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ORIGINAL ARTICLE

Are fossil fuel CEOs responsible for climate change? Social structure and criminal law approaches to climate litigation

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Abstract
Some argue that climate change-related harms are criminal harms, and that fossil fuel corporations and/or their CEOs are liable. Targeting wrongs perpetrated by fossil fuel industry CEOs individualizes the causes of climate change and presumes that punishing an individual or a group of bad actors will provide part of the solution to climate change. However, the primary driver of climate change is the system of capitalism as a total mode of production. The actions of CEOs are considerably shaped and constrained by this system—they are cogs in its machinery. Realizing the radical changes necessary to tackle the climate crisis requires rigorous examination of how the structure of contemporary capitalism perpetuates environmental degradation.

Keywords Climate litigation · Climate law · Marxism · Capitalism · Ecocide · Left populism

Introduction

> "As a capitalist, he is only capital personified."
> Karl Marx (1976: 342).

If there are any individuals who can be pointed to as the most responsible for the harms of climate change, it would seem to be the CEOs of fossil fuel companies, especially those who supported and engaged in climate change denial campaigns. For this reason, some argue that climate change-related harms are criminal harms, and that fossil fuel corporations and/or their CEOs are liable (Engelhardt 2013; Carter and Woodworth 2018; Aronoff 2019). Despite support from Senator Bernie Sanders (Johnson 2019), this line of argument is less prevalent and newer, more common in popular than academic literature. Climate litigation typically brings civil charges against states or carbon-intensive companies (Setzer and Byrnes 2020). We have argued elsewhere that—despite our personal support for these efforts—suing fossil fuel companies for climate change harms will likely have little impact on emissions and, further, bringing civil charges against fossil fuel companies misdiagnoses the drivers of climate change because it assumes that climate change is driven by bad corporations rather than a constantly and necessarily expanding capitalist system that requires fossil fuel inputs (Gunderson and Fyock 2021). Here we expand upon this argument in the context of international criminal law. Our argument, in a nutshell, is that blaming CEOs for climate change risks deepening the common and misleading narrative that climate change is caused by bad individuals rather than capitalism as a total system. While the left-populist method of accusing the elite as the rogues behind social ills may have strategical benefits in some cases, climate change is an issue in which structural explanations and systemic remedies are more fitting and, we argue, necessary for addressing climate change.

To make this case, we have chosen Kate Aronoff (2019) as our principal interlocutor, analyzing the political-economic aspects of the argument that fossil fuel executives ought to be tried for crimes against humanity by the International Criminal Court (ICC). Aronoff herself acknowledges that such a case going ahead is not possible within the rules of international law. International corporations do not fall under the jurisdiction of the ICC, so the argument is a thought experiment concerned with the political-economic implications of such strategies rather than their procedural technicalities. However, a similar scenario in the future may

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not be out of the question. A growing movement, supported by Pope Francis and Emmanuel Macron, makes the case that *ecocide*—"mass damage and destruction of ecosystems"—should be considered an international crime by the ICC (Stop Ecocide 2021). The push for the UN to recognize ecocide as a crime against peace began in the 1970s (Higgins et al. 2013; Mehta and Merz 2015). If this movement finally succeeds, this "would mean political leaders and corporate executives could face charges and imprisonment for 'ecocidal' acts" (Kusnetz et al. 2021). A draft definition of ecocide was recently proposed by a group of legal experts to be considered for adoption by the ICC: "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and widespread or long-term damage to the environment being caused by those acts" (quoted in Siddique 2021; for histories of the development and different renditions of the concept, see Higgins et al. 2013; Mehta and Merz 2015). However, climate change was not included in the definition due to "a desire to make it more difficult for countries—and corporations—to oppose the proposed new law" (Siddique 2021). This latter fact is a serious departure from the concept's more radical roots and current use in the climate movement (see Whyte 2020), and also a fine illustration of the status quo-preserving tendencies of law.

Rather than focusing on legal and procedural questions, we, like Aronoff, focus on the political-economic dimensions of the thought experiment. Aronoff's piece is used as an illustration because she skillfully and explicitly articulates the sociological and political assumptions built into the case for a criminal trial. We hope that our response is not read as a harsh criticism. In fact, we admire Aronoff's work on climate politics, especially regarding fossil fuel nationalization (Aronoff 2020), and agree with her on most points regarding climate policy.

