are not looked at as people (or historically, human). People are units of labor from which profits can be extracted, or in the case of private persons, units of profit themselves.

The determination of who consumed and who produced was another means in which definitions and perceptions of superiority were enforced.<sup>28</sup> Historically, the Global North had access to capital and power, and the Global South had access to the natural resource but no access to capital or power. The group with the capital was able to exploit conditions favoring it, thus reinforcing the perception and actuality of global hierarchy. I would argue that this same narrative persists today notwithstanding the transition of sugar from food to fuel, with slavery, forced labor, and bondage as the continued methods of value creation.<sup>29</sup>

This section begins with a description of the process in which sugar is extracted from the sugarcane plant, and then a consideration of the impact of this process on the human body. I begin discussion of one of the themes in this paper, that sugar very clearly organized and defined society, and the ultimate goal of this section is to bring to light the dichotomies, the historical relationships that defined the sugar trade, and those that continue to create the appearance of formal equality while at once sustaining material inequalities. Part of the inquiry necessitates a discussion of the illusion that is the private contract between worker and employer,<sup>30</sup> and the human rights

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<sup>28</sup> *Id.* at 42 (“The wealth they created mostly returned to Britain; the products they made were consumed in Britain; and the products made by Britons—cloth, tools, torture instruments—were consumed by slaves who were themselves consumed in the creation of wealth.” (emphasis added)).

<sup>29</sup> See discussion *infra* Part I.C. Slavery, or forced labor as some prefer to call it, as a business model is documented just about everywhere except for corporate disclosure documents.

<sup>30</sup> While there is equality, in that both worker and employer have the right to enter into a business relationship or not, the circumstances in which that decision is made is not one of equality, which leads to inequality. See Darder, *supra* note 10, at 852 (“[W]e must cultivate a critical understanding of how the politics of globalization have functioned to perpetuate increasing material inequality and human suffering, in the name of economic development, democracy and social progress.”). If as former Brazil President Lula puts it, “Those who do not cut sugarcane go hungry,” then

violations that seem integral to sugar production and indicate the profitability of the slave plantation as an economic model.<sup>31</sup>

A. THE EUROPEAN SUGAR PLANTATION

It takes extraordinary human effort to cut sugarcane, and as discussed later in this article, an enormous amount of capital. The work is so violent on the human body that the idea of the zombie grew out of the physical and mental effort needed to cut and process sugarcane in Haiti. The zombie, a body that moves absent consciousness, is described in *Sweet Negotiations*:

It is not surprising that the folklore figure of the zombie emerged from sugar plantations. Slaves faced not only the danger of scalding but also that of getting their fingers caught in the mill's rollers. Since the arm was invariably drawn in . . . 'if a mill feeder be catch't by the finger, his whole body drawn in, and he is squeez'd to pieces.' . . . Since

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formal equality is a mere illusion and reinforced by a structure which denies that opportunity. See JEFFREY REIMAN & PAUL LEIGHTON, *THE RICH GET RICHER AND THE POOR GET PRISON: IDEOLOGY, CLASS, AND CRIMINAL JUSTICE* 70 (9th ed. 2010).

<sup>31</sup> See Clemens Höges, *A 'Green Tsunami' in Brazil: The High Price of Clean, Cheap Ethanol*, SPIEGEL ONLINE (Jan. 22, 2009, 6:38 PM), <http://www.spiegel.de/international/world/0,1518,602951,00.html> ("The ancestors of Brazil's big landowners established the first plantations shortly after Christopher Columbus brought sugarcane to the New World. First they drove Indians into their fields, then they shipped in blacks from Africa. The nightmare of trans-Atlantic slavery began with sugarcane. *Now the crop gives up ethanol as well as sugar, and a green tsunami is rolling across Brazil.*"(emphasis added)); see also MINTZ, *supra* note 4, at xxiv (noting that island plantations were the invention of Europe); *id.* at 47–52 (describing the dangerous work involved with boiling the cane); PATEL *supra* note 6, at 78 ("To grow tea and sugar required industrial agriculture's single most bloody innovation—the plantation. The agricultural technology of advanced and permanent monoculture came bundled with its own social technology, of soil tilled, cane hacked and leaves plucked by an endless supply of almost disposable people from the Global South."); Russell R. Menard, *Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire*, 81 AGRIC. HIST., Summer 2007, at 309, 309 (discussing the financial gains made in English commerce due to the plantation model).



the harvest season could last ten months, during which the mill ran constantly, shutting down only to clean or repair the machinery when rain prevented harvesting cane or on Sundays, the slaves were almost always exhausted. They are often described as sleeping on their feet, while in Brazil ‘sleepy like a sugar mill slave’ was a common expression.<sup>32</sup>

The zombie represents a non-human condition; in essence a subaltern<sup>33</sup> black or brown body occupied by the European conception of (1) humanity, (2) property, and (3) ownership and power.<sup>34</sup> Through the space that is the slaves’ bodies, an entire economic theory sustained trade, and the sugar trade in particular depended precisely on an economic theory or model in which human beings could be bought, sold, traded, and disposed of in a wage market that devalued the wage itself.<sup>35</sup>

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<sup>32</sup> RUSSELL R. MENARD, SWEET NEGOTIATIONS 15 (2006).

<sup>33</sup> Gayatri Spivak, *Can the Subaltern Speak?*, in MARXISM AND THE INTERPRETATION OF CULTURE (Cary Nelson & Lawrence Grossberg eds., 1988) (explaining that the subaltern is the person without a voice—the person living on the margins of society).

<sup>34</sup> In essence, this paper is about power and the social, economic, and political structures that replicate power. While I do not cite particular passages, I am greatly influenced by the readings of Michel Foucault, Antonio Gramsci, and Jean-Paul Sartre. See MICHEL FOUCAULT, HISTORY OF SEXUALITY VOL. I–III (Robert Hurley trans., 1990); ANTONIO GRAMSCI, SELECTIONS FROM THE PRISON NOTEBOOKS (Quentin Hoare & Geoffrey Nowell Smith eds., 1971); JEAN-PAUL SARTRE, ANTI-SEMITES AND JEW: AN EXPLORATION OF THE ETIOLOGY OF HATE (George J. Becker trans., 1948).

<sup>35</sup> I discuss the wage market issue in Part III of this paper. In this part, I use the term “disposable people.” I thought I was clever in coming up with the idea; however, in the course of my research I determined that this idea is in no way novel. That said, I was delighted to realize that I am not alone in my assessment. See KEVIN BALES, DISPOSABLE PEOPLE: NEW SLAVERY IN THE GLOBAL ECONOMY (2012). During the colonial and plantation era, slaves were considered the private property of plantation owners. Today, Bales and others define a new condition of the modern slave: the condition of commodity. The modern slave as commodity is cheaper and more profitable to the process than the slave as property was to the slave owner. *Id.* at 14–15. There is no need to invest capital to maintain the slave as property because the slave can easily be replaced. There is no need for long-term maintenance and care of “property” and certainly no need for the

While what defines slavery or slave labor may have evolved,<sup>36</sup> there is a truth that remains today: The narrative of sugar as fuel continues the narrative of bondage, a reality that is well documented.<sup>37</sup> The individual (typically a male because women are deemed to produce lower output per day) that is caught in the predicament of bondage or slave labor is one that is poor and with very few socio-economic options. In other words, the individual is a member of what Lucy Parsons calls the “property-less class.”<sup>38</sup> Without a legacy of privilege or property, this individual has only manual labor to sell.<sup>39</sup>

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expense of documents protecting legal ownership. As Bales notes, a short-term relationship, low-cost purchase, and absence of legal ownership results in higher profits for the modern “slave-holder” than for the historical slave-owner or trader. *Id.* at 4, 14–15.

<sup>36</sup> See Lukas Knott, *Unocal Revisited: On the Difference Between Slavery and Forced Labor in International Law*, 28 WIS. INT’L L.J. 201 (2010–2011); see also Justin Campbell, *A Growing Concern: Modern Slavery and Agricultural Production in Brazil and South Asia*, HUM. RTS. & HUM. WELFARE, 2008, at 131, 131–41, available at <http://www.du.edu/korbel/hrhw/researchdigest/slavery/agriculture.pdf>; SOFIA MONSALVE SUÁREZ ET AL., FIAN INT’L, AGROFUELS IN BRAZIL: REPORT OF THE FACT-FINDING MISSION ON THE IMPACTS OF PUBLIC POLICIES ENCOURAGING THE PRODUCTION OF AGROFUELS ON THE ENJOYMENT OF THE HUMAN RIGHTS TO FOOD, WORK AND THE ENVIRONMENT AMONG THE PEASANT AND INDIGENOUS COMMUNITIES AND RURAL WORKERS IN BRAZIL (2008), available at <http://www.fian.org/resources/documents/others/agrofuels-in-brazil>.

<sup>37</sup> See MONSALVE SUAREZ ET AL., *supra* note 36; see also Campbell, *supra* note 36; *Forced Labour in Brazil: 120 years after the Abolition of Slavery, the Fight goes on*, ILO (May 13, 2008), [http://www.ilo.org/global/about-the-ilo/press-and-media/centre/insight/WCMS\\_092663/lang-en/index.htm](http://www.ilo.org/global/about-the-ilo/press-and-media/centre/insight/WCMS_092663/lang-en/index.htm), [hereinafter ILO]; PATEL, *supra* note 6, at 192 (citing ILO).

<sup>38</sup> In many respects, Lucy Eldine Gonzalez Parson’s “property-less class” is indeed the “disposable class.” See T.S. GREER & LUCY PARSONS, *A LIFELONG ANARCHIST! SELECTED WORDS AND WRITINGS OF LUCY PARSONS* 545–46 (2010) (explaining that the property-less class—the wage workers—are by competition forced to sell their labor—their selves—to the lowest bidder or starve).

<sup>39</sup> For example, Ruben Ometto Silveira Mello, the individual that controls Cosan S.A. and Cosan Ltd., would never imagine a life of cane cutting. Ometto Siveira Mello is named No. 554 in Forbes billionaires list worldwide. In Brazil he is No. 19. See *The World’s Billionaires*, FORBES

*B. CANE CUTTING AND PROCESSING TODAY*

If manual labor is to be used, sugarcane fields are first set on fire for the purpose of removing the leaves on the stalk and killing any pests or creatures that could harm the workers.<sup>40</sup> The stalks are quite tall, anywhere between four and twelve feet high, and to cut through the tough exterior of the plant (even without the leaves) requires the use of a machete (in Spanish) or *facão* (in Portuguese), a large blade anywhere from one to two feet in length. Maria Aparecida de Moraes Silva, a professor of sociology at Universidade Estadual Paulista describes the work:

The act of cutting the cane consists of two strokes with the *facão*. The first stroke separates the cane from the root, and the second removes the remaining leaves from the stalk, allowing the worker to twist the stalk free with his hand. The motions are fast and fluid, but the double stroke requires strength, even the first, second, or third time.<sup>41</sup>

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MAGAZINE, <http://www.forbes.com/profile/rubens-ometto-silveira-mello/> (last updated Mar. 2013).

<sup>40</sup> Höges, *supra* note 31, at 1; *see also* BANCO NACIONAL DE DESENVOLVIMENTO ECONOMICO E SOCIAL & CENTRO DE GESTAO E ESTUDOS ESTRATEGICOS, SUGARCANE-BASED BIOETHANOL: ENERGY FOR SUSTAINABLE DEVELOPMENT 72 (1st ed. 2008) [hereinafter BNDES], *available at* <http://www.bioetanoldecana.org>; Roberto Sementazo et al., *A Discrete Event of Sugar Cane Harvesting Operations*, 46 J. OPERATIONAL RES. SOC'Y 1073, 1073 (Sept. 1995) (discussing problem that arises if too much time lapses—fifteen days—between cane burn and processing).

<sup>41</sup> Rel UITA, *Disposable Workers: The Ethanol of Flesh and Bones*, YOUTUBE (Feb. 10, 2010), [http://www.youtube.com/watch?v=jR\\_Xxjz1BUsY&feature=related](http://www.youtube.com/watch?v=jR_Xxjz1BUsY&feature=related); *see also* Cristine Pires, *Ethanol is a Potential New Ally against Modern Slavery in Brazil: Demand for Biofuel may Improve Working Conditions in Sugarcane Fields*, INFOSURHOY.COM (Feb. 7, 2010), [http://infosurhoy.com/cocoon/saii/xhtml/en\\_GB/features/saii/features/main/2010/07/02/feature-04](http://infosurhoy.com/cocoon/saii/xhtml/en_GB/features/saii/features/main/2010/07/02/feature-04). The title of this article is misleading because what is documented in the article is the condition of the sugarcane worker. In the article, Profesora Aparecida de Moraes says that “workers usually are registered, have work permits, work contract agreements and get paid based on their productivity. . . . *But if we look*

One day's work in the fields equates to swinging the machete anywhere from 3000 to 4000 times and stopping to resharpen the blade about three times.<sup>42</sup> According to Professor Aparecida de Moraes, the current demand for sugar translates into increased productivity requirements: While in the 1980s, the workers were expected to cut five to eight tons of cane per day, today the expectation is over ten tons.<sup>43</sup>

After the cane is cut, it is transferred to the sugar mill by truck where it is then crushed by rollers as part of the process to extract its juice.<sup>44</sup> If the cane is not washed, the juice released from the crushing process will be dirty with soil. The crushing is intended to separate the plant fibers and waste, or bagasse, from juice. The bagasse is used to power the mill, which reduces the energy necessary to run the plant.<sup>45</sup> Water from the juice is then evaporated causing a kind of crystallized cake or a honey-like soft and brown residue called molasses. The sugar we use to sweeten our coffee comes from the crystallized cake. Sugar ethanol is derived from the

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*closely into this work relationship issue, we see that freedom is nonexistent.*"  
*Id.* (emphasis added).

<sup>42</sup> Rel UITA, *supra* note 41; see also Höges, *supra* note 31.

<sup>43</sup> Höges, *supra* note 31, at 1 (describing experience of a typical worker in which the worker is required to harvest three and a half tons of sugarcane, which makes about 300 liters of fuel).

<sup>44</sup> BNDES, *supra* note 40, at 72 (discussing transportation to avoid saccharose loss); see also Sementazo et al., *supra* note 40.

<sup>45</sup> BNDES, *supra* note 40, at 72. The market has indicated that producing biofuels from sugar is done at a lower cost basis than corn ethanol and others and through a more efficient process:

Demand for ethanol derived from sugarcane is high because the process is more cost-effective and efficient and produces less greenhouse gas emissions than the process involving corn. Ethanol, whether sugar- or corn-derived, is purportedly a rich source of heat and energy. Ethanol can also be added to gasoline in a way that improves the efficiency of the fuel.

*Id.* at 65–66. Furthermore, of all biofuels, including corn ethanol, sugar ethanol purportedly has the highest rating in reducing greenhouse gas emissions. *But see* David Morris, *Give Ethanol a Chance: The Case for Corn-Based Fuel*, ALTERNET (June 13, 2007), [http://www.alternet.org/story/53956/give\\_ethanol\\_a\\_chance%3A\\_the\\_case\\_for\\_corn-based\\_fuel](http://www.alternet.org/story/53956/give_ethanol_a_chance%3A_the_case_for_corn-based_fuel) (advocating for the use of biofuels and corn ethanol in particular).

molasses, which is sent to a distillery where it is converted into alcohol.

The work is still dangerous and there are many short-term and long-term injuries. Workers are exposed to chemicals from the burning of the cane, which trigger long-term diseases including cancer, degenerative diseases, and chronic renal failure.<sup>46</sup> The working lifespan of a cane cutter is about fifteen years.<sup>47</sup> They leave or are fired because they are unable to physically do the work. And are left with nothing. Thus, they do not leave after fifteen years to “retire”; rather, they leave because they are injured, mutilated, diseased, and no longer viable sources of labor.<sup>48</sup>

In other words, there is a point in which all human energy has been extracted, and when there is nothing left, the laborer is of no use to the mill operator. For me, this translates into the commodification of human labor, which essentially means such labor is easily disposed of and replaced. In other words, the property owner is in the position to exploit the productive capital—whether human or natural resource—and extract value from labor in a way that the worker is unable to. The worker in many respects is equal to the sugarcane. Once the labor value is extracted (as the juice in the cane), what is left is waste, and like the bagasse, a worker that is useless. In many respects, this is why modern slavery is much more profitable than colonialism-era slavery, when slaves were themselves investments that had to be maintained.<sup>49</sup> While the life and work span of a slave was short, there were costs associated with slaves as property in the same way that equipment required capital maintenance. The modern laborer, as a result of perceived freedoms, namely the freedom of contract, imposes no such cost on the property owner.

### C. IS FORCED LABOR SLAVERY?

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<sup>46</sup> See Rel UITA, *supra* note 41; see also Juan F. Perea, *The Echoes of Slavery: Recognizing the Racist Origins of the Agricultural and Domestic Worker Exclusion from the National Labor Relations Act*, 72 OHIO STATE L.J. 95, 97 (2011).

<sup>47</sup> Rel UITA, *supra* note 41.

<sup>48</sup> *Id.*; see also MONSALVE SUAREZ ET AL., *supra* note 36 at 4.

<sup>49</sup> See BALES, *supra* note 35, at 15. See generally *id.* ch. 1.

