



Crude power: a genealogy of criminogenic state-corporate-industry symbiosis

Anamika Twyman-Ghoshal¹

Received: 19 January 2026 / Accepted: 5 June 2026
© The Author(s) 2026

Abstract

The function of government is broadly seen as an agent to control crime (Garland 1996). However, critical scholars have identified that the government's crime control role is ambiguous, suggesting that the state and large corporations are interpenetrated (Kramer 2020; Tombs 2012; White 2018b). This paper examines the emergence of the United States Federal government and private oil industry relationship using a re-rendered two-stage genealogical inquiry method. The analysis shows the development of a complex yet largely symbiotic association of continuities, recurrences, and changes over the past century. The relationship makes clear that the largely unfettered dominance of power elites has functioned through the bulwark of the public and private sectors, continuing a colonial ontological praxis which devalues nature, human, and non-human life. The result of this particular state-corporate-industry symbiosis has been to normalize criminogenic dynamics, embed a petroleum fuelled global economy, and precipitate the climate crisis and related Earth system damage.

Keywords State-corporate crime · Power elite · Capitalocene · Petroleum · Climate crisis · Genealogy

Introduction

The assumption that the government functions to control crime and harm is increasingly and more visibly contested. Over the past few decades, critical scholars have identified instances where the state and large corporations act in symbiosis, including in the ongoing extraction of fossil fuels and the denial of the climate crisis (Gar-

✉ Anamika Twyman-Ghoshal
Anamika.Twyman-Ghoshal@brunel.ac.uk

¹ Social and Political Sciences Department, Brunel University of London, Marie Jahoda Building, UB83PH Uxbridge, London, United Kingdom

land 1996; Kramer 2020; Oreskes and Conway 2010; Tombs 2012; White 2018a). In response to Tombs (2012) call for an examination of “the theoretical totality of the state-corporate relation” (p.176), this paper examines the historical development of the relationship between the United States (US) Federal government and private oil industry. The research used a re-rendered genealogical approach to understand the process that brought us to the precarious environmental present. Research has shown that the US government has not only failed in its function to inhibit the harmful behaviour of the private oil industry but has actively encouraged fossil fuel extraction despite the climate crisis being attributed to rising greenhouse gas (GHG) emissions (Kramer 2020). It is argued here that the US government’s close relationship with the US oil industry has been a critical factor in shaping the fossil fuel dependent global economy. The paper helps contextualize recent developments in the US, showing that the actions of the US Federal government under the Trump administration, which has brazenly exhibited its support for the fossil fuel industry, dismantled the Environmental Protection Agency, and rolled back environmental regulations, have not occurred in a vacuum (Noor 2026).

Since 2015, the world has experienced the hottest decade in the 176-year observational record (WMO 2026). The warmest recorded year since 1850 was 2024, when global surface temperatures increased more than 1.5 °C above the preindustrial averages, with 2025 ranking as the third warmest on record (WMO 2026). The changing climate is making Earth increasingly unsafe for humanity and other species (Gupta et al. 2023). The increase of 1 °C in global warming is estimated to have already affected around 9% of the global population, that is around 600 million people in terms of mortality, morbidity, geographical adaptation, and displacement (Lenton et al. 2023). It is predicted that global temperatures will continue to increase and are estimated to rise 2.7 °C by 2100 (UNEP 2023).

Global warming is caused by unrestricted emission of greenhouse gases that have concentrated in the atmosphere. The primary sources of GHG emissions are from burning fossil fuels, including oil, coal, and natural gas and through unsustainable land use such as industrial agriculture, factory farming, land clearance, and deforestation (Filonchik et al. 2024; Lamb et al. 2021). The levels of GHG in the atmosphere today have substantially increased since the preindustrial period. Carbon dioxide levels in 1750 are estimated to have been between 278 parts per million; in 2022 they were recorded at over 422.45 parts per million (Friedlingstein et al. 2024).

The current geological period has been named the ‘Anthropocene’ because it has been dominated by human actions which have disrupted the Earth’s integrated system i.e. the physical, chemical, and biological processes that interact to create an integrated system of land, ocean, atmosphere, and geographic poles (Crutzen 2006; Steffen et al. 2015). During the Anthropocene, the Earth’s integrated system has experienced unprecedented pressures that have interfered with Earth’s metabolism. Rockström et al. (2024) list nine key processes that interfere with Earth System stability. By 2023, six of these exceeded their safe planetary boundary limits – that is, the threshold within which life on Earth can continue to thrive. These include climate change, biosphere integrity (through biodiversity loss), biogeochemical flows, land-system change, environmental pollutants due to novel entities (i.e. human made substances such as plastics), and freshwater change (Steffen et al. 2020; Persson et

al. 2022). The impact of crossing the safe planetary boundaries of the key Earth system processes is predicted to cause “widespread severe existential or irreversible negative impacts on countries, communities, and individuals ... such as loss of lives, livelihoods or incomes; displacement; loss of food, water or nutritional security; and chronic disease, injury or malnutrition” (Gupta et al. 2023, p.637).

The term ‘Anthropocene’ is more than a geological descriptor, it implies that the environmental problems of the modern world are caused by all humanity, failing to reveal the specific human factor responsible for creating a global system responsible for the climate crisis: rampant and unfettered capitalism (Moore 2017; White 2018a). Moore (2017) has used the term ‘Capitalocene’ instead, to more precisely capture the dominance of the structures of advanced capitalism that are responsible for the ecological crisis, particularly fossil capitalism (Malm 2016).

Between 1751 and 2010, two thirds of all carbon dioxide and methane emissions were generated by 83 oil, gas, and coal producers and 7 cement manufacturers (Heede 2014). More recent data from 2023 has shown that emissions from oil production have continued to increase (Carbon Majors 2025). Of the 90 high emitters, fourteen investor-owned and state-owned companies have been identified as key entities causing the climate crisis¹ (Ekwurzel et al. 2017). The overproduction of carbon dioxide by these companies has resulted in an increase in the global mean surface temperature, a rise in global sea levels, and the acidification of the ocean (Licker et al. 2019). Petroleum is responsible for a quarter of global GHG emissions (Rowlands 2000). Although the investor-owned oil industry is not the sole climate aggressor, it carries a particularly large and unique part of the responsibility for driving global warming (Kramer 2020; Buell 2012). More than half of all emissions produced by private petroleum companies were produced after 1986, when the climate risks of GHG emissions were already well established (Ekwurzel et al. 2017). Moreover, in an analysis of the role of 28 large publicly traded corporations in the climate crisis discourse, oil companies have been particularly obstructionist with the aim of derailing efforts to reduce emissions; this despite simultaneously engaging in global warming research (Mulvey and Shulman 2015).

The private oil industry is dominated by five independent corporations (BP, Chevron, ConocoPhillips, ExxonMobil, and Shell) that together are responsible for the largest part of emissions; these companies also have significant leverage over the political economy and have been a key obstruction to climate regulation (Frumhoff et al. 2015; Rowlands 2000; Carbon Majors 2025). Of these five companies, three (BP, Chevron, and ExxonMobil) are descendants of one entity: Standard Oil Company (SOC). The harmful actions of these powerful corporations have not occurred in a vacuum; governments have largely failed to regulate or control their deviant corporate behaviours. White (2018b) has suggested that the damage to the ecosystem through climate and other environmental change has been facilitated by the interpenetration of corporate and state power which has enabled corporations to become ruthless and predatory. Tombs (2012) has gone further, describing the relationship between the capitalistic state and large corporations as symbiotic. The paper begins

¹ Chevron, ExxonMobil, BP, Royal Dutch Shell, Conoco Phillips, Peabody Energy, Total, Saudi Aramco, Gazprom, National Iranian, Pemex, Petroleos de Venezuela, Coal India, and Kuwait Petroleum.

by explaining the re-rendered genealogical inquiry method used to examine the emergence of the relationship between the US Federal government and the private oil industry. The paper is then divided into two sections, the first problematizes the present, outlining the diagnosis of the state-corporate responsibility for climate crimes. The second traces the emergence of this problem by mapping the relationship of the US government and the US oil industry, vacillating between performative crime-control, crime-facilitation, harm-facilitation, and harm-initiation.

A genealogy of state-corporate symbiosis

The approach used to examine the development of this particular state-corporate relationship is rooted in historical criminology, specifically starting with a problem in the current time, to trace a “history of the present” (Garland 2014; Lawrence 2019). Garland translated Foucault’s (1977; 1984) genealogical work for historical criminological analysis as “a method of writing a critical history: a way of using historical materials to bring about a revaluing of values in the present day” (p.372). This paper re-renders Foucault’s agenda of anatomizing hegemonic ‘truth’ claims of our world (Bevir 2008; Kretsedemas 2017) to a focus on tracing the descent and emergence of our current predicament.

Drawing on Nietzsche’s work, Saar (2008) explains that a “genealogy is history differently practiced” (p.297); one which examines the dynamics as well as the effects of power that have constituted our present. A genealogy seeks to “problematize concepts by showing what we took to be ahistorical has a past” (Carlson 2019). It is an “ontology of the present” (Dean 1994, p.50) practiced through a social and political mapping that reveals the relationship between institutions and powers (Deleuze 1992). In this article, Garland’s approach is adapted into a two-stage framework: starting with a preliminary *diagnosis* of a problem situated in the present, followed by an account of the process of its *emergence*.

The *diagnosis* is the defining stage that entails identifying the current condition based on observations of a contemporary phenomenon; it is a problematization of what is taken for granted. This problematization disrupts what is assumed to be the ‘truth’ (Freire 1972). This first stage is guided by the questions “what is happening now?” and “what is this now within which all of us find ourselves?” (Tamboukou 1999, p.202). Although a genealogy is always historical, what distinguishes it from a conventional history is that it has an intent to reveal what is hidden, which is articulated through the *diagnosis* (Bevir 2008; Garland 2014). In the *diagnosis* section, academic literature is reviewed to outline the problem of the criminogenic causes of the climate emergency, specifically looking at the responsibility of the state and examining its relationship with corporations.

The second stage examines the process that led to the *emergence* (or ‘entstehung’) of the phenomenon, exploring “possible ways of thinking differently, instead of accepting and legitimating what are already the ‘truths’ of our world. The aim is to provide a counter-memory that will help subjects recreate the historical and practical conditions of their present existence” (Tamboukou 1999, p.203). This is done by examining the continuities, changes, and historical recurrences in the *emergence* of

the phenomenon (Lawrence 2019). Historical criminology is imbued with critical, reforming, and redemptive impulses (Channing, Churchill and Yeomans 2023); genealogies more specifically demythologise the systems that have produced our dangerous present, allowing for emancipation and transformation (Tamboukou 1999). This approach is therefore particularly well suited to respond to Kramer's (2020) call for criminologists to examine "the social injustices that organisations produce or tolerate, confront the abuses of powerful officials, and analyse how political and economic system cause destruction, devastation, and untold suffering" (p.1). In this paper the focus is on the relationship between the US Federal government and the private oil corporation, looking specifically at the *emergence* of the power symbiosis and its normalization.

Garland (2014) explains that.

"Genealogical analysis traces how contemporary practices and institutions emerged out of specific struggles, conflicts, alliances, and exercises of power, many of which are nowadays forgotten. It thereby enables the genealogist to suggest – not by means of normative argument but instead by presenting a series of troublesome associations and lineages – that institutions and practices we value and take for granted today are actually more problematic or more "dangerous" than they otherwise appear." (p.372).

