



UNIVERSITY OF HELSINKI



<https://helda.helsinki.fi>

Helda

Layered Resources and layered politics : Dispossession by environmental degradation at the frontlines of oil extractivism

Nygren, Anja

Taylor and Francis Ltd.

2025-10-21

Nygren, A 2025, 'Layered Resources and layered politics : Dispossession by environmental degradation at the frontlines of oil extractivism', *Annals of the American Association of Geographers*, vol. 115, no. 9, pp. 2262-2287. <https://doi.org/10.1080/24694452.2025.2522842>

<http://hdl.handle.net/10138/599686>

10.1080/24694452.2025.2522842

cc_by

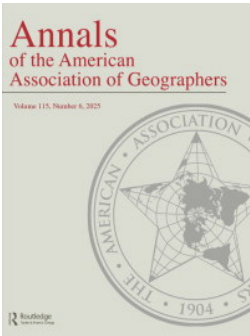
publishedVersion

Downloaded from Helda, University of Helsinki institutional repository.

This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Please cite the original version.



Layered Resources and Layered Politics: Dispossession by Environmental Degradation at the Frontlines of Oil Extractivism

Anja Nygren

To cite this article: Anja Nygren (24 Jul 2025): Layered Resources and Layered Politics: Dispossession by Environmental Degradation at the Frontlines of Oil Extractivism, Annals of the American Association of Geographers, DOI: [10.1080/24694452.2025.2522842](https://doi.org/10.1080/24694452.2025.2522842)

To link to this article: <https://doi.org/10.1080/24694452.2025.2522842>



© 2025 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 24 Jul 2025.



Submit your article to this journal [↗](#)



Article views: 168



View related articles [↗](#)



View Crossmark data [↗](#)

Layered Resources and Layered Politics: Dispossession by Environmental Degradation at the Frontlines of Oil Extractivism

Anja Nygren

Global Development Studies, University of Helsinki, Finland

Extractivism and associated environmental-social conflicts have attracted growing attention in recent years. Drawing from archival research, documentary analysis, and ethnographic field work, this article analyzes the decades-long struggle between the oil industry, state authorities, and fisher-farmers over salinization, contamination, and associated dispossession at the frontlines of oil extractivism in Mexico. Analyses of extractive conflicts have frequently centered on smallholders' struggles against land appropriation. I argue, however, that smallholders' dispossession through hydrocarbon extraction more commonly materializes in the degradation of their environments than in direct appropriation of their lands. Drawing on recent theorizations in subterranean political ecology and voluminous resource geography, the study shows that consideration of layered resources and layered politics is needed to enhance understanding of oil-related dispossessions and cognate contestations. The article presents extractive frontlines as sites of sacrifice and stamina, involving diverse tactics by local residents and social movements to hold the oil industry responsible, and techniques of pressure and persuasion by the oil industry and the state to stave off local claims for compensation and crush resistance. The study contributes to discussions on access to layered resources and politics, dispossession by environmental degradation, struggles over recognition and responsibility, and visible and invisible forms of contestation and repression amidst extractivism. *Key Words:* *dispossession, hydrocarbon extractivism, justice, Mexico, oil extraction, social movements.*

In recent years, accelerated extractivism and its effects—greenhouse gas emissions, environmental pollution, and conflicts over access to resources involving companies, states, and local populations—have received increased attention (Kikon 2019; Wilson 2021; Heikkinen, Nygren, and Custodio 2023; Spalding 2023). Consequently, there is a rich body of literature analyzing resource extraction, land acquisition, and smallholder dispossession for agro-industrial and biofuel plantations, hydrocarbon and mining operations, and initiatives for conservation and climate change mitigation in different parts of the world (Lunstrum, Bose, and Zalik 2016; Anthias 2018; Lesutis 2019; Wolford 2021; Vehrs and Zickel 2023).

Engaging with recent political-ecologically oriented extractivism literature, this article analyzes five decades of conflict between the oil industry, state authorities, and small-scale fisher-farmers over salinization, contamination, and associated

dispossession at the frontlines of hydrocarbon extraction in Chontalpa, Tabasco, in southeastern Mexico. It focuses on the following questions: How has oil extraction shaped access to resources and forms of dispossession at the frontlines, and how have the oil industry, state authorities, and frontline residents negotiated compensation for associated impacts? How do people who have lived amidst extractivism for decades contest the politics of recognition practiced by the oil industry and the state, while seeking ways to make the industry responsible? Extractivism refers to extensive resource exploitation, with an attendant logic of nature commodification (Gudynas 2015; Svampa 2019). Often the sites of extraction are targets of rapid resource removal, with scant attention paid to local productive structures, benefit sharing, and sources of employment, as value-adding processes are carried out elsewhere (Ye et al. 2020; Nygren, Kröger, and Gills 2022).

ARTICLE HISTORY

Initial submission, January 2024; revised submissions, January and May 2025; final acceptance, May 2025

CORRESPONDING AUTHOR Anja Nygren  anja.nygren@helsinki.fi

© 2025 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

In extractivism-related literature, detailed analyses have been carried out of smallholders' enforced displacement through large-scale land encroachments and enclosures (Lahiri-Dutt, Balakrishnan, and Ahmad 2012; Levien 2018; Svampa 2019; Li and Semedi 2021). I argue, however, that in hydrocarbon extractivism, smallholders' dispossession usually materializes in restrictions to their access to resources and degradation of their environments, rather than direct land appropriation. Drawing on recent theorizations in subterranean political ecology and voluminous resource geography, I suggest that to enhance understanding of extractivism, consideration of *layered resources* and *layered politics* is needed. Although oil industries and farmers rarely compete for the same resources, the verticality of resources and the restrictions set by subterranean extraction make the coexistence of oil extraction and agriculture and fishing within the same area highly complex. This becomes evident when analyzing the interlinked effects of oil extraction across different layers, generating stacked resource deals and dispossession by environmental degradation.

Focusing on the case of Chontalpa, I examine the centrality of layered resources and politics, and the indirect dispossession by environmental degradation characteristic of oil and several other sectors of extractivism (Perreault 2013; McKay, Alonso-Fradejas, and Ezquerro-Cañete 2021). Indirect dispossession refers to a process that gradually restricts local forms of production and social reproduction (Harvey 2003), disrupting people's maintenance of everyday life (Ojeda 2021). The article analyzes how heterogeneous smallholders have organized themselves to bear witness to oil-related harms and strive for justice in extractive sacrifice zones, where local livelihoods are constrained by political-economic rationales of extractivism. It addresses the analytical possibilities that an approach of layered resources and politics opens to understand dispossession by environmental degradation and associated contestations, showing that the vertical and horizontal, and the material and metaphorical are closely interlinked in extractivism-induced dispossession.

Mexico is an illustrative example of a "petro-state." The state-owned company, Petróleos Mexicanos (Pemex), is the eleventh largest producer of crude oil in the world and a top supplier of crude to the United States, with production of 1.9 million barrels per day, and a net sales revenue of US\$73

billion in 2021.¹ Since the early 1970s, the Mexican federal government has implemented huge interventions in the Chontalpa wetlands to extract some of the country's largest hydrocarbon reserves, with drastic consequences for dozens of agricultural communities due to restrictions on resource access and large-scale salinization and contamination of soils and water sources. In light of long-term trajectories, the Chontalpa wetlands present as zones of sacrifice and shame, as well as sites of struggle and stamina, where the oil industry and state authorities have employed complex modes of pressure and persuasion to depoliticize extraction and avert local claims for compensation, whereas residents have designed diverse tactics of contestation to hold the oil industry responsible. The study illustrates the possibilities of and limitations on contesting prevailing forms of extractivism within the extraeconomic strategies used by the oil industry to crush resistance.

The next section draws on (subterranean) political ecology and (voluminous) resource geography to advance the conceptualization of the layered resources and politics related to dispossession by environmental degradation and cognate contestations. The third presents the characteristics of oil extraction in Tabasco and the methods used in the study, and the fourth analyzes oil-related salinization and pollution in Chontalpa as a dynamic connected to vertically layered resources and politics, and horizontally linked networks. The fifth analyzes the politics of recognition, and the sixth examines the mobilizations around compensation and the oil industry's tactics to "tame" them. The conclusion addresses layered resources and politics as a key analytic in understanding the dispossession by environmental degradation characteristic of oil extraction, and crucial to wider theorization of extractivisms and their contestations.

Layered Resources and Layered Politics

The analytical framework of this study has been inspired by recent theorizations on resource access, dispossession, and the politics of recognition in (subterranean) political ecology and (voluminous) resource geography. Developing Harvey's (2003) approach of accumulation by dispossession, several studies have shown how agro-extractivism, biofuel production, and open-pit mining have displaced large

numbers of smallholders through aggressive enclosures (Lahiri-Dutt, Balakrishnan, and Ahmad 2012; Borrás et al. 2016; Lesutis 2019; Li and Semedi 2021), transferring their land rights to extractive firms and separating the rural poor from their means of production either by force or through market mechanisms (Levien 2018; Wolford et al. 2024). A rich body of literature also shows how overlapping projects of conservation, climate change mitigation, and extraction produce huge displacements, eroding smallholders' and communal resource rights (Massé and Lunstrum 2016; Ybarra 2018; Enns, Bersaglio, and Sneyd 2019; Kröger and Nygren 2020; Vehrs and Zickel 2023).

In hydrocarbon extractivism, though, dispossession does not usually involve smallholders' direct eviction from their lands; rather, it causes indirect dispossession through restrictions on access to resources and environmental degradation, which gradually erode the conditions vital to maintaining local livelihoods. The same holds true of certain forms of agro-extractivism, underground mining, and conservation-related green extractivism (McKay et al. 2016; Leifsen 2017; Rai et al. 2019; Veltmeyer and Ezquerro-Cañete 2023). Here I build on political-ecological and critical-agrarian studies that point out that in addition to outright usurpation of smallholders' land, attention is needed to indirect livelihood dispossession (Feldman and Geisler 2012). Benjaminsen and Bryceson (2012) and Büscher and Davidov (2016) showed how conservation projects include forms of extraction, where the spaces involved remain communal but the benefits from them contribute to capital accumulation by tourism companies and rent-seeking governments. Likewise, Fairhead, Leach, and Scoones (2012) and Hiraldo (2018) demonstrated that some carbon sequestration and ecosystem services projects involve the reformulation of rules governing access to resources, producing *in situ* displacement.

This article develops the concept of "dispossession by environmental degradation" to grasp the key features of indirect dispossession characteristic of oil extractivism. Inspired by Perreault (2013), Leifsen (2017), and Hurtado and Vélez-Torres (2020), the study uses this analytic to examine how small-scale fisher-farmers are dispossessed without being moved, as the impacts of oil extraction are outsourced to them. Parallel dynamics hold true in agro-extractivism based on contract farming, where land-use control by processors and soil degradation by agro-chemicals can proletarianize farmers

without their lands being seized (Vélez-Torres et al. 2019; McKay, Alonso-Fradejas, and Ezquerro-Cañete 2021).

To understand the dispossession characteristic of oil extraction, attending to layered resources and layered politics is crucial. Recently, various scholars have remarked that a horizontal approach, focusing on how extraction affects the landscape, provides limited insights into how subsoil extraction and soil-based activities come together through interlinked spaces (Himley 2021; Collins and Fletcher 2024). Inspired by D. S. Moore's (2005, 2) idea of "sedimented processes," this study analyzes how diverse material and political layers are tied together in the indirect dispossession that derives from and is sedimented into oil extraction—thereby contributing to an emerging literature on vertical space and politics (Marston and Himley 2021; Mostafanezhad and Dressler 2021).

As Figure 1 indicates, interconnections between subsurface, surface, and atmospheric layers are central to understanding the impacts of oil extraction and cognate forms of dispossession. First, drilling of crude and natural gas from the subsoil and further processing produce complex spillover effects (Bebbington and Bury 2013; Hunsberger et al. 2017), releasing pollutive flows into the atmosphere through continuous gas flaring that causes climate warming and acidification. Second, oil extraction expands both underground and into the landscape through oil infrastructure, constraining access to land and surface and groundwater resources (Nygren 2021). Third, oil spills, gas explosions, and gradual discharge of oil residues pollute surrounding soils and water sources, the fluid characteristics of oil diverting such waste through water networks to faraway places.

