

MAKING THE RURAL URBAN: INTER-CLASS DYNAMICS TO PROTECT THE
ENVIRONMENT IN THE COLOMBIAN COUNTRYSIDE

by

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A dissertation submitted to the Graduate Faculty in Sociology in partial fulfillment of the requirements
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This manuscript has been read and accepted for the Graduate Faculty in Sociology in satisfaction
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ABSTRACT

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For the past thirty years, the small rural town of La Calera in the outskirts of the Colombian capital of Bogotá has received an influx of upper-middle class residents that want to live “in nature.” These ex-urban newcomers arrived to the Andean highlands to live next to the long-time residents, who are descendants of peasants and mining workers that live “off nature.” The different visions of what nature or its uses should be create a series of interactions among residents that will decide the future of this area’s ecological resources in the face of further urban expansion.

Yet, contrary to other gentrification cases, including those of “green” gentrification, this dissertation shows how newcomers and longtimers in La Calera use environmental concerns to bridge social class rifts and demand the state to provide different services. Residents see abundant ecological resources like water and land around them, but they do not have access to aqueducts, green public space or power over planning decisions affecting the distribution of these resources. As a response, newcomers and longtimers create *inter-class alliances* through what I call *third nature*, or how they

want to both protect and keep using existing ecological goods by intervening in the physical and political landscapes against a state that *induces scarcity* by selectively enforcing environmental policies to the detriment of Calerunos.

Residents interact in four key sites to create third nature. First, they negotiate how to use natural resources to sustain peasants' livelihoods while at the same time maintaining "green" aesthetics and practices. Past these potential disputes, newcomers and longtimers build community aqueducts to obtain water from the surrounding *páramo* ecosystems as the second site of interactions. Third, Calerunos shared a common goal in demanding they enjoy the ecological and economic benefits of a new "eco-park" project that would mostly benefit visitors from elsewhere. Finally, residents actively critiqued the planning policies in participatory meetings about the incoming zoning plan in La Calera to halt further urban growth.

As cities all around the global South continue to grow, urban expansion posits a threat to the environment by transforming agricultural and protected areas into denser residential spaces. Moreover, as natural resources become more scarce in the face of climate change, inequality might further existing environmental privileges. La Calera is the opposite case: despite high class inequality, residents aim to protect ecological resources around them. By examining closely how Calerunos do that, this dissertation opens the door to see similar processes in rural-urban areas elsewhere.

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CHAPTER ONE - Urbanizing the Mountains

More than a physical border, the high Andean mountains dividing the Colombian capital of Bogotá and the rural town of La Calera act like a mental border between the city and nature. From the capital, these dark green mountains, home to the high-Andean ecosystems, look like a city dweller's vision of "pristine" nature with little evidence of human intervention. From the other side, however, the layer of thick forest only covers the mountaintops, and shifting the gaze a few meters below reveals dense woods giving way to large pastures, agricultural fields and, most strikingly, houses (see figs. 1.1 and 1.2). While some look like traditional peasant houses of the area—a single floor, adobe walls, tile roofs, small windows, fences made of barbed wire—others signal the presence of a very different social class—property owners who prefer two floors, cement walls, waterproof roofs, large windows, and "live fences" with trimmed *eugenia* plants and pine trees. The co-presence of these different architectural styles reflects an uncommonly mixed residential landscape, one that is hard to find in Latin America, especially in Colombia, where social classes tend to live apart from each other, in separate areas of the same district or town.