In this analysis the "struggles, conflicts, alliances, and exercises of power" are a particular focus, examining the accumulation of power of the private owned US petroleum industry, i.e., Big Oil. The relations of power and their interactions, associations, and lineages are traced over time as they changed and developed, to understand how the sequence of events resulted in what Moore (2017) calls the Capitalocene and the climate crisis. The historico-critical analysis employed draws on a variety of interdisciplinary academic literature and investigative journalism to develop a "counter-memory" (Foucault 1980). The inquiry is particularly sensitive to the complicated "play of dominations" (Foucault 1984, p. 83) between the state and the private sector. To illustrate the "play of dominations" the process uses a diagrammatic tool to map the shifts over time in the state-corporate-industry relationship (Deleuze 1992).

Diagnosis: state-corporate responsibility for climate crimes

Green criminology emerged in 1990 to understand the harm caused to ecosystems, victimising humans and animals (Lynch and Long 2022; Goyes 2019). The field is an extension of critical criminology, employing a zemiological lens (Potter 2010). Zemiology looks beyond the legalistic construction of the concept of 'crime' to capture an array of wilful social harms, akin to what Passas (2005) has called "lawful but awful" practices that do not entail lawbreaking. Within green criminology, examining climate change as a crime/harm was first discussed by Lynch and Stretesky in 2010, with White and Kramer making the case for defining climate change as crime in 2015.

“Given the mountain of scientific evidence documenting a hotter planet, climate devastation, and the resulting disruption and ecocide ... the continuing extraction, marketing, and burning of fossil fuels – which leads to GHG emissions that produce ecological and social disorganization and destruction- are morally blameworthy harms that deserve to be labelled as climate crimes” (Kramer 2020:44).

The global impact of climate crimes has included calls for adding a fifth international crime to hold organisations accountable for the damage and destruction of ecosystems - the crime of ecocide (White 2018b; White and Kramer 2015). Recent research has made it clear that “the corporation – the mechanism that capitalism uses to reproduce itself – was designed in a way that virtually guarantees ecocide” (Whyte 2020:4) and therefore represents an existential threat to humanity. Despite having the knowledge, technology, funding, and capacity to alleviate the effects of GHG emissions, powerful entities, including international organisations, governments, and corporations, have failed to produce the needed change (Frumhoff et al. 2015; Goldberg et al. 2020; UNEP 2023).

The US has contributed the largest share of GHG emission per person per year, even in comparison to more recent highly polluting countries such as India and China (Friedlingstein et al. 2024; Urry 2011). Despite carrying the largest share of the responsibility for the climate emergency, US oil corporations have not been limited by US Federal regulations, instead Big Oil has increased emissions and engaged in dangerous methods of extraction (Kramer 2020). Critical criminologists, particularly those focused on green criminology, have apportioned responsibility for unabated GHG emissions to climate aggressors. These powerful actors have continued extraction despite knowing about the harmful environmental effects, whilst also actively denying the existence of the climate crisis (White 2018a; Kramer 2020; Lynch et al. 2013; Holley and Shearing 2017).

In 1976, Frank Pearce introduced the term ‘crimes of the powerful’ to capture the “shifting relations between states and corporations under neoliberalism” (Bradshaw 2018:157). Pearce (1976) recognised that despite the state being made up of multiple institutions (including government, judiciary, executive, and army), it is dedicated, as a whole, to creating a favourable environment for capitalism. The state creates the “illusion of neutrality, impartiality, and plurality... sustaining this through implementation of basic safeguards for individual human rights, baseline welfare and educational provision, democratic elections and environmental protection” (White and Kramer 2015, p.385). This illusion helps obscure that the state and the market are tightly entangled, where such acts are primarily symbolic gestures (Bradshaw 2018; Lynes, Treadwell and Bavin 2024).

The state-corporate nexus is not aberrant; Friedrichs (2012) has argued that most crimes of the powerful involve some level of implicit or explicit cooperation between the state and corporations. Ultimately the state is a *capitalist* actor which plays “a much more general role in reproducing the social conditions necessary to sustain a capitalist social order” (Tombs 2012:173). Notably, states created the fiction of the *corporation*, making it a legal entity with artificial personhood and citizenship that empowered it with protections superior to those afforded to real citizens (McLean

2004; Whyte 2018). Unlike natural citizenship which implies a reciprocal relationship of rights and responsibilities, corporate citizenship “has access to significantly enhanced forms of rights and is expected to bear significantly diminished responsibilities” (Whyte 2018, p.966). The list of enhanced rights of corporations includes limited liability by shareholders for corporate harms, reduced taxation, corporate bailouts, and privileged access to politics, policy, and law (Whyte 2018). Whyte (2014) has called these privileges ‘regimes of permission’ that authorize corporate deviance and grievous social harms making the business organization, especially large multinational ones, inherently criminogenic.

In 1990, Kramer and Michalowski introduced the term state-corporate crime to capture the inter-organisational mechanisms between the private and public sector that cause serious social harm (Kramer, Michalowski and Kauzlarich 2002). Kramer (2020) subsequently documented that although fossil fuel companies have produced the greatest share of the GHG emissions, they have been aided in this process by states (see also Frumhoff et al. 2015). The state-corporate nexus illustrates how crimes by corporations can be facilitated (through failure to regulate) or initiated (through direct action) by the government. Bradshaw (2015) expands on the nexus between state and corporations by including ‘industry’ as a level of analysis. Industries are groups of corporations that share the same economic activities, united in the branch of processing or manufacturing. Adding industry captures the role of the state in facilitating or initiating criminogenic organizational formations beyond the singular notion of the corporation. The criminogenic tendencies of industries have been demonstrated across pharmaceuticals, tobacco, pesticides, gambling, food, and energy (Atilas and Rojas-Páez 2022; Atilas and Whyte 2025; Bradshaw 2015; Passas and Goodwin 2010).

At the core of the state-corporate-industry nexus is a network of elites that have the power to cause serious social harms, whilst also being immune from criminalization and prosecution (Kramer 2013; Lynch et al. 2013). These are what Mills (1956) termed the ‘power elite’, dominant and influential individuals who occupy leadership positions (Lynes, Treadwell and Bavin 2024). The power elite are composed of the “investor class and their political allies, [who] continue to exert a disproportionate influence over the content and application of the law” (Kramer, Michalowski and Kauzlarich 2002:267) to create, maintain, and protect the market. These networks of individuals in private and public sectors engage in more and less overt forms of corruption in the architecture of power (Chipkin et al. 2018; Goldstein and Drybread 2022; Hertel-Fernandez 2019; Whyte 2014). The power elite are the ultimate beneficiaries of capitalism; each of today’s 2,640 billionaires is connected to corporate interests (Lynes, Treadwell and Bavin 2024). Deviance occurs through both cooperation and competition of those in the elite network, which rests on “an epistemology and an ideology of a society explicitly in their own interest” (Kauzlarich, Mullins and Matthews 2003, p.242). The network is enabled by ‘revolving doors’, where individuals move between the public and private sector, creating an enduring symbiosis between economic and political decisions which has ultimately resulted in climate destruction (Pons-Hernández 2022).

The symbiotic relationship of the state with large corporations and entire industries, as enabled by power elites, has had a direct impact on the conditions of life on

earth, particularly due to the damaging behaviours and actions of ‘dirty’ industries (White 2018a). These industries are stimulated by what Hamilton (2003) has called a ‘growth fetishism’ which is driven by unsustainable consumption and the treadmill of production that underlies unfettered capitalism (Fussey and South 2012; Kramer 2013; 2020; Lynch and Long 2022; Lynch, Fegadel and Long 2022; White 2018a; Ruggiero and South 2013). Growth fetishism is encouraged by the dominant global economic model—the free market—which encourages individualism, wealth accumulation, and normalizes relentless consumerism and consumption (Michalowski 2010). When the goal of growth is blocked it creates criminogenic asymmetries, i.e., “the impetus for harmful behaviours by corporate and state actors” (Twyman-Ghoshal 2021b:413; see also Passas 2000).

The free market was mainstreamed by the Reagan and Thatcher governments in the 1980s, drawing on a neoliberal ideology favourable to extending the role of the market and curtailing the power of the government in managing the economy (Backhouse 2005). Limiting state interference was seen as essential to increase market efficiency and reduce government policies that maximised social support and welfare (Backhouse 2005). These ideas, known as the Washington Consensus, were advanced across think tanks, universities, and international organizations, creating an illusion that there was agreement that this economic model was the most beneficial (Williamson 2009). The aim of laws was reduced to regulating individual interactions, rather than the outcomes of actions (Ruggiero and South 2013). Fundamentally, neoliberal ideology repurposed a colonial ontological praxis which devalued nature, labour, and energy. Critical goods and services were labelled as *cheap*, therefore produced for their *exchange* value rather than their *use* value (Moore 2017; White 2018a). The resulting commodification of everything has had a profound influence on criminogenesis, effectively creating a global form of anomie (Passas 2000). This is most evident when the aspirations of ruling elites are restrained, i.e., when the free market promise of unfettered growth and market freedom is impacted, by the law or due to concerns over human rights. Responses involve innovative adaptations that “rationalize harmful actions as being in the national interest” (Twyman-Ghoshal 2021b:414).

Capitalism and its most recent form, the free market, did not emerge in a vacuum, the origins are found in colonialism, imperialism, and militarism. Colonialism has shaped human imaginaries, positioning humans at the apex of the Earth System (Ramcilovic-Suominen 2025). This denigration of nature, coupled with the colonial constructions of race and gender, has served to label entire populations and environments as ‘cheap’ and open to domination, appropriation, and exploitation (Moore 2017). Capitalism is therefore not just an economic system, it is also a social system that has subsumed colonial race, gender, and ecological attitudes (Ramcilovic-Suominen 2025; Venn 2009). The globalized free market remains a dual economy, where “uneven and unequal conditions of development can often mask the ubiquitous, underlying factors of persistent poverty and malnutrition, caste and racial justice, the hidden injuries of class, the exploitation of women’s labour, and the victimization of minorities and refugees” (Bhaba 2004:xii). This masking includes the devastating impacts of the climate crisis on vulnerable populations in the Global South (Ngcamu 2023).

The most recent colonial project, European imperialism, was driven by a growth mentality, with an imperative for physical expansion and limitless extraction, production, and consumption (Hickel 2020). The history of colonial state crimes and colonial governmentality, include not only genocides but also ecocides (Brown 2018). The domination, exploitation, and cultural erasure of colonialism occurred in tandem with unscrupulous natural resource extraction (Crook, Short, and South 2018; Goyes 2019). As colonized peoples fought for sovereignty and established independent nations, the end of formal colonialism created a boom in new markets for European capitalists who struggled with domestic oversaturation (Colburn 2021). Colonial and imperial social arrangements changed only in name, the unequal structures remained and became further entrenched, where deviant practices of powerful core nations (former colonizers) exerted economic and political influence and pressure on periphery and semi-periphery countries (particularly former colonies but also over countries that had not been colonized) (Wallerstein 2004). Post-independence the colonial hierarchies did not disappear; they were replaced with domination by the domestic power elite (Fanon 1961/2004).

Nkrumah (1965) described these repurposed colonial relations that maintained economic, political, and social exploitation as neocolonialism. Goyes (2023) defines neocolonialism as *de facto* occupation via land grabs and colonial ways of interacting with nature that occur after a country gained independence. Indirect control of nations takes the form of economic and political manipulation, including in the rampant and largely uncontrolled exploitation of ecosystems, animals, and populations (Goyes 2023). Neocolonialism is intensified by power elites who continue to benefit from a disproportionate level of power and influence over the shape and nature of laws and the direction of global politics (Chomsky 2003; Coleman 1985).