As several political-ecological scholars have remarked, subterranean resources are not just "below there," to be discovered; they are actively "produced" (Bridge 2011; Himley 2021). A layered approach enables examination of how oilscapes are made, maintained, and depleted through processes in which the hydroecological and sociopolitical are interlinked (Bustos-Gallardo, Bridge, and Prieto 2021). Although several studies have explored seismic surveys and construction of underground oil infrastructure as techniques of laying claim to "territory beyond terra" (Valdivia 2015; Peters, Steinberg, and Stratford 2018; Quist and Nygren 2019), it is important to expand our understanding of oil extraction to connections

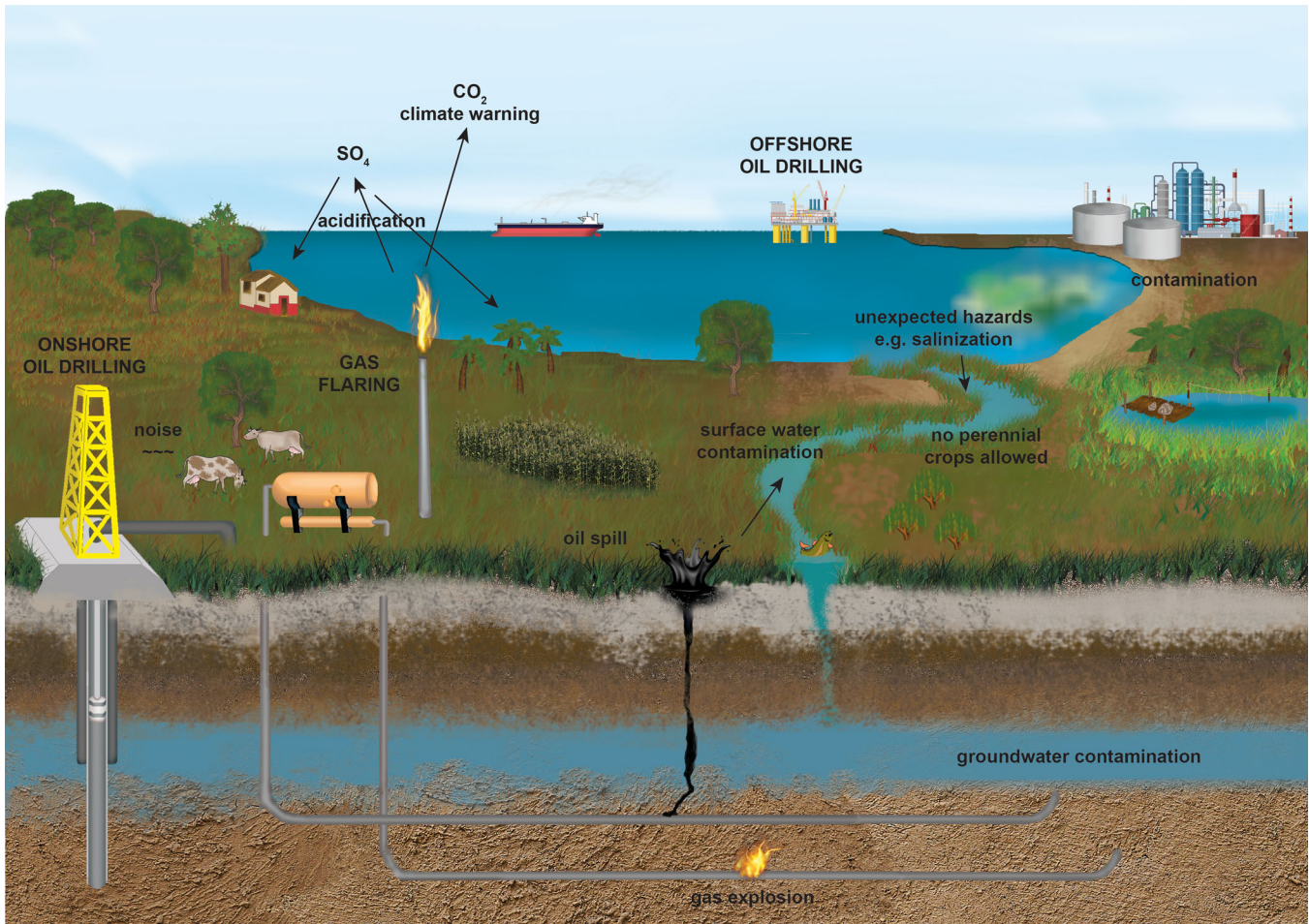


Figure 1. Links between subsurface, surface, and atmospheric layers in hydrocarbon extraction.

between layered resources and politics and linkages between the geological, atmospheric, hydrological, political, and social. Interlocking forces linked to extraction often cause long-lasting, partly invisible pollution through “slow violence” (Nixon 2011, 2), as toxicity accumulates over time (Heikkinen, Nygren, and Custodio 2023) and gradually disrupts other production activities (Davies 2018). Furthermore, to maintain ceaseless production, the oil industry expands its operations vertically into new subsoil deposits and horizontally into new areas, which gives it the character of “geographical restlessness” (J. W. Moore 2007, 130).

Consideration of the regimes that govern ownership of subsurface and surface resources is important for understanding the layered effects of oil extraction. In general, there is a differentiation between private and public forms of subsurface ownership. In the private system, landowners overlaying a subsoil deposit hold the subsurface ownership rights; thus, the

extractive firms must negotiate with them for access to subsoil resources. In the public one, the state owns subsoil resources, regardless of surface land ownership. Within this system, two types of state control exist. In the regalian one, subsoil resources belong to no one until they are discovered, whereupon the state has the power to grant extraction rights in return for rent. In the domanial one, subsoil resources are the state domain and can be extracted by a state monopoly or through an ad hoc agreement (Emel, Huber, and Makene 2011; Ryder and Hall 2017). Most of the Latin American countries follow the domanial system due to resource sovereignty, yet even in this system, oil firms must negotiate the right of temporary occupation of land with the surface landowners to build oil wells and transfer the extracted products. Nonetheless, split property rights, through which surface and subsurface rights can be sold or leased to separate actors, provoke dispossession without land appropriation (Ryder and Hall 2017).

Besides property rights, consideration of access to layered resources is crucial for comprehending oil-related dispossession. Although oil extraction requires relatively little surface land for its reliance on subterranean energy stocks (Huber and McCarthy 2017), it sets long-term restrictions on what can be produced on lands and in which conditions they will remain after extraction. Although smallholders usually retain land ownership, they might not have access to it and be able to benefit from it (Ribot and Peluso 2003) due to the constraints set by oil extraction.

To further the understanding of indirect dispossession, an analysis of layered resources needs to be combined with layered politics that shape access to resources and issues of responsibility. Here, I draw on Lund's (2016, 2024) ideas of the politics of recognition to explore the modes whereby oil firms, often in alliance with the state, seek to establish a particular sociopolitical order to ensure ceaseless extraction, as frontline residents strive to make the oil industry responsible for the harms effected. Especially when state-owned, the oil industry and the state depend on each other's endorsement of their respective authority (Lyll and Valdivia 2019; Nygren and Rabelo Avalos 2025). Simultaneously, the oil industry requires a social license from local people to operate, and state officials must attend to heterogeneous rural populations for wider legitimization of their authority. In contexts of legal pluralism, different authorities with varying degrees of legitimacy often compete over the power to decide who has access to what resources (Peluso and Vandergeest 2011). Thus, extraction involves negotiating a complex patchwork of rights, meaning that contestations are a crucial part of authority seeking (Kenney-Lazar, Suhardiman, and Dwyer 2018). Oil firms often exercise a mixture of formal and informal, and visible and obscure strategies to get a social license and avoid responsibility for any harm (Quist and Nygren 2015). Meanwhile, local residents employ diverse tactics, from open protests to underground resistance, to get institutional recognition of their rights and fair compensation for extraction-related harm. The perspective of "authority-in-the-making" enables examination of how political recognition is consolidated through negotiation and contestation, intermingling divergent views of which rights count, and who has the authority to make decisions on them (Lund 2016). It provides opportunities to examine

layered politics as comprising arenas where formal, informal, and shadow forms of struggle are configured via networked scales and scaled networks operating as webs of accumulation and contestation (Sud 2017; Nygren 2021).

This indicates that extraction is not just about laying claim to resources; it also includes symbolic struggles over authority as different actors try to control access to resources and politics by tangible and intangible means (Lund 2016; Schoenberger and Beban 2018; Sultana 2022). Examining the Ecuadorian lawsuit against Chevron Corporate, Sawyer (2017) showed how oil firms rely on diverse techniques to make harms invisible and responsibilities unrecognizable. Consequently, Frederiksen and Himley (2020) called for attention to modes by which extractive firms interweave strategies of repression and intimidation with tactics of persuasion and seduction. Instead of expelling local inhabitants, provoking the risk of volatile mobilizations, they seek to downplay damage and mold residents' subjectivities to adopt the ideas that extraction brings progress and prosperity (Bebbington et al. 2018; Valdivia, Havice, and Himley 2020). Meanwhile, the harms generated are externalized to local residents. An approach combining layered resources and politics provides a lens for examining oil-related dispossession and cognate contestations as struggles over access to resources and recognition of authority. It can also unravel how access to resources is constituted, controlled, and contested by invisible means of suppression and seduction and underground tactics of resistance.

The Trajectories of Oil Extraction in Tabasco

Tabasco has a long history of oil extraction and associated conflicts, which makes it a fruitful case for studying oil-related harms and contestations. Constitutionally, the federal state owns subsoil resources in Mexico and oil extraction has strong links to sovereignty. Only the state-owned company, Pemex, together with contracted oil-services providers, can explore, extract, and process oil and its derivatives in Mexico (Constitución 2022). The federal and state governments are highly dependent on the oil rents, exposing oil extraction to tumultuous politics.

Chontalpa has been one of the key areas of hydrocarbon extraction since the discovery of huge oil and natural gas deposits in Tabasco in the early 1970s. By 1975, Tabasco was already producing 287 million barrels of crude oil and 19,570 million m³ of natural gas annually (Capdepon Ballina 2009, 38). Mainly due to oil rents, the gross domestic product of the State of Tabasco increased from 331 million pesos in 1950 to 8,344 million pesos (adjusted to 1950 rates) in 1980, an increase of 2420 percent in thirty years. Meanwhile areas used for small-scale agriculture, cattle raising, and fishing were drastically degraded (Tudela 1989, 16–19). Chontalpa contains dozens of agricultural villages and some Indigenous communities, with a patchwork of private, communal (*ejido*), and state-owned lands. Most of the small-size farmers and *ejido* landholders practice food cropping, small-scale animal husbandry, and cacao or coconut production, many combining farming with lagoon-based oyster production and fishing or temporary work on large-scale estates, informal trade, or services.

The state has had a crucial although shifting role in hydrocarbon extraction in Tabasco, from the era of state-led corporatist governance to more recent public–private partnerships and neoliberal strategies that mix corporatist control with market-based governance. Despite current proposals for renewable energy transition via agrofuel and biofuel plantations, and wind and solar power (Avila et al. 2022), oil extraction remains the key element of the Mexican economy. Pemex is reextracting from mature oil wells (*pozos maduros*) in Chontalpa with new drilling techniques, opening offshore oilfields in the nearby Gulf of Mexico, and constructing an oil refinery in Tabasco to decrease Mexico’s dependence on oil processing in the United States. The government justifies the frenetic extraction with neo-extractivist discourses on the generous social policy programs to be financed by oil rents (Tetreault 2020).

The following analysis of oil-related conflicts in Chontalpa is based on archival research, documentary analysis, and several rounds of ethnographic field work conducted between 2010 and 2023. In total, fifty-five open-ended interviews and informal conversations were carried out with heterogeneous Chontalpa fisher-farmers; forty-two interviews with federal, state, and municipal-level authorities; twenty-one with oil-industry representatives; fourteen with nongovernmental organizations and social-movement

leaders; and thirteen with local researchers. These interviews were crucial to understanding conflicts over oil-related harms and cognate politics of recognition and responsibility, and informal conversations and participant observation among Chontalpa residents illuminated how people experience life in drastically altered environments, while trying to make sense of who they are and how they matter. Tracing conflict through various sites of assessment, decision-making, and contestation enabled understanding of the negotiations involved.

Field data were complemented by qualitative content analysis of oil-industrial reports, governmental documents, environmental evaluations, human rights commission reports, and compensation documents from the 1970s to the 2020s, gathered from various archives, libraries, and state institutes. I also conducted a search of Mexican newspaper reports on oil extraction and social mobilizations in Tabasco between 1975 and 2023 to examine discourses of access to resources and politics. When analyzing the media reports, I explored common framings of recognition and responsibility to review how the public narratives of oil-related effects link to layered politics.

Due to the political sensitivity of the topic, gaining access to privileged spaces, such as corporate boardrooms, and coping with the atmosphere of pervasive tension and tight insecurity posed many challenges. Nonetheless, I was able to conduct interview-based “ethnography by appointment” (Rajak 2011, xvii) with Pemex staff and attend oil-related meetings and industry-organized conferences. Testimonial narratives by older residents and retired state officials who remembered the salinization contestations of the mid-1970s cast light on divergent interpretations of the long-term impacts of extraction and the official policies and shadow politics involved.

The documentation of salinization in corporate documents and newspaper reports was sparse. Many materials had been destroyed for political reasons, the responsibilities of regulation had shifted between different institutions over time, and newspapers were controlled by the government, especially during the seventy years of rule by the *Partido Revolucionario Institucional* (PRI) from 1930 to 2000. A gulf between official discourses and unofficial practices required meticulous source criticism, with attention paid to who makes what kinds of statements under which conditions. To understand the aspects ignored, I tried to dig out hidden views and

contested narratives through open-ended interviews.² Another methodological challenge was to analyze historical materials in terms of the time of their production rather than interpreting them categorically through the lens of the present (Perreault 2018; Anand and Kamath 2024). For instance, the paternalistic discourse of oil company executives and governors in the 1970s was much more common practice than today.

Most methodologists agree that validity is a major strength of ethnographic research as data gathering usually occurs through face-to-face contacts over a relatively long period of time (Hart 2006; Li and Semedi 2021). To increase reliability, I cross-checked the information given by different informants and by the same informant in different contexts, and triangulated information provided by residents, oil-industry representatives, and state authorities. These cross-checks provided ways to verify that the opinions presented reflected the views of the actor group in question. The data were arranged according to chronological order, actors, and key topics, and pared down to identify historically persistent, yet contextually shifting discourses and forms of engaging in politics. The examples to be presented were chosen based on the criteria that similar information was given by several informants and the same phenomenon was observed several times in different settings.

As noted by Hart (2006), any analysis of dispossession needs to be linked to contextual conditions, meanwhile considering multiscale processes. Because access to layered resources and politics does not occur according to a “predictable protocol,” empirical research needs to explain the “how and why” (Lund 2024, 12). Ethnographic research combined with documentary analysis offers a means for identifying power-laden negotiations, invisible alliances, and underground contestations. As oil extraction in Chontalpa is situated but not exceptional, the following analysis aims to provide insights into the wider aspects of indirect dispossession characteristic of (oil) extraction.

Dispossession by Environmental Degradation

This section analyzes how access to layered resources and dispossession by environmental degradation related to decades-long oil extraction in Chontalpa are historically sedimented and politically constituted.

Chontalpa oilscapes were literally “built on mud” (Haarstad and Wanvik 2017, 443) during the 1970s oil boom. Oil extraction increased from 62,000 barrels in 1972 to 329 million barrels in 1982, and natural gas production from 8,700 million m³ to 32,000 million m³ (Capdepon Ballina 2009, 38). By 1984, 108 oilfields and 3,600 km of oil and gas pipelines had been established in the region (Beltrán 1993, 606–14). From there, crude oil was transported by pipelines to the State of Veracruz or by tankers to the United States for processing, connecting Chontalpan frontlines to global energy markets. Frenetic oil extraction led to a paradox of inequality in the abundance. Small-scale fisher-farmers—a major part of the population—experienced strong marginalization in relation to the magnitude of the oil industry. By the end of the 1980s, only 6 percent of local residents worked for Pemex (Beltrán 1993, 587), entailing a situation in which “resources are valuable, but people are not” (Li 2010, 69).