While condemned or abolished in the United States in 1876 and in Brazil in 1888 (albeit without a divisive civil war),<sup>50</sup> slavery exists today, and this phenomenon is recognized internationally.<sup>51</sup> The

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<sup>50</sup> BALES, *supra* note 35, at 123.

<sup>51</sup> See Campbell, *supra* note 36; see also Samantha Pearson, *Banco do Brasil sued over 'slavery' funding*, FIN. TIMES, Apr. 1, 2011, 7:13 A.M., <http://www.ft.com/intl/cms/s/0/bf81a228-5c1f-11e0-8f48-00144feab49a.html#axzz1yqCEsYs8>; HUMAN RIGHTS WATCH, WORLD REPORT 2012, at 221 (2012), available at [http://www.hrw.org/sites/default/files/related\\_material/brazil\\_2012.pdf](http://www.hrw.org/sites/default/files/related_material/brazil_2012.pdf) ("In May 2011 the UN special rapporteur on contemporary forms of slavery encouraged Brazil to strengthen efforts to close loopholes perpetuating the practice of slavery, including forced labor in the country's rural areas."); Helena de Moura, *Brazilian Officials Rescue Workers in Slave-like Conditions*, CNN (Sept. 11, 2010), [http://articles.cnn.com/2010-09-11/world/brazil.slavery\\_1\\_rescue-slave-brazilian-officials?\\_s=PM:WORLD](http://articles.cnn.com/2010-09-11/world/brazil.slavery_1_rescue-slave-brazilian-officials?_s=PM:WORLD) (describing condition of ninety-five rescued sugarcane workers in Rio de Janeiro, who were essentially denied basic sanitation, water and dangerous modes of transportation); Michael Smith & David Voreacos, *The Secret World of Modern Slavery*, BLOOMBERG (Nov. 17, 2006), <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aul9sXScm.QE#share>; Katie Fehrenbacher, *Brenco's Big Uh-Oh: Ethanol Workers' 'Terrible' Conditions*, GIGAOM (Apr. 1, 2008), <http://gigaom.com/cleantech/brencos-big-uh-oh-ethanol-workers-terrible-conditions/>; Tom Philpott, *Amnesty International: forced labor in Brazil's sugarcane fields*, GRIST (May 31, 2008), <http://grist.org/article/slave-ethanol/>; U.S. DEP'T OF LABOR'S BUREAU OF INT'L LABOR AFF., OFFICE OF CHILD LABOR, FORCED LABOR, & HUMAN TRAFFICKING, U.S. DEP'T OF LABOR'S LIST OF GOODS PRODUCED BY CHILD LABOR OR FORCED LABOR 10 (2010), available at <http://www.dol.gov/ilab/programs/ocft/pdf/2010TVPRA.pdf>; U.S. DEP'T OF LABOR'S BUREAU OF INT'L LABOR AFF., U.S. DEP'T OF LABOR'S 2010 FINDINGS ON THE WORST FORMS OF CHILD LABOR 103 (2011), available at <http://www.dol.gov/ilab/programs/ocft/PDF/2010TDA.pdf>; *Shell Makes Deal with Cosan in Brazil Despite Slave Labour Claims*, ANTI-SLAVERY (Mar. 2010), [http://www.antislavery.org/english/press\\_and\\_news/news\\_and\\_press\\_releases\\_2008/2010\\_press\\_and\\_news/030210\\_shell\\_makes\\_deal\\_with\\_cosan\\_despite\\_slave\\_labour\\_claims.aspx](http://www.antislavery.org/english/press_and_news/news_and_press_releases_2008/2010_press_and_news/030210_shell_makes_deal_with_cosan_despite_slave_labour_claims.aspx) (Cosan SA Industria and Comercio, a subsidiary of Cosan Limited, were added to the Brazil Labor Ministry black list of companies whose workers persist in slave-like conditions). *But see* Lucia Kassai & Katia Cortes, *Cosan Jumps After Minister says Blacklist was Mistake (Update 3)*, BLOOMBERG (Jan. 8, 2010, 11:30 AM), <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aVr5PNqZMeOQ>.

condition is a real one, particularly in the area of agriculture and in emerging economies.<sup>52</sup>

Some take issue with the term slavery as used to describe what is forced labor or what is known as debt bondage<sup>53</sup>—common in human trafficking—and argue or propose that the term is inappropriate to describe these arrangements.<sup>54</sup> In part, I agree that the terms

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<sup>52</sup> See Perea, *supra* note 46, at 97 (“Contemporary farm workers endure substandard wages, often brutal working conditions, no health insurance or other employee benefits, horrifying living conditions, and environmental hazards.”); see also Nancy Ehrenreich & Beth Lyon, *The Global Politics of Food: A Critical Overview*, 43 U. MIAMI INTER-AM. L. REV. 1, 17 (2009) (“In short, rural poor communities and farm workers bear the brunt of their nations’ inability to control the economic impacts of corporate agriculture, and women and children bear a disproportionate share of that burden.”).

<sup>53</sup> See FREE THE SLAVES AND HUMAN RIGHTS CENTER, UNIV. OF CA., BERKELEY, HIDDEN SLAVES: FORCED LABOR IN THE UNITED STATES 16 (2004), available at <http://digitalcommons.ilr.cornell.edu/forcedlabor/8> (“When depressed wages, poor working conditions, and a lack of legal protections are combined with an increasing demand for cheap farm labor, the result is a continuum of abuses of which forced labor is the most extreme.”); *id.* at 16, n. 24 (“In this context we are referring to abuses other than those detrimental to workers’ health, including death and debilitating injuries or sickness that can be caused by the dangerous working conditions.”); see also MONSALVE SUAREZ ET AL., *supra* note 36, at 18 (“Slave labor is one of the most brutal forms of oppression to which a significant part of the Brazilian rural population is subjected.”); Campbell, *supra* note 36; ILO, *supra* note 37, at 1 (estimating that from 25,000 to 40,000 Brazilians are subject to debt-bondage); Barbara L. Bernier, *Sugar Cane Slavery: Bateyes in the Dominican Republic*, 9 NEW ENG. J. INT’L & COMP. L. REV. 17 (2003).

<sup>54</sup> See Knott, *supra* note 36. Knott argues that the terms slavery and forced labor have different legal meanings and therefore takes issue with the interchangeable usage of each in describing forms of involuntary labor. For Knott, the legal effect of equating the two practices is that both receive *ius cogens* treatment under international law. *Id.* at 209.

“In approximate terms, slavery can simply be defined as the most extreme form of bondage, as opposed to freedom. The problem is in determining where it *really* exists, and when it starts. It is necessary to distinguish it from other forms of forced labor, as compulsion is part of any private relationship, and even more so of relationships between individuals and the state.”

*Id.* I would argue that Knott presents a compelling examination of the dilemma; however, he fails to recognize and account for the cultures and systems of coercion; see *infra* Part I.D.

represent different economic arrangements or conditions. One could argue that the forced labor experience is distinct from slavery, particularly if one has in mind the violent representation of American slavery.<sup>55</sup> American slavery, and the North American slave trade, were characterized by the following: (1) bodies legally quantified as less than a legal person;<sup>56</sup> (2) slaves recorded as property (chattel being the common term); (3) lack of freedom in every respect of life (hence the whips and chains); and (4) violence and rape taken as the norm.<sup>57</sup> Therefore, if we define slavery as fitting this specific paradigm, then forced labor is difficult to rationalize as such. Those that argue there is a difference point to the detail that in forced labor, the worker is not legal property of the owner and has a degree of autonomy; however, others and I argue that what is disregarded is a nefarious element of control and dehumanization.<sup>58</sup> As described by those that have researched the field, forced labor is hidden from everyday sight, and in many instances there are no visible chains, no clear indication of exploitation.<sup>59</sup> And when gazing across a field, the activity being performed, whether by adults or children, looks

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<sup>55</sup> See also SHARPE, *supra* note 3, at 4 (“My intent is to examine and account for a series of repetitions of master narratives of violence and forced submission that are read or reinscribed as consent and affection: intimacies that involve shame and trauma and their transgenerational transmission.”). See generally DOUGLASS, *supra* note 20; HARTMAN, *supra* note 3, at 22 (“The scenes of subjection considered here—the coerced spectacles orchestrated to encourage the trade in black flesh; scenes of torture and festivity; the tragedy of virtuous women and the antics of outrageous darkies—all turn upon the simulation of agency and the excesses of black enjoyment.”).

<sup>56</sup> U.S. CONST. art. I, § 2, cl. 3, *amended by* U.S. CONST. amend. XIV, § 2 (“Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, *three fifths of all other Persons.*” (emphasis added)).

<sup>57</sup> See DOUGLASS, *supra* note 20.

<sup>58</sup> See BALES, *supra* note 35, at 14–19; UNIV. OF CA., *supra* note 53, at 1–2.

<sup>59</sup> See Ormond, *supra* note 1, at 1; UNIV. OF CA., *supra* note 53, at 5 (describing human trafficking in the United States as “hidden from view”).



“normal.”<sup>60</sup> In other words, depicted in that view there is no obvious violence.<sup>61</sup>

But as Professor Mintz describes in his recollection of a visit to the cane fields of Puerto Rico, only the whip is missing.<sup>62</sup> There is lack of choice.<sup>63</sup> There is fear. There is pain. There is violence. And all of it is invisible.<sup>64</sup> The argument that what is happening is not slavery is based on the romantic idea that the arrangement between laborer and manager or owner is one of private contract and consent—the precise dynamic I examine next.

#### D. THE ILLUSORY PRIVATE CONTRACT

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<sup>60</sup> Julia Ormond’s lecture at the Oslo Freedom Forum provocatively recounts a scene of what appears to be healthy children fishing. She says that she is told this is child slavery. She expects the boys to be emaciated. Her NGO guide tells her yes, but the child is twelve years old. That his body is that of a man tells the NGO that the boy has been doing five years of hard labor. Ormond, *supra* note 1, at 1; *see also* UNIV. OF CA., *supra* note 53.

<sup>61</sup> *See* Ormond, *supra* note 1, at 1.

<sup>62</sup> MINTZ, *supra* note 4. From the introduction of *Sweetness and Power*, Mintz’s description of cane work while he was in Puerto Rico:

All the time I was in Barrio Jauca, I felt as if we were on an island, floating in a sea of cane. . . . I would sometimes stand by the line of cutters who were working in intense heat and under great pressure, while the foreman stood (and the mayordomo rode) at their backs. If one had read about the history of Puerto Rico and of sugar, then the lowing of the animals, the shouts of the mayordomo, the grunting of the men as they swung their machetes, the sweat and dust and din easily conjured up an earlier island era. *Only the sound of the whip was missing.*

*Id.* at xviii (emphasis added).

<sup>63</sup> *See infra* note 65 (describing the gato).

<sup>64</sup> *See* Perea, *supra* note 46, at 98 (“Modern-day slavery cases don’t happen in a vacuum. They only occur in degraded labor environments, ones that are fundamentally, systematically exploitive. In industries where the labor force is conti[n]gent, day-haul, with subpoverty wages, no benefits, no right to overtime, no right to organize—that’s where you see slavery taking root.”); *see also* Ormond, *supra* note 1, at 1 (describing how slavery is hidden).

The theory of private contract suggests that a worker has bargained his or her labor in exchange for value, either a wage, something in-kind, or both, for example room and board or health care. The benefit of such private contract is the ability to sue for breach of contract and potentially recover damages. In the case of a good number of sugarcane cutters, however, the private contract appears wholly illusory.<sup>65</sup> While without question a private relationship exists, I find that there is no true enforceable contract

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<sup>65</sup> The process by which debt-bondage comes about has been described as one in which a private contract is formed between a hired contractor and workers. However, the bargaining of such contract is flawed and unequal as there is great misrepresentation in the remuneration to be received as well as the location and accommodations. There is a consistent description of how the relationship arises in agricultural work in Brazil, both sugar and soy, which many describe as debt-bondage:

Enslavement typically begins with a hired contractor known as a *gato*, who recruits impoverished men from the slums of large cities or poor, rural villages. By offering cash up front and the promise of decent wages, he is able to entice these men to leave their homes for work on a distant estate. The men are then driven hundreds or thousands of miles to a remote ranch or plantation, where they are informed that they are in debt for the costs of transportation, food provided on the trip, and even tools.

Campbell, *supra* note 36, at 131; *see also* BALES, *supra* note 35, at 126 (describing the role of the *gato* in recruiting in the slums for charcoal camps). A 2008 article by the ILO recounts the experience of Natanael with this process. Natanael was ultimately never paid:

‘The problems started right away. It took us three days to get to the estate, which was located one-hundred kilometres from the nearest town. We had very little to eat and had to sleep on the highway’, recalls Natanael. As soon as he and the others arrived, the employers collected their employment cards (a document which every worker in Brazil has to present when joining a new job) and stamped ‘cancelled’ on them. Natanael was put to work clearing fields with a chainsaw and without any kind of protective gear. When he asked about his pay, he was told ‘later.’

ILO, *supra* note 37, at 1.

here. What remedy is there, for example, when the employer fails to pay the wage or follow through on promises?<sup>66</sup>

The presence of coercion, supported by harsh and inhumane economic conditions, impacts the efficacy of choice and of the so-called contractual relationship.<sup>67</sup> As Julia Ormond indicated, that slavery does not look like slavery, the coercion that is present in the relationships is not necessarily that of a surly, boss-type intimidating those that sign up to work on the field.<sup>68</sup> The coercion that I am interested in, and that theorists write about, is structural coercion (which has been recognized in U.S. corporations' law as a valid predicament)<sup>69</sup> that would naturally exist in relations between the

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<sup>66</sup> See ILO, *supra* note 37, at 1 (finding that in 2008, an estimated “25,000 to 40,000 workers are still victims of conditions analogous to slavery in this South American Country.” The report emphasizes the place that poverty and rural geography has in perpetuating the condition, and it tells the story of a 21-year-old male worker from northern Brazil after responding to a radio advertisement offering work.); see also BALES, *supra* note 35, at 126–27 (speaking of similar patterns, albeit in the Brazil charcoal camps).

<sup>67</sup> I define coercion legally, as the structural inequity in bargaining power of the participants to the private contract. See REIMAN & LEIGHTON, *supra* note 30, at 221–22 (engaging a discussion on the nature of coercion (as interpreted by Marx) as arising from the structure of the laborer's relationship to the “capitalist” and to property).

<sup>68</sup> See Campbell, *supra* note 36, at 131.

<sup>69</sup> Corporations' law, specifically out of the Delaware Chancery and Supreme Courts, recognizes the idea of structural coercion. In 1985, the Delaware Court of Chancery began to review litigation involving the hostile takeover of corporations. A takeover would be deemed hostile because the buyer circumvented the board of directors, refusing to deal with it, and went directly to the shareholders with a direct offer to buy their shares (known as a tender offer). *Unocal v. Mesa Petroleum Corp.*, 493 A.2d 946, 949 (Del. Ch. 1985) (determining that the two-tier offer by Mesa Corporation for the shares held by Unocal shareholders was structurally coercive because the choice to tender was based on the potential for disparate treatment and not an objective determination of value—the disparate treatment being that those that did not tender their shares in the first tier would be subject to questionable value in the second tier; thus, a tender offer that is structurally coercive creates the illusion or appearance of a voluntary tender, while in actuality the shareholder tenders up front to avoid the certainty of significant value attrition at the back end); see also Ronald Gilson & Reimier Kraakman, *Delaware's Intermediate Standard for Defensive Tactics: Is There Substance to Proportionality Review?*, 44 Bus. Law. 247, 267 (1989) (noting that

property-owning and the property-less.<sup>70</sup> The bargaining between these two parties is illusory, as the worker has no bargaining power when it comes to demanding a fair wage, or even better, a wage equivalent to the value of the product that was transformed by his labor. True bargaining is impossible with the commodification (disposable nature) of the laborer—there are plenty of others that will take his place. Therefore, the worker also has no meaningful work alternative, as the only other option is unemployment.<sup>71</sup> In addition, after the contract is formed there is further coercion as Lucy Parsons further explains: “[i]t compels the wage-worker, under a penalty of hunger, misery and distress of wife and children to obey the dictation of the employer.”<sup>72</sup> In other words, once you are within the employer’s domain, the laborer loses any semblance of control of his circumstances.

At the international level, the relationship of power is replicated in part by the structural inequality between Brazil and foreign capital. The lack of meaningful alternatives—in essence the lack of true choice—creates the cruel paradox in the sugar ethanol trade: without foreign investment, Brazil as an emerging economy stagnates, thus diminishing the opportunity for the working class to work. However, it is precisely foreign investment that recreates structures of exploitation, inequality, and dependency. This dependency on

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structural coercion arises from “risk that disparate treatment of non-tendering shareholders’ might distort shareholders’ tender decision”).

<sup>70</sup> See also GREER & PARSONS, *supra* note 38, at 545–46 (explaining that coercion was strictly structural, that is arising from the nature of capitalism’s economic relationships. “They demonstrate the economic law of competition, which is the rule of the cheapest. The property-less class—the wage workers are by competition forced to sell their labor—their selves—to the lowest bidder or starve.”); see also REIMAN & LEIGHTON, *supra* note 30, at 222 (“The very existence of the social roles of capitalist and worker—defined by ownership and non-ownership of means of production, respectively—is what coerces the worker to work without compensation. It coerces in the same way that a social structure that allotted to one group ownership and thus control of all the available oxygen would coerce. . . . No additional force would be necessary for the coercion to operate.”).