In summary, critical scholarship has identified that at the root of the ecological crisis are power elites that have shaped the nature of the modern global economy through their dispersed roles in corporations, industries, and governments, creating a symbiosis that has enabled climate crimes. Indeed, the dominant global political economic model of our time, the 'free' market, regards environmental harm as a negligible externality and situates the planet as a commodity "given to those who are most capable of exploiting it" (Ruggiero and South 2013:13). In effect, power elites have promoted, enabled, and benefited from the growth mantra of free market capitalism, making them key agents of the Capitalocene (Holley and Shearing 2017; Moore 2017). This is particularly true for Big Oil, where recent actions have shown that "the state consistently strives to maintain the status quo of oil industry development in the face of catastrophic climate change" (Bradshaw 2018:160). In the next section, the process that has led to this present is examined, where serious ecological harm has become normalized and accepted as an inalterable outcome.

Emergence: the criminogenic ‘standard’ oil economy

The first human-controlled energy source that moved consumption away from renewable sources, such as wood and peat, was coal (Mitchell 2009). Coal² fuelled the expansion of European empires and the associated colonial crimes across territories in Africa, Asia, and West Asia (i.e. ‘Middle East’) (Pobodnik 2006; Finkelman, Wolfe, and Hendryx 2021). The transition from coal to oil began in 1880, with the invention of the internal combustion engine. Petroleum was light and fluid, allowing it to be shipped across oceans with less effort, reducing the leverage of domestic workers and government regulations on energy production (Mitchell 2009). Although petroleum was first used in China and West Asia, the modern economy as fuelled by oil has its beginnings in the US.

Crude ambitions: growth of the US oil industry

In the late 19th century, crude oil extraction became the symbol of US-American individualism and expansion (Buell 2012). This included John D. Rockefeller’s Ohio based Standard Oil Company (SOC), founded in 1870. Within a decade, SOC grew and monopolized the oil industry across the US through acquisition and elimination of competitors (Lamoreaux 2019). In addition, SOC cartelized the oil industry by controlling prices and supply with other market participants, including rail operators (such as Reading Railroad, Jersey Central Railroad, St Paul Railroad) (Tarbell 1904). In exchange for fixed transport rates, train companies received a share of the profits from the oil produced by SOC (Granitz and Klein 1996). The result for SOC was an increased market share, from 4% in 1870, to over 80% in 1880 (Boudreaux and Folsom 1999). The growth of SOC was further facilitated by Ford Motor Company’s mass production of Model T cars which made cars affordable. The number of cars on the road grew from 8000 in 1900 to 9.2 million in 1920, stimulating increased consumption of petroleum (Juhasz 2009). SOC became the largest and most profitable company in the world, with two-thirds of global oil supplies originating in the US (Angus 2016). The actions of SOC in these few decades had a dramatic effect on US market relations, shifting support from small businesses to fomenting the dominance of large corporations with concentrated power (Angus 2016).

SOC corporate strategy mimicked settler-colonial practices of the time; land seizures, resource theft, economic dominance, and settlement across the American continent (Veracini 2019) (Fig. 1). This was in keeping with President Roosevelt’s belief that it was, “of incalculable importance that America, Australia, and Siberia should pass out of the hands of their red, black, and yellow Aboriginal owners, and become the heritage of the dominant world races” (1889, p.45). This involved the removal of all obstacles to growth, including large scale and systematic dispossession and elimination of Indigenous populations in the name of *Manifest Destiny* (Boggs 2011; Ostler 2019). This white supremacist belief in the exceptionalism and superiority of

²Coal remains the most carbon-intensive of all fossil fuels (Bell and York). Although coal demand has dropped and is being gradually replaced for power generation, there has been a recent resurgence in coal-fired electricity generation.

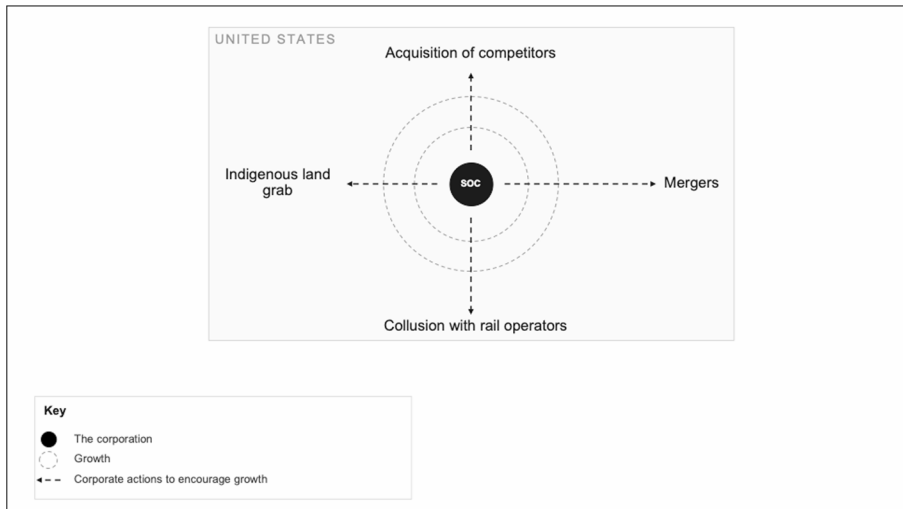


Fig. 1 Growth of Standard Oil Co. (SOC)

the US coined in 1845, remains enshrined in Federal law (Miller 2011). Manifest Destiny provides context for the actions of SOC, justifying settler-colonial territorial expansion across what is now the US, as well as the aggressive pursuit of external geopolitical interests later in its history (Boggs 2011; Miller 2011). For Standard Oil, this translated not only to acquisitions of competitors, but also to lands that belonged to Indigenous populations. This was done within the scope of Federal legislation such as the Dawes Act 1887 and the 1898 Curtis Bill, that enabled US Federal government to take control of tribal territories and dissolve tribal governance rights. US States supported SOC objectives by rewriting treaties “to shift oil-rich land away from tribes” (Juhasz 2009, p.67), illustrating early tendencies of the government to facilitate the corporate interests of white Americans.

The growth of SOC was disrupted by investigative journalism (Fig. 2). In 1881, SOC was the subject of Lloyd’s (1881) exposé listing the consequences of the company’s cartels, stating that “America has the proud satisfaction of having furnished the world with the greatest, wisest, and meanest monopoly known to history” (para 15; see also Priest 2011). In 1904, Ida Tarbell’s book on SOC demonstrated how any impediments to its growth goal were removed through legal, as well as illegal means. Illegal actions included predatory pricing to undercut smaller companies, spying on customers of other oil corporations, intimidating competitors, and conspiring with railway operators for beneficial transport rates. These actions resulted in several investigations and litigation for anti-competitive tactics (Lamoreaux 2019). Moreover, beyond forming an illegal monopoly, SOC had begun a monopolizing trend in other industries (e.g. sugar and whiskey) which also began used collusive practices to remove competition and inflate prices (Moskowitz 2018; Lamoreaux 2019).

Evidence amassed by Tarbell and Lloyd prompted mounting public pressure, resulting in the Federal government passing the Sherman Antitrust Act of 1890, and initiating litigation against SOC (Fig. 3). In 1911, the US Supreme Court held that



Fig. 2 Impediments to the growth of Standard Oil Co. (SOC)

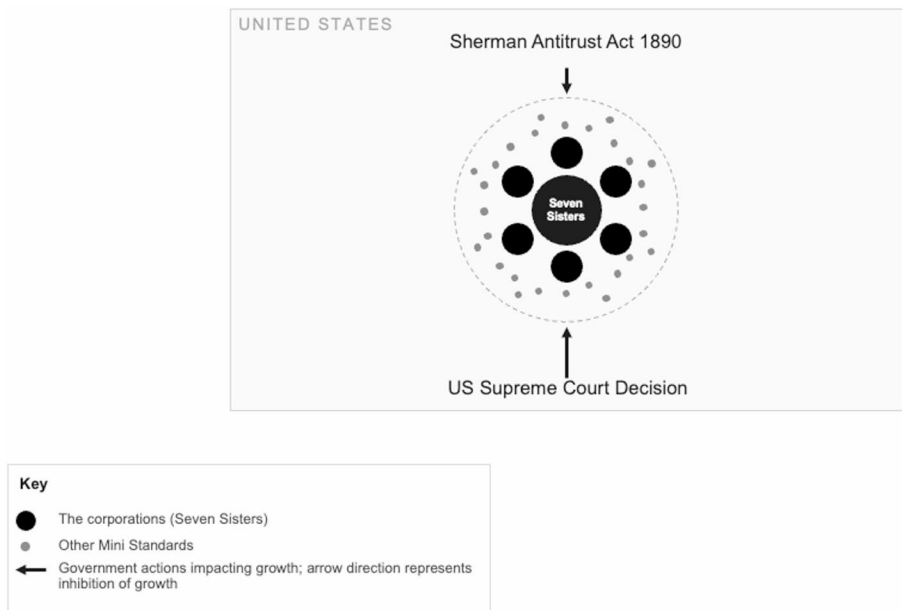


Fig. 3 US Federal government dissolution of Standard Oil Co

SOC was in violation of antitrust law, was anticompetitive, and was determined to constitute a monopoly. As a result of the new law, investigative reports by the US Bureau of Corporations, and associated State lawsuits, SOC was dismantled into 34 separate companies (Fig. 3). These actions were stimulated primarily by election aspirations of politicians and mounting pressure from the growing number of

‘restraint of trade’ lawsuits brought to courts across the US rather than a desire to limit the power of SOC (Sawyer 2019). Through an examination of the Congressional Record and newspaper commentary of the time, Dickinson and Wells (2001) show that the Sherman Act was not intended to actually control monopolies; it was intended to be little more than a façade to pacify public opinion. This was embedded in the Act’s “legislative vagueness and specific judicial interpretation, in the hope of forever snarling effective prosecution” (Dickinson and Wells 2001, p.14).

The break up of SOC was also largely performative, with SOC designing its own dissolution. Rockefeller retained shares in all the newly formed mini-Standard companies, whilst remaining shares were cross owned by other executives from the original SOC (Juhasz 2009). Rockefeller also held a 43% share in the largest of the new companies, Standard Oil of New Jersey (SONJ). Together, the dissolution made him the richest man in the world, with a net worth of 1.5% of US GDP (Nicholas and Fouka 2018). Under the dissolution rules, the mini-Standards were only meant to contract with one another with government supervision and for legitimate reasons. However, this was not enforced; the seven largest mini-Standards created in that breakup,³ known colloquially as the Seven Sisters, began colluding on markets, prices, and on rights to West Asian oil reserves (Juhasz 2009) (Fig. 4). Over time, the mini-Standard companies grew into larger corporations through numerous mergers and by openly defying the obligations under by the dissolution directive (Coleman 1985).



Fig. 4 Growth of the Seven Sisters

³ Standard Oil of Kentucky, Standard Oil of California, Standard Oil of New York, Standard oil of New Jersey, Standard Oil of Indiana, Standard Oil Company Ohio, and the Ohio Oil Company.

In 1914, under the Woodrow Wilson presidency, the US government once again portrayed that it was determined to curtail predatory corporate practices. Wilson ran on a ‘freedom from larger monopolies’ platform and enacted the Clayton Antitrust Act in 1914 to compensate for the weaknesses of the Sherman Antitrust Act (Fig. 5). The new act aimed to prevent harmful mergers and established a prohibition on individuals acting as directors of competitor corporations. That same year, the Federal Trade Commission (FTC) was established as an “instrument of information and publicity” (Votaw 1964, p. 26) on the actions of large corporations, taking over from the US Bureau of Corporations (Lamoreaux 2019). FTC investigations into the dissolution of SOC concluded that the oil monopoly was continuing its anti-competitive practices and recommended more government intervention (Juhasz 2009).