By constitution, the subsoil and the underlying hydrocarbon resources are the property of the federal state in Mexico (Constitución 2022), independent from who owns the surface land. This means that separate parties usually own the surface land and the hydrocarbon resources. Representatives of Pemex and the federal government saw Tabasco as a reservoir of unexploited resources and an impregnable hinterland to be opened up for development by harvesting the subterranean “gifts given by nature” (Tudela 1989, 338), visions legitimated by statements that oil resources are a national patrimony and, thus, are not “stolen” from anybody (Bennett 2016, 262). The imaginary that nature’s challenges can be overcome by modern technology and that oil production benefits all citizens (“Cada hombre es clave...” 1975) justified extraction on the fragile Chontalpa wetlands, with scant regard to environmental impacts or local territorial rights. As the Director of Pemex, Jorge Diaz Serrano stated, “The question is no more how to deal with poverty but how to confront ... the task of managing the abundance” (Cervantes Galván 1993, 634), and presidential candidate José López Portillo observed during his visit in Tabasco in 1976, “It’s time to increase the wealth with the wealth itself” (Maza 1979).

As noted by Lund (2024, 4), when governments intervene in dispossession, they often do so by recoding the constituent parts of the regimes of

possession. The changes in the constitution in 1977 in Mexico prioritized oil extraction over other land uses and granted the oil industry the legal right to temporary occupation of land, obliging landowners, *ejido* landholders, and Indigenous communities to lend their land through territorial encumbrance to the service of oil extraction (Reglamento 1977).

Rather than expropriating frontline land, however, the oil industry is interested in getting privileged access to subsoil hydrocarbon reserves, leaving the adverse impacts of extraction largely with the landowners. The 108 oilfields in operation in the mid-1980s occupied only 3 percent of the surface area of Tabasco (Tudela 1989, 346); however, this figure does not express the fragmentation of the parcels and the need for landholders to reorder their production due to infrastructure constraints—including oilfield batteries, separators, gas burners, tanks, and pipelines, acting as icons of the power of the oil industry to order the space and symbolically demonstrate its authority. For Chontalpa residents, oil wells are both intimate and alienated spaces: part of their lived environment yet sites they are not allowed to visit. Oil extraction prohibits certain land use, such as cultivating perennial crops and trees in areas affected by drilling or subterranean pipelines, as their roots can damage the infrastructure. These restrictions limit the opportunities of land-scarce farmers to participate in cacao and coconut production, two of the scarce options available for small-scale farmers to gain additional income. Often these farms can only be used for cattle raising after intensive oil extraction.

Oil extraction has also altered the lives of thousands of Chontalpa fisher-farmers through environmental degradation, a dynamic requiring attention to “what is taken and what is left” (Bruna 2021, 185). Since the 1970s, Pemex has dredged rivers and lagoons and built a network of roads and water canals to the oilfields. Huge wetland-drainage and earth-moving operations have provoked profound changes in water circulation and reduced the productivity of farming and fisheries. Yet most harms have been defined as the temporary price of long-term prosperity, and deeply political choices have been justified by claims that people need to adapt, not the development interventions.

When analyzing the impacts at stake, attention must be paid to layered links between subsoil, soil, groundwater, surface water, and air. In 1975, a 50-

m-wide opening was made from Machona Lagoon to the Gulf of Mexico at Boca de Panteones, partly to enable Pemex to transport equipment by barge to the oilfields (Figure 2). A subsequent storm, however, extended the opening to a kilometer, allowing an intrusion of saltwater from the sea into the wetlands that altered the hydrological conditions in the Carmen-Machona lagoon complex and salinated 80,000 ha of land (Tudela 1989, 341; Pemex 1994). The increased salinity favored the dominance of marine fish in the lagoons and decreased opportunities for oyster production, while soil salinization reduced agricultural areas and made 2,350 wells unfit for human consumption (Secretaría de Recursos Hidráulicos 1979; Salvador and Reséndez 1990). The consultants who had planned the opening had not carefully considered the regional hydrological conditions, nor the difficulty of controlling nonhuman forces with complex feedback loops.

Oil extraction also links to various types of pollution. The sulfurous gas flaring in the oilfields releases greenhouse gases, and acid rain harms maize, cacao, and coconut cultivation, and corrodes wire fences. Pemex has been evaluated as the ninth biggest producer of carbon emissions in the world, with cumulative emissions of 18,533 MtCO₂ equivalents in 1988 to 2022 (Grasso and Heede 2023, 461). Despite these figures, industry reports make little reference to extraction’s atmospheric effects related to climate change—marked in Chontalpa by intensified storms, floods, and rising sea level—and land subsidence connected to oil extraction from the subsoil increases the saltwater intrusion into water reservoirs. Furthermore, oil extraction poses the risk of oil spills. In 1979, the Ixtoc spill during Pemex’s exploration in the Gulf of Mexico (Maza 1979) lasted for 282 days and leaked 3 million barrels of oil, with significant effects on Chontalpa wetlands (Soto et al. 2014). The risk of a large oil spill or gas explosion related to the thousands of kilometers of pipelines crisscrossing Chontalpa wetlands and villages is high. Minor oil spills and gas leaks occur every month; however, these events do not get much attention, as the harm caused is largely routinized.

In 1979 and 1980, a group of Mexican hydrobiologists analyzed the pollution levels in the Carmen-Machona lagoon complex, the key site of oyster production in Tabasco. The hydrocarbon levels in the water samples were evaluated as low but those of

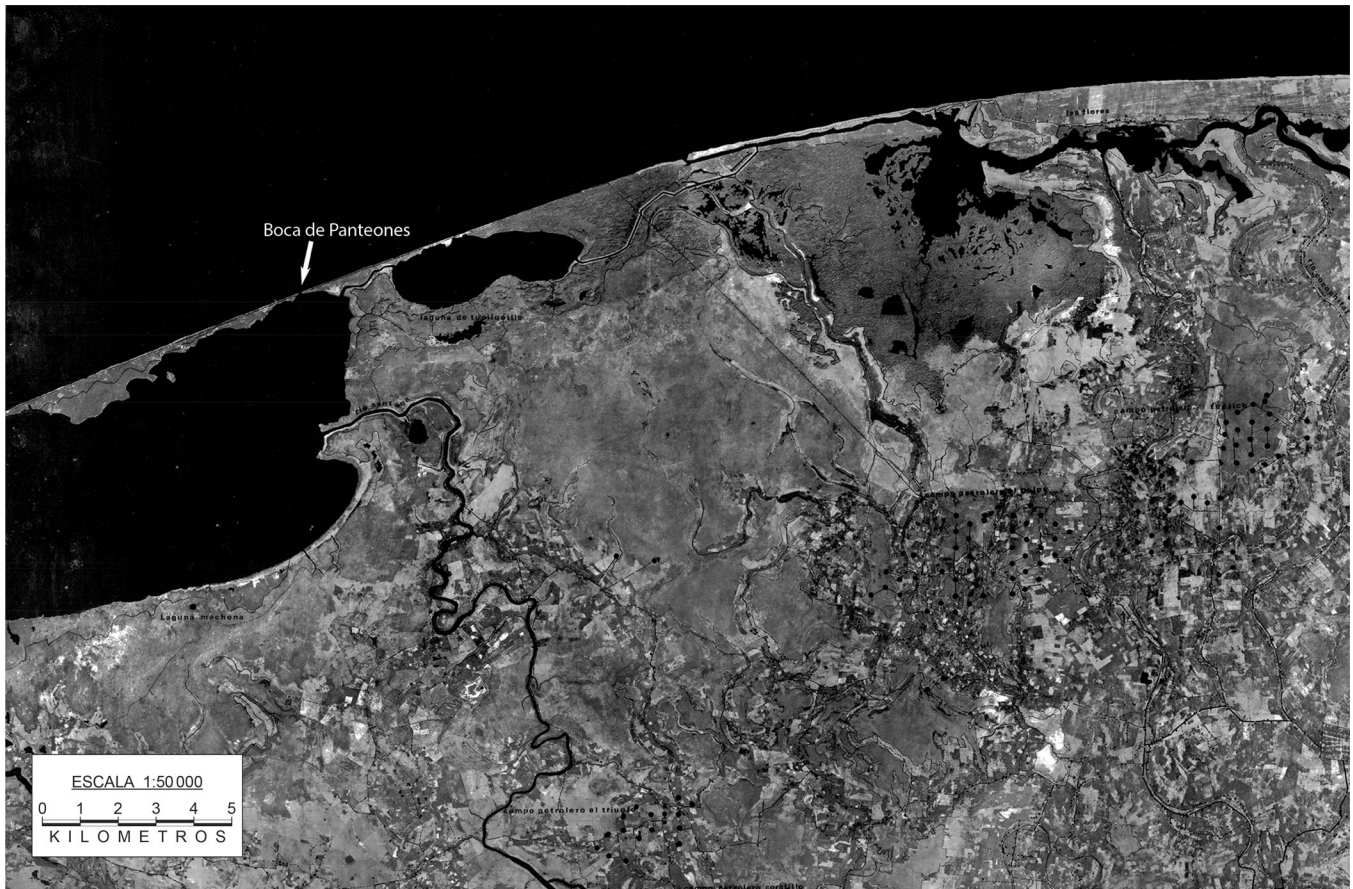


Figure 2. Aerial photo showing the opening at Boca de Panteones and dozens of oil wells in the oilfields of El Triunfo, El Golpe, and Tupilco. *Source:* Centro Documental de Estudios sobre el Agua. Used with permission.

polycyclic aromatic hydrocarbons—toxins linked to stomach and skin cancers and fetal malformations—in the lagoons’ sediments and oysters were high, indicating slow but cumulative pollution (Botello, Coñi, and Castro 1983). Initially sponsored by Pemex, funding was suspended after these findings. Likewise, when state officials were informed of the results, they dismissed them, stating, “This is populist ecologism, the situation is not so serious” (Restrepo 1993, 668). Nevertheless, as Figure 3 indicates, dozens of Chontalpa communities claimed compensation in the mid-1980s for soils that had been officially registered as salinated and polluted.

Hydrological analyses in the early 1980s also showed that sediments in the Coatzacoalcos and Tonalá Rivers near the oil processing plants of La Venta and Cinco Presidentes contained high levels of hydrocarbons: 1,794 and 1,829 ppm (mg/kg), respectively—whereas accepted levels are 30 to 100 ppm (Botello and Páez 1987)—making the Coatzacoalcos and the Tonalá among the most polluted rivers in the

world (Figure 4). At the time, Pemex was discharging untreated wastewater into rivers, while poorly maintained waste containers polluted water sources (Tudela 1989, 347). The extent to which Pemex was violating the spirit of the prevailing law is complicated, though: Few precautionary measures were required in regard to environmental risks, and dumping regulations were scarce. Yet, as many oil residues are not biodegradable, their presence in sediments exposes all life forms to health risks; furthermore, the overlapping effects of long-term exposure to hydrocarbons and other toxins are not well understood (Salas Landa 2016). Crude oil contains thousands of compounds, most of which have not been sufficiently studied to determine their toxicity (Sawyer 2017).

The key role of indirect dispossession in oil extraction—the result of restricted access to resources and environmental degradation—was revealed almost by accident in this study. Oil industry officials interviewed in the first field work period in 2011 offered assurances that Pemex does not expropriate

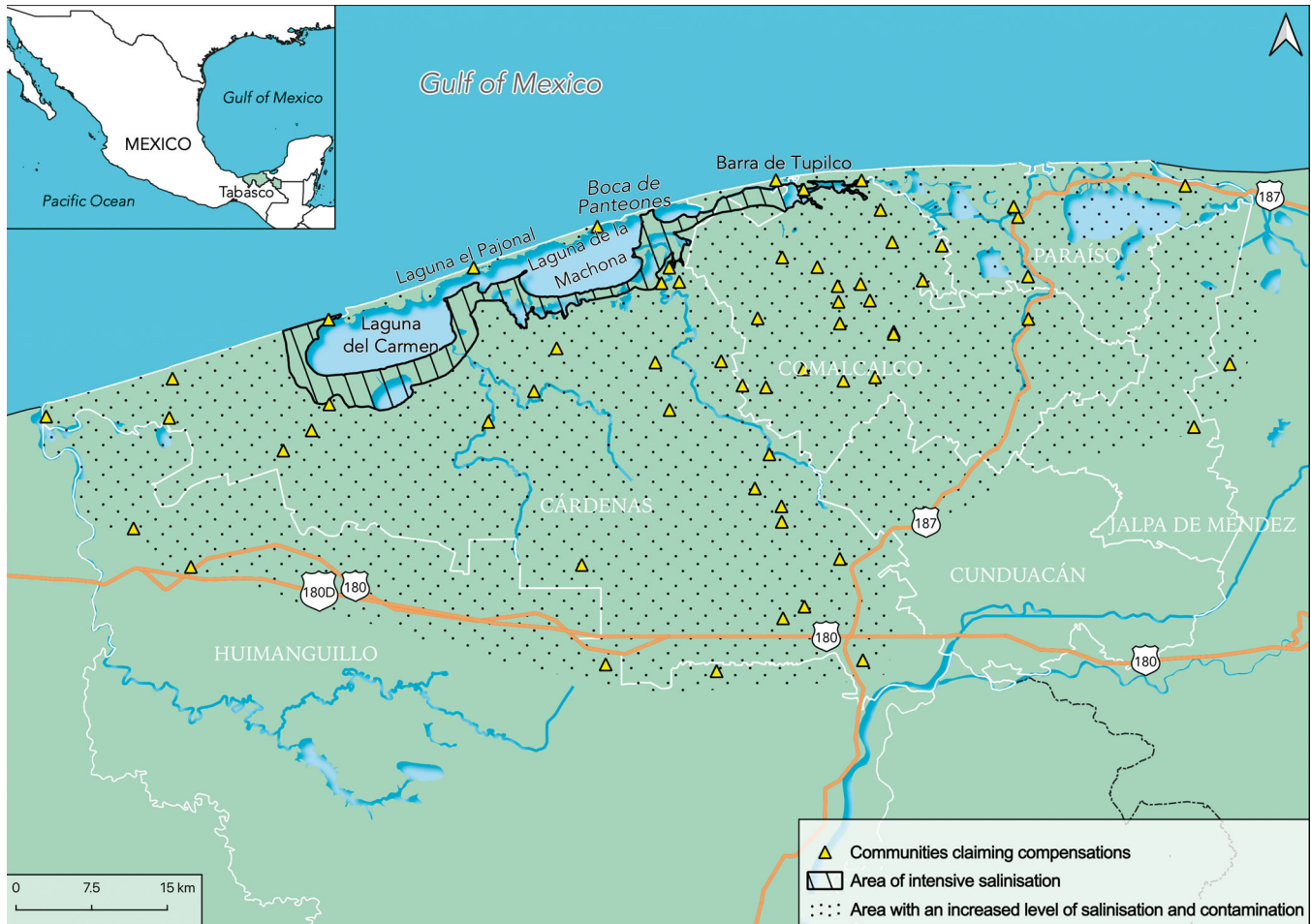


Figure 3. The registered area of salinisation and contamination in Chontalpa in 1985, and the communities claiming compensation. Designed based on information in Beltrán (1993) and Pemex (1994).

smallholders' land; however, their statements received little attention due to the suspicion that they might be concealing such actions. Meanwhile, the problem was implied by local farmers when stating, "The oilfields are in our lands, but the land produces poorly because of degradation" (Interviews, August 2011). Yet, it was a statement by an official responsible for regulating oil extraction in an interview in February 2012 that explicitly directed attention to the role of indirect dispossession: "Pemex's deal is just subterranean, thus *campesinos* [peasants] can continue to cultivate their land." A later possibility to visit some oilfields—permission being difficult to get for security reasons—demonstrated that the oil wells are, in fact, on farmers' lands. As oil extraction and agriculture occur at different layers, however, the industry can conceal many of the impacts of extraction, making it difficult for residents to show causality between the pollutants that the oil industry emits and the ailments people are suffering. Furthermore, most of the

evaluations have been funded by Pemex, increasing the probability of minimizing harms and disentangling company responsibility.

