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**CONTESTING EXTRACTIVISM: GOLD, WATER AND POWER IN
EL SALVADOR**

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

ENVIRONMENTAL STUDIES

by

James Alejandro Artiga-Purcell

June 2021

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2021

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ABSTRACT

Contesting Extractivism: Gold, Water and Power in El Salvador

James Alejandro Artiga-Purcell

This research examines the political ecological processes that drive and resist extractivism. I use socio-ecological theory, mixed methods, and interdisciplinary critical analysis to better understand how El Salvador became the only country in history to ban metal mining. Though literally sitting on a gold mine, the Salvadoran government broke ranks with a continent-wide extractive imperative. However, far from a bastion of anti-extractive development or paragon of water rights, El Salvador faces a contentious battle over water privatization as non-metal mining extraction continues to drain and pollute the country's most important water resource—the Lempa River. Through key informant interviews with mining and water experts, semi-structured surveys with anti-mining communities, archival research, and ethnographic participant observation I uncover how El Salvador's conflicting extractive politics emerged. Political economic and historical institutional analyses underscore the relative unimportance of gold mining to Salvadoran elites and the national economy and the growing importance of non-metal mining extractivism. Landscape ecology and discourse analyses show how gold's unique material-discursive relation to the Lempa river fueled "water over gold" narratives. These narratives highlighted the vulnerability of the national water resource to gold mining while obscuring how metal mining's threat to water emerged in relation to heterogeneous non-metal mining extractive landscapes that continue to pollute the

Lempa. Finally, a relational analysis of El Salvador's anti-metal mining and water justice movements illustrates how El Salvador's historic metal mining ban and ongoing struggle for water justice partially emerged from social movement leaders' strategic decision to discursively and politically separate these movements. These overlapping analyses explain how the forces that propelled El Salvador's historic metal mining ban simultaneously facilitated non-metal mining extraction and entrenched the current water crisis. El Salvador's unprecedented anti-metal mining ban demonstrates the power of social mobilization, the importance of issue framing, and the potential to build unlikely alliances for environmental justice. The country's ongoing commitment to non-metal mining agro-extractivism show how extractivism and its alternatives are not always diametrically opposed but can be mutually constitutive. Delving into the messy political ecologies that resulted in heterogeneous extractive and anti-extractive landscapes may not only inspire ongoing and future anti-extractivist movements across Latin America, but also inform how such political struggles play out, what constitutes success, for who, and at what cost.

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INTRODUCTION:

Contesting Extractivism

Extractive industries underlie many of the most pressing social and environmental challenges of our time. Extractive projects pollute and overuse water resources, destroy landscapes, spew greenhouse gases, and increase socio-ecological vulnerability to natural disasters, poverty and social unrest. Yet everywhere, extractivism booms. Oil, gas, minerals, metals and other extracted resources form the backbone of the global economy, technological innovation, and national development strategies (Bebbington & Bury, 2013). Extractivism has become hegemonic, unthought, inevitable. The political question of “if we should extract” has given way to its de-politicized counterpart, “how should we extract?”

Nowhere has this blind faith in extractivism taken firmer root than in Latin America. Over 500 years of the relentless “pillage of a continent” (Galeano, 1997) have entrenched an apparent “extractive imperative” (Arsel et al., 2016) or “commodity consensus” (Svampa, 2019) that equates extractivism with development. So strong is the will to extract, that it bridges conservative and progressive ideologies, capitalist and socialist politics, and colonial and decolonial discourses (Gudynas, 2010; Rosales, 2013; Veltmeyer & Petras, 2014). From Bolivia, Ecuador and Venezuela to Brazil, Colombia and Honduras there seems to be no alternative to extractivism in Latin America. While relentlessly contested from below, the extractive hegemon remains unquestioned from above. Except, that is, in El Salvador.

On March 29th, 2017, El Salvador became the only country in the world to ban all metallic mining. A twelve-year grassroots struggle against foreign gold mining corporations marked by brave activism, tragic martyrdoms, and sustained community organizing, culminated in a unanimous, bipartisan legislative decree that struck at the core of the Latin American extractive consensus. The notoriously degrading process of ripping precious metals out of the earth in sufficient quantities and with adequate efficiency to be economically viable threatened El Salvador's hydrologic heart, the Lempa river. In an unprecedented move, Salvadorans across political, socio-economic, urban-rural, religious and ideological spectrums denounced gold for something they viewed as inordinately more valuable—water.

El Salvador's metal mining ban stands alone as the most direct legislative repudiation of unbridled extractive development in Latin America. It is unquestionably an outlier. This exceptional case has sparked a flurry of analyses that examine how El Salvador pulled off the seemingly impossible, and to highlight the courageous actors who catalyzed such change (see Nadelman, 2017; Spalding; 2018 Bebbington et al., 2019; Moore & Perez-Rocha, 2019; Broad & Cavanagh, 2021; Lander et al., 2021). Yet perhaps the more profound and unsettling lessons the Salvadoran case offers emerge, not in its exceptionalism, not in its unprecedented victory for water justice, but in how the historic metal mining ban relates to the country's all too common ongoing commitment to water-intensive extractivism.

El Salvador remains one of the most water stressed nations in Latin America. Non-metallic limestone mining, essential for cement production and El Salvador's

growing construction sector, continues unaffected by the exclusively metal mining ban. Water polluting agroindustry, like chemical-dependent monocrop sugarcane production, expands unabated throughout the Lempa watershed sowing socio-ecological conflict in its wake. The anti-mining movements' sister movement for water justice remains embroiled in a contentious battle over a general water law and a right-wing demand for a de facto privatization of the vital resource. People from rural communities in the Department of Cabañas, the epicenter of El Salvador's anti-mining struggle, still walk long distances in baking heat to access clean water. Those that have running water in their homes two days a month strictly ration their household consumption. Others scrounge together the \$2.40 to buy a five-gallon jug for the whole family or simply go without. Beyond an outlier, El Salvador's continued extractivism, natural resource conflicts, and water struggles align all too well with the continental extractive consensus.

Interrogation of El Salvador's ongoing extractivism does not diminish its historic metal mining ban, nor need it engage in critique for critique's sake of one of the most successful anti-mining movements in history. No legislation can tackle everything. No social movement is complete or unhindered by internal conflict and contradiction. Extractive developments are not all the same. They emerge through different, albeit overlapping and mutually-constituting, institutional, social, economic, gendered, ecological, hydrological and many other intersectional material-discursive relations. Gold is not cement, is not sugarcane. It seems self-evident, therefore, that the world's first national metal mining ban would sit triumphantly in the shadow of

ongoing extractivism. But such self-evidence, rooted in assumptions of the *a priori* distinction between extractive developments, conceals important politics and power dynamics. For material-discursive disparities between metal and non-metal mining extractive projects, and their conflicting politics, are never innate, pre-determined or fixed. El Salvador's narrow ban on metal mining was enabled through (un)conscious choices made, (in)actions performed, and roads (not) taken. The ban did not succeed in spite of ongoing extractivism, but rather largely relied on the temporary bracketing off of other Salvadoran extractive developments from political relevance.

Untangling these politics necessitates an analysis of El Salvador's contrasting anti-metal mining and pro-extractive politics—one that situates El Salvador's prioritization of water over gold within the country's broader context of extractive development and contentious water struggle. This dissertation explores the power relations that enabled a ban on gold mining but not all mining, documenting the internal politics, contradictions, and trade-offs that drove the anti-metal mining movement's goals and strategies. It differentiates whose water, and what kind of (already polluted) water, was "saved" from gold mining, and why. It asks, on the road to legislative victory, which landscapes, waterscapes, and livelihoods were centered at the expense of others? Taking these questions seriously is not simply a matter of recounting the history of El Salvador's metal mining ban. Donna Haraway teaches us that "it matters what stories tell stories" (2016: 35). The stories we tell of how El Salvador banned metal mining matter for what subsequent struggles and

(post)extractive politics become (un)desirable, (un)likely, and (im)possible—for what stories might yet be written, and by whom.

Explanations of El Salvador's metal mining ban also influence how this particular case matters for extractive struggles across Latin America. Interrogation of the unique contradictions imbued in Salvadoran waterscapes, free of metal mining toxins yet scarred by ongoing extractivism, necessarily leads to broader reexaminations of the definitions of extractivism, anti-extractivism, and their relation. The implications of which, reverberate beyond the Salvadoran case. El Salvador's uneasy fit as either an outlier or a typical case within Latin America's extractive imperative raises questions regarding the solidity of this supposed consensus. At what spatial-temporal scales does it operate? How might extractive development and its alternatives overlap, coexist and even mutually-constitute one another? How do water and other more-than-human agencies, interests and materialities simultaneously enable and challenge different forms of (anti)extractive politics? What does this mean for understanding extractive hegemony and counter-extractive movements? Such complex questions deserve uneasy answers that open, rather than close debate, and that foster productive engagement with (un)familiar categories and concepts that frame understandings of extractivism and its alternatives.

CONTESTING EXTRACTIVISM

The stories told here contest extractivism in a dual sense. On the one hand, they contribute an empirical description of perhaps the most successful contestation

of extractivism in modern Latin American history. Building off of and extending existing research, the chapters weave together political economy, institutional history, landscape ecology, social movement theory, discourse analyses, and socationatural approaches in order to examine the social-ecological contexts, political forces, and power-laden maneuvers of an assortment of human and more-than-human characters that led to the world's first metal mining ban. It is a story of the triumphs and limitations of an environmental movement's historic achievement.

On the other hand, the empirical tensions embedded within Salvadoran extractive politics that this study uncovers provokes a broader contestation of extractivism itself, as commonly conceived and theorized in contemporary literatures on natural resource conflicts. Reinvigorating debates on the spatial, temporal and scalar dynamics of extractivism, the Salvadoran case complicates dominant notions of national extractive development, of linear pathways from extractivism to alternatives-to-extractivism, and of a hegemonic extractive imperative. Without denouncing the partial and contingent truths in these renderings, this study opens space for less visible and counterintuitive extractive power relations. It suggests that multiple extractive logics operate within (not just across) nation states, and that political victories for anti-extractivist futures may (un)intentionally entrench extractive politics. This is not the standard David versus Goliath story. There is no purity, only messiness.¹ Extractivism and anti-extractivism are not mutually exclusive projects, but rather, mutually constitutive processes.

¹ As Anna Tsing puts it, "purity is not an option" (2015: 27).

The implications of this empirical-theoretical contestation of such dichotomous framings of extractivism are not trivial. Delving into the messy political ecologies that resulted in heterogeneous extractive and anti-extractive landscapes may not only inspire ongoing and future anti-extractivist movements across Latin America, but also inform how such political struggles play out, what constitutes success, for who, and at what cost.

GUIDING APPROACH AND METHODOLOGY

While written as stand-alone articles that broach distinct questions, literatures, and theoretical debates, the chapters of this dissertation coalesce around a unifying political ecological approach for understanding how El Salvador banned metal mining. A diverse practice and field of thought itself, political ecology broadly attends to the myriad power relations that infuse social-ecological change. A guiding principle of political ecology is that environments are always imbued with politics and politics are never dissociated from ecology (Robbins, 2012). Politics, here, extend beyond the realm of public policy and into circuits of capital, discourse, performed identities, and other multi-scalar and socionatural relations that shape our collective (more-than-human) yet unequal processes of living and dying. Throughout the chapters, this political ecological approach draws attention to socionatural power relations through interwoven analyses of political economy, institutional histories, landscape ecologies, and material-discursive boundary-making processes that shape El Salvador's metal-mining-free yet heavily extracted landscapes.

This research also draws on relational political ecological approaches that propose that entities (whether gold mines, rivers, or social movements) “never precede their relatings” but always become together and out of “previous such entanglements” (Haraway, 2016: 60). Moving beyond investigations of relations between separate and fixed entities, attention to relationality underscores the mutually constituting relations through which those entities emerge, and become separated, in the first place. While taken up most directly in the final chapter about El Salvador’s entangled anti-metal mining and water justice social movements, relationality permeates my analysis of the scale-making politics inherent in extractive politics (Chapter 1) and my examination of viable and unviable extractivism (Chapter 2). In each case, a relational understanding highlights how seemingly separate extractive processes, discourses, landscapes, and political economies mutually constitute one another. The chapters themselves might also be read relationally—as partial and thoroughly entangled.

Data Collection and Analysis

Political ecology demands an interdisciplinary and mixed methodological approach that draws on a range of social and biophysical data and enables the integration of critical social theory and ecological analyses. While each chapter details its particular methodology in more depth, a brief overview of the methods and fieldwork that underly this research project as a whole underscore how the questions and arguments presented in each chapter overlap, build off of, and extend one another.

This dissertation draws on over 10 years of activist work with Salvadoran environmental NGOs and six years of research on anti-mining politics. I collected the bulk of the data used for this research during eight months of fieldwork in El Salvador spread across five visits between 2015 and 2019. The following research methods informed this project.

Key Informant Interviews: Traveling primarily between the capital city of San Salvador and the prospective mining departments of Cabañas and Chalatenango, I conducted semi-structured interviews with 53 key informants using a snowball sample. Participants spanned public, private and civil society sectors and included environmental activists, NGO representatives, church leaders, journalists, academics, business association representatives, mayors, congresspeople from El Salvador's three main political parties², and government officials from a number of Ministries³ as well as the office of the Ombudswoman of Human Rights. Interviews were recorded, transcribed, and then coded for emergent themes using an inductive qualitative analysis that related to each chapter's specific questions using NVivo, a qualitative analysis software. These data proved invaluable for mapping the actors and interests involved in the anti-mining and water justice movements and for understanding social movement goals and strategy, political party maneuvering, popular anti-mining narratives, and expert knowledge of water-mining politics. Each

² These are the right wing Alianza Republicana Nacionalista (ARENA), its conservative offshoot, the Gran Alianza por la Unidad Nacional (GANU), and the left wing Frente Farabundo Martí para la Liberación Nacional (FMLN).

³ These include the Ministries of Resources and the Environment (MARN), Agriculture and Livestock (MAG), Ministry of Health (MINSAL), and Foreign Affairs.

chapter highlights different participants and participant responses in order to conduct political economic analyses of overlapping extractive developments, discursive analyses of mining-water narratives, and relational analyses of Salvadoran environmental social movements.

Community Surveys: With the support of the Asociación de Desarrollo Económico y Social - Santa Marta (ADES), a Cabañas-based development NGO with 25-years' worth of organizing experience in the region and a key actor in the anti-metal mining movement, I conducted 44 semi-structured surveys with anti-mining community members in the department of Cabañas. Despite its historically conservative politics, Cabañas became the epicenter of the anti-metal mining movement in El Salvador due to the high-profile grass-roots struggle against the El Dorado gold mine project owned by the Canadian-based Pacific Rim (and subsequently by Australia-based Oceana Gold) in the municipality of San Isidro. Participants included 23 men and 21 women between the ages of 25 and 73, living in the four municipalities surrounding the proposed El Dorado mine: Guacotecti, San Isidro, Sensuntepeque, and Victoria. The focus on anti-mining activists reflected both the needs of the study and the limitations of conducting fieldwork in a particularly impoverished, gang-controlled area, where trust and legitimacy is paramount for community engagement. My positionality as a light-skinned, male academic, and presumably (and relatively) wealthy foreigner, asking probing questions constrained my survey to only include willing participants with ties to ADES. My affiliation with a known, respected and local institution like ADES

fostered trust between community members and myself. This trust also hinged on my identity as a Salvadoran American with two parents who dedicated their lives working and making meaningful connections with Salvadoran human rights, development, and community organizing leaders (starting during the civil war up to the present). Survey interviews that began with short answers and guarded suspicion despite my affiliation with ADES (leading to questions as to why a foreigner and city-boy would care about El Salvador or rural communities) often opened into lighthearted and passionate testimonies once my link—through blood and history—to El Salvador and “la lucha” became apparent. Following the approved UCSC Human Subject Institutional Review Board protocols, participants gave their free, prior and informed consent before answering a verbally administered questionnaire, with space to expound on subjects of interest.

While most studies of El Salvador’s metal mining ban include a “civil society” perspective, they rely overwhelmingly on community leaders and NGO activist perspectives (see Bebbington et al., 2019; Broad & Cavanagh, 2015; Spalding, 2015). My inclusion of testimonies of anti-mining community members surrounding the El Dorado project enabled novel empirical and theoretical analyses of how the struggle against gold mining came about, how community grievances over water became (re)interpreted as the local struggle became national, and who the metal mining ban benefitted and how. While community survey data informed each chapter, participant responses were most instrumental in uncovering prevalent mining-water

discourses (Chapter 2) and understanding the entangled origins, actors, goals, and strategies of the anti-mining and water justice movements (Chapter 3).

Archival Data: To corroborate and supplement interview and survey data, I also conducted archival research. Literature from anti-mining and water justice NGOs (ranging from research publications to pamphlets to draft mining legislation) enabled analysis of social movement strategies and activist water discourses. Government press briefings and official reports, newspapers, papal encyclicals, scientific papers, statistics from El Salvador's central bank, and reports from international institutions (e.g. the United Nations) provided broader context of El Salvador's water crisis, and sharpened analysis of Salvadoran extractive political economies and institutional histories, and hegemonic water-mining discourses. Government water statistics and maps, corporate environmental impact reports, and sector overviews of extractive sectors (in particular sugarcane and cement industries) production and expansion were instrumental for conducting a landscape ecology analysis that highlighted the environmental, political economic, and discursive overlap between metal and non-metal mining extractive developments. Court documents detailing the mining company Pacific Rim/OceanaGold's lawsuit against El Salvador filed in the World Bank Group's International Center for Settlement of Investment Disputes (ICSID) also proved useful across the chapters. These documents include further testimony from civil society, the Salvadoran government, mining experts and importantly, mining industry representatives that remained inaccessible for comment via interview (e.g. the CEO of Pacific Rim).

Ethnographic Participatory Observation: Over the course of fieldwork, I observed and participated in the very processes of anti-mining and water politics under investigation. Attending anti-mining and water justice rallies, marches, festivals, and press conferences provided insight regarding the actors, tactics, and discourses that propelled the metal mining ban and ongoing struggle over water justice. Spending time in communities, in activists' homes, and in the landscapes of Cabañas enabled in-depth analyses of the lived experiences of those most affected by the impacts of extractivism. Witnessing anti-mining communities' daily lived experience of water struggles provided key information regarding the entangled yet unfinished anti-mining and water justice movements. Experiencing extractive landscapes firsthand, and people's portrayal of those landscapes in public murals, private conversation, and informal group gatherings aided my material-discursive analysis and provided texture and context to my political economic and historical institutional analyses. Participant observation also directly informed my other methods, as experience translated into new or tweaked survey and key informant questions and evolving archival research.

OVERVIEW OF CHAPTERS AND KEY FINDINGS

The overarching question that drives this research project examines how El Salvador's unprecedented metal mining ban, continued extractivism and entrenched water crisis emerged together. Through distinct, yet overlapping theoretical-analytical

approaches, each chapter addresses a partial aspect of this complex and multifaceted issue.

Chapter 1, “Reframing and Rescaling Extractive Development,” situates the Salvadoran case within current framings of Latin American extractivism in the 21st century. However, reconciling the empirical contradictions between El Salvador’s divergent extractive politics requires rethinking and rescaling popular framings of the extractive imperative and Buen Vivir alternatives to extractivism. Recent definitions of extractive development extend the analytic beyond its common association with the mining of metals, minerals, and hydrocarbons. Integrating this work with critical scholarship on scalar politics that destabilizes assumptions of extractivism as a national or supranational development project, offers an alternative framing that accounts for anti-metal mining and pro-extractivist politics within El Salvador. The chapter ends with a brief comparative analysis of gold mining and industrial sugarcane extractivism that operationalizes this rescaled and broadened conceptualization of extractive development. These sectors’ divergent institutional histories and relative importance to national agro-elites and national political economic development facilitate anti-metal mining and pro-extractive politics simultaneously within El Salvador. These findings suggest a broader need to theorize and analyze not only how conflicting extractive and anti-extractive politics coexist at subnational scales, but more crucially, how they relate.

Chapter 2, “Hydrosocial Extractivism,” addresses this latter question by interrogating how gold and sugarcane’s overlapping relations to water shaped El

Salvador's anti-metal mining and pro-extractive politics. Drawing on the analytic of hydrosocial territories that recognizes water as a material-discursive substance, and landscape ecology approaches that emphasize landscape heterogeneity, this chapter explores how mining-water discourses legitimated anti-metal mining and pro-extractivist politics in El Salvador. Analysis of government maps, community murals, activist slogans, and scientific discourses shows a widespread denunciation of gold mining due to its unique toxic and spatial relation to the Lempa river. However, a landscape ecology analysis that situates gold mining within the broader, heterogeneous extractive landscape, demonstrates that gold mining's "unviability" only emerged through its relation to other water-polluting extractive projects, like industrial sugarcane agriculture, that weakened the Lempa's socio-ecological resilience to mining. While partially true, the common "water over gold" discourse that propelled the metal mining ban in El Salvador simultaneously elided non-metal mining extractive landscapes, pollutants and political economic interests. These discursive politics reflect and reinforce hegemonic differentiations between "viable" agro-extractivism and "unviable" gold mining. This differentiation does not stem from contradictory development policy or ideology. Rather, El Salvador's anti-gold mining and pro-sugarcane politics emanate from a unifying hydrosocial extractive logic that segregates "necessary" and "unnecessary" extractive developments based on their material, discursive, and political economic relations to water. The chapter concludes that the analytic of hydrosocial extractivism demonstrates how extractivist

and anti-extractivist water politics don't always conflict, but can mutually constitute one another.

Chapter 3, "Entangled Movements," deploys a relational analysis of El Salvador's anti-mining and water justice social movements. This study's unique survey of community experience and understanding of the anti-mining and water justice movements, combined with analysis of key informant interviews and archival data that traces evolving social movement strategies (embodied in radical transformations across multiple drafts of anti-mining legislation) reveal the overlapping origins, actors, goals, strategies, and knowledge politics that fueled both movements. Rather than inherently distinct, these movements were entangled from the start. The legislative success of the anti-mining movement and ongoing struggle of the water movement reflects strategic decisions by environmental activists to discursively and politically separate the mining and water issues through boundary-making politics. Activists intentionally created parallel "anti-metal mining" and "anti-water privatization" boundary objects to achieve more feasible, incremental change. The relative success of both boundary objects demonstrates the importance and limits of prominent political economic and political opportunity explanations of El Salvador's metal mining ban and entrenched water struggle. Situating Salvadoran anti-metal mining politics within the larger struggle for water justice shows how social movement actors can produce the conditions for their successes through strategic alliances and consequential exclusions. Thus, the Salvadoran case becomes a hopeful example for the possibilities of organized action as well as cautionary

reminder of the power-laden and always uneven politics inherent in environmental movements.

In a brief conclusion, I review the extractive relations uncovered in this analysis that link gold, water and power in El Salvador. Attending to the partialness of Salvadoran extractive and anti-extractive politics offers critical lessons for pursuing more socially and environmentally just alternatives to extractivism and for evaluating the potential, limitations, and inherent contradictions of moving beyond the age of extractivism.

CHAPTER 1:

Reframing and Rescaling Extractive Development: A cross-sectoral analysis of Salvadoran anti-metal mining and pro-extractive politics

In March 2017, at the peak of the commodity super cycle and Latin America's embrace of extractive development, El Salvador became the only country in history to ban metal mining. The twelve-year grass-roots struggle against the El Dorado gold mine culminated in a unanimous vote in the usually staunchly partisan Salvadoran legislative assembly to ban all metal mining outright. Activists worldwide lauded this law, the only of its kind, as an unprecedented victory for water rights over unsustainable extractivism (Dougherty, 2017; Hares, 2017; Palumbo & Malkin, 2017).

For some, the ban signaled a rejection of an emergent "extractive imperative" (Broad & Fischer-Mackey, 2017; Nadelman, 2017) that supposedly unifies Latin American governments of all political stripes and ideologies around a common commitment to development as extractive development (Arsel et al., 2016). Instead, El Salvador marked a move towards a national politics of *Buen Vivir* (good living)—an alternative to extractivism born of Andean Indigenous cosmologies that prioritize socio-environmental rights over economic and extractive development. However, the law's narrow focus on metal mining overlooks El Salvador's ongoing water struggle and ongoing commitment to non-metal mining extractivism. El Salvador faces a contentious battle over water privatization and expanding limestone mining and

industrial sugarcane production continue to deplete and pollute the country's most important water resource—the Lempa River (TAU, 2011: 9). Far from a bastion for water rights and post-extractivism, El Salvador remains the most water stressed nation in Central America (FAO, 2018).

Caught between the extractive imperative and Buen Vivir narratives, the Salvadoran case reveals both framings as synecdoches for extractivism. More specifically, they conflate extractivism with mining, and development with national or supranational development. Such framings not only flatten important subnational differences in extractive development, but also forgo opportunities to critically redefine what counts as extractivism, rethink at what scales extractive development operates, and reexamine the assumed antagonism between extractivist and anti-extractivist politics. Increasingly, definitions of extractivism go beyond the conventional excavation of metals, minerals, and hydrocarbons to include other intensive, ecologically destructive, and export-oriented activities like plantation agro-industry (Gudynas, 2013). Infusing this expanded view of extractivism with a critical analysis of “scalar politics” (MacKinnon, 2010)—where scale is never predetermined, fixed or impervious, and always and continuously materially-discursively produced—opens possibilities for investigating how overlapping extractive and anti-extractive politics coexist within El Salvador. More importantly, it uncovers the hidden extractive interests and politics within El Salvador's metal mining ban and problematizes notions of linear transitions from extractive to post-extractive development.