In what follows, we first argue that the CEOs of fossil fuel companies are filling a preestablished role and that their decisions conform with the expectations of that role and contextualize this argument with a short discussion of the nature of the modern business corporation. Following, we argue that a criminal trial against a CEO, even if successful, would, because it individualizes the causes of climate change, further conceal the primary driver of climate change: capitalism. A seemingly counterintuitive "apology" for fossil fuel executives from a broadly eco-Marxist perspective—the irony is recognized by the authors—acts as a window to shed light on some of the blind spots of both left-populist political strategy and utilizing criminal law to tackle climate change. In making this argument, we attempt to illustrate the importance of recognizing the systemic, or structural, dynamics that drive climate change. We maintain that, to meaningfully combat the root causes of climate change, focus should be placed on the capitalist social system rather than the individuals who happen to be filling roles in this system.

CEOS, corporations, climate change, and criminality

This central section is divided into three parts: (1) a summary of arguments made by others that fossil fuel CEOs are responsible for criminal harms; (2) our primary reply that it is more appropriate to blame the role of the fossil fuel CEO embedded in a capitalist system for climate change harms than it to blame the individuals who happen to fill this role; and (3) our related argument that directing public anger about climate change at individuals, such as fossil fuel CEOs, may have counterintuitive results.

The criminal case against fossil fuel executives

Although the average outcome in climate litigation cases between 1990 and 2016 favored "hindering" positions instead of "favorable" positions (McCormick et al. 2018; Setzer and Byrnes 2020), there have been some momentous pro-climate legal cases. Two of the most notable cases occurred in the Netherlands. In their 2018 landmark case, the Urgenda Foundation was successful in pushing the Netherlands to accelerate climate action (*The State of the Netherlands* v. *Urgenda Foundation* 2018; see Cox 2016). More recently, the Hague District Court ruled that Shell must reduce absolute emissions by 45 percent by 2030 relative to 2019 levels (*Milieudefensie* et al. *v. Royal Dutch Shell Plc* 2021; see Bousso et al. 2021). Both rulings were based on Dutch standard of care laws.

As stated in the introduction, most litigation related to climate change pursues civil, not criminal, charges against states and/or corporations. This paper is concerned with the distinct call for criminal charges to be brought against fossil fuel companies or their executives for climate change harms. In addition to the fact that fossil fuel companies are responsible for the majority of carbon emission (Griffin 2017), those who call for criminal prosecution against fossil fuel companies or their executives stress the following two details to underscore the criminal nature of climate change-related harms: (1) continuing and expanding operations despite knowingly causing planetary harm and (2) funding climate denialist/misinformation campaigns to slow climate action.

Reflecting the longstanding criminal legal principle of *mens rea*, it makes intuitive sense to highlight the intentional behavior of executives and carbon-intensive corporations in disregarding their operations' impact on the environment and climate change. Tom Engelhardt (2013) labels the knowing act of destroying the planet "terracide" and reasons that:

> Big Oil evidently has no qualms about making its next set of profits directly off melting the planet. Its top executives continue to plan their futures (and so

> ours), knowing that their extremely profitable acts are destroying the very habitat, the very temperature range that for so long made life comfortable for humanity.

Despite knowing the dangers of climate change, fossil fuel corporations go to great lengths to continue extracting fossil fuels, including hydraulic fracturing and deepwater drilling. This knowledge of the harms their corporations' actions, then, makes CEOs liable for such harms. He compares this to the acts of asbestos, tobacco, and lead industries, which were aware of harms while continuing operations.

Coupled with knowingly causing harm, the fossil fuel industry's active contributions to the spread of misinformation about climate change (Dunlap and McCright 2015) are cited as a criterion for criminal harm. Carter and Woodworth (2018) argue that this deliberate "decades-long blocking and lying about scientific evidence on the dangers of human-caused global warming" is a level of deception that constitutes a crime against humanity. Aronoff (2019) makes the case that fossil fuel executives in particular are guilty of crimes against humanity: "acts [such as extermination and enslavement] when committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack" (ICC 1998). Both Carter and Woodworth and Aronoff cite the Climate Vulnerable Forum's (2012) estimate that there are 400,000 climate change-related deaths a year, a number that will increase if we do not avert catastrophic warming.