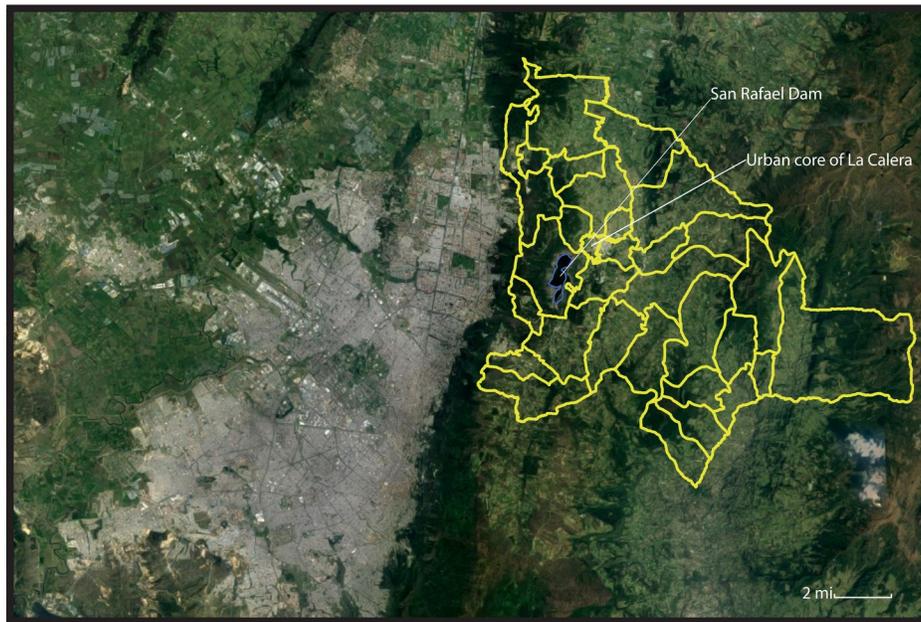


Figure 1.1. Bogotá's urban footprint (left, in gray) and La Calera's rural district boundaries (right, in yellow), divided by the Andes (the dark green stripe in the middle). Map made by the author based on Google Maps (2018).



Figure 1.2. An overview of rural La Calera, showing the Andean forest on mountain tops along with agricultural and residential uses of the valley. Bogotá is behind the mountains to the right. Photo by the author, June 2019.

Latin America is the most urbanized region in the world, with more than 70% of its population living in cities (UN Habitat 2012; 2016). Colombia's urban population is even higher at about 80%, after decades of rural-to-urban migration from people looking for better job opportunities and life conditions, and as refugees from its long-standing civil war. However, a small but growing, opposite trend of urban-to-rural migration is changing the subcontinent's landscape, and the town of La Calera is one of those places that is being transformed by this new migration. Turning nature reserves and agricultural land to residential use poses a particular challenge in the face of climate change, where land, water and other ecological resources are crucial in mitigation strategies.

Moreover, this transformation also brings questions about environmental justice. The difference you see between traditional peasant houses and villa-like new homes represents a socio-economically mixed landscape where diverse visions of nature and the countryside overlap. These visions play out in material constructions and political scenarios, which affect how land and water are developed, turn decision-making processes complex, and influence land use change. In particular, these effects are experienced in places with high ecological value like the Andes where people from different classes now live next to each other.

Former urban dwellers move to La Calera to live in "nature," to re-create their urban lives in green spaces but away from the city's toxic pollution. They are mostly upper and upper-middle class, building their houses in the areas closer to the city for commuting and believing they can do this

without compromising the “green” surroundings. In this they are like colonial explorers who believe they have found “wilderness” and like urban gentrifiers who move into a neighborhood for its authenticity, but in this case the authenticity is the ecological landscape.

These urban-to-rural newcomers arrive to a place that was already populated. Their longtimer neighbors are peasants and descendants of mine workers who have called this side of the mountain home for generations. The longtimers use nature to extract value from agriculture or tourism; they live *off* nature. Newcomers, however, extract value from the aesthetics of nature; they live *in* nature.. Someone with an affinity for political ecology would see potential conflict between the different uses of nature that each group prefers—newcomers focusing on consuming nature, while longtimers are more interested in using it for production. At the same time, a person familiar with gentrification would also see signals of contention: a higher social class moving into a previously lower-class area, with effects on land markets, possible displacement, and conflict between neighbors. The basic issue is how environmental privileges are distributed, who uses them and how, and who decides that. In La Calera, more than deciding who gets to bear the environmental ills of this process, the question is who gets to keep the environmental goods and for what.

Yet what I found after spending many months in La Calera was not a story of conflict but a story of consensus. Longtimers and newcomers use environmental arguments to prevent further residential development, and they demand that the state enforce environmental policies. Newcomers and

longtimers alike want clean water, protected green landscapes, and decision-making power in environmental and urban planning discussions. Despite class differences, surface tensions, and the different ways in which they see nature, newcomers and longtimers have developed a deep network of interactions and coalitions to protect the environment and fight against a common enemy: the state. But the state has many faces, and it would be simplistic to paint it as the villain of the story. It acts both as a guardian of the environment—through laws protecting ecosystems—and as a predator—by granting building licenses to large-scale industries and housing complexes in the areas it should protect. Facing this duplicity, residents from both groups join together in different situations to *demand* that the state enforce existing environmental policies and satisfy their needs for basic infrastructure and public green space. Residents neither develop private solutions nor withdraw from politics. Instead, they demand power to make official plans that would halt further urban growth. They use their environmental and ecological concerns as a vehicle for forging consensus in the face of a state that has strong environmental regulations and weak enforcement mechanisms.