This paper proceeds with a brief historical overview of 21st century Salvadoran extractivism, my research methodology, and a closer examination of the extractive imperative and Buen Vivir framings. The next section details the empirical and theoretical limits of these framings in the Salvadoran context and offers an alternative framing for understanding El Salvador's overlapping extractive developments. Redefining extractivism as more-than-mining and rescaling extractive politics to account for the conflicting and variegated extractive developments within national territories illuminates how extractive and anti-extractive politics overlap in El Salvador. Rather than merely "add" the local to analyses of extractive development, I interrogate how scalar boundaries get drawn in ways that highlight particular extractive politics and exclude others. The final section illuminates these politics through a comparative analysis of gold mining and industrial sugarcane extractive developments. It traces how divergent institutional histories and conflicting political economic interests shape anti-metal mining and pro-extractive politics in El Salvador. I conclude that attending to overlapping extractive developments offers a more nuanced understanding of where the Salvadoran case fits within 21st century Latin American extractivism. It also provokes questions for how we might reframe extractive development more broadly.

SALVADORAN EXTRACTIVE DEVELOPMENT IN CONTEXT

The Central American "gold belt" runs through mountainous, northern El Salvador. Largely unexploited, this rich gold deposit has attracted international

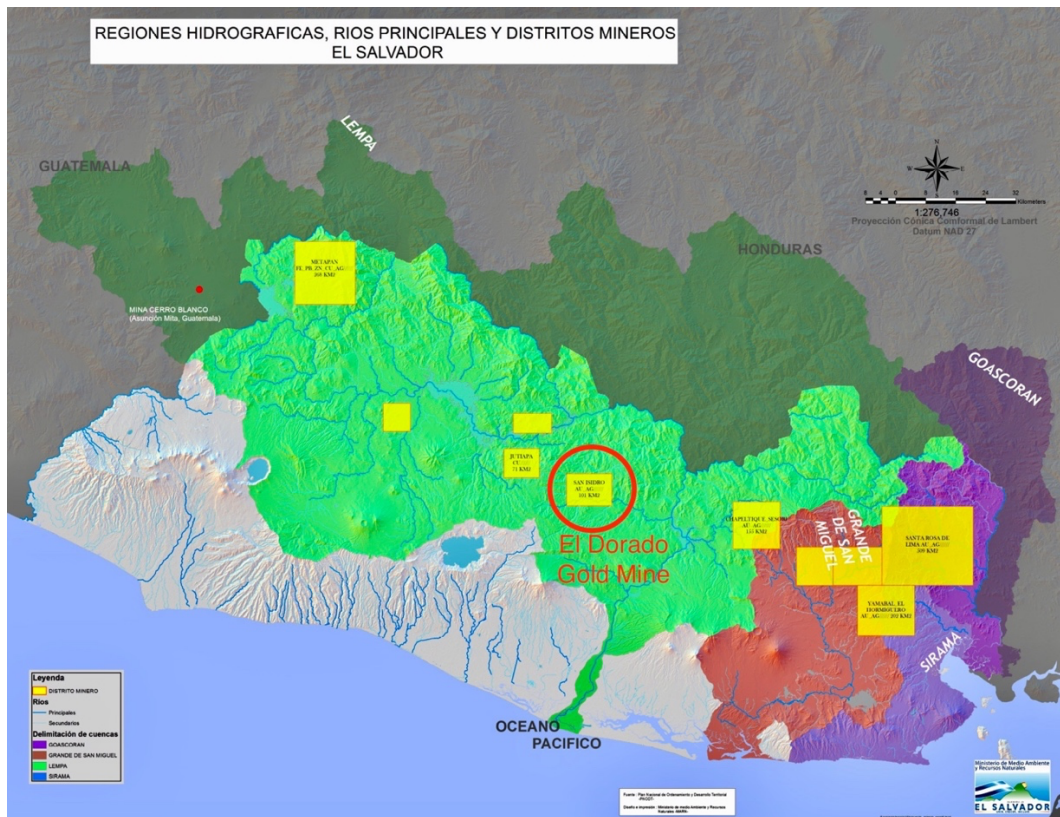
mining capital since the country's restructured mining law in 1996 and the historic rise in metal prices beginning in the early 2000s. Known as one of the most environmentally destructive human activities, the prospect of large-scale gold mining incited local protest in the northern departments of Chalatenango and Cabañas. In 2005, this coalesced in the National Roundtable Against Metallic Mining in El Salvador (known as "La Mesa").

La Mesa denounced gold mining, noting the industry's intensive water use and pollution. These impacts would be particularly acute in El Salvador. El Salvador is among the most environmentally degraded nations in Latin America and "...is the only [country] in the Central American region that is already at limit of water stress" (MARN, 2017d: 38).⁴ According to a 2017 study of the country's water quality, not one tested site complied with standards for potable water consumption even after conventional methods of treatment. Only 10% of tested sites complied with irrigation quality standards (MARN, 2017c). The looming impacts of climate change-induced drought in the Central American "dry corridor" only compound El Salvador's water crisis (Maurer et al., 2009; McKinley, 2018). Furthermore, the gold belt overlaps geographically with El Salvador's largest and most important water resource, the Lempa river (see Figure 1). The Lempa River watershed covers 50% of the country, accounts for 57% of the nation's water resources, and supplies the majority of Salvadorans with potable water (MARN, 2017d). Located near San Isidro, Cabañas,

⁴ The report defines "water stress" as the minimal annual requirement of 1,700 m³ per person to live a healthy life.

and in the heart of the Lempa river basin, the El Dorado gold mine⁵ became the epicenter of the anti-mining movement.

Figure 1. Overlapping Water-Mining Geographies



El Salvador's principal rivers, watersheds and mining deposits (MARN, 2011, modified by author).

Given these extenuating circumstances, an independent Strategic Environmental Assessment (EAE) mandated by the Salvadoran Ministry of Economy to analyze the viability of metallic mining concluded,

These conditions of vulnerability represent an important barrier to the possibility that the country can guarantee effective metal mining with control of its environmental and social risks and impacts, and in making a net positive

⁵ El Dorado was owned by the Canadian-based Pacific Rim Corporation, and then subsequently the Australia-based OceanaGold Corporation.

contribution to the social and economic development of the country (TAU, 2011: 71).

More bluntly, director of the environmental NGO UNES, Luis Gonzales noted,

If they put a mining company here we are done. We are a water dependent country. We have a water crisis, food crisis, biodiversity crisis, climate change. The water in El Salvador is the most polluted in the region. We are the country with the least access to water in the region. So, allowing metallic mining is a shot in the head (Gonzales, 2019).

In short, for Central America's smallest, most densely populated, environmentally degraded, and water stressed nation, gold mining's threat proved too great.

By 2015, the sustained and broad-based anti-mining movement, backed by Salvadoran Catholic church leadership and bi-partisan congressional representatives, had gained widespread public support (IUDOP, 2015; Nadelman, 2015). The local conflict, epitomized by the unresolved assassinations of five anti-mining activists in Cabañas (Cabezas, 2014), became a national outcry against gold mining.

In March 2017, El Salvador banned all metal mining. Salvadoran and international environmentalists, academics and politicians extolled the historic prohibition as a victory for "water over gold" (Broad & Cavanagh, 2017; Fertziger et al., 2017). As a beacon for water justice (a central issue within Buen Vivir movements) El Salvador breathed new hope into faltering visions of alternatives to extractivism across Latin America (Broad & Fischer-Mackey, 2017).

However, these narratives quickly unraveled when situated in the larger political-ecological context of Salvadoran extractive and water politics. Since 2012, a progressive water law proposed by the umbrella group El Foro del Agua (which includes key actors and organizations in the anti-mining movement) has languished in

the Legislative Assembly. More remarkably, just three months after they banned metal mining, the same assembly members that voted to ban metal mining attempted to privatize the country's water, directly contradicting the core tenets of La Mesa's demand for collective water rights. The apparent unification across government and civil society to choose clean water over extractivism dissolved into political gridlock over water governance (Karunanathan & Spronk, 2015; Morán, 2012).

Currently, El Salvador lacks a coherent water law and suffers from unequal water distribution, non-existent or crumbling water infrastructure, and increasing water stress propelled by ongoing non-metal mining extractive development. Ecologically destructive and water-intensive sugarcane plantations expand across the Bajo Lempa watershed sowing socio-environmental conflict in their wake. Non-metal mining (e.g., limestone), unhindered by the ban, pollutes waterbodies and fuels unchecked urbanization and development—in many cases paving over headwaters and usurping community water rights in the process (Sandberg & Wallace, 2013; Tellman, 2014). El Salvador's unprecedented metal mining ban has not put an end to neoliberal extractive development (Young, 2015).

Highlighting El Salvador's ongoing extractivism not only contextualizes the country's unprecedented metal mining ban, but also enables a more thorough investigation of how the ban came about—its successes and limitations. The contradiction imbued in Salvadoran anti-metal mining and pro-extractivism politics, discourses and landscapes exposes empirical and analytical problems in current understandings and typologies of Latin American extractive development.

Interrogating how El Salvador fits within and challenges extractive imperative and Buen Vivir framings underscores the partialness of such categories, even at the national scale. More importantly, it suggests that extractivism and alternatives to extractivism must not be analyzed only in isolation or in opposition to one another. Uncovering how they coexist, overlap and relate across spatial-temporal scales elucidates the uneven and nonlinear processes of extractivism. The implication of such complexity opens possibilities for how we might redefine and recategorize extractivism to include its contradictory politics. It also provides crucial insight regarding how contestations of extractivism—especially those embodied in movements committed to environmentally just and sustainable transitions to post-extractive futures—are never pure, always partial and necessarily ongoing.

METHODOLOGY

To locate Salvadoran extractivism within existing framings requires an inductive ethnographic approach that starts from empirical evidence to question and reformulate taken-for-granted narratives. On my first day of interviews, I spoke with an anti-mining activist at a rally for water justice in San Salvador. As the hot and tired protesters rallied outside of the offices of El Salvador's most important business peak association, the National Association of Private Enterprise (ANEP), I immediately realized that the issue of extractivism in El Salvador extended beyond my initial focus on gold mining. Recent work on expanded definitions of extractivism beyond metals, minerals and hydrocarbons (see especially Acosta, 2013; Gudynas 2013), helped spur

a multi-sectoral analysis of El Salvador's overlapping extractive politics. A rich literature on "scalar politics" (MacKinnon, 2010) also bolstered my investigation of how and where extractive developments operate. Viewing scale as materially-discursively produced, rather than predetermined, fixed or impervious, I was able to question hegemonic examinations of extractive development as national development. The conflicting politics that led to my interview about El Salvador's historic metal mining ban at a rally protesting ongoing water-intensive extractivism necessitated that I take the possibility of a multiplicity of extractive development within the nation state seriously. Political ecological literatures that infuse power relations into explanations of human-environment development and change (Robbins, 2012), informed my data collection and analysis. This led me to examine the myriad stakeholders, political economic interests, and environmental discourses and processes that shape natural resource development (Bebbington & Bury, 2013).

This research draws upon eight months of fieldwork in El Salvador spread across five visits between 2015 and 2019. I conducted 53 semi-structured key informant interviews using a snowball sample to better understand the political economic interests, party politics, environmental movement strategies, and corporate tactics and blunders that led to El Salvador's mining ban and continued sugarcane and cement extractivism. Interviewees included environmental activists, NGO representatives from La Mesa, church leaders, journalists, academics, mayors, congresspeople from the three main political parties, and government officials from the Ministries of the Resources and the Environment (MARN) and Agriculture and

Livestock (MAG). To corroborate and supplement interview data, I also conducted archival research analyzing national and municipal governments documents, NGO archives, and newspapers.

LATIN AMERICAN EXTRACTIVISM IN THE 21ST CENTURY

Two divergent narratives provide critical insight for locating El Salvador's place within 21st century extractive development: extractive imperative and Buen Vivir alternatives to extraction. Rather than rigid models or coherent frameworks, I interrogate these literatures as distinct framings.⁶ The continued and deepened extractive development under Latin America's left-wing governments—a so-called “neo-extractivism”—has led scholars and activists to highlight a continental “extractive imperative” (Arsel et al., 2016). That is, governments of all political shades have united under the banner of extractivism. From this perspective, El Salvador's ongoing extractivism merely reflects the regional consensus. However, Buen Vivir framings highlight an emerging break from the extractive imperative. In particular, scholars point to El Salvador's metal mining ban as a rejection of extractive development and a move towards post-extractivism (Broad & Fischer-Mackey, 2017). Both framings take the nation state—and national development—as their unit of analysis. Probing the implicit scalar assumptions in these framings enables subsequent discussion of how extractive imperative and Buen Vivir framings

⁶ While each contains nuance and complexity that exceeds the limits of this brief overview, they coalesce around relatively cohesive and distinct narratives of the perceived shift in 21st century Latin American extractivism.

not only smooth over differences within subnational extractive development projects, but also forgo opportunities to critically (re)examine the assumed antagonism between extractivist and anti-extractivist politics.

The Extractive Imperative

The flourishing literature on “new” or neo-extraction describes the further entrenchment of mining and hydrocarbon projects under left-wing governments.⁷ The “newness” of this extractive national model of extractive development derives from its “redistributive” nature to fund left-wing social programs (Bebbington, 2009; Gudynas, 2010). Pivoting away from “right-wing” neoliberal extraction’s unrestricted free-markets designed to maximize corporate profit (Bridge, 2004), self-proclaimed “post-neoliberal” governments like Bolivia (under President Evo Morales) and Ecuador (under President Rafael Correa) raised tax and royalty rates, nationalized (partially or wholly) projects, and redirected funds from transnational shareholders to national social welfare budgets (Pickup, 2019). Latin America’s Left justified resource extraction politically and discursively as a “necessary” response to “national need” and preservation of “national identity” (Perreault, 2013).⁸

Recent analyses suggest that the centrality of extractivism across neoliberal and neo-extractive states signals a continent-wide “extractive imperative” (Arsel et al., 2016). Rooted in Rostowian (Rostow, 1960) linear development models, “[t]he

⁷ Bebbington identifies the central concern thus, “How far does the ideological position of a government affect how relationships between extraction, environment, land, and territorial rights are handled?” (2009: 15).

⁸ See Massey (2012) and Yates & Bakker (2013) for a critical discussion of the “post-neoliberal” turn in Latin America.

extractive imperative is marked by an ideological commitment to further extraction as a necessary and unavoidable step towards higher level of development” (Arsel et al., 2016: 884). That is, a unifying commitment to extractive development transcends extractive policy differences between nation states. Neoliberal, post-neoliberal and hybrid regimes all agree that “poverty reduction, environmental protection and national development can be best and most rapidly achieved if the full potential of extractive industries is harnessed” (Ibid: 885). While the neo-extraction literatures highlight the empirical shift towards extraction-with-a-human-face under Latin America’s Left, the extractive imperative underscores the ideological continuity of the continent’s overarching development paradigm that assumes that extractivism fuels universal progress.

The extractive imperative argument resonates with growing scholarly analyses on Latin America’s regional development. Svampa locates the shift in 21st century extractive development in the move from the neoliberal Washington Consensus to the extractivist “Commodity Consensus” (2019, 24). Others concur that Latin America’s “consolidated development project” (Burchardt & Dietz, 2014: 469) leaves “unchanging [the] core of extractivist institutional arrangements: those that facilitate the large-scale extraction of unprocessed resources for export” (Szablowski & Campbell, 2019: 636). More broadly, Dunlap and Jakobsen note a global “imperative of total extraction” (2020: 93).

A key difference between neo-extractive and extractive imperative narratives derives from their differential scales of analysis. While neo-extractivist scholars note

the differences in extractive development between nation states (in particular neoliberal and so-called post-neoliberal) (Veltmeyer & Petras, 2014), extractive imperative connotes supranational (e.g. regional or global) trends that unify states. Importantly for our analysis, both take the nation state—that is the notion of national extractive development—as the key unit of analysis.⁹

Buen Vivir Alternatives to Extractivism

Environmental and indigenous movements have challenged the “new” extraction for perpetuating “old socio-ecological conflicts” (Villalba-Eguiluz & Etxano, 2017: 9). They denounce post-neoliberal visions for “progressive” economic development, social welfare, and national sovereignty for giving way to increased environmental degradation, dispossession, erasure of indigenous ways of life, and criminalization of social dissent (Andreucci & Radhuber, 2017; Anthias, 2018; Chérrez et al., 2011). Justifications steeped in the discourse of unified “national interest” conveniently gloss over the unequal spatial and temporal distribution of social benefits and environmental costs, inextricably linked to diverse interests shaped by “class, gender, ethnicity and ability” (Arsel et al., 2016: 885). This disillusionment with the extractive imperative has strengthened opposition movements calling for Buen Vivir alternatives to extraction (Gudynas & Acosta, 2011).

⁹ An edited volume by Veltmeyer and Petras (2014) exemplifies this broader assumption that for every extractive state there is a single national model of extractivism. Accordingly, they argue that Colombia is neoliberal, Chile is “pragmatic neoliberal,” Ecuador is “post-neoliberal” (i.e. neo-extractivist), Peru is a hybrid...etc. If government regimes change, states potentially vault from one category to the next (e.g. Brazil’s neoliberal “(re)turn” since 2016 (Barasuol, 2016)), but seemingly never occupy more than one at a time.

Transposed from localized Andean indigenous lifeways and cosmologies into post-developmental movements and socialist-statist projects, Buen Vivir as concept, practice and policy lacks unifying ideological and political consensus (Villalba-Eguiluz & Etxano, 2017). However, the core tenets of Buen Vivir—“Sumak Kawsay” in Kichwa, “Suma Qamaña” in Aymara, or “good living” in English—generally center on the recognition of the interrelatedness and inalienable rights of humans and non-humans, individuals and collectives, and their plurality of knowledges, cultures, and values (Kothari et al., 2014; Radcliffe, 2012). For critics of the extractive development, Buen Vivir demands post-extractive politics and “alternatives to development” rather than “alternative” or “sustainable” development couched in “green” capitalism’s eternal drive for economic growth (Escobar, 1995).

Discursively, Buen Vivir fits nicely with the anti-neoliberal sentiments of left-wing governments across Latin America. However, “unresolved contradictions” embedded in human-environmental rights and well-being materialized in “gaps between ‘discourse’ and ‘policy practices’” (Villalba-Eguiluz & Etxano, 2017: 3, 9). Despite progressive legislation like Ecuador (2008) and Bolivia’s (2009) constitutions, and Ecuador’s National Plan for Good Living (2013-2017), continued reliance on extraction raises concerns that political internalization of Buen Vivir amounts to government cooptation or development greenwashing (see Acosta, 2015; Lu et al., 2017; Walsh, 2010).

Others are more optimistic that Buen Vivir has already grown from social movement to development policy, marking the beginning of such a paradigm shift.

Broad and Fischer-Mackey (2017) claim that, despite cases of cooptation in the Andean region of its birth, Buen Vivir is on the rise in often overlooked places. Though opposing extractive imperative arguments, they similarly scale their analysis at the level of the nation state. They place El Salvador and Costa Rica on their nations “moving-towards-buen vivir list” (Broad & Fischer-Mackey, 2017: 1339). Costa Rica led the charge with its 2010 unanimously passed ban on new open-pit mining and cyanide-based mining. As we’ve seen, El Salvador went even further, banning all metal mining outright.¹⁰ The advancement of these bans “predominantly for environmental reasons” show “signs of hope, indications of a weakening of the extractivist paradigm and the rise of a development paradigm merging social and environmental concerns” (Ibid: 1328). Even more encouragingly, similar mining policy shifts across Latin America, though not as drastic nor permanent, mark a growing trend. Rather than an outlier, Broad & Fischer-Mackey see El Salvador as an emergent vanguard, a harbinger of a new and growing anti-extractivist paradigm embracing Buen Vivir over the extractive imperative.

REFRAMING AND RESCALING EXTRACTIVISM

Taken alone, El Salvador’s metal mining ban seems to corroborate Broad and Fischer-Mackey’s (2017) optimistic view. Salvadoran politicians rejected the extractive imperative in favor of a politics of Buen Vivir. However, situating the

¹⁰ Unlike Costa Rica, this includes small-scale artisanal metal mining, which predominantly uses mercury instead of cyanide to separate metals from ore.

mining ban within the broader political ecology of non-metal mining extractivism muddies the waters both literally and analytically. Expanding limestone mining and toxic agro-industry calls into question El Salvador's move towards Buen Vivir. Clearly, extractive imperative and Buen Vivir narratives struggle to capture the empirical realities of the Salvadoran case—simultaneously anti-metal mining and pro-extractive development. At best, they provide partial truths but occlude important politics. Redefining what counts as extractivism and at what scales extractive politics operate illuminates how extractive and anti-extractive politics overlap within El Salvador. Moreover, it redefines which and how different livelihoods, landscapes, and interests get incorporated or decentered within extractive politics.

Attending to overlapping extractive developments offers a more nuanced understanding of where the Salvadoran case fits within 21st century Latin American extractivism. It also provokes questions for how we might reframe extractive development more broadly. These insights lay the groundwork for a subsequent discussion of the political-economic and historical-institutional processes through which multiple extractivisms emerge.

The Salvadoran exception to the extractive imperative?

The 2009 election of Mauricio Funes as El Salvador's first left-wing president marked the peaking crest of the "pink tide" in Latin America. The subsequent 2014 election of the ex-guerrillero, Salvador Sanchez Ceren, prolonged the swell before the

wave crashed back to the right in the FMLN's sobering 2019 loss.¹¹ While in power, the Salvadoran Left aligned themselves economically and politically with the rest of Latin America's "post-neoliberal" governments and their commitment to bolster social welfare (Perla & Cruz-Feliciano, 2013). With mounting pressure to finance these social programs, the discovery of substantial gold reserves and the regional impetus to take full advantage of Latin America's extractive boom set the political-economic stage for El Salvador's progressives to pursue the leftist neo-extraction development model and fall in line with the continental extractive imperative. However, Salvadoran policymakers departed from the greenwashing tendencies of neo-extractive states, whose extractive policy contradict their campaign promises and Buen Vivir discourse. The Sánchez Cerén administration kept its promise to ban metal mining.

While scholars generally agree on the uniqueness of the Salvadoran case, interpretations of its implications for Salvadoran development vary. A series of articles by Bebbington and colleagues focus narrowly on Salvadoran mining policy as a regional "outlier exception" (2018: 114). In a comparison of El Salvador and pro-mining Honduras, they note that the two countries "have taken divergent paths in regulating extractivism" (2019: 85). This conflation of extractivism with metal mining might suggest that the Salvadoran government rejected extractivism outright, a repudiation of the extractive imperative. While the authors make no such claim

¹¹ The Salvadoran Left lost the presidency in 2019, following a string of left-wing electoral losses in Argentina and Chile, and variations of contested elections and "soft" and "hard" coups in Brazil, Paraguay, Honduras and Bolivia (Frens-String & Velasco, 2016; Encarnación, 2018).

directly, other scholars do. Noting El Salvador’s “deviat[ion] from the extractivism norm,” Broad and Fischer-Mackey boldly conclude that the metal mining ban suggests a “weakening of the extractive paradigm” (2015: 1328). Nadelman concurs, “El Salvador’s choice to not unearth its gold resources makes it an outlier in Latin America” and marks a clear “rejection of the extractive imperative” (2017: 186).¹²

Crucially, in these accounts extractivism and Buen Vivir appear mutually exclusive. El Salvador’s metal mining ban exemplifies Buen Vivir because it contradicts the Latin American consensus that extractivism is necessary for development. But is the conflation of metal mining and extractivism justified? Does El Salvador’s historic legislation signal a linear move towards a national anti-extractivist Buen Vivir politics? To adequately address these questions requires deeper consideration of what constitutes extractivism and at what scales extractivism operate. Can extractive politics and anti-extractive politics coexist? And if so, how do they emerge together? As we’ll see, asking such questions does not lead to simple yes or no answers. But it opens possibilities for more clearly situating the Salvadoran case within 21st century Latin American extractivism, and more importantly, for better understanding overlapping and contradictory extractive politics beyond El Salvador.

Redefining and rescaling extractive development

Traditionally, extractivism refers to the large-scale excavation of non-renewable resources. Most often associated with metals, minerals and hydrocarbons,

¹² I thank Rachel Nadelman for generously discussing her somewhat revised stance on this issue. Our fruitful interrogation of ongoing extractivism in El Salvador’s proved instrumental for writing this article.

the term evokes imagery of large holes in the ground and landscapes stripped bare, portals through which finite subterranean elements emerge above the surface.

However, recent research on extractivism broadens its analytical scope. Acosta states,

extractivism [refers] to those activities which remove large quantities of natural resources that are not processed (or processed only to a limited degree), especially for export. Extractivism is not limited to minerals or oil. Extractivism is also present in farming, forestry and even fishing (2013: 62).