Aronoff justifies holding executives accountable for these harms for three key reasons: (1) fossil fuel executives are "at the helm" of the climate-degrading corporations and, thus, deserve punishment; (2) it would make other fossil fuel executives aware of possible repercussions of their actions; and (3) criminal charges would act as a means to "channel… populist rage" at concrete figures. The first justification, an argument concerning appropriateness, is examined in the following subsection, whereas (2) and (3), which relate to the alleged possible effectiveness of the strategy, are analyzed in the subsection, "Individualizing the system masks the system."

Fossil fuel CEOs are cogs

By stating that top fossil fuel executives are "at the helm" of criminal organizations, Aronoff (2019) means that executives were "seek[ing] out new reserves to burn as quickly as possible to keep their shareholders happy" and drawing on resources to undermine regulations. Thus, as powerful decision-makers in fossil fuel corporations, top executives are "those most responsible for the crisis [and should be held] fully accountable." The notion of responsibility here assumes that top executives are relatively free in their actions and decisions. This section makes the case that the actions of CEOs are shaped, in elemental ways, by their role in the structure of capitalist corporations. To make this argument, we first briefly trace the rise and dominance of the giant corporation in monopoly capitalism and the place of the CEO in this system.

The corporation has a long history, stretching back to ancient Roman *societates*, which resembled modern corporations by "permitting individuals to bind together into a collectivity, whose existence and perpetuation was independent of any individual member" (Stern 2017: 22). Although the commercial corporation, or joint-stock company, became a prominent form of incorporation by the late fifteenth century (Stern 2017: 25), giant monopolies did not dominate national markets in Europe and, especially, the USA until the end of the nineteenth century (Foster 2018), following legislative transformations throughout the nineteenth century that moved the corporation from the realm of public governance to private law. For example, in 1886, the US Supreme Court ruled that corporations were persons with legal rights (see Bakan 2004: 16; Whyte 2020: 36ff). Starting near the conclusion of the nineteenth century, the giant corporation "displaced the small family firm as the dominant economic unit of the system, marking the end of the freely competitive stage of capitalism and the beginning of monopoly capitalism" (Foster 2018). Since the 1970s, monopoly capitalism has become increasingly financialized—to combat stagnation and a lack of profitable investments, finance became a relatively autonomous process of capital accumulation—and internationalized, where the global market is increasingly controlled by larger and fewer multinational corporations (Foster and McChesney 2017). It is important to note that the development of the business corporation has always been to maintain and expand the underlying goal of capitalism: accumulate capital (Baran and Sweezy 1966: 58ff). In comparison to the individual capitalist, the corporate form has a longer lifespan and keener risk-avoidance skills. As Whyte (2020: 4) puts it, the corporation is "the mechanism that capital uses to reproduce itself."

Assuming that social systems are first and foremost composed of roles, not individuals, and their relations (e.g., Parsons and Shils 2001), what is the role of the CEO in the monopoly-capitalist system? Milton Friedman (1970) answered this question in a straightforward way in a famous *New York Times* essay:

> In a free-enterprise, private-property system, a corporate executive is an employe of the owners of the business. He has direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while

> conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom.

While Friedman is often wrongly credited or blamed, depending on one's position, for an intellectual paradigm shift in corporate governance, the truth is that "whatever emphasis he placed on the bottom line was hardly novel. Instead, it was widely accepted at the time he wrote that generating profits was a core corporate mission" (Cheffins 2020: 8). The CEO is necessarily the warden for the corporation's accumulation of capital and, if they are a "good" CEO, they act only in the corporation's best interest (profit-maximization). The typical shareholder's interest in the corporation is their own accumulation of wealth while the CEO's role is to the perpetuity and betterment of the corporation itself.