Dispossession by environmental degradation thus constitutes a more complex process than direct land appropriation. First, the impacts of oil extraction extend to diverse indirect effects, problematizing the coexistence of oil extraction and agriculture or fishing (Figure 5). Second, the cumulative effects of extraction are difficult to undo and stay largely with local landowners, as the oil industry does not want to own frontline land, viewing extraction damage as difficult to repair. Third, the material and symbolic aspects of dispossession are tightly entangled, with complex impacts on people's livelihoods, territorial control, constitution of subjectivity, and sense of social well-being.

This indicates that although people remain on their land, they recognize that production on the agricultural fields has gradually reduced, and fishing



Figure 4. The Tonalá River, with effects of oil-related pollution. Photo by Anja Nygren, 2023.

has increasingly moved to the open sea, inaccessible to informal fishers. Contrary to industry promises, oil extraction has never generated major employment opportunities for local people; the main workforce contains long-distance workers with technical education. Many residents have become agricultural day laborers or migrated to urban areas to work in informal activities. Those who cultivate their land struggle to make it produce and to cope with reduced livelihood options.

Politics of Recognition and Responsibility

Although tightly entangled in Chontalpan lives for decades, Pemex has used a tactic of strategic ignorance in terms of its adverse impacts. In August 1977, a “Dictating Commission of Complaints of the State of Tabasco” (CODIRET) was established by the government with funding from Pemex to mediate compensation negotiations with residents (Velázquez Guzmán 1982, 183). This strengthened the combined authority of the company and the state, blurring boundaries between public and private power. Unlike in many other countries, where affected people negotiate directly with extractive firms (Frederiksen and Himley 2020), the state’s key

role in steering the compensation evaluations in Mexico has not provided a more level playing field, as Pemex controls the negotiations from the shadows and is deeply involved in oil politics (Nygren and Rabelo Avalos 2025). Analysis of the formal governance structures alone does not capture the hidden networks where issues of access and recognition and legality and illegality are negotiated in arenas closed to public scrutiny.

In response to claims that it should take responsibility for adverse impacts, Pemex has pursued dual tactics. First, discourses of safety have portrayed oil operations as manageable, despite the harms involved. Pemex has repeatedly denied its responsibility for the salinization—asserting that it was not the company that made the sea opening—and shrugged off its responsibility for pollution by arguing that the key drivers are the careless use of pesticides and the domestic wastewater discharged into lagoons (Interviews with Pemex staff, August 2014). Arguing that “Pemex does not compensate for feelings of concern” and that “accusations of harm need to be shown as matters of fact” (Interviews, August 2011), Pemex officials have claimed that the company has followed all the norms and has nothing to do with the salinization or pollution, thereby dismissing the need for further evaluation.



Figure 5. The constraints set by subsoil extraction complicate the coexistence of oil extraction and agriculture. Photo by Anja Nygren, 2019.

The second tactic has been the “slow violence of politics” exercised through the bureaucracy of delays (*muralla de papel*) to intimidate those claiming compensation (Velázquez Guzmán 1982). All claims are evaluated according to criteria set by the responsible state institution, and scant information is provided of the procedure. In cases of verified effect, applicants must provide a series of documents, triggering further bureaucratic procedure. As Auyero and Swistun (2009, 128–29) noted, delaying without totally disappointing is a key tactic of domination. Because land-tenure documents are a condition of eligibility, residents without registered ownership fear that they will not qualify, although many of them have been cultivating their land under a usufruct right for decades. For fishers, it is even more difficult to get their claims recognized, as they are considered to have mobile livelihoods and loose attachment to the land. The frustration with Pemex for not taking their claims seriously was expressed by many residents: “They have promised compensation so many times, but everything stays in the air”

(Interview, February 2012); “Pemex doesn’t comply with the agreements, it hoards everything, with no benefits for the communities” (Interview, February 2015).

Tabasco and other petroleum producer states have received payments for their key contribution to national oil production for decades. Pemex does not consider this money compensation, however; rather, it is defined as a “bonus” for oil-production states (Breglia 2013, 163–64). Likewise, Pemex has been reluctant to admit that the community development projects it provides in Chontalpa are compensation for oil-related salinization or pollution. Pemex recognizes an area of 3 to 5 ha around oil wells and a radius of 500 m around gas-flaring towers as restricted resource access; however, the effects extend much further. Most of the compensation Pemex pays is in the form of single payments for lost crops, dead animals, or corroded fences, with no recognition of wider scale soil degradation or water pollution. To prevent collective action, Pemex has demanded that the claims be pursued individually,

although harm to communal resources—collective *ejido* lands, fishing grounds, sites of oyster production, and water sources—is difficult to individualize. Many people have accepted the proposed payment, although much lower than the harm effected, as the authorities have emphasized that there is no other choice because landowners do not own the subsoil.

With single monetary payments, Pemex has sought to leave wider incommensurable issues unaddressed. Salinization, pollution, and territorial rights are trumped by legal norms and economic accounting, while people are reminded that they should support extraction because it is carried out by a public company for the benefit of the nation. As a reminder, the current logo in Pemex installations reads, “For the rescue of sovereignty” (Figure 6).

Such tactics indicate that although Pemex pays up, it neither admits guilt, nor provides apologies for dispossession by environmental degradation, making it difficult for residents to advance claims that go beyond the terms of legality. Chontalpa smallholders self-identifying as *campesinos* (peasants) who sow and fish on the wetlands regard soil, subsoil, water, plants, and animals as intimately interconnected, and restricted access to them falls outside the realm

of what can be monetarily compensated (Nygren and Lounela 2023). Likewise, sufferings related to degraded lands, polluted waters, jeopardized livelihoods, and altered lifeworlds cannot be separated from incommensurable values like productive rights, environmental justice, and human and other-than-human well-being.

For these fisher-farmers, oil exploitation is much more than extracting material resources; it produces altered oilscapes that overwhelm other forms of production and hydrosocial relations. The epistemological differences and power disparities between the oil industry and local residents raise questions about whether the social license for extraction rests on any meaningful legitimacy (Kamphuis 2020). Although Pemex claims that environmental degradation is manageable with technical interventions, for Chontalpa fisher-farmers the significance of the lagoons cannot be translated into water nor the lands into soil, as everything is linked to the Earth beneath and all around. Eliel, a fisher-farmer from El Golpe, opined that “extraction takes away the vapor of the Earth,” demonstrated by the “continuous flame from the *mechones* (gas-flaring towers)” (Interview, August 2014). Fabiola, an older resident living near the reactivated oil wells in Magallanes, explained, “Drilling sucks the juice of the Earth, and for this reason, there are *hundimientos* (subsidence)” (Interview, October 2023). According to several local interlocutors, gas flaring creates an eerie atmosphere at night in villages close to oilfields, with uncertainty about the hazards involved (Figure 7). These conceptions question the oil company view of the subterranean as a “resource repository” (Marston and Himley 2021, 5), separated from soil, air, and surface and groundwater.

Pemex experts regarded local ways of conceptualizing oil activities as unreal beliefs, thus endeavoring to belittle Indigenous knowledge and ignore alternative forms of reporting impacts. Through “epistemic violence” (Davies 2022, 409), the company tries to silence local voices, invisibilize the slow violence of degradation, and cover up issues of responsibility. Meanwhile it appropriates Indigenous knowledges, giving oilfields Mayan Indigenous names—such as *Zapp* (Lap), *Tecoalli* (Pyramid), and *Yaxché* (Tree of Life)—and naming the oil refinery under construction *Refinería Olmeca*, after the Mesoamerican civilization of the Olmecs that prevailed in Chontalpa in 1100–400 BC. This strategy “to show respect for



Figure 6. Pemex’s logo, making reference to resource sovereignty. Photo by Anja Nygren, 2023.



Figure 7. Gas flaring as a by-product of oil extraction. Photo by Anja Nygren, 2023.

Indigenous cultures” (Interview with Pemex staff, October 2023) acts as a means to embellish the company’s public image, meanwhile metaphorically demonstrating its power to control the territory and define the pathways of progress.

To cultivate patient “petro-citizens” (Valdivia 2008, 465), Pemex provides frontline communities with development projects—constructing roads and water pipes, renovating schools, donating agricultural inputs and fishing nets—thereby adopting a state-like role and compensating for poor state attention to frontline communities, while facilitating oil activities through improved infrastructure (Breglia 2013, 158–59). Many women lamented that Pemex aid primarily targets men in the form of diesel, gasoline, fertilizers, and fishing nets, ignoring women’s responsibility for maintaining the home and taking care of household members’ well-being. As typical of extractivism-related projects (Ojeda 2021; Pereira

and Tsikata 2022), scant attention is paid to women’s key role in sustaining the dynamic relations between production and social reproduction. Nonetheless, despite the huge amount of money “injected” by Pemex into community projects, it far from compensates for the harms experienced.

Pemex representatives claimed that residents constantly ask for compensation because the state has acted as a “fatherly patron” or “Papá Noel,” “taking charge of peasants and providing them gifts, which feeds clientelism” (Interviews, August 2011, October 2015). State officials, in turn, asserted that “due to the expectations generated by Pemex, people have adopted a culture of claims, reflecting a saying, ‘Troubled waters, fisherman’s gain’” (Interview, February 2012). In 2013, the Governor of Tabasco demanded that people “stop milking Pemex,” urging citizens to “take care of themselves” (Márquez 2013). Pemex representatives stated that people stake claims that have nothing to do with oil extraction, “saying that the water is salinated because Pemex has poisoned it” and that “my cow, Mariposa, is deaf because of the noise of the gas flaring” (Interviews, February 2011). Similarly, state officials argued that “people feel disappointed if no harms are demonstrated on their farms as they can’t then benefit from compensations” (Interviews, August 2011). Meanwhile, the oil industry’s right to extract subsoil resources was left unquestioned.

Nevertheless, there were also ambiguities in oil governance between federal- and state-level officials. When analyzing the reports of the governors of Tabasco from 1975 to the 2000s, I noted tensions between the federal authorities’ agendas of accelerated oil extraction and state territorialization and the governors’ concerns about the petrolization of Tabasco and an emphasis on peasant livelihoods and social equality at the same time as they supported oil extraction. In response to the federal government’s aim to consolidate its authority in Chontalpa through oil extraction, the governors warned of the risk of “converting the zone into a state within the State” (Gobierno de Tabasco 1983–1987, 76). Enrique González Pedrero, Governor of Tabasco from 1983 to 1987, emphasized the need to “harmonize oil activities with ... the search for social equality” (Gobierno de Tabasco 1983–1987, 15–16), and Roberto Madrazo Pintado (1995–1999) stressed the need to “integrate Pemex in a harmonious way to the State development, preventing its conversion to an enclave that

can generate ... social instability” (Madrazo Pintado 1995, 61–62). Meanwhile, all the governors reiterated their loyalty to the federal government based on the prevailing forms of corporatist governance and the state’s strong dependency on oil rents.

Since the mid-2000s, global oil companies, including Pemex, have increasingly focused on corporate social responsibility (CSR) programs to get a social license to operate. The director of Pemex emphasized in his speech at the Oil Conference on “Industrial Security” in Veracruz in 2010 that “CSR does not mean charity.” Another high-level Pemex representative added, “Earlier, Pemex poured money into communities, but this tactic caused us huge problems. Thus, Pemex does not give direct aid anymore, but we work with governments and local leaders, helping thousands of people through CSR programs.” A representative of Shell further explained, “We have moved from charity to strategic social investments to ... build confidence, conscience, and cooperation” (Field notes, October 2010). Although claiming a departure from paternalist corporate largesse, many CSR programs are mired in clientelist relations, invoking ideas of empowerment instead of entitlement and eschewing rights in favor of self-governance (Rajak 2011, 14). Backed by neoliberal strategies, responsibility for the troubles caused by industrial extractivism is placed on the shoulders of local residents. Partnerships wherein the corporation offers state-like services and the state controls claims for corporate-related compensation serve as a way to obscure responsibility.

Many Chontalpa smallholders consider CSR programs compensation without culpability that leaves the underlying degradation unaddressed; nonetheless, they seek to attach themselves with the aim of at least capturing “handouts” of oil-related benefits (Interview, February 2012). Likewise, people cultivate ties to state officials in the hope that somebody in a position of power will intercede on their behalf, meanwhile feeding into officials’ will to govern and need to gain political legitimacy. Consolidating rights is intimidating in contexts where the officials in power have the authority to decide when rights apply and yet no duty to make them available (Holston 2011). As Lund (2016, 1202) stated, however, for many people there is only one thing worse than being commanded by authorities, and that is not being seen. Due to a “desire for attachment,” people often accept the unequal terms of their

incorporation (Ferguson 2015, 150), renewing clientelist practices and justifying differentiated recompense based on social status, political position, gender, and ethnicity.

