5-6-2020

Racial Justice is Climate Justice: Racial Capitalism and the Fossil Economy

Julius McGee  
*Portland State University, cjulius@pdx.edu*

Patrick Trent Greiner  
*Vanderbilt University*

Follow this and additional works at: https://pdxscholar.library.pdx.edu/usp_fac

Part of the Economics Commons, Environmental Policy Commons, Race, Ethnicity and Post-Colonial Studies Commons, Social Justice Commons, Social Welfare Commons, Sociology Commons, and the Urban Studies and Planning Commons

Let us know how access to this document benefits you.

Citation Details


This Article is brought to you for free and open access. It has been accepted for inclusion in Urban Studies and Planning Faculty Publications and Presentations by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.
May 6, 2020

RACIAL JUSTICE IS CLIMATE JUSTICE: RACIAL CAPITALISM AND THE FOSSIL ECONOMY
“In a real sense all life is inter-related. All men are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. I can never be what I ought to be until you are what you ought to be, and you can never be what you ought to be until I am what I ought to be... This is the inter-related structure of reality.”

- Dr. Martin Luther King Jr., Letter From Birmingham Jail

The narrative of oppression moves through dialectical pressures. Capitalism evolved from the feudal order that preceded it, creating new forms of racial oppression that benefited an emerging ruling class[1]. Racial tensions evolve alongside economic oppression that subjugates labor to capital. The preceding racial order molds to emerging mechanisms of expropriation and exploitation by way of force and resistance. Beneath the surface of these tensions lies the interconnected threads of ecological and human expropriation. At the heart of all oppression, lies the manipulation of reproduction. The social processes necessary to reproduce black and brown communities, the ecological processes necessary to reproduce various species, and the dialectical processes that exist between humans and nature that are necessary to reproduce societies; the history of oppression is a tapestry of exploitation and expropriation interwoven so as to reproduce the means of maintaining the ruling class lifestyle. From afar this tapestry
looks like a single garment; enslavement, capitalism, colonialism, etc. all coming together to produce the image of modernity, but on close examination one can see the interlocking threads of history weaving together a tapestry of oppression.

Fossil fuel consumption is a ubiquitous form of oppression that intersects with other oppressive structures, empowering those who call upon them to more efficiently extract surplus from various processes of social and ecological reproduction. As Malm writes, “The fossil economy has the character of totality... in which a certain economic process and a certain form of energy are welded together[2] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn2)” (12). We must not ignore, however, the ways in which oppressive structures and processes of social reproduction are welded into this totality as well. The expropriation of Black bodies cannot be reduced to mere economic relations, nonetheless racial oppression has always served economic interests. Thus, it is our goal to identify how the ongoing process by which fossil fuels and racial oppression are fused to one another and how that fusion changes the economic character of racial capitalism. This will not be a detailed narrative. Our goal is to develop a heuristic to better understand the connection between racial justice and climate change. To this end, we start with the claim that racial justice is climate justice.

Fossil fuels are the loom that weaves the tapestry of oppression into a functioning whole, systematically influencing the lives of the enslaved, imperialized, colonized, and exploited. Fossil fuels have become the bedrock of economic growth and the basis of most social reproduction. By social reproduction we mean human institutions that maintain the genealogical infrastructure of society. The family, schools, food, language, all of these are essential to reproducing a community’s way of life. The dialectical bounding of economic growth and social reproduction is mediated through the consumption of fossil fuels. The family uses energy derived from fossil fuels to survive; schools use electricity to reproduce knowledge; food is produced and transported via networks of fossil fuel consumption; language is increasingly tailored to the needs of economic production. Economic growth is itself a process of reproduction. Growth within the tapestry of oppression reproduces the conditions of much of contemporary social life, but its primary function is the protection and
improvement of ruling class livelihoods. The legitimacy of the capitalist class derives from their ability to sustain economic growth. Economic growth is maintained by fossil fuel consumption. The residual impact of this pairing is the emission of greenhouse gases into the atmosphere, as well as the transformation of any earth systems that don’t readily lend themselves to the perpetuation of such emission.

All oppression is unsustainable. Oppression produces contradictions that undermine the mechanisms of both social and ecological reproduction. In the case of fossil fuels, humans burn the buried remains of plant and animal species that lived millions of years ago to change the landscape of the living. Fossil fuels embody the death that was essential to our life; they have already contributed to the reproduction of lifecycle processes. When humans use fossil fuels as the basis of social reproduction, they are choosing to live based on death instead of life. The reproduction of economic growth, which is essential to the capitalist classes’ rule, is undermined by climate change. Carbon dioxide emissions are the largest contributor to climate change, which threatens the reproductive capacity of the tapestry of oppression. Changes in weather patterns contradict the ecological and social processes that the capitalist class expropriates and oppresses to reproduce their way of life. However, because fossil fuels weave together all forms of reproduction, it is not just the reproduction of the capitalist class that is threatened by climate change, but that of all subjects composing the weft and warp bound together by fossil fuels to create the great tapestry of oppression.