In his 1980 classic *The Environment*: *From Surplus to Scarcity*, the pathbreaking environmental sociologist and neo-Marxist Allan Schnaiberg (1980: 207) argues that the "role of businessmen is as *expanders* of production." In this role, "it is apparent that businessmen have no a priori interests as businessmen in stopping the expansion of production, and every interest in advancing it." This assessment certainly applies to top corporate executives whose explicit purpose and organizing aim is to grow the corporation. The role of corporate management is to maximize profits for the company. The content of the decisions of concrete executives will, of course, vary, but they will aspire to this all-important aim, an aim necessitated by social-structural conditions. We agree that rational adults can reflectively choose between different possibilities in whatever role they fill. However, roles place constraints on what possibilities can be realized. This structural insight is especially fitting in the case of corporations, which are, by creation, depersonalized, thereby "encourag[ing] the removal of responsibilities for the consequences of corporate decisions" (Tombs and Whyte 2015: 113). In the case of fossil fuel corporations, the goal of top executives is to increase profits through the extraction and distribution of more fossil fuel resources. It is misleading to argue that top executives are responsible for performing the tasks they are structurally impelled and encouraged to do. In our society, a "good" fossil fuel CEO is one who most profitably manufactures fossil fuels. If this node in a system contributes to catastrophic harms and global injustices, then it is the system that is "bad," and only secondarily those fleshy humans who happen to fill its predetermined roles.

If one assumes that "evil" CEOs drive climate change, then it follows that a climate crisis would be diminished with CEOs who are moral, good-natured, and passionate about solving global problems. This assumption is similarly misleading. Regardless of the personality and ethics of concrete fossil fuel executives, the reality is that the fossil fuel industry would lumber on with or without their individual participation. If they were so ethical to call for an end to fossil fuel exploration and extraction, they would be replaced. This point is not restricted to fossil fuel executives. As Clive Hamilton (2015: xi) writes in the foreword of Christopher Wright and Daniel Nyberg's excellent *Climate Change, Capitalism, and Corporations*:

> it is not that the executives who run them [corporations] are evil; they simply function the way the system dictates and the system … is structured to keep the global capitalist system growing. The executives have no choice: if they cannot stomach it then they must leave and be replaced by people with fewer scruples or an enhanced ability to deceive themselves, to believe the stories their own Public Relations (PR) people make up.

In response to the expected criticism that our analysis is an abstract tautology, we propose a thought experiment. Imagine a world the same as ours in every way except that Rex Tillerson was never born. In this Tillerson-less world, it is highly unlikely that ExxonMobil would not have hired someone to fill the CEO role in 2006. It is also highly unlikely that the non-Tillerson CEO of ExxonMobil would not have done everything in his or her—likely his—power to maximize profits by expanding production from 2006–2017. Tillerson is not the problem as he could have been replaced by any number of "suits." Chomsky puts it this way:

> All [CEOs in fossil fuels and related industries] are following impeccable capitalist logic, knowing exactly what the consequences are, but in a certain sense having no individual choice: if the CEO chooses otherwise, he will be replaced by someone who will do the same thing. The problem is institutional, not merely individual (in Chomsky and Pollin 2020: 54).

The problem is that Rex Tillerson lives in a society that is ruled by giant corporations whose only aim is to expand and run by CEOs whose only goal is the perpetuation of their particular corporation.

To summarize, trying a fossil fuel executive for harms caused by climate change would be akin to trying an executioner for murder. The individual filling the role is of minimal importance. The problem is the role itself in relation to the total social system. In other words, the seemingly sensible intuition to focus on the intent of wrongdoers is actually a deceptive intuition in the case of many climate change-related harms. Although we make this case from a political-economic perspective rather than a legal perspective, when it comes to climate change-related harms, there is far more explanatory power in examining systems and roles (i.e., structure) than there is in pointing to the intent of a "guilty mind" (i.e., psychology) (for the history of the conceptualization of "*mens rea*," see Sayre 1932). In the following section, we argue that drawing attention to individual intent as the basis for criminal culpability veils the system driving climate change. This structural argument has practical implications for climate-political strategy.

Individualizing the system masks the system

Along with being the "right thing to do," Aronoff (2019) makes two consequentialist arguments for trying fossil fuel executives for crimes against humanity: (1) trying individual executives "makes clear to fossil-fuel executives that they could face consequences beyond vanishing profits" and (2) crimes against humanity case "could channel some much-needed populist rage at the climate's 1 percent." Building on the argument that individualizing the causes of environmental problems may mask the causes of environmental problems, this subsection challenges both assumptions.