Despite these formal control efforts under the Wilson administration, they remained little more than gestures (Fig. 6). The FTC recommendations were not implemented, instead the US government pivoted to encouraging the expansion of the oil industry under the guise of war necessity with the start of World War 1 (WW1) (Votaw 1964). In 1917, Wilson established the Fuel Administration to forge new alliances between the Federal government and the oil industry – driven by a close partnership with the National Petroleum War Service Committee (Yergin 2012). The National Petroleum War Service Committee, which was chaired by the president on SONJ, ensured that US oil supplied the war in Europe.

This more open display of state support for the oil industry continued with successive ‘pro-business’ US Presidents who openly encouraged the growth strategies of the Seven Sisters (Yergin 2012). The effect was that large, consolidated corporations became normalized in the US, with the Federal government benefiting from a grow-

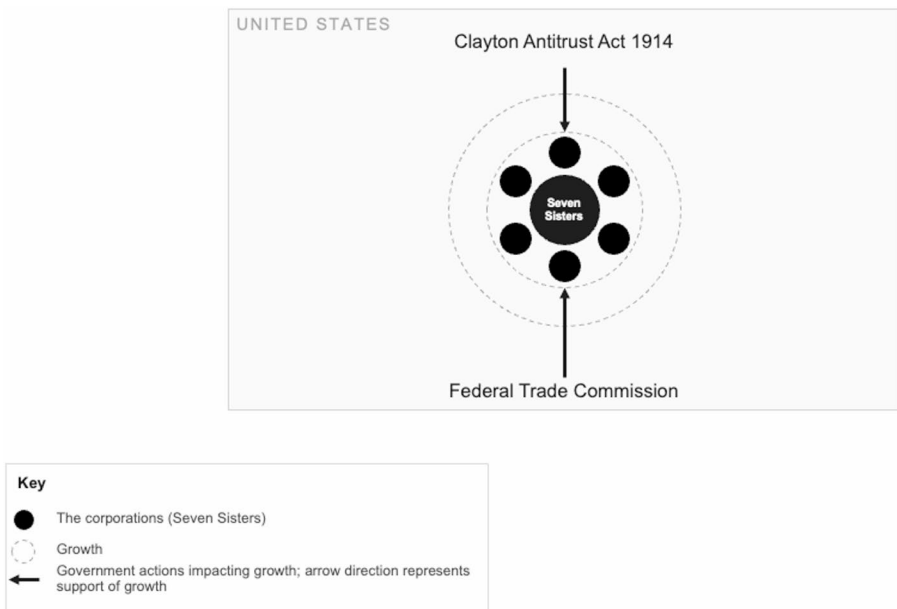


Fig. 5 US Federal government curtailing the growth of the Seven Sisters

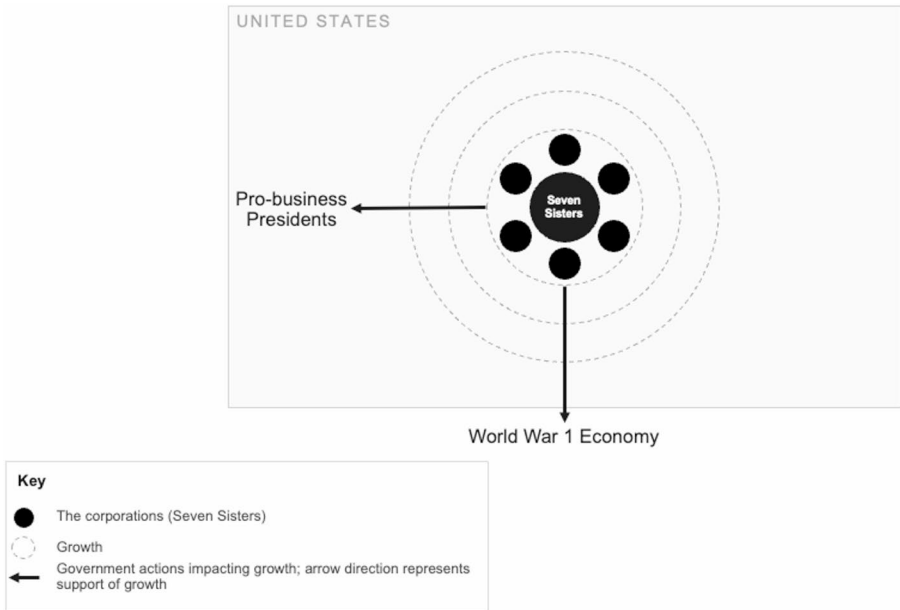


Fig. 6 US Federal government support for the growth of the Seven Sisters

ing GDP achieved due to large corporate profits (Lamoreaux 2019). However, GDP growth was not for the benefit the US population, these policies “helped the rich get richer and the corporations to grow larger but [had] done nothing to spread the wealth to the rest of society” (Juhasz 2009, p. 80). The Federal government had now taken on the role of actively facilitating the growth of the US private oil industry.

The ‘pro-business’ stance was rooted in wealthy power elites that engaged in varying levels of state capture, cronyism, nepotism, and corruption across the private and public sectors (Twyman-Ghoshal and El Masri in press). This included individuals like Albert Fall, Secretary of the Interior (1921-1923), who leased government-owned petroleum and oil shale properties to oil corporations without public consultations (Jimenez-Andrade 2024). Andrew Mellon, Secretary of the Treasury (1921-1932), was also complicit, he ensured that antitrust policies were beneficial to him and fellow elites (Wu and Cashman 2018). These actions enabled a rapid transition from coal to oil and ensured the growth of the Seven Sisters.

Fuelling the future: European expansion

Domestic growth of the mini-Standards was stymied by the Great Depression which had been triggered by an aggressive push to transition from coal to oil (Fig. 7). The increased use of automobiles caused a reduction in the investment in railroads, despite trains being critical infrastructure for the operation of the US economy (Kennedy 2023). The economic collapse had a boomeranged effect on the US oil industry. Consumer demand for petroleum dropped whilst oil supplies increased due to

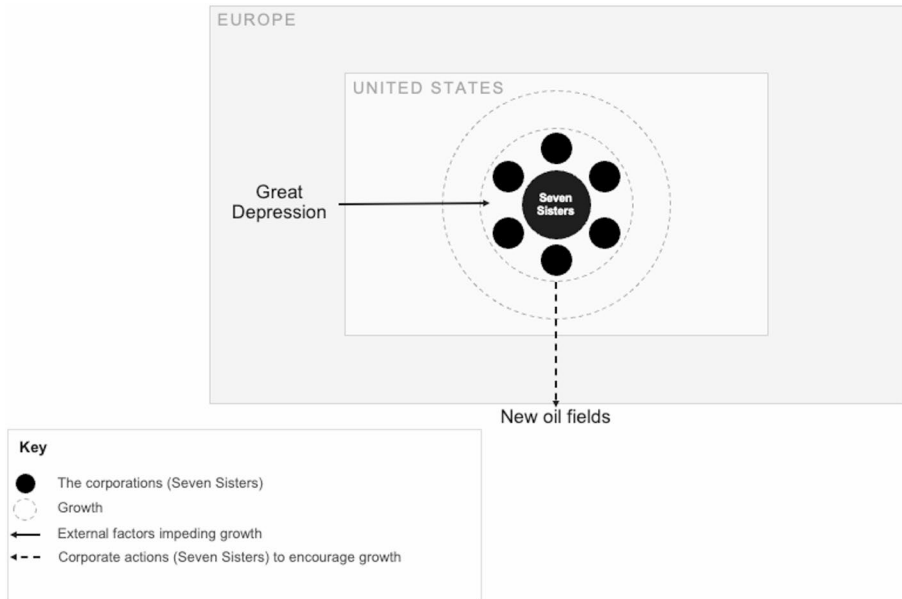


Fig. 7 Restrictions on the growth of the Seven Sisters

the discovery of large reserves in California, Oklahoma, and Texas (Kennedy 2023; Painter 2012).

The US Federal government moved from facilitating growth to initiating it, negotiating war production contracts to create new markets for the mini-Standards (Fig. 8). These contracts ensured that US companies supplied allied forces with 85% of their oil needs during the second World War (WW2) (Mitchell 2011; Yergin 2012). Britain paid for US gasoline used in the war with its gold reserves, making the US currency particularly strong after the war (Smith-Nonini 2016). As a result, during the Bretton Woods post-war conference, the new international monetary system established by the allies used the dollar as the new international reserve currency (pegged on the value of gold) (Smith-Nonini 2016). US corporations, including Big Oil, were further propped up by acquiring assets at the end of WW2, built and paid for by the US government, at a fraction of their value (Angus 2016). The US government also ensured the Seven Sisters had access to oil concessions in South America and West Asia (Painter 2012) (discussed in more detail below). In effect, US government intervention constituted a form of corporate welfare in the aftermath of the Great Depression. Government actions, which appeared as support for war-torn Europe, in reality buttressed the wealth of US power elites across several fronts.

The US state-corporate-industry partnership engineered a more permanent shift in geopolitics from the old world of European (particularly British) colonial dominance to the new world of American hegemony (Brew 2022). A new post-war political order was reimagined by US planners who collaborated with the UK government and its power elites to build an extensive network of army bases (Twyman-Ghoshal 2021a). This was done using the legacy of the British empire to access key strategic locations to build military bases and cement political dominance (Twyman-Ghoshal

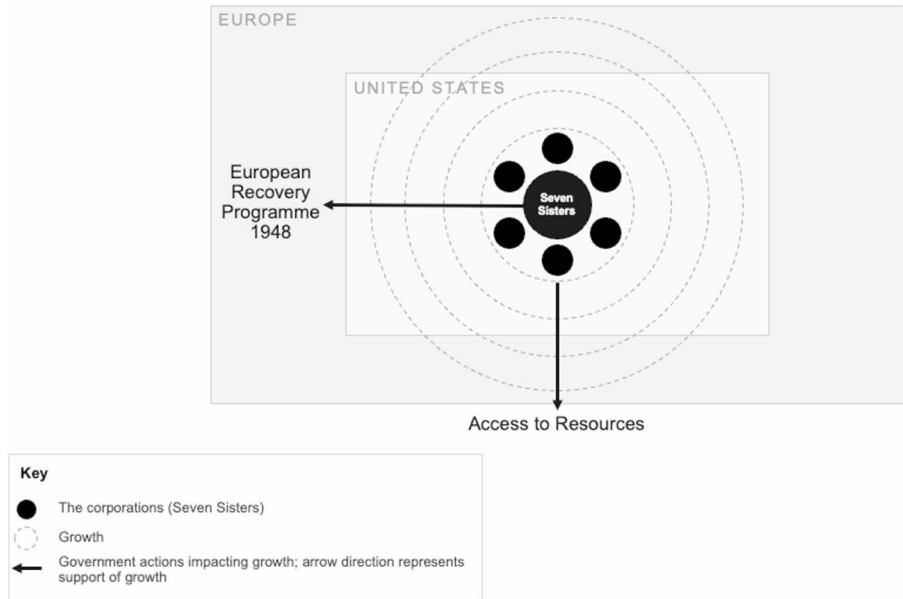


Fig. 8 US Federal government support for the growth of the Seven Sisters

2021a). The resulting US military-industrial complex unashamedly promoted corporate interests, illustrating the tight network of power elites across the three power centres of the US that Mills identified in 1956 - military, political, and corporate.

