

Land, Copper, Flora: Dominant Materialities and the Making of Ecuadorian Resource Environments

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ABSTRACT

This article examines the nuances of different constructions and meanings of “natural resources” in Ecuador. Focusing on the biodiverse and copper-rich region of Intag, I show how once a process of commodification of natural materials is underway—in a place where the biophysical specificities of soil, minerals, and flora map onto extractive, as well as “green” economies of value—there is an emergence of what I call “metonymic materiality,” a discursive frame in which one particular aspect of material resources becomes iconic of the place, assuming dominant significance and value for the actors. Once such “dominant” materialities emerge, they may be contested through counter-discursive strategies, where other constitutive materialities are used to symbolize and promote alternative regimes of value. I present a “resource biography” of Intag, focusing on its emergence as an agricultural frontier, a copper treasury, and, finally, a place of rare and precious biodiversity. I analyze how the resource environments that emerge around these materialities overlap and supplant each other, relationally and dynamically. [Keywords: Ecuador, environmental movements, mining, materialities, resource environments]

Introduction

The road that leads into Apuela rises and descends through the *páramo* (tropical alpine grasslands) and the cloud forest of the Imbabura province in the Northwest of Ecuador. The forest, named after the low-level cloud cover at the canopy level, is filled with orchids and ferns, mosses and butterflies. A river narrows into a stream below the road and cascading waterfalls puncture the green mountainsides that rise above the emerald-green valley hundreds of meters below—the Intag Valley, a region that my interlocutors in Quito and in the Amazon region alike described to me as “remote” more often than any other place I have visited in Ecuador.

On a busy, dusty street in Apuela—a small town with a 2,000 meter elevation nestled amidst the subtropical forest that stretches west of the famous volcano crater lake Cuicocha—the office of DECOIN (*Defensa y Conservación Ecológica de Ingag*)¹ is situated two blocks down from the market, next door to a lunch place. There, my interview with DECOIN director Carlos Zorilla turns into a lunch of hearty fish soup, rice, and chicken as several other local anti-mining activists from the Toisan Consortium² join us. The World Cup is happening, so the conversation about local politics pauses periodically as exciting plays transpire on the television where we watch Argentina playing Nigeria. Between bites (and football passes), Carlos talks about Intag, a biodiverse region in the Ecuadorian Andes that is now a contested site of forests and mining initiatives, protected areas, and potential copper concessions. “This used to be an area of *colonos*,”³ he says. Carlos continues:

They came here to destroy the forest—that was government policy. If you do not destroy the forest, you do not get the land title. But change is happening, even if it is going to take time...People are changing, the young people are already questioning the older generation. Just talk to Israel Pérez, the President of the Ranchers’ Association—he used to be your typical *colono* with a gun, a machete, and a chainsaw—and he has undergone a radical transformation. Now he is one of the many people who defend our forests, now his primary concern is conservation. He wants to manage his paddock, he wants to plant trees, to give intensive care to the land; the area where he lives has been totally cut down, and he wants to replant.

The man Carlos refers to, Israel Pérez, is one of the three plaintiffs in an ongoing transnational lawsuit, *Ramírez v. Copper Mesa*. Copper Mesa, a Canadian mining company (a subsidiary of Ascendant Copper), tried to organize copper extraction operations in Intag, which led both to intra-community divisions and to highly effective community resistance. Copper Mesa was neither the first, nor the last company to attempt mining operations in the area. Beginning in 1994, Bishi Metals, a subsidiary of the Mitsubishi Corporation, had made an earlier, unsuccessful bid for Intag's subsoil resources. Currently, a new state-driven mining initiative is in the works, to be developed by the National Mining Company (*Empresa Nacional Minera*). But Copper Mesa became especially infamous for documented death threats and physical assaults against anti-mining activists. In fact, these events became the basis for the *Ramírez v. Copper Mesa* lawsuit, and helped draw international support to *la lucha antiminera* (anti-mining struggle) that has become the defining process in the political ecology of the region.

Taking a political ecology approach, I fuse historical and ethnographic analysis to show how this struggle against subsoil extraction is the most recent instantiation of the contested process through which Intag has been claimed as a "resource environment" by various political and social factions. By resource environment, I mean a locus where issues of environmental governance, environmental change, and environmental valuations are negotiated among diverse actors, and, in a broader sense, as Richardson and Weszkalnys (this issue) sum it up—an "[assemblage] of substances, things, people, technologies, and discourses constitutive of specific resources."

The Intag valley has been largely neglected by mass media and by anthropologists alike. This has changed somewhat recently, with the anti-mining resistance garnering some media attention. However, even today Intag's reputation as a "remote" and "inaccessible" location persists. Even though, in general, there is much academic attention to mining-related conflict in the Andes across Latin America (Bebbington 2011, Bebbington et al. 2008, Bury and Kolff 2002, Himley 2012, Li 2011, Urkidi 2010), and even though Intag is a fascinating example of the complex ways in which "resource environments" are produced in Ecuador today, it remains understudied compared, for example, to the oil-rich Ecuadorian lowlands that stretch throughout the Amazon basin. It is Amazonia that has put Ecuador on the map of global environmentalism for some time as a site

of struggle between indigenous communities and oil companies. In the “David and Goliath” narrative of that conflict, nature as a cultural, sacred resource—inalienable from its traditional inhabitants and in need of protection—is juxtaposed with “nature” as a repository of subsoil resource that can be de-territorialized and commodified. But the nuances of what exactly a natural resource means in Ecuador are far more complex. The Intag region is an example of that complexity. Here, the kinds of ancestral and pre-capitalist claims to the land and the environment that characterize indigenous discourses of environmental sovereignty (both in Ecuador and elsewhere in the world) have not emerged. Rather, Intag is not only a region “developed” by colonos in the 1970s, but also one where colonos have become environmentalists (a term they use to self-identify), recasting their ecosystem as a different kind of resource environment in the process. As they renegotiate their relationships with their environment, the material world around them becomes a medium for simultaneously renegotiating their relationship with the state, which is actively producing its own narrative about nature as a national resource. Their story, and the story of this valley, offers a novel perspective on the contestations between different groups at different scales around what is valuable about nature, and how it ought to be used (which also tends to mean a referendum on the very meaning of “development” as per Bebbington et al. 2008). It also offers a different way to think about mining conflicts in the Andes, which are often analyzed using categories such as environmental risks, decision-making mechanisms, and trust in expertise (Muradian et al. 2003); in terms of their effect on trajectories of development and rural livelihoods (Bebbington et al. 2008, Perrault 2006); or in the context of particular bureaucratic practices, such as CSR (Corporate Social Responsibility) (Warnaars 2012; Li 2009, 2011), or expertise production (Velasquez 2011). But as of now, such conflicts are understudied through considering the historical and political constitution of resource materialities of the contested landscapes—which I analyze through the framework of resource environments.