Economic growth is mediated by fossil fuels through the exploitation and expropriation of labor. Exploitation is labor that reproduces the conditions of the capitalist class. The surplus derived from labor exploitation reproduces class dynamics within the tapestry of oppression. Expropriation is the process of confiscation that yields the labor and natural resources that reproduce the existence of those living within the tapestry of oppression—particularly those most deeply exploited. Ecological processes, subsistence living, culture, etc., these forms of reproduction are often tailored to the needs of the ruling class. In order to reproduce their means, the
oppressed must pay tribute to the capitalist class. However, the tapestry of oppression is not totalizing. The oppressed resist subjugation through the development of new forms of social reproduction.

There have always been alternative modes of social reproduction. However, reproduction outside the tapestry of oppression threatens the existence of the capitalist class. Therefore, the capitalist class views these forms of reproduction as disposable. Those who are expropriated are disposable insofar as the mode of social reproduction they rely upon, and in many instances their very existence is determined by the whims of the capitalist class. When the mechanisms of reproduction fall outside the realm of what can feasibly be expropriated, the capitalist class corrals processes of social reproduction from geographically and culturally distant populations into the service of capital accumulation. This process is known as primitive accumulation.

Primitive accumulation operates on the color-line as *piezas de indias*. *Piezas de indias* was a term used during African enslavement to quantify the productive capacity of enslaved peoples[3] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn3). Specifically, *piezas de indias* measures qualities and characteristics of enslaved Africans that were developed prior to their enslavement. The term denotes a measurement of the value of a theft. “Marx had meant by primitive accumulation that the *piezas de indias* had been produced, materially and intellectually, by the societies from which they were taken and not by those by which they were exploited[4] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn4)” (121). Primitive accumulation, like all forms of oppression, is a process that is productive of contradictions. These contradictions contain legacies of opposition to the tapestry of oppression. It is here that one finds the germ and trajectory of the Black radical tradition. Primitive accumulation occurs on a spectrum. Material and intellectual theft is not homogenous, though it *does* often take shape around the color-line[5] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn5). *Piezas de indias* is primitive accumulation specific to Black folks. In this
essay, we identify the ongoing transformation of *piezas de indias* through three major shifts in the distribution and production of fossil fuels: 1) the first industrial revolution, 2) the second industrial revolution, 3) the neoliberal revolution.

Although it is still common for historians to refer to a single industrial revolution (much like it is common to refer to a single agricultural revolution[6] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn6)), many U.S. historians refer to a second industrial revolution as well[7] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn7) [8] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn8). The second industrial revolution occurred during the early and mid 20th century with the electrification of rural and urban towns, increases in railroad use, and the emergence of the automobile industry. This is distinct from the first industrial revolution, which started in Britain in the late 18th century, gradually spread across Europe and the U.S., and is defined by the increased use of steam engines and the rise of textile manufacturing in cities. For our purposes, both of these industrial revolutions are understood as forms of primitive accumulation perpetuated by *piezas de indias*. By this, we mean that primitive accumulation during the first and second industrial revolutions functioned through uneven and combined development, creating unique dynamics of interdependence within the tapestry of oppression.

**THE FIRST INDUSTRIAL REVOLUTION: KING COTTON AND RACIAL CAPITALISM**

If fossil fuels are “a train put at a point in the past on the current perilous track”, African enslavement is the track by which the train moves. The bulk of the fossil economy, which emerged in Britain during the 18th and 19th centuries, was initially centered on textile production. The raw materials that made industrial production of textiles economically preeminent were extracted by enslaved bodies on cotton plantations in the United States. As competitive capitalism grew in British towns, largely a result of innovations related to the steam engine, enslavement grew to meet
the productive demands of the emerging industries. By the mid-19th century, the
United States accounted for three quarters of global cotton production[9]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn9). The majority of the southern states’ cotton was sent to Britain and the
northern U.S. to be manufactured into clothing in industrial factories. Eli Whitney’s
cotton gin drastically increased the productive capacity of cotton plantations, and
thereby accelerated enslavement[10]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn10). From 1790 until the United States’ congress banned the importation of
slaves from Africa in 1808, southern plantations imported around 80,000 enslaved
Africans. In fact, so powerful was the economic imperative of expropriation, that
despite the ban on the import of enslaved peoples to the U.S. slave ships continued to
find their way to American shores until 1860- when the slave ship, Clotilda, brought
110 west Africans to the coast of Alabama[11]

Racial capitalism as a concept is synonymous with the Black radical tradition.
Enslaved Black folks played a pivotal role in resisting the fossil economy from its
inception, as their labor was essential to the rise of industrial capitalism. Slave
rebellions, such as the German Coast Rebellion and Nat Turner’s Rebellion,
threatened the hegemony of the southern bourgeoisie[12]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn12), which in turn threatened the flow of cotton to industrial centers. The
Southern bourgeoisie were aware of their influence on industrial capitalism. King
Cotton Diplomacy was implemented during the Civil War to coerce European
nations into supporting the South’s secession efforts. These efforts failed for many
reasons; the British and French had stockpiles of cotton due to previous surpluses,
and the British were able to expand cotton extraction via their colonies. However, an
often ignored factor that contributed to the failure of King Cotton Diplomacy was
the general slave strikes throughout the South, where hundreds of thousands of
enslaved Black folk fled plantations to support the war effort. The general slave strikes
also provided the Union army with much needed reinforcements, which helped end the war swiftly\[13\]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn13) \[14\]