Although not totally homogeneous in their views, environmental degradation provided a touchstone whereby Chontalpa fisher-farmers interpreted their lives, recalling how “earlier the harvests were bountiful but the salinization burnt the coco palms, and thus they don’t produce any more,” and “before the oil extraction water in rivers was *dulce* (sweet), while now, it’s all *salada* (salty),” with sweet and salty having the double meaning of clean and dirty (Field notes, October 2015). This nostalgia for the good old days shows the intimate relation of local fisher-farmers to the wetlands, and their feelings of frustration when deprived of the possibility to work their maize fields and cacao gardens to “reaffirm themselves as *campesinos*,” as Ojeda (2021, 90) noted of Colombian smallholders. Despite consisting of heterogeneous groups of small-scale peasants, *ejido* smallholders, near-landless rural workers, and formal and informal fishers, a wide range of Chontalpa residents offered strong criticism of the paternalistic control exercised by Pemex, and of the company’s dismissal of the harms effected. Many people had learned through years of experience that single payments, small privileges, and CSR projects do not compensate for the long-term harms. Arguments by Pemex that oil extraction benefits all citizens stood in stark contrast to fisher-farmers’ experiences of dispossession by environmental degradation.

As many impacts of oil extraction are temporally latent, it is difficult to show evidence of their possible damage, especially for smallholders who lack adequate technologies. Local interlocutors told narratives of toxicity similar to other oil frontlines (Watts 2011; Salas Landa 2016; Cepek 2018; Davies 2022), recalling moments when cattle died after consuming polluted water and expressing concern over toxins that cause “this and that sort of cancer” (Interviews, August 2014). Thus, they tried to be recognized as rights-holders who can question oil extraction with reference to material harms and metaphorical violence. Fisher-farmers justified their rights to compensation in light of building their daily lives on fragile wetlands and enduring the sufferings effected by extraction. Their experiences of salinized environments and salinized politics illustrate how dispossession by environmental

degradation is forged and lived, and how people are constituted and constitute themselves as political subjects in relation to oil extraction by designing various forms of contestation.

Negotiations and Contestations

Extraction frontlines are not just spaces where oil industries and the state vie to assert control over valuable global commodities; they are often also sites of multifaceted conflict. This section explores contestation of the prevailing forms of extraction by local social movements through visible and underground tactics, and the showy and shadow strategies used by the oil industry and the state to hide the harmful effects of extraction. In September 1976, tensions in Chontalpa gave rise to a social movement, *Pacto Ribereño*, among small landowners and *ejido* landholders in key areas of Pemex's operations (Velázquez Guzmán 1982). The movement demanded (1) fair compensation for oil-related harms and the right to collective claims; (2) diversification of peasant agriculture; (3) allocation of part of the oil rents to smallholders in whose terrains extraction is conducted; (4) reduction of harms; and (5) civic participation in the planning of regional development (García Meza 1993, 43). In November, thirty-nine rural communities and nineteen *ejidos* had joined Pacto, which consisted of 7,000 small-scale fisher-farmers, cattle raisers, and cacao and coconut producers, making it one of most significant social movements in Mexico (Velázquez García 2016). It employed a mixture of tactics, including protests, petitions, court complaints, and creative maneuvers, to challenge the prevailing forms of extraction.

Initially, Pacto members presented their claims formally at oil production offices, where they were mainly ignored. As El Guayo peasants stated, "The Superintendent of Comalcalco has denied us audience, kicking us out of the office" ("Indemnización por más de 6 millones" 1976). Pemex also tried to quell the movement with red tape (*muralla de papel*), requiring that the claimants register themselves. When they did so, Pemex chose the authoritative tactic of the loss of civil rights (*muerte civil*) to put Pacto outside the law. The Attorney General declared Pacto illegal, and the Director of Pemex announced, "We don't deal with criminals" (Velázquez Guzmán 1982, 177).

In response to nonattendance, Pacto leaders decided to galvanize the issues through radical tactics. In November 1976, Pacto members occupied thirteen oilfields and closed the valves of pipelines to La Venta, the key node of oil and gas distribution in Mexico. Pemex and the state responded with violent repression. The government ordered 2,000 soldiers to evict the protestors and Pacto leaders were incarcerated in Atasta military camp, accused of damage to national assets (García Meza 1993). When Pacto repeated its demands, Pemex created a tactic to dismiss the movement, declaring that the state-affiliated Agrarian Communities League represents the peasants' "authentic" interests ("Las instalaciones se hallan..." 1976). State officials claimed in newspaper reports that "the peasants have been manipulated" ("Las instalaciones se hallan" 1976; "Absurdas las indemnizaciones" 1976), and the federal government reformed the constitution to prevent collective claims (Reglamento 1977). Between January 1978 and January 1979, Pemex denounced fifty blockings, most of which were suppressed by the police and delegitimized on the basis that they had been provoked by "agitators" ("Agitadores de oficio" 1979; Lozano 1979; "Ninguna agitación" 1979). Through such discourses, Pacto-affiliated residents were framed as a security risk to be pacified.

As noted by Frederiksen and Himley (2020), repression is not necessarily the most effective means for firms to manage social mobilizations, as they can attract media attention, have deleterious effects on investor confidence, and energize resistance. Mixing acts of coercion with paternalist persuasion, representatives of Pemex and the state started to organize secret meetings with Pacto's legal advisers. Due to the risk of disorientation, Pacto decided to strengthen its ties to the government, as a Pacto newspaper advertisement in December 1979 indicated: "Mr. President of the Republic, we thank you for the joint agreement that we will be paid the compensations. ... We declare that we have always been faithful to the principles of our political party PRI" (Velázquez Guzmán 1982, 187).

Until the 1980s, only larger scale landowners involved in Pacto had received payments; the rest continued to wait. In January 1981, thousands of peasants blocked a petrochemical complex and seized nine oilfield batteries, five compression stations, and two water injection plants. Most likely, Pemex paid the 4,100 million pesos required by Pacto in 1982;

however, Pacto members denounced their legal advisor for embezzling 2,050 million pesos. According to a governmental report, the advisor had negotiated a deal to receive 40 percent of the money if pacifying Pacto, and one of the Pacto leaders declared that the authorities offered him 7 million pesos for his silence.³ These deals provoked feelings of betrayal among Chontalpa fisher-farmers. To calm the situation, the government established a “Special Normative Program for the Coastal Zone of the State of Tabasco” (PROCEDOT) to implement development projects in the region. Meanwhile Pacto leaders sent letters to the president and the governor declaring people’s ability to take direct action if prevented from obtaining justice through official channels, referring that “the peasants implemented the Mexican revolution, and they are capable to do it again.”⁴

In an effort to gain institutional recognition of their claims, in 1990 Chontalpa residents submitted a complaint to the National Human Rights Commission of Mexico (CNDH) accusing Pemex of environmental injustice, and the state of inaction in preventing it. Although representatives of Pemex and the state presented categorical views of peasants in the interviews, arguing that “people practice an industry of claims,” in their reports to CNDH there were no authoritarian accusations. Rather, Pemex managers aimed to exercise control through symbolic persuasion, creating a semblance of order that concealed the prevailing volatility and detached the company from any responsibility. The tactics of Pemex to cover up and downplay the impacts of extraction show how symbolic manipulation and omission are crucial parts of domination that limit the possibility to think otherwise. The state reports focused on normative issues with scant regard for environmental-social harms, while narrowing local claims for justice to compensation payments.

The dominant discourse of extractivism seems so powerful that even the smallholders, when given a voice, often express themselves along the lines set by the extractive industry (Lund and Rachman 2018, 426). Chontalpa fisher-farmers presented strong criticism of oil-related restrictions on resource access and livelihood dispossession, but the reports they delivered to CNDH focused on ecological damage and health concerns, with little mention of social dispossession. They reported the impacts of salinization and pollution on plants and animals and

increased cases of gastrointestinal diseases (CNDH 1992, 5, 100–01), probably because the Pacto leaders knew that such claims would be easier to get recognized than those of dispossession. State authorities responded with loose statements, keeping the evaluations of oil-related health risks vaguely defined (CNDH 1992, 11, 18, 88). Likewise, Pemex gave vague answers to CNDH’s clarification requests, demanding that residents verify their claims with solid proof (CNDH 1992, 8, 26–27).

After consultations, CNDH released a report in 1992 (CNDH 1992) recognizing the harmful effects of oil extraction, which was a win for Chontalpa fisher-farmers who had for decades struggled for such recognition. The report required Pemex to expropriate land where the effects of oil extraction are not feasible to undo and reorient farms with lands possible to restore to new forms of production. Notable in the CNDH report was that it requested that Pemex compensate not only direct but also indirect effects, including people’s restricted access to resources and the salinization and pollution of 80,000 ha of land. Furthermore, CNDH required Pemex to conduct environmental restoration, distancing itself from the view of Pemex managers who insisted that compensation only covered damage to crops and animals, not soil degradation and water pollution. Due to limited executive authorization, however, Pemex ignored most of the requests related to restoration, compensation for indirect effects, and repair to the ruptures of dispossession. The same strategies of dismissing criticism and distancing the oil industry from the harms (Appel 2012) has been used by Pemex in media communications. In the newspaper reports analyzed, representatives of Pemex are conspicuous by their absence, with an implicit message that the smallholders’ claims are so trivial that they do not require comment.

Since the 2010s, the institutional landscape of deregulation has provided a favorable ambience for oil and natural gas exploitation in Mexico as elsewhere in Latin America (Bebbington and Bury 2013). Hybrid forms of governance have made it challenging for social movements to pressure the industry to shoulder responsibility and the authorities to undertake regulation. In 2013, a coalition of Pacto-oriented fisher-farmers, the environmental organization *Asociación Santo Tomás*, and the human-rights organization *Fronteras Comunes* filed a lawsuit against Pemex based on the recently established Law of Collective Actions. Even though

judicial oversights of extractive companies are complex, and legal frameworks offer scant possibilities to articulate issues of justice (Akchurin 2023), they won the dispute, the first time a civic movement won a court case against oil-industry-related environmental harms in Mexico.⁵ The root problems continue, however, along with protests. In 2014, Tabasco had the most oil well seizures in Mexico, with peasants from Nacajuca and Jalpa de Méndez blocking 800 oilwells and closing Pemex headquarters in Villahermosa for forty-four days. Once again, Pemex allayed the situation by reconstructing schools, football fields, and roads in affected communities. The Operative Director of Pemex lamented that oil-production goals could not be reached due to “communities who have made the blockings one of their key activities” (Robles de la Rosa 2015), while the federal government advanced legal procedures to restrict the possibilities to seize oil installations (Secretaría de Gobernación 2016).

Despite diverse legal and extralegal strategies, it has been hard to silence Pacto. Nobody imagined that Chontalpa fisher-farmers would be capable of seizing hundreds of oil wells and interrupting drilling for days. Even if temporary, occupations challenge the oil industry’s authority, revealing that the governance regimes are more fragile than officially acknowledged (Gilbert 2023). They pose a huge risk to oil companies, as oil activities must be executed with twenty-four-hour attention and even a small disturbance can be crippling. Although Pacto has not been able to bring Pemex to its knees, there have been volatile moments when the occupations have disrupted the commodity flows, and the effects have spilled into the wider productive circuit (Arboleda 2020).

In addition to blockades and occupations, Pacto-related manifestations have included demonstrations, street marches, petitions, and other kinds of official declarations, in which people have articulated their concerns in ways that are difficult to ignore. Instead of claiming subsoil ownership, smallholders have declared their right to a safe environment and benefits from oil as a patrimony. Although women have been underrepresented in leadership positions, they have had a key role in formulating compensation claims, with emotional references to children’s health and the need to cherish the Earth as the vigor of life. They have also pointed out the disproportional effects of oil extraction along gender and ethnicity lines (Interviews, August 2014).

During these struggles, Pacto has exploited the competition between different state institutions, trading off one set of interests against another and taking advantage of institutional gaps and contradictions. As de Vries (2016, 11) noted, analyzing politics only in terms of “mentalities of rule” conceals the anxieties haunting the minds of those dominating. The magnitude of the mobilizations obliged Pemex and the state authorities to create a huge apparatus of control and persuasion. When Pemex announced that people had to claim compensation individually, Pacto responded that oil-related harms are joint problems and must be resolved collectively. Demonstrations have often been held in symbolically powerful spaces, such as *zócalos* (public squares), where hundreds of fisher-farmers have demanded that the governor hold Pemex accountable. The actual degree of protests has probably been even higher than reported, as Pemex has pressured the media to underreport them, and many people have been reluctant to express their criticism openly.

Meanwhile, state authorities have struggled to find a balance between promoting extractivism and securing smallholder livelihoods to maintain their legitimacy. In public debates over whom the state should serve, Pacto leaders have presented strategic discourses touching on peasants’ humility and claiming that Pemex needs to compensate for the loss of the lived environment, not just of crops or animals (Interviews with Pacto leaders, February 2012, August 2014). Simultaneously, Pacto leaders have reiterated corporatist politics. By frequently requesting meetings with the governor or the president, they have reinforced clientelist power relations that predispose them to risk of cooptation. Given the strong means of repression exercised by Pemex and the state, it is important not to romanticize Pacto’s achievements. Many occupations have ended with arrests and violence from the army or police, and in politically volatile circumstances, any form of contestation can put participants’ lives at risk. Although the government has argued that police operations have been carried out according to the rule of law, they have indicated the wide-scale criminalization of protests. Similar strategies of suppression are common at many extractive frontlines (Watts 2011; Cepek 2018; Gilbert 2023).

In its trajectories, Pacto has gone through periods of open resistance alternating with invisible actions beneath the surface to diminish the risk of repression.

As Simón, an elder Pacto leader, stated, “People don’t have strength to resist all the time, thus, they stay quiet. But this doesn’t mean giving up. Suddenly, protests emerge again, like bubbles in the water” (Interview, February 2012). Pacto has experienced many twists and turns, with feelings of passion and commitment mixing with doubt and despair—a dynamic that is often forgotten in studies that stress the opportunities of social movements to change asymmetric power structures and authoritative regimes (Schilling-Vacaflor, Flemmer, and Hujber 2018).