Resource Environments and Materialities

The purpose of this article is two-fold. As a case study, this article focuses on the contested production of Intag as a succession of resource environments and provides a historical analysis of how a folk environmentalism emerged among a group marginalized in the iconic narratives about

environmental struggles in Ecuador—a group of colonos, who, several decades ago, came to Intag to colonize the land and burn down the forest, and their indigenous neighbors whose political activism developed along class lines, rather than through ethnic identity politics. I use this case study to develop and advance a theoretical argument about the way in which certain materialities (in this case, land, copper, and flora) become symbolically dominant in particular places as “natural resources,” generating resource environments that compete and overlap, as well as underlie both local environmental subjectivities (e.g., folk environmentalism) and state visions for particular development trajectories.

As my second goal, I hope that this article will help diversify the trend of focusing on indigenous resistance to oil exploitation in the production of knowledge about nature and politics in Ecuador (both in academia and in the media). The indigenous mobilization in the “oil patch” is an incredibly important issue, but one that undoubtedly receives as much attention as it does because of certain geographical politics of knowledge production. As Lucero notes, “in ‘Andean’ republics, the often lightly populated lowland Amazonian regions are frequently considered to be sites where ‘real’ natives are found” while “Andean people have often adopted the language and strategies of the western left thus making them, in the eyes of some, seem less ‘pure’ and ‘authentic’ than their Amazonian counterparts” (2006:35). The anti-oil mobilizations in Ecuador’s eastern provinces are a type of struggle that most recently maps onto, and is appropriated for, the “*Avatar*” discourse—a topical Hollywood update of the aforementioned David and Goliath discourse, so prevalent in Western environmentalist imaginaries of resource struggles in the Global South, where “green” Indians struggle against greedy capitalist companies defacing their ancestral nature. The media loves to profile the “*Avatar* in the rainforest,” and scholars, in turn, have a fertile field of study as they attempt to unpack both the stereotypes projected onto the indigenous denizens of the oil patch and the strategic primitivism that mobilizes such projections for political capital. But other political ecologies exist in Ecuador, with different nuances and different “scripts”—and, arguably, remain understudied.⁴ This case study of Intag as a shifting, constantly contested, and renegotiated resource environment is an attempt to bring one such example into dialogue with other scholarship about nature and politics in Ecuador.

My use of the term “resource environment,” although firmly tethered in the materiality approach (see Richardson and Weszkalnys this issue), is

in dialogue with Escobar's (1999) notion of "nature regimes." Escobar focused on the sociohistorical production of nature through discursive and practical activities, which correspond to particular "regimes" of nature. In this article, I discuss the processes involved in the creation and contestation of specific parts of nature as resources—processes which map onto the shift that occurs, in Escobar's (1999) terminology, between "organic" and "capitalist" regimes of nature. This shift also resonates with Hughes' (2005) interplay between what he calls "second nature" and "third nature"—between the environment shaped by anthropogenic factors and the environment constructed and imagined for its potential, produced by "speculation, rather than exploitation." Since no copper has been extracted in Intag yet, the value of Intag as a copper resource environment is presently speculative, although of course such speculation has real-life political and economic repercussions. My usage of "resource environments" also draws on Bakker and Bridge's discussion of materiality as a concept that encompasses "concrete differences in the material world and the way these enable and constrain the social relations necessary for resource production" (2006:21). Throughout the article, I do my best to practice the "sustained engagement with the materiality of resources" that they advocate (Bakker and Bridge 2006:7). I think through the ways in which Intag's combination of scarce water, unique cloud forest flora, and copper deposits accessible only through mountaintop removal triggers what Kaup (2008:1735) describes as "new forms of organization within nature-based commodity sectors, which often function to secure, define, and limit the access to certain types of nature and their benefits." The frame of "materiality" integrates the material and the discursive practices around particular resources, as "concrete differences" of resources or would-be resources bear upon their agentive capacities—in line with what Bennett (2010) calls "vital materialities"—and the range and type of discourses and praxes that they engender. Although I do not theorize nonhuman agency in the anthropomorphic way that de la Cadena (2010) describes as common in Andean cosmopolitics, where nonhuman actors are invoked as spiritual personages in the political arena (e.g., Pachamama), I start this article from the perspective that materiality is consequential, and that Intag is a place where "society and matter exchange properties" (Latour 1994:41). Even as humans act upon an objectified nature, fitting it into abstract categories of resources and values, land, copper, and flora, in turn, act upon the formations of social relations,

and shape the material and discursive possibilities in both human-nature and human-human relations.

Thus, beyond its contribution to the aforementioned literature on mining in the Andes, I intend for this article to contribute to a broader body of scholarship concerned with the social and political lives of natural environments as resource environments. In particular, I endeavor to contribute to the literature dealing with resource conflicts in the era of neoliberalism and—especially in Latin America—in the era of post-IMF nationalism, which, I argue, characterizes the “left turn” in Latin America. I define post-IMF nationalism elsewhere as “the process by which a state...strategically constructs an image of itself as a current or former victim of international institutions which have forcefully and radically restructured its economy to their own advantage through loan conditionalities” (Davidov 2012:12). This literature largely focuses on social mobilizations and social movements vis-à-vis resource extraction and is grounded in theories of sovereignty, citizenship, and the state (Merino 2012, Himley 2012, Humphreys Bebbington 2012, Bebbington 2009, Hogue and Rau 2008, Sawyer 2004). Working in a different direction, in this article I follow the likes of Perreault (2006) and Kaup (2008) in starting with the material and the biophysical which “explore[s] the nexus of the symbolic and the material” while grounded in “concrete locations” (Biersack 2006:17) and the materialities of the landscape.

The “concrete differences” that characterize Intag are reflected in the particular historical ontology of nature and resources there, in the constructions and contestations. Not every place has flora that is classified as “biodiverse” in the same way as it is in Intag, and not every place is as rich in copper ore. The copper that lies beneath the mountains that rise over the Intag valley, the water that comes primarily from a single water source, and the rare botanical species unique to a cloud forest habitat all inform and shape the geographical, geological, and eco-political maps of the region. I discuss the ways in which those material resources are, on the one hand, incorporated into and remade through economies of value into categories of entitlement, ownership, and identity, and on the other hand, become defining elements of what gives a place its value. These are imbricated processes that challenge the dichotomy of humans as agents and acted upon natural materials. Furthermore, since value is not fixed but rather oscillates, historiographic and ethnographic attention to it can help challenge, as Richardson and Weszkalnys note in the introduction to

this collection, the “one-way” imaginary of how something is transformed from raw substance into a resource. Resource environments overlap and supplant each other, relationally and dynamically, rather than linearly and teleologically.