La Calera's position in a peri-urban location is a good indicator of the socio-environmental effects of changing former agricultural and protected land into urban uses, especially in the face of climate change. Following social scientist Roger Keil's (2018) call for diversifying what we understand by these peri-urban spatial configurations, I see a great need to define a new way of observing and describing Latin American urban peripheries. Most studies about the region's city peripheries have focused on

development of informal settlements established by people coming *from* the countryside without jobs or capital. These settlements suffer from lack of infrastructure and high stigma, and squatters develop strong relationships with political parties regarding slum clearance or regulation (see i.e. Álvarez Rivadulla and Bocarejo 2014; Murphy 2015; Arboleda 2016; Álvarez Rivadulla 2017). However, La Calera and an increasing number of towns across the region are not at all squatter settlements. Towns and villages in other parts of Latin America and throughout the global South show that peri-urban areas are diverse and complex. Socially, they may combine different classes, and economically, they might combine agricultural, industrial, and residential uses (Ren Forthcoming; Cowan 2019; Vij et al. 2018; Heinrichs and Nuissl 2013; Gonçalves and Pilo 2017; Colombijn and Kusno 2017). La Calera's combination of social classes and land uses suggests a more varied urbanization of the Latin American countryside that calls for closer study.

Some scholars of Latin America call this process “rururbanization” (Barros 1999; Bayón Jiménez 2016; González-Domínguez, Thomé-Ortiz, and Osorio-González 2018; Nates Cruz and Velásquez López 2019; Sánchez-Torres 2018), emphasizing the in-between character of this urban expansion. For them, the growing urbanization of the countryside triggered by migration of upper-middle classes embodies a process that simultaneously can assume many forms, including suburbanization—in its geographical scale—and, more importantly, rural gentrification—in its class differences. Earlier research highlights social class, separation, and exclusion: better-off newcomers can use their social,

cultural and economic capital to develop infrastructure like clean water pipes for themselves, and not always share it with the longtimer population. Researchers also see the influence of large capital in building large-scale social housing complexes to the detriment of agricultural uses. But La Calera is different. What I found there adds a missing piece to our understanding of urban to rural migration. What in other places are sources of conflict, here become opportunities for inter-class coalitions and environmental consensus. In La Calera, the two residential groups join together in participation in community meetings, building and maintaining environmental infrastructure, and taking legal actions—to demand that the state provide services needed by both of them. These shared goals enable these groups to work together against the state.

This dissertation shows how residents of La Calera use the goal of protecting the ecosystem and the landscape both materially and symbolically, as a common ground to make demands on the state without the mediation of political parties or ideological manifestos. I examine how neighbors interact with each other and with the state to negotiate a common understanding of the environment, how that negotiation is helped when the state frames natural resources as scarce despite their abundant availability, and what a rural town in Colombia can suggest about the opportunities to make more equal relationships in unequal spaces.

Nature Is Your Neighbor

For the past thirty years, La Calera has received an influx of upper and upper-middle class residents, nearly all of whom move from Bogotá, the capital and largest city in Colombia. Most of them are looking for “nature.” This quest is commodified by housing developers and land sellers, and is best represented by a billboard on the main road connecting the Colombian capital with the town (see fig. 1.3). The ad for a new gated community shows a picture of a yellow bird, and states, “A new neighbor welcomes you—your neighbor, nature.” The promise of this elite housing development selling country houses and land plots is that home buyers will be able to live removed from the city, in green mountains, with houses surrounded by a domesticated, pristine, and neighborly “nature.” New residents will enjoy birdsongs, clean air, and beautiful Andean landscapes that could become an oasis away from the city life—representing a South American highland version of what geographer Neil Smith (2008) called a “bourgeois ideology of nature.” And with it, they will find a sense of calm and quiet that only exists outside the city.



Figure 1.3. A billboard on the road of La Calera. Photo taken by the author, 2016.