Although the British refrained from taking an explicit “side” during the war, which was in part fueled by their reliance on grain produced in northern states\[15\]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn15), they partook in many efforts to support the southern states’ secession. This included efforts by the British bourgeoisie, who built the majority of ships used by the confederate navy\[16\]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn16). It is clear that the British had a vested interest in maintaining enslavement in the United States. Although the British had previously outlawed slavery across its empire, the Black radical scholar Eric Williams made it clear that this was not due to a moral shift in British sentiment toward enslavement. The abolition of slavery in the empire served the interest of the emerging industrial bourgeoisie, who used reparations paid to indebted plantation owners to finance industrialization\[17\]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn17) \[18\]

Following the abolition of slavery, millions of Black folk were denied just compensation for the socially and environmentally destructive contradictions of enslavement, which had manifested in the early fossil economy. Instead of choosing a path toward healing, the United States government ceded power back to plantation owners, who in turn developed systems of debt peonage, sharecropping, and convict leasing, which restructured the tapestry of oppression and further tangled the oppressive threads of the fossil economy and the expropriation of Black bodies. All
three of these systems of expropriation (debt peonage, sharecropping, and convict leasing) helped the United States regain its place as a global leader in cotton exports. In fact, the South's new systems of expropriation increased the efficiency of cotton exportation to industrial centers[19]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn19). Black folk who resisted these changes and attempted to integrate into white society became the target of new Jim Crow laws, which, among many other things, prevented Black and poor White folk from constructing their own communities. In the tapestry of oppression, the threads that bind the oppressed are mediated by the policy and ideology of the ruling class. If fossil fuels are the loom, then these forces of hegemony are the shuttle- weaving the weft of ecological devastation into the warp of social domination- the product is the legitimated mode of social reproduction and control; the tapestry of oppression. Jim Crow laws- one such shuttle- were a form of continuous primitive accumulation that disrupted communal efforts by Black folk to resist expropriation via debt peonage, sharecropping, and convict leasing. Without these efforts, it would have been difficult to corral Black bodies back into servitude in support of the fossil economy. A loom is rendered useless without a shuttle.

After surviving and resisting decades of expropriation in the southern United States, ecological and economic pressures changed the interdependent dynamics within the tapestry of oppression. The Boll Weevil epidemic of the late 19th and early 20th century decimated the South's cotton economy creating a push factor for Black migration out of the South. Further, the reduced flow of European immigrants to the United States due to World War I, created distinct pull factors for Black migration to industrial cities[20]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn20). From the late 19th to mid-20th century hundreds of thousands of Black folks migrated out of the South to industrial cities across the United States in what is known as the Great Migration[21]
(file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn21). Black migration out of the south coincided with a dramatic change in
the structure of the fossil economy. While in 1860 cotton still reigned supreme as the U.S.'s leading industry, by 1890 cotton was surpassed by machinery manufacturing as well as steel and iron production[22]. The new jobs in these expanding sectors were filled by Black migrants. To be clear, the cotton economy still played a prominent role in industrial manufacturing throughout the late 19th early 20th centuries, however the influx of Black workers to industrial cities provided the industrial bourgeoisie with leverage over workers by way of racial segregation.

During the early years of the Great Migration, White industrial workers in the United States formed the first national labor unions in response to the economic imbalances produced by the second industrial revolution and World War I. These unions organized mass resistance to the changing dynamics of the fossil economy, however their efforts were undermined by bourgeois racial hegemony. For example, the Great Railroad Strike of 1877, which resisted a central component of the fossil economy, freight train transit fueled by fossil fuels, was a response to wage cuts onset by the end of the Great War[23]. Black railroad workers were actively denied membership to railroad unions, stoking hostility and resentment between Black and White workers. Specifically, White workers saw the lower wages paid to Black workers as a threat to union efforts and demanded that Black workers be replaced with White workers who would be paid higher wages[24], rather than demanding equal pay for White and Black workers. The active discrimination against Black workers by unions resulted in what could be viewed as Black workers crossing the picket line, however the only accurate assessment of these events would lead to the conclusion that it was the color-line that crossed unions and the picket line that crossed Black workers. Similarly, the Homestead Strike of 1892 pitted oppressed workers against the fossil economy's emerging juggernauts, steel and iron manufacturing. The strike was undermined by the color line and Black
workers were, once again, denied union membership. In November 1892, 2,000 White workers on strike violently attacked Black workers who crossed picket lines as well as their families. Ultimately, at the end of the month, the White worker’s strike was brought to a close and they were left reapplying for their jobs. Resistance to the fossil economy was undermined by racial tensions. Again, instead of walking down the path of healing by building a cohesive resistance, industrial workers chose to further entrench the expropriation of Black folks and fossil fuels.

