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Toward a Caribbean Genealogy of Energy: Cosmologies of Energy in Modernity's First World

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Abstract: The story of the rise of "energy" usually centers on the Industrial Revolution and the coal-powered steam engine in nineteenth-century Western Europe. Although it often escapes notice, the Caribbean was actually the site of the first known use of a steam engine to power industrial manufacturing (on a sugar plantation) and the world's first oil well (drilled by a US company in southern Trinidad). These "firsts" point toward energy's roots in colonial and imperial projects of extraction in the Caribbean, revealing the centrality of race and the plantation in understanding energy capitalism and the current climate crisis. This article traces a Caribbean-attuned genealogy of "energy". Today, energy is taken for granted as an abstract universal, but the concept was bound to specific forms of racial governance during the transition from sugar to fossil fuels as apex capitalist commodities. In tracing this genealogy, I rewrite the first two "laws of energy" as ethico-political statements on racial governance rather than descriptions of a pre-existing natural order. Adding to scholarship that has laid bare the relationship between biological sciences and race, I argue that energy sciences have also been central to sustaining (while occluding) racialized hierarchy. I then look at conceptions of energy in perhaps the world's oldest petro-state (Trinidad, with brief comparisons to neighboring Venezuela) to elaborate Caribbean-attuned, speculative alternatives to the "laws of energy".

Keywords: energy humanities; Caribbean; modernity; plantation; race; Carnival; ritual; anthropology of oil; Petro-State; history of science

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1. Introduction

If, as Szeman and Boyer (2017, p. 3) have argued, the task of the energy humanities is "nothing less than to reimagine modernity", this reimagining has already been achieved, in different ways, by Caribbean and Caribbean-focused thinkers. The Caribbean, in these thinkers' estimations, is the center of the making (and potential reimagining) of the modern world (e.g., James [1938] 2001; Mintz 1966, 1985, [1974] 1989; Williams 1944; Wynter 2003). Building on this well-established scholarship, I will argue that the Caribbean is also absolutely central to the making of energy as a modern concept. If both energy and the Caribbean are pivotal to any imagining of modernity, then what we need is a Caribbean-attuned genealogy of energy as a global concept. Such a genealogy shows that energy, while taken for granted today as an abstract universal, was bound to specific forms of racial governance and a longer history of environmental crisis in the Caribbean.

The rise of the modern energy concept is usually narrated as an effect of the Industrial Revolution and the coal-powered steam engine in nineteenth-century Europe (e.g., Daggett 2019; Malm 2013, 2016). Yet, if the Caribbean was the modern world's first world, presaging the rationalization of energy in Europe's Industrial Revolution, then a less Eurocentric story of energy is necessary. Although it often escapes notice, the Caribbean was

the site of the steam engine's first industrial implementation (Boyer 2023, 2024; Deerr and Brooks 1940), and by the late eighteenth century, Caribbean sugar plantations were the second-largest buyers of steam engines in the world (only British cotton mills consumed more coal-powered engines) (see Tann 1998). While the history of the modern world's reliance on the next apex fossil fuel (oil) most often begins with the 1859 Drake Oil Well in the US (e.g., Wilson et al. 2017, p. 5), a US company drilled the world's first commercial oil well in the southern Caribbean (in Trinidad) two years earlier (Jobson 2024, p. 13). By the early 1900s, extractive oil economies were firmly entrenched in the southern Caribbean, in both Trinidad and Venezuela (ibid., p. 14; Coronil 1997).[1] If the rise of the modern energy concept is indelibly bound to fossil fuel-powered machines (Daggett 2019), then the Caribbean has played a central, if underacknowledged, role in this story. The commodification and quantification of energy were brutally implemented first in the Caribbean through plantation necropolitics. Subsequent European biopolitical regimes of energy, which asserted that the consumption of greater quantities of energy was necessary for the flourishing of (certain) humans, owe an uncancellable debt for this brutal exploitation. Rather than receiving reparative justice for this debt, the Caribbean today bears some of the most brutal climate effects of Northern-led energy capitalism.

The first sections of this essay trace the roots of the modern commodification of energy to Caribbean plantations in the eighteenth and early nineteenth centuries. Following well-established Caribbean scholarship, which argues that chattel slavery funded and presaged Europe's industrialization (e.g., James [1938] 2001; Mintz 1966, 1985, [1974] 1989; Williams 1944), I argue that these "necropolitical" (Mbembe 2019) regimes of plantation energy funded and gave birth to biopolitical regimes of energy in the nineteenth-century Industrial Revolution of Europe. Thereafter, as Europe's Industrial Revolution made the emancipation of the enslaved more economically convenient for Europeans (Williams 1944), necropolitical regimes began using the concept of entropy, forged by the new energy sciences, as a rationale for the governance of ex-enslaved people in the Caribbean (Fiori 2020). I argue that the rise of energy science is inextricable from the rise of biopolitics and that both are indebted to the racial necropolitics of plantation and post-plantation regimes.

Incisive accounts by scholars have sought to expose the "bent and broken backs" of racialized humanity, on which the "founding stones of modern industry" rest (Du Bois 1935, p. 15; see also Jobson 2021). While foregrounding the brutality of the plantation system in the Caribbean (and the West's indebtedness to it), the second part of the essay seeks to go beyond representing Caribbean people as only bent and broken by necropolitical regimes of energy. I do so by looking at how Caribbean people in Trinidad have theorized and lived alternative cosmologies of energy, which mine and parody the logic of work identified as central to stories of the rise of the energy concept (Daggett 2019; Rowe 2023). I focus on Trinidad's Carnival as a key contested site, where "energy" and "work" are resignified. Like the fossil fuel-powered engine, Trinidad's Carnival season builds "energy" and "heat" (through forms of masking, parody, political critique, ritual, music, dance, and sociality) to generate "work/wuk". This work/wuk, however, is constructed in contrast to moral codes that seek to contain energy within wage labor and respectability.

The saturation of Carnival with energy discourses certainly references Trinidad's long-standing experience with the energy industry and the contested infrastructures of oil money (Jobson 2024, pp. 133–54), but it also presents a counter-discourse on how best to use energy. Against embodied masculinist ideals of containing vital energy for work that have been foundational to a White habitus of energy in the US or Europe (e.g., Daggett 2019; Rowe 2023), Carnivalesque celebrations of energy often conceive of it as a collectively generated, possessing force. Rather than simply a story of the self-possessed individual's failure, "possessing energies" in the Caribbean tell counter-normative stories of how energy

could be reimagined through ritual. I detail how Carnival practices (in devil masquerades or the dance form of "wuk") parody or subvert the ethics of energy subordinated to work.

Finally, I look at a very different mobilization of the devil in petro-pessimist discourses of being possessed by infernal or unproductive energy in Trinidad and Venezuela. Iconic here is the Venezuelan cofounder of OPEC's conception of oil as "the devil's excrement"—a diabolical force that possesses and corrupts the state and society (Pérez Alfonzo 1976). As opposed to the Carnival ethics of energy, which revalue the devil as a symbol of rebellion, these petro-pessimist critiques see the devil as a negative, telluric energy that inspires waste and entropy (see, for example, Coronil 1987, 1997; Kappeler 2024). I look at how this notion of demonic oil draws on Christian moral hierarchies—the very same hierarchies Westerners used to demonize Africana religions and Carnival as associated with the devil and chthonic realms—that are symptomatic of a wider use of the demonic, entropic, or telluric in anti-Black racism (e.g., Césaire [1969] 2002; Fanon [1952] 1986, p. 146). I argue that discourses of "energy conservation" and "energy waste", while palatable to Western environmentalist sensibilities, can replay the governing logic of the second law of energy, which racializes (and demonizes) those who (*allegedly*) cannot use energy properly.

I structure the sections of this essay around the first two seemingly contradictory "laws of energy": (1) energy is neither created nor destroyed, and (2) energy tends to dissipate into less useful forms. I propose Caribbean-attuned readings of these nineteenth-century "laws" within a global context that does not separate science from racial governance. I then look at how these two laws might be rewritten from the perspective of perhaps the world's oldest petro-society (Trinidad), with brief comparisons to Venezuela.

2. Energy, the Caribbean, and Biopolitics: The First Law

Today, the first law of thermodynamics—the idea that energy is a universal force that is "neither created nor destroyed"—might seem self-evident. After all, "energy" has proliferated across a wide variety of social spheres. Energy is God. Energy is the universe. Energy is an industry that sustains many of the largest companies in the world. In short, energy is everywhere. Even with all this energy flowing through the veins of society, I may feel that "I don't have enough energy" and need to consume an "energy drink". If, as Cara Daggett (2019) has convincingly argued, the modern concept of "energy" was only born in the 1800s, following Europe's Industrial Revolution, then why is the idea that energy is eternal, omnipresent, and universal such a popular premise of ideas about religion, spirituality, politics, economics, affect, and health today?

The Foucauldian answer could be simple: biopolitics demands the quantification, cultivation, and management of life, with "energy" becoming the construct by which moderns gauge productive life force. Yet, as with Foucault's unrelenting Eurocentrism, this answer seems to erase some important developments over the last five hundred or so years. I will suggest that the modern concept of "energy" had to be born in the early nineteenth century because it became an absolute necessity for industrializing Europeans to write regimes of enslavement out of ideas of productive energy. This was materially possible through the widespread implementation of heat engines and the industrialization of Europe (funded by sugar plantation profits produced by enslaved Africans who would, following emancipation, somehow be racialized as lacking productive energy) (Fiori 2020; Williams 1944). The first law wrote these exploited humans out of energy by creating a universal so big that it could completely abstract productive force from specific relations of coercion or exploitation. "Energy" could perform this capacious work of abstraction because it is actually not a physical property but what physicists regard as a convenient construct (perhaps this is why it has been harder to critique energy sciences than other physical sciences in the formation of racism). To center Europe's first site of colonization

and intensive enslavement—the Caribbean—is to remember that what gets called "energy" (and who is able to possess more of it) emerges from (and continues to sustain) specific relations that founded Western modernity.

While accounts of the Industrial Revolution and the rise of the steam engine are largely Eurocentric (especially British- and Scottish-centric) (e.g., Daggett 2019; Malm 2013, 2016), this "Revolution" and modernity itself are indebted to the Caribbean. The Caribbean region first experienced the dynamics that defined modernity: large-scale European colonization, racially segmented societies, massive population displacements across vast distances, intensive cultural heterogeneity, "rational" time/labor discipline, the statistical management of populations, relatively unregulated capitalism, globalization, and industrial production. European plantation regimes in the Caribbean, particularly sugar plantations, funded industrialization in Europe (Williams 1944) and provided the caloric and dietary transformations that would fuel the creation of an urban proletariat in Europe (Mintz 1985). The mechanized rhythms of modern commodified labor power were first implemented on the large-scale, proto-industrial slave plantations of the Greater Caribbean (Mintz 1966). For these reasons, according to James ([1938] 2001), enslaved people on sugar plantations formed the first proletariat.