Nor has Pacto been entirely uniform in its contestation tactics. Some members have favored direct action led by charismatic leaders, whereas others have hoped that their son (or daughter) would one day work as a lawyer, seeking fair compensation for oil-related harms via legal channels. In informal discussions, many smallholders criticized how some political leaders act as gatekeepers for Pemex, benefitting from all kinds of privileges. The strong oil labor unions that have sometimes joined Pacto in demonstrations have not endorsed blockades or occupations, as their agenda is intensive oil production under improved labor rights. The discourses both by Pemex and Pacto to justify their agendas in the struggles over oil have also transformed to a certain degree over time. To dismantle the contestations, Pemex has stressed manageable risks and minimal harms, framing its views in previous years with discourses of control and care, and recently, with metaphors of sustainability and harmonious coexistence. Meanwhile Pacto has stressed environmental harm and livelihood disruption, expressing its claims previously through narratives of solidarity and equality, and nowadays increasingly through notions of responsibility and environmental justice.

Since the presidency of Andrés Manuel López Obrador (2018–2024), legal control over resource sovereignty has been strengthened and contracts with private companies have been put under strict scrutiny. Despite current trends toward renewable energy production, Pemex is promoting vertical expansion of oil extraction through reextraction from mature oil wells and horizontal expansion into new oil frontiers (Interview with Pemex staff, October 2023). In this rush, the company has ignored the decades of degradation and dispossession, portraying Chontalpa as a region of riches “to-be-re-extracted” and pollution as something in the past, before ultramodern technologies. Pacto-inspired

movements have tried to repoliticize the issues, incorporating matters of ruined environments and livelihoods into public debates. To hold the oil industry responsible, they have formed strategic alliances with international environmental and human rights advocacy groups.

Despite plans for renewable energy production, 89 percent of Mexico’s energy generation comes from fossil fuels.⁶ A key question in Chontalpa, as on many other frontlines, is how to restore polluted soils and waters and repair livelihoods disrupted by decades of oil extraction; however, to date there are no concrete plans for such operations. Pemex is focusing on low-cost extraction from Chontalpa’s terrestrial oil wells and nearby shallow-water reserves, while contracting transnational companies for high-cost, deep-water extraction. According to Chontalpa residents, extraction from mature wells brings unanticipated insecurities and shallow-water drilling restricts their access to customary fishing areas and increases the risk of oil-leak pollution (Interviews, October 2023). Furthermore, transition to renewable energy production might create new forms of dispossession, as agrofuel and biofuel plantations and solar energy and wind power require more land than fossil fuel extraction (Huber and McCarthy 2017). Thus, there is a risk that lands in these sacrifice zones will be appropriated for wind or solar power generation, with low compensation for local smallholders based on arguments that they are degraded.

In recent years, Pacto-oriented movements have amplified their contestation tactics from protests, blockages, occupations, petitions, media communications, and legal actions to new forms of “bearing witness” (Davies 2022, 418), including techniques of geographic information systems, open data, and critical cartography to visualize the harms and demonstrate alternative ways of thinking. Despite the alarming societal insecurity in Mexico, which poses huge challenges for social mobilization, the struggle of Chontalpa’s fisher-farmers continues. Meanwhile, many residents expressed skepticism about Pemex negotiations improving their living conditions. Tabasco is highly dependent on oil rents and the industry is unwilling to expropriate lands that have been drastically degraded. Representatives of Pemex and state authorities presented salinization and pollution as bygone accidents, criticizing “peasants who cling on to the past, instead of seeking new

potentials” (Interviews, January 2019). Yet Chontalpa fisher-farmers have no intention of relinquishing the search for justice related to restricted resource access and dispossession by environmental degradation (Interviews, November 2019 and October 2023); many of them are still hoping that their claims will be recognized, while trying to maintain their confidence in the future and recraft their livelihoods in the degraded oilscapes.

Conclusion

This article has addressed the environmental-social effects of oil extractivism and associated forms of dispossession and contestation by employing an approach that explores layered resources and layered politics, focusing on the analytical possibilities it provides. Drawing on recent theorizations in subterranean political ecology and voluminous resource geography, the study has emphasized the need to extend attention from a land-centric focus toward cumulated effects across diverse layers (Marston and Himley 2021; Collins and Fletcher 2024). The article has grounded these conceptualizations in an empirical analysis of hydrocarbon extractivism in Mexico, examining long-term conflicts between the oil industry, state authorities, and Chontalpa fisher-farmers over oil-related harms and associated dispossession. It has shown that to understand the effects of oil extraction, links within and across subsoil, soil, air, and surface and groundwater need to be carefully considered.

The article has demonstrated that hydrocarbon extractivism does not usually involve direct appropriation of smallholders’ lands; rather, dispossession occurs indirectly through restrictions in people’s access to resources and environmental degradation. The oil industry is interested in access to subsoil hydrocarbon reserves, not in appropriating large areas of frontline land, knowing that much of it will be degraded by oil extraction. Thus, the harmful effects of extraction largely remain with local landowners, who experience disruption of their livelihoods due to salinization, degradation, and pollution of their agricultural fields and fishing grounds. The article has employed the concept of dispossession by environmental degradation to explain how smallholders’ livelihoods are dispossessed even though land property regimes have not been significantly changed (Borras and Franco 2012). This kind of livelihood dispossession, in which people own their land but experience gradual disruption of their

forms of production and social reproduction, is a key feature of oil extractivism, and parallel dynamics characterize several other sectors, such as agro-extractivism based on contract farming, and certain forms of underground mining and conservation-related green extractivism (Leifsen 2017; Rai et al. 2019; Hurtado and Vélez-Torres 2020; McKay, Alonso-Fradejas, and Ezquerro-Cañete 2021). The study contributes to the analytical clarification of the role of indirect dispossession in these endeavors, explaining how smallholders are dispossessed without their land being seized.

By combining examination of layered resources with an analysis of layered politics, the study has illustrated the power dynamics in the politics of recognition and how oil extraction is facilitated and contested through formal, informal, and shadow forms of governance. Tight corporate–state relations play an important role in oil politics, especially in state-owned companies, as states prioritize extraction at the cost of local livelihoods due to the rents provided (Schilling-Vacaflor, Flemmer, and Hujber 2018). The article has shown a range of strategies—from repression to persuasion and omission—exercised by the oil industry and the state to hide the degradation and dispossession generated and to evade responsibility (Frederiksen and Himley 2020). It has revealed the blurred lines between public and private power and the tactics by which the industry channels compensation negotiations to the state authorities, who aim to reduce dissent through clientelist relationships (Coates and Nygren 2020). Meanwhile, the oil industry downplays the adverse impacts via a bureaucratic body of negotiations and through charity-associated CSR programs.

Attention to layered politics has also unearthed the hidden injustices derived from—and sedimented into—oil extraction, and the tactics designed to contest the industry’s control over resources and politics. The article has shown how extraction transforms frontlines into sacrifice zones and revealed a series of legal and extralegal means used by the industry together with the state—coercion, intimidation, ignorance, seduction, cooptation, and divide-and-rule—to disarticulate countervailing actions. Meanwhile, it has shown how frontline residents seek to defend their resource rights and livelihoods through diverse tactics, including organized movements, strategic maneuvering, underground actions, and everyday forms of resistance (Hall et al. 2015; Scoones et al. 2018). They ground their claims in

their long-term experience of the omission and abuse inflicted by the industry and the state, rendering sacrifice zones also sites of struggle and stamina.

By showing the links between the vertical and horizontal, and the material and metaphorical, the study has advanced understanding of the slow violence of pollution and the slow violence of politics. As the oil industry considers compensation in terms of single payments for lost cultivates and animals, vertically layered production systems and horizontally connected water networks expand the effects of salinization and pollution to areas far from the sites of extraction. Through an analysis of the interplay of the material and metaphorical, the study has shed light on how the material qualities of subterranean resources and the political-economic projects in which they are enrolled shape each other. By providing economic compensations and political favors, the oil industry leaves unaddressed the incommensurable issues of resource rights and environmental justice, aiming to mentally prepare people to give up their claims. For local fisher-farmers, struggles for justice in circumstances wherein some actors benefit from global circuits of production whereas others suffer from dispossession are not merely questions of economic compensation; they also subsume issues of how to restore damaged environments and repair degraded livelihoods in extractive sacrifice zones.

Drawing on the notion of epistemic violence, the article has shed light on how the invisible nature of subterranean extraction helps the oil industry to conceal the harms effected, while hampering social contestation. By delving beneath official politics (Marston and Himley 2021), the study has revealed the oil industry's subtle means to dismantle mobilizations and the social movements' underground forms of resistance and ways of bearing witness. For decades, local residents have carved out tactics to make the industry responsible for lost resource rights and displaced livelihoods, through protests, demonstrations, petitions, and lawsuits, meanwhile crafting space for underground contestations and everyday contentions. The study has illustrated the movements' tactics to disrupt oil extraction and deny a social license to oil operations, meanwhile showing the reactionary measures taken by the oil industry and the state when communities mobilize, and how massive extraction continues despite huge contestations. Corresponding trends are common at many extractive frontlines and likely to persist in the future.

Examination of layered resources and politics is crucial for understanding the dispossession by environmental degradation characteristic of oil extraction and for wider theorization of extractivisms and their contestations. It provides insights into struggles over resource access, and negotiations and contestations over recognition and responsibility—analytical devices important for researchers, policy experts, and scholar-activists examining extractivism in different parts of the world. The article contributes to discussions on layered resources and politics, dispossession by environmental degradation, struggles over recognition and responsibility, tactics of contestation, and strategies to dismantle them: topics of profound importance for scholarly debates on extractivisms and transformative resistances. Through analysis of a long-term search for justice the study has integrated questions of the uneven distribution of burdens with those of institutional recognition, political representation, and social repair (Nygren 2018), including demands to restore degraded environments and repair livelihoods ruined by decades-long extractivism.

Acknowledgments

I highly appreciate the excellent comments by two anonymous referees and the editor of the *Annals of the American Association of Geographers*. I also thank Miguel Diaz, Mira Käkönen, Anu Lounela, Sango Mohanty, and Dora Ramos for their comments on the earlier version of the article. An earlier version of this article was presented in the Sociology of Development & Change and Rural Sociology Research Seminar at the Wageningen University in February 2025, and I highly appreciate the constructive comments received. I also thank Inka Tuomisto for drawing Figure 1 and Ohto Nygren for drawing Figure 3.

Funding

This research was funded by the Finnish Research Council (Grant 1317319) and by the Kone Foundation (Grants 4705967 and 4706918).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes

1. See <https://www.statista.com/statistics> (accessed February 7, 2023) and <https://yearbook.enerdata.net/crude-oil/world-production-statistics.html> (accessed February 7, 2023).
2. Due to the sensitivity of the topic, all the informants have been anonymized. The study has followed the ethical guidelines by the University of Helsinki and the Finnish Advisory Board on Research Integrity.
3. AGN-Sedena Estado Mayor Caja 246 Exp 84-1983, 1–21; AGN-Sedena Estado Mayor Caja 196 Exp 1620-1983_1, 1–8, Hernández (1982); Velázquez García (2016).
4. AGN-Sedena Estado Mayor Caja 196 Exp 1620-1983_1, 9.
5. See <https://la-verdad.com.mx/devasta-pemex-desde-hace-anoscomunidades-tabasco-24864.html> (accessed December 19, 2023).
6. See <https://www.iea.org/countries/mexico/energy-mix> (accessed July 4, 2024).

References

- Absurdas las indemnizaciones reclamadas pro ejidatarios de Comalcalco y Agua Dulce [The compensations demanded by ejido-holders of Comalcalco and Agua Dulce are absurd]. 1976. *Avance de Tabasco*, November 24.
- Agitadores de oficio bloquean pozos en Tabasco: Pemex [Official agitators block oilfields in Tabasco: Pemex]. 1979. *Excelsior*, February 19.
- Akchurin, M. 2023. Environmental justice at the environmental courts? Mining, socioenvironmental conflicts, and environmental litigation in northern Chile. *The Extractive Industries and Society* 15:101279. doi: 10.1016/j.exis.2023.101279.
- Anand, N., and L. Kamath. 2024. Eviscerating the sea. *Comparative Studies of South Asia, Africa and the Middle East* 44 (1):118–34. doi: 10.1215/1089201X-11141543.
- Anthias, P. 2018. Indigenous peoples and the new extraction: From territorial rights to hydrocarbon citizenship in the Bolivian Chaco. *Latin American Perspectives* 45 (5):136–53. doi: 10.1177/0094582X16678804.
- Appel, H. 2012. Offshore work: Oil, modularity, and the how of capitalism in Equatorial Guinea. *American Ethnologist* 39 (4):692–709. doi: 10.1111/j.1548-1425.2012.01389.x.
- Arboleda, M. 2020. *Planetary mine: Territories of extraction under late capitalism*. London: Verso.
- Auyero, J., and D. Swistun. 2009. *Flammable: Environmental sufferings in an Argentine shantytown*. New York: Oxford University Press.
- Avila, S., Y. Deniau, A. H. Sorman, and J. McCarthy. 2022. (Counter)mapping renewables: Space, justice, and politics of wind and solar power in Mexico. *Environment and Planning E: Nature and Space* 5 (3):1056–85. doi: 10.1177/25148486211060657.
- Bebbington, A., A.-G. Abdulai, D. H. Bebbington, M. Hinfelaar, and C. A. Sanborn. 2018. *Governing extractive industries*. Oxford, UK: Oxford University Press.
- Bebbington, A., and J. Bury. 2013. Political ecologies of the subsoil. In *Subterranean struggles: New dynamics of mining, oil and gas in Latin America*, ed. A. Bebbington and J. Bury, 1–25. Austin: University of Texas Press.
- Beltrán, J. E. 1993. Los impactos del petróleo [The impacts of petroleum]. In *Tabasco: Realidad y perspectivas XI*, 569–624. Mexico: Porrúa.
- Benjaminsen, T. A., and I. Bryceson. 2012. Conservation, green/blue grabbing and accumulation by dispossession in Tanzania. *Journal of Peasant Studies* 39 (2):335–55. doi: 10.1080/03066150.2012.667405.
- Bennett, M. M. 2016. Discursive, material, vertical, and extensive dimensions of post-cold war Arctic resource extraction. *Polar Geography* 39 (4):258–73. doi: 10.1080/1088937X.2016.1234517.
- Borras, S., and J. Franco. 2012. Global land grabbing and trajectories of agrarian change: A preliminary analysis. *Journal of Agrarian Change* 12 (1):34–59. doi: 10.1111/j.1471-0366.2011.00339.x.
- Borras, S. M., J. C. Franco, S. R. Isakson, L. Levidow, and P. Vervest. 2016. The rise of flex crops and commodities: Implications for research. *The Journal of Peasant Studies* 43 (1):93–115. doi: 10.1080/03066150.2015.1036417.
- Botello, A. V., J. A. Goñi, and S. A. Castro. 1983. Levels of organic pollution in coastal lagoons of Tabasco State, México. *Bulletin of Environmental Contamination and Toxicology* 31:271–77.
- Botello, A. V., and F. Páez. 1987. *El problema crucial: La contaminación* [The crucial problem: Contamination]. México: Centro de Ecodesarrollo.
- Breglia, L. 2013. *Living with oil: Promises, peaks, and declines on Mexico's Gulf coast*. Austin: University of Texas Press.
- Bridge, G. 2011. Resource geographies I: Making carbon economies, old and new. *Progress in Human Geography* 35 (6):820–34. doi: 10.1177/0309132510385524.
- Bruna, N. 2021. Extractivism, rural livelihoods and accumulation in a 'climate-smart' world: The rise of green extractivism. PhD dissertation, University of Rotterdam.
- Büscher, B., and V. Davidov. 2016. Environmentally induced displacements in the ecotourism–extraction nexus. *Area* 48 (2):161–67. doi: 10.1111/area.12153.
- Bustos-Gallardo, B., G. Bridge, and M. Prieto. 2021. Harvesting lithium: Water, brine and the industrial dynamics of production in the Salar de Atacama. *Geoforum* 119:177–89. doi: 10.1016/j.geoforum.2021.01.001.
- Cada hombre es clave en la industria petrolera mexicana [Every person is a key in the Mexican oil industry]. 1975. *Rumbo Nuevo*, July 27.
- Capdepon Ballina, J. L. 2009. Del campo a la ciudad: Tabasco y sus transformaciones económicas (1945–2008) [From the countryside to the city: Tabasco and its economic transformations (1945–2008)]. In