<sup>71</sup> GREER & PARSONS, *supra* note 38, at 545–46 (“The property-less class—the wage workers—are by competition forced to sell their labor—their selves—to the lowest bidder or starve.”).

<sup>72</sup> *Id.* at 591–93.

foreign capital is very much like the relationship of the colonizer and the colonized.<sup>73</sup> In the next section, I consider the ways that foreign capital finances the sugar ethanol industry and the ways in which Brazil regulates, or fails to regulate, its capital market. Brazil effectively regulates landownership when it would be well-advised to regulate the mechanisms through which foreign capital insinuates itself into this industry.

## II. BRAZIL SUGAR MARKET: THE BUSINESS AND LEGAL CONTEXT

*And [Sir Dalby Thomas governor of Jamaica] saw that because the whole process—from the establishment of colonies, the seizure of slaves, the amassing of capital, the protection of shipping, and all else to actual consumption—took shape under the wing of the state, such undertakings were at every point as meaningful politically as they were economically.*<sup>74</sup>

*The dictatorship hawked the country to foreign capitalists as a pimp offers a woman, and put the stress where it belonged . . .*<sup>75</sup>

The colonialism-era sugar trade was sustained by a legal and business environment that permitted free trade via the exploitation of national resources abroad and the dehumanization and

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<sup>73</sup> See Rachel J. Anderson, *Toward Global Corporate Citizenship: Reframing Foreign Direct Investment Law*, 18 MICH. ST. J. INT'L L. 1, 5 (2009–2010) (describing foreign direct investment law as “a vestige of the colonial era during which early forms of transnational corporations emerged”); GALEANO, *supra* note 4, at 206–07; see also FRANTZ FANON, *BLACK SKIN WHITE MASKS*, ch. IV (Charles Lam Markmann trans., Grove Press 1967) (1952) [hereinafter FANON, *BLACK SKIN WHITE MASKS*] (describing an inferiority of the colonized (black) that becomes so deeply engrained—inferiority that includes recognition of the superiority of the colonizer (white), such that the colonized wants and needs to become like the colonizer to feel of value as a human. Furthermore, the brilliance of this psychological phenomenon is that it creates a self-abnegation that perpetuates a desired power-structure).

<sup>74</sup> MINTZ, *supra* note 4, at 41.

<sup>75</sup> GALEANO, *supra* note 4, at 217.

reclassification of humans as legal property for purposes of facilitating that trade. In this section, I consider a selection of laws that impact land control, corporate transactions, labor, and the environment in Brazil—laws that keep open the door to foreign capital.

A. ONE OF THE BRICS

Brazil is one of the BRIC countries.<sup>76</sup> The significance of this grouping is that it represents to the capital markets a significant potential for risk-based returns. BRIC countries are considered “emerging markets,” essentially up-and-coming markets where opportunistic investors can make significant returns on investment.<sup>77</sup> The energy sector has a particular interest in Brazil as it discovers returns to be made by alternative fuels. And Brazil is desirable because it has a powerful asset—one of the largest concentrations of what is called biomass.<sup>78</sup> What makes an emerging market

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<sup>76</sup> The BRIC countries are Brazil, Russia, India, and China. From an economist’s point of view, the BRICS represent certain GDP levels that while below the G8, are compelling, infrastructure and stability in trade. See *generally Building BRICS*, FT.COM, <http://www.ft.com/intl/indepth/bric> (last visited Apr. 1, 2013) (focusing on emerging market news for the BRIC countries, Brazil, Russia, India, and China). Sometimes South Africa is thrown in as the “S” in BRICS. See J.P.P., *Why is South Africa included in the BRICS*, THE ECONOMIST (Mar. 29, 2013, 5:35 PM), <http://www.economist.com/blogs/economist-explains/2013/03/economist-explains-why-south-africa-brics>; Carrasco & Williams, *supra* note 23, at 4.

<sup>77</sup> See also *supra* note 23 (describing Global South as emerging market).

<sup>78</sup> See Jim Chen, *Biodiversity and Biotechnology: A Misunderstood Relation*, 2005 MICH. ST. L. REV. 51, 51 (2005) (“The global south is home to most of earth’s threatened and endangered species, while the global north holds the capital and technology needed to develop this natural wealth.”). Biomass is “living (or once living) stuff” like trees, bushes, grasses, algae, grains, microbes, bacteria, the oceans, and life in the oceans. BRONSON ET AL., *supra* note 10, at 56, 60–61 (2011) (listing all companies, energy and agribusiness, involved with investment presence in the biofuel market); see also Marcos Sawaya Jank, *From the President’s Desk: Ethanol at the Crossroads*, UNICA SUGAR CANE ASSOCIATION (Mar. 30, 2012), <http://english.unica.com.br/opinioao/show.as/?msgCode>.

attractive? There is risk here—risk from instability and risk with significant payoffs.<sup>79</sup>

Brazil has had an ethanol market since the 1970s when policy dictated the need to move toward alternative fuels to satisfy domestic demand for energy.<sup>80</sup> However, notwithstanding this demand, the government<sup>81</sup> and certainly local business interests have been unable to develop and independently exploit and expand the ethanol market. As a result, offshore investors have identified Brazil as an opportunity in the energy sector,<sup>82</sup> and significant foreign capital has entered the fray.<sup>83</sup>

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<sup>79</sup> See *supra* note 10 (discussing the multiple avenues for profitability in biomass).

<sup>80</sup> See Vanessa M. Cordonnier, *Ethanol's Roots: How Brazilian Legislation Created the International Ethanol Boom*, 33 WM. & MARY ENVTL. L. & POL'Y REV. 287, 294 (2008) (citing twenty federal directives in the sugarcane market since 1941, including Programa Nacional do Alcool, Decree 76.593 of Nov. 14, 1975, which gave ethanol a role in Brazil's fuel economy).

<sup>81</sup> The role of the sovereign in shaping the economy and influencing the capital markets is evident not just from policy (setting quotas for sugar production), but also from participations in investments. For example, the government controls the energy business in Brazil. Thus, notwithstanding Petrobras's public financing via IPO, see *infra* note 98 and accompanying text, those that purchased interests in the company were subject to the Brazil sovereign as controlling shareholder. See generally PETROBRAS ENERGIA S.A., SEC PROSPECTUS (Dec. 11, 2009) [hereinafter PETROBRAS PROSPECTUS], available at <http://www.sec.gov/Archives/edgar/data/1449877/000095012308017747/y72519b3e424b3.htm>.

<sup>82</sup> In fact, Brazil's economic policy includes permitting foreign interests to dominate its economy. See Celio Hiratuka, *Foreign Direct Investment and Transnational Corporations in Brazil: Recent Trends and Impacts on Economic Development 2* (Working Grp. on Dev. & Env't in the Ams., Discussion Paper No. 10, Apr. 2008) ("One of the basic characteristics of the Brazilian economy is a high level of internationalization, with foreign corporations playing a leading role in many sectors.").

<sup>83</sup> Notwithstanding the government's control of Petrobras, sugar production in Brazil is reliant on the participation of foreign capital. See also Hiratuka, *supra* note 82, at 4 (discussing the historically important and significant role of foreign capital in the Brazil economy); Anderson, *supra* note 73. See generally PETROBRAS ENERGIA S.A., SEC PROSPECTUS SUPPLEMENT (Sept. 3, 2010) [hereinafter PETROBRAS PROSPECTUS

While the intent of this section is to examine the business and legal context in which the sugar ethanol market is evolving in Brazil, there is an important subject concerning the separation of ownership from control as concerns natural resources and certainly labor. Thus, I am compelled in this section to examine how the private market is controlled and how the business and legal or regulatory context facilitates (and indeed encourages) that control. I would like to clarify that when I say legal or regulatory, I am interested in actual regulations—environmental and corporate—that are in place as well as the way in which law reinforces and reproduces power.<sup>84</sup> Thus, in the same manner that the plantation economy extracted value from slave labor and natural resources, transferring wealth across the ocean, the new sugar boom exploits Brazil’s labor and environment with no meaningful transfer of wealth to the local communities.

#### B. FOREIGN CAPITAL INVESTMENT

I begin with who supplies the capital.<sup>85</sup> The historical process of converting sugarcane into sugar was, and still is, a capital-intensive process because a significant capital contribution is required up front and continuously to maintain operations. For the seventeenth and eighteenth century investors, capital-intensiveness meant costs associated with acquiring land, acquiring and maintaining equipment and machinery, and certainly the acquisition of labor. Slave labor was preferred because it was permitted by law and ensured the greatest returns on investment.

It is important to note that during the colonialism-era sugar market, foreign capital was not necessarily investing in a local

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SUPPLEMENT], available at <http://www.sec.gov/Archives/edgar/data/1119639/000095012310083653/y86399e424b2.htm>

<sup>84</sup> Roger Cotterrell, *Making Law Central: A View of Sociological Studies*, 29 J.L. & SOC’Y 632, 639 (2002) (suggesting that the law is the infrastructure of social relations). In the case of biofuels, I extend Professor Cotterrell’s argument that laws and regulations are “redefined as an engine[s] for profit.” *Id.* at 644.

<sup>85</sup> MENARD, *supra* note 32, at 50-51 (discussing the role the Dutch had in developing the sugar market in Barbados). The title of this section, “Foreign Capital Investment,” is influenced by Menard’s discussion of the enormous costs that Bajans faced in the Barbadian sugar boom, and the corresponding question: who supplied the capital?



business activity. More often than not, foreign capital arrived in various parts of the Global South to create a market in which commodities belonging to another were exploited.<sup>86</sup> Lending was structured as simple secured debt credit arrangements with the product or equipment as collateral.<sup>87</sup> Financing also came from “funds transferred to the colonies by immigrants who used inheritances or proceeds from the sale of property at home to make a start in America,”<sup>88</sup> but it is unclear about how profits were distributed. Presumably the distributions followed the typical priority of payments in which debt participations were paid first, followed by equity participations.<sup>89</sup>

Menard describes the predicament of Barbados, in which local capital was sparse given the lack of local wealth:

I suspect that Barbados would have become a major sugar producer with or without the contribution of the London merchants, but if islanders had to rely on savings out of current earnings alone, it would have been a much slower process, and there would be no talk of sugar revolution or even a sugar boom. While the intervention of merchants was not necessary to the rise of Barbadian sugar industry, it did speed it up and give it the special intensity that set it apart and made it possible to speak of the sugar revolution or

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<sup>86</sup> While Professor Menard focuses on Barbados, the financing of sugar trade was very similar throughout the Caribbean and the Global South. European financing either created a market in sugar where one really did not exist, or as in Barbados, fully developed a weak one. See MENARD, *supra* note 32, at 50 (“[O]ne finds evidence of capital coming from a variety of sources, but it is usually argued that the island’s development in the early stages of the sugar boom was especially dependent on external sources of capital.”).

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> Because the investor participating in a transaction in the form of debt has assumed a low risk position, that of the creditor, this necessarily means that the investor is paid first, assuming there are profits to distribute. See ROBERT J. RHEE, *ESSENTIAL CONCEPTS OF BUSINESS FOR LAWYERS* 29 (2012). The equity participant assumes a higher risk position in anticipation of higher returns and is therefore paid last, assuming profits remain after all debt is paid. *Id.*

the sugar boom instead of a more prosaic rise or growth of the sugar industry.<sup>90</sup>

Today, the reemergence of Brazilian sugar in the global market for biofuel replicates the same economic relationships, albeit a more complex and involved manner.<sup>91</sup> A core dynamic remains, and that is the need for outside or foreign capital and the inability of local owners to develop the enterprise on their own.

Financing today has gone beyond simple debt structures. This is largely related to the sophistication of the capital markets and the innovation of Wall Street investment banks as they create new products for consumption and new ways to capitalize off or hedge risks.<sup>92</sup> This modern, or post-modern, world of capital, mirrors the global economy that marked exploration and the New World, where

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<sup>90</sup> MENARD, *supra* note 32, at 64–65.

<sup>91</sup> See Larry Rohter, *With Big Boost From Sugar Cane, Brazil Is Satisfying Its Fuel Needs*, N.Y. TIMES, Apr. 10, 2006, <http://www.nytimes.com/2006/04/10/world/americas/10brazil.html?pagewanted=all> (“[E]thanol development has been led by Brazilian companies with limited capital. But with oil prices soaring, the four international giants that control much of the world’s agribusiness—Archer Daniels Midland, Bunge and Born, Cargill and Louis Dreyfuss—have recently begun showing interest.”); see also CODEXIS INC., FORM 10-K 25 (Mar. 5, 2012) [hereinafter CODEXIS FORM 10-K] (“These markets are well-established with multiple companies, such as The Archer Daniels Midland Company, Cargill and a number of smaller companies producing ethanol in the United States, and Shell producing ethanol in Brazil.”).

<sup>92</sup> For example, credit markets today are marked by products that go beyond secured and unsecured loans. Complex financial instruments including collateralized debt offerings (CDOs), asset-backed securities, credit derivatives, credit-linked notes, and credit enhancements, to name a few, define a market much larger and broader than could be imagined in the period of the initial sugar boom. The market has evolved to include products and financial instruments that permit investors to allocate or shift risk to other investors desiring exposure to that risk. As a result, there is another layer of value and capital papering transactions. For insight into structured finance and the practice of law that concerns these financial instruments, see Joshua D. Coval et al., *The Economics of Structured Finance* (Harvard Bus. Sch. Fin. Working Paper No. 09-060, 2008), available at <http://dx.doi.org/10.2139/ssrn.1287363>; Andreas A. Jobst, *A Primer on Structured Finance*, 13 J. DERIVATIVES & HEDGE FUNDS, available at <http://dx.doi.org/10.2139/ssrn.832184>.

governments and monarchies funded merchants and explorers to exploit economies and sources of wealth beyond Europe.

### C. BUSINESS ASSOCIATIONS

Brazil regulates its capital markets through the regulatory agency Comissão de Valores Mobiliários<sup>93</sup> (CVM) and corporations through its Lei da Sociedad Anônima<sup>94</sup> (the Corporations Code). Securities are traded in Brazil through BM&FBovespa.<sup>95</sup> The framework for regulating the capital market mirrors the U.S. securities laws, regulatory regime, and disclosure requirements for publicly-traded corporations.<sup>96</sup> For example, like the U.S. Securities Exchange Commission, the CVM does not pass judgment on the

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<sup>93</sup> See COMISSAO DE VALORES MOBILIARIOS, <http://www.cvm.gov.br> (last visited, Mar. 13, 2013); *Legal and Regulatory Structure of the Brazilian Securities Markets*, CVM.GOV, <http://www.cvm.gov.br/ingl/regu/Regu.asp#Legal> (last visited Mar. 24, 2013). Both the CVM and the Corporations Code are recent adoptions to Brazil law (i.e. 1970s phenomenon) while the United States has been regulating the securities markets since 1933.

<sup>94</sup> Lei No. 6.404, de 15 de Dezembro de 1976, DIARIO OFICIAL DA UNIAO [D.O.U.] de 17.12.1976, available at <http://www.cvm.gov.br/ingl/regu/law6404r.ASP>.

<sup>95</sup> BM&FBovespa was formed in 2008 with the merger of Bovespa (Bolsa de Valores de São Paulo), the stock market, and BM&F (Bolsa de Mercadorias e Futuros), the commodities and futures market. BM&FBovespa. *About BM&FBovespa*, BM&FBovespa.COM, (last visited Mar. 18, 2013).

<sup>96</sup> See also Ozden Deniz, *Reforming Corporate Governance in Developing Countries and Emerging Market Economies*, 18 NEW ENG. J. INT'L & COMP. L. 67, 72, 87 (2012) (explaining how corporations are cross-listed on foreign stock exchanges and the value behind creating an SEC-like enforcement agency). See generally Bernard S. Black et al., *The Corporate Governance of Privately Controlled Brazilian Firms*, 7 BRAZILIAN REVIEW OF FINANCE 4 (2009), available at <http://bibliotecadigital.fgv.br/ojs/index.php/rbfin/article/view/1450> (providing an overview of Brazil corporate governance, and noting that most firms publicly traded on the BM&FBovespa are also cross-listed on the New York Stock Exchange and therefore subject to U.S. securities laws.)

merits of an issuance or offering. Rather, the regulatory intent is to assure investors that all material information is disclosed.<sup>97</sup>

Because sugar production and maintenance costs continue to be enormous, traditional forms of capital sourcing have evolved to reflect more sophisticated participation structures including initial public offerings, private placements, joint ventures and asset purchases. In this section, I introduce examples of the above structures. Please note that these are merely a sampling of local and foreign companies involved in the sugar trade in Brazil.