Put simply, extractivism goes beyond mining.

Adding further clarification, Gudynas distinguishes “natural resource extraction” from “extractivism” based on intensity (volume and scale of resources extracted), destination (local, national or export), and ecological impact (Gudynas, 2013: 3). Using Gudynas’ example, while subsistence farming and artisanal mining extract natural resources, they do not constitute extractive industries like agro-export monoculture and large-scale mining. Not only does extractivism exceed mining, it defies sectoral boundaries (e.g. mining or agriculture) altogether. That is, extractivism is not tied to a particular resource or activity, but to a particular “mode of accumulation” (Acosta, 2013: 62) or what Willow describes as a “logic” or “a mindset and a pattern of resource procurement based on removing as much material as possible for as much profit as possible” (Willow, 2019: 2). Burgeoning literature within critical agrarian studies details how soy, African palm, and sugarcane monocultures extract local resources—particularly soil minerals and water—with

devastating socio-ecological impacts, to fuel global capitalist markets (McKay et al., 2021).¹³

This redefinition of extractivism is not meant to supplant or critique more narrow interpretations that focus solely on mining. We must not lose sight of the specific materialities, political economies, identities, technologies and other socio-ecological relations specific to drilling holes, digging pits, and stripping mountains.¹⁴ But a redrawing of extractivism's boundaries, from extractive sector to extractive logic, does not preclude attending to these differences. It opens analytical possibilities for probing how distinct extractive developments overlap, reinforce and conflict with each other. While particular extractive sectors might flounder in a territory, the extractive logic might flourish. Consequently, understanding of extractivist/anti-extractivist politics must reach beyond their assumed antagonism. Not only can they coexist (see below), but they may be mutually constitutive (see Artiga-Purcell, forthcoming).

Finally, while not unique to this redefinition, attending to multiple extractive developments beyond mining emphasizes the contingencies of scale. That is, the spatial, temporal and socio-political scales of natural resource development becomes a question rather than a forgone conclusion (Budds & Hinojosa, 2012). If, as we'll

¹³ Not all industrial export-agriculture is necessarily "extractive" or extractive in the same way. For example, despite displacing corn, beans, and rice cultivation, the expansive coffee landscapes fueling El Salvador's export-agricultural industry since the 1950's (Durham, 1979; Wade, 2016) accounts for much of the country's reforestation and replenished biodiversity (Hecht et al., 2006; Monro et al., 2005).

¹⁴ I owe a special thanks to Thomas Chiasson-LeBel and the Critical Cultural Political Economy of Extractivism Research Cluster at UC Santa Cruz for productive conversations regarding this point.

see, El Salvador contains extractivist and anti-extractivist politics, then analysis of extractivism as national development (in the singular) proves insufficient. To better understand and characterize extractive development in El Salvador, and elsewhere, we must attend to how extractivism manifests across extractive sectors and scales of analysis—where scales are not predetermined, fixed or impervious, but materially-discursively (re)produced through uneven power relations (McCarthy, 2005).¹⁵ To better explain El Salvador’s metal mining ban and its relation to extractivist and anti-extractivist politics, we must look beyond gold and attend to the overlapping extractive developments within the national territory.

Troubling El Salvador’s Move Towards Buen Vivir

Highlighting multiple extractive developments shows that the metal mining ban has not ended extractivism in El Salvador. Monocrop sugarcane’s cultivation area skyrocketed almost tenfold from 11,598 mzs in 1960 to 112,147 mzs¹⁶ in 2018 (CONSAA, 2018a; MARN, 2012). This growth is concentrated in the Bajo Lempa region, where high applications of agrochemicals and water consumption provoke environmental degradation and social conflict (Hughes et al., 2016). Similarly, though just 0.3% of national GDP, non-metallic mining, primarily for cement production, flourishes in El Salvador (CEPAL, 2020). Apart from the socio-environmental costs of removing hillsides to extract gravel and limestone, cement production underlies El Salvador’s expanding construction sector (5.8% of GDP)—linked to a litany of forced

¹⁵ Anna Tsing’s notion of “scale-making” is also useful for denoting how scale is always (re)produced or “conjured” (Tsing, 2005).

¹⁶ One manzana is approximately 1.7 acres (or 6,972 square meters).

displacements, water grabbing, and ecological degradation (CEPAL, 2020; Cuéllar & Kandel, 2017). According to Salvadoran environmental activist Luis Gonzales, “We have to advance with a broader focus of extractivism because mining is not only gold and silver. There is also non-metallic mining, like lime and HOLCIM in Metapán, which also has impacts” (Gonzales, 2019).¹⁷

El Salvador’s persistent commitment to extractive development empirically contradicts the core tenets of Buen Vivir ideology and praxis founded on alternatives to extractivism. However, just as El Salvador’s metal mining ban does not signal the end of extractivism, expanding limestone mining and agro-industry should not overshadow Salvadoran anti-extractivist politics. El Salvador’s metal mining ban is a unique example of Buen Vivir manifest in policy with tangible socio-ecological effects. To acknowledge that El Salvador has not “arrived at” or “achieved” Buen Vivir hardly refutes Broad and Fischer-Mackey’s suggestion of El Salvador’s movement towards “prioritization of environmental concerns” (2017: 1339). Beyond legislative endpoint, Buen Vivir implies ongoing struggles and relational processes (Santos, 2016).

The effects of the legislative victory against metal mining continue to permeate Salvadoran extractive politics and development discourse. Ex-Minister of the Environment and Natural Resources, Angel Ibarra, stated, that although the anti-mining movement “is from the communities, it aligns with the development

¹⁷ LafargeHOLCIM is the world’s largest cement producer. The Swiss corporation operates two cement plants that include gravel and lime extraction in Metapán, El Salvador (Holcim, 2020).

objectives of President Salvador Sánchez Cerén to build a Buen Vivir society” (MARN, 2017b). This Buen Vivir narrative exceeds green-washing and political appropriation. While El Salvador’s current water struggle exemplifies the country’s ongoing commitment to extractivism, it equally represents an extraordinary and ongoing victory for the water justice movement (Artiga-Purcell, forthcoming). The national movement against water privatization has successfully blocked the right-wing’s neoliberal water legislation. Stymied by a growing discourse against water privatization, the ARENA-controlled legislative assembly has cautiously refused to pass their own water legislation using their partisan majority. According to FMLN congresswoman Dina Argueta, “one of the achievements that we were able to demonstrate this past year is that we succeeded in preventing the approval of a privatization law. And that was done by the social movement” (Argueta, 2019). While Buen Vivir narratives have not pushed through a progressive water law, as they did with the metal mining ban, they have successfully stopped a neoliberal backslide. They have altered the national water discourse. In this peculiar case, having no general water law simultaneously benefits particular extractive industries (e.g. large-scale sugarcane producers) and leaves room for continued struggle for water rights. Extractive and anti-extractive politics are not so easily disentangled.

Partial Extractive Developments

How then, should we characterize Salvadoran extractivism? Should we revert back to an immanent extractive imperative to explain away such contradictions? Perhaps the imperative “lost the battle” on metal mining but is “winning the war” on

extractive development. Or should we narrowly focus on metal mining and caste El Salvador as a beacon of Buen Vivir? After all, rather than a successful battle in a doomed war, anti-extractivist ideology and practice continue to shape Salvadoran lives, politics and environments in tangible and meaningful ways. Unlike Ecuador or Bolivia, Salvadoran landscapes lack gaping holes gouged by large-scale metal-mining. Each explanatory lens reveals empirical truths but conceals vital politics. To breach this apparent impasse, to attend to El Salvador's entangled extractive/anti-extractive politics, we must redefine and rescale our analysis of extractivism. We must attend to partial extractive developments.

Viewed as more-than-metal mining, Salvadoran extractivism internalizes extractive imperative and Buen Vivir politics. That is, a cross-sectoral analysis of extractive industries shows that extractive and anti-extractive politics coexist within its national territory. In and of itself, such a finding is not new and not particularly surprising. The crux of many extractive conflicts turns on vying interests that include anti-extractivist actors. Neoliberal and post-neoliberal politics are always variegated, uneven and unfinished (Vela-Almeida, 2018). More interesting in the Salvadoran case is that these usually conflicting politics are not necessarily mutually antagonistic or "incompatible" (Villalba-Eguiluz & Etxano, 2017: 9). This is not our normal David versus Goliath story of extractive conflict. For there are many Goliaths (many extractive developments), heterogeneous Davids (many anti-extractivist movements), and blurred boundaries in between (e.g. competing extractive interest and "subalterns among subalterns" (Wolford, 2010: 11)). Building on Yates and Bakker's call to

“resist dichotomizing neoliberalism and its alternatives” (2013: 12), we must also resist dichotomizing extractivism and alternatives to extractivism.

By attending to the complex extractivism/anti-extractivism relations within national territories, extractive development escapes its scalar tether to national or continental politics. This is not an analytical return to the local. That would reify nested hierarchies that permeate rigid notions of scalar analysis (Brenner, 2001). Rather, it is a call to critically question at what scales extractive development operates. It is to take the scalar politics inherent in extractive politics seriously. The goal is thus not to merely “add” the local to analysis of extractive development, but to interrogate how scalar boundaries get drawn in ways that highlight particular extractive politics and exclude others.

In El Salvador, extractive imperative and Buen Vivir framings detail partial empirical truths—El Salvador’s unprecedented anti-mining victories and ongoing extractivism. Their partial (in both senses of the word) accounts remain contingent on what counts as extractivism, at what scale extractivism takes place, and how extractivism and anti-extractivism relate. At stake in such questions is not simply a more complex or better categorization of Salvadoran extractivism. The answers implicate which and how different livelihoods, landscapes, social movement successes, ongoing struggles, possible alliances, and conflicting interests get incorporated within notions of extractive politics or cast aside as tangential, unrelated or nonexistent. To bundle El Salvador within a hegemonic extractive imperative misses the extraordinary successes of (and potential lessons learned from)

anti-extractivist movements. To romanticize the Salvadoran case is to omit ongoing socio-ecological oppressions wrought by non-metal mining extractivism (see Artiga-Purcell, forthcoming). The partialness of these framings cannot be remedied through their mere addition. It requires rethinking our scalar assumptions about how we characterize extractive development.

OVERLAPPING EXTRACTIVE DEVELOPMENTS: THE CASE OF GOLD AND SUGARCANE

So far, I've stressed how overlapping extractive politics coexist within national territories. El Salvador's historically unprecedented metal mining ban and ongoing extractivism makes this clear enough. But how could such a unique case prove insightful for other countries without such stunning legislative outcomes? What lessons does El Salvador provide for better understanding and framing overlapping extractive politics more generally? More concretely, how might we identify these politics? To transcend discussions of the Salvadoran outlier, I attend to the processes—not simply the policy outcomes—through which overlapping extractive developments emerge. Specifically, I conduct a comparative analysis of gold mining and industrial sugarcane extractive developments to trace how divergent institutional histories and conflicting political economic interests shape distinct extractive politics in El Salvador.¹⁸ The Salvadoran case demonstrates the broader analytical utility and

¹⁸ Other important features that remain beyond the scope of this analysis also distinguish extractive politics (e.g. material-discursive relations, infrastructures, technologies, identities, among many others). I address many of these in forthcoming works.

need for reframing and rescaling extractive development from national extractive development to subnational extractive developments.

Diverging Institutional Histories

After the bloody conquest of the Pipiles in the territory now known as El Salvador, a Spanish captain serving under Pedro de Alvarado exclaimed “To hell with this land; let’s go, since there’s no gold” (Bartolome de las Casas, quoted in Tilley, 2005: 5). Despite a few projects during the late 19th and early 20th centuries, and ongoing small-scale operations, El Salvador has never been a mining nation (Haggerty, 1998; White, 1974). Mining institutions—broadly defined here as “sets of formal and informal rules and norms that shape interaction of humans with others and nature” (Agrawal, 1999: 637)—have remained weak throughout Salvadoran history. This lack of regulatory capacity, labor relations, technical expertise, infrastructure, livelihood practices and customs, and knowledge structures both facilitated social movement and legislative resistance to gold mining.

Upon first hearing of mining corporations’ search for mines (“minas”), communities responded that all of the land mines left over from the Civil War had already been removed (Escobar Arce, 2018). This misinterpretation—explosives versus gold—captures how, until the early 2000s, most Salvadorans “had no idea what mining was” (Mira, 2018). Even the Salvadoran economic and political elites knew little about gold mining. As ARENA Congressman and member of the Commission on Environment and Climate Change, Johnny Wright Sol noted, “truthfully, before becoming a congressman I knew very little about it [mining],

almost nothing” (Wright Sol, 2019). By itself, the historical lack of mining does not explain El Salvador’s metal mining ban. Unfamiliarity does not necessarily beget rejection. However, the unknowns of gold extraction spurred activists to question and investigate mining as a viable industry (Escobar Arce, 2018). Not deeply rooted in the fabric of daily life, common knowledge, and local development practices, gold mining was up for debate from the outset. These weak local ties to mining facilitated anti-mining activists’ mobilization against the intrusive industry.

Beyond opening the door for dissent, weak institutional histories also helped slam the door shut on potential mining developments. An independent Strategic Environmental Assessment (EAE) named “weak institutions”—specifically the government’s incapacity for “management, monitoring and inspection of mining activity”—among the four main barriers to mining’s viability in El Salvador (TAU, 2011: 63). Noting the country’s lack of mining specialists and qualified personnel, academic and ex-member of the Commission for National Development, Sandra de Barraza, concurred that the most important justification for the metal mining ban remains the “lack of institutional capacity” (de Barraza, 2019). Mining’s weak institutional history fueled anti-mining sentiment and legitimized the ban.

In stark contrast to mining, plantation agriculture’s roots run deep in Salvadoran history. “Denied the opportunity for quick riches [via gold mining], the conquistadors and later the Spanish settlers eventually came to realize that the sole exploitable resource of El Salvador was the land” (Haggerty, 1998: 5-6). Export-agriculture became El Salvador’s economic backbone (Woodward Jr., 1976).

The current sugarcane industry extends Salvadoran plantation agriculture's long institutional history of oligarchic power and socio-ecological impunity dating back to colonial-era cacao and indigo production, and the 19th century cotton boom (Durham, 1979). Sugarcane production has expanded throughout the Bajo Lempa in zones previously occupied by cotton plantations as late as the 1980s (MARN, 2012). Just like its forebearers, Salvadoran sugarcane revolves around production monopolies,¹⁹ brutal working conditions²⁰ and largely uncontested free-reign access to water.²¹ As environmental activist Pedro Cabezas noted, “sugarcane interests...use millions of liters of water a day without any regulation, without asking anyone for permission. Historically, these interests have had the state as their administrator...” (Cabezas, 2019). This is not to say that the Salvadoran sugarcane industry and agro-oligarchs face little resistance (Bull et al., 2014). But resistance to industrial sugarcane extractivism runs into decades-old social relations, ideologies, and power-structures—from agro-elites' institutional capture of congress (see below) to the normalized structural violence of plantation ecologies (Haraway & Tsing, 2019)—intent on preserving the status quo (De Bremond, 2007; CJA, 2020). Struggles over access and control over fertile land and uprisings against oppressive agricultural modes of production define much of Salvadoran political-economic history. Where

¹⁹ Before export, sugarcane requires an intensive refinery process to extract and treat sugar from the tough cane stalks. Only 6 certified refineries exist in El Salvador (MARN, 2012; 2017).

²⁰ In the past two decades, researchers have found a growing prevalence of chronic kidney disease (CKD) in Salvadoran sugarcane workers. Though investigation continues, overwork, heat exhaustion, and exposure to agrochemicals remain the most likely causes (Mejía et al., 2014).

²¹ Sugarcane production remains a major, and growing, water user in El Salvador (MARN, 2012; 2017d), with often little regulatory oversight (UNES, 2016; Mira, 2019)

mining's weak institutional history facilitated successful counter movements, plantation agriculture's ubiquitous institutional influence continually inhibits them.

Distinct institutional histories did not determine El Salvador's current anti-mining and pro-extractivism legislation. Examination of "weak" versus "strong" institutional histories cannot adequately capture the nuanced politics that actively shape extractive landscapes. But attending to these histories illuminates El Salvador's diverging extractive politics.

Vying Political Economic Interests

Institutional histories are always entangled with and co-produced by political economic interests. Rather than outcomes of inevitable progress, linear development, or rational planning, extractive development projects are continually made through contentious politics. The contribution of distinct natural resources to national economic development, and especially to the accumulation of wealth and power among contending elites, remains vital for understanding extractive governance (Bebbington et al., 2018). A brief comparison between Salvadoran elites' ambivalence towards gold mining and entrenched investment in sugarcane proves illustrative.

Metal mining has always represented a trivial fraction of the Salvadoran economy. As Bebbington et al. note, "The fact that mining is insignificant in El Salvador's economy, meant that neither the public-sector budget nor national elites depended on income from mining" (2018: 122). Any prospect of sparking local investment in the industry faded away during the civil war of the 1980s and

subsequent neoliberalization that drove elites from national productive activities²² towards international finance throughout the 1990s (Gammage, 2006; Paus, 1995). By the time El Salvador restructured its mining law in 1996, and again in 2001, to attract foreign direct investment, few local elites knew of, much less invested in mining in El Salvador or elsewhere (Bebbington et al., 2019; Broad & Cavanagh, 2015).

The lack of local mining capital investment also derives from transnational corporations' decision not to (and later inability to) forge political alliances with Salvadoran business leaders (Nadelman, 2017). Journalist, Leonel Herrera notes,

Here the miners made a huge mistake. Due to their ambition, they didn't look for local partners, and when they did it was too late. They came and they wanted to take everything. The businessmen here saw that they wouldn't gain anything as they [the miners] literally came to extract and take away. So, the economic power here was not interested in mining. It was a failure in their strategy not to seek local partners (Herrera, 2018).

Interviews across the private, public and civil society sectors corroborated this view of foreign mining corporations' costly blunder, which Nadelman (2018) also persuasively documents. Lacking technical knowledge, capital investment, and good-faith partnerships with foreign mining interest, Salvadoran elites recognized that going against the rising anti-mining movement was simply bad business.

While gold mining interests lacked allies among the political economic elite, sugarcane interests permeate Salvadoran politics (Waxenecker, 2017). Luis Gonzales noted this difference, saying,

²² Agriculture, maquiladora, and construction industries remain exceptions, although each has declined in recent years (Wade, 2016).

historically, these [water-intensive] sectors have had political representation in congressmen and congresswomen. There are congressmen and congresswomen that are sugarcane producers [“cañeros”], something that miners [“los mineros”] never had. So, the miners obviously had negotiations and talks, but they didn’t have their interests supported or protected (Gonzales, 2019).

For example, John Write, the father of the staunchly anti-mining congressman Wright Sol, runs the second largest sugarcane refinery in the country (El Angel) (CONSAA, 2020).²³ This direct familial link between agribusiness and government is but one iteration of private interests’ historical and systemic institutional capture (Waxenecker, 2017). The Salvadoran Sugarcane Association and the Salvadoran Sugarcane Producers Association (Procaña), two key institutions directed by sugarcane oligarchs, both participate in the country’s most important business peak association, the National Association of Private Enterprise (ANEP). As a non-governmental institution, ANEP represents Salvadoran business interests and boasts direct access and influence over policymakers (Spalding, 2015).²⁴

ANEP’s influence on political elites blatantly manifests in El Salvador’s contrasting mining and water policy. The metal mining ban derived from draft legislation proposed by the environmental social movement and MARN. The current water law proposal under discussion in the legislative assembly Commission on the Environment and Climate Change emanates from ANEP. In 2017, this Commission

²³ The Wrights trace their lineage to El Salvador’s historic coffee oligarchy and the Melendez family “dynasty” (Gould, 2019). From 1913 to 1927 Carlos and Jorge Meléndez, followed by their brother-in-law, Alfonso Quñónez Molina, held the Salvadoran presidency consecutively. During this period, El Salvador’s Coffee Growers Association (Asociación Cafetalera) became known as the “invisible government” (Haggerty, 1990: 13).

²⁴ Tellingly, Antonio Saca served as ANEP’s president before he took over the national presidency.

dropped MARN's "General Water Law" proposal as their guiding document in favor of ANEP's "Integral Water Law" (Escobar, 2018b). Notably, congressman Wright Sol introduced this change, stating that ANEP's proposal provided a "more just and efficient" baseline to govern water use in El Salvador (MARN, 2017a). A key distinction between the MARN and ANEP proposals is that the latter allows ANEP to choose two of the five representatives on the water legislation's governing body. The former includes only state representatives (MARN, 2018). While ANEP remained on the sidelines during the anti-mining struggle, it has forcefully inserted itself into current water politics.

A more in-depth analysis of Salvadoran water politics exceeds the present study. Yet with this brief comparative analysis, we see how gold and sugarcane's distinct institutional histories and political-economic interests produce Buen Vivir and extractive imperative politics simultaneously. Focusing on the processes driving these multiple extractive politics, rather than their end result (e.g. the metal mining ban), provides an analytical approach that extends beyond El Salvador. The Salvadoran case illuminates a need for cross-sectoral analyses that attends to the potential diversity of extractive developments that operate across and within scales.

This is a starting point for such analysis. Future research on multiple extractivisms must delve deeper into the divisions among and between local and transnational elites, environmental social movement strategies, corporate blunders, local and national electoral politics, as well as the contentious politics within the extractive sectors. Beyond political economy, this approach also suggests the need for

more in-depth examinations of environmental discourses, labor identities, and water geographies, among many other forces that shape diverging extractivisms.

CONCLUSION

Latin America's turn-of-the-century bipartisan extractive boom has unearthed marked distinctions and surprising convergences in national development policy across historical-geographical, socio-political, and economic difference. Scholars and activists have identified the rise of neo-extraction as a sign of a regional extractive imperative. Yet emergent successes of Buen Vivir politics offer evidence of a potential break with a hegemonic extractive consensus.

The Salvadoran case empirically diverges from extractive imperative and Buen Vivir characterizations of extractive development. The country's historic metal mining ban defies extractive imperative explanations. Its continued commitment to non-metal mining extraction, like monocrop sugarcane and cement mining, undercuts Buen Vivir arguments. Explaining El Salvador's overlapping extractive and anti-extractive politics requires redefining extractivism as more-than-mining and rescaling extractive politics to account for heterogeneous and variegated extractive developments within the national territory. Attention to contingent political economic interests and diverging institutional histories reveals how anti-gold mining stances produce Buen Vivir and extractive imperatives simultaneously. More consequentially, it suggests the need to reframe national extractive developments in order to take into

account the multiple and partial extractive and anti-extractive developments within states.

These findings provoke further questions and the need for more research regarding how best to characterize Salvadoran extractive developments and extractivism more generally. Attention to El Salvador's multiple and conflicting extractive development projects demands a more critical rethinking of extractivism and its alternatives. How are these opposed, overlapping, and mutually constitutive? Future research on extractive development and transitions to a more just, sustainable and potentially post-extractivist future must transcend the scalar confines of the developmental state. It must take seriously the possibility that the road to post-extractivist futures may run up against the complex and contradictory relations between extractivism and its alternatives? Finally, how might research on multiple extractivisms bridge theory with praxis to inform socio-environmental struggles and movements in El Salvador and beyond? These questions open possibilities for reexamining extractive power dynamics and for forging alliances across diverse extractive conflicts.

CHAPTER 2:

Hydrosocial Extractivism:

Gold, Sugarcane and Contested Water Politics in El Salvador

In 2017, El Salvador became the only country in the world to ban metal mining. According to the law, metal mining’s “environmental impact on water resources” both in terms of water quality and quantity served as the primary justification for such unprecedented action (Decree No. 639). Given the vulnerable state of El Salvador’s already highly contaminated rivers (MARN, 2017c), the country chose “water over gold” (Broad & Cavanagh, 2017; Fertziger et al., 2017). However, the law’s narrow focus on metal mining overlooks that much of the existing pollution derives from extractive activities other than metal mining. While limestone mines for cement production contaminate rivers in the north, industrial agriculture, like monocrop sugarcane, remains an important national water consumer, and a serious source of agrochemical pollution (MARN, 2012, 2017d). Despite facing a pending water crisis—marked by climate change-induced drought, undrinkable water, and lowering water tables—Salvadoran non-metal mining extractive development expands unabated.

That Salvadoran water is protected in some ways and polluted in others may not seem surprising. The conflicting interests that permeate state governance (Mathews, 2005; Lu et al., 2017) and the complex and manifold nature of water (Boelens et al., 2017) suggest that El Salvador’s contradictory water politics reflect

the rule rather than the exception. However, gold mining, non-metal mining and industrial agriculture are compatible the world over, from Honduras to Brazil and beyond. Rather than economically and conceptually incongruous, mining and agricultural extraction literally fuel each other (Pfeiffer, 2006) and underlie common extractive development ideologies (Gudynas, 2013). El Salvador's historic metal mining ban is, by definition, not the norm. So, what explains El Salvador's unique anti-mining and pro-extractivism politics beyond inconsistencies in governance and environmental determinism?