- Historia política contemporánea de Tabasco 1958–2008*, ed. C. E. Ruiz Abreu and A. Fábregas Puig, 3–115. Villahermosa: Gobierno del Estado de Tabasco.
- Cepek, M. 2018. *Life in oil: Cofán survival in the petroleum fields of Amazonia*. Austin: University of Texas Press.
- Cervantes Galván, E. 1993. Prioridades nacionales e intereses locales: La explotación del petróleo en Tabasco [National priorities and local interests: The oil exploitation in Tabasco]. In *Tabasco: Realidad y perspectivas VI*, 631–41. México: Porrúa.
- Coates, R., and A. Nygren. 2020. Urban floods, clientelism, and the political ecology of state in Latin America. *Annals of the American Association of Geographers* 110 (5):1301–17. doi: 10.1080/24694452.2019.1701977.
- Collins, Y. A., and R. Fletcher. 2024. From green to black: A voluminous political ecology of the extraction–conservation nexus. *Annals of the American Association of Geographers* 114 (6):1291–1309. doi: 10.1080/24694452.2024.2341108.
- Comisión Nacional de Derechos Humanos (CNDH). 1992. Recomendación 100/92 de la CNDH sobre el caso de ejidatarios y pequeños propietarios de los municipios Cárdenas, Cunduacán, Comalcalco, Paraíso y otros el Estado de Tabasco, mayo/92 [Recommendation 100/92 of the case of ejido-holders and small landowners in the Municipalities of Cárdenas, Cunduacán, Comalcalco, Paraíso and other municipalities of the State of Tabasco, May 92].
- Constitución Política de los Estados Unidos Mexicanos. 2022. DOF 18-11-2022. Accessed December 29, 2022. <https://www.diputados.gob.mx/LeyesBiblio/pdf/CPEUM.pdf>.
- Davies, T. 2018. Toxic space and time: Slow violence, necropolitics, and petrochemical pollution. *Annals of the American Association of Geographers* 108 (6):1537–53. doi: 10.1080/24694452.2018.1470924.
- Davies, T. 2022. Slow violence and toxic geographies: “Out of sight” to whom? *Environment & Planning C* 40 (2):409–27. doi: 10.1177/2399654419841063.
- de Vries, P. 2016. The inconsistent city, participatory planning, and the part of no part in Recife, Brazil. *Antipode* 48 (3):790–808. doi: 10.1111/anti.12223.
- Emel, J., M. Huber, and M. Makene. 2011. Extracting sovereignty: Capital, territory, and gold mining in Tanzania. *Political Geography* 30 (2):70–79. doi: 10.1016/j.polgeo.2010.12.007.
- Enns, C., B. Bersaglio, and A. Sneyd. 2019. Fixing extraction through conservation: On crises, fixes and the production of shared value and threat. *Environment and Planning E* 2 (4):967–88. doi: 10.1177/2514848619867615.
- Fairhead, J., M. Leach, and I. Scoones. 2012. Green grabbing: A new appropriation of nature? *Journal of Peasant Studies* 39 (2):237–61. doi: 10.1080/03066150.2012.671770.
- Feldman, S., and C. Geisler. 2012. Land expropriation and displacement in Bangladesh. *The Journal of Peasant Studies* 39 (3–4):971–93. doi: 10.1080/03066150.2012.661719.
- Ferguson, J. 2015. *Give a man a fish: Reflections on the new politics of distribution*. Durham, NC: Duke University Press.
- Frederiksen, T., and M. Himley. 2020. Tactics of dispossession: Access, power, and subjectivity at the extractive frontier. *Transactions of the Institute of British Geographers* 45 (1):50–64. doi: 10.1111/tran.12329.
- García Meza, N. E. 1993. El caso del Pacto Ribereño [The case of Pacto Ribereño]. In *Tabasco: Realidad y perspectivas II*, 135–47. Villahermosa, Mexico: Gobierno del Tabasco.
- Gilbert, D. E. 2023. Shutting down the machines of destruction: Possibilities for agrarian life on the protest blockade. *Antipode* 55 (5):1433–53. doi: 10.1111/anti.12910.
- Gobierno de Tabasco. 1983–1987. *Tabasco a través de sus gobernantes* [Tabasco through its rulers] 14. Government of Tabasco. Unpublished document.
- Grasso, M., and R. Heede. 2023. Tie to pay the piper: Fossil fuel companies’ reparations for climate changes. *One Earth* 6 (5):459–63. doi: 10.1016/j.oneear.2023.04.012.
- Gudynas, E. 2015. *Extractivismos*. La Paz, Bolivia: Centro de Documentación e Información.
- Haarstad, H., and T. I. Wanvik. 2017. Carbonscapes and beyond: Conceptualizing the instability of oil landscapes. *Progress in Human Geography* 41 (4):432–50. doi: 10.1177/0309132516648007.
- Hall, R., M. Edelman, S. M. Borrás, I. Scoones, B. White, and W. Wolford. 2015. Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions “from below.” *The Journal of Peasant Studies* 42 (3–4):467–88. doi: 10.1080/03066150.2015.1036746.
- Hart, G. 2006. Denaturalizing dispossession: Critical ethnography in the age of resurgent imperialism. *Antipode* 38 (5):977–1004. doi: 10.1111/j.1467-8330.2006.00489.x.
- Harvey, D. 2003. *The new imperialism*. Oxford, UK: Oxford University Press.
- Heikkinen, A.-M., A. Nygren, and M. Custodio. 2023. The slow violence of mining and environmental suffering in the Andean waterscapes. *Extractive Industries and Society* 14:101254.
- Hernández, R. 1982. Exigen campesinos de Comalcalco se aclare un fraude de 4,200 millones [Peasants of Comalcalco require clarification of the fraud of 4,200 million]. *Excelsior*, November 23.
- Himley, M. 2021. The future lies beneath: Mineral science, resource-making, and the (de)differentiation of the Peruvian underground. *Political Geography* 87:102373. doi: 10.1016/j.polgeo.2021.102373.
- Hirald, R. 2018. Experiencing primitive accumulation as alienation: Mangrove forest privatization, enclosures and the everyday adaptation of bodies to capital in rural Senegal. *Journal of Agrarian Change* 18 (3):517–35. doi: 10.1111/joac.12247.
- Holston, J. 2011. Contesting privilege with right: The transformation of differentiated citizenship in Brazil. *Citizenship Studies* 15 (3–4):335–52. doi: 10.1080/13621025.2011.565157.

- Huber, M., and J. McCarthy. 2017. Beyond the subterranean energy regime? Fuel, land use and the production of space. *Transactions of the Institute of British Geographers* 42 (4):655–68. doi: [10.1111/tran.12182](https://doi.org/10.1111/tran.12182).
- Hunsberger, C., E. Corbera, S. M. Borrás, Jr., J. C. Franco, K. Woods, C. Work, R. de la Rosa, V. Eang, R. Herre, S. S. Kham, et al. 2017. Climate change mitigation, land grabbing and conflict: Towards a landscape-based and collaborative action research agenda. *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 38 (3):305–24. doi: [10.1080/02255189.2016.1250617](https://doi.org/10.1080/02255189.2016.1250617).
- Hurtado, D., and I. Vélez-Torres. 2020. Toxic dispossession: On the social impacts of the aerial use of glyphosate by the sugarcane agroindustry in Colombia. *Critical Criminology* 28 (4):557–76. doi: [10.1007/s10612-020-09531-3](https://doi.org/10.1007/s10612-020-09531-3).
- Indemnización por más de 6 millones de pesos reclaman a Pemex campesinos de seis rancherías en el Mpio. de Comalco [Peasants of 6 six rancherías in the Municipality of Comalco require more than 6 million pesos as compensation]. 1976. *Avance de Tabasco*, November 22.
- Kamphuis, C. 2020. The transnational mining justice movement: Reflecting on two decades of law reform activism in the Americas. *Canadian Yearbook of International Law* 57:286–352.
- Kenney-Lazar, M., D. Suhardiman, and M. B. Dwyer. 2018. State spaces of resistance: Industrial tree plantations and the struggle for land in Laos. *Antipode* 50 (5):1290–1310. doi: [10.1111/anti.12391](https://doi.org/10.1111/anti.12391).
- Kikon, D. 2019. *Living with oil and coal: Resource politics and militarization in northeast India*. Seattle: Washington University Press.
- Kröger, M., and A. Nygren. 2020. Shifting frontier dynamics in Latin America. *Journal of Agrarian Change* 20 (3):364–86. doi: [10.1111/joac.12354](https://doi.org/10.1111/joac.12354).
- Lahiri-Dutt, K., R. Balakrishnan, and N. Ahmad. 2012. Land acquisition and dispossession: Private coal companies in Jharkhand. *Economic Political Weekly* 47:39–45.
- Las instalaciones se hallan en poder de campesinos inconformes. [The installations are in the power of dissatisfied peasants]. 1976. *Avance de Tabasco*, November 23.
- Leifsen, E. 2017. Wasteland by design: Dispossession by contamination and the struggle for water justice in the Ecuadorian Amazon. *The Extractive Industries and Society* 4 (2):344–51. doi: [10.1016/j.exis.2017.02.001](https://doi.org/10.1016/j.exis.2017.02.001).
- Lesutis, G. 2019. Spaces of extraction and suffering: Neoliberal enclave and dispossession in Tete, Mozambique. *Geoforum* 102:116–25. doi: [10.1016/j.geoforum.2019.04.002](https://doi.org/10.1016/j.geoforum.2019.04.002).
- Levien, M. 2018. *Dispossession without development: Land grabs in neoliberal India*. Oxford, UK: Oxford University Press.
- Li, T. M. 2010. To make live or let die? Rural dispossession and the protection of surplus populations. *Antipode* 41 (Suppl. 1):66–93. doi: [10.1111/j.1467-8330.2009.00717.x](https://doi.org/10.1111/j.1467-8330.2009.00717.x).
- Li, T. M., and P. Semedi. 2021. *Plantation life: Corporate occupation in Indonesia's oil palm zone*. Durham, NC: Duke University Press.
- Lozano, M. 1979. El petróleo derramado por el pozo Ixtoc 1 llegó a las playas tabasqueñas [Petroleum sprayed by oilfield Ixtoc 1 arrived to the Tabascan beaches]. *Excelsior*, July 17.
- Lund, C. 2016. Rule and rupture: State formation through the production of property and citizenship. *Development and Change* 47 (6):1199–1228. doi: [10.1111/dech.12274](https://doi.org/10.1111/dech.12274).
- Lund, C. 2024. Coding regimes of possession: An essay on land, property, and law. *Globalizations* 2024:1–16. doi: [10.1080/14747731.2024.2343451](https://doi.org/10.1080/14747731.2024.2343451).
- Lund, C., and N. F. Rachman. 2018. Indirect recognition: Frontiers and territorialization along Mont Halimun-Salak National Park. *World Development* 101:417–28. doi: [10.1016/j.worlddev.2017.04.003](https://doi.org/10.1016/j.worlddev.2017.04.003).
- Lunstrum, E., B. Bose, and A. Zalik. 2016. Environmental displacement: The common ground of climate change, extraction and conservation. *Area* 48 (2):130–33. doi: [10.1111/area.12193](https://doi.org/10.1111/area.12193).
- Lyall, A., and G. Valdivia. 2019. The speculative petrostate: Volatile oil prices and resource populism in Ecuador. *Annals of the American Association of Geographers* 109 (2):349–60. doi: [10.1080/24694452.2018.1531690](https://doi.org/10.1080/24694452.2018.1531690).
- Madrado Pintado, R. 1995. *Primer año de trabajo* [First year of work]. Unpublished document.
- Márquez, A. 2013. Dejen de ordeñar a Pemex, pide Núñez [Stop milking Pemex, requests Núñez]. *Avance de Tabasco*, April 18.
- Marston, A., and M. Himley. 2021. Earth politics: Territory and the subterranean. *Political Geography* 88:102407. doi: [10.1016/j.polgeo.2021.102407](https://doi.org/10.1016/j.polgeo.2021.102407).
- Massé, F., and E. Lunstrum. 2016. Accumulation by securitization: Commercial poaching, neoliberal conservation, and the creation of new wildlife frontiers. *Geoforum* 69:227–37. doi: [10.1016/j.geoforum.2015.03.005](https://doi.org/10.1016/j.geoforum.2015.03.005).
- Maza, E. 1979. Pemex depoja, contamina y quiebra un modo de vida [Pemex dispossesses, contaminates, and breaks a lifestyle]. *Proceso*, July 9.
- McKay, B. M., A. Alonso-Fradejas, and A. Ezquerro-Cañete. 2021. Introduction. In *Agrarian extractivism in Latin America*, ed. B. M. McKay, A. Alonso-Fradejas, and A. Ezquerro-Cañete, 1–20. London and New York: Routledge.
- McKay, B. M., S. Sauer, B. Richardson, and R. Herre. 2016. The political economy of sugarcane flexing: Initial insights from Brazil, Southern Africa and Cambodia. *The Journal of Peasant Studies* 43 (1):195–223. doi: [10.1080/03066150.2014.992016](https://doi.org/10.1080/03066150.2014.992016).
- Moore, D. S. 2005. *Suffering for territory: Race, place, and power in Zimbabwe*. Durham, NC: Duke University Press.
- Moore, J. W. 2007. Silver, ecology, and the origins of the modern world, 1450–1640. In *Rethinking environmental history: World-system history and global environmental change*, ed. A. Hornborg, J. R. McNeill, and J. Martínez Alier, 123–42. Lanham, MD: AltaMira Press.