**THE SECOND INDUSTRIAL REVOLUTION: FOSSIL FUELS AS A BASIS FOR SOCIAL REPRODUCTION**

If *piezas de indias* during the first industrial revolution is defined by enslavement, Jim Crow, and industrial labor disenfranchisement, in the second industrial revolution it is defined by political coercion and the uneven distribution of fossil fuel-based amenities.

In the early 20th century, as the U.S. emerged as a global economic hegemon, electrification became a means to expand the fossil economy through coerced consumption. Mass electrification of towns started with the construction of Pearl Street Station in New York City in 1882. The first residential house to receive electricity in the U.S. was occupied by J.P. Morgan (the famous financial capitalist), who was a large financial backer of residential electrification. Morgan was responsible for the eventual merger of Edison Electric Company and rival company Thomson-Houston, into the economic giant General Electric, which persists today as one of the largest multinational corporations. Electrification did not become ubiquitous until it braided together the ability to increase the efficiency of reproductive labor with the production of culture. Specifically, inventions such as the electric iron, washing machine, and refrigerator all increased leisure time in the home for many workers and
families. This newly afforded leisure time was replaced by the culture industry\[27\] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn27), which used electricity to create commodities, such as the radio and eventually the television to mass produce culture.

Mass distribution of electrification was slow due to its infrastructural needs. Little is known about the first working class households to receive electricity. What is known is that early distribution was contingent on whether or not households could afford electricity\[24\]. This leads us to suspect that early on, electrification in U.S. cities was implemented along the color-line, however more research is needed to understand the totality of these effects.

Following the Great Depression, rural electrification was implemented by the Roosevelt administration as part of the New Deal in the 1930s. In his research on rural electrification in the U.S. south, geographer Conor Harrison identified the ways in which Jim Crow laws influenced rural electrification and disadvantaged Black households in the rural spaces of the region. It must be remembered that, in the 1930s, more than half of the previously enslaved Black population in the U.S. lived in the rural South\[28\] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn28). Harrison argues that analyses carried out to determine where the efforts of electrification should be directed relied on a “correction factor”, which was used by federal agents in the rural electrification program to underestimate potential electricity use in Black households. Ultimately, this served to prioritize electrification of White households throughout the region. In this sense, the correction factor, similar to other New Deal policies such as redlining\[29\] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn29), was used to systematically disadvantage Black folk. Harrison concludes, “New energy systems do not emerge into places devoid of social order. Rather..., energy systems deployed in already uneven and racialized landscapes tend to perpetuate marginalization” (pp. 928). Again, fossil fuels were used to further wrap Black folk into the tapestry of oppression. In general, one can see how many New Deal policies, such as the National Housing Act of 1934 and the Rural Electrification Act
of 1935, encouraged expropriation by more tightly bounding social reproduction (in this case the need for shelter and reproductive labor necessary to maintain that shelter) with economic life. The New Deal relief efforts were implemented on the color-line. This meant that processes of expropriation, which New Deal policies facilitated, were inherently uneven. As such, the continued use of these amenities, at best, functioned to maintain the color-line.

The rise of the automobile industry is a more explicit example of uneven development during the second industrial revolution. The automobile was developed through a series of inventions using internal combustion engines to propel horseless carts[30] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn30). The mass production and consumption of automobiles is most commonly associated with Henry Ford, the Model T car, and “Fordism.” Fordist production combined the fragmented tasks of “Taylorism” with industrial processes to produce assembly lines of so-called “low skilled workers.” This process increased labor productivity such that working class incomes rose alongside the profits of the capitalist class. The subsequent increase in working class disposable income encouraged mass consumption, which was structured around the automobile[31] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn31) [32] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn32). Automobiles expanded the scope of the fossil economy by making oil paramount in industrial development. This expansion was supported by the discovery of large oil reserves in the southern United States in the Spindletop oil fields during the late 19th century[33] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn33).

Automobile expansion is inexorably linked to racial segregation in the United States. The phenomenon of White flight, which led to mass suburbanization in the U.S., was encouraged by New Deal housing policies that facilitated the expansion of the automobile market. In order to pass New Deal legislation during the Great Depression, the Roosevelt administration pandered to Southern Democrats by
excluding Black folks from many of the amenities granted by the New Deal policies[34]

Prior to the Great Depression, many industrial cities were already heavily segregated due to racial hostilities during the first Great Migration of Black folks out of the South. Federal agencies constructed during the New Deal, such as the Federal Housing Administration and Home Owners Loan Corporation, furthered racial segregation through racial covenants and new underwriting standards that discouraged home loans in racially mixed and predominantly Black neighborhoods. New Deal legislation also disproportionately affected Black farmers through rural restructuring efforts that pushed Black farmers in the South off their land (a legacy that continues today in HUD financing to Black farmers, see NYT 1619 Project[36]). This in combination with new labor opportunities in industrial cities due to World War II, prompted the second Great Migration of Black folks out of the rural south and into urban centers.