Land use in La Calera reflects that idea of a pristine nature. About two-thirds of La Calera's mountainous territory are rural (64%) and a third consists of protected land such as nature reserves and other conservation areas (35%). Officially designated "urban" land—the town proper—amounts to less than 1% of the municipality's area (0.98%). Most newcomers have built their houses in that vast expanse of rural land, where they expect to feel close to the nature being sold by the billboard. Because of this urban-to-rural migration, the number of people who arrived from Bogotá in the previous five years more than doubled from 894 in 2005 to 2,010 in 2018—an increase from 7.3% to 14.4% of La

Calera's total population.

But what the billboard from that gated community ignores is that there were already *long-time* neighbors in the municipality. The residential population was mostly comprised of peasants and former workers of a cement company that extracted the area's rich limestone deposits. These longtimers had lived in the area for generations, and they owned most of the rural land of La Calera. Along with the birds, they would be the *other* neighbors of the newcomers, but they were not advertised as such by the property developers who put up the billboard.

The distinction between these groups is not only about length of residence in La Calera, but also entails a class difference. Although there is no representative survey in Colombia that asks for income or occupation in this area, the census includes educational attainment—which is a good class proxy, especially in a country as unequal as Colombia.¹ According to table 1.1, in 2005, 70% of people 18 or more years of age living in rural areas of La Calera had completed high-school or less, compared to 18% who had a university degree or higher. These figures shifted considerably by 2018, when only about half of the population (52%) was in the first group and the college education rate almost doubled (34%). These shifts could be the result of better education coverage across the board, but the more highly educated population in 2018 really speaks to the increase in upper-middle class newcomers that have moved to La Calera in recent years. This polarized population composition is familiar in urban

¹ According to the World Bank (2020), Colombia's Gini index is 50.4, placing it as the 16th most unequal country in the world.

neighborhoods undergoing gentrification.

Table 1.1. Percentage of the Population 18 Years or Older Living in Rural Areas by Educational Attainment. La Calera,

2005-2018

	2005	2018
High School or Less	70%	52%
BA or Higher	18%	34%

Source: Author’s calculations based on DANE (2005, 2018).

But unlike claims about a neighborhood’s cultural authenticity that are at the core of many urban gentrification narratives (Zukin 2010), La Calera exemplifies rural gentrification where claims about “authentic” nature become a key motivator for struggles over space. While “nature” can be defined for longtimers in terms of production—as a source of income derived from agriculture and cattle raising—newcomers define nature in terms of consumption: they are attracted to La Calera for its aesthetic values. In urban areas, the use of “green” discourses are aimed at recovering previously polluted or neutral areas, where the state and private do cleanups, build parks and give way to upscale housing apartment buildings that trigger gentrification (Gould and Lewis 2016). Most of these transformations pit “environmentally conscious” newcomers against “environmentally careless” longtimers, but in few cases, both populations can find a common ground to recover green spaces *and* avoid longtimers’ displacement (W. Curran and Hamilton 2017). Little is known about how these processes occur in rural areas; in La Calera, longtimers and newcomers come together to preserve nature and improve life

conditions for everyone *against* a third actor: the state.

Residents have created consensus over key issues that will affect La Calera in years to come. Over the course of my fieldwork, there were four key political events: two elections (one for president and senate, and one for mayor and city council), the beginning of a mega-project to build a park four times larger than the largest park in Bogotá, and the mandated participatory process to determine the new zoning plan for the municipality. These four highly contentious political arenas featured battles not among the two groups of residents, but rather between them and the national and local governments. I observed consensus and cooperation develop between residents as they demanded the state to prevent further urbanization and enforce environmental policy. This development suggests dynamic possibilities for new relationships between different actors who want to preserve the natural environment in gentrifying rural areas that are growing in Latin America and in other parts of the world.

Urban-Rural Continuums in Latin America

La Calera shows how concerns about environmental inequalities can bring people in contrasting class positions together in a context of growing rural gentrification. In Colombia, additionally, rural areas have been reshaped by the civil war. The war hit rural areas hardest and this triggered even more

rural-to-urban migration for people violently displaced from their homes. In this context, the unexpected move from the cities to the countryside is especially striking. With it, cities expand and add former agricultural areas in spaces that are not fully urban nor fully rural.