Environmental sociologists and others have made the case that blaming individuals for climate change and other environmental problems, and focusing on solutions that modify individual behavior, can have counterintuitive consequences, including the concealing of systems that drive environmental problems (e.g., Stoner 2021; Szasz 2007). For example, people given the option to implement household actions to reduce emissions were less likely to support carbon taxes (Werfel 2017). In fact, the probable reason fossil fuel companies have spent millions of dollars on promoting individual behavioral changes as the solution to climate change is to insulate their own actions from regulation (McFall-Johnsen 2021). We argue that blaming CEOs similarly individualizes structurally caused climate change harms, and predict this populist strategy will have similar counterintuitive results. A focus on CEOs conceals the larger role played by the structural backdrop in which corporate activity takes place.

Aronoff's (2019) first consequentialist argument, that other fossil fuel executives would be frightened by a trial against a fellow executive upon knowing "they could face consequences beyond vanishing profits," has ambiguous potential consequences for mitigation. Perhaps, the hypothetical trial would deter some applicants from becoming a fossil fuel executive if given the opportunity, but again, there would be nothing stopping a formally environmentally compliant corporation from carrying on legally valid forms of environmental degradation. For a related example, most base erosion and profit shifting, the strategies multinational corporations use to avoid domestic tax liabilities, occur through legal avenues such as debt shifting to intra-company subsidiaries, strategic corporate inversions, and treaty shopping (Beer et al. 2018). Despite the legality of most corporations' tax strategies, domestic jurisdictions lose an estimated 500–600 billion American tax dollars to these practices (Shaxson 2019). Similarly, we argue that the harm done by corporations to the climate is largely through their routine, legal activity, not through the occasional aberrant actions of a rogue CEO. This is not to say that Shell's misconduct in the Niger Delta, for example, does not merit legal repercussions. Rather, such unfortunate circumstances are only a small fraction of the otherwise legal operation of fossil fuel companies that cause the overwhelming amount of climate change-related harms.

Aronoff's second consequentialist argument is that trying fossil fuel executives, who are the "clear villains" and should be "shamed," would "put names and faces to a problem too often discussed in the abstract." Our reply to this populist argument logically follows the line of thinking developed up to this point: blaming concrete fossil fuel executives as the cause of climate change perpetuates the myth that environmental degradation is caused by bad individuals rather than by society's own internal structural imperatives. We should not put a face on the problem precisely because the causes of the problem really are abstract.

Let us assume a highly improbable future event: an ICC trial with Rex Tillerson as the defendant, charged with crimes against humanity. The outcome: he is found guilty and punished harshly. Those observing the spectacle may feel as though climate change is being addressed because a scoundrel responsible for climate change has been punished. However, this would be an illusion, for two reasons.

First, it is unlikely that, following the trial, no one would fill top executive positions (see above), unless the corporation itself had completely altered its basic structure. However, the latter hypothetical would indicate that society had already entered a new political and economic epoch, one that would render moot this consequentialist case for an ICC trial.

Second, and more importantly, pointing to individuals or groups of individuals as the cause of climate change can only further mask, rather than shine light on, the system that drives climate change. The CEO of a fossil fuel company must extract fossil fuels, the most profitable of energy sources (Kenner and Heede 2021), to increase profits. As as long as that role exists, along with the system in which it is embedded, those filling that role will behave within predetermined systems of action or be replaced by someone who will.

We hope that our argument is not interpreted as a deterministic claim that individuals are unimportant or that environmental social-scientific research should not bother with individual-level analysis. There are many synthetic and emerging theories of individual-society relations in the context of climate change (e.g., Stern et al. 1999; Shove 2010; Norgaard 2011; Ollinaho 2016; Gunderson et al. 2020; Weintrobe 2021). Developing models that embed individuals in social structures is essential for explaining the social-psychological basis for climate change inaction, pinpointing variables that predict support for involvement in environmental movements, and other important questions. Our underlying point related to the structure-agency problematic is simple: any individual filling the role of a fossil fuel CEO will make decisions that he or she thinks best increases profits for the corporation (e.g., how to best expand fossil fuel extraction), a corporation embedded in a society that structurally requires profit-maximization and reinvestment. The individual is not the problem; it is the system—how a particular form of ownership (the business corporation) came to dominate other forms of political, legal, and social forms of organization. We conclude that the climate movement's strategy should be one in which political demands are made at this macro-systemic level through reconfigurations of property, ownership, and corporate governance.