In a very direct way, the Caribbean was entangled with the engine most often cited as inspiring the modern energy concept and inaugurating fossil fuel capitalism. A Jamaican sugar plantation was the site of the first use of the steam engine to power industrial manufacturing machinery (Deerr and Brooks 1940, ctd. in Boyer 2023, 2024). The proliferation of steam-powered machines on New World plantations ushered in what Tomich and Zeuske (2008) term "the second slavery" in the late eighteenth and early nineteenth century, powered by the widespread use of a fossil fuel (i.e., coal) (see Fiori 2020, p. 565; Tomich 2018). The institution of slavery, they argue, was further intensified by machines, and regimes of enslaved labor were increasingly bound to the energy logics of the steam engine.

Even before the steam engine, as Sidney Mintz (1966, 1985) consistently argued, the Caribbean sugar plantation was the world's first experiment in proto-industrial production and rationalized time/labor discipline, given the necessary siting of the sugar mill on or adjacent to the cane field (sugar would spoil if it was sent to Europe to process). However, the rise of other commodities that could be transported in raw form and industrially processed in Europe—in particular cotton—fueled industrialization in Western Europe. Eric Williams (1944, p. 102) wrote that the implementation of the steam engine in British cotton mills facilitated slavery's obsolescence in the Caribbean, making abolition economically convenient. However, it is also important to note that the industrial use of the steam engine was pioneered on Caribbean plantations and that the plantation itself had already laid a blueprint for the "rationalized" exploitation of "energy". While Williams's argument on the economic motivations for emancipation does not sufficiently recognize the central agency of enslaved people in resisting plantation regimes, his project does assert the indebtedness of Western European industrialization to enslavement. Yet, rather than simply asserting that Britain's industrialization relegated Caribbean enslavement to an obsolete past, it is important to see the endurance of racial logics in the very concepts on which industrialization and Western development have been built. Even before the modern idea of universal energy solidified in the nineteenth century, Caribbean regimes of slavery had brutally quantified enslaved humans as "extractable energy" (Yusoff 2018, p. 50; see also Jobson 2021).

This violent quantification of human energy informed subsequent biopolitical techniques for the management of life. The crucial difference is that Black people were not paid for the value of their lives, while biopolitical management invested white lives with value. The biopolitics of life insurance provides a telling example of this divergence in the

ways that life, as quantifiable energy, was distributed. While a full history has yet to be written, the entire modern insurance industry arguably has its roots in the transatlantic slave trade (Gómez 2021). Undeniably, the industry began with the insuring of European maritime cargoes, which meant that the probabilistic value of enslaved humans and material goods had to be converted into a general equivalent. Insuring humans as property, Europeans quantified enslaved persons into units (the *pieza de indias*) that were supposed to reflect their probabilistic productive energy (calculated using factors that included gender, ethno-national origin in Africa, age, health, etc.) (see Gómez 2021). Statistical sciences calculating the value of life could then be transferred to the life insurance industry of nineteenth-century Britain, in which the remaining value of one's life became the basis for profit-making in Europe. The transatlantic slave trade and the insurance industry, therefore, gave rise to the biopolitical techniques of statistical sciences that could calculate the probabilistic value of life as a commodity. Yet, while the life insurance distributed this value of life to British insurance companies and the families of propertied Whites, the transatlantic insurance industry transferred the value of enslaved African people to white merchants and slave owners.

Tellingly, one of the early enthusiasts of life insurance in Britain, the polymath Thomas Young, first employed the word "energy" in its more general, modern sense in lectures delivered to the Royal Society. Also telling is that these lectures were published in the same year that Britain outlawed the transatlantic slave trade (1807). In the next section, I argue that the abolition of the slave trade, emancipation, and energy were deeply entangled in a less-than-liberatory way. Energy science forwarded the logic of the plantation while disavowing this linkage by removing the enslaved human from a model of energy quantification. Young used the word "energy" to replace Leibniz's "*vis viva*" (literally, "living force")—the term with which (entirely Eurocentric) histories of the modern energy concept in the sciences usually begin. While Leibniz's "living force" indicated what today might be called "kinetic energy" (and thus was not limited to living beings), it contained an implicit association with life. Precisely at the moment when it started to become expedient for the industrializing British to excise enslaved humans from notions of productivity, Young lexically removed "life" from a nascent concept of "energy". In this reckoning, energy sciences were to become part of a massive erasure of the ongoing debt energy capitalism owed to lives that were quantified as value but rendered outside of the supposed Industrial Revolution in Europe. The idea that "energy is neither created nor destroyed" would erase the brutal creation and destructive effectiveness of energy exploitation.

A number of authors have made the argument that mass enslavement in the Americas birthed the mass quantification and extraction of "energy" (even though energy only developed its modern connotations as slavery was being legally abolished over the course of the nineteenth century). Some of these authors take this argument a step further, implicitly drawing on Eric Williams's (1944) ideas about the Industrial Revolution's obsolescence of slavery, to argue that industrialization allowed enslaved Africans to be replaced by fossil fuel-powered "energy slaves" (this is actually the term they often use for machines) (e.g., Illich [1974] 2023; Nikiforuk 2012).[2] The solution to today's climate crisis is realizing that "we" (energy consumers) are slave masters, which would arouse the moral sentiments necessary to "abolish" fossil fuels. This assertion is problematic on a number of counts; it equates enslaved humans with machines, treats hydrocarbon consumers indiscriminately as slave owners, and assumes that racial regimes of *human* enslavement ended with fossil fuel capitalism. My argument is somewhat different. "Energy" did not end the analytics of racial governance that sustained transatlantic slavery. "Energy", however, did establish an articulation of racial governance that was entangled with both the juridical end of slavery and the rise of fossil fuels. Modern energy is not the new slave; it is a concept that Western-

ers used to exclude the former enslaved from the ascendant logics of productive energy in the nineteenth century, racializing the era's pseudo-scientific narrative of social Darwinism.

In the years between Britain's Slavery Abolition Act (1834) and the final abolition of slavery in the French Caribbean (1848), *no less than twelve Western European scientists independently arrived at some formulation of the conservation of energy*. Between 1837 and 1844, four of these scientists made general statements about "the world of phenomena as manifesting but a single force. . .which could never, in all its transformations, be created or destroyed" (Kuhn 1978, p. 72). This was essentially the kernel of the first law of thermodynamics, which was explicitly synthesized by Clausius in 1850. The remarkable coinciding of all these independent "discoveries" of a universal force was no coincidence. Certainly, the ascendance of the fossil fuel-powered steam engine in both the Caribbean and Europe helped oblige scientists to conceive of two entirely different physical properties—heat and motion—as convertible. However, by the time of these "discoveries" of a universal force in the era of emancipation, the steam engine had existed in various forms for over a century. The first use of a steam engine to power industrial manufacturing machinery occurred on a Jamaican sugar plantation in 1757, but rudimentary steam engines had been used as water pumps as early as 1712. While the steam engine was not contemporaneous with the birth of "energy", emancipation was. Beyond simply stating that heat and motion were convertible, the idea of universal energy abstracted the quantification of living force from its birth in slave plantation regimes. If "energy" was a natural, pre-existing, and omnipresent force rather than an act of quantification bound to the brutality of the slave plantation, then it was simply a matter of exploiting energy and putting it to work.

While the notion of a convertible, general equivalent arose across anglophone, francophone, and germanophone Europe in the 1830s and 1840s, there was still no consensus on the term for this universal force. According to Smith (1998), it was the tireless promotion of William Thomson (Lord Kelvin) that led to "energy" becoming the chosen term for an abstract universal. In the decades following the full emancipation of enslaved people in the British and French Caribbean, Thomson further abstracted and generalized Young's use of "energy" to refer not just to *vis viva* but also to work, animal magnetism, force, heat, etc. (Rowe 2023, p. 34; Smith 1998). As Rowe (2023, p. 34) notes, Thomson had profoundly theological reasons for championing the idea of universal energy, even as some physicists protested that such a broad conception of energy was an invented abstraction. Because energy was everywhere and indestructible, with no single physical referent, Thomson claimed that energy could only come from the transcendent God of his Evangelical faith. This transcendent abstraction meant that energy ultimately came not from exploited humans or resources but from the divine. Thomson's efforts at popularizing energy were not simply motivated by theological concerns but by an attempt to conceal and sustain Western energy capitalism's dependence on a longer story of racial capitalism. Indeed, the term that preceded "energy" in the Western history of a universal force was the German word *Arbeitskraft*, or "labor power". In the 1840s, the physicist Hermann von Helmholtz began using *Arbeitskraft* to distinguish a more general notion of energetics from a narrower sense of *vis viva* (Rowe 2023, p. 33). Between the 1840s and 1850s, Marx took up this notion of "labor power" as the cornerstone for a theory of capitalism as a general system (Bellamy and Diamanti 2018, p. xiv; Rabinbach 1990). Thomson's subsequent replacement of "labor power" with "energy" effectively erased laboring humans from the concept that formed the basis for the British Empire's imperial and economic might. While Marxist scholars have recently foregrounded the erasure of the European working classes from the concept of exploitable energy (Bellamy and Diamanti 2018), the basis for industrial capitalism has roots that extend beyond Western Europe.

The universalized abstraction of energy was also bound to the rise of the population as an object of governance, with racial hierarchies determining the application of biopolitical versus necropolitical management to different population segments. Importantly, the concept of energy forced scientists to think at the population level using statistical probabilities. Because it was impossible to measure the various states of every molecule in a complex system, such as a steam engine, the energy of a system had to be conceived of as a molecular population of statistical probabilities (see Daggett 2019, p. 80). In a similar way, a human population can only exist as statistical probabilities in techniques of biopolitical governance. To take a more familiar example, this manner of knowing "the people" through statistical probabilities is the common sense that permeates pre-electoral speculation in liberal democracies. Since it is impossible to know the changing opinions of every person at every point in time prior to an election, knowledge of "the people" depends on statistics, probabilities, and sampling. Prior to the more-touted uncertainty principle of quantum physics, the concept of energy as a molecular population overturned the deterministic premises of Newtonian physical sciences.[3]

Daggett (2019, pp. 80–81) locates this birth of the statistical population firmly within industrializing northern Britain. However, as with the statistical sciences of the insurance industry, the knowledge of the probabilistic "energy" of a population had already been mobilized in regimes of plantation slavery. Yet, while eighteenth-century tracts on the proper management of plantations often figured enslaved people as parts of a machine (e.g., Martin [1754] 1765; qtd. in Fiori 2020, p. 563), nineteenth-century necropolitical regimes would increasingly seek knowledge of the ex-enslaved as statistical populations, whether through criminology, eugenics, or Malthusian demographics. Just as the paradigmatic machine of the Industrial Revolution—the steam engine—actually inspired a shift away from Newtonian machinic thinking about *force* to statistical probabilities, so too did machinic notions of nature and society shift toward statistical sciences of populations in the nineteenth century. Yet, race established a crucial distinction between populations who would be the objects of the Foucauldian biopolitics of increasing birth rates, health, and productivity and those who would be stereotyped as unproductive or criminal. While Foucault's musings on this rise of biopolitics are entirely Eurocentric, a more global perspective on biopolitics shows its dependence on the population-level necropolitics of race, a fact that Foucault himself was at least partially aware of, if only in the European context.[4]

In sum, the rise of the modern concept of "energy" was profoundly entangled with European regimes of enslavement and the first theater of large-scale European colonization—the Caribbean. The modern concept of energy, as a universal abstraction, emerged during the steam-powered revitalization of slavery and its subsequent abolitions by industrializing European powers. If the first law of thermodynamics could be stated in terms that did not obey the "modern constitution's" separation of science from the making of social hierarchies (Latour 1993; Wynter 2003), it might read something like the following statement:

> "Energy is everywhere and nowhere. It is neither created nor destroyed. Therefore, it is a quasi-divine abstraction divorced from the embodiment of specific relations of coercion or social production. It is a statistical summation of the capacity of populations—partitioned primarily by race, class, gender, and life/nonlife—to do work".