- Mostafanezhad, M., and W. Dressler. 2021. Violent atmospheres: Political ecologies of livelihoods and crises in Southeast Asia. *Geoforum* 124:343–47. doi: [10.1016/j.geoforum.2021.05.010](https://doi.org/10.1016/j.geoforum.2021.05.010).
- Ninguna agitación; pocos pozos bloqueados [No agitation, few oilfields blocked]. 1979. *Excelsior*, February 20
- Nixon, R. 2011. *Slow violence and the environmentalism of the poor*. Cambridge, MA: Harvard University Press.
- Nygren, A. 2018. Inequality and interconnectivity: Urban spaces of justice in Mexico. *Geoforum* 89:145–54. doi: [10.1016/j.geoforum.2017.06.015](https://doi.org/10.1016/j.geoforum.2017.06.015).
- Nygren, A. 2021. Water and power, water's power: State-making and socationature shaping volatile rivers and riverine people in Mexico. *World Development* 146:105615. doi: [10.1016/j.worlddev.2021.105615](https://doi.org/10.1016/j.worlddev.2021.105615).
- Nygren, A., M. Kröger, and B. Gills. 2022. Global extractivisms and transformative alternatives. *The Journal of Peasant Studies* 49 (4):734–59. doi: [10.1080/03066150.2022.2069495](https://doi.org/10.1080/03066150.2022.2069495).
- Nygren, A., and A. Lounela. 2023. Remaking of wetlands and copying with vulnerabilities in Mexico and Indonesia. *Water Alternatives* 16:295–320. <https://www.water-alternatives.org/index.php/alldoc/articles/vol16/v16issue1/690-a16-1-7/file>.
- Nygren, A., and A. V. Rabelo Avalos. 2025. Oil extraction and indirect dispossession: Responsibility and resistance in Southern sacrifice zones. *Journal of Peasant Studies* 2025:1–32. doi: [10.1080/03066150.2025.2480200](https://doi.org/10.1080/03066150.2025.2480200).
- Ojeda, D. 2021. Social reproduction, dispossession, and the gendered workings of agrarian extractivism in Colombia. In *Agrarian extractivism in Latin America*, ed. B. McKay, A. Alonso-Frajedas, and A. Ezquerro-Cañete, 85–98. London and New York: Routledge.
- Peluso, N., and P. Vandergeest. 2011. Political ecologies of war and forests: Counterinsurgencies and the making of national forests. *Annals of the Association of American Geographers* 101 (3):587–608. doi: [10.1080/00045608.2011.560064](https://doi.org/10.1080/00045608.2011.560064).
- Pemex, Petróleos Mexicanos. 1994. *Problemática de las reclamaciones de campesinos y pescadores del Estado de Tabasco* [Problematic of reclaims by peasants and fishers in the State of Tabasco]. Unpublished document.
- Pereira, C., and D. Tsikata. 2022. Contextualising extractivism in Africa. *Feminist Africa* 2:14–48.
- Perreault, T. 2013. Dispossession by accumulation? Mining, water and the nature of enclosure on the Bolivian Altiplano. *Antipode* 45 (5):1050–69. doi: [10.1111/anti.12005](https://doi.org/10.1111/anti.12005).
- Perreault, T. 2018. Mining, meaning and memory in the Andes. *The Geographical Journal* 184 (3):229–41. doi: [10.1111/geoj.12239](https://doi.org/10.1111/geoj.12239).
- Peters, K., P. Steinberg, and E. Stratford. 2018. *Territory beyond terra*. London: Rowman & Littlefield.
- Quist, L.-M., and A. Nygren. 2015. Contested claims over space and identity between fishers and the oil industry in Mexico. *Geoforum* 63:44–54. doi: [10.1016/j.geoforum.2015.05.015](https://doi.org/10.1016/j.geoforum.2015.05.015).
- Quist, L.-M., and A. Nygren. 2019. Debating the unknowns of marine oil exploration in Mexico. *The Extractive Industries and Society* 6 (3):855–62. doi: [10.1016/j.exis.2019.06.005](https://doi.org/10.1016/j.exis.2019.06.005).
- Rai, N. D., T. A. Benjaminsen, S. Krishnan, and C. Madegowda. 2019. Political ecology of tiger conservation in India: Adverse effects of banning customary practices in a protected area. *Singapore Journal of Tropical Geography* 40 (1):124–39. doi: [10.1111/sjtg.12259](https://doi.org/10.1111/sjtg.12259).
- Rajak, D. 2011. *In good company: An anatomy of corporate social responsibility*. Stanford, CA: Stanford University Press.
- Reglamento de la Ley de Hidrocarburos. 1977. Accessed December 29, 2022. <http://www.ordenjuridico.gob.mx/leyes.php#gsc.tab=0>.
- Restrepo, I. 1993. El deterioro ecológico y la planeación de desarrollo [Ecological damage and development planning]. In *Tabasco: Realidad y perspectivas XI*, 647–73. Mexico: Porrúa.
- Ribot, J. C., and N. L. Peluso. 2003. A theory of access. *Rural Sociology* 68 (2):153–81. doi: [10.1111/j.1549-0831.2003.tb00133.x](https://doi.org/10.1111/j.1549-0831.2003.tb00133.x).
- Robles de la Rosa, L. 2015. Bloqueos en 2014 impidieron perforar pozos [Blocks in 2014 prevented perforation in the oilfields]. *Excelsior*, July 16.
- Ryder, S., and P. M. Hall. 2017. This land is your land, maybe: A historical institutionalist analysis for contextualizing split estate conflicts in U.S. unconventional oil and gas development. *Land Use Policy* 63:149–59. doi: [10.1016/j.landusepol.2017.01.006](https://doi.org/10.1016/j.landusepol.2017.01.006).
- Salas Landa, M. 2016. Crude residues: The workings of failing oil infrastructure in Poza Rica, Veracruz, Mexico. *Environment and Planning A* 48:718–35.
- Salvador, B. M., and M. A. Reséndez. 1990. Modificaciones de la comunidad de peces en el sistema lagunar El Carmen-Machona como una consecuencia de la abertura de un cauce artificial, Tabasco [Modifications of fish communities in the lagoon system El Carmen-Machona as a consequence of the opening of the artificial channel, Tabasco]. *Universidad y Ciencia* 7:5–13.
- Sawyer, S. 2017. Crude contamination: Law, science, and indeterminacy in Ecuador and beyond. In *Subterranean estates: Lifeworlds of oil and gas*, ed. H. Appel, A. Mason, and M. Watts, 126–46. Ithaca, NY: Cornell University Press.
- Secretaría de Recursos Hidráulicos. 1979. *Estudios para la evaluación inicial del deterioro ambiental del Estado de Tabasco* [Studies for a preliminary evaluation of environmental degradation in the State of Tabasco].
- Schilling-Vacaflor, A., R. Flemmer, and A. Hujber. 2018. Contesting the hydrocarbon frontiers: De-politicizing state strategies and local responses in Peru. *World Development* 108:74–85. doi: [10.1016/j.worlddev.2018.03.019](https://doi.org/10.1016/j.worlddev.2018.03.019).
- Schoenberger, L., and A. Beban. 2018. “They turn us into criminals”: Embodiments of fear in Cambodian land grabbing. *Annals of the American Association of Geographers* 108 (5):1338–53. doi: [10.1080/24694452.2017.1420462](https://doi.org/10.1080/24694452.2017.1420462).
- Scoones, I., M. Edelman, S. M. Borras, R. Hall, W. Wolford, and B. White. 2018. Emancipatory rural politics: Confronting authoritarian populism. *The Journal of Peasant Studies* 45 (1):1–20. doi: [10.1080/03066150.2017.1339693](https://doi.org/10.1080/03066150.2017.1339693).

- Secretaría de Gobernación. 2016. Ley federal para prevenir y sancionar los delitos cometidos en materia de hidrocarburos [Federal law to prevent and sanction crimes in the material of hydrocarbons]. *Diario Oficial*, December 1.
- Soto, L. A., A. V. Botello, S. Licea-Durán, M. L. Lizárraga-Partida, and A. Yáñez-Arancibia. 2014. The environmental legacy of the Ixtoc 1 oil spill in Campeche Sound, southwestern Gulf of Mexico. *Frontiers in Marine Science* 1:19. doi: [10.3389/fmars.2014.00057](https://doi.org/10.3389/fmars.2014.00057).
- Spalding, R. J. 2023. The politics of implementation: Social movements and mining policy implementation in Guatemala. *Extractive Industries and Society* 13:101203.
- Sud, N. 2017. State, scale and networks in the liberalization of India's land. *Politics and Space* C 35 (1):76–93. doi: [10.1177/0263774X16655801](https://doi.org/10.1177/0263774X16655801).
- Sultana, F. 2022. Critical climate justice. *The Geographical Journal* 188 (1):118–24. doi: [10.1111/geoj.12417](https://doi.org/10.1111/geoj.12417).
- Svampa, M. 2019. *Neo-extractivism in Latin America: Socio-environmental conflicts, the territorial turn, and new political narratives*. Cambridge, UK: Cambridge University Press.
- Tetreault, D. 2020. The new extractivism in Mexico: Rent redistribution and resistance to mining and petroleum activities. *World Development* 126:104714. doi: [10.1016/j.worlddev.2019.104714](https://doi.org/10.1016/j.worlddev.2019.104714).
- Tudela, F. 1989. *La modernización forzada del trópico: El caso de Tabasco* [Forced modernization of the tropics: The case of Tabasco]. México: El Colegio de México.
- Valdivia, G. 2008. Governing relations between people and things: Citizenship, territory, and the political economy of petroleum in Ecuador. *Political Geography* 27 (4):456–77. doi: [10.1016/j.polgeo.2008.03.007](https://doi.org/10.1016/j.polgeo.2008.03.007).
- Valdivia, G. 2015. Oil frictions and the subterranean geopolitics of energy regionalisms. *Environment and Planning A: Economy and Space* 47 (7):1422–39. doi: [10.1177/0308518X15595764](https://doi.org/10.1177/0308518X15595764).
- Valdivia, G., E. Havice, and M. Himley. 2020. Critical resource geography: An introduction. In *The Routledge handbook of critical resource geography*, ed. M. Himley, E. Havice, and G. Valdivia, 1–20. London and New York: Routledge.
- Vehrs, H.-P., and M. Zickel 2023. Can environmental injustices be addressed in conservation? Settlement history and conservation-induced displacement in the case of Lyanshulu in the Zambezi region, Namibia. *Human Ecology* 51:89–105. doi: [10.1007/s10745-022-00383-9](https://doi.org/10.1007/s10745-022-00383-9).
- Velázquez García, M. A. 2016. Recursos del estado mexicano contra los movimientos sociales: Las distintas manos de leviatán [Resources of the Mexican state against the social movements: Different hands of Leviathan]. *Estudios Sociológicos de El Colegio de México* 34 (101):247–72. doi: [10.24201/es.2016v34n101.1448](https://doi.org/10.24201/es.2016v34n101.1448).
- Velázquez Guzmán, M. G. 1982. Afectaciones petroleras en Tabasco: El movimiento del Pacto Ribereño [Oil effects in Tabasco: The movement of Pacto Ribereño]. *Revista Mexicana de Sociología* 44 (1):167–87. doi: [10.2307/3540198](https://doi.org/10.2307/3540198).
- Vélez-Torres, I., D. Varela, V. Cobo, and D. Hurtado. 2019. Beyond property: Rural politics and land-use change in the Colombian sugarcane landscape. *Journal of Agrarian Change* 19 (4):690–710. doi: [10.1111/joac.12332](https://doi.org/10.1111/joac.12332).
- Veltmeyer, H., and A. Ezquerro-Cañete. 2023. Agro-extractivism. *The Journal of Peasant Studies* 50 (5):1673–86. doi: [10.1080/03066150.2023.2218802](https://doi.org/10.1080/03066150.2023.2218802).
- Watts, M. 2011. Blood oil: The anatomy of a petro-insurgency in the Niger delta, Nigeria. In *Crude domination: An anthropology of oil*, ed. A. Behrends, S. P. Reyna, and G. Schlee, 49–80. New York: Berghahn.
- Wilson, J. 2021. *Reality of dreams: Post-neoliberal utopias in the Ecuadorian Amazon*. New Haven, CT: Yale University Press.
- Wolford, W. 2021. The plantationocene: A lusotropical contribution to the theory. *Annals of the American Association of Geographers* 111:1–18. doi: [10.1080/24694452.2020.1850231](https://doi.org/10.1080/24694452.2020.1850231).
- Wolford, W., B. White, I. Scoones, R. Hall, M. Edelman, and S. M. Borras. 2024. Global land deals: What has been done, what has changed, and what's next? *The Journal of Peasant Studies* 2024:1–38. doi: [10.1080/03066150.2024.2325685](https://doi.org/10.1080/03066150.2024.2325685).
- Ybarra, M. 2018. *Green wars: Conservation and decolonization in the Maya forest*. Oakland: University of California Press.
- Ye, J., J. D. van der Ploeg, S. Schneider, and T. Shanin. 2020. The incursions of extractivism: Moving from dispersed places to global capitalism. *The Journal of Peasant Studies* 47 (1):155–83. doi: [10.1080/03066150.2018.1559834](https://doi.org/10.1080/03066150.2018.1559834).

ANJA NYGREN is Professor of Global Development Studies at the University of Helsinki, Finland. E-mail: anja.nygren@helsinki.fi. Her research interests include resource extractivism, frontier dynamics, and water governance in the Global South.