A comparative analysis of Salvadoran gold and sugarcane extractivism shows how their distinct hydrosocial relations—their material, discursive and political economic relations to water—simultaneously produced El Salvador's metal mining ban and expanding extractivism. While mining is not inherently more degrading than industrial sugarcane production, the location of gold deposits upstream in the Lempa river—El Salvador's most important watershed—distinguished gold mining from expanding sugarcane production in the lower Lempa. Going beyond geographical determinism, gold mining's threat only gained salience through a “water over gold” discourse inscribed in maps, community murals, and activist slogans. While tremendously effective in shaping popular opinion, this discourse rescaled the mining conflict from a local water rights issue to a national water security threat. The portrayal of a homogenous “national water resource” under siege from foreign mining corporations conveniently obscured non-metal mining sources of water pollution. A landscape ecology analysis of extractivism within the Lempa watershed demonstrates

that gold mining's "unviability" only emerged through its spatial relation not just to water in general, but to other polluting extractive projects within the heterogeneous waterscape. For existing pollution to continue, gold mining became untenable. But why choose sugarcane over gold? The relative insignificance of gold mining and the longstanding importance of sugarcane extraction to Salvadoran elites and the national economy bolstered narratives that denounced gold mining's use of cyanide as irrational and sugarcane production's use of agrochemicals as "necessary" for development.

The entanglement of water quality statistics, water meanings, extractive landscapes and capital flows in El Salvador underscores how hydrosocial territories and extractivism emerge together. Attention to such hydrosocial extractivism provides a useful lens not only for differentiating between extractive developments, but also for understanding how extractivism and anti-extractivist politics don't always conflict, but mutually constitute one another.

HYDROSOCIAL EXTRACTIVISM

Extraction entails the appropriation or taking away of materials for use—a metabolic process intrinsic to sustaining life. In contrast, extractivism denotes a particular logic that facilitates and organizes the material, discursive and thoroughly political acts of extraction at a degrading rate that outpaces resource regeneration upon which local ecologies and communities rely. Extractivism has always been multiple and interrelated. Mines of all types require timber, cement, energy, rare

earth-powered electronics and fiber-optic cables, as well as a host of other extracted materials to operate. Extractivism begets extractivism.²⁵ Yet beyond myriad projects that coalesce under a singular extractive logic, like cogs in an extractive machine, I seek to understand how distinct extractive politics, landscapes and narratives conflict, overlap, and mutually-constitute one another. I explore how anti-extractivism begets extractivism and vice versa. I draw on political ecologies of extractivism, landscape ecology and hydrosocial territories literatures to examine El Salvador's anti-metal mining and pro-sugarcane extractive politics.

Political Ecologies of Extractivism

Political ecological approaches recognize physical environments as inherently political, and politics as inextricably linked to the material world (Robbins, 2012). Privileging questions of power, politics extends far beyond the confines of state legislation and coercion, and into institutional structures, political economic interests, issue-framing, and the daily human-environment engagements that shape landscapes, livelihoods and intersecting identities (Agrawal, 2005).

A burgeoning literature extends political ecological analyses into examinations of extractive development and natural resource conflicts (Bridge, 2004). This diverse scholarship takes various theoretical and methodological approaches to demonstrate how resource extraction drives global capitalist accumulation (Bridge, 2008; Himely, 2010; Huber, 2018); underlies national development (Acosta, 2013; Gudynas, 2010; Watts, 2004); transforms local landscapes and livelihoods (Bury,

²⁵ I adapt this expression from Vince Beiser's (2018) insight that concrete often begets more concrete.

2005; Lahiri-Dutt, 2019; Peluso, 1992); permeates sovereignty claims, environmental discourses and identities (Anthias, 2018; Emel et al., 2011; Perreault & Valdivia, 2010), and sparks conflict and social mobilization (Bebbington & Bury, 2013).

Three key insights from this work proves critical for understanding extractive conflicts in general, and Salvadoran extractivism in particular. First, extractive conflicts stem from the complex entanglements of political economic interests, technologies, infrastructures, discourses, identities and ecological processes that produce uneven access and control over resources (Bebbington & Bury, 2013). Second, these socionatural politics cut across spatial-temporal boundaries and actively (re)make scales of relations (Tsing, 2005). Beyond jumping preexisting local, national, and global borders, Salvadoran extractive politics make scalar relations by evaluating watershed management, mapping (and overlooking) extractive landscapes, and defining national development interests. Finally, extractivism extends beyond excavating particular raw materials (e.g. gold, oil, rare earths). It describes an extractive logic geared towards high volume, high intensity, and export-oriented production of natural resources²⁶ to maximize profit (Gudynas, 2013). Taking this broader definition, extractivism may describe clear-cut logging, industrial fishing, and, relevant for our purposes, industrial monocrop sugarcane production (Willow, 2019).

²⁶ I refer to natural resource “production” in a double sense. Material products are physically produced through extracting and processing activities. They are also ideologically and discursively produced as desirable “resources” existing passively in “nature” awaiting to serve human needs and ingenuity.

In El Salvador, these political ecologies of extractivism emerge through their relation to heterogeneous landscapes. Though rooted in conservation literatures and an often not-so-implicit nature/culture dualism reflected in patch/matrix frameworks, more critical landscape ecology approaches blur the boundaries between “patches” of saved ecosystems—like the patch of Lempa river saved from gold mining—and the surrounding landscape or “matrix” (Perfecto & Vandermeer, 2010). Infusing landscape heterogeneity into this political ecology analysis of Salvadoran extractivism facilitates exploration of how the geographies of gold and sugarcane extractivism relate. Attention to the flow of pollution, meaning and power across heterogeneous hydrosocial territories illustrates how watershed degradation and resilience discourses so useful to condemn gold mining simultaneously erased non-metal mining extractive geographies and political economic interests. Before delving into this analysis, we must first examine more fully how water engages extractivism.

From Hydrosocial Territories to Hydrosocial Extractivisms

Whether as a key ingredient in accessing and processing raw materials, an obstacle to be removed, or a receptacle for waste, water makes extraction possible. Yet, how distinct sectors and site-specific activities²⁷ utilize and pollute water, and how they relate to local and regional waterscapes differs widely. Understanding extractive development within El Salvador necessitates close attention to how multiple extractive projects and industries relate to water.

²⁷ Even similar extractive projects (e.g., gold mines) utilize and pollute water differently according to geomorphologies of the landscape, minerology of the deposit, watershed hydrology, and available technologies (Bridge, 2004).

Literature on hydrosocial territories views water as a hybrid socionature (Kaika, 2005; Perreault, 2014; Loftus, 2015). Hoogesteger et al. define “hydrosocial territories as spatial configurations of people, institutions, water flows, hydraulic technology and the biophysical environment that revolve around the control of water” (2017: 4). Departing from positivist approaches, water here, “is not just H₂O” (Swyngedouw, 2015: 20), subject to universal measurements of volume, flow, pollution and temperature. Water flows bend along overlapping fields of gravity and power that “shapes how, where, and to what water flows” (Ibid: 5). Rather than a natural given, water is actively produced through historically-geographically contingent and power-laden interests, discourses, and practices (Bakker & Bridge, 2006).

I propose the analytic of “hydrosocial extractivisms” as a synthesis and extension of political ecologies of extractivism and hydrosocial territories approaches that highlights how socionatural extractive activities and waterscapes actively produce and mutually constitute one another (Budds & Hinojosa, 2012). Extractive struggles not only entail conflicts over access and control over physical water resources, but also struggles over water norms, laws, rules, meanings, and narratives (Seemann, 2016). Throughout these struggles, water becomes more than a natural resource, receptacle, or passive obstacle that facilitates and gets polluted by extractive activities. Water—as material flow, discourse, and political resource—shapes how, where, and what extraction takes place (Gibbs, 2009). As we’ll see, the differentiation between “good” sugarcane and “bad” gold mining extractivism in El Salvador

emanates from their material, discursive, and political economic relations to hydrosocial territories.

METHODS

In this paper I use a comparative analysis of documents and interviews in order to examine gold mining and industrial sugarcane operations' distinct toxic and spatial relations within the Lempa watershed. My analysis of how gold and sugarcane extractions differ across their material, discursive, and political economic relations relies on interview and archival data collected during eight months of fieldwork in El Salvador spread across five visits between 2015 and 2019.

To better understand the material relations that distinguish different hydrosocial extractions, I rely on key informant interviews²⁸ with environmental movement activists and government officials in the Ministry of the Environment (MARN) and the Ministry of Agriculture and Livestock (MAG), as well as archival data²⁹ from government, UN, and corporate documents. To explore the geographical

²⁸ Using a snowball sample, I conducted 53 semi-structured key informant interviews with environmental activists, NGO representatives from the national anti-mining coalition (La Mesa Nacional Frente a la Minería Metálica en El Salvador), church leaders, journalists, academics, business sector representatives (e.g. from agricultural industries), mayors, congresspeople from the three main political parties, and government officials from the Ministries of the Resources and the Environment (MARN) and Agriculture and Livestock (MAG).

²⁹ Archival data included governments reports, NGO archives, United Nations reports, corporate documents such as Environmental Impact Assessments, and court documents detailing Pacific Rim/OceanaGold's lawsuit against El Salvador for being denied an exploitation permit for the El Dorado mine, available at the World Bank Group's International Center for Settlement of Investment Disputes (ICSID) archives. These court documents were particularly useful to cite testimony of key actors unavailable for interview, like the CEO of Pacific Rim Mining Corporation.

overlap and environmental impact of multiple extractive pollutions I collected data on the Salvadoran hydrology, water quality, and mining and sugarcane geographies.

I also explore how sugarcane and gold extractivism emerge through divergent water discourses and political economic interests. Discourse analysis requires placing the content of interviews, surveys, maps, and archival data in social and historical context. It searches “beyond the text” to look at the power relations embedded within representations themselves (Waitt, 2005: 166). In order to understand representations of mining, water and agriculture in the anti-mining movement, I collected data from key informant interviews with environmental activists, journalists, academics, congresspeople, and government officials, community interviews,³⁰ and archival data from NGO literature, scientific papers, expert reports, testimonies from the Pacific Rim vs El Salvador ICSID case, central bank statistics on mining and sugarcane production and field notes and photos from my own visits to the landscapes in the department of Cabañas. I analyze the visible and hidden representations of hydrosocial extractions embedded within maps, murals, and popular slogans. I draw on concepts from landscape ecology and resilience literatures to examine how these representations amplify and distort the material heterogeneity of El Salvador’s waterscape.

Finally, I extend my comparative analysis of gold and sugarcane’s material and discursive relations to water through an examination of their overlapping political

³⁰ I conducted a total of 44 interviews with a convenience sample of anti-mining community members living near the proposed El Dorado gold mine in the department of Cabañas, El Salvador.

economies. This analysis sheds light on the relative importance of gold and sugarcane extractions to local elites and national economic growth. As we'll see, water quality statistics, popular images of pollution, and the capital flows imbued in water mutually produce each other at every stage of the analysis.

OVERLAPPING HYDROSOCIAL EXTRACTIVE GEOGRAPHIES

El Salvador's conflicting extractivisms revolve around the Lempa river. Winding 422 Km from the mountains of Chiquimula, Guatemala, through western Honduras and into northern El Salvador and all the way to the Pacific coast, the Lempa is Central America's longest river (OAS, 2017: 5). It holds particular importance for Salvadorans. The basin encompasses roughly 17,935 km², with the majority (57%) falling within Salvadoran territory (OAS, 2017; MARN, 2017e). The Lempa basin holds 66% of the country's population (UNEP, 2007: 23). It is the lifeblood of Salvadoran agriculture, the primary source of hydroelectric energy, and provides drinking water for over half of Salvadorans (Broad & Cavanagh, 2013; 2015; TAU, 2011: 7). According to a 2007 UNEP report, the Lempa faces a number of environmental problems, "associated with dam building, deforestation, land overuse, increasing populations, urban construction processes, and industrial zones" (UNEP, 2007: 38-39). It is also particularly vulnerable to climate change impacts like drought (Maurer et al., 2009).

The Lempa is a socionatural waterscape. The river's hydrologic cycle, overlapping uses and pollutions, trilateral governance regimes, and myriad

meanings for development, livelihood and national identity intersect with multiple extractive activities within its basin. The river's socionatural flows shape these extractions differently depending on their particular toxicity and location within the watershed. I explore how gold mining and sugarcane geographies relate differently to the Lempa, how these industries' distinct spatial relations to the Lempa impact their "viability" as extractive developments, and how varying toxicities compound their geographical differences. Gold mining's particular toxicity and location in the middle Lempa made it a unique threat, differentiating it from sugarcane production.

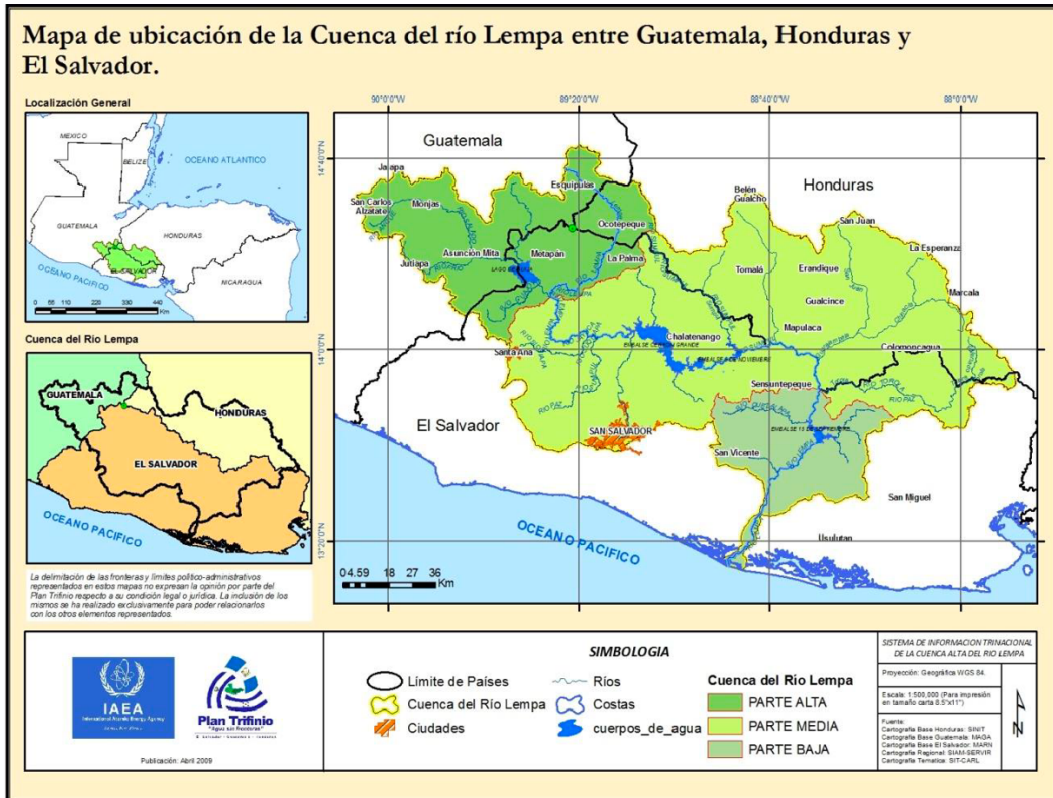
Watershed Geographies

El Salvador's gold belt runs across northern El Salvador's upper and middle Lempa watershed (See Figures 1 and 2). The prize deposit along this geological formation, the El Dorado project, sits within the Copinolapa and Titihuapa sub-basins, two important areas of water recharge for the Lempa river (ADES et al., 2012). This large-scale mine requires the latest technologies to recover enough "fine grained" gold dust to make a profit. According to a technical report prepared for Pacific Rim,³¹ the mine planned to process 500 tons of ore per day (Ristorcelli & Ronning, 2008: 26), consume large volumes of water at 10.4 liters/second (Moran, 2005), and utilize "high cyanide strengths" (Ristorcelli & Ronning, 2008: 163) to leach an estimated 490,758 ounces of gold and 3,138,016 ounces of silver (Pacific Rim Mining Corp, 2006). Like many extractive conflicts around the world, the threat

³¹ In 2013, the Canadian exploratory mining firm, Pacific Rim, sold its El Dorado mine to the Oceana Gold, a larger firm based in Australia.

of acid mine drainage, cyanide spills, and overconsumption of local water resources vital for subsistence agriculture, raising livestock, and daily use, made the El Dorado gold mine a local conflict in the surrounding communities of San Isidro, Cabañas.

Figure 1. The Lempa River Watershed



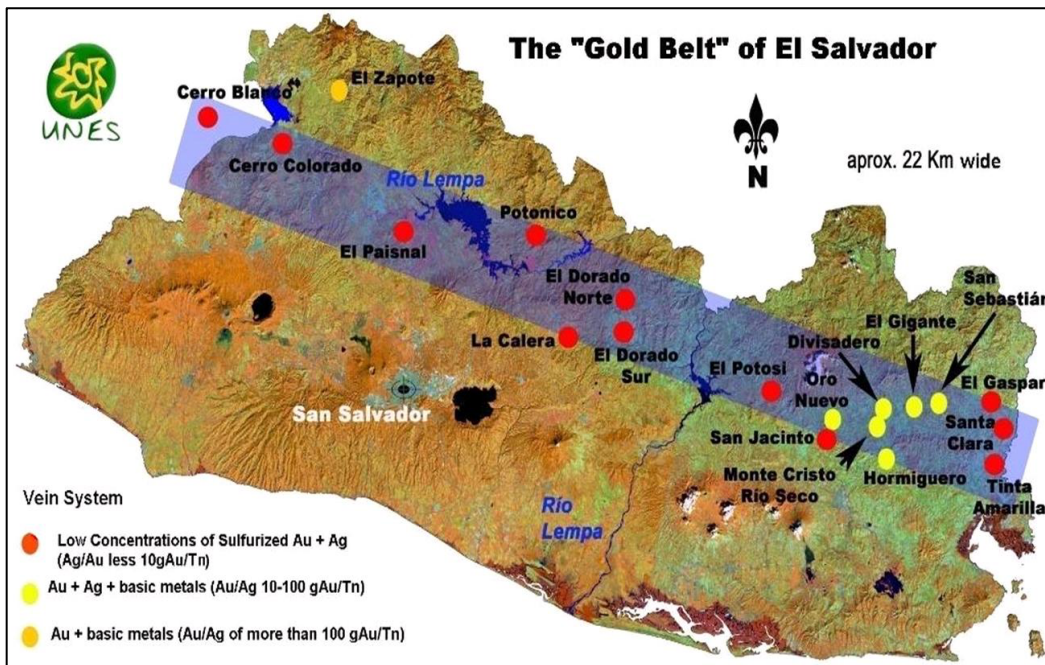
The Salvadoran portion of the Lempa River basin divides into three parts: the upper (Parte Alta), middle (Parte Media) and lower (Parte Baja) Lempa (IAEA, 2009: 5).

Despite Pacific Rim/Oceana Gold’s assurances that low concentrations of naturally occurring sulfides, state-of-the-art cyanide “detoxification” and “destruction” technologies, and water recycling strategies (Ristorcelli & Ronning, 2008) would lead to “environmentally and socially responsible” mining (Pacific Rim Mining Corp, 2007: 1), El Dorado’s overlap with the Lempa made it an existential

threat not only to local communities but to the national water supply. An independent report noted that Pacific Rim's "inadequate" Environmental Impact Assessment of the mine "raises concerns about possible contamination to the Rio San Francisco from the discharge of mine water" (Moran, 2005: 9), which would be catastrophic (Larios et al., 2008). The San Francisco stream runs into the San Isidrio and Tituhuapa rivers, important tributaries to the middle Lempa. Upriver from much of the country's industry, agriculture and population centers, the downhill flow of mine contamination through this essential artery posed social, environmental and economic consequences for downriver water users (Moran, 2005; Steiner, 2010). Following the contours of Salvadoran hydrology, local environmental activist, Vidalina Morales concluded, "...they were going to pollute the water of the Lempa River with heavy metals...If mining is in the upper part of the Lempa River, all the sediments would go to the Lempa River" (Morales, 2019).

Salvadoran geography, demography, climatology and diminished environmental resilience compound gold's "unfavorable" location in the Lempa watershed. El Salvador is the smallest, most densely populated, and environmentally degraded country in Central America. It is located in the Central American "dry corridor," a region severely impacted by droughts and floods made more intense by climate change. The Salvadoran government declared a "state of emergency" in 2015 and 2016 (FAO, 2017), and a "red alert" in July of 2018 due to unprecedented drought (Calderon & Díaz, 2018).

Figure 2. El Salvador's Gold Belt



The El Dorado project lies in the middle Lempa. Image produced by Unidad Ecológica Salvadoreña (UNES), accessed at the Canadian Mining Journal (2017).

Within this context, Salvadoran activists, academics and politicians agreed that while mining might be viable in sprawling Argentina or diffusely populated Canada, gold and water's overlapping geographies made such development impossible in El Salvador. As one anti-mining activist noted, "we managed to state that mining could be viable anywhere except El Salvador, a tiny country of 20,000 square kilometers, overpopulated, with a serious water problem³²" (Herrera, 2019). Even the ex-Minister of the Environment, Hugo Barrera noted,

First of all, the Salvadoran territory is small. We have a fairly high population, more than 350 inhabitants per square kilometer. And the topography of the

³² Only 20% of El Salvador's surface water is potable even after conventional methods of treatment, and only 24% is recommended for irrigation use (TAU, 2011: 8).

Salvadoran territory practically declines from the northern part to the sea. So, whatever is done does not stay stagnant but rather runs to different places, towards rivers, lakes, or the sea... And the population density and territorial narrowness also make it necessary to think that whatever is done can have extremely negative effects against the population if they are not very careful (Barrera, 2019).

Thus, rather than denounce gold mining in general, Salvadorans across political parties and sectors linked their anti-mining stance to the “natural accidents” of gold-water geographies.

The geography of Salvadoran sugarcane plantations provides a stark and useful contrast to highlight mining’s unique relation to water. Much like mining, industrial sugarcane production requires vast amounts of water and an array of water-polluting chemicals--herbicides, pesticides, fungicides, fertilizers, and ripeners (Hughes et al., 2016). According to a study by El Salvador’s Ministry of the Environment,

the runoff and infiltration of agrochemicals associated with the cultivation of sugarcane in the most fertile lands of the country (alluvial plain) generates a degrading impact of great magnitude, which also affects nearby ecosystems such as mangroves, pollutes water flowing into the coastal wetlands with infinite compounds of high toxicity (MARN, 2017d: 75).

However, unlike mining, the industry’s recent expansion largely concentrates in the lower Lempa region by the Pacific coast (MARN, 2012). At the river’s mouth, intensive pollution and aquifer depletion have caused national alarm and local conflicts (Flores, 2016; Jacinto et al., 2018; Mira, 2019), but do not threaten upstream water users in the same way as gold mining.

Adding further geographical complexity disrupts the juxtaposition of upriver gold mining versus downriver sugarcane. Monocrop sugarcane plantations sprawl

across the upper, middle and lower Lempa watershed. Older plantations in the departments of Cuzcatlan, La Libertad and Chalatenango release agro-toxins into important aquifer recharge zones in El Salvador's intermediate valleys that drain into the middle Lempa river (MARN, 2017d: 75). Like gold mining, they too pose threats to downstream water-users. But the crucial distinction remains between fixed gold deposits, locked in El Salvador's arid, mountainous North, and more mobile sugarcane crops, that increasingly move to the hot, fertile, and water-abundant Pacific coast. This crucial difference manifested in claims that while both sugarcane and gold extraction pollute water, gold's immobility in relation to water makes it inevitably toxic and unviable, while sugarcane's relation to water may be improved, regulated and even moved (Flores, 2019).

Thus, gold and sugarcane extractions' actual geographies, as well as their possible geographies mediate their distinct spatial relations to water in El Salvador. However, Salvadoran geography, geology and hydrology are not deterministic of the country's distinct anti-gold mining and pro-sugarcane politics. To better understand El Salvador's metal mining ban and ongoing water crisis, we must explore how gold and sugarcane's material water geographies intersect with discursive and political economic productions of hydrosocial territories.

Toxic Flows and Temporalities

The extraction of gold as compared to sugarcane reflects distinct biochemical toxicity and temporality, which further mediates the spatial relations of upstream-downstream extractive projects and water uses. For example, acid mine drainage—the

leaching of naturally occurring toxic minerals, and heavy metals by oxidized sulfides in dug-up ore—notoriously reverberates across landscapes and through centuries (Bridge, 2004). Activist and government visitors to El Salvador’s San Sebastian gold mine, unoperated for two decades, described persistent acid mine drainage that colors the nearby river “KoolAid orange and yellow” (Broad & Cavanagh, 2013: 14). With over 1,000 times the toxicity levels of surrounding waterways, the San Sebastian river is now a biological dead zone, a non-living legacy of mining’s permanent costs (Ibid).