3. Entropy and Necropolitics: The Second Law

If the first law of thermodynamics erased (while implicitly cementing) the indebtedness of European ideas of energy to slavery, then the second law of thermodynamics helped to facilitate the violent governance of ex-enslaved populations. While the first law universalized energy as indestructible (and thus abstracted it from relations of produc-

tion), the second law (somewhat paradoxically) stated that energy tends to decay into less useful forms. Rudolph Clausius formulated versions of the second law in the 1850s, introducing the term "entropy" in 1865 (Clausius 1865). This new term quickly became exceedingly popular in scientific and popular circles, expressing the tendency of energy toward dissipation, chaos, or uselessness.

As Daggett (2019) and Rowe (2023) have argued, entropy provoked moral and theological crises among White Christians. Scottish Presbyterian engineers or British Evangelicals used the idea that energy tends toward chaos to argue that the Protestant work ethic or White hetero-masculinist vitality were essential to saving humanity from an inability to put energy to work. Yet, part of this story is the fact that these were not abstract moral or theological crises. Entropy was essential to racializing and governing non-white populations as those who could not put energy to work (Daggett 2019, pp. 8–10).

The enslaved labor that had made the Industrial Revolution possible in Europe by providing the profits to fund it and the "laboratory" (Guadalupe Ortega 2014) to experiment with industrial modes of production could now be rendered unproductive through racist tropes of Blackened entropy (i.e., the shift in Western racist representations of Blackness from working machines to lazy vagrants). Vagrancy laws formed the backbone of the post-abolition regulation of Black populations and their criminalization (Du Bois 1935; Paton 2004, 2015). As with slavery, whites invented racist tropes to justify this post-emancipation violence. Yet, these tropes changed radically and were entangled with the rise of the energy concept. While many scholars have noted how another major scientific innovation of the nineteenth century, Darwinism, was used to justify racist social hierarchies (e.g., Wynter 2003), the new energy sciences also played a key role. The shift from representations of the enslaved person as a productive machine to unproductive excess was part of these shifting white rhetorics of domination in the nineteenth century, and entropy was a key term in this shift (Fiori 2020).

The shift toward entropy as a justifying logic for racialization coincides with what Sylvia Wynter (2003) has identified as the shift from "homo politicus" to "homo economicus" as the normative figure in Western modernity. Wynter (2003), in her magisterial genealogy of the making of modernity and "Man", distinguishes between two forms of an overrepresented Western ideal: Man 1 and Man 2. Man 1 centers on an overtly political conception of the proper human subject that emerges from Renaissance/early modern cosmopolitical hierarchies in the 15th/16th centuries and extends through the 18th century. Man 2 centers on a biological or economic, rather than political, conception of the human, solidifying in the mid-nineteenth century with the rise of Darwinian evolution (and the emancipation of enslaved people in the Americas [with the exception of Brazil and Cuba]).

Part of Wynter's brilliance is that she shows how the invention of the modern concept of race was not only the invention of new notions of Man; it was also the crux of a reordering of Western cosmologies of the universe, nature, religion, and society. Medieval Christian "cosmopolitics" (De la Cadena 2015) were organized along an Aristotelian gradient from base or dense matter to ethereal matter that terminated with the most refined form—God. The center of this universe was the center of the earth. Aristotelian natural philosophy asserted that the basest forms of matter would collect at this center, while the most ethereal forms would be farthest from this center. The center of the universe (i.e., the center of the earth) was hell—the site of the basest matter—and the farthest periphery of the universe was occupied by the angels and then God. For this reason, Freud's ([1916–1917] 1963) infamous assertion that the heliocentric "Copernican revolution" of the Renaissance was science's "first blow" to humanity's self-centeredness is entirely wrong.[5] Being on the earth was a lowly place in this hierarchy of matter/spirit, and the center of this cosmos was, in fact, the worst place to be.

Among humans, at least in this Western conception, the clergy and monastic orders of the Catholic church had privileged access to more refined celestial realms, while the earthly laity lacked this access. Wynter essentially argues that the Copernican heliocentric cosmos, over an extended process, helped to force a reordering of the clergy–monarch/laity hierarchy of Man in the medieval Aristotelian hierarchy of the cosmos. If the earth (and hell) were not the center of the universe, where dense or base matter collected, what was the glue that held the cosmopolitical hierarchy together? In the physical sciences of the 15th and 16th centuries, there was no concept of gravity. What Wynter suggests is that the cosmopolitical order began to be constructed around an ideal of Man himself rather than a church- or monarch-centered hierarchy of man and God and that race would establish a social hierarchy of relative proximity to or distance from this ideal. This portrait of the birth of Western humanism views it less as the liberation of the human than as a cosmopolitically ordering principle.

The terms of Euro-Christian theology, particularly conceptions of the devil and demonic possession, played overt roles in the making of Man 1 (Crosson 2019; Johnson 2011). African-identified populations were represented as incapable of being "homo politicus" because their societies were ruled by "spirit possession" and "fetishism" (the worship of objects with no value, at least according to European observers) (see Matory 2018; Pietz 1987). European ideas of demonic possession were repurposed to render Blackness as diabolical, irrational, and incapable of the self-possessed political subjectivity necessary for making contracts (see Johnson 2011). The self-possessed modern political subject of Western Liberal contract theory was formed against and through the figure of those who were not self-possessed and were thus possessable. It is important to note that these were racist fantasies used to underwrite slavery and colonialism. Europeans in early and late modernity continued to make claims of embodying more-than-human powers in states that could be termed "possession". Yet, this did not lead to wholesale statements about whites not being able to exhibit the consistent personhood supposedly necessary for social contract theory.

Being possessed by what one today might call "energy" (perhaps drawing on a Spiritualist genealogy of spirits as "energies") was thus a foundation for racialization. In addition, a Euro-Christian association of the devil and demons with chthonic forces and Blackness also inspired European racial ideas, in which, as Fanon ([1952] 1986, p. 146) notes, "whether concretely or symbolically, the black man stands for the bad side of the character. As long as one cannot understand this fact, one is doomed to talk in circles about the 'black problem'. Blackness, darkness, shadow, shades, night, the labyrinths of the earth, abysmal depths, blacken someone's reputation". In the era of Wynter's Man 1, the mining of wealth from the earth or from enslaved persons could still be revalued through an alchemical or Aristotelian hierarchy of base, dense black matter (e.g., lead) and whitened, refined forms (e.g., gold) (see Carter 2023).

This Aristotelian or alchemical hierarchy, I suggest, was troubled by the increasing dependence of Western wealth production on black, chthonic forms of matter in the 19th century: coal and then oil. In the shift from Man 1 to Man 2, it seems to me that a retooled cosmopolitical hierarchy was necessary. Blackness became increasingly denigrated not simply through an association with base, chthonic, or blackened matter, as in medieval and early modern Aristotelian terms, but with a new scientific concept—entropy. The shift from Man 1 to Man 2, in my reckoning, involved a shift in racist tropes of Blackness from base matter (the figure of the enslaved as machine or fetish worshipper of value-less matter) to entropic energy.

Rather than energy extraction or energy science, Wynter makes another scientific "revolution" central to the rise of Man 2 in the nineteenth century—Darwinism. If Freud's

([1916–1917] 1963) assertion about the first Copernican blow to humanity's self-centeredness is entirely false, then his assertion about the "second blow"—Darwinian evolution—is also weak. In fact, Wynter argues that the nineteenth-century rise of evolution fueled another racist reordering around a self-centered picture of a slightly different figure of Western Man. Man 2 would be an economically energetic Man whose position as a "favoured race" (to borrow from the subtitle to Darwin's *On the Origin of Species*) would be determined by explicitly or implicitly social Darwinist discourses. Apart from social Darwinism—the idea that certain races were favored while others were, in Wynter's (2003) terms, "dysselected" in the economic hierarchy—a number of other factors came into play in this partial transition.

The Western theological/alchemical/Aristotelian underpinnings of Man 1 continued to inform racist tropes, but the terms of Man 1 shifted with various events of emancipation. Emancipation partially challenged Man 1's terms of homo politicus, as the ex-enslaved became people who were (if only in theory) juridical subjects bound up within Liberal deifications of law and social contract. For Wynter (2003), the shift toward Man 2 means that explicitly economic or evolutionary/biological rationales were increasingly used to support racial hierarchies following nineteenth-century emancipations. As I have argued throughout this essay, of paramount (if underacknowledged) importance was the rise of thermodynamics, the energy concept, theo-political anxieties about entropy, and the unprecedented mining of fossil fuels. Racialized populations were excluded from the economic virtues of Man 2 by virtue of entropic unproductivity, "laziness", or criminal predilections (again, these ideas are fictions). The Euro-Christian theological underpinnings of racialization persisted, but racial hierarchies were presented in the supposedly secular terms of "science", "economics", "evolution", "Malthusian demographics", "eugenics", or "criminology".

Such a genealogy of the Western terms of racialization is a broadly brush-stroked picture of the shifting logic of anti-Black racism. These various phases overlap, and the transitions are extended and uneven. What I have tried to highlight is the salience of "energy" in this Wynterian genealogy. "Energopolitics" are racial politics, and the two dominant modalities of modern power that Boyer (2014) identifies—"energopower" and "biopower"—conceal a longer genealogy of racial necropolitics that was first implemented in the Caribbean. Biopower's statistical management of populations, as I have argued, has been entangled with a racialized genealogy of energy as "the manufacturing of a common unit, which establishes a vertical distribution" of life (Da Silva 2011, p. 42). In turning toward "energy", critical analyses require not simply greater attention to material infrastructures (wires, pipelines, ducts, etc.) (Boyer 2014, p. 325) but an interrogation of how purported proximity to Western ideals of "Man" shapes the nodes of these infrastructures and the points at which infrastructures fail (I write this from rural southern Trinidad, where there has been no water service for over a month, a fact that is inextricable from this region's positioning in terms of race and class).

In this section, I have argued that the rapid post-emancipation proliferation of a generalized concept of entropy was particularly important to the "energopolitical" hierarchy of distance from Man 2. Entropy provoked not simply cosmological fears of energy dissipating into chaos and the "heat death of the universe" but was intertwined with White racial fears and theological concerns (Daggett 2019; Rowe 2023). The idea that certain racialized populations could not put energy to work because they possessed too little productive energy or were possessed by excessive, chaotic energy was foundational to the policing of ex-enslaved populations in the latter part of the nineteenth century. In this same time period, the mass proliferation of a low-energy disease among White people, neurasthenia, conjured fears that tropical climates or industrialized environments could sap the White productive energy necessary to save the world from entropy (see Rowe 2023, pp. 157–58).