During World War II, the automobile industry grew exponentially due to government purchases related to the war effort[30]. Following the war, the United States Congress continued to support the automobile industry through legislation, such as the Federal Aid Highway Acts of 1944 and 1956. Further, after the war many Black workers who migrated into industrial cities were put out of work and replaced by White workers who had recently returned from the war. Newly constructed highways and new mortgage schemes, both of which were backed by the U.S. government, combined with the booming automobile industry to encourage White families after war to move out of the city and into suburban sprawls.

The phenomenon, known as White Flight[37], was facilitated by preexisting racial oppression, newly institutionalized racist policies, and government support for the automobile industry. In the end,
White flight further tangled the reproductive needs of the capitalist class with the reproductive needs of the oppressed. In post-World War United States, the automobile became the opiate of the White working class; it liberated White folks from the drudgery of city life that had befallen Black folks and simultaneously bound them to the whims of the capitalist class. Through automobile proliferation, the fossil economy effectively weaved together the social reproductive needs of the oppressed with the reproductive needs of the capitalist class such that oppression is perpetuated through myriad dimensions of social reproduction. Where one chooses to live, and how one chooses to live, is tethered to the automobile and the mechanisms that led to its widespread use. Thus, one’s life chances—largely determined by where one is born—are, in effect, patterned by the historical structures and relations that compose the fossil economy. These impacts can even be seen today, as research has shown a clear link between race in the United States and carbon emissions from transportation, race and access to solar energy technologies, and ties between life expectancy and zip code of birth. Such historically produced associations have created a reality wherein Black liberation is often negotiated under the looming shadow of the fossil economy. The long Civil Rights Movement saw Black communities advocating for better schools, better housing, better access to transit, and better working conditions. Due to the second industrial revolution, most of these amenities became inexorably linked to the fossil economy. While it would be inappropriate to define the Civil Rights Movement as Black folk simply seeking better access to the fossil economy, many of the ‘rights’ granted to Black folks during the Civil Rights Movement benefited the fossil economy due to the structural changes that occurred during the second industrial revolution. For example, access to public transit increasingly became a necessity for life within the city, particularly after transit funding was shifted away
from cities and towards the suburbs[42]

Actions taken by Civil Rights activists, such as the Montgomery bus boycotts, were negotiated under the framework of the fossil economy. Further, legislation, such as the Civil Rights Act of 1964, included policies that undermined unions' ability to discriminate against Black folks. However, by this time many industrial unions were seeking to share in the benefits of the fossil economy, rather than deconstructing the mechanisms of capital accumulation[43]

A key point here is that many of the social, political, and economic gains made during the Civil Rights Movement were premised on the unjust allocation of fossil fuel-based amenities.

In the aftermath of primitive accumulation during the second industrial revolution, a new Black radical tradition emerged that sought to control social reproduction outside the framework of the tapestry of oppression; this movement came to be known as the Black Power Movement. Influenced by the radical teachings of Malcolm X, the Black Power Movement in the United States sought liberation through controlling the means of social reproduction. The crowning achievements of the Black Panther Party, which was one of the most successful organizations in the Black Power Movement, were the free breakfast programs, free health clinics, and resistance to police brutality. These efforts actively resisted the expropriation of Black folk in the tapestry of oppression. The Black Panthers sought liberation through re-appropriating various mechanisms of social reproduction. For example, the free breakfast program was supported by local grocery stores, who donated food to the Black Panther Party[45]

The cost of this food captured the embedded cost of the fossil economy (i.e. the fossil fuels used to produce and transport the food to local communities). The cost and relative inaccessibility of this food for Black folk was a product of the
uneven distribution of fossil fuel amenities, which at this point had become the basis of social reproduction in the tapestry of oppression. Thus, the re-appropriation of this food into free breakfast for hungry Black children resisted the inequality embedded in the tapestry of oppression. However, as we mentioned earlier, social reproduction outside the tapestry of oppression is a threat to the ruling class. The Black Power movement was actively targeted and opposed by the state, not because they were a violent threat, but because they undermined the internal mechanisms of social reproduction inside the tapestry of oppression; they were actively pulling at the threads, unwrapping the tapestry as it wrapped around them. The ruling class was successful at corralling the oppositional social reproduction within the Black Power Movement. To resist this new threat, the ruling class implemented a new form of piezas de indias that combined the tactics used during the first and second industrial revolution -- this new form of primitive accumulation would come to be known as neoliberalism.

**THE NEOLIBERAL REVOLUTION: MASS INCARCERATION, GENTRIFICATION, AND THE RISE OF COLOR-BLIND ENVIRONMENTALISM**

Under neoliberalism, piezas de indias functions through political coercion and economic restructuring. Neoliberalism is a political and economic project that reframes the crisis of stagflation, which plagued monopoly capitalism, as a worker-induced problem[46] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn46). Economically, neoliberalism functions through the state, which facilitates the redistribution of wealth from workers to the ruling class. Politically, neoliberalism works as a narrative to justify legislation that seeks to recapture wealth distributed by the state to workers through programs such as welfare. The mechanisms through which these processes occur are often violent. However, this violence is typically mystified through political coercion[47] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn47). For instance, the carceral state in the U.S., which has emerged as an
extension of the neoliberal state, is often viewed apolitically and ahistorically. This allows the carceral state to operate with impunity, as its violent actions are viewed as a necessary and normal response to political dissent. For our purposes, we will explore neoliberalism in the U.S. as it relates to 1) economic restructuring in the wake of deindustrialization and 2) political restructuring in the wake of the declining welfare state.