Metonymic Materialities

I theorize that once a process of commodification of natural materials is underway in a place like Intag—where the biophysical specificities of soil, minerals, and flora map onto extractive, as well as “green” economies of value—there is an emergence of what I call “metonymic materiality,” a discursive frame in which one particular aspect of material resources becomes iconic of the place, assuming dominant significance and value for the actors on the level of both political strategies and collective political identities and personal meaning-making. Once such “dominant” materialities emerge, they may be contested through counter-discursive strategies, where other constitutive materialities are used to symbolize and promote alternative regimes of value. If the state⁵ is “selling” Intag as the Land of Copper, Inteños are trying to hold on to it through strategically framing (and, in the process, coming to understand and experience) Intag as the locus of a unique biosphere. As if in a game of “rock, paper, scissors,” geological surveys commissioned by the World Bank map that locate profitable subsoil minerals in the region are countered by biome maps, biodiversity surveys, and conservation plans. Quite literally, the emergence of such dominant materialities maps the region, as fertile soil, subterranean minerals, or clusters of specific plants or mosses claim or vie for dominant symbolic status, strategically “deployed” by the state, transnational corporations, and local activists alike. The question of which substances successfully⁶ become metonymic, emerging as the prism through which social and economic relations are negotiated and the primary medium of value articulation, is a question of power and power relations. To study the dynamics of such power relationships means to locate them ethnographically in time and space, and to show how these claimed and contested materialities overlap and succeed each other.

Although the “maps” documenting the relationship between material substances and symbolic discourses overlap in space, a historical perspective shows the various materialities’ emergence and interaction over time. Intag was initially “mapped” as a natural resource for its land and

water, then re-cast first as a land of copper, and subsequently as a land of rare species. Successive resource environments emerge through strategic processes that single out and iconize particular aspects from the tapestry of natural materials. These processes take shape through policy measures, grassroots practices of resistance, and discursive work by actors on all sides. Whether through literal commodification or strategic symbolification, particular material aspects of the natural world come to define places like Intag. The reader may consider the three sections below (“land,” “copper,” and “flora”) as key elements in a resource biography of Intag—I use the term “biography” metaphorically, evoking Kopytoff’s (1986) classic take on biography as a form based on changing meanings given to objects by successive users. Intag, of course, is a place, rather than an object; but to reach the epistemological goals before me, as Kopytoff did with objects, I engage with the “various singularizations of it, [its] classifications and reclassifications...[where] the drama lies in the uncertainties of valuation and identity” (1986:90).

The Making of Resource Environments

Land: Intag as an “Agricultural” Frontier

While land, copper, and flora all readily map onto the imaginary of what Barbier called “fixed endowments...provided...freely by nature and geology...distributed randomly across regions and countries” (2011:6), what I aim to make legible through this historical approach is that “a natural resource” is not, after all, a natural category. It is a fluid and temporary state that is contingent on symbolic and political economies that define “value.” As Richardson and Weszkalnys (this issue) note, “resources may revert to other states of being, and be different things to different people at the same time.” That is why a particular natural resource can have a metonymic materiality that can function as a powerful icon—that is also why its iconicity is necessarily unstable and vulnerable.

We start with land. Cotacachi County is a part of Imbabura, a province in the north of Ecuador. The county spans 1,800 square kilometers, which include several of the most biodiverse forests in the world. In fact, the region lies along the Conservation Corridor of the Tumbes-Chocó-Magdalena Hotspot, one of the world’s 25 biodiversity “hotspots” targeted for conservation.⁷ Intag lies in the western part of Cotacachi

County, across steep slopes and plunging valleys circumscribed by narrow mountain roads.

These are the ancestral lands of the indigenous population of the Andean sector of Cotacachi. The earliest Spanish references to the region mention trade with indigenous groups in the Cotacachi-Otavallo valley. Intag's neotropical climate and high elevation facilitated the production of niche agricultural products like cotton and sisal, used for textiles in the pre-colonial era (Espinoza Soriano 1988). The topography of the landscape was prohibitive to early colonial settlement (prefiguring a subsequent weak presence of the state in this region that is usually described, first and foremost, as "remote"). Over the last century, Intag became a site of sugar production, attracting landed elites who profited from large *haciendas*. Simultaneously, colonos, pushed out of the demographically oversaturated sierra, migrated into sparsely inhabited "frontier" areas such as Intag, making fortunes from logging, sisal, beans, a variety of fruits, and bootleg alcohol. Today, the region is populated by a mix of indigenous Cotacachi Kichwa, and *mestizo* and Afro-Ecuadorian colonos. The materiality of the soil in Intag shaped the valley as a destination for the migrant colonos and as a locus of mobilizations around agrarian livelihoods. On the one hand, the soil in Intag is relatively rich thanks to the large amounts of organic matter in the topsoil, the volcanic activity, and the foliar coverage of the montane forest, producing sufficient litterfall for an optimal nutrient cycle (Kocian et al. 2011). On the other hand, the agricultural capacity of any soil is contingent on adequate water sources, and while a cloud forest is a water-rich ecosystem, water supplies are far from unlimited in the valley, and forest clearing leads to decreased rainfall, creating potential water shortages for farming. Soil fertility and water insecurity helped shape the biophysical and political dimensions of Intag as an agricultural resource environment.

Between 1964 and 1973, a nation-wide agrarian reform transformed Intag. The goal was to break up the *latifundios*⁸ and the haciendas, and to redistribute land in a more equitable manner through granting land titles to indigenous people who had previously worked as tenant farmers for hacienda owners. However, the land reform was not an effective way of reorganizing the agricultural environment for a number of reasons, partially because the program did not take into account the traditional practices of complementary land use, where various ecological "stories" literally located at different altitudes were simultaneously exploited by the

same population (Murra et al. 1985). Furthermore, because of insufficient awareness of the land reforms, many either did not receive land titles or only received small patches of agriculturally subpar land without water access. In the fallout from the reforms, water rights became a crucial subsistence issue for both indigenous and poor mestizo farmers in Intag and the struggles over water rights have shaped the political ecology of the region. Water concessions from the state (which holds the formal title to all national water resources) tended to privilege those already in possession of political and economic capital. Water access rights continue to be an issue, partially because current concessions are based on outdated flow figures, and partially because demand for water has increased due to land fragmentation, water-intensive agricultural initiatives, and the growth of local municipalities, while water supplies remain limited (Rhoades et al. 2008, Carse 2006). Most recently, anxieties over the passage of a new controversial water law being used as a gateway for water privatization have compounded the tensions around this issue.