If the second law of thermodynamics could be stated in terms that did not exclude its social contexts of power when it was formulated in the post-emancipation nineteenth century, it might read as follows:

> "Energy tends toward a state of uselessness. Therefore, the mission of homo economicus, the prototypical White bourgeois man (Man 2), is to put energy to use as fast as possible. Those who cannot put energy to productive use should receive less social resources, be forced to work (whether in prisons or welfare-to-work schemes), or be subjected to culling through eugenics or state violence".

4. The People Have the Real Energy: An Alternative First Law

> We come from the land where the people have the real energy.
>
> —David Rudder, from "Trini 2 De Bone" (on the 2003 album Blessed)

> Please tell it to the Senate, that I feel
>
> That we can relieve our friendly foreign companies
>
> Of their barrels, from the barrels of oil that we export overseas,
>
> Turn it around, chisel the sound and sell it.
>
> Make the manufacturing real,
>
> So that we can produce
>
> Many more orchestras of steel.
>
> —Kyle "Skeeto" Amos, From "Pandemonium" (qtd. in Muller 2015)

Cara Daggett (2019) has argued that the modern concept of energy, which arose in Europe during the Industrial Revolution, was contained within what she calls a "geo-theology" of the Protestant work ethic. She focuses on the religious views of Glasgow-based engineers and scientists situated at the heart of the British Empire's newfound industrial might. But what were the cosmologies of energy elaborated by the Caribbean people who fueled and funded this industrialization and who endured the most brutal aspects of British regimes of work? As Terra Rowe (2023, p. 162) suggests, alternative imaginations of energy, besides the dominant logic of the sovereign "possession" of energy as a resource, are needed within the energy humanities. Invocations of alternative energies often idealize a presumed pre-industrial past of "holistic" energy, which encompassed "divinity, life, and rightness" (Hughes 2017, p. 28), in contrast with a present of alienated, fossilized energy.[6] Such presumptions belie the Romantic foundations of both Western environmentalism and primitivism, as nostalgia for a holistic past the West allegedly lost with industrialization. However, as I have argued in the preceding sections, the very idea of energy as a "holistic" universal is indelibly bound to the West's brutal commodification of enslaved humans' labor power, which was first enacted on a mass scale in the Caribbean. It is no coincidence that nature, as environmental historian Richard Grove (1995) has argued, emerged as an object of protection precisely at this moment of European colonial exploitation and plantation extraction. If "nature" and "energy" point toward relations of power rather than transhistorical romanticized pasts, then it becomes important to trace how those whose "energy" was exploited elaborated counter-cosmologies of energy that were entangled with modern systems of exploitation.

In this section, I focus on embodied "work" in Trinidad Carnival as a counter-modern cosmology of energy. Importantly, Carnival is not simply premodern but, to use Paul Gilroy's (1993) term, "counter-modern". As such, the "work" of Carnival highlights

explicitly counter-normative ideas of energy, even as it is entangled with modern industrial materials and processes (such as petroleum products, oil barrels, and machine energies). Carnival rituals of "work" are extremely high-energy activities that aim to produce heat and "wuk" (work) through embodied rituals that diminish sleep. Against an imagination of the Global South as an alternative realm of restful low energy consumption (e.g., Illich [1974] 2023), Carnival suggests how high-energy cosmologies can also resignify "work" and "energy" as alternative collective concepts.

The preceding sections have reframed the modern genealogy of energy by centering the Caribbean, enslavement, and race. Enslaved Caribbean peoples were exploited as possessable energy machines and then (following emancipation) policed for (allegedly) not possessing the proper energy to work. In both cases, the Caribbean subaltern classes were rendered as not possessing the self-possessed energy that white–Christian–bourgeois Man could evidence. Yet, rather than simply being determined by subordination within Euro-Christian polemics of possession or the Protestant work ethic, Caribbean people were humans who navigated their particular situations with creativity and ingenuity. Under dire circumstances, subaltern Caribbean people had the strength and resilience to live an otherwise that ran counter to, but was enmeshed in, dominant colonial value systems. If the Caribbean is the center of both modernity *and* a "counter-modernity", what other stories of energy could be told besides the ones outlined in this essay's earlier sections? To tell such stories, Sylvia Wynter (2015) insisted that a "ceremony" for being human otherwise was necessary. Focusing on Caribbean concepts of energy in perhaps the world's oldest petro-society, I will trace a counter-modern concept of energy and work in Trinidad's Carnival (with brief comparisons to African Trinidadian religious practices).

The Caribbean, as scholars have noted, is often characterized by oppositional cultural frameworks. Perhaps the most noted of these is the respectability/reputation opposition. As elaborated by Wilson (1973), it asserts that anglophone Caribbean culture is composed of two domains of competing values: the Euro-Christian framework of respectability and the subaltern Afro-Caribbean realm of street reputation. I do not have the space to enumerate all the valid critiques that have been leveled against this framework by Caribbean theorists, but many of the critiques center on the assumed gender division between male/public reputation and feminine/private respectability (e.g., Besson 1993). For these reasons, I find the reputation/respectability framework unuseful in thinking about Carnival and Africana religions, as they are both domains that are often rendered as counter-normative to Euro-Christian respectability but in which women maintain prominent roles.

Rather than using a gendered respectability/reputation binary to understand the cosmologies of energy in the Caribbean, I will use an embedded relational framework of work/wuk. Work/wuk is not binary; Carnival's "wuk" includes and satirizes hegemonic meanings of "work". In this way, Trinidad Carnival is not simply opposed to or outside of Western modernity but enacts hyperbolic parodies, subversions, and boundary crossings that draw on the industrial materials of modernity—whether energy, work, oil barrels, sequins, or kerosene. As much as Carnival is romanticized as the total inversion of hierarchical systems, the practice of Trinidad Carnival itself (particularly the expensive Carnival Tuesday bands) can reaffirm hierarchies, such as those of color and class, even as these practices overtly claim to be violating respectable norms (see also Crichlow and Armstrong 2012).

Both "work" and "wuk" ostensibly refer to the same noun/verb, but one signifies a domain of hegemonic (British/American) English ("work"), and the other is in Trinidad's English Creole ("wuk"). As with many seemingly common sense English words, such as "science" or "power", "wuk" both encompasses the hegemonic meanings of "work" and carries counter-normative connotations (see Crosson 2020). "Work" refers to what Daggett (2019) talks about in her genealogy of energy: that activity which is considered

central to one's identity and value in bourgeois society (one's job, career, profession. . .the standard answer to the question "What do you do?") (see also Weeks 2011). For Daggett, "work" emerged as the pre-eminent sphere of value with the fossil fuel-powered Industrial Revolution in nineteenth-century Europe, which marked a shift from "preindustrial, poetic energy. . .to a mania to put the world to work" (Daggett 2019, p. 4). This romanticization of pastoral forms of labor prior to Europe's Industrial Revolution (an era that included chattel slavery, serfdom, and gendered divisions of labor) is a problematic but common feature of moderns' dissatisfaction with subordination to wage labor. As I discuss below, scholars have sometimes projected these romanticized notions of a pre-industrial non-work society onto Trinidad's Carnival, leading to erasures of Carnival's enmeshment with modern forms of work, race, and energy. In fact, the wholesale projection of white fantasies of premodern non-work onto the Caribbean is a cornerstone of tourist propaganda for the region. These tourist fantasies of non-work are (explicitly or implicitly) based on the work of Black Caribbean people (in subordinate service positions).

At any rate, Trinidad is not a model tourist island but a modern industrialized petro-state, in which the relatively minuscule percentage of profits the government gleans by charging "rents" on foreign oil and gas companies is often redistributed through forms of government employment. Where I "work" in rural southern Trinidad, such government jobs (apart from the unemployment relief crew that cuts the grass on the side of the road) are extremely scarce. Still, the people I know in rural southern Trinidad work hard. Yet, contrary to academic critiques of work, which often assume a society in which wage labor is "valued more than other pastimes and practices" (Weeks 2011, p. 2), for my rural interlocutors, "wage labor" conjures the experience or memory of the plantation (which only ceased to be the primary source of employment in the area in the 1970s). Following emancipation (1834–38), the rejection of wage labor (which, for the laboring classes, meant working for the plantation) became a key form of resistance for the ex-enslaved. A Caribbean genealogy of "work", therefore, should not assume that wage labor is the default experience that necessarily structures concepts of energy. Rather, in Trinidad, Tobago and many other parts of the British-colonized Caribbean, the ex-enslaved fought to establish forms of non-waged work that carved out spaces of partial autonomy from wage labor on plantations (see Craig-James 2008; Crosson 2014). The planter class, in turn, sought to limit the ex-enslaveds' ability to resignify work by limiting access to land, disproportionately taxing laboring classes, criminalizing independent forms of livelihood as "vagrancy", or enmeshing laborers in cycles of debt (e.g., Craig-James 2008; Paton 2004).

At my field site in rural southern Trinidad, the struggle to resignify work as the autonomous use of one's time and energy continues in opposition to both plantation-associated forms of labor and clientelistic state employment schemes. Rather than forms of wage labor, small-scale farming (of marijuana) on abandoned plantation lands is the primary livelihood at the site of my fieldwork. Usually, farmers neither own the land they cultivate nor rent it; they perform what I call a kind of fugitive "marronage" within the ruins of the plantation system. While non-ownership excludes them from financing schemes (which are, in any case, difficult to access without government connections), it provides them with the flexibility to limit financial risk, set their own terms of labor, and navigate the criminalization of commercial marijuana farming (the cultivation of small, personal amounts of marijuana was only decriminalized in Trinidad in 2019, while the selling of any amount remains officially illegal). To call such small-scale farming in the second-growth forests of former plantation lands "wage labor" would elide its strongly oppositional relationship to both the state and the former plantation regimes of waged labor. In short, contrary to academic critiques of work, many people at my field site (and

in the world) may not experience wage labor as the paramount site of value, virtue, and personhood (although academics and professionals certainly have access to this experience).

In sum, alongside the "work" of Man 2, a productive ideal that certainly has a life in the Caribbean (as detailed in this essay's next section), "wuk" in Trinidad refers to activities that have not been recognized as valuable labor in the dominant theo-sciences of energy and wage labor that Daggett (2019) skillfully traces. These activities are cultural archives that bear traces of struggles to resignify "work" in the Caribbean within post-emancipation contexts that often criminalized, stigmatized, or regulated alternative forms of "wuk".