El Salvador’s geology and climatology further compounded gold mining’s threat. The country’s seismic geology,³³ and increasing propensity for destructive weather events under climate change conditions,³⁴ turned these potential costs into seemingly inevitable catastrophes. Even if the transnational mining corporations implemented cutting-edge “best practices,” earthquakes and increased flooding from storms could collapse or breach toxic tailings dams and expose reclaimed pits, reactivating acid mine drainage. Resonating with ecological risk and resilience theory (Anderies et al., 2013; Carpenter et al., 2001; Holling, 1973), Salvadoran activists and politicians feared that one more shock to such an already degraded and vulnerable watershed, might push the entire socio-ecological ecosystem over a critical threshold

³³ According to a project impact report commissioned by Pacific Rim for its El Dorado mine, “[the] data indicate that there is potential for a major earthquake to occur near the site, and that there is a need for sophisticated seismic analyses of proposed mine facilities at appropriate levels of seismic risk” (Ristorcelli & Ronning, 2008: 22).

³⁴ El Salvador faces an exponential increase in the number and magnitude of extreme weather events punctuated by severe drought due to climate change. The high risk of landslides and floods raises the likelihood of toxic spills, and mining accidents and reduces the country’s resilience to such degradation (Bebbington et al., 2015).

and cause irreversible harm. In effect, gold mines represented ticking timebombs in a country prone to natural disaster.

The contrast with sugarcane once again proves useful. The agrochemicals necessary for large-scale production and export of monocrop sugarcane also pollute and bioaccumulate in environments and bodies with devastating socio-environmental consequences (García-Trabanino et al., 2015; Hughes et al., 2016). The sugarcane plant, *Saccharum officinarum*, is a water-intensive crop. It requires a long growing period (between 18-24 months) to reach maturity, during which plants consume roughly 1,500-2,500 mm of water—three times more water than soybean (FAO, 2020). The most productive harvests take place in hot weather, increasing water loss via evaporation and transpiration.

Sugarcane production for export also requires polluting agrochemicals. Huge quantities of fertilizers (nitrogen, phosphorus, and potassium) accelerate the growth and volume of cane plants. Herbicides like 2, 4-D³⁵ (Hedonal) and Paraquat³⁶ control weeds, pesticides, like Actara 25-WG and Jade kill mosca pinta (*Aeneolamia contigua* or spotted spittlebug in English) and sugarcane borer (*Diatraea saccharalis*), and fungicides like Benomyl and Carbendazium combat “red rot” (*Glomerella tucumanensis*) (Hughes et al., 2016). The notorious glyphosate, the main ingredient in Monsanto’s Roundup products, speeds up production as a sugarcane

³⁵ Hedonal, the active ingredient in 2, 4-D, originated in Agent Orange (PDDH, 2016a).

³⁶ The United States EPA classifies Paraquat as “moderately toxic” (PDDH, 2016a). It is responsible for 20% of the 932 pesticide poisoning cases in El Salvador, the most of any pesticide (MINSAL, 2017: 9).

ripeners. These chemicals interact differently in environments and range in their water solubility, filtration into groundwater, and bioaccumulation in aquatic life (PDDH, 2016a). Their cumulative effect has devastated water quality in aquifers across El Salvador, particularly in the lower Lempa (Hughes et al., 2016; MARN, 2017e).

However, in contrast to gold mining, Salvadoran policy makers deem water degradation as a result of sugarcane production as not inevitably toxic nor permanent in El Salvador. While officials in the Ministry of Agriculture and Livestock recognized industrial sugarcane's culpability in the country's water crisis, their solution centered on stricter enforcement that would "give teeth" to existing regulations (Sosa, 2019). By contrast, gold mining's unique spatial scale, toxicity and inevitable long-term impacts lay beyond regulatory improvement. These sentiments echo Acosta's assertion that "There are certain extractivist activities, such as large-scale ore mining for example, that can never be made 'sustainable' because their very essence is destructive" (Acosta, 2013: 63). While strict water regulations might mitigate sugarcane conflicts, the only option for gold mining was prohibition.

The point here is not that sugarcane runoff is inherently less toxic or persistent than acid mine drainage. Such conclusions invariably depend on site-specific environmental contingencies and the socio-political factors inherent in "natural" hazard risk, vulnerability, and resilience. Risk assessment is itself "necessarily a social and political exercise" (Jasanoff, 1999: 150). However, their distinct hydrosocial geographies and toxicities enabled contrasting gold and sugarcane extractive politics.

MINING-WATER DISCOURSES AND SILENT EXTRACTIVE

LANDSCAPES

The hydrological and environmental threats posed by gold mining does not alone explain the spread of anti-mining sentiments across sectors, classes, and political allegiances. Explanations of El Salvador's metal mining ban that lean too heavily on scientific rationality, political shrewdness or inevitable ecological consequences evoke environmental determinist arguments that miss the politics inherent in framing extractive development and water policy. A deeper examination of these power relations shows that, though essential, the location of gold deposits in the Lempa watershed and its toxic impacts only became relevant and actionable through the translation of these materialities into a carefully constructed and intuitively grasped discourse.

Deploying critical discourse analysis that goes “beyond the text” (Waite, 2005: 166), illustrates the power of maps, murals, and slogans in framing gold and sugarcane extractions' distinct relations with Salvadoran water resources. A pervasive “water versus gold” discourse rescaled the mining issue from a local to a national water conflict in order to broaden anti-mining support. Though a successful organizing strategy for the anti-mining campaign, this power-laden discourse also obscured Salvadoran landscapes and the socio-ecological relations that permeate notions of resilience and vulnerability. Debates within landscape ecology literature on patch/matrix heterogeneity illuminate how narratives of a homogenous national water

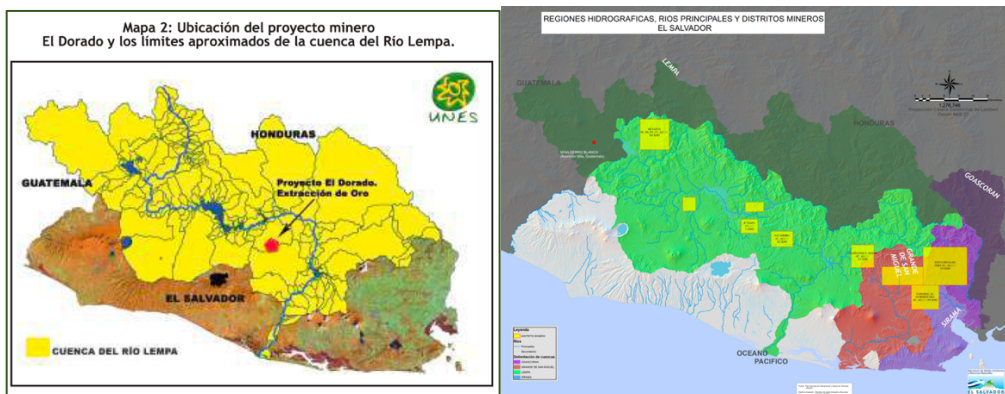
resource concealed the variegated geographies of water pollution. Gold mining's "unviability" emerged through its spatial relation to other polluters within El Salvador's heterogeneous waterscape.

Maps, Murals and Meaning

The power of the anti-gold mining discourse lies in its simplicity. To explain why gold mining is not viable in El Salvador, Sandra de Barraza merely pointed to an atlas. The academic and former member of El Salvador's Commission for National Development expounded, "anyone who sees the map of the country, and sees the issue of the basin, and understands how the basin works, and checks where 70 percent of the population is located, understands the concern..." about El Salvador's "very unfavorable environment for mining" (De Barraza, 2019). Even without complex water chemistry science or the impenetrable language of environmental impact assessments, gold mining's threat to the Lempa and to the nation appeared self-evident to most Salvadorans.

The map of Salvadoran gold deposits superimposed on the outline of the Lempa watershed became a powerful visual tool deployed throughout NGO pamphlets and community presentations, scientific papers, and government reports (Figure 3; see also Moran, 2005; Tau, 2011). As Denis Wood notes, "maps make arguments" (2010: 42). These maps argued for "water over gold." Not only did they depict the "natural accidents" of Salvadoran geography and hydrology that make mining unviable, but they translated this point into an intuitive format easily grasped by all.

Figure 3. Mapping “Gold versus Water”



These two maps highlight the overlap of metal mining and the Lempa watershed. The map on the left (Erzinger et al., 2008) depicts the El Dorado gold mining project as a red dot in the bright yellow shadow of the Lempa River watershed. The map on the right (MARN, 2011) depicts all the mining concessions in El Salvador in yellow rectangles on the backdrop of El Salvador’s important watersheds—the largest being the Lempa, depicted in green.

The narratives in these maps also reverberated throughout popular imagery, literature, social movement slogans, and even national legislation. Murals often depicted an ecologically vibrant Lempa river aside apocalyptic images of potential desolate miningscapes. In San Isidrio, Cabañas, a mural contrasts the death and degradation associated with mining, symbolized by a skull and barren land in darkness, with the life and health associated with a mining-free landscape, symbolized by a dove, clean water, and a farmer tending crops under the sun (Figure 4). Echoing this sentiment, anti-mining literature stated in bold text, “sustainable development in El Salvador is written ‘R-I-O-L-E-M-P-A’” (McKinley, 2016: 8). In both the mural and the booklet, the Lempa river is not just a resource or a commodity, but the lifeblood of El Salvador.

Figure 4. Water is Life, Gold is Death



Mural in San Isidrio, Cabañas. The writing at the bottom of the mural states, “Natural resources are not commodities, but rather a source of life. Because of this we are in resistance for life” (Photo by the author, 2017).

The centrality of the Lempa River to Salvadoran water imaginaries, enabled a scalar move from calls to “save the Lempa” to the all-encompassing narratives to “save water” more generally. As Moore and Perez-Rocha note, “while international organizations lifted up the Salvadoran refrain that ‘water is more valuable than gold,’ the focus on the defense of water in a country facing a grave water crisis, rather than short-term economic gains, resonated in many spheres” (Moore & Perez-Rocha, 2019: 41). Such popular slogans remade the scale of the mining conflict to both

illustrate the very real threat to an essential river, and to resonate across “many spheres” and broaden the anti-mining coalition (Spalding, 2015). Gold mining’s threat to the Lempa spoke to a larger and more universal assertion that mining destroys water, and therefore life. This narrative culminated in the 2017 metal mining ban proclamation that “metal mining, due to its environmental impact on *the water resource*, becomes a threat to the sustainable development and well-being of the Salvadoran family” (Legislative Decree No. 639, 2017, emphasis added).

The location of gold deposits in the Lempa watershed ironically led to a largely placeless discourse centered on the “sustainable development” of “national water” resources. The El Dorado mine’s immediate threat to local communities around San Isidrio receded evermore from anti-mining discourse as vague calls to protect “the water resource” gained popularity. Gold’s spatial relation to the Lempa sparked visions of a seemingly homogenous water resource—a “Salvadoran water” devoid of uneven hydrosocial contours—under siege. Anti-mining discourses re-made the scale of gold’s relation to water, from a local to a national socio-ecological crisis. This strategic move largely relied on scientific and expert narratives to “prove that mining was not viable” (Gonzales, 2019). However, its widespread success depended on intuitive imagery and clear messaging that tapped into meanings of the Lempa river as a source of not just potable water and livelihood, but also of national sovereignty, sustainable development, and the “well-being of the Salvadoran family.”

This narrative proved so successful that by 2015 79% of polled Salvadorans agreed that El Salvador was not “an appropriate country suitable for metal mining”

(IUDOP, 2015).³⁷ In addition, 89% responded that mining would produce “very grave” (71%) or “somewhat grave” (18%) water contamination (Ibid). When asked why such a broad swath of Salvadorans denounced gold mining’s potential threat, while largely ignoring other ongoing environmentally degrading activities like industrial agriculture, Hugo Barrera responded, “perhaps [mining] was the more significant activity. In other words, it caused more damage. Or it was more obvious that this generated dangerous damage to the health of people and the environment as well...as a consequence of the contaminated water” (Barrera, 2019, emphasis added). The obviousness of mining’s physical relation to water proved just as important as the geographical overlap itself for proving gold mining’s unviability in El Salvador. Crucially, this obvious relation was not innate, but was strategically produced through maps, murals, and scientific discourse. That is, beyond an explanation for differentiating gold and sugarcane hydrosocial extraction, obviousness of gold’s unviability was the result of hydrosocial extractive politics. While a brilliant discursive maneuver, this production of the “obvious” obscured less apparent socio-ecological power relations that also facilitated El Salvador’s metal mining ban.

Silent Geographies and Hidden Interests

The construction of the “water over gold” discourse reflects both material realities of gold deposits in the Lempa watershed as well as popular imaginaries and meanings attributed to the Lempa river. However, this narrative obscures which water

³⁷ The main reasons given were because mining “destroys the environment” (35%) and because “the country is very small” (IUDOP, 2015).

uses and whose hydrosocial interests mining threatened. Harley's notion of the "silence on maps" details how maps, and discourses more generally, "exert a social influence through their omissions as much as by the features they depict and emphasize" (Harley, 2009: 136). A landscape ecological analysis that situates gold deposits within the Lempa's heterogeneous waterscape demonstrates how mining's spatial relation to other extractive industries like sugarcane production, rather than to a vague "national water source," made gold mining "unviable" in El Salvador.

The maps, murals, and literature conveying gold's untenable relation to water served the anti-mining movement's strategy to illustrate the degrading impacts of mining and El Salvador's particular vulnerability. However, their reliance on universalizing water narratives that dislocated heterogeneous water flows from place also served non-metal mining extractive interests, like sugarcane producers. This universalizing narrative takes a dual form. The first argues that Salvadoran water—a vague and homogenizing category—remains too polluted and vulnerable to gold mining's degrading impacts. The second, argues that gold mining will pollute life-giving, clean water. While the first never explains what or why Salvadoran water resources have become polluted in the first place, the second ignores the pollution altogether. Maps of gold deposits within the vulnerable Lempa hide other polluting industries responsible for the rivers reduced socio-ecological resiliency. Murals that contrast devastated mining landscapes with bucolic blue rivers and agricultural scenes obscure the many types of agriculture—and particularly industrial agriculture—along the banks of the Lempa. On their own, these discourses illustrate important gold-

water relations, but both effectively erase non-mining extractions from the Salvadoran landscape. To borrow Marilyn Strathern's phrase, here we clearly see how "relations obscure relations" (Strathern, 2020: 187).

Beyond the erasure of non-mining water polluters, the "water versus gold" discourse misses the spatial heterogeneity of water pollution across the Salvadoran waterscape. The universalizing water narrative evokes early patch/matrix frameworks in island biogeography and landscape ecology that fueled "land-sparing" and "forest transition" models of conservation. Geared towards protecting a "patch" of biodiversity, these frameworks largely ignored the surrounding "matrix" (Cushman et al., 2009; Turner, 2005). Similarly, the narrow focus on banning metal mining equates to "sparing" a patch of the Lempa from mining's impacts without attending to the non-mining sources of pollution that made the Lempa vulnerable to mining in the first place. Just as critics of land sparing note that the framework justifies more intensive and destructive land use practices—often monocrop agriculture—surrounding biodiverse patches, "mining versus water" narratives justify and facilitate on-going degradation of the surrounding waterscape matrix by political economic interests invested in expanding sugarcane production, among other polluting activities.

Attention to watershed heterogeneity and "matrix quality" (Perfecto & Vandermeer, 2010) illustrates that mining's threat to the Lempa emerged in relation to the river's diminished resilience to water contaminants due to existing water polluting industries. Gold mining's existential threat to the Lempa lay not in its

individual impact, but rather in its pushing cumulative degradation of the river beyond a socio-ecological threshold. Given El Salvador's highly stressed environment, Larios et al conclude that "adding a new source of chemical contamination could be the final trigger in a chain of problems that could make it difficult or impossible for the country to recover ecologically" (Larios, et al., 2008: 79). Gold mining in El Salvador threatened to push an already vulnerable watershed into an irreversible ecological "regime shift" (Folke et al., 2004). The study continues,

By carrying out mining projects in development, the rivers that help keep the Lempa River in a less deplorable condition can be polluted. Although these rivers are not completely free of contamination given the population density and agricultural practices of the area, their quality is much better than that of the rivers in the southern area, where the population density is even higher and the contamination of pesticides too. The greater contamination of the rivers in the north of the country would be fatal for the population of El Salvador, for the flora and fauna (Larios et al, 2008: 79).

Attending to heterogeneous Salvadoran waterscapes through a landscape ecology lens illustrates that gold mining did not just threaten Salvadoran water in the abstract. It threatened to contaminate a particular patch of the Lempa river vital to dilute heavily polluted water to "less deplorable" levels of contamination. Beyond a threat to Salvadoran water or the lower Lempa, gold mining pollution threatened to topple the hydrosocial relations that enable water-intensive non-metal mining extraction. As I explore below, Salvadorans deemed these polluting industries, like monocrop sugarcane production, vital for national security. This made mining a national liability.

EXTRACTIVISM AND WATER POLLUTION POLITICS

The material and discursive relations that distinguish hydrosocial extractions inextricably contend with and produce unequal political economic interests. What, how, and where extraction takes place relies as much on profit motives, global markets, and capital accumulation as it does on geology, soil fertility and environmental discourse. To borrow Richard White's comment about the Columbia River, "A lot of money flows down [the Lempa] river" (White, 1995: 109). To whom this liquid capital flows is a matter of contentious politics. That is, decisions about who gets to use, pollute, and benefit from the Lempa remake the material and social world by excluding vying interests and alternative possibilities (Escobar, 2018a). A comparative analysis of gold and sugarcane extractions' toxic relation to water shows that El Salvador's unprecedented gold mining ban also reflects deep-seeded extractive interests.

The spectacle surrounding particular pollutants like cyanide fueled popular arguments that gold mining's toxicity made it uniquely unviable and irrational in El Salvador. However, the discourses differentiating cyanide from toxic pesticides do not stem neatly from their material differences alone. They evoke particular political economic interests and social movement strategies to build broad coalitions against metal mining. Next, I detail the political economic interests that blocked gold mining and propelled sugarcane extraction. Gold's relative unimportance and sugarcane's centrality to Salvadoran elites and the national economy underly notions of cyanide-based metal mining as "bad business" and of toxic sugarcane production as

“necessary” development. Consequently, the same political economic arguments that justified El Salvador’s metal mining ban currently thwart water justice activists concerned about highly toxic agrochemicals. Rather than contradictory politics, El Salvador’s anti-mining and pro-extractive stance emanate from the same hydrosocial development logic.

Cyanide and Pesticide Politics

Of all its impacts, the mining industry’s use of cyanide to separate gold from ore provoked the greatest alarm in El Salvador. Widely known as a lethal substance, a broad consensus condemning cyanide bridged class, political, and even religious difference. In interviews with Cabañas community members surrounding the proposed El Dorado mine, numerous people associated cyanide and mining with death. According to one woman,

There are human spaces like El Salvador where mining is not viable. It is unviable because first, we only have one river that receives 50% of the hydrographic basin of the territory at the national level...the Lempa river, is the only river that has potential to generate development, to use for agriculture, industry, even for drinking. If we affect the territory with chemicals, in this case cyanide, and it gets into the subsoil, it will contaminate, then the impact is fatal (interview with author).

Another man stated, mining activities “would bring death, because of cyanide and the poison that they leave in the earth” (interview with author).

These concerns echoed messaging from the upper ranks of El Salvador’s Catholic Church (Nadelman, 2015). A popular anecdote mentioned throughout interviews noted that due to his history as a chemistry student, even the conservative, Opus Dei archbishop of San Salvador, Monseñor Sáenz LaCalle, came out against

mining. According to anti-mining activist, Vidalina Morales, Monseñor Sáenz LaCalle told his parishioners, “If you don’t want to listen to me as the archbishop of this dioceses, I need you to listen to me as a chemist, which I am...I know as a chemist that cyanide is a deadly chemical element” (Morales, 2019). On May 3, 2007, the archbishop, along with all of El Salvador’s Bishops signed an open letter that concluded, “although some economic benefits may be obtained, precious metal mining should not be allowed in El Salvador. No material advantage can compare with the value of human life” (CEDES, 2007). Among the reasons given, the letter states, “People suffer serious health problems mainly due to the use of cyanide in large quantities for the extraction of gold and silver” (Ibid). Accordingly, the metal mining ban legislation makes clear that “the use of toxic chemicals, such as cyanide, mercury, and others, in any metal mining process is prohibited” (Legislative Decree No. 639, Art. 2).

Cyanide became so central to the anti-mining argument that the issue came to a head in Pacific Rim’s lawsuit against El Salvador in the World Bank’s International Center for Settlement of Investment Disputes (ICSID). The company sued El Salvador in 2009 for not accepting its Environmental Impact Assessment and denying its extraction permit. Trying to downplay fears of cyanide Pacific Rim’s CEO, Thomas Shrake stated in his witness statement, “I realize ‘cyanide’ is a scary word, and if we played name association with cyanide, it creates some images that are not pleasant” (Shrake, 2011: 528-529). But, he continues, the

reality is that there has never been a fatality related to—from cyanide within...the western mining industry as opposed to these—as opposed to

agriculture in the tropics, which is very dangerous. 1,500 people a year are killed in El Salvador from exposure to these very harmful and dangerous chemicals, and that doesn't count long-term potential for other diseases that result from these very dangerous chemicals (Ibid: 528-529).

Though this testimony downplays mining's socio-environmental impact, it raises key distinctions between mining pollution and agro-toxins that exceeds their material differences. While mining poses a potential toxic threat, pesticides poisoned 7,932 Salvadorans between 2011 and 2015 (MINSAL, 2017). The majority of poisonings occurred in municipalities within the Lempa river basin, with Chalatenango and Cabañas—the epicenters of the anti-mining movement—claiming the most deaths of all Salvadoran departments (Ibid).

Ironically, water rights activists and even the Salvadoran president have echoed Mr. Shrake's comparisons between the detrimental effects of mining and agro-toxins. In the Five-Year Development Plan for 2014-2019, president Sanchez-Ceren's lines of action include, "Strengthen the normative and institutional framework to regulate high-risk activities such as metallic mining, the use of pesticides, and others that affect the health of people, natural resources and the environment" (Government of El Salvador, 2015: 165). Similarly, renowned activist, Margarita Posada states,

the fact that cyanide is used for the extractive process also poisons the rivers, and poisons everything within the aquifers... The problem of agro-toxins is very similar to the problem of mining, which does not just affect the peasants. It affects us all because the food is contaminated, the water as well. The poison penetrates the aquifers and eventually reaches the rivers (Posada, 2019).

The toxic similarities between cyanide and pesticides suggests that their differentiation reflects more than their ecological impact.

Mr. Shrake locates the difference between cyanide and pesticides in discourse. The industry's use of cyanide—a “scary” toxin widely associated with death—led Salvadorans to deem mining “unviable.” This narrative parallels discourses of mining's “obvious” threat to water, explored above. However, the formal recognition of El Salvador's pesticide problem across social movements and the highest echelons of government undercuts the discursive difference between mining and sugarcane's toxicity. In other words, material and discursive difference alone, cannot explain El Salvador's anti-gold mining and pro-sugarcane politics. Mr. Shrake's unsuccessful legal strategy likening cyanide to agrochemical pollutants required a political economic analysis of mining and sugarcane's relative and different importance to Salvadoran elites and national development.

“Bad Business” versus “Necessary” Development

In addition to the sustained, broad-based, and well-organized anti-mining movement, research shows that political economic interests paved the way for El Salvador's metal mining ban (see chapter 1; Bebbington et al., 2019; Broad & Cavanagh, 2015; Nadelman, 2017). Throughout Salvadoran history mining has contributed an insignificant amount to national GDP.³⁸ More importantly, few national elites knew of, much less invested in mining. This disinterest partly emerged

³⁸ From 1990 to 2005 mining represented less than a mere 0.5% of Salvadoran GDP (Banco Central de Reserva de El Salvador, 2018: 109).

from Pacific Rim/Oceana Gold's failure to forge alliances among the Salvadoran business elite (Nadelman, 2017). The social movement "mining versus water" discourses also strategically avoided confrontation with non-metal mining interests. The central platform of the anti-mining movement intentionally underscored that the campaign was not anti-development or anti-extraction, and "does not propose the elimination of metal mining throughout the world" (McKinley, 2016: 13). Rather, for all of the socio-ecological reasons explored previously, "in their cost-benefit analysis, Salvadoran citizens [saw] this industry as a *bad business* for the country" (Ibid: 12, emphasis added).

The rational language of "bad business" assuaged the fears of pro-business elites and politicians who generally "don't believe in absolute prohibitions" (Wright Sol, 2019) or are against "negative investments" but "totally in favor of all investment that doesn't cause our country harm" (Barrera, 2019). Despite their affinities for free-markets and foreign direct investment, both congressman Wright Sol and Minister of the Environment, Hugo Barrera, played key roles in passing the metal mining ban.