### 1. THE IPO

In the initial public offering (IPO), local and foreign investors are offered equity participations, or stock, in an ethanol operating company, or a larger corporation with a significant wholly-owned ethanol subsidiary or business arm.<sup>98</sup> One of the more notable IPOs

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<sup>97</sup> Sections of the Corporations Code requiring certain disclosures are Article 157 of Section IV, Duties and Responsibilities of Chapter XII, and Chapter XV on financial statements reporting. See Lei No. 6.404, available at <http://www.cvm.gov.br/ingl/regu/law6404r.ASP>; Black et. al, *supra* note 96, (giving a specific breakdown of corporate governance laws (i.e. board independence, shareholder voting (controlling and minority shareholders), corporate formalities, etc.)); Nelson Laks Eizirik, *The Role of the State in the Regulation of the Securities Markets: The Brazilian Experience*, 1 J. COMP. CORP. L. & SEC. REG. 211, 221, 226 (1978) (discussing the relation between the disclosure requirements of the CVM and those of the U.S. Securities Act and U.S. Securities Exchange Act); Norman S. Poser, *Securities Regulation in Developing Countries: The Brazilian Experience*, 52 VA. L. REV. 1283, 1298 (1966) (discussing Brazil's regulatory scheme as relates to capital markets and similarities with the U.S. approach). While the CVM and Corporations Code have Brazil-centric differences, for example the laws and regulations divide the notion of shareholder into two types (controlling shareholder, with control of the corporations operations, and investor, a passive participant) which therefore implicates voting rights, the disclosure requirements are similar in spirit.

<sup>98</sup> See COSAN S.A. INDUSTRIA E COMERCIO, SEC PROSPECTUS (Nov. 17, 2005) [hereinafter COSAN PROSPECTUS], available at <http://ir.cosan.com.br/list.aspx?idCanal=4v/R0dGFws1gQ512T0ZEaA==>. Amyris, Inc., a Delaware corporation doing business in California, went public in the United States on Sept. 28, 2010 at \$16/share. AMYRIS INC., SEC Prospectus (Sept. 28, 2010) [hereinafter AMYRIS PROSPECTUS],

in the U.S. and Brazil capital markets was that of the sovereign-controlled energy company *Petróleo Brasileiro S.A. (Petrobras)*.<sup>99</sup> In its offering of September 2010, Petrobras raised 120.36 billion reais, or USD70 billion.<sup>100</sup> As indicated in its IPO disclosure documents, the company continues to be controlled by the Brazil government.<sup>101</sup>

In 2007, Cosan Limited (Cosan)<sup>102</sup> opened itself up to public financing and went public on both the U.S. and Brazil capital markets issuing equity interests in Class A common shares.<sup>103</sup> In its prospectus, Cosan describes itself as the largest sugar and sugar ethanol producer in Brazil and the third and second largest, respectively, in the world.<sup>104</sup>

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available at <http://investors.amyris.com/secfiling.cfm?FilingID=1193125-10-218728>. Amyris uses synthetic biotechnology to genetically modify yeast for the purpose of converting plant-based sugars into biofuel. See AMYRIS INC., FORM 10-K 2 (Mar. 14, 2011) (Item 1 Business) [hereinafter AMYRIS FORM 10-K], available at <http://investors.amyris.com/secfiling.cfm?filingID=1193125-11-65613&CIK=1365916>. The company has relationships, via development, supply, and distribution agreements with Total S.A., Petrobras, and Cosan and joint ventures with Usina São Martinho, a subsidiary of Brazil ethanol company São Martinho S.A., for the purpose of accessing “feedstock” and developing large-scale production facilities. AMYRIS PROSPECTUS, at 3. The company also indicates that its “near-term production primarily [focuses] on the use of Brazilian sugarcane as our feedstock because of its abundance, low cost and relative price stability.” AMYRIS FORM 10-K, at 3.

<sup>99</sup> In its prospectus supplement, Petrobras indicates an intent to “increase our production and infrastructure for the commercialization of biofuels both in Brazil and for export abroad, especially by investing in companies operating in the biofuel sector, including ethanol.” PETROBRAS PROSPECTUS SUPPLEMENT, *supra* note 83, at S-13.

<sup>100</sup> *Id.*; see Peter Millard, *Petrobras Raises \$70 Billion in World’s Largest Share Sale*, BLOOMBERG, Sept. 24, 2010, <http://www.bloomberg.com/news/2010-09-24/petrobras-raises-70-billion-in-world-s-largest-share-sale-to-fund-fields.html>; see also, Chris V. Nicholson, *Petrobras Raises \$70 Billion in Share Issue*, N.Y. TIMES, Sept. 24, 2010, <http://dealbook.nytimes.com/2010/09/24/petrobras-raises-70-billion-in-share-issue/>.

<sup>101</sup> PETROBRAS PROSPECTUS SUPPLEMENT, *supra* note 83, at S-39.

<sup>102</sup> Cosan’s principal operating company is subsidiary Cosan S.A. Indústria e Comércio. See COSAN PROSPECTUS, *supra* note 98.

<sup>103</sup> *Id.* at 1.

<sup>104</sup> *Id.*

## 2. PRIVATE PLACEMENT

In a private placement, stock in a private ethanol operating company is offered to a limited group generally consisting of qualified institutional buyers<sup>105</sup> in the United States and other institutional investors outside the United States and Brazil. For example, through its joint venture with Cosan, Raízen (described below), Royal Dutch Shell plc (Shell) holds about 15.5%<sup>106</sup> of stock in Codexis, Inc., a California-based biotechnology company that is focused on converting cellulosic biomass into sugar for the purpose of producing ethanol.<sup>107</sup> The company has an exclusive agreement with Shell for the production of biofuel. That agreement expires in November 2012.<sup>108</sup> The company is collaborating with Raízen, its largest shareholder, for the purpose of “improv[ing] Raízen’s current first-generation process for manufacturing ethanol from sugarcane” as well as developing second-generation fuels exclusively with Shell.<sup>109</sup> The Codexis annual report to shareholders, as filed with the SEC, claims that Raízen “has annual production capacity of over 2 billion liters of ethanol, and is the world’s largest producer of ethanol from sugarcane, with 600 million gallons produced in 2010.”<sup>110</sup>

## 3. JOINT VENTURE

The joint venture, a business organization in which two companies come together to form a separate corporation or limited liability company (the venture) to pursue a common business interest for a particular time frame, is perhaps the more common approach to investing and participating in the sugar ethanol market. Agricultural companies and certainly energy corporations have taken this form to participate in a variety of sugar-related activity. Raízen is an example of this.<sup>111</sup>

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<sup>105</sup> 17 C.F.R. § 230.144(a)(1)(i) (1933) (noting that qualified institutional buyers must have ability to invest \$100 million of discretionary income in securities that are not affiliated with the investor).

<sup>106</sup> CODEXIS FORM 10-K, *supra* note 91, at 13, 48.

<sup>107</sup> *Id.*

<sup>108</sup> *Id.* at 14.

<sup>109</sup> *Id.* at 13.

<sup>110</sup> *Id.*

<sup>111</sup> Raízen’s website describes the company’s activities as follows:

## 4. M&amp;A

In addition, there is activity in the mergers and acquisitions market as well as the market for one-off asset purchases.<sup>112</sup> In 2010, ETH Bioenergia acquired Brenco, a Brazilian ethanol producer “backed by venture capitalist Vinod Khosla and AOL founder Steve Case.”<sup>113</sup> ETH Bioenergia is a private company controlled primarily by Brazilian construction and energy company, Odebrecht, and Japanese trading group, Sojitz Corporation<sup>114</sup> Prior to that merger, Brenco was active in the asset purchase front.<sup>115</sup> In 2009, Bunge

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A Brazilian organization which produces annually more than [sic] 2.2 billions of liters of Ethanol, in order to attend the national and international market, 4 million tons of sugar, and installed capacity of 900 MW of electric energy from sugar cane bagasse. The company has over 4,500 service stations for retail fuel distribution in Brazil, over 500 convenience stores, 53 fuel distribution depots and aviation fuel business [sic] in 54 airports in Brazil.

In addition, the name is explained:

The name Raízen is the union of the words ‘root’ and ‘energy’ in Portuguese. The first word means the portion of the plant that takes in nourishment and water necessary for life; and the second is the critical factor for any dynamic: in order to have life or movement, there must be energy.

*Who We Are*, RAIZEN.COM, <http://www.raizen.com/en/raizen/quem-somos.aspx> (last visited Mar. 22, 2013).

<sup>112</sup> See Hiratuka, *supra* note 82, at 5 (discussing the importance of mergers and acquisitions activity in Brazil).

<sup>113</sup> *Update 4-Brazil’s ETH Acquires Brenco, Forms Ethanol Giant*, REUTERS (Feb. 18, 2010), <http://www.reuters.com/article/2010/02/18/eth-brenco-idUSN1820330020100218>.

<sup>114</sup> *Id.*

<sup>115</sup> See Darryl Isherwood, *Bunge to Acquire Brazilian Sugar Producer Usina Moema Participacoes*, FOXBUSINESS (Dec. 24, 2009), <http://www.foxbusiness.com/story/markets/bunge-acquire-brazilian-sugar-producer-usina-moema-participacoes/>.

Limited, a global agribusiness corporation, acquired Brazilian sugar company Usina Moema Participacoes.<sup>116</sup>

## 5. DERIVATIVES

As addressed in the introduction to this paper, there is another layer of capital market activity that is unknown or invisible to the average person: the derivatives market.<sup>117</sup> Derivatives (also known as synthetic financial instruments) are contracts between two parties (generally institutional investors, such as banks or hedge funds) in which the value of that contract is derived through reference to an external asset (hence the term derivative).<sup>118</sup> Ultimately, through this contract the parties trade the exposure to risk. For example, a currency hedge agreement is a derivative contract in which one party with exposure to currency risk (say an American corporation doing business in Brazil, and therefore exposed to fluctuations in value of the *real*) contracts with another party, the counterparty, who will make payments equivalent to the losses associated with currency fluctuations.<sup>119</sup> As consideration for these payments, the

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<sup>116</sup> *Bunge to acquire Brazil sugar cane firm Moema Par*, ICIS NEWS (Dec. 24, 2009), <http://www.icis.com/Articles/2009/12/24/9321864/bunge-to-acquire-brazil-sugarcane-firm-moema-par.html>.

<sup>117</sup> The derivatives market, at least in the context of the credit market collapse of 2008, has been called a shadow banking system as well as an invisible hand (invoking Adam Smith's position that there is an invisible hand unknown to the investor guiding his decisions). See Gary B. Gorton, *Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007* (May 9, 2009), <http://dx.doi.org/10.2139/ssrn.1401882>; see also SMITH, *supra* note 5, at ch. 2, ¶ 9 ("By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.").

<sup>118</sup> See Jobst, *supra* note 92, at 5.

<sup>119</sup> A derivative contract, including a currency hedge agreement, would be documented on the standard form agreement published by the International Swaps and Derivatives Association, called the ISDA Master Agreement (1992 or 2002). The agreement is accompanied by a Schedule (indicating any changes to the form agreement), Credit Support Annex (indicating any collateral) and one or more Confirmations (documenting specific transactions). The example hedge agreement I mention above is an



counterparty receives a fee. The counterparty agrees to this contract because it benefits the counterparty's portfolio of investments or is itself a hedge to another contract with a different counterparty.

While not the focus of this paper, I believe it important to recognize that in the current capital market value is not simply derived through labor. Value in transactions arises from synthetic instruments papering the deal as well as speculative contracts (e.g. futures, options).<sup>120</sup> In addition, as with international project finance,<sup>121</sup> the role of sovereign funds is relevant as is the role of derivative and other complex financial instruments.

While I have no direct knowledge, based on my experience working on structured finance transactions (including hybrid and synthetic collateralized debt offerings) and based on existing literature, I am confident that derivatives, through swaps and hedging contracts, play a significant role in generating value and profitability in the sugar market. In terms of dollars, I would not be surprised if they exceed the equity valuation.<sup>122</sup> In addition, in making this

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oversimplification of the terms of the contracts, but sufficiently communicates the arrangement and payment structure between the parties. See ISDA, <http://www.ISDA.org> (last visited Mar. 3, 2013). On the purpose of currency hedges, see Paul J. Lim, *Those Euro Bets Have Many Ifs*, N.Y. TIMES, Dec. 3, 2011, <http://www.nytimes.com/2011/12/04/your-money/currency-hedging-has-many-ifs-for-investors.html>.

<sup>120</sup> See *supra* text accompanying note 115.

<sup>121</sup> See generally Baker, *supra* note 12.

<sup>122</sup> See *Sugar No. 11 Futures*, INTERCONTINENTAL EXCHANGE, <https://www.theice.com/productguide/ProductSpec.shtml;jsessionid=8FA439E65D6C170FB581D9DA08BA134D?specId=23#data> (last visited Jul. 25, 2012) [hereinafter ICE SUGAR FUTURES] (displaying charts that show the role of futures contracts in the sugar market). Determining the size of the derivatives market is a challenge because of transparency. The Bank for International Settlements (BIS) tracks market activity for derivatives (e.g. currency hedges, interest rate swaps, equity linked contracts, commodity hedges, credit default swaps). The notional value for over-the-counter derivatives for the year ending December 2011 was USD 647.76 trillion. See *Table 19: Amounts Outstanding of Over-the-Counter (OTC) Derivatives, by Risk Category and Instrument*, BIS, <http://www.bis.org/statistics/otcder/dt1920a.pdf> (last visited Feb. 22, 2013). The number of reporting countries rose to thirteen, with the addition of Spain and Australia. Notional value is the value of the contract, versus the actual amount (substantially less than notional value) invested in the contract. Compare the value of the global derivatives market with the world's gross domestic product for 2011

argument I also refer to the extensive and growing literature on the role of speculation in commodities markets as an underlying cause of the global rise of food prices in 2008.<sup>123</sup>

I raise the issue of derivatives as a final piece to the discussion on how capital enters the sugar market so as to touch the notion that value and profit are a fiction—the issue being who really creates value for whom. Although outside the realm of Marx’s imagination, I would describe the derivatives market as the ultimate in the fetishism of commodity because it creates capital accumulation independent of costs associated with labor or natural resources. In this shadow market, capital itself regenerates through a synthetic form and creates a magnificent layer of value, further alienating labor. Even the commodity is alienated as science moves to create a synthetic form of biofuel (the second generation) that produces value completely independent of the natural resource.

\* \* \*

In each of the above-referenced financing structures, the power of capital is expanded, whether there is an allocation of risk, as in the joint venture, or the sale of an equity or ownership stake in exchange for cheaply accessible capital via IPO. In addition, in each of the

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of \$69,971,508. *Gross Domestic Product 2011*, THE WORLD BANK, <http://databank.worldbank.org/databank/download/GDP.pdf> (last visited July 30, 2012) (ranking the top six GDPs: U.S. \$15,094,000; China \$7,298,097; Japan \$5,867,154; Germany \$3,570,556; France \$2,773,032; Brazil \$2,476,652). See generally INTERNATIONAL SUGAR ORGANIZATION, <http://www.isosugar.org> (last visited Feb. 22, 2013) (an international trade organization).

<sup>123</sup> In 2008, food prices escalated, having a devastating impact on underdeveloped countries. See Editorial, *The World Food Crisis*, N.Y. TIMES, Apr. 10, 2008, [http://www.nytimes.com/2008/04/10/opinion/10thu1.html?\\_r=0](http://www.nytimes.com/2008/04/10/opinion/10thu1.html?_r=0); Baffes & Haniotis, *supra* note 15; Mitchell, *supra* note 8; see also *Report on Causes of the 2007–2008 Global Food Crisis Identified*, SCI. FOR ENVTL. POL’Y (Eur. Comm’n, DG Env’t News Alert Serv.), Jan. 20, 2011 (citing DEREK HEADEY & SHENGGEN FAN, INT’L FOOD POLICY RESEARCH INST., RESEARCH MONOGRAPH 165, REFLECTIONS ON THE GLOBAL FOOD CRISIS (2010)), available at <http://ec.europa.eu/environment/integration/research/newsalert/pdf/225na1.pdf>. See generally THE RENEWABLE FUELS AGENCY, THE GALLAGHER REVIEW OF THE INDIRECT EFFECTS OF BIOFUELS PRODUCTION 61 (2008) (discussing the impact of biofuels on the global food market and global poverty).

above structures, the capital is foreign, and largely from the Global North. Thus, participation in the sugar boom can take multiple complex forms, each satisfying or aligning the investor with the proper exposure or allocation of risk. One of the challenges, given the sophisticated financing structures, is access to information. Because much of the investing activity is private, disclosure is absent. For example, while publicly traded corporations are subject to disclosure requirements, specific investment activity (the various joint ventures, stock ownership, etc.) may occur through privately held subsidiaries. The financials associated with these transactions are merely consolidated into the parent's reporting as is permitted by GAAP (generally accepted accounting principles) rules.<sup>124</sup> A public corporation, therefore, has discretion on how to report material information on its periodic reports.<sup>125</sup>

The above-referenced business structures reflect that capital immigrating to Brazil is in the form of participation with corporations that already have a presence in Brazil. In other words, much of the foregoing investment occurs indirectly. With direct investments, outside capital sources are directly acquiring property and land; whereas in Brazil, outside sources are also joining local and existing corporations in the expansion of an existing bioenergy effort.<sup>126</sup> Although discussed shortly, indirect participation is significant because it allows foreign investors to circumvent restrictions in foreign landownership. However, while direct ownership of land is circumvented, control of that property is not.

It is important to note that the sugar ethanol market is essentially a combination of two approaches: agricultural and scientific. By

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<sup>124</sup> See FASB Issues FASB Statements No. 141(R), *Business Combinations*, and No. 160, *Noncontrolling Interests in Consolidated Financial Statements*, Dec. 4, 2007, <http://www.fasb.org/news/nr120407.shtml>.