One of the first neoliberal efforts to restructure a society's processes of social reproduction occurred in Chile in 1973, when the United States backed a coup d'état against the democratically elected socialist leader—Salvador Allende. This event is significant in that it sparked a restructuring of the fossil economy (first in Chile but eventually across most of the world), as well as the restructuring of the state's role in managing political dissent. After being elected, Allende nationalized Chile's copper industry, which at the time was the nation's largest export, and Chile's private utilities. The coup that ousted Allende was led by Augusto Pinochet, who installed a brutal military dictatorship to replace Chile's democratic government. In addition to reprivatizing Chile's newly nationalized copper market and public utilities, Pinochet also employed a violent military regime that was hostile to political dissent[48] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn48). With respect to the fossil economy, one of the more significant changes that followed the re-privatization of Chile's utilities was the creation and installation of a wholesale energy market system. The wholesale energy market was a trading scheme developed by economists trained at the University of Chicago, which was an early breeding ground of neoliberal economic policies and ideology. The economic restructuring of Chile was an experiment of racial capitalism—akin to the experiments others have examined in Puerto Rico[49] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn49) and Flint Michigan[50] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn50) more recently.
In general, wholesale energy trading is best understood as a neoliberal project that was developed to further efforts to extract surplus from the oppressed. Rather than using the traditional monopoly structure of energy production and consumption that was developed during the second industrial revolution— an approach which saw electricity monopolies profit by reducing the cost of production relative to that of consumption— wholesale energy markets break down monopolies into smaller, more competitive producers and distributors. Electricity producers compete with one another by selling energy to distributors at variable rates. Under this scheme, households often pay a fixed rate for electricity, which further normalizes the ubiquity of fossil fuel consumption while also rendering the cost of production invisible to consumers within the tapestry of oppression. The habits of electricity consumers under this new scheme create the conditions for a more rapid, efficacious mode of accumulation by dispossession. The term accumulation by dispossession was developed by Harvey to describe how capitalist policies under neoliberalism result in a centralization of wealth and power by dispossessing public and private entities of their wealth or land. We employ it here to highlight that, if producers believe consumption will be higher during certain hours of the day they can alter the price of electricity sold to distributors to turn a greater profit. As a result, wealth is increasingly concentrated into the hands of energy producers— being transferred from the energy distributors and, when left unprotected by policy makers, consumers that are woven into these market mechanisms. Put differently, implementation of the wholesale market system allows for the more rapid accumulation of wealth by energy producers via a process of dispossession, or expropriation, of both the natural world and the populations who must rely on their products in order to reproduce their life cycles in the system of neoliberal capital— that most recent pattern of oppressive structures and relations being woven across the tapestry that tangles our fates.

The wholesale energy market exacerbates the tendency towards uneven development within the tapestry of oppression by making energy saving techniques carried out within the home mutually beneficial to electricity distributors and consumers. The ability to reduce electricity consumption— at least during certain hours of the day— becomes a market in and of itself that is supported by electricity distributors.
For example, energy distributors such as Pacific Gas and Electric and Portland General Electric have created incentive programs to increase energy savings within households in their distribution network. While on the surface these incentives appear to be potential points of disruption to the fossil economy, in actuality they represent an alliance between energy distributors and wealthy home owners who work in tandem to shift the burden of the accumulation by dispossession carried out by energy producers onto poorer and disproportionately Black households. The accessibility of energy efficient appliances and energy saving techniques operate on the color-line. Black folk in the U.S. are more likely to rent their homes, to be rent stressed, and live in fuel poverty. The material conditions of Black life prevent Black folk from accessing the energy saving techniques that are available to consumers, such as energy efficient refrigerators, modern insulation, and energy efficient heating and air conditioning. For example, renters in the U.S., which is disproportionately made of Black folks, are unable to implement many energy saving techniques—such as insulation, and energy efficient heating and air conditioning—because the choice to make such improvements is typically only accessible to homeowners, investment property owners and landlords. Beyond accessibility, the incentive structure of these types of home ‘upgrades,’ are generally expected in the long-term savings over years and decades; a cost-savings timeline which is not applicable to renters whose housing security is far more precarious (even if renters did purchase an energy efficient refrigerator, their rent may increase prohibitively in the coming months, making the investment in an energy efficient appliance more of a nuisance than a benefit.). Further, using these amenities works to alleviate the cost of electricity, which disproportionately benefits White households. Similar to the White Fight of the second industrial revolution,
energy saving techniques are an opiate of the White middle class, one that works to alleviate the cost of energy consumption by further tangling the threads within the tapestry of oppression.