Laws against healing "spiritual work" across the British Caribbean provide one key example of this criminalization of alternative forms of "wuk". In this context, "wuk" refers to practices of healing and protecting clients that generally occur within the home of the "spiritual worker" or the client. This "wuk" was criminalized as "obeah" under British colonial rule, and British anti-Obeah laws remain on the books in many independent Caribbean nations (Trinidad and Tobago repealed its anti-Obeah laws in 2000).[7] Spiritual workers often traveled between plantations, or even between colonies, to perform their work, defying planters' efforts to "locate" or fix laborers on or around a plantation.[8] Spiritual "wuk" thus provided a livelihood that was partially outside of plantation frameworks of labor and was thus initially criminalized in the post-emancipation era as a form of vagrancy (i.e., construed as unproductive entropy rather than productive work). Spiritual "wuk" is also a form of labor in which women have held prominent roles (see Alexander 2006, pp. 287–332). It is work that is religious, even though it was criminalized as base superstition, vagrancy, or fraud. For all these reasons, this "wuk" was regulated by rendering it non-equivalent to the "work" of Daggett's Scottish Presbyterian promoters of energy.

"Wuk" is also a form of dance that is associated across the anglophone Caribbean with Carnivalesque celebrations (e.g., Carnival in Trinidad or Crop Over in Barbados), a dance fueled by the high-tempo contemporary genre of music known as Soca. Wuk is akin to "wining", but various distinctions (e.g., of Caribbean origin or of linear versus circular hip movement) might be made between these forms of dance.[9] In Soca lyrics of the 1980s and 1990s, "wuk" was often a form of dance heavily related to sex through a series of double entendres that drew parallels between domestic labor and sexual intercourse.[10] Reflecting a broader shift in Carnival toward an ethos of individual enjoyment that centers on the female reveler, "wuk" was increasingly severed from an explicit relation to sex as it became a dominant feature of Soca lyrics in the twenty-first century. Today, wuk has counter-normative potentials of bodily enjoyment, which are not necessarily moored to sex or heteronormative partnered dancing. Partly for this reason, "wuk" is a charged site of contestation over norms of gender, sexuality, race, and respectability in Trinidad.

Trinidadian detractors often critique contemporary Carnival as lewd, waxing nostalgic for traditional "ol' mas" (traditional Carnival) (Shah 2023; see also Aching 2012; Scher 2002, 2007). These invectives, usually leveled by men, thinly clothe polemics of gender and sexuality in nostalgia for tradition. They imagine traditional Carnival as a rite that centered on the working-class male prior to the commercial degradation of contemporary Carnival, which centers the (middle-class) female as the iconic reveler (see Scher 2002). The "ol' mas" that contemporary critics imagine has actually been purified to feature gender-conforming masquerades, excising perhaps the most popular late nineteenth- and early twentieth-century masquerade in which men dressed in women's nightgowns (the *Pissenlit*—"piss in the bed" or "bed-wetter" figure) (see Brereton 2012; Scher 2007). Critics often imagine a past of gender-conforming, male-dominated Carnival as the antidote to the contemporary "bikini mas" that features women performing wuk for their own enjoyment.

Yet, the politics of wuk are not quite so simple. Hubert Devonish (2011) notes that there has been a shift over the past four decades from wuk and wining subordinated to a

male–female dance partnership that ultimately leads to reproductive sex to wuk as solo female or female–female dance. While such a partial shift is most definitely the case, wuk remains a site of contestation between Carnival as a space for what Devonish (2011, p. 322) calls women's "ownership of their own sexuality through auto-sexual dance" and an event in which men assume that women's bodies are hyper-accessible. At any rate, internal and external observers, whether critical or supportive of contemporary Carnival, often focus on sex, gender, and (hyper)sexuality. Yet, in contemporary contexts, "wuk" does not have to center on sex but can also signify bodily enjoyment unmoored from the confinement of sexuality to the heteronormative couple or the liberation of female enjoyment from male control (as thematized, for example, in Calypso Rose's 2016 hit "Leave me Alone", which was released around the time of femicides in Brooklyn and Trinidad Carnival celebrations).

There are countless examples of "wuk" as the central feature in the lyrics of Soca—the generally high-tempo contemporary popular music of Carnival. Songs such as Destra Garcia's "Keep on Wukkin'" or Destra and Drupatee's "Wuk yuh Waist" exhort listeners to "wuk" without stopping. Yet, this is not the Protestant ethic of hard work but a counter-normative bodily performance that centers on one's "waist" or "waistline". Destra, who is known for her "high-energy" performances, often invites women onto the stage during concerts to participate in "wuk up" competitions. After one such performance in Jamaica in 2024, the national newspaper declared, "no waistline was safe from the infectious energy Destra brought and the crowd pulsed in time" (Cole 2024). The title of this article proclaimed that the Soca artistes had "heat[ed] up" the crowd. As any history of energy in the sciences notes, the key moment in the birth of the modern energy concept was when steam engines forced people to realize heat could be transformed into work. During Carnival, a season in which the sounds of collective rituals are intended to "heat up" the social atmosphere to a high-energy pitch, heat is also transformed into work. Yet, as "wuk", the yield of this heat and energy is bodily enjoyment and the *partial* inversion of the moral orders of respectability and work.

While Carnival has changed considerably over its history in Trinidad, both past and present forms of enjoyment have often parodied hegemonic norms and figures. The "ol' mas" Dame Lorraine figure (known as "Las Damas" in the West Indian-descended community of El Callao, Venezuela) performs a hyperbolic parody of upper-class norms of respectable femininity (while rendering such norms lewd), just as contemporary Carnival parodies the normative force of productive "work". Like (crypto-) Protestant capitalism, contemporary Soca lyrics exhort the listener to work "hard". Yet, in these lyrics, "hard work" is resignified as a particularly forceful or "dutty" form of dance. While a Euro-Protestant notion of hard work is about the sacrifice, discipline, and productive labor that marks one as chosen (whether in the religious, moral, evolutionary, or economic terms of Man 2), "hard wuk" is a performance that violates the bodily norms associated with productive labor and respectability.

Both "spiritual work" and "hard wuk" are thus emblematic of practices that insist on the importance of wuk, while undermining hegemonic framings of work. Both practices were subject to heavy colonial regulation. Spiritual work was (and, in some cases, is) criminalized as Obeah, and Carnival has been subject to moral–sexual repugnance by some outside (and internal) observers (as I detail further in the next section). There is a blurring between these two forms of denigration. White observers often characterized the rituals of Africana religions in Trinidad as "orgies", in part because people moved their bodies in ways that were not acceptable within their Euro-Christian frameworks (see, for example, Forde 2018). Carnival celebrations were, at times, criminalized by the British because they allegedly violated British norms of civilization (see Brereton 2012). Contemporary critiques of Carnival by unsympathetic Trinidadians often reproduce the orgiastic condemnations of

colonial description, with one recent critic calling contemporary Carnival an "orgasmic" "cesspool of vulgarity" (Shah 2023). In sum, similar tropes of atavism and sexual vulgarity have been used to criminalize or stigmatize both Carnival and Africana religious practices in Trinidad.[11]

In his acerbic critique of popular and academic valorizations of Carnival, Trinidadian academic/poet Raymond Ramcharitar (2020) insists that the very terms of the colonial denigration of Carnival as backwards have formed the basis for its celebration. He quotes the work of a prominent US academic in Trinidad Carnival Studies (Milla Cozzart Riggio) to provide paradigmatic examples of what he considers the reproduction of "Orientalist" tropes that mark the non-Westerner as the opposite of the modern West as follows:

> "The epistemology of the Carnival world, [writes Riggio] . . . because it is centered in imagination and intuition rather than in logic or reason, privileges things of the spirit over the material". More specifically, "by privileging leisure over work" Carnival in Trinidad "recalls pre-industrial rhythms". Furthermore, "by affirming the power of imagination and fantasy against the logic of reason" the Carnival assumes the quality of "an alternative to the efficiency of the producing and industrialising world". (Ramcharitar 2020, pp. 7–8)

Ramcharitar is certainly right in critiquing such facile popular and academic characterizations, yet I do not agree with his view that Carnival should, therefore, not be celebrated or valued.[12] Contrary to Riggio's characterizations, I am insisting that Carnival is profoundly modern, playing an important (if unacknowledged) role in a modern genealogy of "energy". It is neither pre-industrial nor devoid of logic and reason; it is entangled with the history of industrialization, the modern concept of energy, and modern hierarchies of race.

While often explicitly counter-normative in its ethos, Carnival is modern and energy-intensive, repurposing industrial products for masquerade performance (e.g., oil barrels become steel drums, and brake hubs become central percussion instruments). As in Western capitalism, "wuk" during Trinidad's Carnival requires the generation of a lot of energy. There are numerous lyrics in the genre of Soca that attest to the significant amounts of energy required for this secular/sacred ritual. To take one example, in his song, "Energy High", Machel Montano sings the following lyrics:

> You getting on like if your battery overload
>
> And if you see somebody shuttin down
>
> You better let em know, they gots to go. . .
>
> And if you see somebody slowin
>
> You better stop and say, that way
>
> Everybody know. . .
>
> Boy you're crossin the stage, start to misbehave
>
> Enjoy yourself but keep in mind
>
> Keep your energy high, high

Montano values forms of energy that may be regarded as excessive (e.g., a battery overloading) while also foregrounding the communal nature of generating high-energy states. If one person in a Carnival band does not have "high energy", they "gots to go". Carnival is a collective energy machine. It is not by accident that the rhythm section of a Carnival band, a group of musicians beating on break hubs and other repurposed metal parts on top of a Carnival truck, is often called "the engine room". The "engine room" also figuratively refers to the bodily energy center of Carnival—the waist or waistline.

The Caribbean is both quintessentially modern and counter-modern. The language of work, machinery, heat, and the generation of energy sits firmly within modern industrial language. Yet, this is not the energy–work nexus of the (crypto-) Protestant ethic. In fact, a number of Carnival songs celebrate evading wage labor to engage in the wuk of Carnival season. One particularly popular song, "Ducking", by Bajan artiste Fadda Fox (written by Jason Shaft Bishop and Nicholas "Fadda Fox" Sealy in 2015), turns the evasion of office work into a dance movement that imitates the singer ducking so as not to be seen by their boss at a Carnival season party after claiming to be sick. This does not mean that Trinidadians do not "work hard" in the Euro-Protestant sense of productive labor. However, it is necessary to remember that before and after emancipation, the laboring classes struggled against wage labor to forge forms of work that were semi-autonomous of the plantation. Planters and colonial officials, in turn, brought moral–racial discourses of Christianity and productivity to bear on laboring classes, often constructing them as "lazy" subjects in need of reform.[13] Through various means, these planters and lawmakers also attempted to bind laborers to the plantation by making it the only source of a wage. Colonial power structures thus sought to conflate wage labor and plantation labor for the lower classes, helping to create resistance to wage labor (through alternative forms of work) as a vibrant cultural theme. Rather than celebrating wage labor as the paramount value that constitutes an individual's worth, the counter-normative ethics of Carnival can celebrate the ability to either evade waged work or party for days without sleep and still go to work in the morning. All of this requires a lot of energy, and this energy is generated collectively, primarily through music and constant movement. "Sleep is for the dead" is a Carnival season saying that exhorts the reveler to keep their energy high by not stopping or sleeping.