This strategy was furthered by the US 1948 Economic Cooperation Act which provided \$13 billion in aid to Western European countries under the European Recovery Programme (ERP), i.e. the Marshall Plan. What looked like an initiative to rebuild Western Europe after the WW2, was a mechanism for US companies, including the Seven Sisters, to gain a large financial stake in rebuilding Europe, something that the mini-Standards had aggressively lobbied for (Angus 2016). As part of the ERP, money granted by the US for rebuilding Europe had to be spent with US corporations thereby circling funds back into the US. Moreover, the use of ERP funds was conditional, with a prohibition on the use of these monies for any projects that could compete with US corporations (Painter 2009). As a result, more than half of all oil purchased in Europe came from US oil companies, paid for by the ERP (Mitchell 2011). ERP funded projects also ensured new energy use patterns through the strategic allocation of funds on projects promoting increased reliance on oil, such as large investment in road building (for fuel burning cars) rather than in mass transit or rail (Painter 2009; Mitchell 2009). Between the 1940s and 1970s petroleum consumption grew and US GDP doubled, further enhanced by mass-production of automobiles and the petrochemical industry (Melsted and Pallua 2018; Angus 2016; Brew 2022; Painter 2009). Between 1946 and 1973, oil production increased by 700% (Pobodnik 2006). The expansion of US oil into Europe after WW2, as supported by the ERP, brought about new energy use patterns and a rising demand for oil. These actions showed the US government was now more openly displaying its protective role over the US oil industry.

Full throttle: West Asian & global expansion

To protect the domestic market from being impacted by the increased demand for oil from Europe, the 1948 Economic Cooperation Act stipulated that petroleum and petroleum products used in Europe had to come from outside of the US (Surrey 1948). This stimulated the Seven Sisters to expand more aggressively into West Asia, ensuring control over both production and distribution (Penrose 1979). This international strategy of acquiring foreign resources built on colonial legacies and imitated colonizing practices.

Iran (Persia), although never formally colonized, was reduced to a semi-colony through foreign intervention (Twyman-Ghoshal and El Masri forthcoming). In 1908, Britain created the Anglo-Persian Oil Company (APOC) – now British Petroleum (BP), building on control it had established over Iran's resources some decades before (Twyman-Ghoshal and El Masri forthcoming). The aggressive British oil policy of time meant that it also had the majority stake in Turkish Petroleum Company (TPC) along with Turkey and Germany. When the Ottoman empire collapsed after WW1, the US government lobbied strongly to open TPC for acquisition (Stivers 1983). In 1928, the assets of TPC were split between with APOC, Royal Dutch Shell Company (Shell), and Compagnie Francaise de Petrole (Stivers 1983). The Agreement “was one of the initial cases of oil company cooperation on an international scale” (Stivers 1983, p.23), which excluded competitive bidding particularly from oil producing countries themselves. These actions maintained control over critical West Asian natural resources and ensured continued dependence on foreign intervention. The same year, the secret Achnacarry Agreement was signed between the three largest oil companies (APOC, Shell, and SONJ), creating an “Oil Constitution” that provided European and US oil companies the power to make decision on extraction, production, distribution, and pricing of oil. The agreement was later expanded to 15 other international oil companies, creating an international oil monopoly (Khalaf et al. 2025). The existence of this agreement was kept secret for 25 years (Kkalaf et al. 2025).

Through these repurposed colonial relations, mini-Standard companies acquired a large stake in West Asian oil, producing 90% of petroleum in 1972 (Juhasz 2009; Goyes 2023). The oil empire was build on the vestiges of colonialism, where the international oil monopoly, made up of the US, Britain, and other former colonizers, had the power to control the price of oil and thereby directly impact the income of producing countries. The wealth and power of private oil companies, particularly the Seven Sisters, meant that they were acting “as a de facto international agency of the US government while dictating the economic development of nations the world over” (Juhasz 2009, p.75). The power of the oil industry has required even US Presidential candidates who were less pro-business, to court the mini-Standards, fomenting an enduring symbiotic relationship between the Federal government and the US oil industry.

With the advent of decolonization and demands for social, political, and economic justice, oil producing countries sought to regain control over their natural resources (Kobrin 1984). In 1960, the Organization of the Petroleum Exporting Countries (OPEC) was created by Saudi Arabia, Iran, Kuwait, and Venezuela to rebuke the

control of the international oil cartel and ensure fairer terms (Juhasz 2009). In 1970, the US hit its peak oil production, making it reliant on foreign oil imports to supply the rising demand (Bardi 2009).

In 1973, when the Arab-Israeli war erupted, OPEC responded to the US arming Israel with an embargo on oil destined to the US and by raising prices (by tying the value of oil to gold) (Smith-Nonini 2016). The impact was felt by consumers in the US, when heating oil and gasoline prices rose by 30–40% (Juhasz 2009). For the Seven Sisters this had two impacts. First, they amassed the highest profits in ten years which ultimately triggered litigations and FTC investigations into collusion (Juhasz 2009; Coate 2005). Notably, these FTC cases against oil companies were dismissed as soon as the Reagan administration took office in 1981 (Muris and Sayyed 2011). Second, the actions of OPEC meant that the Seven Sisters saw its control of the oil market and its access to foreign oil reserves decline, presenting an impediment to their continued future growth (Fig. 9).

The solution was one again facilitated by the Federal government (Fig. 10). With the help of US banks, the Seven Sisters lobbied President Nixon to end the gold standard and float the US dollar (Smith-Nonini 2016). The result was a price inflation of gold, from the US\$35 per ounce agreed in Bretton Woods to US\$90.50 in mid-1973, to US\$455 by the end of the 1970s (Hammes and Wills 2005). To counteract the effects of the fall of the US dollar and to bring oil back in range of its historical gold-pegged value, OPEC again raised the price of oil (Hammes and Wills 2005). Together with the Arab oil embargo of October 1973, the effect was the first oil price shock of the 1970s. This triggered the first recession since the Great Depression and prompted worries about maintaining Western dominance of the market (Foster and McChesney 2012). The actual impact on European and US economies was relatively small; in fact, the price hike once again generated substantial profits for oil companies, banks, and investment corporations (Zweig 1995). In contrast, the effect on emerg-

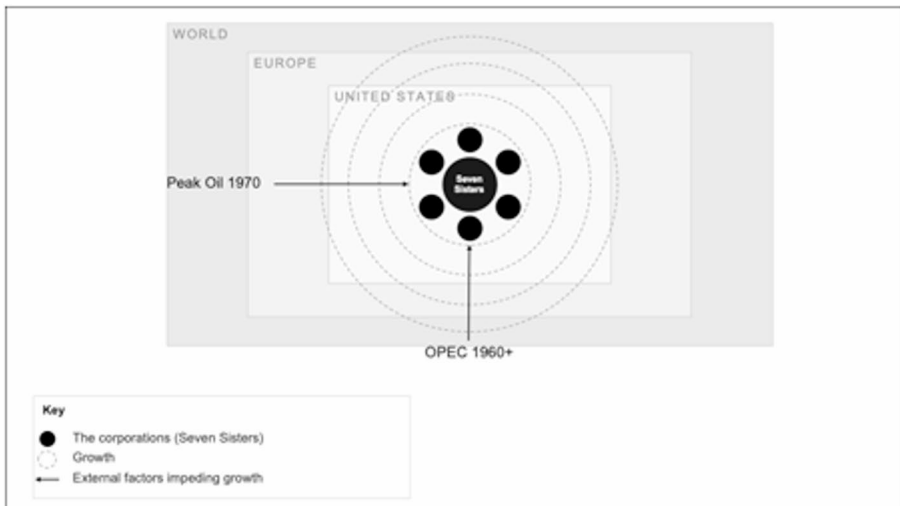


Fig. 9 Restrictions of the global growth of the Seven Sisters

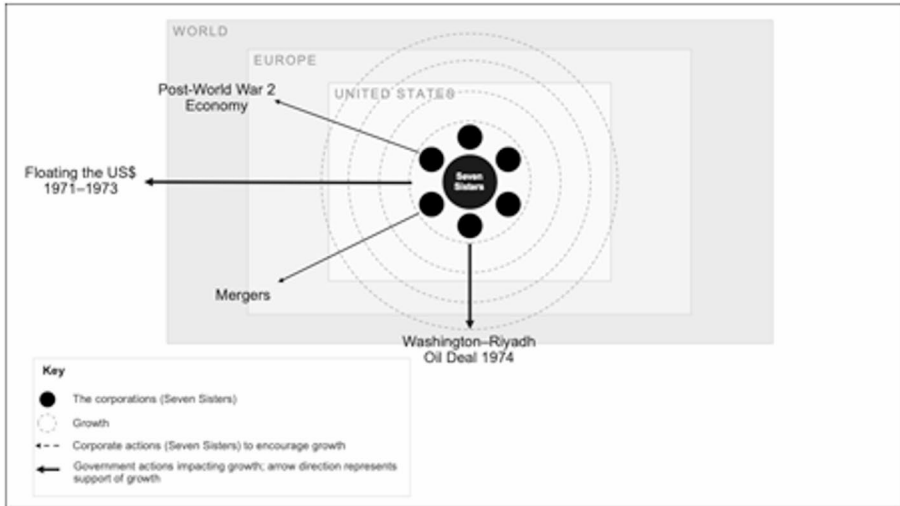


Fig. 10 US Federal government enabling the growth of the Seven Sisters

ing economies was devastating, resulting in financial hardship, poverty, inflation, and unemployment. The resulting energy debt paved the way for the “globalization of neoliberal policies and displaced profit generation from production to speculative activities” (Smith-Nonini 2015, para 2).

These speculative activities were facilitated by the 1974 Washington-Riyadh oil deal, which furthered the growth of the Seven Sisters. The deal built on a 1945 agreement between Saudi King Abdul Aziz ibn Saud and US President Roosevelt that gave US oil corporations exclusive rights to Saudi oil. Under the secret 1974 deal, the US dollar became the primary currency for oil (Angus 2016; Smith-Nonini 2016). The resulting ‘petrodollars’ that Saudi Arabia earned were deposited with multinational banks based in New York and used to buy US Treasury securities, thereby propping up the US economy (Smith-Nonini 2015). In exchange, the US agreed to provide support, security, and arms to the Saudi regime (Spiro 1999). In 1974, the US eliminated controls on foreign lending, resulting in a wave of aggressive international bank loans to post-colonial and emerging economies, all financed using petrodollars (Smith-Nonini 2015). Like the ERP, these loans provided funds for development projects, however they were more financially aggressive with stricter conditions attached. Many of these projects were energy-related and generated contracts for private US companies, including the Seven Sisters (Perkins 2004). It is estimated that between 1992–2002 the World Bank approved \$18.5 billion for petroleum projects across twenty-five Global South countries (Duruigbo 2005). Beyond the oil industry, US multinational banks flourished; Citibank quadrupled its international holdings in the first half of 1974 (Zweig 1995).

In the late 1970s, the US and the UK governments raised interest rates to bolster the value of their respective currencies due to concerns about rising domestic inflation. The result was that foreign loans became more expensive for poorer nations furnishing their debt (Smith-Nonini 2015). In 1981, Alaskan oil production increased

and US oil companies flooded the market. This reduced global oil prices resulting in a series of loan defaults by oil producing countries, plunging them into crisis (Smith-Nonini 2016). The International Monetary Fund (IMF), of which the US is the largest shareholder, created a new conditional loan scheme for countries with large foreign debt (Woods 2003). By 1989, these conditional loans morphed into the more aggressive Structural Adjustment Programs (SAPs) as part of the Washington Consensus. SAP's forced loan recipient countries to enable the free market by liberalizing trade and finance, privatizing state-owned enterprises, implementing fiscal discipline (i.e. reducing welfare programmes), strengthening private property rights, and reducing government intervention (through the reduction of legislation and regulation that limited corporate freedom, e.g. labour standards) (Steger 2013; IMF 2025). These conditional loans did not prevent debtor countries from experiencing endemic and repeated financial crises, in fact the 'development' promised by SAPs failed to materialize (Stiglitz 2003). However, the private oil industry continued to grow unimpeded (Huber 2012).