The first incarnation of Intag as a resource environment thus stretched over several decades, when it was cast by the state as a frontier available for colonos, with the agricultural land of the valley standing for economic and social opportunities. As with any frontier environment, it embodied the tension between a location of marginality vis-à-vis the state and inclusion in a state project of territorial reorganization: a place characterized by “linear spatialities, discrete social systems, and the inevitability of incorporation” (Raffles 2002:153). It was a resource environment for the state itself as well as for the colonos dispatched there. For the colonos, the resources provided included water and land for ranching and agriculture. For the state, the resource was space itself, necessary for managing the over-concentration of population in other areas. Thus, Intag’s historical construction as a resource environment involved negotiations between the original indigenous residents,⁹ the newcomers (who, over time, bifurcated into wealthy hacienda owners and poor mestizo farmers), and the state. The state remained largely absent in terms of providing services and infrastructure and yet “managed” Intag as an environment rich in the opportunities that a “frontier” affords.

It was among these actors, then, that Intag was constructed and contested over issues of land tenure and water access, and ultimately emerged as an “agricultural” resource environment. As a category, the agricultural resource environment is closely connected to ideas about

ecology and botany, but in a different way than, for instance, notions of “wild nature” or an “environment of biodiversity.” As I will discuss later in this article, currently Inteños are pursuing forms of agriculture compatible with, and complementary to, an identity of a resource environment of biodiversity. However—and this further evidences the historical mutability of resource categories around such materialities as “land”—the initial transformation of Intag into an explicitly “agricultural” resource environment (rather than the “frontier” environment, where agriculture was one of many possible modes of subsistence) ran counter to the ideals of sustainability that would become locally adopted in later years. Reflecting on the changes that took place due to the land reform, Robinson Guachagmira, local activist and secretary of the Asociación de Campesinos Agroecológicos de Intag (Association of the Agroecological Farmers of Intag), explained:

Before people used to come and claim a piece of land, to live off, and they used to say—my land, as far as I can see, and they did not pay anything for the land then...but then with the agrarian reform there was a new national policy, then it became mandatory to plant, to exploit all the land that people had. That led to deforestation; people organized mountain fires under the pretext of “clearing” the land, so that they could say that they were the owners.¹⁰

Further, as Carlos Zorilla wrote in his reflections on the decades of activism in the area, “[c]ertainly, the destructive land reform policies of the 1960s which encouraged small farmers to colonize and farm mountainous areas covered in tropical and subtropical forests—almost totally unsuitable for agriculture—also heavily contributed to the problem” (2002:55).

In addition to the use of deforestation as a successful strategy for establishing ownership and exploitation of land, owners of large haciendas also started planting easy-to-grow eucalyptus as another way of demonstrating “active use of land” to the government authorities (Carse 2006). As eucalyptus requires large amounts of water, this was another instance of an “unsustainable” agricultural intervention in a region with increasingly scarce water resources.

In short, the axis of the discourse around this agricultural resource environment ran along class lines, rather than ethnic lines (as was the case in the Amazon), making environmental rights claims based on ancestral, historical land holdings less viable in Intag than in the eastern provinces. The

state government's intention was, arguably, to facilitate equity more than to restore historical justice, and it was variously perceived, by different actors, as an agent of disfranchisement or of opportunity. It was perceived, on the one hand, as the "overreaching" machine of nation-building, transforming the landscape for its own gain, and on the other hand, as the locus of (generally disappointed) expectations of greater economic parity through land reform and updated water concessions as well as a mediator between local interests and foreign companies.

Copper: Intag as a Mineralogical Resource Environment

Transnational neoliberalism—or neoliberalization, to use Peck and Tickell's (2002) term that highlights the fluid and dynamic processes involved in implementing neoliberal ideas and policies—first arrived in Intag through the World Bank PRODEMINCA (Mining Development and Environmental Control Project) in the 1990s. The scope of the \$24 million USD project involved a variety of activities to facilitate industrial mining in Ecuador. This included the first comprehensive geological survey of the country, the subsequent generation of a mineralogical reference database that could be used by mining companies (36 minerals of potential interest to mining companies were selected for analysis), privatization of mining activities, and reforms to Ecuadorian mining legislation to create a more "attractive" investment environment. Intag was located within the 3.6 million hectares of western Ecuador marked for this project, and its biodiverse areas were not excluded from mineral sampling. Although a local NGO, DECOIN, brought a claim against PRODEMINCA activities on the grounds that World Bank policies, which officially mandated consultations with local communities, were violated in the course of the execution of the project, the PRODEMINCA project produced a body of knowledge that contributed to the deregulation of the mining sector. As Zorilla, the founder of DECOIN, wrote:

Although it was impossible to prove a direct connection, the changes to the mining legislation follow the Bank's main policies for mining projects. The modifications severely weakened environmental measures and undermined the authority of the Ministry of the Environment, as they opened the way for mining companies to mine in Ecuador. (2002:57)

Starting with the 1991 mining law and continuing through the increasingly neoliberal decade that followed (culminating in the dollarization¹¹ of the Ecuadorian economy), the mining sector in Ecuador underwent a series of reforms which encouraged mining investment. These reforms included a shift to a “single title” system, which eliminated a previously existing requirement for a renewed title at each stage of the mining process. The new, comprehensive “single title” was valid for 30 years, and could be revoked only for delinquency in paying fees. Furthermore, the modifications to the mining law abolished all royalties from mineral production (Zorilla 2002, Kuecker 2007). Mining companies took notice and, among other mineral-rich areas, Intag attracted their attention.

Starting in the 1990s, a new resource domain opened up in Intag with the discovery of copper in the area. As a result of the increasing neoliberalization of Ecuador, and PRODEMİNCA’s activities, Intag was also cast as a desirable investment environment for foreign companies interested in procuring mineral resources. Essentially, the Ecuadorian state and the World Bank started “producing” Intag in the transnational space of economic investment and neoliberal opportunity as a copper resource environment—both through literal production of knowledge by PRODEMİNCA geologists and engineers whose surveys yielded data that put Intag on the global resource map as a site of 72 million tons of copper, and through “opening” it to the copper mining industry via the aforementioned legal reforms spearheaded by then-minister of Energy and Mines Pablo Teran. As Inteños, alarmed by the activities of the corporate geologists, educated themselves on the likely environmental consequences of open-pit mining, it became obvious that this rapidly emerging metonymic materiality of copper was incompatible with Intag as an agricultural resource environment. It is this incompatibility and its consequences that I will address in the next part of this article.