<sup>125</sup> See Securities Act of 1933, 15 U.S.C.A. §77, available at <http://www.sec.gov/about/laws.shtml>; Securities Exchange Act of 1934, 15 U.S.C.A. § 78, available at <http://www.sec.gov/about/laws.shtml>.

<sup>126</sup> See Alexander Kliment & Vivianne Rodrigues, *China's 0.6% Stake in Brazil's Land Feud*, FT TILT (July 27, 2011, 1:15 PM), <http://tilt.ft.com/#!/posts/2011-07/26256/brazil-study-more-limits-on-foreign-land-owners> (archived blog) (explaining that the current figure of foreign-owned Brazilian land "may not capture lands help by foreigners through partnerships with local companies"); see also *infra* notes 144–45 on foreign direct ownership of land.

agricultural, I mean the traditional form of cultivating and processing sugarcane (essentially the process that this paper largely focuses on). However, while the agricultural approach needs perfecting, as companies try to determine efficiency in a volatile commodities market, a parallel process is being developed. The same companies partnering in sugar agriculture are also funding or partnering with companies doing research in genetically modified forms of various organisms that produce the sugar that produces ethanol.<sup>127</sup> Therefore, the sugar market is effectively two markets in one: a natural and a synthetic one, or as discussed in magazines, first generation and second generation.<sup>128</sup>

At the end of the day, there is a significant influx of capital into Brazil as foreign capital discovers another “emerging market.”

#### D. THE ILLUSORY REGULATORY FRAMEWORK

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<sup>127</sup> See BRONSON ET AL., *supra* note 10, at 101–02. BP, for example, contributed start-up capital to a company called Qteros, which was born out of research at the University of Massachusetts. Qteros developed the “Q microbe” which converts plant waste to biofuel. See Jim Lane, *Portrait of a Transformative Technology: Qteros and its Q Microbe*, BIOFUELS DIG., June 24, 2010, <http://www.renewableenergyworld.com/rea/news/article/2010/06/portrait-of-a-transformative-technology-qteros-and-its-q-microbe>; Jim Kinney, *Reborn Qteros Rises Again with New Plan to Develop Technology to Make Ethanol*, THE REPUBLICAN, Dec. 20, 2012, [http://www.masslive.com/business-news/index.ssf/2012/12/qteros\\_rises\\_again\\_with\\_a\\_new\\_business\\_m.html](http://www.masslive.com/business-news/index.ssf/2012/12/qteros_rises_again_with_a_new_business_m.html). Shell, more recently through Raizen, is invested in Iogen Corporation, which creates genetically modified microbes that break down plant material. Jim Lane, *Iogen Makes a Comeback in Landmark Sugarcane Cellulosic Ethanol Deal with Brazil’s Raizen*, BIOFUELS DIG., Oct. 16, 2012, <http://www.biofuelsdigest.com/bdigest/2012/10/16/iogen-makes-a-comeback-in-landmark-sugarcane-cellulosic-ethanol-deal-with-brazils-raizen/>; see *supra* text accompanying note 111 on Raizen.

<sup>128</sup> See CODEXIS FORM 10-K, *supra* note 91, at 8; BRONSON ET AL., *supra* note 10, at 56; see also AMYRIS FORM 10-K, *supra* note 98. Discussion of the second generation, or synthetic market, which involves genetic modification of natural organisms, is outside the scope of this paper. However, this market raises a plethora of issues from ethics, to biosafety risks and hazards, and to capital market concerns.

Brazil is generally welcoming to outside investors, with the possible exception of investors seeking to acquire rural land.<sup>129</sup> While in fact the government has permitted outside interests to control, access, or dominate markets, there are significant protectionist policies related to foreign acquisition of land.<sup>130</sup> That said, the Brazilian government itself is heavily vested in the market via sovereign funds or interests such as its positions in Banco Nacional de Desenvolvimento Econômico e Social (BNDES) and the energy company, Petrobras.<sup>131</sup> The government is also extremely

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<sup>129</sup> See also GALEANO, *supra* note 4, at 215–19. Galeano recounts Brazil's history with foreign investment, even through periods of dictatorship. He describes the incredible entry of foreign capital in the 1960s, when at one point foreign capital was found to control 40% of the market. Half of that capital was American in origin and the other half German. About the Castelo Branco dictatorship in particular, Galeano writes:

The dictatorship hawked the country to foreign capitalists as a pimp offers a woman, and put the stress where it belonged: 'The treatment of foreigners in Brazil is among the most liberal in the world . . . no general restrictions are in effect with reference to the nationality of owners, partners, or shareholders. . . . There is no limit to the percentage of the registered capital that may be remitted as profit. . . . No limitation is placed on the repatriation of capital, and reinvestment of profits is considered as an increase of the original capital . . . .'

*Id.* at 217–18 (alteration in original) (citations omitted). Compare Hiratuka, *supra* note 82 with *infra* note 158 on the role of bilateral investment treaties or agreements.

<sup>130</sup> *Id.*

<sup>131</sup> The desire of the Brazilian government to create a global ethanol powerhouse has influenced a foreign capital-friendly environment. The government itself is involved in the financing of the trade via the sovereign bank BNDES. In 2010, BNDES's total disbursement into the financial sector totaled 139.7 billion *real* with 4.5 billion *real* allocated to the mechanical industry, including biofuel projects. For the government, biofuel is the priority. See BNDES, ANNUAL REPORT 2011, at 51–52 (2011), [http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes\\_pt/Galerias/Arquivos/empresa/RelAnual/ra2011/relatorio\\_anual2011\\_trilingue.pdf](http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/Galerias/Arquivos/empresa/RelAnual/ra2011/relatorio_anual2011_trilingue.pdf); see also Podcast Interview with Carlos Eduardo Cavalcanti, Head of Biofuels Department at BNDES, RENEWABLE ENERGY WORLD (July 21, 2011), <http://www.renewableenergyworld.com/rea/partner/green-power-conferences-3234/news/article/2011/07/podcast-interview-with-carlos-eduardo-cavalcanti-head-of-biofuels-department-at-bndes>; *Brazil Pledges R\$1 Billion for Innovation in Sugar and Ethanol Sectors*, PORTAL BRASIL

vested in economic policies that stimulate ethanol production with the expectation that Brazil become a controlling international presence in the world of sugar ethanol.<sup>132</sup>

In this subsection, I examine the role that the government plays (via the law) in structuring and influencing economic hierarchies and relationships. Brazil has chosen to regulate foreign ownership of agricultural land while encouraging capital to exercise control indirectly and while failing to enforce laws that protect human rights and the environment. That said, in fairness to Brazil, the inequities in landownership are historically so stark, prompting occupations by the MST (discussed herein). The problem here is that capital is invisible but land on the other hand is quite visible, and the state is failing to address this.

#### 1. THE LAND

*Land in Brazil is a source of power. The landowners are the powerful. Inequality in Brazil can be traced directly to who owns land.*<sup>133</sup>

Land ownership in Brazil is historically a source of instability and violence.<sup>134</sup> There seems to be two very different questions that

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(Mar. 22, 2011), <http://www.brasil.gov.br/news/history/2011/03/22/bndes-and-finep-signs-r-1-billion-agreement-to-finance-innovation-in-the-sugar-and-ethanol-sector/print>.

<sup>132</sup> See generally Höges, *supra* note 31; see also Henry Chu, *Brazil's Leftists No Longer See President as Their Champion*, L.A. TIMES, Jan. 26, 2005, <http://articles.latimes.com/2005/jan/26/world/fg-lula26>; Juscelino F. Colares, *A Brief History of Brazilian Biofuels Legislation*, 35 SYRACUSE J. INT'L L. & COM. 293 (2008).

<sup>133</sup> Ben Lilliston, Inst. for Agric. & Trade Policy, *Land and Power in Brazil*, THINK FORWARD BLOG (Mar. 22, 2011), <http://iatp.typepad.com/thinkforward/2011/03/land-and-power-in-brazil.html>.

<sup>134</sup> See MONSALVE SUÁREZ ET AL., *supra* note 36, at 18 n.28 (citing JOÃO ALFREDO TELLES MELO, REFORMA AGRÁRIA QUANDO? CPI MOSTRA AS CAUSAS DA LUTA PELA TERRA NO BRASIL [AGRARIAN REFORM WHEN? CPI SHOWS THE CAUSES OF THE STRUGGLE FOR LAND IN BRAZIL] 44ss (Brasília: Senado Federal 2006)):

impact the biofuel production in Brazil: (1) who owns the land, and (2) who controls, or has access, to the land? The land registers of the Instituto Nacional de Colonização e Reforma Agrária (INCRA) seem to be unreliable.<sup>135</sup> The lack of transparency of land ownership is also attributed to the land tenure in Brazil.<sup>136</sup>

In terms of social effects, the result is increased tensions between large agribusiness interests and local farmers and rural landowners.<sup>137</sup> According to the U.N. Food and Agriculture

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The INCRA Register is based on reports and its data contains inaccuracies. According to a statement made by the Ministry for Agrarian Development to the Mixed Parliamentary Inquiry Commission on Land (2004), approximately 200 million hectares of land in Brazil have not been formally identified in any register. According to existing registers, out of the 850 million hectares of the national territory, 420 million are private properties, 102 million are environmental conservation areas and 128 million are indigenous areas. The lack of information favours illegality and legal instability in the area of land tenure, stimulating illegal appropriation of public lands (land grabbing).

*See also* Lilliston, *supra* note 133 (“The country doesn’t know much about who owns the land. We don’t know how much land is in foreign control. The Brazil agency has no data. They just don’t know,” Alentejano told us.”). *See generally* Olivier De Schutter, *The Green Rush: The Global Race for Farmland and the Rights of Land Users*, 52 HARV. INT’L L.J. 503 (2011) (focusing on the “land-grab” phenomenon in the Global South, specifically Sub-Saharan Africa).

<sup>135</sup> *See id.*

<sup>136</sup> *See* Kristen Mitchell, *Market-Assisted Land Reform in Brazil: A New Approach to Address an Old Problem*, 22 N.Y.L. SCH. J. INT’L & COMP. L. 557, 563–72 (2003) (discussing the legacy of the land tenure system of Brazil in creating inequitable land distribution and sustaining poverty, and examining market-based reform as an alternative to traditional land distribution methods). Market-based land reform gives the landless access to credit or aid for the purpose of acquiring land. *Id.* at 582–83; *see also* Roy L. Prosterman & Tim Hanstad, *Land Reform in the Twenty-First Century: New Challenges, New Responses*, 4 SEATTLE J. FOR SOC. JUST. 763 (2006) (discussing land reform and rural poverty, and the scope of the problem generally); COMM. ON WORLD FOOD SECURITY [CFS], POLICY ROUNDTABLE: LAND TENURE AND INTERNATIONAL INVESTMENT IN AGRICULTURE, U.N. DOC. CFS:2010/7 (Oct. 11–14 & 16, 2010), *available at* <http://www.fao.org/docrep/meeting/019/k8929e.pdf>.

<sup>137</sup> *See supra* note 16.

Organization (FAO), unequal land distribution affects the country's GINI index,<sup>138</sup> which indicates that Brazil has inequality as compared to other countries, represented by a coefficient of 0.85 for land distribution for 1990.<sup>139</sup> A GINI coefficient of 0 represents perfect equality (in other words, everyone's income is the same),<sup>140</sup> and a GINI coefficient of 1 represents absolute inequality (in other words, income is concentrated in one person).<sup>141</sup> *The Economist* reports that most countries fall between a GINI coefficient of 0.25 and 0.6.<sup>142</sup>

A significant activist movement is attempting to ameliorate the situation. The Movimento dos Trabalhadores Rurais Sem Terra (MST), or Landless Rural Workers' Movement, is pushing for redistribution of land interests and certainly distribution of land to the rural poor.<sup>143</sup>

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<sup>138</sup> For an explanation of GINI Index, see *The World Factbook*, CIA.GOV, <https://www.cia.gov/library/publications/the-world-factbook/fields/272.html> (last visited July 24, 2012). See also *GINI Index*, WORLD BANK.ORG, <http://data.worldbank.org/indicator/SI.POV.GINI/> (last visited July 24, 2012) (describing the purpose and function of the GINI Index).

<sup>139</sup> See *1990 Round of Agricultural Censuses*, FAO.ORG, <http://www.fao.org/economic/the-statistics-division-ess/world-census-of-agriculture/additional-international-comparison-tables-including-gini-coefficients/table-1-number-and-area-of-holdings-and-ginis-index-of-concentration-1990-round-of-agricultural-censuses/ar/> (last visited July 24, 2012); see also Fabiana Frayssinet, *Brazil: Agribusiness Driving Land Concentration*, GLOBAL GEOPOLITICS & POL. ECON. (Oct. 6, 2009), <http://globalgeopolitics.net/wordpress/2009/10/06/brazil-agribusiness-driving-land-concentration/> (indicating a .872 land GINI reported by Brazilian Institute of Geography and Statistics 2006 Census of Agriculture). *The FIAN Report* claims Brazil's GINI coefficient in 2000 was 0.802. MONSALVE SUÁREZ ET AL., *supra* note 36, at 4,18.

<sup>140</sup> *Unbottled GINI Inequality Is Rising. Does it Matter—and if so Why?*, THE ECONOMIST, Jan. 20, 2011, <http://www.economist.com/node/17957381> (“A common yardstick is the Gini coefficient, which runs from 0 (everyone has the same income) to 1 (one person has all the income)”).

<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

<sup>143</sup> See PATEL, *supra* note 6, at 204–13 (The World's Most Important Social Movement); see also Kevin E. Colby, *Brazil and the MST: Land Reform and Human Rights*, 16 N.Y. INT'L L. REV. 1 (2003); Bradley S. Romig, *Agriculture in Brazil and its Effect on Deforestation and the*



According to the *Financial Times*, foreign direct ownership of land is minimal and calculated at 0.53% of the country.<sup>144</sup> Compelling to me, however, is that 30% of the Mato Grosso and Mato Grosso do Sul areas<sup>145</sup>—where much of the sugar and soybean production occurs—is reported to be owned by foreigners with Japan being the largest holder.<sup>146</sup> That said, I am not compelled by foreign ownership of land which is why I am not compelled by recent protectionist policies instituted by the Brazilian government that limit foreign ownership of land.<sup>147</sup>

The government has reinstated a law from the 1970s, Federal Law No. 5.709/71,<sup>148</sup> described by *The Economist* as antiquated and restrictive of foreign ownership of Brazilian land.<sup>149</sup> According to a 2011 article in *The Economist*:

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*Landless Movement: A Government's Attempt to Balance Agricultural Success and Social Collateral Damage*, 11 *DRAKE J. AGRIC. L.* 81, 92–103 (2006); Lilliston, *supra* note 133; Kenfield, *supra* note 16, at 5.

<sup>144</sup> Kliment & Rodrigues, *supra* note 126 (disclaiming that the register may not capture land control via foreign partnerships with local companies); see also Alexei Barrionuevo, *China's Interest in Farmland Makes Brazil Uneasy*, *N.Y. TIMES*, May 26, 2011, [http://www.nytimes.com/2011/05/27/world/americas/27brazil.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2011/05/27/world/americas/27brazil.html?pagewanted=all&_r=0) (discussing Brazil's move toward regulations that limit on direct foreign ownership of land, with land grabs by China causing most concern).

<sup>145</sup> Mato Grosso and Mato Grosso do Sul are states located in the center west part of Brazil, abutting Bolivia and Paraguay. The northern section of Mato Grosso border the Amazon rain forest. These states are rural, with terrain ranging from rain forest to savannah. Significant harvesting of soybean including some sugarcane occurs in Mato Grosso, with charcoal in Mato Grosso do Sul. The geography and distance from urban centers makes these areas susceptible to slave labor and practices. See BALES, *supra* note 35; see MONSALVE SUÁREZ ET AL., *supra* note 36.

<sup>146</sup> See Kliment & Rodrigues, *supra* note 126.

<sup>147</sup> See *id.*

<sup>148</sup> Lei No. 5.709, de 7 de Outubro de 1971, *DIÁRIO OFICIAL DA UNIÃO [D.O.U.]* de 7.10.1971.

<sup>149</sup> See Thiago Assumpção Henriques & Bernardo Pimentel Barbosa Perssoa, *Restrictions on Acquisition and Leasing of Rural Land in Brazil*, *LATIN AM. L. & BUS. REP.* (Feb. 2011), available at [http://www.suillrom.com/files/Publication/ac6bddcd-4490-4629-94dc-47baf8600300/Presentation/PublicationAttachment/5c9db260-6b56-4f6d-985b-4c3316b94d07/Korb\\_Gadwood\\_Gross\\_LALBR\\_Feb\\_2011.pdf](http://www.suillrom.com/files/Publication/ac6bddcd-4490-4629-94dc-47baf8600300/Presentation/PublicationAttachment/5c9db260-6b56-4f6d-985b-4c3316b94d07/Korb_Gadwood_Gross_LALBR_Feb_2011.pdf)

Farmland is being treated as a strategic asset on a par with oil. Last year, spooked by the idea of foreign sovereign-wealth funds and state-owned firms buying up vast tracts, the government resurrected a 1971 law limiting the amount of rural land foreigners can buy. It was revived even though in the 1990s it was deemed incompatible with the new democratic constitution and open economy. The details are under review: foreigners may be allowed to buy a bit more without restriction, and still more if the government thinks it is in the national interest. But there is no timetable for passing a new law. The Brazilian Rural Society estimates that \$15 billion of planned foreign agriculture investments are being dropped.<sup>150</sup>

In 2010, Brazil's Attorney General, the Advocacia Geral da União (AGU), reinstated by legal opinion<sup>151</sup> Article 1, paragraph 1 of the 1970 law, which differentiates between Brazilian incorporated companies that are controlled by foreign shareholders and those that are not.<sup>152</sup> In past interpretations of this paragraph, the AGU declared the paragraph unconstitutional, and not in accordance with the understanding of the Brazilian Federal Constitution of 1988.<sup>153</sup> Notwithstanding the restrictions, companies may appeal to the President of Brazil, Brazilian Agriculture Ministry, or the Department of Trade for authorization of purchase or activity beyond the restrictions.<sup>154</sup>

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(translation of authors' article originally published in the Azevedo Sette Advogados).