An important condition of these relationships, one that is unique to the neoliberal epoch of the fossil economy, is the apparent color-blindness of environmental sustainability. Household energy saving techniques that are supported by energy distributors, and many other markets as well, are touted as environmentally sustainable and are a central part of strategic climate mitigation planning. Nonetheless, these narratives are also part of a hegemonic discourse of color-blindness that masks the reality of racial oppression in the United States. Here, again, instead of walking a path that heals the planet and unravels the threads of Black expropriation, the White middle class is being coerced into an alliance with an industry that perpetuates uneven development throughout the fossil economy.

The development of neoliberalism in the United States coincided with the rise of the carceral state. In his book, *Incarcerating the crisis: Freedom struggles and the rise of the neoliberal state*, Jordan T. Camp argues that the carceral state emerged by creating racial enemies out of those resisting neoliberal efforts to restructure the economy. Specifically, Camp contends that the “transformation of the [carceral] state was legitimated in response to the organic crisis of U.S. Jim Crow capitalism, a transition that represented a rupture in a ‘total way of life’ characterized by Fordism’s purportedly high wages, mass production, industrial factories, assembly lines, bureaucratized unions, and mass-based popular culture.” Black folks were disproportionately affected by what Camp calls the ‘crisis of Jim Crow capitalism’.[56] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn56). The various rebellions that spawned from this crisis, including the Harlem Revolt of 1964, the Watts Rebellion of 1965, and the Detroit Rebellion of 1967 germinated grassroots resistance to the tapestry of oppression, inducing class-consciousness. This created a crisis of capitalist hegemony, as the ideological threads that protected the policies underlying racial capitalism began to strain. These rebellions— as rebellions so often do— breached the color-line, as White and Black workers united in resistance to the economic restructuring of neoliberalism. Carceral
policies emerged in response to these rebellions. It was through these new policies and discourses that the capitalist class attempted to recapture its hegemonic influence. Our metaphorical loom—fossil fuels—was fit with a new shuttle—the ideological tenets of colorblind racism and the policies of mass incarceration—to intricately interweave Black folk, Black life, and U.S. understandings of criminality in a way that maintained the tapestry's coherence.[57] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn57). Taken together these changes culminated in the current wave of mass incarceration, a phenomena which represents the neoliberal state's political and economic response to the rebellions of Black folk.

The political upshot of all this is that mass incarceration has effectively restructured the color-line in the United States. People of color are confronted by the police, charged with crimes, and incarcerated at disproportionately higher rates than Whites within the U.S. carceral state49. This has occurred against the backdrop of color-blind racism, and it is through the use of color-blind rhetoric that the racialized outcomes of carceral policy have come to be viewed as essential to maintenance of 'law and order' in the U.S.—which further disguises the raced palette of mass incarceration. Simply put, the color-line has been established around a coded language of race, which helps to legitimate piezas de indias through incarceration. Further, this process has also helped efforts to reorganize the fossil economy, making its machinery more suitable for weaving together the social and cultural structures of modernity into the totality that is the tapestry of oppression.

In a forthcoming study, we have found that mass incarceration significantly increases carbon emissions from industrial production. While on the surface the relationship between mass incarceration and climate change appears disparate, the interconnected threads of the tapestry of oppression reveal a direct relationship between mass incarceration and the fossil economy. This relationship is an artefact of the prison industrial complex, which represents a collection of political, bureaucratic, and economic interests that benefit from mass imprisonment. Economically, the prison industrial complex profits from industrial development that is interconnected with mass incarceration. Specifically, since 1980 more than 1,000 prisons have been
constructed in the U.S[58] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn58). The construction and maintenance of prisons have become a source of revenue for over 3,000 private U.S. corporations. These companies are funded through government contracts, which provide an avenue for industrial expansion. Sociologist Natalie Deckard, argues that mass incarceration works as a “locus for the coercion of demand and consumption”, compelling those who would otherwise marginally participate in markets to become active consumers[59] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_edn59). Moreover, the prison industrial complex has effectively enacted policies that allow the state and private entities to profit from incarcerated labor. Prison work programs, such as the U.S. government owned corporation Unicor, pay prisoners as little as a dollar an hour for industrial labor, which helps to expand industrial development by reducing the cost of labor. Further, Unicor has a monopoly on government contracts for textile production. Fascinating here, is the reality that black enslavement is yet again being used to support the textile industry, bringing us full circle.