In 1991, parallel to (and inspired by) PRODEMİNCA-related pro-mining activities, the Ecuadorian government negotiated an agreement with Japan on the subject of mining exploration. Japan sent Bishi Metals, which would team up with CODİGEM (the state-owned Metallurgical Mining Development and Research Corporation) to prospect within the exploratory framework of PRODEMİNCA. The copper-rich area around Junin¹² was chosen as a potential site for a future open-pit copper mine. By 1997, an exploration camp for mining engineers opened in close proximity to Junin. A combination of factors led to escalating local resistance

to that project. First of all, DECOIN uncovered an environmental impact study commissioned by Bishi Metals for the planned copper mine. Despite the policies of transparency assumed by Bishi Metals as well as the other actors involved in PRODEMINCA activities, the study had not been shared with local communities. Once DECOIN obtained a copy and circulated it through the community, Inteños learned that the study predicted deposition of mercury, arsenic, cadmium, chromium, cyanide, and lead into the local water supplies, as well as large-scale deforestation. As Robinson explained to me during an interview, using the map at the Nangulvi tourist center to illustrate his point, deforestation would also lead to desertification:

The people read the environmental assessment report, and realized that the exploitation of the mine will cause desertification, and that would dry out the climate. We are in a forest zone here, our rivers don't come down from snow-covered mountain tops, they come from within the forest, they would dry out.

Robinson recalled other things in the report, too: "The people from Japan wanted to transform everything, install tunnels in the river, relocate people to make room for waste, lots of instability, things that would have a strong negative social impact, even increase crime." In addition to problematic plans for their region, local people also witnessed the mining camp staff emptying the waste from latrines into the river that was the source of Junin's drinking water. But it was the proposed relocation of the approximately 100 residents of a valley that was to be flooded which finally galvanized local people into direct action.

In May 1997, Junin residents hiked up to the camp, located six kilometers up the mountain trail, gathered and inventoried the entirety of the camp property (including geological survey equipment, electrical generators, and everyday miscellanea like dishes and hardware tools), and brought it back down the mountain. After the local authorities were notified of their activities but failed to respond, the people of Junin burned down the mining camp. The direct action was effective: Bishi Metals pulled out of the region. However, Intag's identity as a resource environment rich in copper was now well-established, and the conflict with Bishi did not deter other companies that were interested in purchasing the concession. The next company to express interest in copper extraction,

CODELCO (Corporación Nacional del Cobre de Chile or the National Copper Corporation of Chile), withdrew after a successful tactical protest organized by Acción Ecológica together with Chilean environmental activists in Santiago during the state visit of Ecuadorian President Alarcon (WRM Bulletin 1997). However, by 2004 a Canadian company, Ascendant Copper Corporation, acquired the concession and its subsidiary, Copper Mesa Mining Corporation, and began exploratory activity in the region. Correspondingly, DECOIN, Acción Ecológica, and other grassroots organizations in the region continued building an anti-mining resistance which was not always an easy task as divisions emerged between those interested in collaborating with the mining project and those opposed to it.

The interaction between mining activities and anti-mining resistance illustrates the tensions that emerge when the same geo-terrain is claimed as multiple resource environments. The activities of both the mining corporation and the anti-mining activists show some ways in which those claims can be made. Copper Mesa was purchasing strategically important plots of land, at times using illegal tactics for that purpose. As Rosario Piedro, the widow of a man who was murdered in an earlier land dispute connected with Mitsubishi's activity in the region, recalled, some of the land was transferred illegally, using fabricated deeds.¹³ Copper Mesa was also making clandestine deals with community members open to receiving money from them in exchange for support, road access, and other material and social currencies valuable to the company during the tense exploratory period. Carlos Zorilla recalled an incident where Copper Mesa was forced to publicly reveal the names of everyone on their payroll: "They gave us this whole huge list of people we didn't know about, who had received this money...150-something people. That was bad, that was bad... that is a lot of people, especially in a [small] place like this."¹⁴

Flora: Intag as an Environment of Biodiversity

Meanwhile, DECOIN, in an alliance with the indigenous mayor of Cotacachi County, succeeded in producing a locally-authored ecological ordinance declaring Cotacachi County a *cantón ecológico* in which mining is banned and environmentally sustainable projects are promoted (Kuecker 2007). This put Cotacachi on the map as the first "ecological county" in South America. Although local ordinances are superseded (both politically and legally) by national policies and the state constitution

(according to which all subsoil resources belong to the State of Ecuador), these parallel practices illuminate the contested nature of Intag as a resource environment in the juxtaposition of contradictory perspectives on what the relevant resources and contested materialities are and how they can be valued. Over the past decade, as external forces were aggressively re-casting Intag as a new kind of resource environment defined by the metonymic materiality of copper, Inteños began to update Intag's identity as an "agricultural resource environment." They aligned it with Intag's identity as a resource environment of biodiversity. Although "biodiversity" is undoubtedly a construction that is in many ways hegemonic (Escobar 1998) and is rightly analyzed as a globalized technique of nature governance (Turnhout and Boonman-Berson 2011), it is a strategically valuable identity on the international political arena from which DECOIN and Acción Ecológica had been successful in enlisting support—as such, it has become a part of the local environmentalist vocabulary, as the information disseminated by DECOIN made it legible as a useful etic category. Again, the "concrete differences" are significant to the construction and possibilities of the Intag "biodiversity"—the specific qualities of flora in Intag make it possible for the local environmentalists to appeal to particular trends in contemporary international conservation policies and values, as international conservation policies tend to promote conservation of rainforest ecosystems with rare mosses (like those found in Intag), while drier habitats are less likely to be prioritized for the kind of "conservation" that would thwart mining activity in the area (Green et al. 2005). Furthermore, in a testament to how relational the development of resource environments is, the presence of copper, and the threat of mining, recasts "rare" or "fragile" flora as "endangered" flora, forcing a relational framework of value—is the value of the flora heightened because it is vulnerable and threatened? Is it more valuable than the copper?