<sup>150</sup> *Protectionism in Brazil: A Self-made Siege—First They Went for the Currency, Now for the Land*, THE ECONOMIST, Sept. 24, 2011, available at <http://www.economist.com/node/21530144/>.

<sup>151</sup> T.J.R.J., No. 01/2010, de 30 de Junho de 2010, DIÁRIO OFICIAL DO RIO DE JANEIRO [D.O.U.E.R.J.] de 23.7.2010.

<sup>152</sup> Henriques & Perssoa *supra*, note 149 (explaining that control by foreign shareholder is similar to the U.S. concept of controlling shareholder's ability to dictate or influence business, or control the voting process).

<sup>153</sup> *Id.*

<sup>154</sup> *Id.* Provisions of the law include the requirement that foreign companies can only acquire rural land for the purposes of farming, cattle

While Federal Law 5.709/71 may restricts direct ownership, it does not solve the issue of control as highlighted earlier. Companies that invest in biofuel are large food corporations, chemical companies, energy companies, and bioengineering companies.<sup>155</sup> Acquisition of Brazilian rural land is wholly unnecessary given the partnerships or leasing arrangements that can be created with local landowners.<sup>156</sup> Ultimately, a corporation does not need ownership to thrive; what it needs is control or simply, access.<sup>157</sup> As outside capital grows it develops more and more access to the asset and the natural resource.<sup>158</sup>

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raising, and industrial or settlement projects, and such projects must be specified in the company's by-laws. *Id.*

<sup>155</sup> See Kenfield, *supra* note 16 (discussing the role of agribusiness corporations (with significant presence in the soybean market) in investing in biofuel development, listing Louis Dreyfus Commodities, Tereos, and Cargill); BRONSON ET AL., *supra* note 10; PATEL, *supra* note 6 (discussing influence and interest of Archer-Daniels-Midland Company, Monsanto Company, Bunge Limited, and Cargill).

<sup>156</sup> See Kliment & Rodrigues, *supra* note 126; Mendelson Lima et al., *Deforestation and the Social Impacts of Soy for Biodiesel: Perspectives of Farmers in the South Brazilian Amazon*, 16 *ECOLOGY & SOCIETY*, no. 4 at 2, 13 (2011), available at <http://www.ecologyandsociety.org/vol16/iss4/art4/>.

<sup>157</sup> Once the European elite discovered "sweetness," sugar came under elite control as Europeans appropriated sugarcane for their exclusive consumption. See Schneider, *supra* note 2.

<sup>158</sup> A tool of international trade to consider is the bilateral investment treaty or bilateral investment agreements (BIT), an arrangement between sovereigns to encourage and stimulate foreign development and investment. See generally United Nations Conference on Trade and Development (UNCTAD), *Bilateral Investment Treaties 1959–1999*, U.N. DOC. UNCTAD/ITE/IIA/2 (2000), available at <http://unctad.org/en/Docs/poiteiid2.en.pdf>. Brazil has historically resisted BITs and has refused to ratify on the basis that BITs conflict with the Brazil Constitution. See UNCTAD, *Total Number of Bilateral Investment Treaties Concluded*, June 1, 2011, available at [http://unctad.org/Sections/dite\\_pccb/docs/bits\\_brazil.pdf](http://unctad.org/Sections/dite_pccb/docs/bits_brazil.pdf) (noting BITs signed by Brazil but not ratified or entered into). Lack of ratification gives foreign investors no reason to purchase agricultural land as they are unable to avail themselves of the protections of the BIT. BITs tend to be extremely protective of foreign investors, giving them more rights than domestic investors in the event that the value of their property declines as a consequence of environmental regulation, labor regulation, water allocation rights, land regulation, etc. Professor Carmen González discusses the Latin American resistance to BITs and subsequent relaxing of restrictive measures

## 2. THE AMAZON: DEFORESTATION & THE FOREST CODE

A distinction must be made between what is known as the Amazon biome and the Legal Amazon. The Amazon biome refers to the rain forest that many automatically think of when they hear the term Amazon.<sup>159</sup> The Legal Amazon (Amazônia Legal) is an administrative area that is not entirely biome, but is also cerrado<sup>160</sup> (savannah) and encompasses south-central Brazil, including the states of Acre, Amazônia, Rondônia, Roraima, Amapá, Pará, Mato Grosso, and parts of Tocantins and Maranhão.<sup>161</sup>

The Brazil Forest Code of 1965 was passed to protect 80% of the Amazon from deforestation caused by farming.<sup>162</sup> However, enforcement has been minimal, and as documented by various organizations, agencies, research studies, and media, deforestation of the Amazon is a persistent problem.<sup>163</sup> During the first quarter of

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once countries found themselves without access to traditional forms of financing. Carmen González, *China's Engagement with Latin America: Partnership or Plunder?*, in NATURAL RESOURCES AND THE GREEN ECONOMY: REDEFINING THE CHALLENGES FOR PEOPLE, STATES AND CORPORATIONS (Elena Merino-Blanco & Jona Razzaque eds., 2012), available at <http://ssrn.com/abstract=2029417>.

<sup>159</sup> Lima et al., *supra* note 156.

<sup>160</sup> *See id.* (“International attention on deforestation in Brazil tends to focus on the Amazon biome. However, the loss of Cerrado forest is also of concern.”).

<sup>161</sup> *Id.*; *see also* Lima et al., *supra* note 156 (stating that sugarcane-producing areas comprise 61% of Brazil’s territory). *See generally* Juliano Assunção, et. al., *Deforestation in the Amazon: Prices or Policies?* 3–35 (Climate Policy Initiative Rio de Janeiro, Working Paper, 2012), available at <http://climatepolicyinitiative.org/publication/deforestation-slowdown-in-the-legal-amazon-prices-or-policies/>; *Sugarcane Producing Regions in Brazil*, UNICA.COM, <http://english.unica.com.br/content/show.asp?cntCode=%7BD6C39D36-69BA-458D-A95C-815C87E4404D%7D> (last visited Feb. 22, 2013).

<sup>162</sup> C.FLOR., Lei No. 4.771 (Braz. 1965) (revogado pela C.FLOR., Lei No. 12.651 (Braz. 2012)); C.FLOR., Lei No. 7.803 (Braz. 1989); C.FLOR., 281 Medida Provisória 2.1667-67 (Braz. 2001); C.FLOR., Lei No. 12.651 (Braz. 2012).

<sup>163</sup> Lima et al., *supra* note 156 (quoting studies of deforestation attributed to soy and other agribusiness activity in Brazil and documenting the impact of biofuel production in deforestation of Mato Grosso area,

2012, the Brazilian legislative body enacted amendments to the Forest Code, which would relax many of the provisions that protected certain rural areas from human occupation.<sup>164</sup> However, President Dilma Rousseff vetoed twelve articles of the new code in part on the basis that the amendments were “vague” or “imprecise” in dealing with preservation, or “did not articulate environmental parameters with social and productive criteria . . .”<sup>165</sup> That said, the veto could be overturned by the legislature.<sup>166</sup>

According to the Ethanol Book published by BNDES, sugarcane is grown in most states, with the most significant concentration occurring in the mid-south to southeast, which accounts for 85% of production.<sup>167</sup> The state of São Paulo is reported to produce 60% of the cane; however, production in the Mato Grosso area, where much cultivation of soybean occurs, is seeing an increase as price and availability of land decreases in São Paulo.<sup>168</sup> The *Ethanol Book*

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including the cerrado); see also BNDES, *supra* note 40, at 84; Assunção et al., *supra* note 161, at 35 (describing deforestation activity, albeit at a slow rate due to Brazil conservation efforts); Alexei Barrionuevo, *Brazil: Government Vows Crackdown on Cattle Ranchers in the Amazon*, N.Y. TIMES, May 18, 2011, <http://www.nytimes.com/2011/05/19/world/americas/19briefs-Brazil.html>.

<sup>164</sup> See Eduardo Soares, *Brazil: 12 Articles of New Forestry Code Vetoed by the Government*, GLOBAL LEGAL MONITOR (June 4, 2012), [http://www.loc.gov/lawweb/servlet/lloc\\_news?disp3\\_l205403176\\_text](http://www.loc.gov/lawweb/servlet/lloc_news?disp3_l205403176_text); Lei No. 12.651, *supra* note 162; see also *Brazil's New Forest Code Faces International Opposition*, PUBLIC RADIO INT'L (May 17, 2012), <http://www.pri.org/stories/science/environment/brazil-s-new-forest-code-faces-international-opposition-9903.html>.

<sup>165</sup> Soares, *supra* note 164.

<sup>166</sup> *Id.*

<sup>167</sup> BNDES, *supra* note 40, at 156. According to the *Ethanol Book*, “Sugarcane has been cultivated in Brazil since 1532, when it was introduced by Martim Afonso, the first Portuguese colonizer, who intended to build sugar mills such as those already existing at the time on the Azores Islands.” *Id.* at 155.

<sup>168</sup> *Id.* at 156; see *Sugarcane Production in Mato Grosso Expected to Increase 6%*, SOYBEAN & CORN ADVISOR (Mar. 21, 2011), [http://www.soybeansandcorn.com/news/Mar21\\_11-Sugarcane-Production-in-Mato-Grosso-Expected-to-Increase-6](http://www.soybeansandcorn.com/news/Mar21_11-Sugarcane-Production-in-Mato-Grosso-Expected-to-Increase-6) [hereinafter SOYBEAN & CORN ADVISOR]; see also Rohter, *supra* note 91. The mills in the Mato Grosso region are expected to produce about 1 billion litres of ethanol in 2011, enough to satisfy the regional demand. SOYBEAN & CORN ADVISOR. In addition, Adecoagro, S.A., a leading agribusiness and energy company with

claims that the Amazon, presumably the biome, is an illogical geographic area for the cultivation of sugarcane because sugarcane does not attain good productivity in climates such as those found in wet equatorial regions.<sup>169</sup>

However, I have found no claim that sugarcane is planted in the Amazon biome. Rather, the concern is that planting sugarcane—and soy—for the purpose of satisfying global biofuel demand results in displacement of land used for grazing cattle, as well as growing other crops for food purposes.<sup>170</sup> The result is that these activities are pushed into protected areas, which results in deforestation not permitted by the Forest Code.<sup>171</sup> Presumably, this caveat is an attempt by Brazil's sovereign development bank, BNDES, to respond to environmentalists that argue that the market for sugar ethanol has created devastation in the rain forests of the Amazon. There is dispute about whether indirect deforestation is a consequence of using pastureland, for example, in Mato Grosso or whether what is really happening is that "largely abandoned or degraded pasture land [is being put] back into production."<sup>172</sup>

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a significant presence in Latin America, currently owns one sugar mill in the state of Mato Grosso do Sul called Angélica, a new modern mill that has a "sugarcane crushing capacity of 4 million tons per year." ADECOAGRO S.A., SEC PROSPECTUS 153 (Jan. 28, 2011) [hereinafter ADECOAGRO PROSPECTUS] ("Sugar, Ethanol and Energy Business: We believe we are a growing and efficient producer of sugar and ethanol in Brazil. We cultivate and harvest sugarcane, which is then processed in our own mills to produce sugar, ethanol and electric energy. As of September 30, 2010, our overall sugarcane plantation consisted of 54,352 hectares, planted over both owned and leased land. We currently own and operate two sugar and ethanol mills, UMA [Usina Monte Alegre] and Angélica [Agroenergia Angélica], with a total crushing capacity of 5.2 million tons of sugarcane per year."). The harvest is largely mechanized and the plant's electricity is generated through the sugar bagasse by-product. *Id.* Adecoagro is in the process of raising funds for a third Mato Grosso mill, Ivinhema. *Id.* at 183. The mill is expected to cost close to \$700 million. *Id.* at 184.

<sup>169</sup> See BNDES, *supra* note 40, at 69.

<sup>170</sup> See Lima et al., *supra* note 156; Rohter, *supra* note 91 ("Much of the deforestation is caused by the soybean production but also by beef cattle ranchers. As land is used to grow, the pasture land gets pushed into the rain forest."); see also Barrionuevo, *supra* note 163; PATEL, *supra* note 6, at ch. 7.

<sup>171</sup> Rohter, *supra* note 91.

<sup>172</sup> *Id.*

While some report that the rates of deforestation are at their lowest,<sup>173</sup> there is documentation that deforestation of the Mato Grosso region is increasing exponentially. The *New York Times* revealed that the rate of deforestation in the period between August and April 2010 increased by 26% compared to the same period the prior year.<sup>174</sup> The Brazilian government defends the practice by arguing that there is no new deforestation.<sup>175</sup> Rather, the cultivation of sugarcane is occurring in previously exploited parts of the rainforest.<sup>176</sup> However, environmentalists are concerned about future rates of deforestation: Once the production of sugar rises, specifically to satisfy global sugar ethanol demand, then rates of deforestation will increase as it will be more cost effective to “raze virgin forest than recover already devastated lands.”<sup>177</sup>

### 3. HUMAN RIGHTS TREATIES

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<sup>173</sup> E.g., Assunção et al., *supra* note 161.

<sup>174</sup> Barrionuevo, *supra* note 163.

<sup>175</sup> For the Brazilian government, “deforestation” is occurring on land that has already been destroyed. In the *Stuffed & Starved* chapter entitled “Glycine Rex” in which Patel introduces the infiltration of the soybean into just about every food, including chocolate, Patel also discusses the notion of deforestation in the Mato Grosso area of Brazil, where significant cultivation of soybean also occurs. He quotes the governor of Mato Grosso as saying in 2003: “To me, a 40 percent increase in deforestation doesn’t mean anything at all, and I don’t feel the slightest guilt over what we are doing here. We are talking about an area larger than Europe that has barely been touched, so there is nothing at all to get worried about.” Patel, *supra* note 6, at 188 (citing Amanda Cassel & Raj Patel, FOOD FIRST: INST. FOR FOOD & DEV. POLICY, *Policy Brief No. 8: Agricultural Trade Liberalization and Brazil’s Rural Poor: Consolidating Inequality* (Aug. 2003)); see also SOYBEAN & CORN ADVISOR, *supra* note 168 (“In recent years, the government has been pushing for the conversion of degraded pastureland into new crop production such as soybeans, sugarcane, or palm oil in order to reduce the amount of deforestation in Brazil. The state of Mato Grosso has 2.5 million hectares of land classified as degraded pastures, which are pastures that have a very low carrying capacity for cattle ranching.”).

<sup>176</sup> See Barrionuevo, *supra* note 163.

<sup>177</sup> *Amazon Rainforest may be used to Grow Sugarcane for Ethanol*, ASSOCIATED PRESS, Sept. 10, 2007, available at [http://english.pravda.ru/news/business/09-10-2007/98492-sugarcane\\_ethanol-0/](http://english.pravda.ru/news/business/09-10-2007/98492-sugarcane_ethanol-0/).

Brazil has ratified most, if not all, significant international human rights treaties and instruments and has incorporated these rights into its Constitución Política de 1988, con reformas de 1996 (Brazil Federal Constitution of 1988 with 1996 reforms),<sup>178</sup> as well as legislation arising therefrom. United Nations treaties and instruments ratified include the Universal Declaration of Human Rights (UDHR),<sup>179</sup> the International Covenant of Economic, Social, and Cultural Rights (ICESCR),<sup>180</sup> the International Covenant on Civil and Political Rights (ICCPR),<sup>181</sup> the Convention on the Elimination

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<sup>178</sup> C.F. (Braz. 1988) (con reformas de 1996). Full text of the document is accessible through Georgetown University's School of Foreign Service Center for Latin American Studies Political Database of the Americas at <http://pdba.georgetown.edu/Constitutions/Brazil/english96.html>. FIAN International, an international membership organization that conducts various fact-finding missions on the issues of human rights, reports that all principles of the Universal Declaration of Human Rights have been incorporated into Brazil's Federal Constitution of 1988. However, implementation of the principles occurs through regulation, and promulgation of such laws is slow. See MONSALVE SUÁREZ ET AL., *supra* note 36, at 11 n.3.

<sup>179</sup> Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/810(III) at 71 (Dec. 10, 1948), 999 U.N.T.S. 171, 1057 U.N.T.S. 407.