In contrast with the Euro-Protestant subordination of energy to waged work, representations of Carnival energy in Soca can represent it as a possessing power or spirit that pushes the reveler beyond the normal limits of endurance. In Scrunter's classic Soca "De Jumbie", the singer proclaims that a Carnival jumbie (spirit) is "roaming through the land", taking over his volition and obliging him to jump up or wuk without stopping (Shadow's song "Bassman" reproduces much the same theme). The very bodily movements denigrated as the excessive, wasteful expenditure of energy in Western representations of "spirit possession" can also be figured as the ecstasy of enjoyment that Soca occasions in the dancer. In a popular classic, "Soca Baptist" (1979) by Super Blue/Blue Boy, the movements of Carnival dancers (wining and wuk) are compared to the movements of Trinidad's most popular Africana religion—the Spiritual Baptists—under spirit manifestation.[14] These Soca tunes both reproduce *and* revalue European ideas about Afro-Caribbean people's allegedly excessive use of energy outside of wage labor.

Traditional Carnival also celebrates figures denigrated within Euro-Christian theologies and white ideals of respectability: the devil, the single mother (the "baby doll" masquerade), the thief (the "midnight robber" masquerade), or the Native American (the various "Indian" masquerades). Perhaps the most common traditional masquerades that remains popular in Carnival today are the various devil figures, each with their specific forms of dress, movement, or music. The Blue Devils dye their skin with Rickett's Blue (a blue cube used by the British to whiten their clothes) and demand money from passersby (one must "pay the devil" a nominal fee to avoid being harassed). In the town of Paramin, they take over the streets on the night before Carnival Tuesday, stopping traffic (sometimes by climbing on top of cars). They compete in bands, each with different themes (for example, "civilized" Blue Devils carrying mock cell phones or Blue Devils in white-face wielding the US flag with hats reminiscent of early twentieth-century US marines (Figures 1 and 2)). They may also spit fire by drinking from a bottle of kerosene and spitting it into a flame (Figure 3).

Figure 1. Blue Devil band demanding nominal sums of money by using white-face and the devil's trident to attempt to scare onlookers, Paramin, Trinidad, 2010 (photograph by the author).

Figure 2. Blue Devil in white-face wielding the US flag to stop traffic, so that the driver would "pay the devil", Paramin, Trinidad, 2010 (photograph by the author).

Figure 3. A Blue Devil blowing a mouthful of pitch oil, one of the first petroleum-derived commercial products of Trinidad in the 19th c., into a flame to spit fire, Port of Spain, Trinidad, 2010 (photograph by Olivia Fern).

Other devil characters in contemporary Trinidad Carnival also use the materials of Caribbean modernity for their masquerades. The Jab Molassies (literally molasses devils) originally darkened their skin by smearing it with molasses, the first byproduct of sugar refinement. Today, they use petroleum byproducts, such as grease, tar, and/or pitch oil [kerosene], instead of molasses to give the skin the dark, shiny color of an oil slick. Another devil masquerade, the Jab Jab or "whipmaster", carries a whip, which the character cracks in the air or uses to stage mock battles with other Jab Jabs.

Again, these figures carry the marks of Caribbean modernity: the US marines that occupied Caribbean nations in the early twentieth century, the presence of whiteness as a menace, the materials of the sugar plantation (molasses, whips), or industrial products (tar, oil, or kerosene) made from the petroleum on which the economy has increasingly

depended since the mid-1800s.[15] The most celebrated instrument of Carnival, the steel drum or steel pan, was invented in the 1930s from the discarded oil barrels of the US- and British-led petroleum extraction of the early 1900s in Trinidad (making it the first instrument to place all chromatic notes on a single surface and one of the only instruments invented in the twentieth century) (Figure 4). The Trinidadian inventors of the steel pan used the refuse of petro-extractive economies to circumvent a British ban on the use of skin drums since the late 1800s, innovating an instrument that was both percussive and chromatic. Today, "pan yards" are community focal points throughout Trinidad, where local people practice on variously pitched steel drums for the Carnival season, during which they process through the streets while playing. "Pan yards" demand a lot of work and energy from their members, but for the most it is not a form of wage labor (although there are many pan players who earn a living from their art).

Figure 4. Bass and tenor steel pans/drums in the process of being forged from oil barrels and tuned, Trinidad, 2024 (photograph by the author).

By using the very instruments of the modern commodification of energy (sugarcane, oil barrels, car parts, or petroleum products), Trinidadians have elaborated a complex

alternate cosmology of energy. Carnival practices reference Trinidad's experiences with the West's first experiments in industrial labor (the sugar plantation) and as one of its earliest sites of petroleum extraction. While many scholars insist that the materiality of oil is largely invisible in modern culture (e.g., Hughes 2017, p. 5; Wilson et al. 2017, p. 5), Trinidad's Carnival repurposes the materiality of oil on the skin and in steel. Energy permeates these alternate cosmologies and is central to the effective performance of Carnival (or the rituals of Africana religions).

Like the First Law of Thermodynamics, the logics of "wuk" in Carnival and Africana religious healing assert that energy is of paramount importance. Yet, this energy is not necessarily a finite material resource subordinated to Man 2's forms of productive work. In Carnival or spiritual work, energy has to be generated, but this generation happens through interpersonal relations—between dancers, between musicians, or between humans and divine "powers". It is an intangible and unquantifiable, yet intensely felt and central, product of successful sociality. Rather than a pre-existing, natural universal that can be extracted, energy is a social experience that must be generated through relations.

5. The Devil's Excrement and the Resource Curse: An Alternative Second Law

While the figure of the devil can inspire counter-normative cosmologies of "energy" and "work" in Trinidad's Carnival, the negative associations of the devil can also inspire critiques of the "energy industry" in the southern Caribbean, as oil wealth allegedly unmoors the energy of the population from productive work. In Venezuela, these negative assessments have often condensed around a direct equation of oil, excrement, the devil, the nation, and the petro-state (Pérez Alfonzo 1976; Coronil 1987, p. 233, 1997, pp. 353–54 et passim; Kappeler 2024). In Trinidad, these negative assessments center on the island's alleged "Carnival mentality", which supposedly leads to "laziness" and dependence on the redistributions of the petro-state. I remain critical of both of these petro-pessimist narratives because, at least in some versions, they reproduce the racialized invectives of entropy and unproductivity that were leveled against the ex-enslaved in Trinidad, Venezuela, and beyond following emancipations. I also look at how these deprecating statements lay full blame on the people and society while minimizing the role of state violence, foreign hydrocarbon companies, or US economic policies (for example, that North American fracking has made the US the world's largest producer of oil and gas, with direct impacts on Trinidad and Venezuela).[16] At the end of this section, I give a very brief sketch of an alternative reading of the social effects of the Oil Boom (1973–1982) in Trinidad, which emphasizes state violence, the suppression of Black Power, and the concentration of wealth. First, however, I will summarize petro-pessimist discourse in both Venezuela and Trinidad.

Juan Pérez Alfonzo, the Venezuelan Minister of Energy in the early 1960s and one of the principal founders of OPEC, infamously asserted in his 1976 book *Hundiéndonos en el Excremento del Diablo* that Venezuela was "drowning in the Devil's excrement". He went on to write: "I call petroleum 'the devil's excrement'. It brings trouble. . . The [oil money] hasn't brought us any benefits" (Pérez Alfonzo 1976; cited in Karl 1982, p. 316). Rather than a figure inspiring the Carnivalesque celebration of a counter-normative logic of energy, the devil's association with the demonic pact, evil, the lure of wealth without work, and the telluric bowels of the earth inspired a petro-pessimist critique in Venezuela.

Although Pérez Alfonzo emphasized a growing wealth gap and detrimental environmental effects, petro-pessimist critiques drawing on "the devil's excrement" sometimes repurposed the very allegations of entropy that Europeans leveled against racialized subjects following emancipation in deprecating statements about their own country by *some* Venezuelans (see, for example, Coronil 1987, p. 233, 1997, pp. 353–54 et passim;

Kappeler 2024). I should emphasize that I have never heard Venezuelans reproduce such negative statements about the Venezuelan people as a whole, and I am conflicted about reproducing these rather negative assessments (which I will only do selectively). I remain doubtful about the implicitly racialized aspects of the devil and entropy that could be seen as informing these identifications of Venezuelan society with "the devil's excrement".

In the wake of the "oil bust" that followed the oil "bonanza" of the 1970s, Venezuelan anthropologist Fernando Coronil (perhaps somewhat hyperbolically) delivered a litany of excrement-laced assessments of Venezuelan society as follows:

> Venezuela had lost control over itself; intoxicated by oil as waste it had become transformed into waste. . . The identification of both the nation and individuals with excrement became an ever more common short hand expression for everyday problems . . . "somos una mierda", "es que este es un pais de mierda" ("we are pieces of shit", "it's that this country is made of shit"). (Coronil 1987, p. 233)

Following the neoliberal structural adjustments precipitated by fallen oil prices in the 1980s, popular uprisings in Venezuela in 1989 (the "Caracazo") led to a military crackdown that killed, by some estimates, more than three thousand people (Coronil and Skurski 1991). US anthropologist Aaron Kappeler made the following remarks:

> After the Caracazo riots of 1989. . ."the devil's excrement" came increasingly to be attached to the nation in popular discourse. Having cast their lot with oil, many Venezuelans viewed themselves as possessing a deep-seated or tragic flaw, which made them susceptible to the lure of the trade. Average citizens interpreted the ruin visited on society as punishment for greed and *nonproductive gains equated with sin*. (Kappeler 2024, p. 10, my emphasis)

In short, the boom–bust cycles in postcolonial petro-states inspired critiques that drew on normative Euro-Christian cosmologies of the devil, sin, and nonproductive energy to develop a critical petro-theology. The nation was possessed by an evil force that polluted its body, as the "nonproductive gains" of oil wealth corrupted society, allegedly unmooring it from the proper morality of productive work.

In this narrative, fossil fuel wealth did not inspire a proper work ethic, but this idea elides the key role that foreign oil companies played in disaggregating organized labor and distributing oil wealth. It is true that oil and gas, once it has been "discovered", does not require large-scale labor at points of extraction. Yet, prior to extensive automation, it did require large, concentrated pools of labor at points of refinement and processing. Especially in the case of Venezuela, foreign (primarily US and Dutch) oil companies intentionally segregated zones of extraction from zones of refinement to prevent labor resistance. These companies offshored refinement to the Dutch Caribbean islands of Curaçao (starting in 1918) and Aruba (starting in 1928) because they were then (and, to some extent, are still) under colonial rule. Companies perceived the labor force as more pliable and the colonial conditions of production as more amenable to the corporate governance of labor, which extended to regulating family structures and sexual relations (Schields 2023). The early history of oil processing in Venezuela laid the basis for the still-persistent "Muscovado Bias" of the "plantation economic model": an extreme dependence on the exportation of a raw commodity, usually for value-added processing elsewhere (Best 1968, pp. 283–84).

These conditions of labor impacted the formation of the Venezuelan petro-state. While Venezuela was almost entirely dependent on oil revenues by the 1980s, the oil sector employed less than one percent of the total labor force (Tinker Salas 2015, p. 106). Without being able to provide stable labor in the oil industry for the majority of Venezuelans, the redistribution of oil wealth was dependent on social spending and employment from the petro-state. The state was thus the "magical" (Coronil 1997) entity that transformed oil

into money for the population (or siphoned oil money off into elite hands). The petro-pessimist narrative often contends that these structures led to a social dependence on state redistribution.