In sharp contrast to gold mining, large-scale sugarcane production has deep historical roots in the Salvadoran agricultural oligarchy and has become "one of the most important and dynamic [industries] in the agricultural sector of the country" (CONSAA, 2018b). While the sugarcane industry and its representatives in the country's most important business peak association, the National Association of Private Enterprise (ANEP), remained silent on the mining issue, they have been at the forefront of the national political battle over water. Congressman Wright Sol, the son

of the second largest sugarcane refiner in the country, John Wright, introduced water legislation in 2017 (MARN, 2017a) that has been described by opponents—including anti-mining movement leaders—as a de facto privatization of the resource (Mesa Nacional Frente a la Minería Metalica en El Salvador, 2018).³⁹

While members of both parties describe the water law debate as a right-vs-left issue, sugarcane interests largely transcend partisan politics as the industry remains a key sector in the national economy. Sugarcane’s use in sugar and ethanol products make it a “flex crop” that is more resilient to market shocks (Borras Jr. et al., 2016). Despite agriculture’s declining percentage of Salvadoran GDP since the 1990s, largely due to the falling price of coffee and cotton, sugarcane production has surged (Segovia, 2017). The most recent growth in production has tracked the rise in both international and national sugar prices since the early 2000s (MARN, 2012).

Policies that foster domestic and international trade also facilitate sugarcane production. The Salvadoran government imposes a 40% import tariff to prevent cheap sugar from Honduras and Nicaragua from undercutting local producers (Hughes et al., 2016; Herrera, 2019). The government “considers sugar politically sensitive because it is an important driver of rural income and employment” (Herrera, 2019). Salvadoran sugarcane producers also benefit from duty-free entry to the United States under Dominican Republic-Central American Free Trade Agreement (CAFTA-DR)

³⁹ Many of the NGOs and other member of La Mesa also participate in similar coalitions for water justice like El Salvador’s “Foro del Agua” and the more recent “National Alliance Against the Privatization of Water.”

and World Trade Organization (WTO) quotas as well as a free trade agreement with South Korea signed in 2017 (Ibid).⁴⁰

Even El Salvador's first liberal government under President Funes supported sugarcane interests. On September 5, 2013, the Salvadoran Legislative Assembly approved Legislative Decree No. 473, promising, "Reforms to the Law on Control of Pesticides, Fertilizers and Products for Agricultural Use." The reform sought to prohibit 53 agrochemicals. However, President Funes never ratified the bill. Instead, on October 1, 2013, Funes returned an altered version of the bill to congress that removed 11 of the 53 agrochemicals from the list. Among those removed were 2, 4-D (Hedonal), Paraquat and Glyphosate—essential for large-scale sugarcane production. The Funes administration reasoned that El Salvador needed to,

find the balance in the protection of all the rights involved in the aforementioned reform, as well as *the harmonization of national legislation with the international trend* in the subject of pesticides, fertilizers and products for agricultural use and within the framework of the signed international agreements for El Salvador in this matter (President Mauricio Funes, 2013: 3, emphasis added).

The justification continues,

Within Article 3-A, incorporated in Decree 473, the use of pesticides and fertilizers that contain heavy metals and metalloids in their formulation is prohibited. This wording is very general and would lead to the prohibition of *fertilizers and pesticides necessary for agriculture*, undermining food security (Ibid: 8, emphasis added).

⁴⁰ El Salvador is currently in negotiations with China to form a Free Trade Agreement that would open China's markets to Salvadoran sugar (Avelar, 2019). Other important markets for Salvadoran sugar include Taiwan, Indonesia and Canada (Herrera, 2019).

In other words, the country so proud to be the first to ban metal mining refused to stray from international precedent by banning heavy metal-based agrochemicals. The government that defended its sovereign right not to mine in the World Bank's ICSID court, used international law to defend "harmonization" with the status quo. Moreover, these arguments coopt the discourse and rationale of the anti-metal mining movement that differentiates between "necessary" and "unnecessary" development or "unviable" and "essential" pollutants. Whereas "gold is not an essential metal for development and economic growth" in El Salvador (McKinley, 2016: 12), the Funes administration effectively mandated that large-scale sugarcane production is necessary for national development.

The striking differences in Salvadoran gold and sugarcane extractive politics lies not in their apparent contradiction, but in their compatible hydrosocial extractive logic. The discourses of gold mining as irrational extractive development reemerge in narratives of agro-toxins as rational development. This differentiation between "good" and "bad" extractivisms emanates from their material, discursive, and vitally, their political economic relations to water. Due to their distinct links to Salvadoran elites and national security, sugarcane is "necessary," gold is not.

CONCLUSION

El Salvador's unprecedented metal mining ban roused visions of potential post-extractive development futures (Broad & Fischer-Mackey, 2017; Artiga-Purcell, forthcoming). The Salvadoran people, backed by a broad coalition of powerful

supporters—from the Catholic Church to the highest echelons of government—chose “water over gold.” Yet to explain how El Salvador banned metal mining requires an in-depth examination of whose water, what type of water, and why water was “saved.” Situating El Salvador’s anti-metal mining stance within its ongoing commitment to non-metal mining extractivism sheds new light on the country’s extractive politics.

Viewing gold mining and sugarcane extractions through a hydrosocial lens highlights that El Salvador’s anti-mining and pro-extractive development stems from a unifying logic. Extractive developments become unviable or necessary through their material, discursive and political economic relations with, and mutual constitution of, hydrosocial territories. In El Salvador, the hydrosocial relations that made gold mining unanimously unviable unraveled in the contested struggle over industrial sugarcane production. Rather than opposing forces, extractivism and its anti-extractivism other mutually constituted one another as anti-mining legislation justified non-metal mining extraction through silent geographies and overlooked water politics.

Though thoroughly situated in place, these findings reach beyond the Salvadoran case. Given the centrality of water to most extractive activities, the analytic of hydrosocial extractivism provides a useful (though not exhaustive) lens through which to explore multiple extractive developments. Beyond adding empirical complexity, hydrosocial extractivism sheds light on often hidden power-dynamics that permeate extractivism-water relations. Such work is vital for understanding the

entrenchment of extractive development in the 21st century and for positioning environmental justice social movements and anti-extractive politics in relation to the myriad interests, goals, and trade-offs that circumscribe socio-ecological struggles.

CHAPTER 3:

Entangled Movements:

Anti-metal Mining and Water Justice in El Salvador

It took twelve years of constant struggle for El Salvador to ban metal mining. The triumphant exclamations that water rights had finally won over toxic gold mining following the March 2017 verdict—the only of its kind—were short lived. Just three months later Salvadoran environmentalists retook to the streets. Once again, they demanded water justice. But this time, they protested a right-wing water law proposal. The same legislative assembly that unanimously deemed gold mining an existential threat to national water resources had apparently “saved” water in order to privatize it. Noting the economic interests driving what activists deemed a “de facto privatization,” then minister of the environment, Lina Pohl, lamented, “this time in contrast to what happened with the Mining Law, gold won over water” (La Prensa Grafica, 2017).

Few academic or popular accounts situate the Salvadoran anti-mining movement’s unprecedented success within the context of the country’s broader water justice movement and ongoing struggle to pass a comprehensive water law. Those that do, like ex-minister Pohl, see them as two distinct cases. Gold and water have different materialities, geographies, political economies, institutional histories, infrastructures, meanings and significances for sustaining life. The political task of saying “no” to mining, though historic, required less nuance than crafting complex

water policy. It seems unsurprising, therefore, that El Salvador's anti-metal mining movement succeeded while the water justice movement struggles on. Yet, examination of the overlapping origins, goals, actors, strategies, and knowledge politics that fueled both movements—formally launched a year apart—troubles their assumed separation. A focus on the boundary-making politics through which El Salvador's anti-mining and water justice movements emerged reveals the contingencies of their supposed “successes” and “failures.” It reveals their utter entanglement.

Evoking entangled social movements aligns with relational theories that trouble *a priori* divisions of entities based on the assumed fixity and boundedness of their supposedly inherent properties. Relationality suggests that entities never precede the material-discursive relations, or intra-actions, from which they emerge (Barad, 2007). Distinctions between El Salvador's anti-metal mining and water justice movements, including their contrasting legislative outcomes, do not reflect inherent differences in social movement strategy, gold and water's political economy, or other contingent conjunctures. They emerged through power-laden boundary-making politics. That is, through intra-actions that shaped how, and which social movement strategies, political economies, and contingencies coalesced in (and became excluded from) El Salvador's anti-metal mining movement.

In this chapter I explain El Salvador's metal mining ban and ongoing water struggle by attending to the boundary-making politics through which they emerged. Tracing the entangled genealogies of the anti-mining and water justice movements

demonstrates that Salvadoran activists' narrow condemnation of metal mining was not inevitable or due to a lack of concern for other types of extractivism (e.g., non-metal mining). It was a calculated political-legislative strategy. The "anti-metal mining" narrative became a "boundary object" (Star & Griesemer, 1989)—vague enough to attract a broad coalition of support and specific enough to produce indifference from Salvadoran elites whose ties to non-metal mining extractivism went unthreatened. This boundary object strategically excluded the tangle of vying water interests permeating the struggle for a national water law. It produced parallel movements. Rather than abandoning the water issue, Salvadoran environmental activists crafted a parallel "anti-water privatization" boundary object. The relative success of this boundary object—embodied in a bipartisan discursive denunciation of water privatization and a new constitutional amendment to make water a human right—demonstrates the limits of political economic and political opportunity explanations of the metal mining ban.

The implications of this relational interpretation are profound and extend beyond the Salvadoran case. Without essentializing social movements or glorifying activism, situating El Salvador's metal mining ban within the larger struggle for water justice shows how social movement actors can mutually produce the conditions for their successes. They can forge strategic alliances and consequential exclusions through boundary-making politics. Attending to the exclusions, as well as the alliances, remind us that social movement successes are always partial and thoroughly power-laden. Moreover, a relational understanding of El Salvador's entangled

movements resituates its metal mining ban from an outlier case, an irreproducible product of the stars aligning, to an example of the possibilities of organized action.

EXPLAINING EL SALVADOR'S METAL MINING BAN

El Salvador's anti-mining struggle has generated a rush of analyses to explain its unprecedented success. Though spanning a variety of academic fields, theoretical approaches, and methods, three broad themes cut across these explanations: successful organizing, the balance of political economic interests, and what I term "contingent conjunctures." Rather than mutually exclusive, these axes of explanation often emerge together in particular analyses, albeit with unequal weight and emphasis.

Successful Organizing

The most common explanation maintains that El Salvador's metal mining ban resulted from a "sustained coordinated social movement" (Bebbington et al., 2018). Through a variety of organizing tactics that spanned mass popular mobilization, targeted alliance-building with powerful actors (including leaders in catholic church, bipartisan politicians, and private sector interests), and a mix of faith-based, legal rights, and scientific discourses, grassroots activism built a broad, cross-sectoral, and international anti-mining coalition (Spalding, 2018). This narrative pays special attention to key actors that lent crucial resources, political access, and legitimacy to the anti-mining movement. Nadelman (2015) underscores how Salvadoran Archbishop Seins LaCalle and the conference of episcopal bishops depoliticized and

legitimized the anti-mining stance while providing a crucial bridge between rank-and-file movement members and policymakers. Bebbington et al. (2019) highlight the bureaucratic and technocratic “boundary agents”⁴¹ that translated anti-mining demands into concrete legal documents. Others emphasize the “bridge-framing” carried out by researchers who legitimized community concerns of mining’s socio-ecological impact using hegemonic scientific methods and discourses; the networks of local and international NGOs that pressured the Salvadoran state to act; and politicians from the Right and Left who intervened on behalf of the social movement at key moments (Spalding, 2015). Though often lost in the grander narratives, local activists—particularly the four martyrs assassinated in 2009 at the height of the conflict—provided critical organizing strategy, stamina, and inspiration throughout the 12-year struggle.

Political Economic Interests

While certainly necessary, successful social mobilization alone cannot sufficiently explain El Salvador’s metal mining ban. Researchers increasingly point to the mining industry’s lack of institutional history in El Salvador (Artiga-Purcell, forthcoming), failed alliances with local business elites (Nadelman, 2017), and

⁴¹ This chapter draws on many valences of the term “boundary.” “Boundary agent” refers to actors who cross the political, knowledge, and technological boundary (or border) that separate social movement goals (e.g., a metal mining ban) and political-legal requirements (e.g., from the navigation of legislative procedures to the translation of movement slogans into the language of articles and laws). As discussed below, “boundary objects” are not simply human agents who cross boundaries, but rather are collectively produced material-semiotic objects (e.g., from mining laws to water justice discourses) that bring together disparate (and possibly contradictory) interests and meanings. Finally, “boundary-making” does not connote a crossing of pre-defined borders or the erasure (however temporary) of such borders, but rather the political process of producing borders through power-laden acts of inclusion and exclusion.

overall insignificant contribution to national development (Bebbington, et al., 2019). As a result, the Salvadoran business elite remained largely indifferent towards a metal mining industry dominated by transnational capital, of which they had little knowledge of and no investment in. Although seemingly at odds with their usually pro-business, free-market agenda, El Salvador's private sector never joined the pro-mining lobby—a huge boon for the anti-mining movement.

Contingent Conjunctures

Salvadorans often turn to the concept of “coyuntura” (meaning conjuncture or historical moment) to explain how dynamic, fortuitous or semi-random processes and factors briefly coalesced to pass the metal mining ban. Similarly, in ethnographic analyses conjuncture refers to historically situated elements that “collide and align in particular constellations” and are produced “sometimes deliberately, [but] more often as an unintended consequence of how various elements combine” (Li, 2014: 16).

Contingent conjunctures emerge in analyses that recognize the importance of corporate blunders (Nadelman, 2018), electoral cycles (Bebbington et al., 2019), fortuitous World Bank arbitration decisions (Moore & Perez-Rocha, 2019),⁴² and Salvadoran geography, ecology and climatology (Artiga-Purcell, forthcoming).

Contributing to, yet also exceeding structural explanations, conjunctures reveal how

⁴² Pacific Rim's lawsuit against El Salvador filed under the Dominican Republic-Central American Free Trade Agreement (CAFTA-DR) in the World Bank's obscure International Center for Settlement of Investment Disputes (ICSID) court further alienated Salvadorans across socio-economic class by seemingly undermining national sovereignty (Bebbington et al., 2019; Belloso, 2018). The court's fortuitous ruling in favor of El Salvador in 2016 proved decisive for the unanimous vote to ban metal mining the following year.

El Salvador banned metal mining “because many stars were aligned” (Bebbington et al., 2019: 100).

RELATIONAL MOVEMENTS, BOUNDARY-MAKING AND KNOWLEDGE POLITICS

These explanations oscillate between social movement agencies and the political economic structures and conjunctural contexts within which they operate. However, Bebbington and colleagues stress that these “micro- and macro-political ecologies of the mining question in El Salvador constituted each other” (2015: 203). A relational view of social movements builds off and extends this insight. Understanding social movements as always emergent relations attends to the processes through which activism, political economic interests and socio-ecological conjunctures mutually constitute one another. However, the implications of a relational approach stretch beyond attention to mutual constitution. Focusing on the boundary-making politics inherent in such relating unearths not only the productive forces of building a movement (e.g., the constitution of a successful anti-metal mining movement), but also simultaneous exclusionary forces that subdue alternative material-discursive possibilities (e.g., the strategic failure to regulate non-metal mining). Finally, tracing how particular movements, strategies, and interests, coalesced around particular boundary objects demonstrates the politics of alliances and trade-offs inherent in building social movements. Beyond charting the “many stars that aligned” to make El Salvador’s metal mining ban possible, a relational

treatment of social movement boundary-making and knowledge politics explores the power-laden agencies and political choices that produced their alignment.

Relational Social Movements

In contrast to resource mobilization, political opportunity and structuralist social movement theories of the past (Tilly, 1978; see also Edelman, 2001; Della Porta & Diani, 2006; Tarrow, 2011),⁴³ more recent work on social mobilization defines social movements not as rational actors, but as a series of ephemeral and heterogeneous networks (Keck & Sikkink, 1998). More precisely, “[s]ocial movements are fluid and *emergent*, not fixed states, structures, and programs” (Escobar, 2005: 217, emphasis added). Social movements are relations. Rooted in a commitment to probe hard boundaries and common-sense taxonomies, relational thought provides an alternative to analyzing interactions *between* fixed entities. As Massey (2009: 19) explains, “A relational view of the world entails that power is not an external relation between already finally pre-constituted entities. On the contrary, the very fact of relationality is part of what constitutes those entities themselves.” Karen Barad’s (2007) distinction between “interaction” and “intra-action” similarly highlights the analytical move from relations between fixed entities to the relations that (re)constitute those entities (or phenomena in Barad’s lexicon) in the first place.⁴⁴

⁴³ As Della Porta and Diani explain, “The concept which has had the greatest success in defining the properties of the external environment, relevant to the development of social movements, is that of ‘political opportunity structure’” (2006: 16). Variables might include electoral instability, elite division, and openness of the political system to dissent, among many others.

⁴⁴ Marilyn Strathern’s distinction between internal relations, which “can link only relative beings as the parts of a whole” and external relations, which link “things already existing” (2020: 7, 43) provides another useful formulation of relational thought.

Social movements—as networks of actors, objects and processes—never precede the material-discursive intra-actions from which they emerge. El Salvador’s anti-metal mining movement did not merely react to or interact with seemingly external and pre-existing environmental geographies, political economic interests and contingent conjunctures outside their realm of influence. Congresswoman Dina Argueta emphasizes this point in reference to the collective work needed to actively produce a favorable coyuntura in order to pass the mining law.

It was a special coyuntura that was able to be taken advantage of. Hopefully we can build these scenarios in this new context, we can generate them. Because that coyuntura was generated, it was not born that way. Nor was it just generated. They [the social movement] worked to make it happen. And hopefully we could do it in this new stage with the water law (Argueta, 2019).

This passage shifts from the common narrative of activists “taking advantage of” political opportunity to that of activists actively “generating” the conditions for their success. Beyond a return to “successful organizing” explanations this insight invites us to recognize the blurriness that troubles the *a priori* separation of political economy, social movement strategy, and contingent conjunctures. As we’ll see, the anti-mining movement’s prioritized condemnation of metal instead of non-metal mining shaped how and which geographies, interests and contingencies came to matter.

Boundary-Making Politics

If social movements do not pre-exist the intra-actions through which they emerge, their boundaries—the entanglement of people, materials, discourses and their many other constituting elements—must be constantly (re)made. Following Barad,

their boundaries “do not sit still” like objects with inherent properties (2007, 171). It is only through “specific agential intra-actions that the boundaries and properties of the components of phenomena [in our case social movements] become determinate and that particular concepts...become meaningful” (Ibid: 139). Social movements are “not a thing, but a doing,” a product of ongoing material-discursive boundary-making (Ibid: 151).

The enactment or doing of particular boundaries necessarily precludes the enactment of others. “Intra-actions always entail partial exclusions” (Barad, 2007: 177). As such, different aspects of social movements emerge through particular intra-relations so that their boundaries are never fixed and always partial. The separation of El Salvador’s water justice and anti-mining movements was not inherent, inevitable, or static, but was (re)made through boundary-making intra-actions. This tactical separation proved instrumental in the passing of the metal mining ban. But it also prioritized particular interests and boundaries over others, doable incremental change (passing a mining law) over daunting structural transformation (ensuring the human right to water).

The boundaries between metal mining and non-metal mining, and those delineating Salvadoran national interest, water justice, and anti-water privatization were also continuously (re)configured. They zigzagged between generality and specificity, determinism and contingency, always differentially serving vying political agendas. But how did certain boundaries coalesce, however ephemerally? What

power-laden agencies were involved in their making? The concept of boundary object proves useful here.

Boundary Objects

Boundary objects are “objects which are both malleable enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites (Star & Griesemer, 1989: 393). That is, they remain vague enough to be widely accepted but specific enough to remain useful to particular groups, even when that utility serves competing or contradictory ends. Boundary objects manifest as physical things (e.g., legal documents), discourses (e.g., national interest), statistical measurements (e.g., water quality) and other material-discursive artifacts (see Fujimura, 1992; Sluijs et al., 1998; Cohen, 2012; de la Cadena, 2015). Crucially, boundary objects require “collaboration” between “heterogeneous communities of practice,” but that collaboration is always “asymmetric” (de la Cadena, 2015: 122). Various collaborators hold disproportionate sway over how boundaries are drawn, whose interests they include, and which hegemonic interpretations of boundary objects become indispensable for their coalescence.

In El Salvador, the emergence of anti-metal mining and anti-water privatization narratives, both linked to an amorphous national interest, forged overlapping, yet distinct, boundary objects. Bracketing off disagreements about the tenability of extractive development and definitions of privatization respectively,

these boundary objects enabled shifting and unlikely alliances that fueled different outcomes—the metal mining ban and ongoing water struggle.

METHODS

A relational approach demands that any comparative analysis of El Salvador’s supposedly successful anti-mining and stalled water justice movements examine how they formed and evolved without taking their *a priori* separation for granted.⁴⁵

To trace the origins and evolving strategies, goals, and alliances of both movements, I conducted semi-structured interviews with 53 key informants in the anti-mining and water justice movements and their allies—including academics, religious leaders, journalists and government officials—using a snowball sample. Interviews with politicians reflecting the progressive and conservative wings of Salvadoran political ideologies (including six congresspeople from El Salvador’s three main political parties)⁴⁶ who were thoroughly involved in (both for and against) the anti-mining and water justice struggles provided crucial information regarding how diverse political interests and ideologies coalesced and broke apart around distinct anti-mining and water justice narratives. These interviews shed light on each social movements’ strategic maneuvers to produce boundary objects that fostered and

⁴⁵ This study is based on eight months of fieldwork spread across five visits to El Salvador between 2015 and 2019.

⁴⁶ The Alianza Republicana Nacionalista (ARENA) is El Salvador’s predominant right-wing party founded during the country’s civil war. The Farabundo Martí National Liberation Front (FMLN) is a left-wing party formed after the war, but emanating from the guerrilla armed coalition. The Gran Alianza por la Unidad Nacional (GANU) party formed in 2010 as a conservative outgrowth of the ARENA party.

limited coalition-building and (de)legitimized their core demands. I corroborated interview data with archival research drawing from NGO archives, newspapers, and other documents from papal encyclicals to government press briefings.

Finally, semi-structured surveys with 44 anti-mining community members in the department of Cabañas (the epicenter of the anti-mining struggle) proved essential to uncover the overlapping origins, goals, and import of both movements.⁴⁷ While most studies that include a “civil society” perspective in their examinations of El Salvador’s metal mining ban rely on community leaders and NGO activists (see Bebbington et al., 2019; Broad & Cavanagh, 2015; Spalding, 2015; for a notable exception see Broad & Cavanagh, 2021), my unique inclusion of the voice of the movements’ base (“la base”) provides novel empirical evidence of the power relations within and across movements. Attending to the tensions between vying material-discursive experiences—within and between social movements and their opponents—drives this relational analysis.

ENTANGLED MOVEMENTS

A brief glance at El Salvador’s anti-metal mining and pro-water justice movements suggests their clear separation. The former was victorious, after all, while

⁴⁷ This community survey used a stratified convenience sample including 23 men and 21 women from the four municipalities surrounding the proposed El Dorado mine in the department of Cabañas (San Isidro, Guacotecti, Sensuntepeque and Victoria). The survey was carried out with the guidance of community organizers in the development NGO Asociación de Desarrollo Económico y Social (ADES), an organization that has a 27-year history of community engagement in the region. I give special thanks to Vidalina Morales, Antonio Pacheco, Miguel Rivera, Alirio Hernández and Nelson Ventura for their instrumental support and hands-on assistance.

the later remains entrenched in contentious political debate. Their distinct legislative goals—a metal mining ban and a water law respectively—further reinforce such assumptions. However, a closer look demonstrates that these goals were not inherently distinct. The movements’ separation was co-produced strategically by vested interests. The supposed success and failure of each loses salience—or at least gains a political dimension—as we examine how the boundaries delineating these goals were made, not innate. Before we delve into how the anti-mining and water justice movements were made separate yet parallel, we must attend to their historical similarities and connectedness. That is, we must attend to the relations that always precede seemingly fixed and separate social movement entities.

The boundary between El Salvador’s anti-metal mining and water justice movements was blurred from the start. In June 2005, a group of Salvadoran community organizations, research centers, academic and religious groups, and a variety of social and environmental justice NGOs formed the National Roundtable Against Metal Mining (from now on referred to by its Salvadoran abbreviation, “La Mesa”). La Mesa formed the backbone of El Salvador’s anti-mining movement. Just over a year later, on October 17, 2006, around 50 organizations, including many founding members⁴⁸ of La Mesa, launched El Foro del Agua (“The Water Forum,”

⁴⁸Among others, these include Unidad Ecológica Salvadoreña (UNES), Fundación de Estudios para la Aplicación de Derecho (FESPAD), Caritas El Salvador and the Asociación para el desarrollo de El Salvador (CRIPDES). The creation of the National Alliance Against Water Privatization in 2017 furthered this NGO crosspollination including La Mesa founding members ADES and ARPAS.

from now on referred to by its colloquial abbreviation, “El Foro”). Throughout their inception, these movements remained highly integrated.