The result of this hidden history was that the future of the mini-Standards was secured in two ways. First, through a change in the domestic attitude towards anti-trust. Second, through the creation of a global dependence on oil. The US government now openly encouraged mergers by designing and facilitating corporate combinations (Juhasz 2009). Under the Reagan administration Big Oil was able to take over smaller rivals with little resistance from the scaled down FTC (Smith-Nonini 2016). This occurred in tandem with increased Big Oil lobbying – between 1998 and 2006 this amounted to \$240 million spent by the six largest US oil companies (Juhasz 2009) The Seven Sisters absorbed competitors and merged to create new larger petroleum companies, ultimately forming the four largest private multinational oil corporations: ExxonMobil, BP, Marathon, and Chevron. These corporations are now in control of the energy sources that power the globalized planet, not only to fuel petroleum-guzzling cars, but also through the ubiquity of petrochemicals.

Beyond the barrel: petrochemicals

Parallel to the geographic expansion of the mini-Standard companies, the petroleum industry grew the market for oil refining by-products, ensuring demand beyond powering vehicles. This included petrochemicals in plastics, food, medicines, clothing, computers, and agriculture (Angus 2016; Painter 2012). The shift towards fossil fuels freed up land (previously cultivated for wood) which contributed to the production of more agricultural goods and livestock feed (Mitchell 2009). Industrial grain production of corn, soybean, and wheat relied on oil not only for farm machinery, but also for fertilizer and pesticides (McMichael 2000).

Big Oil also ensured that US-American cultural life was carbon heavy using its political influence. This included support for the mass production of cars and the building of roads (rather than railroads or public transportation) (Mitchell 2011). This petroleum fuelled culture was promoted through heavy advertising of a suburban lifestyle and the nuclear family (Harvey 2007; Huber 2012). This included support for growing suburbs with single-family homes which relied on cars, highways, shop-

ping malls, lawn mowers, and air conditioners—all of which were petroleum heavy (Angus 2016).

The expanded use of oil was combined with a culture of disposability which often came in the form of single-use or few-use plastics (Buell 2012). Disposability was an intentional shift away from durability in the plastics industry to ensure demand and growth of the petrochemical industry (Hawkins 2018). The plastic revolution, like much of the petroleum heavy economy, was marketed on consumer convenience which has had a devastating cost to both the environment and human health. The production of plastics emitted 1.8 gigatons of carbon dioxide, with an expectation that this will multiply three to five times (Zheng and Suh 2019). Moreover, it is estimated that human health care costs attributed to single-use plastic in the US alone, is at US\$ 250 billion per year (Zoeller 2024). These modern conveniences have resulted in a multipronged addiction to oil fuelled by a culture of consumption and disposability. All of which has been underpinned by a population that is increasingly squeezed to work longer hours to sustain their modern lives.

Conclusion: state-corporate symbiosis

Tombs (2012) called for the examination of the deepening of the state-corporate relationship “to capture the theoretical totality of the state-corporate relation” (p.176). This genealogy has responded to this call by tracing the development of what has become an intimate relationship between the US Federal government and the private oil industry, examining how this permissive and emboldening political and economic arrangement emerged. This arrangement has not only elevated the role of business and industry generally but has centralized the role of petroleum in daily life. The relationship between the Federal government and the mini-Standards has included troublesome associations and lineages of ruling elites across the private and public sectors that exerted “a disproportionate influence over the content and application of the law” (Kramer, Michalowski, and Kauzlarich 2002, p.267). The troublesome history has shown an ongoing symbiosis that has produced a criminogenic high carbon socio-economic system that has accelerated and aggravated the climate crisis.

Figures 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 serve as a diagrammatic tool to illustrate the relationship dynamics between the Federal government and the Standard oil companies, evidencing the enabling, emboldening, and embedding of a predatory petroleum fuelled capitalism in the US and beyond. Through these diagrams it is possible to see the continuities in state support for the US oil industry with recurrences of state facilitation, but also the changes in the extent of state support. Early in the emergence process, state support was less overt, over time changing from facilitating corporate crimes and harms, to openly protective policies to initiate further growth and wealth accumulation for the power elite. The process identified in the genealogy has shown repeated violation of established laws, regulations, and the rights of independent sovereign nations. Although a detailed engagement with each stage of the process was outside of the scope of this work, and impossible to capture in a journal article, the overview of the process of emergence, has demonstrated continuities, changes, and recurrences in the relationship between the government and the oil industry. It is

hoped that this overview will stimulate further research to capture the details and further complexities of this hidden history.

This genealogy has demonstrated that despite some initial weak attempts by the Federal government to curb the growth aspirations of SOC and its descendants, government actions did not produce any meaningful change. Importantly these control mechanisms were stimulated by investigative journalism (which has become highly politicized in recent times) rather than an intrinsic desire of a democratic government to serve the needs of the population and to protect the environment that humanity relies on. The first English-language news article on climate change was published in the US in the 1930s, followed by increasing evidence of the direct impact of fossil fuels (Twyman-Ghoshal, Patten, and Ciaramella 2022). The US government was aware of the impact of fossil fuels on the environment throughout much of the tightening of the collaboration with fossil fuel companies. Rather than limit the production of GHG, the Federal government repeatedly bolstered and supported the growth of the oil giants. Although other countries such as Saudi Arabia, Russia, Iran, Mexico, Venezuela, India and Kuwait directly own energy corporations which have also contributed to the fossil fuelled economy, it is the US government that has served to normalize, legitimize, and enhance the aggressive business tactics of the global oil industry. Beyond the climate crisis, the outcome of this support has been to curb economic competition, create a hostile environment for small companies, and create a society where the rich get richer and poor get poorer. These tactics have served to deepen national debt, particularly of post-colonial and emerging economies. These actions have largely been beyond public scrutiny, where the US government has maintained illusions of “neutrality, impartiality, and plurality” (White and Kramer 2015, p.385).

From the analysis, it is clear that the institutions and practices we value and take for granted today are more problematic and more “dangerous than they otherwise appear” (Garland 2014, p.372). The narrative that the US government is neutral, impartial and plural, with a public mandate to control crimes and harms, has been revealed to be a fiction. Instead, successive Federal administrations, irrespective of political affiliation, have paved the way for the increasingly blatant forms of state capture in more recent history. The historical events illustrate repeated abuse of entrusted power in exchange for private gain of the power elite. The long-term impact on the US has been increasingly bold levels of state capture by private multinationals and powerful elites. The second Trump presidency has demonstrated regular examples of the symbioses of the institution of political governance and the institution of economic production and distribution. This has included President Trump refusing to divest from the Trump Organization, violating the emoluments clause in the US Constitution, and soliciting payments in exchange for federal appointments and policy decisions (Graham 2026). The Trump administration has displayed overt support for the oil industry, with a “drill, baby, drill” agenda that has rolled back regulations protecting the environment and boosted fossil fuel extraction (Noor 2026). What was hidden is now in plain sight. However, what remains an illusion is that this is a new or recent phenomenon, rather than a continuation of business as usual.

Beyond the US, the symbiosis between the Federal government and Standard oil companies has had a profound impact on the global economy. The free market in its

current form has its roots in the US restructuring of capitalism in the postwar period and in a growth-culture derived from colonial practices but redesigned by the oil industry in collaboration with the US government. The growth-culture that underpins these actions originates in the European colonial project, with coal originally buttressing the colonial logics, structures, norms, and practices that caused genocidal and ecocidal harm (Ramcilovic-Suominen 2025; Lynch, Fegadel, Long 2022). As revealed here, oil was the next chapter in that same history.

In 1965, US President Johnson warned that, “this generation has altered the composition of the atmosphere on a global scale through radioactive materials and a steady increase in carbon dioxide from the burning of fossil fuels” (para 68). However, it is not the entire generation that is responsible for the composition of the atmosphere, the responsibility for the Capitalocene has been borne primarily by the power elite that has functioned through the state-corporate-industry symbiotic network. One of the most devastating effects of the symbiosis between the fossil fuel industry and the powerful US Federal government, is that despite warnings decades ago, the US government has done little to curb the fossil fuelled economy. Instead, the US government has been the co-creator of our current crisis.

Acknowledgements I would like to sincerely thank the anonymous reviewers and the editor for the very helpful feedback and suggestions which substantially strengthened the manuscript.

Author contributions A.T-G wrote the entire piece.

Data availability No datasets were generated or analysed during the current study.

Declarations

Competing interests The authors declare no competing interests.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Angus I (2016) Facing the anthropocene. Monthly Review Press, New York
- Atiles J, Rojas-Páez G (2022) Coal criminals: crimes of the powerful, extractivism and historical harm in the global south. *Br J Criminol* 62(5):1289–1304. <https://doi.org/10.1093/bjc/azac050>
- Atiles J, Whyte D (2025) Fossil capital in the Caribbean: the toxic role of “regulatory havens” in climate change. *Regul Gov* 19(2):469–481. <https://doi.org/10.1111/rego.70001>
- Backhouse RE (2005) The rise of free market economics: economists and the role of the state since 1970. *Hist Polit Econ* 37(1):354–392. https://doi.org/10.1215/00182702-37-Suppl_1-355

- Bardi U (2009) Peak oil: the four stages of a new idea. *Energy* 34(3):323–326. <https://doi.org/10.1016/j.energy.2008.08.015>
- Bell SE, York R (2012) Coal, Injustice, and Environmental Destruction: Introduction to the Special Issue on Coal and the Environment. *Organization & Environment* 25(4):359–367. <https://doi.org/10.1177/1086026612468138>
- Bevir M (2008) What is genealogy? *J Philos Hist* 2(3):263–275. <https://doi.org/10.1163/187226308X335958>
- Bhaba HK (2004) Foreword: framing fanon. In: Fanon F (ed) *The wretched of the earth*. Grove Press, pp vii–xlii
- Boggs C (2011) From Manifest Destiny to empire. *Phantom democracy: corporate interests and political power in America*. Palgrave Macmillan, pp 25–56
- Boudreaux DJ, Folsom BW (1999) Microsoft and Standard Oil: radical lessons for antitrust reform. *Antitrust Bull* 44:555–576. <https://doi.org/10.1177/0003603X9904400302>
- Bradshaw EA (2015) Obviously, we're all oil industry": the criminogenic structure of the offshore oil industry. *Theor Criminol* 19(3):376–395. <https://doi.org/10.1177/1362480614553521>
- Bradshaw EA (2018) Pipelines, presidents and people power: resisting state–corporate environmental crime. *Revisiting crimes of the powerful*. Routledge, Abingdon, pp 157–173
- Brew G (2022) The geopolitics of oil: the United States in the twentieth century. In: Dannreuther R, Ostrowski W (eds) *Handbook on oil and international relations*. Edward Elgar, Cheltenham, pp 114–128
- Brown M (2018) Colonial states, colonial rule, colonial governmentalities: implications for the study of historical state crime. *State Crime J* 7(2):173–198. <https://doi.org/10.13169/statecrime.7.2.0173>
- Buell F (2012) A short history of oil cultures: or, the marriage of catastrophe and exuberance. *J Am Stud* 46(2):273–293. <https://doi.org/10.1017/S0021875812000102>
- Carbon Majors (2025) Carbon majors: 2023 data update. <https://influencemap.org/briefing/The-Carbon-Majors-Database-2023-Update-31397>. Accessed 19 Jan 2026
- Carlson L (2019) Critical for whom? Genealogy and the limits of history. *Method Theory Study Relig* 31(3):185–209. <https://doi.org/10.1163/15700682-12341436>
- Channing I, Churchill D, Yeomans H (2023) Renewing historical criminology: scope, significance, and future directions. *Annu Rev Criminol* 6(1):339–361. <https://doi.org/10.1146/annurev-criminol-030421-035516>
- Chipkin I, Swilling M, Bhorat H, Qobo M, Duma S, Mondl L, Peter C, Buthelezi M, Friedenstein H, Prins N (2018) *Shadow state: the politics of state capture*. NYU Press, New York
- Chomsky N (2003) *Hegemony or survival: America's quest for global dominance*. Macmillan
- Coate MB (2005) Twenty years of Federal Trade Commission merger enforcement activity (1985–2004). *Potomac Law and Economics Working Paper 05–02*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=708503. Accessed 19 Jan 2026
- Colburn FD (2021) *Colonialism, independence, and the construction of nation-states*. Palgrave Macmillan, Cham
- Coleman JW (1985) Law and power: the Sherman Antitrust Act and its enforcement in the petroleum industry. *Soc Probl* 32(3):264–274. <https://doi.org/10.2307/800686>
- Crook M, Short D, South N (2018) Ecocide, genocide, capitalism and colonialism: consequences for indigenous peoples and global ecosystems environments. *Theor Criminol* 22(3):298–317. <https://doi.org/10.1177/1362480618787176>
- Crutzen PJ (2006) The “Anthropocene.” In: Ehlers E, Krafft T (eds) *Earth system science in the Anthropocene*. Springer, pp 13–18
- Dean M (1994) *Critical and effective histories: Foucault's methods and historical sociology*. Routledge
- Deleuze G (1992) *Foucault*. University of Minnesota Press
- Dickson PR, Wells PK (2001) The dubious origins of the Sherman Antitrust Act: the mouse that roared. *J Public Policy* 20(1):3–14. <https://doi.org/10.1509/jppm.20.1.3.17286>
- Duruigbo E (2005) The World Bank, multinational oil corporations, and the resource curse in Africa. *Univ Pa J Int Econ Law* 26(1):1–68
- Ekuruzel B, Boneham J, Dalton MW, Heede R, Mera RJ, Allen MR, Frumhoff PC (2017) The rise in global atmospheric surface temperature and sea level from emissions traced to major carbon producers. *Clim Change* 144:579–590. <https://doi.org/10.1007/s10584-017-1978-0>
- Fanon F (1961/2004) *The wretched of the earth*. Grove Press