While the "fragile" ecosystem of a cloud forest (Aldrich et al. 1997) secures concern in international epistemic communities around conservation, on the regional level, the residents have started challenging the extractive plans for Intag through a development of alternative economies, including sugar collectives, organic coffee production, subsistence farming, and agro-tourism. Agricultural activity was no longer associated with deforestation and unsustainable activities. Instead, sustainable agriculture emerged as the new agro-economic model for the region, mobilizing land for a different sort of resource environment. Cash crops

were rejected and pesticide-free earth promoted in ways harmonious and compatible with the metonymic materiality emerging around rare species and intact forests. As these agro-ecological projects emerged, with the help of both national and international environmental NGOs, DECOIN successfully raised funds to purchase land adjacent to existing eco-reserves, thus increasing the acreage of the territory protected from mining and logging activities.

At this point, the “typical colonos” described by Carlos Zorilla underwent a “radical transformation” in which they traded in their machetes and chainsaws for new forms of environmental management associated with a very different range of agricultural practices and a very different positionality in the political ecology of the region. If decades ago the state created a “frontier” agricultural resource environment for colonos on sparsely populated indigenous land, now, in the face of the state recreating this land as a new, extraction-centered resource environment, the colonos recreated themselves as agricultural environmentalists, thus inhabiting a position that enabled them to oppose the resource extraction model in the way that unsustainable agriculture never would have. A new metonymic materiality defined both their new environmental subjectivity and their political strategy.

In a certain sense, adopting the identity of “agricultural environmentalists” was the best strategy¹⁵ for opposing extractive industries in Intag. Although Intag certainly was an indigenous Kichwa homeland, the fact that historically indigenous issues and claims to the region were expressed through the idiom of “class” and economic dispossession and voiced through *campesino* (farmer), rather than indigenous organizations, is arguably strongly linked to the fact that a strong narrative of Intag as an “indigenous ancestral environment” never emerged. Of course, an “indigenous ancestral environment” is another type of resource environment claimed for a region, one that is successfully deployed by indigenous organizations in the struggles against oil concessions in the eastern part of the country. If anything, in the Ecuadorian oil patch the opposite situation can be observed. The colonos’ stake in the ecosystem has become incorporated into the politically powerful construction of an “indigenous resource environment.” A good example is the fact that the famous class action lawsuit, *Anguinda v. Texaco Inc.*, is consistently represented in the media as an exclusively “indigenous” lawsuit, despite the fact that it was filed on behalf

of both indigenous residents and colonos farmers who alleged harm by environmental pollution from Texaco's extraction activities (Sawyer 2001). But in Intag, even though some indigenous inhabitants believe that the damage to the ecosystem affects Indians and mestizos differently, indigenous political actors joined the colonos in claiming an eco-agricultural resource environment in opposition to the national and transnational claims on Intag as a source of copper.

The 2006 assault of the residents of Junin by a private paramilitary brigade hired by Ascendant Copper was particularly important in mobilizing a broad-based regional resistance. When unarmed community members from Junin mobilized to block road access for the brigade en route to the contested copper deposits, security men pepper-sprayed the gathered crowd and opened fire. This assault and the subsequent lawsuit filed by three Inteños against the mining company marked new domains in which the legitimacy of Intag's identity as a copper resource environment was challenged and contested. The assault itself represented the visceral physical domain, where Inteños blocked the roads to their lands with their bodies and where their bodies bore the brunt of the mining company asserting its power over the region and its resources. The lawsuit opened up a legal domain as yet another arena in which Intag's status as a copper resource environment was contested.¹⁶ The legal domain is connected to the "international media" domain, as the lawsuit got a lot of international press, and was of significant help in promoting international awareness about the situation in Intag. Through the lawsuit, communities in Intag have become affiliated with environmental and activist networks in North America. In addition to wire media coverage, Canadian filmmaker Malcolm Rogge has produced and directed a documentary about the struggle against Copper Mesa called *Bajos Suelos Ricos (Under Rich Earth)* (Rogge 2008) which has been shown at a variety of international film festivals. An Ecuadorian human rights organization produced a film called *In the Open Sky: Undermining Rights* (Alvarez n.d.). In response, Ecuacorrientes, a subsidiary of the Canadian mining company Corriente Resources, produced their own documentary, portraying the director of DECOIN, Carlos Zorilla, who has become the international public face of *la lucha*, in a negative light. The film disparages his manual entitled *Protecting Your Communities Against Mining Companies and Other Extractive Industries*.¹⁷

Discussion and Conclusion

What Now? Intag as a “National Resource Environment”

In this last section of the article, I attempt to place both the history and the “synchronic moment” of Intag’s metonymic materialities in national and global contexts, for as the different metonymic materialities gain symbolic footholds, the contours of such resource environments come in and out of focus in different configurations across such scales. An interesting, and in many ways difficult, aspect of the situation for the anti-mining resistance today is the stance of the Correa government, which, as a part of its agenda to reaffirm Ecuadorian sovereignty over its resources in the post-IMF era, is trying to recast Intag as a national rather than transnational resource environment. Since his election, Rafael Correa has paradoxically managed to successfully position himself as an “environmentalist” president in the global arena and a mining champion at the national level. Correa’s very public “hard stance” against the established oil sector in the country, historically dominated by Western companies, was augmented by the fact that in the new 2008 constitution, *Pachamama* (nature) was given inalienable and “legally enforceable” rights to “exist, flourish and evolve” (Charman 2008:131). This has given Correa valuable political capital, namely a solid international (and, at least initially, a national) image as a green, progressive, populist leader. One of the results of Correa’s political positioning has been the promotion of a national mining sector consisting of new mining concessions, backed by public funds, and holding the promise of prosperity “for the people.” If, in the past, the identity of Intag as an eco-agricultural resource environment clashed with claims made by, and for, transnational corporations and supported by a weak state assimilated to IMF and World Bank mandates, then today, this same identity is contested by a strong populist state consolidating its power by initiating national mining projects. In its new incarnation as a copper resource environment, Intag is also positioned as a *national* resource environment. This poses a challenge in Intag where the metonymic materiality of biodiverse forests fed by clean rivers relies on the international support of the global political left, because of Correa’s compounded political capital. The international support for his presidency is a part of widespread support for the new wave of progressive political leadership in South America, and a misrecognition of how “green” he is—since internationally, he is more famous for “standing up” to “Big Oil” than for promoting mining. But domestically,

Correa's *desarrollo* (development) model is grounded in the 2009 Mining Law, which, in addition to creating a national mining company, rolled back the safeguards required by the Environmental Management Law, allowed mining companies to prospect on private or community land without land-owners' permission, included provisions for "public utility" that would allow for expropriation by the state, and effectively criminalized "any disruption that prevents mining activities." Far from a formality, the last clause has already resulted in Ecuadorian anti-mining protesters being charged with sabotage and terrorism (Human Rights Watch 2012). Thus today, Inteños have to reckon with the prospect of national mining programs taking over the now-defunct Copper Mesa concessions. Last August, Quito's *El Hoy* newspaper reported on the new national mining push and mentioned that Ecuador's new national mining company, Enami, in a joint-venture with Chilean Codelco, is planning to open a copper mine in Junin (*El Hoy* 2010). As some members of DECOIN stated, "it is one thing to fight against a 'nasty' transnational mining company, and another to defend the social, economic and environmental rights enshrined in Ecuador's Constitution that are threatened by the very same state that is supposed to guarantee them" (Zorilla 2010).