Fossil fuel extraction also tended to foreclose the development of alternative productive industries, despite some efforts at economic diversification (see Browne 2024; Tinker Salas 2015, p. 76). Oil and gas wealth, as a "resource curse", overvalues a nation's currency, making domestic production less cost-effective and importation central (the misnamed "Dutch Disease" that oil wealth provokes). Today, both Trinidad and Tobago and Venezuela import the majority of their food products and consumer items, often making prices higher for these goods than in the US (while average wages remain far lower) (see Hassanali 2024). Ironically, both petro-states also import the majority of their refined oil from abroad since production has plummeted in both Trinidad and Venezuela over the past decade and a half and domestic refineries have closed or are functioning at limited capacity.[17]

As in Venezuela, Trinidad has produced sharp critiques of the economic dependence on hydrocarbons as a sinful or immoral pact. Trinidad and Venezuela are both characterized by dualistic, competing discourses of fossil fuel wealth that depend on a Christian binary of God/salvation and the devil/sin. In Trinidad, what I have called the "prosperity gospel of oil" avows that fossil fuels are a divine blessing gifted to the nation (Crosson 2022). Fossil fuel abundance thus draws on a born-again Christian "prosperity gospel" that sees wealth as the mark of divine favor. This implicit neo-Pentecostal underpinning of petro-optimist political theologies exceeds any denominational lines and extends (in a more exuberant fashion) Euro-Protestant ideas of material wealth as a sign of salvation. In contrast, an equally crypto-Protestant "austerity gospel" of oil decries the waste and corruption of the petro-state or the people, urging the nation to return to an ethos of productive labor (ibid.). This "austerity gospel" is perhaps even more widespread than the "prosperity gospel" of fossil fuels, especially in contemporary Trinidad and Venezuela. Since the US has become (by far) the world's largest producer of oil and gas (after the widespread implementation of fracking), Trinidad and Venezuela sit in increasingly vulnerable relations within the geopolitics of fossil fuels. By the end of the second Obama administration, the US no longer needed Venezuela's oil as it had before, and foreign policy shifted accordingly, with increasingly harsh economic sanctions accelerating under the Trump administration. The year 2014 marked a turning point from the boom years of high oil prices under Chávez in the 2000s, to the bust years of the current humanitarian and political crisis of the increasingly authoritarian Maduro regime.[18]

While Trinidad has not experienced the same level of economic crisis as Venezuela, since 2014 the government has initiated a series of belt tightening measures in response to falling energy prices and increased US fossil fuel production. Free higher education (the GATE program) and other forms of social spending have been partially sacrificed on the altar of austerity. Taking one example of the post-2014 situation, a 2015 national newspaper article attributed the deep social spending cuts of the Prime Minister of the Trinidad and Tobago (Keith Rowley) to "the backdrop of current low energy prices and a dismal fiscal projection" (Rowley Announces More Belt Tightening 2015). Government and popular discourses, in turn, have justified post-2014 "belt tightening" by decrying the laziness that the state's redistribution of oil and gas wealth allegedly fostered. After a newspaper columnist lamented Prime Minister Rowley's inability to communicate effectively around budget cuts when "the economy is not going to be on an upswing anytime soon" (Demming 2019), one Trinidadian reader made the following comments:

> This could have been fixed decades ago. But no administration wanted to be the heavy hand that smites [sic] discipline, that attempts to change the culture of apathy, "gimme gimme", feting [partying] and carnival mentality, and just plain laziness. ("Comments", in Demming 2019)

In contrast with the revaluation of the devil and the "wuk ethic" during Trinidad Carnival, the austerity gospel often veers into a demonization of "laziness" and the "carnival mentality". As in Venezuela, these negative appraisals of one's own nation morally condemn the inability of the people to achieve the proper discipline of a productive work ethic. These discourses thus implicitly draw force from similar characterizations of colonized peoples as entropic, which I detailed in this essay's second section. Somehow, this moral discourse imagines that if Trinidadians or Venezuelans could just evidence a properly disciplined work ethic, their problems would go away (which seems to me an incredibly specious argument, especially given the two countries' current predicaments).

While popular, these condemnations are not universally shared. It would be a mistake to characterize all Trinidadian or Venezuelan feelings about their own people as negative. To be clear, Trinidadians and Venezuelans work extremely hard. The open question is whether this work (or the alleged failure to achieve it) is the basis for one's relative demonization or moral elevation. These condemnations have real material consequences in deciding which populations or which nations are naturalized as "dysselected" (Wynter 2003) in normative visions of economic prosperity. As much as the demonization of oil as infernal aligns with the moral discourses of Western environmentalism, which also cast dependence on hydrocarbons in a negative light, it leaves hegemonic Christian politico-theological assumptions very much intact. Has oil made people lazy and in league with the devil, incapable of attaining a work ethic that would signal civilization and development in postcolonial petro-states? Or has the very yoking of energy to racialized entropy constructed the oppressive value systems with which one can make facile negative generalizations about their own countries that naturalize their socio-economic problems as a matter of individual moral failure?

There are important alternative narratives of the experience of oil wealth in Trinidad, which I have heard in oral histories from African Trinidadians who came of age during the Oil Boom (known as the "Bonanza" in Venezuela) (1973–1982). I do not have the space to discuss these narratives here and will simply give an extremely brief sketch. The Oil Boom directly coincided with the suppression of Black Power movements in Trinidad, culminating in the killing or capture of armed segments of the movement in 1973–74 by a secret police force (the Flying Squad) created by Prime Minister Eric Williams. The Flying Squad was led by Randolph Burroughs, whose success in suppressing Black Power insurgents led to his rise as the longest-serving postcolonial Commissioner of Police (he resigned in 1987 after being charged with trafficking cocaine and conspiracy to murder). By the time of the Oil Bust (1982–1992), transnational cocaine/arms/human trafficking and money laundering—orchestrated through complex networks that involved Trinidadian politicians, police, and business elites—was firmly entrenched as a hierarchically organized illicit economy (see Scott 1986). While some Trinidadians assert that the Oil Boom made lower-class Afro-Trinidadians lazy, criminally inclined, and dependent on state handouts, others emphasize the role of the state and private interests in suppressing the upward mobility of lower-class Black people and reconsolidating elite economic wealth (through licit and illicit means) in the wake of Black Power.

In sum, the austerity gospel of oil as a pact with the devil provides popular and vibrant resources for critiquing some of the workings of the petro-state. Yet, it draws on Euro-Christian theological/racial hierarchies and a demonization of being possessed by telluric energy. Rather than possessing oil and exerting sovereignty over it, the postcolonial

petro-nation is allegedly possessed by infernal hydrocarbons. In a way, these petro-demonic theologies could articulate the postcolonial state's relative lack of possession of its own energy. In Trinidad and Venezuela, despite both countries having nationalized oil companies, the energy industry is ultimately dependent on foreign companies who provide the necessary capital for expensive fossil fuel development. Since 2014, this capital has been a good deal more disinterested in such investment, given the rise of the US as the number one oil producer in the world (thanks to the incredibly energy-intensive process of fracking) and the "discovery" of oil in more pliable political economies (such as the massive offshore finds in neighboring Guyana, controlled largely by the US Houston-based company Exxon Mobil). While the prosperity gospel of fossil fuels celebrates the nation's possession of oil as a divine blessing, the austerity gospel states that the petro-nation is itself possessed by fossil fuels as an infernal energy. This critical discourse, however, often verges on recycling the racist tropes of "entropy" that structured the post-emancipation governance of work in the Caribbean (by ironically insisting that the people who worked the hardest in society—the laboring classes—were lazy [and thus in need of regulation]).

6. Conclusions

In this essay, I have traced a genealogy of energy in the modern world that argues for the centrality of the Caribbean. This genealogy foregrounds race, enslavement, and colonialism in the making of energy, climate crisis, and modernity. While scholars mark the Caribbean as modern by virtue of these exploitative processes, Caribbean people have shown incredible creativity in developing "counter-modern" discourses of energy. I detailed two of these counter-modern discourses of energy in Trinidad's Carnival (with very brief reference to Africana spiritual work). Finally, I showed how normative Christian theological conceptions inform not simply the valorization of energy and oil (see Daggett 2019; Rowe 2023) but also a critique of the effects of fossil fuel wealth in postcolonial petro-states.

Today, the situation of Trinidad and Tobago (and neighboring Venezuela) is marked by vulnerability and uncertainty within the global political economy of energy, even as both states attempt to continue the "petro-state masquerade" (Jobson 2024) of limitless fossil fuel wealth in a present of economic recession. North American fracking has made the US far less interested in the energy of Trinidad and Tobago and Venezuela. The horizon of a "green transition" away from fossil fuels (if it ever happens) promises to further sideline these postcolonial economies in which hydrocarbon wealth, while fueling social spending, contributes to the stunting of alternative industries and a renewed dependence on the export of raw material resources to Northern powers (and on the volatile prices of these energy exports). Currently (in 2024), government leadership in Trinidad and Tobago urges the people to observe a present of economic austerity, with the promise of a cross-border gas venture with Venezuela again bringing prosperity in 2027 (see, for example, Mohammed 2024). Yet, this venture depends on increasingly uncertain geopolitical circumstances, most specifically a renewed waiver from the punitive arm of the US Treasury (OFAC), which would allow Trinidad to conduct business with its heavily sanctioned next-door neighbor (see, for example, Boodan 2024).

Still there is room for hope. One of these sources of hope and resilience is the counter-normative energy culture of Trinidad, perhaps the world's oldest petro-society. As much as energy continues to be a commodified resource in increasingly uncertain national visions of development, "the real energy", as Soca/Calypso artiste David Rudder's (2003) Trinbagonian anthem suggested, is in "the people". While counter-normative visions of energy and work have been entangled with the long-standing extraction of oil and gas in Trinidad, Rudder's energy of the people does not lie in the hydrocarbons beneath their feet but in

the energy that is generated relationally between them. Like Rudder, I firmly believe that Trinidadians have a unique ability to make any situation, no matter how tough, energy-rich. Unlike oil and gas deposits, this energy does not depend on foreign petro-companies or geopolitical circumstances for its fruition. In a situation of increasing uncertainty and austerity, this energy of the people is the energy of the future.

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Notes

1 I use "Trinidad" to refer to an island with a long-standing hydrocarbon economy, where pitch and kerosene were produced in the 1800s, oil and then gas in the 1900s, and (primarily) natural gas and gas-derived products in the twenty-first century. "Trinidad and Tobago" refers to the postcolonial nation-state. Tobago was only administratively grouped with Trinidad by the British in 1889 and bears a distinctive (yet intertwined) history. Tobago is known as a tourist island and is often contrasted with the petro-industrial, supposedly violent society of Trinidad. However, in the current year (2024), Tobago's per capita murder rate has at times exceeded Trinidad's, and Tobago has more recently become a site of oil and gas extraction (although this extraction is occluded from view, since it happens offshore and is negotiated between the national government in Trinidad and foreign companies). To avoid conflating two islands with distinctive histories, I generally use "Trinidad and Tobago" only to refer to the nation-state.