- Filonchuk M, Peterson MP, Zhang L, Hurynovich V, He Y (2024) Greenhouse gas emissions and global climate change: examining the influence of CO₂, CH₄, and N₂O. *Sci Total Environ* 935:173359. <https://doi.org/10.1016/j.scitotenv.2024.173359>
- Finkelman RB, Wolfe A, Hendryx MS (2021) The future environmental and health impacts of coal. *Energy Geosci* 2(2):99–112. <https://doi.org/10.1016/j.engeos.2020.11.001>
- Foster JB, McChesney RW (2012) The endless crisis: how monopoly-finance capital produces stagnation and upheaval from the USA to China. Monthly Review Press, New York
- Foucault M (1977) Discipline and punish: the birth of the prison. Pantheon
- Foucault M (1980) Language, counter-memory, practice. Cornell University Press
- Foucault M (1984) Nietzsche, genealogy, history. In: Rabinow P (ed) The Foucault reader. Pantheon, pp 76–100
- Freire P (1972) Pedagogy of the oppressed. Penguin
- Friedlingstein P, O'Sullivan M, Jones MW et al (2024) Global carbon budget 2024. *Earth System Science Data* 17(3):965–1039. <https://doi.org/10.5194/essd-17-965-2025>
- Friedrichs DO (2012) State-corporate crime in a globalized world. In: Potter G (ed) Controversies in white-collar crime. Routledge, pp 53–71
- Frumhoff PC, Heede R, Oreskes N (2015) The climate responsibilities of industrial carbon producers. *Clim Change* 132:157–171. <https://doi.org/10.1007/s10584-015-1472-5>
- Fussey P, South N (2012) Heading toward a new criminogenic climate change. In: White R (ed) Climate change from a criminological perspective. Springer, pp 27–39
- Garland D (1996) The limits of the sovereign state. *Br J Criminol* 36(4):445–471. <https://doi.org/10.1093/oxfordjournals.bjc.a014105>
- Garland D (2014) What is a “history of the present”? *Punish Soc* 16(4):365–384. <https://doi.org/10.1177/1462474514541711>
- Goldberg MH, Marlon JR, Wang X, van der Linden S, Leiserowitz A (2020) Oil and gas companies invest in legislators that vote against the environment. *PNAS* 117(10):5111–5112. <https://doi.org/10.1073/pnas.1922175117>
- Goldstein DM, Drybread K (2022) Anthropological meditations: illiberal politics and corruption in the Trump era. In: Goldstein DM, Drybread K (eds) Corruption and illiberal politics in the Trump era. Routledge, pp 3–18
- Goyes DR (2019) Southern green criminology: a science to end ecological discrimination. Emerald Group Publishing
- Goyes DR (2023) Southern green criminology: fundamental concepts. In: Goyes DR (ed) Green crime in the global south: Essays on southern green criminology. Springer International Publishing, Cham, pp 1–30
- Graham DA (2026) The evolution of trump’s corruption. *The Atlantic*. <https://www.theatlantic.com/newsletters/2026/04/evolution-of-trump-corruption-g7-summit/686983/>
- Granitz E, Klein B (1996) Monopolization by “raising rivals’ costs”:- the Standard Oil case. *J Law Econ* 39:1–47
- Gupta J, Liverman D, Prodani K et al (2023) Earth system justice needed to identify and live within Earth system boundaries. *Nat Sustain* 6:630–638. <https://doi.org/10.1038/s41893-023-01064-1>
- Hamilton C (2003) Growth fetish. Allen & Unwin, Crow’s Nest
- Hammes D, Wills D (2005) Black gold: the end of Bretton Woods and the oil-price shocks of the 1970s. *Indep Rev* 9:501–511
- Harvey D (2007) A brief history of neoliberalism. Oxford University Press
- Hawkins G (2018) Plastic and presentism. *J Contemp Archaeol* 5:91–102. <https://doi.org/10.1558/jca.33291>
- Heede R (2014) Tracing anthropogenic carbon dioxide and methane emission to fossil fuel and cement producers, 1854–2010. *Clim Change* 122:229–241. <https://doi.org/10.1007/s10584-013-0986-y>
- Hertel-Fernandez A (2019) State capture: how conservative activists, big businesses, and wealthy donors reshaped the American states and the nation. Oxford University Press
- Hickel J (2020) Less is more: how degrowth will save the world. Random House
- Holley C, Shearing C (2017) Thriving on a pale blue dot: criminology and the Anthropocene. In: Holley C, Shearing C (eds) Criminology and the Anthropocene. Routledge, pp 1–24
- Huber M (2012) Refined politics: petroleum products, neoliberalism, and the ecology of entrepreneurial life. *J Am Stud* 46:295–312. <https://doi.org/10.1017/S0021875812000126>
- International Monetary Fund (IMF) (2025) IMF conditionality. IMF. <https://www.imf.org/en/about/factsheets/sheets/2023/imf-conditionality>. Accessed 19 Jan 2026

- Jimenez-Andrade JR (2024) The Teapot Dome scandal: the Supreme Court's precedent that changed the political corruption prosecution because of social pressure. *Oil, Gas, and Energy Quarterly* 72:803–821
- Johnson L (1965) Special message to the congress on conservation and restoration of natural beauty. The Association of Centers for the Study of Congress. Accessed 19 Jan 2026 <https://congresscenters.org/great-society-congress/items/show/292>
- Juhász A (2009) *The tyranny of oil: the world's most powerful industry and what we must do to stop it*. Harper Collins
- Kauzlarich D, Mullins C, Matthews R (2003) A complicity continuum of state crime. *Contemp Justice Rev* 6:241–254. <https://doi.org/10.1080/1028258032000115895>
- Kennedy CA (2023) Biophysical economic interpretation of the great depression: a critical period of an energy transition. *J Ind Ecol* 27(4):1197–211. <https://doi.org/10.1111/jiec.13404>
- Khalaf AM, Hussein ANM, Jasim HO, Abd Khalaf AJ (2025) The historical roots of oil price monopoly and its exploration in the Arabian Gulf. *Arab World Geogr* 28:78–87. <https://doi.org/10.64903/1480-6800-28.1.78>
- Kobrin SJ (1984) The nationalisation of oil production, 1918–80. In: Pearce DW, Siebert H, Walter I (eds) *Risk and the political economy of resource development*. Palgrave Macmillan, pp 137–164
- Kramer RC (2013) Carbon in the atmosphere and power in America: climate change as state-corporate crime. *J Crime Justice* 36:153–170. <https://doi.org/10.64903/1480-6800-28.1.78>
- Kramer RC (2020) *Carbon criminals, climate crimes*. Rutgers University Press
- Kramer RC, Michalowski RJ, Kauzlarich D (2002) The origins and development of the concept and theory of state-corporate crime. *Crime & Delinq* 48:263–282. <https://doi.org/10.1177/0011128702048002005>
- Kretsedemas P (2017) What is genealogy? Introduction to the inaugural issue of genealogy. *Genealogy (Basel)* 1(2):1–10. <https://doi.org/10.3390/genealogy1020010>
- Lamb WF, Wiedmann T, Pongratz J et al (2021) A review of trends and drivers of greenhouse gas emissions by sector from 1990 to 2018. *Environ Res Lett* 16:073005. <https://doi.org/10.1088/1748-9326/abee4e>
- Lamoreaux NR (2019) The problem of bigness: from Standard Oil to Google. *J Econ Perspect* 33:94–117. <https://doi.org/10.1257/jep.33.3.94>
- Lawrence P (2019) Historical criminology and the explanatory power of the past. *Criminol Criminal Justice* 19(4):493–511. <https://doi.org/10.1177/1748895818794237>
- Lenton TM, Xu C, Abrams JF et al (2023) Quantifying the human cost of global warming. *Nat Sustain* 6:1237–1247. <https://doi.org/10.1038/s41893-023-01132-6>
- Licker R, Ekwurzel B, Doney SC et al (2019) Attributing ocean acidification to major carbon producers. *Environ Res Lett* 14:1–14. <https://doi.org/10.1088/1748-9326/ab5abc>
- Lloyd HD (1881) The story of a great monopoly. *The Atlantic*. <https://www.theatlantic.com/magazine/arc-hive/1881/03/the-story-of-a-great-monopoly/306019/>. Accessed 19 Jan 2026
- Lynch MJ, Fegadel A, Long MA (2022) Green criminology and state-corporate crime: the ecocide-genocide nexus with examples from Nigeria. In: Short D, Crook M (eds) *The Genocide-Ecocide Nexus*. Routledge, pp 81–102
- Lynch MJ, Long MA (2022) Green criminology: capitalism, green crime and justice, and environmental destruction. *Annu Rev Criminol* 5:255–276. <https://doi.org/10.1146/annurev-criminol-030920-114647>
- Lynch MJ, Long MA, Barrett KL, Stretesky PB (2013) Is it a crime to produce ecological disorganization? Why green criminology and political economy matter in the analysis of global ecological harms. *Br J Criminol* 53:997–1016. <https://doi.org/10.1093/bjc/azt051>
- Lynes A, Treadwell J, Bavin K (2024) *Crimes of the powerful and the contemporary condition: The democratic republic of capitalism*. Bristol University Press, Bristol
- Malm A (2016) *Fossil capital: the rise of steam power and the roots of global warming*. Verso Books
- McLean J (2004) The transnational corporation in history: lessons for today. *Indiana Law J* 79:363–378
- McMichael P (2000) Global food politics. *Mon Rev* 50(3):97–111. <https://doi.org/10.1023/A:1007684827140>
- Melsted O, Pallua I (2018) The historical transition from coal to hydrocarbons: previous explanations and the need for an integrative perspective. *Can J Hist* 53:395–422. <https://doi.org/10.3138/cjh.ach.53.3.03>
- Michalowski R (2010) In search of state and crime in state crime studies. In: Chambliss WJ, Michalowski R, Kramer RC (eds) *State Crime in the Global Age*. Willan Publishing, pp 13–30