Conclusion

This paper argues that (1) the actions of CEOs are considerably shaped and constrained by capitalism as a total system—they are cogs in its machinery—and that (2) targeting wrongs perpetrated by fossil fuel industry CEOs individualizes the causes of climate change and presumes that punishing an individual or a group of bad actors will provide part of the solution to climate change. However, the primary driver of climate change is the system of capitalism as a total mode of production. Realizing the radical changes necessary to tackle the climate crisis requires rigorous examination of how the structure of contemporary capitalism perpetuates environmental degradation.

There is no global problem more conducive to educating the public about the nature of the capitalist system, and its stranglehold over the entire planet, than climate change. Part of this education is avoiding the lure of putting a human face on a problem driven by an inhuman system. The only route to address climate change is altering the structural conditions that require constant capital accumulation and, with it, emissions. This case has been elaborated extensively elsewhere, and cannot be deeply engaged here (e.g., Foster et al. 2010; Stoner and Melathopoulos 2015; Clark et al. 2018). Scholars in critical green criminology and related areas have done much to bring together the argument that a growth-dependent economic system is the foundation of corporate and state-corporate crimes against the environment, and the climate in particular (Lynch et al. 2013; Stretesky et al. 2013; Long et al. 2016; White 2018; Kramer 2020; Whyte 2020; Lynch et al. 2021; Van Der Velden and White 2021). For example, Whyte (2020: 3) convincingly defends the thesis that "the contemporary form of the profit-making corporation is probably as close as we could get to a model organisation that is capable of destroying the world."

While this argument is "abstract" and may be a more cumbersome rallying cry for increasing the size and militancy of the climate movement, the spread of this awareness is imperative for the possibility of a transformative climate politics. To fundamentally change the abstract social relations that determine how wealth is accumulated and how resources are distributed for the reproduction of these relations, the climate movement will need to continue to (1) identify barriers to transforming global political-economic conditions and (2) propose prescriptions consistent with the diagnosis that climate change is a systemic contradiction of capitalism (e.g., Stuart et al. 2020). Only some of the barriers to changing the modern corporate structure include the enshrinement of private property as a human right, the removal of shareholders from any liability for the corporation through corporate governance laws, the lobbying of fossil fuel companies and other carbon-intensive industries to delay climate action, and the ability of multinational corporations to evade state jurisdictions and tax structures. These features of the world system would persist despite any efforts to address them at an individual level (e.g., criminally prosecuting fossil fuel CEOs).

While we do not have the space to outline a coherent plan for "system change" here, we point to one relevant program that we think is especially promising: fossil fuel nationalization. A course of action which Aronoff (2020) also advocates, fossil fuel nationalization would create an ownership structure in which it is possible to plan a rapid phase-out of fossil fuels and to transition fossil fuel workers into careers in renewable energy and related sectors (e.g., Paul et al. 2020). We have stressed elsewhere that nationalization as a fossil fuel phase-out plan would need to be paired with a political movement and party committed to phasing-out fossil fuels and a large-scale transition to renewables (Gunderson and Fyock 2021). Without these essential components, the nationalization of fossil fuel companies would merely monopolize the control of fossil fuel extraction in the hands of the state (e.g., as is the case in China). In other words, nationalization only has the potential to challenge the anti-democratic nature (cf. Glasbeek 2002: ch. 6) of the private control of fossil fuel corporations if it is tied to public forms of governance and control. In contrast, the social structure of private ownership is inherently stacked against the phasing out of fossil fuels for reasons described throughout this paper: privately owned firms must grow, and the growth of fossil fuel companies requires increases in fossil fuel extraction. Fossil fuel nationalization is only one strategy that has the potential to alter current power relations (e.g., the role of the private executive) and move "beyond" the capitalist system that drives climate change (Stuart et al. 2020).

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