<sup>180</sup> International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200 (XXI) A, U.N. Doc. A/RES/2200(XXI) (Dec. 16, 1966), 993 U.N.T.S. 3, S. EXEC. DOC. D, 95-2, S. TREATY DOC. NO. 95-19, 6 I.L.M. 360 (ratified by Braz., 1992). The ICESCR recognizes rights including, but not limited to, the right to work, *id.* ¶ 6, the right to fair wage, *id.* ¶ 7, the right to an adequate standard of living, *id.* ¶ 11, and the right to education, *id.* ¶ 14. Each state that has ratified the convention "undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures." *Id.* pt. II, art. 2, ¶ 1.

<sup>181</sup> International Covenant on Civil and Political Rights, G.A. Res. 2200 (XXI) A, U.N. Doc. A/RES/2200(XXI) (Dec. 16, 1966), 999 U.N.T.S. 171, S. EXEC. DOC. E, 95-2, S. TREATY DOC. 95-20, 6 I.L.M. 368 (ratified by Braz., 1992) (in part to protect individuals against slavery, *id.* pt. III, art. 8, ¶ 1, and torture, *id.* pt. III, art. 7; as well as protect other rights associated with the right to life, *id.* pt. III, art. 6; liberty, *id.* pt. III, art. 9; due process, *id.* pt. III, art. 9, ¶ 3; and freedom of religion, *id.* pt. III, art. 18, ¶¶ 1-4).



of All Forms of Racial Discrimination (CEAFRD),<sup>182</sup> and the Convention on Rights of the Child.<sup>183</sup> Other treaties ratified include the American Convention on Human Rights—known as the Pact of San Jose—(ACHR),<sup>184</sup> as well as the Additional Protocol to the ACHR in the area of Economic, Social, and Cultural Rights.<sup>185</sup> Fundamental International Labour Organization (ILO) conventions<sup>186</sup> ratified include those on child labor<sup>187</sup> and forced labor.<sup>188</sup>

Notwithstanding the extensive effort of the state of Brazil to protect its citizens from human rights violations, labor conditions in agribusiness are reported to be exploitative, degrading, and dehumanizing.<sup>189</sup> Consistent with the idea of lack of choice and meaningful work alternatives, discussed *infra*, FIAN International reports that a significant number of workers released from slavery-like conditions end up returning.<sup>190</sup> One of the reasons cited for the

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<sup>182</sup> International Convention on the Elimination of All Forms of Racial Discrimination, G.A. Res. 2106 (XX), U.N. Doc. A/RES/2106(XX) (Dec. 21, 1965), S. EXEC. DOC. C, 95-2, S. TREATY DOC. 95-18, 660 U.N.T.S. 195, 212 (ratified by Braz., 1966) (intended to prevent all practices that create racial discrimination, racial hatred, racial superiority (i.e. segregation, apartheid, colonialism)) *Id.* p.mbl.

<sup>183</sup> Convention on the Rights of the Child, G.A. Res. 44/25, U.N. Doc. A/RES/44/25 (Nov. 20, 1989), 1577 U.N.T.S. 3, 28 I.L.M. 1456 (ratified by Braz., 1990); MONSALVE SUÁREZ ET AL., *supra* note 36, at 11.

<sup>184</sup> Organization of American States, American Convention on Human Rights, Nov. 22, 1969, O.A.S.T.S. No. 36, 1144 U.N.T.S. 123, S. TREATY DOC. No. 95-21, 9 I.L.M. 99 (ratified by Braz., 1992).

<sup>185</sup> O.A.S.T.S. No. 69 (1988), Basic Documents Pertaining to Human Rights in the Inter-American System, OEA/Ser.L.V/II.82 doc.6 rev.1 at 67 (1992) (ratified by Braz., 1995).

<sup>186</sup> A list of all ILO conventions ratified by Brazil can be found at [http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:209277928547450::NO:12100:P12100\\_INSTRUMENT\\_ID:312174:NO](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:209277928547450::NO:12100:P12100_INSTRUMENT_ID:312174:NO).

<sup>187</sup> *See, e.g.*, ILO, Worst Forms of Child Labour Convention, C182, 17 June 1999, C182 (ratified by Braz., 2001).

<sup>188</sup> *See, e.g.*, ILO, Forced Labour Convention, C29, 28 June 1930, C29 (ratified by Braz., 1957).

<sup>189</sup> *See* MONSALVE SUÁREZ ET AL., *supra* note 36, at 4, 29. *See generally* U.S. DEP'T OF LABOR'S LIST OF GOODS PRODUCED BY CHILD LABOR OR FORCED LABOR, *supra* note 51; U.S. DEP'T OF LABOR'S 2010 FINDINGS ON THE WORST FORMS OF CHILD LABOR, *supra* note 51.

<sup>190</sup> *See* MONSALVE SUÁREZ ET AL., *supra* note 36, at 18.

discrepancy in policy and practice is geography.<sup>191</sup> Slave labor, for example, is reported to occur frequently in remote areas of the country where it is invisible to the general population.<sup>192</sup>

The use of slave labor in Brazil and other sugarcane producing countries is well documented by both governmental and non-governmental organizations, activist organizations, and activist scholars.<sup>193</sup> The former President of Brazil, Luiz Inácio Lula da Silva, engaged the human rights issue by taking a position against slave labor and by taking steps to eradicate its use.<sup>194</sup> However, enforcement of these anti-slavery efforts has been a challenge. The capital market is certainly hesitant to recognize a human rights issue in the commodities trade.<sup>195</sup> This hesitation might be intentional, or worse, entirely unintentional, as the idea just does not enter the market consciousness.<sup>196</sup> However, a plausible explanation is that in an emerging market, where there is an aggressive push to exploit a market that the world has its eyes on, that economic policies

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<sup>191</sup> Campbell, *supra* note 36, at 131 (“Slave labor is typically utilized to harvest sugarcane and to clear vast amounts of land for raising cattle and for providing access to valuable timber.”). Others report that slave labor occurs primarily in the cultivation of sugarcane and soybeans. PATEL, *supra* note 6, at 192.

<sup>192</sup> Campbell, *supra* note 36, at 131.

<sup>193</sup> See *supra* note 34.

<sup>194</sup> See generally BALES, *supra* note 35, at xi (explaining former President Lula da Silva’s initiative to increase police presence to curb slavery); MONSALVE SUÁREZ ET AL., *supra* note 36, at 3, 12, 38 (detailing Lula da Silva’s National Commission for the Eradication of Slave Labour and the National Plan for the Eradication of Slave Labour).

<sup>195</sup> For example, listening to the Milken Institute’s conference panels on emerging markets and bioethanol commodities, one would never know that there is a world of inhumane activity and disparate rights sustaining the growth and projections the journalists, CEOs, etc. are talking about. In fact, few consider the impact that a deal has on the lives of individuals, and if they do, it does not matter to the purpose of the deal, which is to get a return for an investor. See generally Global Conference, *Connect: People, Opportunities, Solutions*, MILKEN INSTITUTE (2013), available at <http://www.milkeninstitute.org/events/events.taf?function=detail&cat=GC&id=389&eventID=GC12>.

<sup>196</sup> *Id.*

stimulating that growth clash directly with human rights and environmental concerns.<sup>197</sup>

### III. GREEN FETISH: LANGUAGE AS THE REPRODUCTION OF POWER

*Capitalism transforms society in its entirety as it sucks people by the billions into labouring for it. It changes the whole pattern by which humanity lives, remoulding human nature itself. It gives a new character to old oppressions and throws up completely new ones.*<sup>198</sup>

The message that I have sought to convey in this paper is twofold: (1) the sugar ethanol market is based on and replicates colonialism-era relationships as it relates to people, property, and the environment, and (2) the position that like the colonialism-era sugar market, sugar ethanol is in demand because a market has been created for it by energy and agribusiness corporations.<sup>199</sup> The purported benefits given by proponents of biofuel create an acceptable appearance, which is that of the green agenda, but if one

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<sup>197</sup> See BALES, *supra* note 35, at 147 (“When human rights compete with profit, profit wins.”); see also Henry Chu, *Brazil’s Leftists No Longer See President as Their Champion*, L.A. TIMES, Jan. 16, 2005, <http://articles.latimes.com/2005/jan/26/world/fg-lula26>; Höges, *supra* note 31 (Brazil president dreams of a green belt). Green Tsunami and the FIAN Report also indicate that the Brazil government has executed contracts with other countries (Sweden, Japan, the United States) in which Brazil intends to satisfy the biofuel demand of those countries. Interestingly, the Swedes have included a provision against the use of slave or child labor in the production of biofuel, and in return for the stipulation, they are paying a 5% to 10% premium. Höges, *supra* note 31; MONSALVE SUÁREZ ET AL., *supra* note 36, at 23–25. In fairness, however, Bales reports in the “Preface to the Revised Edition of *Disposable People*”, that President da Silva “came out strongly against the slavery that destroys the lives of many Brazilians and is also a key element in the destruction of the country’s natural environment.” BALES, *supra* note 35, at xi.

<sup>198</sup> HARMAN, *supra* note 5, at 11.

<sup>199</sup> A trade in sugar existed before it was discovered or appropriated by the Europeans. See Schneider, *supra* note 2, at 311; MINTZ, *supra* note 4, at xv. As discussed earlier, the market for sugar ethanol has existed in Brazil since the 1970s. See *supra* note 7.

looks closely those benefits are marginal.<sup>200</sup> The market has discovered that the value of sugar is greater as fuel than it is as food;<sup>201</sup> in other words, higher profit margins are delivered from sugar when it is grown for the purpose of sustaining an energy market versus a global food market. This phenomenon is consistent with how capitalism is perceived to operate. In particular, Lucy Parson's theory on the flow of capital is instructive.<sup>202</sup> Parsons described a characteristic of capital—when demand for the thing being invested in drops, capital flows from one industry to another.<sup>203</sup> For Parsons, "If the price of commodity falls below the cost of its production, capital will be withdrawn from the production of this commodity."<sup>204</sup> In other words, if the price of sugar on the commodities exchange falls below the cost associated with converting sugarcane to sugar, and certainly if subsequent

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<sup>200</sup> The allure of biofuel seems to be twofold: first, biomass is sustainable unlike fossil fuel, and second, greenhouse emissions are found to be lower than that for fossil fuels. On the matter of greenhouse gas emission, proponents of biofuel argue that biofuels release lower levels of carbon dioxide than do fossil fuels, thus the notion that they burn "cleanly." Robert A. Fortunati, *Alternative Fuels, Ethanol and Biofuels*, Paper 16A, Rocky Mountain Mineral Law Foundation (2007). In addition, the life cycle of biomass creates a balance—carbon dioxide neutrality—whereby any carbon dioxide released by the fuel is at once removed from the air by existing biomass through the process of photosynthesis. *Id.* Taking into account the entire life cycle of sugar ethanol, from growth of the cane to production of the alcohol, sugar ethanol is found to compare favorably in terms of its greenhouse gas emissions over fossil fuels and corn ethanol. That said, I am unable to determine to what extent. Furthermore, I am not sure that there are biofuels (e.g. soy) that do not require forced labor, encroach on the forests, cause environmental degradation, and disrupt the food supply. *See also supra* note 16, 36. *But see, e.g.*, BNDES, *supra* note 40 (discussing sugar ethanol favorably in all respects, but this report was funded by BNDES and other government agencies, which have a stake in the outcome of the sugar ethanol industry).

<sup>201</sup> *See* Bolling & Suarez, *supra* note 8, at 2 ("[N]early half of Brazil's cane is grounded for ethanol."); Valdes, *supra* note 9, at 9 ("In the States of Minas Gerais, Goiás, Paraná, and Mato Grosso, more sugarcane is distilled into ethanol than is used for sugar production."). The fact that the World Bank detected a clear rise in global food prices and attributed that rise to the market for biofuel, is a strong suggestion of this. *See supra* note 15.

<sup>202</sup> GREER & PARSONS, *supra* note 38, at 735.

<sup>203</sup> *Id.*

<sup>204</sup> *Id.*

consumption is inadequate, then investors will withdraw their investment to minimize losses. The capital is then transferred to another investment in which there is a desired return. In the case of sugar, I would take Parson's point further. The volatility of the price of sugar on the open market is an indication of this dynamic.<sup>205</sup> When sugar fails to yield proper returns, as is necessarily the nature of the market, investors in commodities immediately shift their investment to a commodity that will do so. I do not argue that sugar as food has necessarily failed to yield proper returns; however, a shift has certainly occurred as most sugar is produced for the purpose of producing energy.<sup>206</sup>

It is important to note here the history that sugar-dependent economies have with this phenomenon. In her article, *Seasons of Resistance: Sustainable Agriculture and Food Security in Cuba*, Professor Carmen González discusses in part the disastrous boom and bust cycles that have afflicted "sugar monocultures."<sup>207</sup> The sugar monoculture created and then sustained economies dependent on the export of sugar.<sup>208</sup> For example, Cuba, the subject of González's piece, for over forty years exported 82% of its sugar and devoted nearly half of its irrigable land to the growth of sugarcane, while at once importing food and other necessities from abroad.<sup>209</sup> This near complete dependency on sugar exports produced a volatile

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<sup>205</sup> ICE SUGAR FUTURES, *supra* note 122.

<sup>206</sup> While I have not fully explored the depth of the emerging synthetic market, there is an indication that it is thriving. See Agres, *supra* note 10; BRONSON ET AL., *supra* note 10, at 56, 90 (expanding on the developing and influential "synthetic biology" industry). I suspect that once synthetically derived fuel substitutes begin to yield more attractive returns, the impact on the natural market for biomass may be disastrous.

<sup>207</sup> Carmen G. González, *Seasons of Resistance: Sustainable Agriculture and Food Security in Cuba*, 16 TULANE ENV. L.J. 685, 692–95, 703–05 (2003); see also GALEANO, *supra* note 4, at 59. In Chapter 2, of *Open Veins*, Galeano focuses on the sugar monoculture of Latin America (largely Brazil) and the Caribbean (Cuba, Barbados, Dominican Republic, and Haiti), and here he writes of the legacy of colonialism, that of abandoned sugar mills, devastated lands, and severe poverty.

<sup>208</sup> González, *supra* note 207, at 692–95, 703–05.

<sup>209</sup> *Id.* at 692.

domestic economy, one that mirrored the volatility of sugar prices on the global commodities market.<sup>210</sup>

González demonstrates how the Cuban sugar monoculture led to foreign control—primarily by the United States—of the Cuban economy.<sup>211</sup> Ultimately, once Cuban relations with the United States deteriorated, resulting in embargo, Cuba had to look to private

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<sup>210</sup> See *Id.* Radio addresses given by Fidel Castro to the Cuban populace in January 1965 and May 1970 are instructive on the complexity, unpredictable nature, and general difficulties plaguing the cultivation of sugarcane. In an address given on January 22, 1965 in Spanish over the Havana Domestic Radio and Television Service, Castro said, “The sugarcane harvest is important to our economy. To win the battle of the sugarcane harvest is to win the battle of the economy, for it means the development of the sugar industry, with its objective of producing 10 million tons of sugar by 1970.” Fidel Castro, Meeting with Union & Sugar Industry Leaders, Radio address on Havana Domestic Radio (Jan. 22, 1965) (transcript available at <http://lanic.utexas.edu/project/castro/db/1965/19650122.html>). In this particular speech Castro calls for mechanization as well as addresses the very significant role that Cubans have in the very important sugar harvest. *Id.* However, it is the 1970 report on the sugar harvest where we understand the challenges. “It is not as easy to run a mill as it is to run a cable car or a bicycle.” Fidel Castro, Premier Castro 20 May Report on Sugar Harvest, Radio address on Havana Domestic Radio (May 21, 1970) (transcript available at <http://lanic.utexas.edu/project/castro/db/1970/19700521.html>). Problems concerning “yields” due to “daily grinding” issues, excessive rains in certain geographic areas, or other issues related to the operation of the mills or capital expenditures associated with the mills, are specifically discussed. A sense of urgency certainly comes through the text. Castro is very specific about issues affecting output and effective competition with what he calls the “capitalist harvest.” *Id.* at 5, 12, 22. In particular, the May 20 speech contains a very clear and transparent discussion about the profit differentials between trade agreements, or privately negotiated agreements between Cuba and say, the Soviet Union, to purchase surplus sugar, and the free market. Castro concludes that “Sugar prices vary—generally, agreement prices are higher than free market prices.” Cuba’s approach at that time is heavily dependent on trade agreements. Noteworthy for me is the capitalistic tone of the speeches. While I focused on two specifically associated with the sugar crop, Castro is aggressive in his talk about business deals. *Id.*

<sup>211</sup> See González, *supra* note 207, at 693, 703–04.

contracts with other countries, namely the Soviet Union and China, to fill the extensive gap in sugar export.<sup>212</sup>

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With the sugar ethanol industry, sugar has thus reemerged as an item of desire, although not in the sense of a fetish for the sweet (or even the green fetish). The energy market that has been developing, growing, and evolving since the mid-2000s, satisfies a fetish for profit.

The term profit has no intrinsic meaning; no word does.<sup>213</sup> The meaning attributed to the term profit—how it is derived, who is entitled to it—is designed to construct a truth, often passed off as a scientific or “natural” (rule of god) truth, that serves specific interests and reproduces particular ideologies.<sup>214</sup> Profit from a finance perspective, which is how I know it, is the positive difference between revenues that are generated by business activity in excess of the costs (both operating and capital in form) associated with that activity. That basic definition, however, has been located within a purposeful understanding of capital and production that intentionally underestimates, or in the case of slavery or forced labor, eliminates, the value of labor in producing profit. My intent in this section is to

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<sup>212</sup> *Id.* at 704.