What does this new national climate mean for anti-mining activism in Intag? For various circumstantial and symbolic reasons, the Intag case remains well outside the spotlight of the "iconic" political ecology struggle that has come to define Ecuador in global consciousness—the David versus Goliath narrative around the *Aguinda v. Texaco* lawsuit in eastern Ecuador, which distills to the trope beloved by Western environmentalists of Indian "tribes" versus American capitalists. In the eyes of the international left, Correa is hardly a villain on par with the Chevron Texaco corporation. Even though there is an indigenous constituency in Intag, it also remains on the margins of one of the more successful representational discourses to oppose resource extraction—the reframing of contested places as first and foremost "indigenous resource environments." The strategic value of this framework, unavailable to Inteños, lies in the fact that it positions contested places as repositories of "traditional" cultures idealized as "natural conservationists" and the last remaining sites of "pure" non-exploitative human-environmental relations. This framework also claims such places as "global" resources. As Brightman et al. write, "Amazonia is often portrayed as global property because of perceptions in the Western world of its environmental value as the 'lungs of the world'"

(2010:351). However, although the Intag activists—indigenous farmers and mestizo colonos alike—lack the “innate legitimacy” afforded by the world to indigenous “natural ecologists” and the publicity of what Sawyer (2004) called “the crude chronicles,” they continue to develop a praxis focused on a strong fusion of sustainable agriculture and conservation. This fusion is developed through agro-tourism, biodiverse farms, shade-grown coffee production (this form of coffee growth helps preserve the cloud forest), and an overall focus on sustainable, pesticide-free agriculture. In fact, a recent update in the DECOIN newsletter summarizes the framework and the arguments through which Intag is claimed to invoke not only an eco-agricultural resource environment but also the value regime of biodiversity and conservation, and related arguments for an ecology-based resource environment for Ecuador as a whole. In the view of the anti-mining activists and their many supporters in Intag, an ecologically intact Intag depends on a national shift away from mining, which DECOIN advocates through emphasizing the specific aspects of Ecuador’s unique materialities. The newsletter highlights biodiversity (“there are more orchids in tiny Ecuador than in Brazil”), pointing out that mining sites are located in exceptionally biodiverse and threatened areas that “harbor dozens of mammals, reptiles, amphibians, birds, and plants threatened by extinction” and that heavy metal contamination would render the flora and fauna of the water systems “toxic for centuries” (Zorilla 2010). The newsletter also notes that, “[i]t rains a lot in the mining areas where the copper is. Heavy rainfall and mining are sure-fire ingredients for a perpetual ecological nightmare” (Zorilla 2010).

Concluding Thoughts

As Erich Zimmerman (1933:15) wrote, “resources are not: they become.” To understand the case of Intag, it is important to consider it in a comparative and historical perspective. Doing so allows for an examination of how certain parts of the natural environment come to be what I call “metonymic materialities”—that is, culturally and politically categorized as carrying value in a national context—and how a specific range of new categories of value, connected to biodiversity and ecology, became associated with Ecuadorian geographies, topographies, and ecosystems. As a case study, Intag does not fit with the by-now iconic Ecuadorian narrative of foreign capitalist companies versus indigenous peoples in the last

untouched rainforests on the planet. Intag is a case study about colono farmers who for many years engaged in a state-sanctioned, unsustainable exploitation of a “frontier,” and who, despite developing ecological consciousness in response to transnational neoliberalism in the guise of foreign mining companies, are now engaged in a struggle with a national government perceived as progressive, populist, and “green” by much of the world. As colono farmers engage in a constant process of creating and diffusing knowledge about pesticides and shade-grown coffee, about provincial environmental legislation and community mobilization, their struggle changes the nature of their claims on the region, the region itself, their political identities, and ways of meaning-making.

The case of Intag is important precisely because it does not fit into the readily recognized narrative of the struggle between forces of capitalism and environmentalism in Ecuador. It shows that there is a plurality of environmentalisms and that the different actors in Ecuador (indigenous communities, migrant colonos, resource extraction companies, grassroots organizations, conservation NGOs, and the state) engage in the social and political processes of producing the value of resource environments and in negotiating the legitimacy of that value. Resource environments in Ecuador, including Intag, become sites where these economies can be studied simultaneously as processes of physical transformations (and sometimes deterritorialization) of the substances and the resources (whether fertile land, shade-grown coffee, clean water, rare species of moss, or subterranean copper deposits), and the process of the production of dominant and contested values.

In this article, I tried to demonstrate that the historical succession of material practices and symbolic narratives that co-constitute both natural resources and resource environments at any given moment do not always neatly fit into the conventional juxtaposition of corporate commodification and the kind of “organic” traditional environmentalism that is a part of the Western green primitivist fantasies about “pure” rainforests and the “ecologically noble savages” that inhabit them. Historical analysis can complicate and augment the trope of “environmentalism in developing nations,” even as it is overrepresented in the Western imagination (and media portrayals) of Ecuador. The goal of this article, then, was to illuminate Ecuadorian environmental narratives and negotiated resource environments located beyond the renowned oil patch and to show how, in the political ecology of the Ecuadorian past and present, the resource