While the fossil economy did not encourage mass incarceration, it has benefited from mass imprisonment through the prison industrial complex. In its current state, mass incarceration, which is nothing more than a modern form of enslavement, is woven into the tapestry of oppression through the use of hegemonic ideology and policy—though, yet again, it is only the use of fossil fuels that has made such complex weaving possible. The economic crisis of the 1970s, which disrupted the structure of the fossil economy that was developed during the second industrial revolution, produced mass unrest. Neoliberal policies are a response to this unrest, which seek to further entrench Black folk into the tapestry of oppression through coerced demand and consumption. The seemingly ever-expanding carceral state creates a cycle of coerced production and consumption. Incarcerated people simultaneously consume and produce industrial goods, which benefits a small number of entities within the prison industrial complex.
CONCLUSION

Black folk have been at the center of the fossil economy since its inception. At each moment of change within the tapestry of oppression, when the threads hang loose and are in need of mending, the opportunity for organized resistance has been squandered by the shuttles of white hegemony; reconstruction following the civil war, mass migration fueled by emerging industries, civil unrest after the economic crisis of the 1970s. All of these moments are defined by primitive accumulation-- by piezas de indias. The emerging renewable energy economy once again presents us with an opportunity to resist the tapestry of oppression. However, the interlocking threads of the tapestry must be opposed if renewables are going to be effective at alleviating oppression. Such resistance requires that we craft new shuttles-- by introducing policies that serve as a redress to past forms of expropriation-- while simultaneously constructing a new loom-- one energized not by the death embodied in the carbonaceous form of fossil fuels, but by the productive, immediate, and life giving (if also fleeting) power of our Sun. Such dramatic changes require purposeful, community-based action, as the inertia of the historical forces described here is formidable. Consider a recent study published in the journal Nature Energy[60] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20Climate%20Justice.docx#_edn60), which finds that the expansion of renewable energy consumption disproportionately burdens Black households in the southwestern United States with higher energy bills, demonstrating the long-term effects of Black expropriation within the tapestry of oppression. The expropriation of Black folk is so deeply woven into the tapestry of oppression that pulling on a loose thread without considering the structure of the whole risks disproportionately unraveling the tapestry, which has been carefully woven by way of racialized policy implementation and fossil fuel-based technologies. Combating climate change requires more than simply opposing the fossil economy; we must resist the oppression that fossil fuels have facilitated for over 100 years. The question is: will we seize this moment and unite to carefully unravel this tapestry, weaving it anew into something more just and sustainable, or will we yet again squander an opportunity for healing in favor of further entangling the threads that constitute the tapestry of oppression?
John Kay’s 1733 Patent for the “New Engine or machine for Opening and Dressing Wool”. This patent introduced the “flying shuttle” to the loom. The introduction of the shuttle allowed looms to be operated by a single laborer, and made loom production fast and efficient enough to facilitate its role in the industrial revolution. https://www.britannica.com/biography/John-Kay (https://www.britannica.com/biography/John-Kay)

NOTES


[9] Beckert, Sven. "Emancipation and empire: Reconstructing the


[12] (file:///C:/Users/hampt/Downloads/Racial%20Justice%20is%20Climate%20Justice.docx#_ednref12) The southern bourgeoisie should be contrasted with their industrial counterparts in the northern U.S., specifically due to their use of enslavement wage labor to derive surplus.


[17] One should also not forget that it was the rift in soil metabolism between plantation and town that made the sugar trade a volatile market in need of economic restructuring.


[22] Economics 323-2: Economic History of the United States Since 1865
http://faculty.wcas.northwestern.edu/~jmokyr/Graphs-and-Tables.PDF


[34] Lowndes, Joseph E. From the new deal to the new right: Race and the southern origins of modern conservatism. Yale University Press, 2008.


[41] Macintyre, S., Ellaway, A., & Cummins, S. Place effects on health: How can we conceptualise, operationalise and measure them? Social Science & Medicine, 55(1), 125-139.


[52]  
(See http://www.pgecorp.com/corp_responsibility/reports/2017/cu02_cee.html)

[53]  
(See https://www.portlandgeneral.com/residential/energy-savings/special-offers-incentives)

[54]  
According to a 1981 modification of the Urban Development Act of 1969, rent stressed, or burdened, households are those paying more than 30% of their income on housing. As of 2015, 24% of Black households in the U.S were bearing such a burden, while 20% of White households were. The numbers highlight the disparity more clearly when looking at households that experience a severe rent burden- defined as spending more than 50% of income on housing. In 2015 23% of Black U.S. households were severely burdened, compared to 13% of White U.S. households.  

[55]  
(“Fuel poverty, is often defined as a situation where low-income households are not able to adequately provide basic energy services in their homes and for their transport at affordable cost”   
What Camp cites as ‘Jim Crow Capitalism’ encompass the economic restructuring of the second industrial revolution.


struggle (/read/tag/struggle), industry (/read/tag/industry), industrial
(/read/tag/industrial), revolution (/read/tag/revolution), racial capitalism
(/read/tag/racial+capitalism), king cotton (/read/tag/king+cotton), radical
(/read/tag/radical), tradition (/read/tag/tradition), social reproduction
(/read/tag/social+reproduction), jim crow (/read/tag/jim+crow), us
(/read/tag/us), united states (/read/tag/united+states), fordism
(/read/tag/fordism), taylorism (/read/tag/taylorism), white flight
(/read/tag/white+flight), systemic racism (/read/tag/systemic+racism), white
supremacy (/read/tag/white+supremacy), neoliberalism
(/read/tag/neoliberalism), mass incarceration (/read/tag/mass+incarceration),
gentrification (/read/tag/gentrification), environment
(/read/tag/environment), environmentalism (/read/tag/environmentalism)