<sup>213</sup> CHRIS WEEDON, *FEMINIST PRACTICE & POSTSTRUCTURALIST THEORY* 22 (1st ed. 1987) (“[L]anguage, far from reflecting an already given social reality, constitutes social reality for us. Neither social reality nor the ‘natural’ world has fixed intrinsic meanings which language reflects or expresses.”); *see also* MINTZ, *supra* note 4, at 157 (“Where does the locus of meaning reside? For most human beings most of the time, the meanings believed to inhere in things and in the relationships among things and acts are not given but, rather, are learned.”).

<sup>214</sup> *See* MINTZ, *supra* note 4, at 152–53

The other sort of meaning can be grasped when one considers what consumption, and its proliferated meanings for the participants, can signify for a society as a whole, and especially for those who rule it; how those who govern or control the society perpetuate their status and profit from the intensified diffusion of inside meanings, and of the consumption which the validations of these meanings entail. . . . [T]he simultaneous control of both the foods themselves and the meanings they are made to connote can be a means to pacific domination.

explore that ideology and offer a new approach, or rethinking of profit that reflects the value that truly goes into production.<sup>215</sup>

Language, how we think (or learn to think) about things, define relationships and ideas, creates and solidifies a power-structure.<sup>216</sup> The illusion of equality, for example, reinforced by the idea of private contract begins to convey this point. The notion of consent and private contract creates a language of equality that sustains the mechanisms of inequality.<sup>217</sup> As discussed earlier, when one party has control of the production process, and another has no control, and certainly no alternatives for meaningful work, there is no equal bargaining power, an important element in contract formation.<sup>218</sup> Therefore, if we stop thinking of the relationship of exploited agricultural workers as one in private contract, then we are better

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<sup>215</sup> SMITH, *supra* note 5, at 32 (“But though labour be the real measure of the exchangeable value of all commodities, it is not that by which their value is commonly estimated.”). The problem for Smith is how labor is valued. For Smith, labor is “an abstract notion, which though it can be made sufficiently intelligible, is not altogether so natural and obvious.” *Id.* So, in my proposal that we rethink profit, I acknowledge the challenge of first, how do we value the labor of a cane-cutter that has a ten- to fifteen-year work span? And then, is there a way to get past the theory (i.e. abstraction) and price labor fairly?

<sup>216</sup> See MINTZ, *supra* note 4, at 152–53.

<sup>217</sup> See HARTMAN, *supra* note 3. Saidya Hartman examines the illusory nature of the liberty of contract as related to black, newly-freed slaves in the United States:

The liberty of contract, however illusory, could not be disassociated from the imposition of forms of involuntary servitude facilitated by Black Codes, vagrancy laws, the convict-labor system, the criminal surety system, breach-of-contract laws, and the share system. Moreover, even those wage laborers operating under presumably ideal conditions of the ‘free market’ were unable to enjoy the fruits of their labor. The liberty of contract dissimulated the inequality at the heart of the exchange.

*Id.* at 147.

<sup>218</sup> See HARMAN, *supra* note 5, at 31–32 (“The relation between the employer and the worker had the appearance of being between equals. . . . Yet the surface appearance of equality hid a deeper inequality.”).



able to see the relationship shrouded in inequality and to address that inequality.<sup>219</sup>

In the context of labor, the structure of power is reproduced in the way that the value of labor is considered within the understanding of profit. For the existing definition of profit to have any efficacy, labor must be minimized in terms of value. This is achieved by defining labor as less significant than capital—as less than property.

We equate the value of labor to the wage, which is by nature less than its true worth.<sup>220</sup> Thus, by constructing labor as something less than property, the worker's worth is significantly altered (effectively dispossessed of power and control).<sup>221</sup> That valuation then, conveniently occurs through a different market (the wage market, which seeks to pay as close to nothing for work).<sup>222</sup> If labor is not defined as property, the value of labor is misrepresented as the wage, as opposed to being represented through the thing that labor has transformed into having productive value. And ultimately the laborer is structurally placed in a subservient bargaining position (which is the heart of the coercive nature of capital).

The impact is a powerful shift in perspective, one that establishes apparent socio-political-economic positions: The agricultural worker needs the capitalist to survive, rather than the capitalist needing the worker.<sup>223</sup> This creates the sense that the capitalist is doing the worker a favor by letting him or her cut cane

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<sup>219</sup> See MONSALVE SUÁREZ ET AL., *supra* note 36, at 61–63 (making short- and long-term recommendations to the Brazilian state as it relates to the human right to work, right to food, and the environment (particularly for rural and indigenous populations), and making the following recommendation to the international community: “Reconsider all incentive policies, such as the mandatory targets of replacing fossil fuels by agrofuels, considering the serious negative social and environmental impacts the expansion of this industry will have on Brazil as a leading country in this sector.”).

<sup>220</sup> The wage market intentionally seeks to pay the “cheapest” wage. See generally Spivak, *supra* note 33.

<sup>221</sup> See REIMAN & LEIGHTON, *supra* note 30, at 228 (“Capitalists and workers have the same right of property; they just happen to own different things.”).

<sup>222</sup> See HARMAN, *supra* note 5, at 29 (“[The workers] get paid a wage, while their labour produces goods that are the property of those who control the means of production.”).

<sup>223</sup> *Id.* at 33.

all day, when in fact the worker is providing the labor necessary for the capitalist to make profit. And this is whether the worker is actually cutting cane or working a machine that cuts the cane.

The challenge for me is how to determine the intrinsic value of labor in a way that is more authentic than the wage.<sup>224</sup> But really, there is no challenge. What there is, however, is a shift in thinking.

Thus, how do we ascertain the intrinsic value of an agricultural worker whose labor consists of cutting cane in the heat for more than the average work-day? The work span of such worker is short, given the violence imposed on the body from repetitive motion. We can either decide to value that short work span ‘cheaply,’ with a present-value formula, which favors wealth creation at the capital level. Or we can value that short work span ‘expensively,’ or in my opinion, the correct valuation accounts for the effect of a present-value formula that shifts wealth from capital to the worker, whose hard labor is necessary in production.<sup>225</sup>

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<sup>224</sup> Adam Smith, the purported father of neoclassical economics, discussed the role of labor in the determination of profit, and while he conceded that the matter was incredibly abstract he also placed great weight on labor’s value and recognized that while labor creates exchange-value, exchange-value is not considered in determining the value of labor. See SMITH, *supra* note 5, at 32 (“But though labour be the real measure of the exchangeable value of all commodities, it is not that by which their value is commonly estimated. . . . an abstract notion, which though it can be made sufficiently intelligible, is not altogether so natural and obvious.”).

<sup>225</sup> If we are talking about mechanized cultivation, then the value of the worker necessarily increases given the longer work span and the more involved skill necessary to work a machine. Regardless, the worker is utilizing his or her property, labor, in the creation of the ultimate product. Also, for a moment I was challenged with classification—do I classify the value of labor as in-kind capital contribution, thereby exposing the worker to risks associated with that level of ownership and the particular product (i.e. volatility of sugar). But ultimately, I do not think it is my obligation to determine how labor should be classified because then I would continue the ideology that removes control from the laborer. The agricultural worker creates value with his or her labor, and part of equalizing bargaining positions in the “private contract” would be to restore control to the worker. He or she decides how their labor should be classified and thus wealth returned to them. See MINTZ, *supra* note 4, at 57 (“Slaves and forced laborers, unlike free workers, have nothing to sell, not even their labor; instead, they have themselves been bought and sold and traded.”).

In my research for this paper, I have come across an interesting conclusion: Free labor is “cheaper” than slave labor. Following the current mode of thought, yes, slave labor was more expensive given the capital-intensive nature of the production. But if I stop to think about the underlying subtext in this assertion, I realize how this thought perpetuates certain modes of thought that sustain ideology by making us think that the current way is a natural state. For example, invoking Gayatri Spivak: “Human labor is not, of course, intrinsically ‘cheap’ or ‘expensive[.]’ An absence of labor laws (or a discriminatory enforcement of them), a totalitarian state . . . and minimal subsistence requirements on the part of the worker will ensure it.”<sup>226</sup>

Spivak is essentially calling out a business and legal context that artificially establishes a truth that recreates power structures.<sup>227</sup> In other words, “cheap” is not a given, but a dynamic created by legal and institutional arrangements that permit power-relations to be accepted as neutral and then natural, and enable the Global North to profit from slave labor while evading both moral and legal responsibility. I invoke Robert Heilbroner to make the following point: “So it is that we ‘obey’ the rhythms of the machine and dance to the tune of money, hardly aware that we are following the dictates of a social, not a natural, imperative.”<sup>228</sup>

I recognize the challenges in my proposal, given the many interests involved in global business relationships. However, rethinking the definition of profit, or how the components of profit are defined, is absolutely necessary because the reality is that the current notion of profits as relates to agricultural is an inaccurate representation of the role of capital in determining value.<sup>229</sup>

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<sup>226</sup> Spivak, *supra* note 33, at 83.

<sup>227</sup> See WEEDON, *supra* note 213, at 28:

Profit is made by paying labour less than the value which it produces. The worker has no alternative than to work for as little as the employer pays her. Yet, in the dominant liberal discourses of capitalist society, this oppressive relationship between capital and labour is represented as a free contract between rational, sovereign individuals.

(echoing the same points regarding the illusory private contract).

<sup>228</sup> See HEILBRONER, *supra* note 3, at 117.

<sup>229</sup> REIMAN & LEIGHTON, *supra* note 30, at 221 (citing Marx’s explanation of the uniqueness of labor-power: “Labor-power, however, has

Certainly in agriculture, as relates to Global North–Global South relations, profit has in the past represented the theft of labor and continues to be represented now. As I discuss in my conclusion, I recognize that there are complexities to these relationships, and what I am not considering here specifically is the role that the elite of Brazil, or those in control of sugar mills, have in contributing to modern-day colonialism conditions.<sup>230</sup> However, any idea can be dismantled if one drills down to the details. Ultimately, I think this is the story of the Global North and the Global South, and the demand on Brazil to produce sugar ethanol for the world is driven by the capital market, which is controlled by the Global North.

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A shift in law and policy occurs first through language.<sup>231</sup> The question is whether change will produce a reallocation of wealth and resources.<sup>232</sup> What profits are, and who is entitled to them, is

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the unique capacity to produce more value than its own”); *see also* MINTZ, *supra* note 4, at 30–31 (discussing the same idea on the unique quality of labor-power).

<sup>230</sup> I find support from the work of B.S. Chimni, who would argue that neoliberal economic policies have created a global bourgeoisie in both the Global North and South that facilitates the dominant role of transnational capital and creates extremes of wealth and poverty. *See, e.g.*, B.S. Chimni, *A Just World Under Law: A View from the South*, 100 AM. U. INT’L. L. REV. 2, 17–24 (2006).

<sup>231</sup> WEEDON, *supra* note 213, at 22 (“[L]anguage, far from reflecting an already given social reality, constitutes social reality for us. Neither social reality nor the ‘natural’ world has fixed intrinsic meanings which language reflects or expresses.”).

<sup>232</sup> COASE, *supra* note 19, at 173 (“The question which then has to be considered is whether, through its influence on demand, a change in the criteria for assigning ownership to previously unrecognized rights could bring about a different allocation of resources.”). For me, Professor Coases’s position is compelling. If the proposed solution influences no meaningful change, then the solution is not really a solution. Often attorneys and scholars propose additional disclosure as the solution for some problems. *See generally* Anderson, *supra* note 73 (proposing disclosure as a means for transparency in foreign direct investment). While there is value to transparency, I find that disclosure is quite often ineffectual and meaningless. Disclosure conveys the idea that transparency creates choice for investors and produces change in conduct. So as it relates to human rights violations, the idea is that if this “soft information” is to be required in disclosure

therefore controlled by capital and the ideology that it seeks to ensure and replicate. In the context of the sugar trade, the laborer, the Amazon, and the community that sugar production touches and affects, are not factored into the formula that calculates profits. If these elements were part of the calculation, profits would not be what they are because wealth created from production would stay in the location of production (as opposed to being transferred abroad),<sup>233</sup> and the concept of “emerging market” would disappear.

### CONCLUSION

In her essay *Can the Subaltern Speak*, Spivak critiques those whom she calls the leftist intellectuals in their practice of speaking for the oppressed (the subaltern) in a totalizing theory without considering the experience of the subaltern from her perspective, her point of view.<sup>234</sup> I begin with this idea because I think it speaks to the complexity (some will call it an intellectual flaw) that I have encountered in writing this article. I have arguably simplified the relationships that are formed by the sugar trade, and I have done so without considering all the narratives that form multiple experiences. This article has referred to the theoretical or mythical dichotomies of slave and master, laborer and manager, the property-less and the property-owner, and I have referred to them in a totalizing way, as if they are each a uniform basket of good or evil. Spivak articulates this problem: “[T]he relationship between global capitalism

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documents, companies would have incentive to end the practices. However, disclosure does not bring about a reallocation of resources where rights have not previously been recognized. Disclosure is ineffective at producing meaningful change because it merely goes toward the pricing of equity on the market. Investors, for example, are fully aware of the human rights violations of Cosan and Brenco. While not reported in disclosure documents, the violations are reported by various governmental and nongovernmental organizations. Investors are generally unmoved by these violations because investors care about getting the maximum return on their investment—in deriving additional property from property. If the fine imposed on the company does not materially impact the investment, then it is insignificant.

<sup>233</sup> See MINTZ, *supra* note 4, at 43 (“The wealth they created mostly returned to Britain; the products they made were consumed in Britain; and the products made by Britons—cloth, tools, torture instruments—were consumed by slaves who were themselves consumed in the creation of wealth.”).

<sup>234</sup> Spivak, *supra* note 33, at 74, 75.

(exploitation in economics) and nation-state alliances (domination in geopolitics) is so macrological that it cannot account for the micrological texture of power.”<sup>235</sup> In other words, as relates to this piece, the relationships that come together in the market for sugar or sugar ethanol are beyond the dualistic “Self–Other” relationship.<sup>236</sup> There are hierarchies created within hierarchies. And within each hierarchy, there is a dominant group for whom the greater ideology benefits, notwithstanding that within each layer of hierarchy, not all positions of power are equal.<sup>237</sup> For example, the first hierarchy occurs with the division between the Global North (historically privileged on a global scale, with access to capital) and the Global South (historically unprivileged on a global scale, with access to the natural resource but unable to develop without access to capital). However, like a matryoshka doll, within the Global North and the Global South are layers upon layers of hierarchy that define human relations and power structures.

While I concede that this article has perhaps approached issues in a totalizing way, I argue any error in that respect conveys a necessary theme—that within each layer of hierarchy there is a common language of profit, one historically dictated by the language of the Global North. By embracing the demand for sugar ethanol, the powers of Brazil have adopted the language of the financially

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<sup>235</sup> *Id.*

<sup>236</sup> The Self is the unit of or with access to power. The Other is created by the Self, to ensure that power. For example, in the context of race, the idea of the Self/Other is the idea that whiteness cannot exist, and therefore creates, blackness. Without a continued black construct, whiteness cannot exist. For me, one of the more powerful articulations of this comes from Sartre. See SARTRE, *supra* note 34, at 13 (“If the Jew did not exist, the anti-Semite would invent him.”).

<sup>237</sup> See Imani Perry, *Cultural Studies, Critical Race Theory and Some Reflections on Methods*, 50 VILL. L. REV. 915, 916 n.4 (2005) (describing Gramsci’s notion of hegemony, where “dominant groups in a society maintain their dominance by the persuasion and consent of subordinated groups”). See generally Douglass Litowitz, *Gramsci, Hegemony, and the Law*, 2000 BYU L. REV. 515 (2000) (examining the influence that Gramsci’s concept of hegemony (power structures) has had on various critical scholarship).

superior, in order to achieve superiority itself.<sup>238</sup> In other words, in Brazil's desire to create a "green tsunami," and by giving foreign capital significant access to (and maybe even control of) the production of sugar (for the purpose of ethanol), the state has essentially adopted, condoned, recreated, and given efficacy to that structure that locates power in capital and one which says that profit must necessarily be derived from exploitation and deprivation of wealth. Yet Brazil—as the location of the world's most significant sugarcane crop, and as the dominant producer of sugar and ethanol—is in a unique position to negotiate with the various corporate interests (largely foreign) seeking to exploit its resources. However, through the existing paradigm—in which relationships are marked by private contract but in substance are really bondage—the colonial legacy of sugar production in Brazil remains strong.

The reemergence of sugar trade represents restlessness within capitalism<sup>239</sup>—the tension between (1) embracing a global green movement intended to reduce carbon emissions and (2) abandoning traditional forms of profit generation in the energy sector. In other words, through a modern progressive movement toward alternative energy, human exploitation and environmental destruction are sustained and reproduced.

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<sup>238</sup> See generally FANON, *supra* note 21. Thus, the language of profit cleverly creates formal equality while sustaining and reproducing inequality. See also Darder, *supra* note 10, at 852.

<sup>239</sup> Chris Harman states "Capitalism is a restless system . . . . Competitive accumulation remoulds everything it touches and then, when it has hardly finished, remoulds it all again." HARMAN, *supra* note 5, at 326.