materialities, social identities, and political positionalities mutually shape each other. The state attempted to produce and reproduce Intag as a series of resource environments in a top-down fashion, in accordance with its own national agendas and international dependence. However, at various junctures, the particular conflation of land, subsoil minerals, and biodiversity constrained or subverted the intentions of the state by inspiring political mobilizations, or attracting the attention of international environmental organizations. At the same time, those resource environments reshaped the politics and the praxis of its inhabitants who continue to renegotiate their relationship with the state through the medium of the copper-rich, biodiverse, agriculturally-centered resource environment they call home. But it was also to show that beyond the discursive battles of contested and competing resource environments, the processes by which material entities such as land, water, minerals, and plants gain meaning and value are taking place in the “patches of dirt” as well as in the semiotic fields where competing visions of “nature” and its value are articulated. The material and the symbolic realms mutually transform and themselves become transformed through their interactions. Attention to the differences in the physical world and the symbolic and political differences they engender can help theorize real-world processes of commodification and reification of nature in a way that is not “flattened” or dominated by their existence as commodities but is rather more in line with Dirlik’s (2001) “place-based thinking.” The struggles over metonymic materialities set in motion processes that are not only symbolic. The material substances that make up resource environments are systematically entangled. Processes that are rooted in the material possibilities of these resources are both politically contingent and physically transformative. In a “copper environment,” water is earmarked for mining, and diverted from agriculture. In fact, agricultural land, still fertile, is divested of its status as the region-defining resource. In an “agricultural environment,” a hierarchy of land was established based on its proximity to water. In an “environment of biodiversity,” the local unique flora itself is the resource which can be leveraged by locals in search of allies to help oppose mining projects. In this paradigm, water becomes valued not for its use in particular activities, whether extractive or agricultural, but as an integral part of an ecosystem. By tracing the succession of resource environments, this article demonstrates how materialities of a landscape became iconic and how the material and the political have been mutually transformative.

Competing frames of what, exactly, is valuable about Intag have transformed the physical landscape, whether by boring into the soil for samples, burning down the forest, strategically developing shade-grown coffee plantations, or reforestation. If the state vision for Intag comes to pass, the landscape will be transformed in radical new ways: mountain tops will be removed and give way to open mining pits; the flow of water will be disrupted and diverted through dams; and chemical byproducts will enter the groundwater, transforming both the soil and the flora. ■

Endnotes:

¹Ecological Defense and Conservation of Intag.

²The Toisan Consortium, named after the biodiverse Toisan Range, was founded in 2005; it is made up of ten of Intag's organizations, and supports sustainable projects by working with local groups.

³*Mestizo* farmers.

⁴Much of the international coverage about "environmental issues" in Ecuador is exclusively or partially focused on the oil conflicts, in comparison with the small amount of coverage dedicated to other industries that trigger environmental conflicts: mining, logging, palm oil plantations, etc. This established asymmetry is part of a broader issue of access to international epistemic communities and the visibility they have the power to confer; such visibility is a valuable and scarce commodity.

⁵Of course, the state is not a monolithic reified entity; it is comprised of different networks at different levels of governance. But, although there isn't just one "state project," for the purposes of this article, I talk about several phases that broadly characterize the relationship between Intag and the central government according to state priorities at given points in time. This discussion has to be read with the understanding that there are different scales and incarnations of state agencies that have not all positioned themselves vis-à-vis Intag (or within Intag) in a uniform way.

⁶Of course, "success" does not mean a singular, fixed outcome, perceived in the same way by all of the actors involved—rather, it means that although such representations always continue to be in dynamic interaction with each other, if not in downright conflict, certain representations emerge as place-identities, usually circulated through the media and the global epistemic communities.

⁷The "hotspot" registry was originally proposed by British environmentalist Norman Myers, and has since been operationalized by The Critical Ecosystem Partnership Fund.

⁸Large landed estates run on the labor of poor peasants without land titles of their own.

⁹It is important to note that although land tenure and water rights affected both mestizo and indigenous populations in the region, up until the 1990s, indigenous issues in Intag were encoded in discourses of class rather than ethnicity. See Pallares (2002) for an excellent analysis of this time period in Intag. This state of affairs differed from the heavily ethnicized model of indigenous organizing that was taking place in the Eastern provinces, and it was in this historical context that the production of Intag as a transnational, neoliberalized resource environment started.

¹⁰Interview with Robinson Guachagmira, Nangulvi, Intag, June 2010.

¹¹In January 2000, Ecuadorian *president* Jamil Mahuad announced the adoption of the US dollar as the country's legal tender—the move was unpopular, and Mahuad was ousted within weeks by a popular uprising. The dollarization remained in place, though.

¹²A town in Intag near the copper deposit area.

¹³Interview with Rosario Piedro, Junin, June 2010.

¹⁴Interview with Carlos Zorilla, Apuela, June 2010.

¹⁵In my analyses of politically strategic identities, I do not mean to imply a calculated shift on the part of Intefios, or to suggest that their position on the environment is somehow inauthentic—on the contrary, I agree with Kuecker's (2007) assessment that Intag is an example of organic "folk environmentalism"—but their new identity is also necessarily performative, as it has to be in the circumstances where they have to find international allies and draw the public's attention to the threat of environmental dispossession that they still experience.

¹⁶The transnational lawsuit, heard in an Ontario court, addressed issues beyond the use of violence by the security forces against Junin residents: the documented death threats and physical assaults against anti-mining activists in the region that were attributed to Copper Mesa's agents, the concerns over environmental degradation, and the fears of the negative social impacts and "loss of livelihood" anticipated to be the result of the exploitation of "the large copper reserve thought to be located underneath Junin" (*Ramírez v. Copper Mesa* Statement of Claim, 8. Accessed from <http://www.ramirezversuscoppermesa.com/statement-of-claim.pdf> on Dec 15, 2013).

¹⁷Available from <http://www.culturalsurvival.org/news/united-states/protecting-your-community-0>.

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Land, Copper, Flora: Dominant Materialities and the Making of Ecuadorian Resource Environments

[**Keywords:** Ecuador, environmental movements, mining, materialities, resource environments]

Tierra, Cobre, Flora: Materialidades dominantes y la fabricación de los ambientes de recursos en Ecuador

[**Palabras clave:** Ecuador, los movimientos ambientales, minería, materialidades, entornos de recursos]

Terra, Cobre, Flora: Materialidades Dominantes e a Construção de Ambientes Equatorianos com Recursos

[**Palavras-chave:** Equador, movimentos ambientais, mineração, materialidades, ambientes com recursos]

土地、銅、植物：主要物质资源以及厄瓜多尔资源环境的形成基础

关键词：厄瓜多尔，环保运动，采矿，物质资源，资源环境

Земля, медь, флора: Преобладающие материальности и создание месторождений в Эквадоре

[**Ключевые слова:** Эквадор, экологические движения, горное дело, материальности, месторождения природных ресурсов]

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كلمات البحث: إكوادور، حركات بيئية، التعدين، المواد، مصادر البيئة

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