- Miller RJ (2011) American Indians, the doctrine of discovery, and manifest destiny. *Wyo Law Rev* 11:329–349
- Mills CW (1956) *The power elite*. Oxford University Press
- Mitchell T (2009) Carbon democracy. *Econ Soc* 38(3):399–432. <https://doi.org/10.1080/03085140903020598>
- Mitchell T (2011) Carbon democracy: political power in the age of oil. Verso
- Moore JW (2017) The Capitalocene, part I: on the nature and origins of our ecological crisis. *J Peasant Stud* 44(3):594–630. <https://doi.org/10.1080/03066150.2016.1235036>
- Moskowitz DB (2018) Busting trusts: Standard Oil Company of New Jersey v. the United States, 1911 221 U.S. 1 restraint of trade. *American History* 53:24–26
- Mulvey K, Shulman S (2015) The climate deception dossiers. Union of Concerned Scientists. <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf>. Accessed 19 Jan 2026
- Muris TJ, Sayyed BK (2011) The long shadow of Standard Oil: policy, petroleum, and politics at the Federal Trade Commission. *South Calif Law Rev* 85:843–915
- Ngcamu BS (2023) Climate change effects on vulnerable populations in the Global South: a systematic review. *Nat Hazards* 118(2):977–991. <https://doi.org/10.1007/s11069-023-06070-2>
- Nicholas T, Fouka V (2018) John D (ed) Rockefeller: the richest man in the world. Harvard Business School Case 815–088. <https://www.hbs.edu/faculty/Pages/item.aspx?num=47167>. Accessed 19 Jan 2026
- Nkrumah K (1965) *Neo-colonialism: the last stage of imperialism*. Thomas Nelson & Sons, Ltd
- Noor D (2026) Climate leaders condemn Trump EPA's biggest rollback yet: 'This is corruption'. *The Guardian*. <https://www.theguardian.com/us-news/2026/feb/12/climate-trump-epa-biggest-rollback>
- Oreskes N, Conway E (2010) *Merchants of doubt*. Bloomsbury, New York
- Ostler J (2019) *Surviving genocide: native nations and the United States from the American revolution to bleeding Kansas*. Yale University Press
- Painter DS (2009) The Marshall plan and oil. *Cold War Hist* 9:159–175. <https://doi.org/10.1080/14682740902871851>
- Painter DS (2012) Oil and the American century. *The Journal of American History* 99(1):24–39. <https://doi.org/10.1093/jahist/jas073>
- Passas N (2000) Global anomie, dysnomie, and economic crime: hidden consequences of neoliberalism and globalization in Russia and around the world. *Soc Justice* 27:16–44
- Passas N (2005) Lawful but awful: 'legal corporate crimes.' *J Socio-Econ* 34(6):771–786. <https://doi.org/10.1016/j.socec.2005.07.024>
- Passas N, Goodwin NR (eds) (2010) *It's legal but it ain't right: harmful social consequences of legal industries*. University of Michigan Press
- Pearce F (1976) *Crimes of the powerful: marxism, crime and deviance*. Pluto
- Penrose E (1979) OPEC's importance in the world oil industry. *Int Aff* 55:18–32. <https://doi.org/10.2307/2617130>
- Perkins J (2004) *Confessions of an economic hitman*. Berrett-Koehler Publishers
- Persson L, Carney Almroth BM, Collins CD, Cornell S, De Wit CA, Diamond ML, Fantke P, Hasselov M, MacLeod M, Ryberg MW, Sogaard Jørgensen P (2022) Outside the safe operating space of the planetary boundary for novel entities. *Environmental science & technology* 56(3):1510–1521. <https://doi.org/10.1021/acs.est.1c04158>
- Pobodnik B (2006) *Global energy shifts: fostering sustainability in a turbulent age*. Temple University Press
- Pons-Hernández M (2022) Power(ful) connections: Exploring the revolving doors phenomenon as a form of state-corporate crime. *Critical Criminology* 30(2):305–320. <https://doi.org/10.1007/s10612-022-09626-z>
- Potter G (2010) What is green criminology. *Sociology Review* 20(2):8–12
- Priest GL (2011) Rethinking the economic basis of the Standard Oil refining monopoly: dominance against competing cartels. *South Calif Law Rev* 85:499–557
- Ramcilovic-Suominen S (2025) Capitalism as colonialism as capitalism (and the alternatives). In: Kangas A, Gataulina I, Poutanen M, Rajala AI, Ventovirta H-E (eds) *Rethorising capitalism*. Tampere University Press, pp 198–218. <https://doi.org/10.61201/tup.981>
- Rockström J, Donges JF, Fetzer I, Martin MA, Wang-Erlandsson L, Richardson K (2024) Planetary boundaries guide humanity's future on Earth. *Nat Rev Earth Environ* 5:773–788. <https://doi.org/10.1038/s43017-024-00597-z>
- Roosevelt T (1889) *The winning of the West*, vol 3. GP Putnam's Sons

- Rowlands IH (2000) Beauty and the beast? BP's and Exxon's positions on global climate change. *Environ Plan C Gov Policy* 18:339–354. <https://doi.org/10.1068/c9752>
- Ruggiero V, South N (2013) Toxic state-corporate crimes, neo-liberalism and green criminology: the hazards and legacies of the oil, chemical and mineral industries. *Int J Crime Justice Soc Democr* 2(2):12–26
- Saar M (2008) Understanding genealogy: history, power, and the self. *J Philos Hist* 2(3):295–314. <https://doi.org/10.1163/187226308X335976>
- Sawyer LP (2019) US antitrust law and policy in historical perspective. *Oxford Research Encyclopedia of American History*. <https://oxfordre.com/americanhistory/display/10.1093/acrefore/9780199329175.001.0001/acrefore-9780199329175-e-623>. Accessed 19 Jan 2026
- Smith-Nonini S (2015) Petrodollar financialization, the state, and fictive production. *FocaalBlog*. <https://www.focaalblog.com/2015/11/23/sandy-smith-nonini-petrodollar-financialization-the-state-and-fictive-production/>. Accessed 19 Jan 2026
- Smith-Nonini S (2016) The role of corporate oil and energy debt in creating the neoliberal era. *Econ Anthropol* 3:57–67. <https://doi.org/10.1002/sea2.12044>
- Spiro DE (1999) *The hidden hand of American hegemony: petrodollar recycling and international markets*. Cornell University Press
- Steffen W, Richardson K, Rockström J et al (2015) Planetary boundaries: guiding human development on a changing planet. *Science* 347:736–747. <https://doi.org/10.1126/science.1259855>
- Steffen W, Richardson K, Rockström J et al (2020) The emergence and evolution of earth system science. *Nat Rev Earth Environ* 1:54–63. <https://doi.org/10.1038/s43017-019-0005-6>
- Steger M (2013) *Globalization: a very short introduction*, 3rd edn. Oxford University Press
- Stiglitz JE (2003) Democratizing the International Monetary Fund and the World Bank: governance and accountability. *Governance* 16:111–139. <https://doi.org/10.1111/1468-0491.00207>
- Stivers W (1983) A note on the Red Line Agreement. *Diplom Hist* 7:23–34. <https://doi.org/10.1111/j.1467-7709.1983.tb00380.x>
- Surrey WS (1948) The economic cooperation Act of 1948. *Calif Law Rev* 36(4):509–557
- Tamboukou M (1999) Writing genealogies: an exploration of Foucault's strategies for doing research. *Discourse Stud Cult Polit Educ* 20:201–217. <https://doi.org/10.1080/0159630990200202>
- Tarbell IM (1904) *The history of standard oil company*. McClure, Phillips and Co
- Tombs S (2012) State-corporate symbiosis in the production of crime and harm. *State Crime J* 1:170–195
- Twyman-Ghoshal A (2021a) State co-offending: the case of the recolonization of the Chagos Archipelago and the forced eviction of the Chagossians. *Crit Criminol* 29:311–328. <https://doi.org/10.1007/s10612-021-09570-4>
- Twyman-Ghoshal A (2021b) Global anomie theory oxford research encyclopaedia of criminology. <https://oxfordre.com/criminology/view/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-545>. Accessed 19 Jan 2026
- Twyman-Ghoshal A, El Masri O (Forthcoming) A marriage of convenience: when states co-offend. In: MacManus T, Green P, Ward T, Lasslett K (eds) *The Routledge Handbook of State Crime*, Routledge, pp TBC
- Twyman-Ghoshal A, Patten E, Ciaramella E (2022) Exploring media representations of the nexus between climate change and crime in the United States. *Crit Criminol* 30(4):799–820. <https://doi.org/10.1007/s10612-022-09608-1>
- United Nations Environment Programme (UNEP) (2023) *Emissions gap report 2023: broken record: temperatures hit new highs, yet world fails to cut emissions (again)*. UNEP. <https://www.unep.org/resources/emissions-gap-report-2023>. Accessed 19 Jan 2026
- Urry J (2011) *Climate change and society*. Polity Press
- Venn C (2009) Neoliberal political economy, biopolitics and colonialism: a transcolonial genealogy of inequality. *Theory Cult Soc* 26:206–233. <https://doi.org/10.1177/0263276409352194>
- Veracini L (2019) Settler colonialism. In: Ness IN, Cope Z (eds) *The palgrave encyclopaedia of imperialism and anti-imperialism*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-91206-6_26-1
- Votaw D (1964) Antitrust in 1914: the climate of opinion. *Section of Antitrust Law* 24:14–28
- Wallerstein I (2004) The rise and future demise of the world capitalist system: concepts for comparative analysis. In: Cain PH, Harris M (eds) *Imperialism*. Routledge, pp 141–169
- White R (2018a) *Climate change criminology*. Bristol University Press
- White R (2018b) Ecocide and the carbon crimes of the powerful. *Univ Tasman Law Rev* 37(2):95–115

- White R, Kramer R (2015) Critical criminology and the struggle against climate change ecocide. *Crit Criminol* 23(4):383–399. <https://doi.org/10.1007/s10612-015-9292-5>
- Whyte D (2014) Regimes of permission and state-corporate crime. *State Crime J* 3(2):237–246. <https://doi.org/10.1007/s10612-015-9292-5>
- Whyte D (2018) The corporate citizen and the sovereign exception: from homo sacer to homo supra. *Oñati Socio-Legal Series* 8(6):950–975. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3221143
- Whyte R (2020) *Ecocide-kill the corporation before it kills us*. Manchester University Press
- Williamson J (2009) A short history of the Washington Consensus. *Law Bus Rev Am* 15(1):7–26
- Woods N (2003) The United States and the international financial institutions: power and influence within the World Bank and the IMF. In: Foot R, McFarlane S, Mastanduno M (eds) *US hegemony and international organizations*. Oxford University Press, pp 92–114
- World Meteorological Organization (WMO) (2026) WMO confirms 2025 was one of the warmest years on record. WMO. <https://wmo.int/news/media-centre/wmo-confirms-2025-was-one-of-warmest-years-record>. Accessed 19 Jan 2026
- Wu T, Cashman M (2018) *The curse of bigness*. Penguin Random House, New York
- Yergin D (2012) *The prize: the epic quest for oil, money and power*. Simon & Schuster
- Zheng J, Suh S (2019) Strategies to reduce the global carbon footprint of plastics. *Nat Clim Change* 9:374–378. <https://doi.org/10.1038/s41558-019-0459-z>
- Zoeller RT (2024) The price we pay for the convenience of plastics. *J Endocr Soc* 8(4):1–2. <https://doi.org/10.1210/jendso/bvae022>
- Zweig P (1995) *Wriston: Walter Wriston, Citibank and the rise and fall of US financial supremacy*. Crown

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.