2 For far more sensitive and nuanced accounts of the relationship between fossil fuel capitalism and racialized exploitation, see Du Bois (1935, pp. 15–16) or Jobson (2021). These accounts insist on the centrality of racialized exploitation in fossil-fueled industrialization without reducing this exploitation of humans to a past event.

3 It should be noted that this overturning met with a good deal of resistance, precisely because statistical probability was not seen as certain knowledge. The widespread acceptance of thermodynamics as a statistical science did not occur until the late nineteenth century with the work of Bolzmann, Maxwell, and others.

4 For Foucault (2003), Nazi Germany was the primary referent for the collusion of the biopolitical maximization of the energy of populations and the necropolitical (or sovereign) violence against populations deemed threatening to that vitality. Foucault uses "race" as the concept that partitions populations into those subject to "making live" and those who are killable. While his primary referent for "race" is Jewishness, a less Eurocentric perspective would foreground how "race" had already been operationalized on massive scales to partition colonized or enslaved populations, subject to sovereign violence, from European ones, subject to biopolitical management.

5 In making his case for psychoanalysis as science's "third blow" to human self-centeredness, Freud ([1916–1917] 1963, p. 9) wrote the following statement:

> "In the course of centuries the naive self-love of men has had to submit to two major blows at the hands of science. The first was when they learnt that our earth was not the center of the universe. . .This is associated in our minds with the name of Copernicus. . .The second blow fell when biological research destroyed man's supposedly privileged place in creation and proved his descent from the animal kingdom and his ineradicable animal nature. This revaluation has been accomplished in our days by Darwin, Wallace and their predecessors, though not without the most violent contemporary opposition".

6 For other examples of the idea of energy as a "transcultural" concept, see Oostveen (2020).

7 Obeah has been decriminalized in Anguilla (1980), Barbados (1998), Trinidad and Tobago (2000), and St Lucia (2004) but remains illegal in much of the region. Recent calls for the decriminalization of Obeah in Jamaica or Antigua and Barbuda have met with considerable opposition, which argues that Obeah is sinful, anti-Christian, and potentially damaging to national welfare (see Crosson 2017). In 2013, when Jamaica removed flogging with a whip as a punishment for Obeah in order to sign the U.N. Convention Against Torture, it left the criminal status of Obeah untouched (see Paton 2015). In Jamaica, however, there are ongoing efforts toward decriminalization, although they have achieved no lasting juridical success (see Crosson 2017). On the criminalization of Obeah and other African-identified religious practices, see Boaz (2021).

8 Following emancipation (1834–1838), different methods of binding laborers to plantations were used based on colonies' differing structures of the planter class and land use. "Located labor", in which landless laborers remained dependent on plantation wages, prevailed for much of the century in Barbados. *Metayage* predominated in Tobago, in which laborers sharecropped plantation lands as planters attempted to limit laborers' access to land ownership and bind them in relations of debt. In Trinidad, indentured

labor schemes played a key role, in which laborers were legally prohibited from leaving the plantation to which they were assigned for the period of their contract.

[9] Some Barbadian scholars insist on a Bajan origin for "wuk" or "wuk up", quoting colonial accounts of dances the enslaved organized in Barbados as early examples of "wuk" that derived from Africa (Hunte 2019; Walcott 2014). Walcott insists that "wining", in contrast, is Trinidadian. However, Soca from Barbados has abundant references to "wining". "Wuk" and "wining", moreover, are often treated as synonymous in contemporary Soca from across the Caribbean. In addition, early references to "wuk" in Soca in the 1980s and 1990s emerged in various Caribbean islands besides Barbados (and are perhaps distantly related to the emergence of "twerking" in New Orleans in the early 1990s, a city with strong Carnival traditions and Caribbean connections). This could reflect the increasing dialogue between Soca produced in Barbados and Trinidadian Soca (e.g., the so-called "Bajan Invasion" of the 1990s in Trinidad), but it could also reflect resonant meanings of "wuk/work/werk" across the anglophone Caribbean.

[10] The earliest reference to "wuk" I have been able to find in Soca (which originated as a genre in the 1970s) is the Antigua group Burning Flames' song "Workey, Workey" (1989), later covered by Byron Lee (Jamaica) and Krosfyah (Barbados). Trinidadian artiste Denise "Saucy Wow" Belfon, the "wining queen" of Soca, then flipped the gendered terms of this script by making men "wuk" for her in songs like "Hard Wuk" (1996/7). More recent invocations of "wuk", which permeate twenty-first century Soca, often partially unmoor this conflation with sexual intercourse, making "wuk" a matter of solo enjoyment or exhibition of dance skill. Such invocations seem more in line with Trinidadian artiste David Rudder's use of "wuk" in the 1992 song "De Long Time Band", in which "wuk up" and "wining" are synonymous forms of dance associated with Carnivalesque "bacchanal" and enjoyment.

[11] Carnival was regulated in ordinances that banned dancing to or playing drums shortly after the Emancipation Decree in 1837, in an 1868 ordinance, and again in the "Musical Ordinance" of the 1880s. The Theater and Dance Halls Ordinance of 1934 resulted in the censorship of the lyrics of Carnival songs, and a 1945 Summary Offences Ordinance banned drumming without a license (see Liverpool 1998, p. 36; Munro 2010, pp. 84–120). At various moments, these colonial attempts at regulating subaltern Carnival celebrations led to riots in both Port of Spain and South Trinidad. In addition to anti-Obeah laws, the largest Africana religion in Trinidad (the Spiritual Baptists) were criminalized under the Shouter Prohibition Ordinance from 1917 to 1951, in part as a form of what the law called "indecency" or as a noise disturbance.

[12] I do not have the space to engage at length with Ramcharitar's (2020) nuanced argument. Certainly, the celebration of a Carnival ethos does not characterize all Trinidadians of whatever race or class. In fact, as I show in the next section, there is a popular critical discourse of Trinidad's "carnival mentality", which alleges that fete-ing (partying) is economically wasteful, undisciplined, and incompatible with civilized values. I acknowledge his point that Carnival often sidelines Trinidad's sizeable South Asian populations in favor of an Afro-Trinidadian narrative of the nation. Yet, this is less a historical fact than a product of postcolonial politics, which allegedly tie party affiliation to race (African vs. Indian) (for an alternative to this narrative of postcolonial politics and race, see Crosson 2014). Collective celebrations that violated colonial ideals of civilization and were regulated or criminalized were not the exclusive property of Afro-Trinidadians. The largest popular festival for the laboring classes in nineteenth-century Trinidad was not Carnival but the South Asian festival of Hosay. Supposedly a Shi'ite Muslim festival, Hosay was celebrated mostly by non-Shi'ite Muslims, Hindus, and (Muslim and non-Muslim) Afro-Trinidadians. It was both a multiethnic and a multireligious festival (as it had been in North India) (see Rocklin 2019). Tadjahs (the tombs of the two martyrs commemorated in Hosay) were also carried in Carnival processions in the late nineteenth century (Rocklin 2019). British authorities linked Carnival and Hosay, as seen in the criminal codes seeking to regulate both festivals that emerged out of the 1881 Hamilton Report, which identified both Carnival and Hosay as sites of subaltern "disturbance" (see Munro 2010, p. 100). Yet, like Carnival, Hosay has been partially subjected to programs of racial and religious purification since independence, which would seek to make it more purely traditional (i.e., more purely "Muslim", whatever that means). In the nineteenth century, Carnival (as a holiday in which public assembly was legal due to the holiday's attachment to the French Catholic white elite and Creole middle class) absorbed popular energies of emancipation celebrations (Liverpool 1998, p. 36). In the end, Ramcharitar's dismissal of Carnival culture as a mere invention that promotes an Afro-Trinidadian political project ignores the immense, counter-hegemonic cultural archive that Carnival absorbed. At worst, it risks reproducing a critical discourse of Carnival, which is at least as popular as the celebration of Carnival that Ramcharitar critiques: the (often-racialized) critique of Trinidad as a "Carnival culture" that is therefore lazy, entropic, undisciplined, and morally dissolute (as I briefly discuss in the penultimate section of this essay).

[13] In his scathing 1889 critique of British historian J.A. Froude's account of the West Indies, Afro-Trinidadian linguist and scholar J.J. Thomson sarcastically summed up these colonial, moral–racial discourses on productive work: "The laziness, the incurable idleness, of the Negro [sic], was, both immediately before their emancipation in 1838, and for long years after that event, the cuckoo-cry of their white detractors. It was laziness, pure and simple, which hindered the Negro [sic] from exhausting himself under a tropical sun, toiling at starvation wages to ensure for his quondam master the means of being an idler himself…" (Thomson 1889, p. 201).

[14] Some examples from the song's lyrics include, "If you see Baptist woman wine" and what the singer calls "some Soca and Baptist mix".

[15] The various Indian masquerades of Trinidad's Carnival draw on an iconography of the Plains Indian originally absorbed from US Western movies, which were one of the most popular genres of film in the mid-twentieth-century anglophone Caribbean. Yet, instead of identifying with the colonizer in these movies, the adoption of the Plains Indian figure reveals an identification with the "Indians" of the Western as symbols of the recalcitrance to colonial norms. However, in my experience, contemporary leaders of Indian masquerade bands contest this genealogy by asserting that these figures represent Trinidad's Indigenous peoples and their intermarriage with African Trinidadians.

[16] The year 2023 marked the sixth straight year that the US has led the world in oil production by significant margins (US Leads Global Oil Production for Sixth Straight Year-EIA 2024).

[17] Jobson (2024, p. 15) notes that "Crude oil production in T&T peaked at 193,000 barrels per day (bpd) in 2007 before a sharp decline to 57,000 bpd in 2021; natural gas peaked in 2020 at approximately 4.3 billion cubic feet per day (bcf/d) and fell to 2.4 bcf/d over the same period". After 101 years of operation, Trinidad closed its only oil refinery in 2018 after years of operating the refinery at a loss while having to use imported crude oil. There is currently a bid process to attempt a revamping of the refinery. Since at least 2018, Venezuelan refineries are either non-functional or operating well below capacity, often leading to the importation of gasoline from the other side of the globe (e.g., Iran) and long lines for fuel.

[18] As I write this, Venezuela is currently in a dire political crisis following the 2024 elections, with both principal parties claiming victory (and the Venezuelan government, in contrast with previous elections, releasing no breakdown of votes). While the current hardline iteration of the governing United Socialist Party of Venezuela (PSUV) bears a great deal of responsibility for the crisis, the post-2014 situation of increasing authoritarianism emerged from complex domestic and international circumstances. Some of the harshest non-wartime US sanctions in history played some role in eroding the Venezuelan economy post-2014 (principally by attempting to limit the export of Venezuelan oil to the US and its global allies, although the Biden administration has made some temporary exceptions), while inadvertently incentivizing further government/military corruption and dollarization (which has made the cost of living extremely expensive for most Venezuelans).

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