Both social movements garnered support from key leaders and “boundary agents” in the Catholic Church and in Congress. FMLN Congresswoman Lourdes Palacios played a key role in supporting both La Mesa and El Foro.⁴⁹ The Catholic organization, CARITAS El Salvador, helped draft and present the El Foro del Agua’s first water law proposal to the legislative assembly in 2006. Furthermore, similar to their 2007 letter against metal mining (CEDES, 2007), the Episcopal Conference of El Salvador—a group of ten bishops—formalized their support of the human right to water in a letter titled, “Let’s not let the poor die of thirst” in June 2018. The country’s Catholic leadership made the link between water and mining explicit in their introduction, “Throughout the years, the Bishops of El Salvador have accompanied the just struggles of the Salvadoran people; The most recent happily culminated in the approval of the law prohibiting metal mining in our country” (CEDES, 2018). Echoing the anti-mining slogan “yes to life, no to mining” (“si a la vida, no a la minería”), the Bishops affirm that, “without water there is no life” and therefore, “we are against water privatization” (Ibid)—a slogan that became synonymous with the water justice movement as we’ll see below.

Beyond overlapping members and alliances, La Mesa and El Foro del Agua shared this common discourse centered around water rights. Their mutually

⁴⁹ Now ex-congresswoman Palacios currently sits on the board of directors of ACUA, one of the founding NGOs of El Foro del Agua.

reinforcing demands often appeared side-by-side at co-organized marches, press conferences, and other events. The discursive and organizational overlap resulted in water rights and anti-mining slogans becoming largely interchangeable. At an anti-water privatization march in San Salvador, protesters held signs reading “no to mining” (“no a la minería”) while posters at a commemoration of martyred anti-mining activist Marcelo Rivera in his hometown of San Isidrio, Cabañas stated, “water is life, not a commodity” (“agua es vida, no una mercancía”).

The ease of this discursive overlap largely emanates from the lived experiences and interests of the social movements’ base—rural communities. While not directly representative of the entire country, a survey of anti-mining communities surrounding the proposed El Dorado mine in San Isidrio Cabañas illustrates how for many Salvadorans, the anti-mining and water justice movements were not separate entities, but complementary elements of a single protracted struggle. As one respondent answered when asked what, if any, goals the anti-mining movement had yet to accomplish, “The one that has not been achieved is that of water. We are fighting for water more than anything else in these coming months” (community interview, 2019). Noting the ongoing struggle over water privatization in the country, another community member concurred, “it’s the water...they want to sell the water” (community interview, 2019). More specifically, one woman noted, “The [mining] movement is also about the water issue, the water law. But it has not succeeded in passing a water law” (community interview, 2019).

Rather than a failure of the water justice movement, this unattained goal exemplifies the continuation of the anti-mining movement. Yet another community member stated, “Well, right now I feel that all the goals that have been set have not been advanced, but I feel that we are on the right track” (community interview, 2019). Another woman concurred that the water issue “has not yet been achieved. But they are in struggle” (community interview, 2019). Consequently, when asked if the anti-mining movement still existed, an older man insisted, “it is strong.” He added, “We are still fighting for this law. We have been fighting for the general water law for a long time, just as we fought for the mining law, because they are compatible... They are compatible because the mining law... it was going to pollute our water” (community interview, 2019). In other words, these community members did not finish the anti-mining struggle and then begin anew on the issue of water justice. For most, the anti-mining struggle was and is a struggle for water justice.

Just like La Mesa’s anti-mining narrative, the water justice movement’s anti-water privatization discourse permeated community interviews. Of the 44 interviewees, 31 condemned “water privatization” unprompted or alluded to nefarious “private interests” when asked about the ongoing discussions over the water law. However, the visceral experience of lived struggles over water access added urgency to the tone and timbre of participant responses when discussing water. Over half of respondents (23 out of 39)⁵⁰ in the community survey stated that they had

⁵⁰ For this question the sample size dropped from 44 to 39 because the first five participants were not asked about water scarcity. I added the question to the survey after speaking and living with community members in the department of Cabañas and witnessing people’s daily rationing of water.

experienced water shortages (primarily in the summer months from March to May). The broad rhetoric of gold mining's potential impacts gave way to personalized accounts of daily trials,⁵¹ fears, and resourcefulness regarding water access. An exemplary reasoning for participants' condemnation of water privatization explains, "because we don't have water to start with. We don't have water either to drink or for other tasks. And if they privatize it, it will be worse for us. We are buying water and we do not have the funds with which to buy it" (community interview, 2019,). This change in affect tells a story beyond the survey answers themselves. Though well versed in the particular language associated with both movements—whether anti-mining or anti-privatization—the distinction between the mining ban and water law movements disappeared in the context of peoples' lived experience, daily needs, and hopes for the future. The anti-mining and water justice struggles emanated from a common and lived struggle for water. As one man from San Isidrio concluded about what type of law he hoped for, "Let it be a law that is favorable for the people, a law that will benefit everyone, I agree, but if it is privatized, I am willing to go fight." (community interview, 2019). This message reached politicians closely aligned with the water justice movement. As FMLN Congresswoman Dina Argueta summed up, "we started with mining, but this will not be complete if we do not have a water law" (Argueta, 2019).

⁵¹ These included stories of only having tap water reach the house four days a month, of drinking untreated water despite knowledge of its contamination, of walking over two kilometers to haul water back to the house, and rising early to reach the local tap before it ran dry from overdrawing by neighboring communities.

The similar origins, membership, alliances, discourse and popular base blur the boundaries between El Salvador's anti-mining and water justice movements. But such integrated overlap does not warrant the collapse of parallel movements into an essentialized whole. To do so would be to forgo relationality all together by replacing two discrete entities with one. For all their commonalities, the two movements retain important differences. For example, the water justice movement has unique members (e.g., greater participation from the National University of El Salvador) and alliances (e.g., less support from political economic elites), and responds to distinct socio-ecological problems (e.g., water distribution and wastewater treatment) with a separate legislative goal (e.g., nuanced water regulation instead of a straight forward metal mining ban). Neither completely separate nor the same, El Salvador's water justice and anti-mining movements embody Marilyn Strathern's notion that "one is too few but two are too many" (1991: 36). Beyond interrelating parts or a totalizing whole, these movements mutually constitute one another—they intra-relate.

The importance of this distinction exceeds semantic clarity. It requires us to redefine both movements' "successes" and "failures" in relation to a broader and ongoing water struggle in El Salvador. More specifically, destabilizing these parallel movements' *a priori* separation enables an in-depth exploration of how they were discursively and legally separated, however ephemerally and selectively, through active processes of co-produced boundary making.

CRAFTING PARALLEL MOVEMENTS

Despite their similarities, a key difference separates El Salvador's anti-metal mining and water justice movements. While the water movement faces staunch opposition from Salvadoran business elites, those same private sector interests did not intervene in the mining struggle. This last point seemingly confirms previous explanations of El Salvador's successful metal mining ban—that lacking political economic investment and contingent corporate blunders paved the way for a well-organized social movement. Conversely, facing a radically distinct political economic and conjunctural context, the equally well-organized water justice movement had no chance. Though an elegant comparison, such an analysis replicates political opportunity approaches that examine social movements' interaction with an external political context over which they have little influence. Interrogation of the La Mesa's legal strategy proves otherwise. By tailoring the law to narrowly address metal mining rather than all mining, social movement leaders did not simply take advantage of elites' indifference towards the mining struggle, they consciously mutually produced it. The metal mining ban became a boundary object that excluded unwanted opposition (as well as more radical denunciations of extractivism, as I explore below) while forging a broad alliance to protect an amorphous national interest in the name of water justice. Nowhere is this more evident than in the La Mesa's decision to condemn gold but not limestone mining.

Parsing Extractivism

El Salvador's largest active mining project lies a few kilometers from the Guija Lake on the Salvadoran-Guatemalan border. Owned and operated by

LafargeHolcim, the world's largest cement producer, the limestone mine supplies two nearby cement processing plants in the municipality of Metapán (Holcim, 2020).

Noting the ecological degradation and subsequent need to regulate limestone extraction, a USAID-led report on Central American mining noted that in El Salvador,

current mining operations for limestone and other commodities are not as much of an environmental concern to residents as gold and silver mining operations. However, many of the same environmental impacts can occur during these types of operations as with large scale gold and silver mining. These include deforestation, water pollution from sediment produced from erosion and air pollution from dust. It is anticipated that the new mining law will also address these issues (CAFTA-DR & US Country EIA, 2011: 22).

As we now know, the landmark 2017 law did not. El Salvador's exclusively metal-mining ban left LafargeHolcim's open-pit limestone extraction untouched. But this was not a mere oversight by communities lacking "concern" about non-metal mining as the report suggests. To explain this remarkable non-metal mining exception requires a review of La Mesa's deliberative process in drafting the mining ban legislation.

La Mesa's 2007 mining ban proposal included 72 articles detailing regulations for all mining activities (La Mesa, 2007). The draft legislation stated, "The purpose of the Mining Law is to regulate aspects related to the exploration, exploitation, processing and commercialization of non-renewable *and non-metallic natural resources*, existing in the soil and subsoil of the territory of the Republic" (Art. 1, draft mining legislation, 2007, emphasis added). This language replicates the 1996

mining law and 2001 amendment with the crucial addition of “and non-metallic natural resources.”

The proposal’s comprehensive regulations would have directly impacted LafargeHolcim’s cement operation. The 2007 draft adds two requirements for mineral exploitation and processing that explicitly target water. For example, Article 34 requires, “Environmental Permits for the use and exploitation of water issued by the Ministry of the Environment and Natural Resources in accordance with articles 62, 63 and 70...of the Law of the Environment.” These articles call for the prioritization of “human consumption” of water and call for “adequate compensation” in the case of social and environmental harm (Decree No. 233, Arts 62, 63 and 70). This language directly implicates cement processing which not only relies on mountaintop removal-style limestone extraction, but also highly polluting processing plants which, according to LafargeHolcim, incinerates “tires, used oils, plastics, rubber, textiles and residual chemicals from other industries’ processes” as a form of “clean energy” (Holcim El Salvador, 2020, see also Holcim, 2006).

The draft law also raised mining royalty rates from 2% (1% paid to the state and municipalities respectively) to 6% (3% paid to the state and municipalities respectively). The financial repercussions of this seemingly meager change would directly impact El Salvador’s powerful construction industry. Though non-metallic mining makes up just 0.3% of national GDP, cement production underlies El Salvador’s vital construction sector, which comprises 5.8% of GDP (CEPAL, 2020; Cuéllar & Kandel, 2017). Furthermore, while Salvadoran elites have increasingly

diverted their investments from national productive sectors to services and financial opportunities abroad, Bull (2017) notes an important caveat. “The main exceptions to this trend are found in agriculture and the construction industry, since they are still based in the national territory and because they still belong mainly to Salvadorans” (Bull, 2017: 18). LafargeHolcim’s two cement plants in North East El Salvador and seven distribution centers “serve all of the country’s markets” (LafargeHolcim, 2004). In short, the 2007 draft legislation would not only impact transnational mining corporations. Its corresponding ripple effects in Salvadoran industry would undoubtedly elicit strong pushback.

After heated internal deliberation over the 72-Article draft law, La Mesa collaborated with allies in the Jesuit-run Universidad Centroamericana José Simeón Cañas (UCA) on a new, paired down version. The resulting proposal passed into legislation with a mere 11 Articles (Decree No. 639). The initial proposal’s inherently complex regulations over water use, contamination, and environmental impact were reduced to the simplest of messages: “no to metal mining.”

Producing Indifference and Inaction

The decision to focus solely on metal mining was not easy or unanimous. According to Luis González, director of the environmental NGO Unidad Ecológica Salvadoreña (UNES), “that was a complicated debate. What is the objective of La Mesa Frente a la Minería? To achieve a ban on metal mining in El Salvador. That was an important debate, because some said all mining. Others spoke of gold and silver mining. So that was an interesting and important debate” (González, 2019). Academic

and organizer, Andres McKinley, explained La Mesa's reasoning to only push against metal mining rather than all mining,

...we recognized that if the country will have construction it will need gravel, sand, lime, and cement. We don't need gold. Gold doesn't bring anything to El Salvador, only costs. We don't need silver. But we do need construction materials. We didn't want to go to those extremes, because by trying to ban non-metallic mining we would have built a wall of resistance from many sectors in the country. So, in our proposed law we only included the regulation of metallic mining (McKinley, 2018).

These explanations oscillate between acceptance that metal mining is an especially toxic activity worthy of its own legislation, and acknowledgement that a targeted campaign against gold and silver mines proved more politically feasible. However, La Mesa's current activism lends greater weight to the latter response.

The decision to narrow the legislative goal of the anti-mining movement did not reflect a lack of "concern" or knowledge about the socio-ecological impacts of cement production as the USAID report suggested. After my interview with Andres McKinley, he noted that non-metallic mining was a serious problem in El Salvador and that my investigation should take it seriously (Fieldnotes, 2019). More notably, after the passage of the metal mining ban, La Mesa formally updated its goals.

Originally, the group focused on four "axes" of work: 1) passing a law to ban metal mining, 2) territorial work, 3) transborder mining, and 4) articulation and alliances (González, 2019). According to Luis González, after its legislative victory, La Mesa met to discuss the organization's new "functions." They decided on five axes:

[T]he fight against extractivism...will be our first axis. The second, what was "territorial work," is now called "defense of the territories," because we know that it is not only metal mining. The third, which has to do with transborder mining, is now the fight against mining at the regional level. The articulation

and alliances are now maintained only at a national and regional level. And, a fifth theme has been added, which is the strengthening within La Mesa (González, 2019).

One of the goals listed in La Mesa's online mission statement now reads, "reform relevant laws for the regulation of non-metal mining in a way that minimizes the impacts to the environment, that broadens and guarantees information and citizen participation in decision-making" (La Mesa webpage, 2020).

Clearly, La Mesa's initial focus on banning metal mining was not inevitable or due to a lack of concern for other forms of extraction. It was a conscious and calculated political strategy, stemming from thoughtful deliberation among activist leaders. The repudiation of gold mining, specifically, meant to produce indifference and inaction among potentially powerful opponents.

La Mesa's care to avoid provocation was certainly warranted. Noting why national elites largely ignored the mining issue, FMLN congressman and ex-president of the Legislative Assembly's Commission on Environment and Climate Change (CMCC) (2015-2018), Guillermo Mata, explained, "they were more interested in ... non-metallic [mining], for example the case of CESA cement.⁵² So, while that is not touched, they showed practically neither great nor little interests" (Mata, 2019). Former ARENA congressman and secretary of the CMCC, Johnny Wright Sol concurred with approval,

⁵² CESSA was the national cement company of El Salvador. Holcim (now LafargeHolcim) acquired 20% of CESSA's shares in 1998 and became majority owner of the company in 2004 (LafargeHolcim, 2004). Full acquisition followed in 2010 when CESSA officially changed its name to Holcim El Salvador (Ornelas, 2010).

The focus was very narrowed to metal mining, right. Because still here there are deposits of... not deposits, but there is mining, per se, to extract stone, to extract sand, to extract minerals, the cement industry for example, which we wanted to be careful not to necessarily interfere with that industry. (Wright Sol, 2019).

Across the political spectrum, staunch supporters of the metal mining ban acknowledged the importance of targeted legislation that did not “interfere” with non-metal mining.

These careful social movement tactics proved decisive. When I spoke with Jose Velasquez, executive director of the Salvadoran Chamber of the Construction Industry (CASALCO), he seemed puzzled as to why I would interview him about the anti-mining movement. He noted that CASALCO, and the construction sector generally, had “no interest” nor role in the mining issue (Velasquez, 2018). The success of the narrowed metal-mining focus manifested in the utter astonishment that any sane researcher would probe whether or not CASALCO supported El Salvador’s historic metal mining ban.

Mr. Velasquez’ disinterest in metal-mining politics fits nicely within political economic explanations of the anti-mining movement’s success. It seems obvious that an industry with no skin in the game would not engage in such a politicized issue. However, while partially true, such an interpretation assumes that CASALCO’s rational stance and the alignment of El Salvador’s political economic disinterests in mining pre-existed the anti-mining struggle. Embedded within this assumption, political economy becomes the context within which social movements maneuver, the sea in which activism swims. Thus, the agency of anti-mining organizers diminishes

to the role of exploiters of political opportunity. But the Salvadoran anti-metal mining activists did not merely react to or take advantage of CASALCO's indifference towards mining. They co-produced it. Despite deep concern with all mining, and extractivism more broadly, La Mesa narrowed their legislative goal—by rewriting the mining law to only address metal extraction—in order to produce inaction among potential rivals. To a large degree, they made the waters in which they swam.

El Salvador's metal mining ban legislation became a boundary object by subtraction. That is, beyond broadening its general appeal to diverse interests, the law's narrowed reach successfully excluded unwanted opposition. Rather than merely enhance participation in the anti-mining struggle, the law successfully diminished participation by producing targeted indifference among usually pro-industry, pro-foreign direct investment (FDI) and pro-free market elites. This required a political decision to split the mining issue in two. The legislative moment of El Salvador's anti-mining struggle relied on a strategic and temporary separation of metal and non-metal mining. Importantly, this division did not neatly reflect rational ecological concerns or the range of needs of the movement's diverse base. Nor did this incremental political strategy betray them, as La Mesa's ongoing struggle against extractivism continues. Counterintuitively, the watered-down metal mining legislation simultaneously postponed and furthered the possibility of challenging Salvadoran extractivism more broadly. Moreover, La Mesa's narrowed focus on gold mining opened opportunities for more expansive claims and coalition-building to protect, and discursively create, the national interest.

Forging a National Interest

Although the concerns of Salvadoran environmentalists echoed those of anti-mining movements throughout Latin America and the world, La Mesa managed to foster unlikely alliances where most others provoke oppressive retaliation and criminalization (Chérrez, 2011; Doran, 2017). Latin American governments on the left and the right commonly criticize environmentalists for their anti-development rhetoric and failure to acknowledge the supposed national interest (Bebbington, 2009; Lu et al., 2017). In contrast, by the time the metal mining ban passed in 2017, a broad swath of influential Salvadorans viewed gold mining as antithetical to national development, unviable anywhere in the country, and a threat to the national interest. Aided by Salvadoran geography, ecology and political economy, and legitimized by science, religious morality, and economic development theory, the anti-gold mining discourse became a boundary object—accepted by vying interests for often contradictory reasons. We must briefly examine how this anti-mining boundary object solidified before understanding how these ephemeral alliances broke apart and reconfigured within El Salvador’s ongoing water justice movement.

The success of El Salvador’s anti-mining movement largely derives from their conscious decision to frame their argument above all else, as “pro-water” and therefore in the national interest. Nadelman notes that “[b]y situating the opposition message as pro-water rather than anti-mining, the Salvadoran mining opposition adopted a tactical strategy that allowed the cause to be relevant across Salvadoran society” (2017: 194). She continues, this “pro-water focus provided positive

messaging about the importance of protecting an essential resource rather than being against a particular industry or mode of economic growth” (Ibid, 195). In addition to separating metal from non-metal mining in order to produce indifference and defuse potential opposition, Salvadoran activists fused anti-metal mining and broadly defined pro-water narratives to produce patriotic action to protect an amorphous national interest.

To work effectively, this strategic pro-water narrative required legitimation. The social movement bolstered their claims for social and environmental justice by funding scientific reports on the environmental and economic impacts of mining (Spalding, 2013). Executive director of ADES, Antonio Pacheco highlighted scientific legitimacy as a strategic organizing tool. “Aware of that the challenge was great, we began to look for people specialized in the subject to help us have a solid, technical, and scientific argument...that gave force to our voices and our approach” (Pacheco, 2018). Rather than denouncing all mining in El Salvador or metal mining in general, a series of reports outlined how metal mining was not viable in the specific environmental and economic context of El Salvador (see Moran, 2005; Larios et al., 2008; Erzinger et al., 2008; Power, 2008; Nolasco, 2011; TAU, 2011). The movement’s pro-water narrative gained further legitimacy when the Salvadoran Catholic Church publicly denounced metal mining (Nadelman, 2015).⁵³ These

⁵³ This public denouncement gained even more credibility after Pope Francis published his Encyclical Letter *Laudato Si’* “On Care for Our Common Home.” The Encyclical raised the need for environmental stewardship and denounces the “exploitation of the planet” and in particular of its water resources (Pope Francis, 2015: 22).

scientific and religious arguments paved the way for additional justifications for the metal mining ban on the grounds of the legal human right to water enshrined in the language of the United Nations and the Inter-American Court of Human Rights (Cortez, 2019; PDDH, 2012; 2013; 2016b) and economic arguments that painted metal mining as bad for Salvadoran business (Erzinger et al., 2008).

Together, these reports gave a sector-specific case study analysis that the social movement relied upon to condemn metal mining in the unique case of El Salvador—“the country smallest in territory, most populated, and with the most degraded ecosystem in Central America” (ADES, 2008: 1). Rather than juxtapose environmental justice against development, savvy anti-mining organizers posed the choice between either metal mining or water justice and economic interests. As Guillermo Navarro of CARITAS-El Salvador emphasized, “our focus was not against mining per se, or anti-business, so as not to fall into the trap of being anti-business, anti-development, etcetera... Water was a strategy to influence mining. Because at the center of everything is water pollution” (Navarro, 2019). Congressman John Wright Sol lauded this measured social movement narrative. He states, “another point in favor of how the different organizations approached [the mining issue], was that they did not try to turn metal mining into a monster or a ghost...But the focus was very much on *the national interest*, on El Salvador” (Wright Sol, 2019, emphasis added).

When asked if he saw any contradiction between his pro-economic development and anti-mining stance, ex-Minister of the Environment (MARN), Hugo

Barrera stated, “I am totally in favor of all investment that doesn’t cause our country harm. But positive investment is one thing and negative investments are another. We are against negative investments. Totally against” (Barrera, 2019). Congressman Francisco Zablah, a member of the right-wing GANA party and ex-president of the CMCC (2011-2014), similarly noted, “there can be no economic development going over the environment and the people” (Zablah, 2019). Thus, members of El Salvador’s two preeminent right-wing political parties, could simultaneously oppose gold mining without relinquishing their core free-market, pro-foreign direct investment ideology. Both did so by echoing social movement rationalizations about mining as economically and ecologically harmful for development and the national interest.

The power of “national interest” as a boundary object is precisely its palatability to diverging interest groups. The widely used “pro-water” and “positive investment” rhetoric conceal the vastly different meanings that anti-metal mining allies attributed to them. For example, Hugo Barrera and John Wright Sol condemned metal mining as inevitably toxic and unviable in El Salvador. However, both maintained that “in other places that have much more favorable territorial conditions, it could be that there is no problem [with mining]” (Barrera, 2019). In contrast, Francisco Zablah denounced the “type of mining” attempted by Pacific Rim while noting that other more sustainable metal mining activities might be applicable in El Salvador. He expressed the noncommittal attitude that has led many in the anti-mining movement to fear a potential reversal of the mining ban under right-wing

leadership (Araujo, 2019). Finally, we have already seen that La Mesa organizers used the metal mining ban as a springboard for reconsidering all extractive development in El Salvador and Central America as potentially threatening to Salvadorans' well-being. Each of these divergent views coalesced around metal mining's threat to the national interest.

La Mesa's discursive focus on metal mining produced targeted indifference and inaction among the Salvadoran business elite and spurred allied support by powerful politicians across the ideological spectrum. Rather than emanating solely from a social movement master plan, the anti-mining boundary object largely emerged piecemeal as more and more diverse voices justified its claim to protect the interests of "all Salvadorans." The coyuntura that propelled El Salvador's metal mining ban coalesced around this fragile "national interest" forged through political maneuvering, converging interests, and intersecting legitimations.

BREAKING AND (RE)MAKING BOUNDARIES

The anti-metal mining boundary object that so successfully implemented the metal mining ban shattered in El Salvador's ongoing water struggle. La Mesa's narrow attention to metal mining necessarily broadened to challenge non-metal mining polluters due to the Foro del Agua's more ambitious mandate for water justice. In part, this distinction reflects the different materialities, institutional histories and political economies embodied in Salvadoran gold and water resources (see below and also Artiga-Purcell, forthcoming). The blurry idea of a singular

Salvadoran water interest came into focus, unearthing the myriad competing water rights and zero-sum water uses. The Foro del Agua simply could not replicate the alignment of political economic and conjunctural forces co-produced by La Mesa's strategic incrementalism.

The resulting narrative concludes that where the mining movement succeeded, the water justice movement failed—once again, as Lina Pohl put it, “this time in contrast to what happened with the Mining Law, gold won over water” (La Prensa Grafica, 2017). Strictly applied to legislative outcomes, such reasoning proves sound. El Salvador has a metal mining ban and lacks a comprehensive water law. However, such limited notions of success obscures much. It misses how the metal mining ban became a decisive victory for the water movement—once again deriding their easy *a priori* separation. Moreover, it undervalues the extraordinary discursive and political successes of the water justice movement. What follows not only adds empirical evidence of the importance of political economy for social movement success—a claim often assumed about the metal mining movement through speculation of what might have happened had El Salvador's elites got involved, but not proven through direct comparative analysis (for an exception see Bebbington et al, 2019)—but also of its limitations. For while old anti-mining boundary objects failed to reconcile conflicting political economic water interests, new anti-water privatization boundary objects forged surprising consensus.

Fractured Interests and Heterogeneous Materialities

In stark contrast to the anti-mining movement, El Salvador's water justice movement had no choice but to directly challenge the most powerful national elites.

Leonel Herrera notes the impact of this key difference,

when the [metal mining] law was passed...many of us were emboldened, and said look, we have to repeat this same effort with water. And in fact, we tried. The Catholic church got involved and everything. But it was not possible. Among other reasons, I believe the main one is that in the case of water, Salvadoran private companies, the groups of Salvadoran business elites, did have interests, unlike mining where they had no direct economic interest (Herrera, 2018).

When asked what specific interests challenged the water movement, Marcos Galves, former president of CRIPDES, stated,

there are the sugarcane producers, who want water to grow their cane, because it is a big business. There are the irrigation systems, which include the interests of irrigation associations, who use water for agricultural issues. And of course, there are the bottling companies that sell water (Galves, 2018).

El Salvador's sugarcane, irrigators and bottling industries stem from the historical vestiges of the so-called "fourteen families" that constituted El Salvador's agricultural oligarchs (Nadelman, 2018). Historically and today, "...the best water in this country is in the hands of the sugarcane industry, or the soft drink bottling industry" says biologist and environmentalist, Cidia Cortes (Cortes, 2019). There are also the construction interests that pave over key aquifer recharge zones and overdraw local water resources for hotels, resorts, and other development investments (Cuéllar & Kandel, 2017; Tellman, 2014). Untreated municipal and industrial waste, pesticides used for subsistence agriculture, and many other non-point pollution sources further contribute, albeit unevenly, to water quality and quantity in El Salvador (MARN, 2017c).

The mere diversity of water interests further challenges struggles for water justice in El Salvador. Ex-FMLN congresswoman and key anti-mining ally, Lourdes Palacios makes this point while referencing the distinct territorialities of mining and water. She notes,

... mining was territorially focused in Cabañas, and with the possibility that it would be in Chalatenango. While in the case of water, it is throughout the country, and the interest of capital is throughout the country. So, although the reason, the foundation [of the water and anti-mining movements] is the same, there are a diversity of other obstacles. Because the issue of the privatization of water uses, indeed, the productive, commercial, agricultural, tourist, irrigation use, all that is in the water, and are not in the mining issue (Palacios, 2018).

Few Salvadorans knowingly interact with mining's largely hidden and fixed geographies. Water viscerally touches everyone.

Here, we might briefly recognize the more-than-human agencies and natural resource materialities (Bakker & Bridge, 2006) that shape the differential diversity and political complexity of water and mining interests. In overly crude terms, large-scale gold mining is an exclusionary activity locked in place around a hole in the ground, and tethered to intensive investments, invasive infrastructures, and technological expertise (Bridge, 2013). The relative spatial fixity and boundedness of mining limited the actors (human and otherwise) directly within its orbit of influence. For most Salvadorans, the decision not to mine had little immediate bearing on the necessities and interests of day-to-day life. In contrast, the myriad uses of water depend on its mobility, accessibility as a common pool resource, and ability to easily chemically bind with and transport pollutants through heterogeneous landscapes.

Water's diffuse and ubiquitous flow across diverse needs, uses, and interests made its regulation an immediate issue of concern and contentious politics.

The distinct political economies and materialities imbued in gold and water enabled contrasting boundary-making politics concerning the national interest. For the water issue there were simply “more interests [and I would add, more diverse geographies] in play” (González, 2019). To propose water justice beyond banning metal-mining in El Salvador not only requires coordination between diverse actors across heterogeneous landscapes, but also a socio-ecological restructuring of water uses, interests and flows that directly threatens the existing “privileges of...some of the most powerful families and owners in this country” (Cortes, 2019). La Mesa's boundary-making politics that articulated a singular threat (metal mining) to the common national interest evaporated as the Foro del Agua's calls for water justice provoked more fine-grained boundary-splitting along new borders. This boundary-(re)making reflected the country's competing water geographies and political economic interests.

Shifting Boundaries: From “Anti-metal mining” to “Anti-water privatization”

El Foro del Agua's core demands for more equitable water distribution and regulated contamination strike at the heat of the Salvadoran oligarchy's bottom line. Unsurprisingly, the business class' eerie silence on the metal mining issue turned into a roar of staunch opposition to the water justice movement. The influence of the Salvadoran business interests on the water law can be seen directly in the draft legislation currently under discussion. The Salvadoran elites condemned the “General

Water Law” supported by the Foro del Agua as “anti-private sector” and “too restrictive” of water use (Mancía, 2015). In response, the National Association of Private Enterprise (ANEP)—the country’s most powerful business peak organization—and a coalition of right-wing parties jointly proposed their own “Integral Water Law” in 2017 (National Alliance against Privatization of Water, 2018). This newest legislative draft would serve as the baseline for ongoing negotiations within the ARENA-controlled CMCC.

The Foro del Agua has condemned what it has termed “ANEP’s law” as a *de facto* privatization of water. The law would not result in wholesale water privatization in the vein of previous privatizations of the national bank, telecommunications, and the coffee and sugarcane industries during El Salvador’s neoliberal structural adjustment of the 1990s (Wade, 2016). Instead, the legislation would tilt the balance of power in the law’s administrative entity (“el ente rector”) towards the private sector. ANEP would appoint two out of the five regulators. Another two would be appointed by the mayor’s union (COMURES)—a public organization dominated by the pro-business ARENA party. The executive branch would appoint the final representative (Mendoza, 2018). The Foro del Agua, backed by the FMLN, argues that ANEP’s law “guarantees the commercialization, the abusive use of water, eliminates the management of basins and denies spaces for popular participation” (Foro del Agua, 2017). In June 2018, Salvadoran environmental activists, organizations, and allies launched the National Alliance Against the Privatization of Water in El Salvador in direct response to ANEP’s law.

The discourse of “no to water privatization” echoes the powerful simplicity of the “no to metal mining” narrative. Rather than the tricky task of creating policy that pleases diverse interests, the blanket denunciation emphasizes water as a matter of national interest (just as in the anti-metal mining case). This discursive maneuver tapped into existing alliances and modes of legitimation forged during the anti-metal mining campaign. Just as it came out publicly against metal mining’s inevitable destruction of Salvadoran water resources, the influential Episcopal Conference of El Salvador forcefully legitimized this anti-water privatization stance. They proclaimed, “As shepherds we are witnesses to the clamor of our people, who ask for potable water in all homes, and who could not pay the costs if such a vital liquid were to become a commodity that is subject to the laws of the market” (CEDES, 2018). Once again, the legal language of human rights used to condemn gold mining resurfaced in widespread demands to cement the human right to water in the Salvadoran constitution. Not only did the Foro del Agua replicate the tactics and discourses of La Mesa’s anti-metal mining campaign, but many of the same activists who participated in both movements transferred their know-how, alliances, and organizational capacity to generate boundary objects.

Redefining Social Movement Success

For all their similarities, the anti-metal mining and anti-water privatization boundary objects did not generate the same political response. Congressman Zablah lamented that in the case of the water law, the Left “arrive at the irrationality of having a hatred... a hatred against private business” (Zablah, 2019). Similarly, just as

Congressman Wright Sol commended the anti-mining movement for not “turn[ing] metal mining into a monster or a ghost” he lambasted the water justice movement, noting that, “for the FMLN and the Left—especially the more orthodox—any law that came from...anything that was negotiated with private companies was the devil...and became a privatizing ghost” (Wright Sol, 2019). The same right-wing politicians that supported the anti-metal mining movement denounced the water justice movement. For them, the public’s rational fear of toxic gold had morphed into irrational scare-tactics surrounding water-hungry ghosts and devils.

The strongest repudiation of the Left’s movement to stop water privatization came from anti-mining champion Hugo Barrera. The elder ARENA statesman explained, “I personally am not afraid of privatization. There are things that are better managed privatized than not privatized...water would be one” (Barrera, 2019). The sincerity of this comment is notable for two reasons. First, it highlights once again the wide net cast by the anti-mining boundary object examined previously—which transcended stark ideological differences. Second, Barrera’s exacerbated tone reveals the extraordinary success of the Left’s anti-water privatization discourse. This is because his jab was not aimed at FMLN supporters, but at the ARENA and GANA politicians who had abandoned (at least discursively) their commitment to neoliberal natural resource management. At the same time that El Salvador’s political Right attacks the Left for their irrational hatred of privatization, they insist that there is no water privatization of which to speak. Congressman Wright Sol adamantly defended his support of “ANEP’s law” not in support of privatization, but because “there was

no privatization, hidden or open” (Wright Sol, 2019). Congressman Zablah stated “I will never vote to privatize water. Never” (Zablah, 2019). Moreover, he assured that his colleagues in congress would not either, as “it is political suicide” (Ibid). Far from outliers, the ubiquitous talking point unifying all political parties—including the current president Nayib Bukele—assures that water privatization is out of the question (Villarán, 2019).

The almost universal denial of Salvadoran water privatization reflects the multiple definitions and politics imbued in the term. Activists emphasize “de facto privatization,” or the likely business-friendly outcome of water regulation shaped by private interests. Right wing politicians emphasize any government involvement as antithetical to privatization and therefore denounce the existence of privatization altogether. Rather than engage in debates on the nature of privatization, the relevant point here is how different definitions and interests converged around anti-water privatization as an unlikely boundary object.

Beyond transforming the national rhetoric, National Alliance Against the Privatization of Water in El Salvador demands infiltrated the legislative negotiations within the CMCC which review and vote on each Article in the proposed water law. On March 18, 2019, the CMCC voted along party lines to approve Article 14 of ANEP’s law dealing with the contentious issue of the administrative entity (Leiva, 2019). The now seven-person regulatory body would include representatives from MARN, the Ministry of Agriculture and Livestock (MAG), COMURES, the University of El Salvador, the Juntas de Agua, and most controversially, the

“agricultural sector” and the “productive industrial sector.” Led by the Alliance Against the Privatization of Water movement, the immediate public outrage condemned the partisan vote as a de facto privatization. In response to three days of escalating protests, on March 21, the CMCC voted unanimously to nullify all 14 articles previously agreed upon, and start from zero (Serrano, 2019). In a remarkable move, the CMCC dropped ANEP’s law as its sole baseline in favor of its current integrative approach that draws on four proposals including the Foro del Agua’s draft legislation.

Furthermore, in October 2020, the Legislative Assembly voted to reform Articles 2 and 69 of the Salvadoran constitution to ensure the human right to water. Once ratified by the next legislature, following Salvadoran law, Article 2 of the constitution will read, “All people have the right to life, *to water and sanitation*, to physical and moral integrity, to liberty, to security, to work, to property and ownership, and to be protected in the conservation and defense of the same” (Gutiérrez, 2020, emphasis added). Article 69 will add, “It is the obligation of the State to create public policies and laws that guarantee safe, sufficient, accessible and affordable water to all inhabitants, as well as the use and preservation of water resources” (Ibid). Despite the contradictions inherent in human rights discourse (Brown, 1997; Moyn, 2018; De Sousa Santos, 2015) and the difficulties of legal

interpretation,⁵⁴ the step towards a constitutional recognition of the right to water signifies a major victory for the water justice movement.

The struggle over water regulation continues in El Salvador. While not a clear-cut legislative victory like the metal mining ban, the water justice movement has been remarkably successful and profoundly shaped the national discourse and the legislative process. Unable to produce indifference and inaction as the anti-mining movement did, the water justice movement faced powerful political economic obstacles. When the boundary object binding water justice to the national interest dissolved into competing water interests, organizers and activists constructed a new narrative. Once again, they transcended ideological difference through the benign discourse of human rights and national interest forcefully embodied in anti-water privatization demands.

The “no to water privatization” boundary object remains more porous than its “no to metal mining” counterpart. Different interpretations of what constitutes privatization and competing human rights continue to fuel contentious political struggle over the water law. However, dismissal of the growing consensus around “the human right to water” as a right-wing ploy to coopt the discourse and diffuse meaningful political change reverts to oversimplistic top-down political economic analyses. It strips social movement actors of their agency and extraordinary success in not only preventing—however ephemerally—a backslide into neoliberal natural

⁵⁴ Water rights activists remained apprehensive due to the Legislative Assembly’s decision to ensure “public water management” instead of their preferred language which specified that “water management would be public and not for profit (Peñate, 2020).

resource governance, but also, and more optimistically, opening the discursive and legislative possibility for more participatory and just water administration.

CONCLUSION

El Salvador's ongoing movement for water justice provides crucial insights for understanding how the country banned metal mining. Its unresolved and contentious struggle in the face of myriad vested water interests provides a stark contrast to the case of metal-mining. Clearly political economy and contingent conjunctures weigh significantly on social movements' legislative success. But they are not deterministic. Albeit less "historic" than the metal mining ban, the water justice movement's smaller victories in the face of powerful opposition illuminate the limits of top-down political economic or apolitical contingent conjuncture explanations. Activism, political economic interests and contingent conjunctures mutually constituted one another and coalesced around mirroring boundary objects—anti-metal mining and anti-water privatization. The relative legislative impact of each reflects the asymmetrical politics imbued in the particular relations through which they emerged. However, situated within La Mesa's and El Foro del Agua's broader mission, the division between their successes and failures begin to meld. Just as the success of the metal mining ban signified a victory for water justice, El Salvador's unfinished water struggle tempers the successfulness of the mining legislation.

Redistributing agency to social movements without reverting to oversimplistic "successful movement" narratives or activism glorification offers profoundly

different lessons learned than the prevailing wisdom that “the stars aligned” for El Salvador to pass the only metal mining ban in history. The latter suggests El Salvador’s water justice movement—and other extraordinarily well-organized anti-extractivist movements across Latin America—will succeed only so far as the balance of political economic powers and fate will allow. Certainly, both have significant parts to play. But, acknowledging the hand of strategic activism in tilting that political balance, in tempting fate, and aligning the stars, turns the irreplicable one-of-a-kind anti-mining success story into proof of the attainable and inspiration for other movements to create the conditions for their success. Moreover, blurring the divisions between El Salvador’s anti-mining and water justice movements upends the standards of “success” by highlighting the uneven power relations inherent in activism, and insisting that both movements remain ongoing.

CONCLUSION:

Beyond the Age of Extractivism?

Our current historical moment overflows with epoch-defining titles. Anthropocene, Capitalocene, Patriarchocene, Plantationocene and Chthulucene, to name but a handful, describe different axes of the intersecting socio-ecological crises of our day (Crutzen and Stoermer, 2000, Moore, 2015; Escobar, 2018a; Haraway et al., 2016; Haraway, 2016). The distinctions between them lie in the culpable agents of change they reveal (from *Homo sapiens* and *Homo economicus* to gendered and racialized Man, and more-than-human assemblages), and in their subsequent visions of possible and necessary alternative futures. But like a subterranean vein, or a unifying specter, extractivism courses through each of these narratives. The tension between extractivism and its alternatives inevitably underly and limit the possibilities for technofixes, socio-economic restructuring, anti-racist and anti-patriarchal just transitions, and our best attempts at “staying with the trouble” (Haraway, 2016). Whatever name given to our present era, whatever diagnosis of present socio-ecological ills, and whatever responses such renderings engender, the question of extractivism—that is, the question of its (un)viability as the socio-economic base of sustainable and just futures, and the possibilities of potential alternatives—remains paramount.

The Salvadoran case demonstrates the urgency of the extractivism question and offers novel insights regarding what alternatives to extractivism are possible?

How can they be achieved? At what cost? At whose expense? And crucially, who decides? El Salvador's unique metal mining ban and sadly ordinary commitment to ongoing extractivism simultaneously show that alternatives to extractive development exist and are possible, and that they are always fraught, partial, and power-laden. In this brief conclusion, I review the extractive power relations uncovered in this analysis, their partialness, and what such fraught politics mean for the future of extractivism and its alternatives.

GOLD, WATER AND POWER IN EL SALVADOR

Interrogating the incongruencies in Salvadoran anti-metal mining and pro-extractive politics, and in its correlated international renown for water justice and water stress, demands attention to the particular political ecologies that made water more valuable than gold, but not more valuable than non-metal mining and industrial sugarcane production. Through mixed methods and socio-ecological analysis, this research investigated the political economic, historical institutional, landscape ecological, hydrosocial and relational power relations through which some extractive and anti-extractive landscapes came into being at the expense of others.

Chapter one placed the Salvadoran case within the broader literature on Latin American extractivism in the 21st century. Analysis of El Salvador's divergent anti-metal mining and pro-extractive politics fit uneasily within extractive imperative and Buen Vivir narratives that characterizations implicitly assume linear national and regional moves towards or against extractivism. Explanation of El Salvador's

conflicting extractive politics demanded a rethinking and rescaling of extractive development that accounted for the multiple extractive and anti-extractive currents that operate within national territories. Attention to gold mining's and sugarcane production's distinct institutional histories, political economic interests and relative (un)importance to national development demonstrates how overlapping extractive and anti-extractive politics coexist within El Salvador.

Extending this analysis, chapter two proposed the novel analytic of hydrosocial extractivism to illustrate how extractive and anti-extractive landscapes not only coexist and overlap, but mutually constitute one another through their material-discursive relations with Salvadoran waterscapes. Drawing on landscape ecological notions of landscape heterogeneity enabled analysis of how “water over gold” discourses effectively hide how gold mining's threat to Salvadorans only emerged in spatio-temporal relation to a Lempa waterscape already polluted by ongoing non-metal mining extractivism. Thus, the metal mining ban perpetuates a pernicious hydrosocial extractive logic that simultaneously denounces gold mining as “unviable” and justifies (through silence) industrial sugarcane production as “necessary” for Salvadoran development.

Finally, chapter three's relational analysis uncovers the Salvadoran anti-metal mining and water justice movements' utter entanglement. This novel attention to these movements' entangled origins and goals enabled investigation of how vested and uneven interests strategically maneuvered to discursively and politically separate them. These boundary-making politics succeeded in forging broad-based alliances

against gold mining by temporarily bracketing off the water issue. Emphasizing the agency of activists and the uneven power within movements in constructing the conditions for partial successes eschews environmental and political economic determinism. The separation of anti-mining and water justice movements proved a brilliant strategy by activist leaders to pass the metal mining ban, but also neglected ongoing communities struggles with non-metal mining water pollution. Attending to these boundary-making politics problematizes the assumed distinction between El Salvador's successful metal mining ban and floundering water law by showing how the two are mutually constitutive.

Together, these intersecting analyses unearth the more than human agencies, strategic maneuvers, and political trade-offs that produced Salvadoran landscapes free of gold mining's gaping holes and toxins, as well as waterscapes heavily contaminated, overused and stressed by ongoing extractivism. They show that the decision to choose water over gold—made not only in the final legislative act, but by activist leaders and other popular issue framers who de-emphasized or compartmentalized communities' ongoing struggles against non-metal mining water pollution—harbored within it a silent commitment to ongoing extractive development. Consequently, El Salvador's metal mining ban constitutes a meaningful, yet partial and uneven challenge to extractive development.

CRITICAL LESSONS

The Salvadoran case offers tangible lessons for challenging and rethinking extractivism. On the one hand, examination of how El Salvador's unique and historic metal mining ban came about underscores the power of issue framing, unlikely alliance building, and mutually producing the contexts and conjunctures that facilitated anti-extractivist social mobilization. Such stories of unlikely "victory" (particularly during a continent-wide plunge ever deeper into extractive oblivion) provide invaluable insight for ongoing struggles, and perhaps more importantly, are powerful symbols for the possibilities of counter-hegemonic change. On the other hand, acknowledgement that the metal mining ban has not ended extractivism in El Salvador provides critical lessons about the inadequacy of clear-cut stories that pit David against Goliath, extractivism against post-extractivism, water against gold, and environmental movement against environmental movement. Interrogating the triumphs and limitations of El Salvador's entangled extractive and anti-extractive politics demonstrates how diverse (more-than-human) actors collectively, yet unevenly, define and produce the socionatural conditions that enable, however ephemerally, certain anti-extractive victories, but not others.

The "criticalness" of this latter analysis is twofold. First, it relies on a critical reevaluation of key assumptions in extractive development literatures—particularly regarding the nature, scale, and consequences of extractive conflicts—that overlook how conflicting, multi-scalar, and partial (anti)extractive politics mutually constitute one another. Second, it responds to the critical, as in urgent, need for such a reevaluation in order to inform theory and praxis that strives towards more socially

and environmentally just alternatives to extractivist politics.⁵⁵ Problematizing the heroes, the victors, and their cause gives voice to those who bear the brunt of the partialness and contradiction of anti-extractive conflicts, and whose ongoing daily struggles are otherwise erased in narrations of victorious happy endings.

Such analysis of El Salvador's metal mining ban does not tarnish or trivialize the unprecedented successes of Salvadoran environmental movements. Rather, it makes critical analysis of these successes, their partial-ness, and their implications for ongoing struggles, landscapes and livelihoods even more imperative. Only by highlighting the inherent contradictions in extractive politics can ongoing and future movements hope to respond to, integrate or at the very least engage with, the varied interests at stake in enacting alternatives to extractivism. This project has been an attempt at just such an analysis.

BEYOND THE AGE OF EXTRACTIVISM

Bringing these insights to bear on the question of extractivism, what does the Salvadoran metal mining ban teach us about the current extractive order and the possibilities for alternatives? To begin with, it problematizes such a question. Applying the analytical lens of extractivism to ongoing existential socio-ecological crises does not mandate an additional epic-defining title for our age. Quite the contrary, as the Salvadoran case demonstrates, the conflicting politics inherent in

⁵⁵ I borrow this dual interpretation of critical theory from Patricia Hill Collins's work on intersectionality (Collins, 2019).

extractive imperatives and their corollary movements for anti-extractive alternatives, resist such grand narratives. As we've seen, the extractive logic so characteristic of current capitalist/neo-colonial/patriarchal relations contains its anti-extractive other, just as victorious anti-extractivist politics may further entrench extractivism. Instead of coronating our historical moment "the age of extractivism" in a political maneuver that would seemingly facilitate demands for post-extractive alternatives, the Salvadoran case suggests a more modest and frustratingly complex understanding of extractive development. The case blurs extractive/anti-extractive boundaries, problematizes linear change, and highlights the entangled and conflicting socio-ecological power relations that delineate who and what comes to matter in extractive politics.

More hopefully, by doing away with the purity needed to define an extractive era, the Salvadoran case also demonstrates that the seeds of alternatives to extractivism have already been sown and are bearing fruit. These alternatives are embodied not only in the groundbreaking metal mining ban, but in ongoing water justice and anti-extractive discourses, activism, organizing, and alliances. Though El Salvador's metal mining ban did not fully address access to clean water in Cabañas, or water justice more broadly, recall that this unfinished business did not signal defeat to community members, but rather more work to be done. Partial successes inspire and demand ongoing, collaborative and responsible struggle. Beyond end-goals, they foster always unfinished alternative ways of being.

Any alternatives to extractivism will be partial, contested, and power-laden. There is no guarantee of linear, unidirectional progress. Uneven politics cannot be avoided. Yet, complexity should not induce a sense of paralysis or doom. Such fatalistic sentiments belong to the epic win-or-lose battles over an extractive age that is, at best, an oversimplified and partial reality. Moving beyond the age of extractivism as a concept and partial reality, the Salvadoran case embodies smaller-scale, contradictory, but still profound, anti-extractive politics. Seen thus, El Salvador's historic metal mining ban becomes not merely a post-extractive victory to emulate, but an ongoing anti-extractive movement to join.

APPENDIX 1:

LIST OF ACRONYMS AND ABBREVIATIONS

ADES	Asociación de Desarrollo Económico y Social – Santa Marta (Economic and Social Development Association – Santa Marta)
ANEP	Asociación Nacional de la Empresa Privada (National Association of Private Enterprise)
ARENA	Alianza Republicana Nacionalista (National Republican Alliance)
CAFTA-DR	Dominican Republic-Central American Free Trade Agreement
CASALCO	Cámara Salvadoreña de la Industria de la Construcción (Salvadoran Chamber of the Construction Industry)
CEICOM	Centro de Investigación sobre Inversión y Comercio (Investment and Trade Research Center)
CMCC	Comisión de Medio Ambiente y Cambio Climático (Legislative Assembly’s Commission on Environment and Climate Change)
COMURES	Corporación de Municipalidades de la República de El Salvador (Corporation of Municipalities of the Republic of El Salvador)
CONSAA	Consejo Salvadoreño de la Agroindustria Azucarera (Salvadoran Council of the Sugar Agroindustry)
CRIPDES	Asociación para el Desarrollo de El Salvador (Association for the Development of El Salvador)
El Foro	El Foro del Agua El Salvador (The Salvadoran Water Forum)
FMLN	Frente Farabundo Martí para la Liberación Nacional (National Liberation Front Farabundo Martí)
GANAA	Gran Alianza por la Unidad Nacional (Great Alliance for National Unity)
ICSID	International Center for Settlement of Investment Disputes

La Mesa	La Mesa Nacional Frente a la Minería Metálica en El Salvador (National Roundtable Against Metal Mining in El Salvador)
MAG	Ministerio de Agricultura y Ganadería (Ministry of Agriculture and Livestock)
MARN	Ministerio de Medio Ambiente (Ministry of the Environment)
MINEC	Ministerio de Economía (Ministry of the Economy)
MINSAL	Ministerio de Salud (Ministry of Health)
UCA	Universidad Centroamericana José Simeón Cañas
UNES	Unidad Ecológica Salvadoreña (Salvadoran Ecological Unit)

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