A variety of peri-urban developments in Latin America question the boundaries between ideal types of *urban* and *rural* as a result of the urban spillover into rural hinterland. For this reason, it is important to understand these geographical spaces not as distinct entities but rather as stages in a single process of urbanization, as is explained by sociologists, geographers, and anthropologists (Redfield 1989; Harvey 2014; Lefebvre 2014; Brenner 2014; Keil 2018; A. J. Scott and Storper 2014; Storper and Scott 2016). Three research currents try to go beyond the dichotomy of the urban and the rural and address the spillover of cities into previously “rural-only” areas: (i) Latin American scholars working on the emerging concept of “rururbanization;” (ii) suburbanization studies; and (iii) small but substantive discussions about rural areas in gentrification studies.

In all three processes—rururbanization, suburbanization, and rural gentrification—the new spaces are shaped by newcomers encountering nature. First, they are motivated to live “in nature.” They see the city as a place with virtually none of it. This antinomy follows a binary tradition, certainly in sociology, of thinking about urban and rural societies and spaces as fundamentally different, even opposites. Because of rapid city growth in the nineteenth century in Europe, where most classical sociological theory was written, these thinkers were concerned with explaining radical differences in

social behavior and cultural norms. Perhaps the most well-known of these ideas are Émile Durkheim's (1984) distinction between mechanical and organic solidarity, and Ferdinand Tönnies' (1963) characterization of *Gemeinschaft* (community) and *Gesellschaft* (society). In essence, these thinkers' schemes aimed at putting urban and rural societies at opposite extremes in terms of the emotional and support ties between members of a group, their identities, and their ways of life. These distinctions were translated into space, where *city* life is opposed to *rural* life, and even in popular tales like Aesop's fable *The Town Mouse and the Country Mouse* (Jacobs 1894).

Because of the violent separation between traditional rural solidarities and new urban industrial forms of life and work, many societies around the world have formed a romanticization of nature. Cities are where cement, roads, buildings, and pollution are located, while the countryside is where the “green” resides—pastures, forests, agriculture fields, clean air. This contrasts with the view, especially in Latin America, that cities are better than the countryside, and the antinomy of civilization and barbarism is seen in spatial terms: cities are where modernization happens and where people should go to abandon a backward rural life (Almandoz 2018). This dichotomous view is even more extreme in China (Jaros 2019; Willis 2020)

However, urban political ecology and other critical currents in sociology, geography and anthropology have consistently questioned this dichotomy (Swyngedouw and Heynen 2003; Heynen, Kaika, and Swyngedouw 2006), arguing that cities are not devoid of nature, but that it rather takes

many shapes. Parks (Newman 2015), pigeons (Jerolmack 2013), and water pipes sourcing aqueducts and sewage systems (Gandy 2014) are all types of nature that exist in cities in the U.S. and Europe but that, for one reason or another, are ignored or vilified as unclean.

Southern, and particularly Latin American, peri-urban areas have often been characterized as unclean because they have been mainly slum settlements (Alsayyad 1993; Audirac et al. 2012; Arboleda 2016). Because of the dynamics of urbanization in the sub-continent, which concentrates resources in the city centers, peripheries have been mostly populated by poorer migrants from the countryside, creating opportunities for squatting (Álvarez Rivadulla 2017) and other types of informality in land tenure, relationships with government programs, and infrastructure (Fischer, McCann, and Auyero 2014). Peripheries are also disadvantaged in environmental terms, with toxic waste, high environmental risk, and poverty, as sociologists Javier Auyero and Débora A. Swistun (2009) showed for Buenos Aires and that others have found for Bogotá as well (Zeiderman 2016).

But now, Latin American scholars are studying what happens in the rapid urbanization of the countryside by higher-class participants in urban-to-rural migration (Barros 1999; Arias 2002; Cabrera Montúfar 2012; Pallarès-Blanch, Prados Velasco, and Tulla Pujol 2014; Tulla et al. 2017; Olvera Aguilar 2018). Because newcomers arrive in an area populated mostly by peasants, these scholars study the effects on the interactions between them. For example, in rural Tigre, near Buenos Aires, human rights lawyer Pétalla Timo (2017) found that upper-middle class newcomers benefited from better

environmental goods and infrastructure compared to poor longtimers. In other parts of Colombia, higher-class new residents benefited from an infrastructure network expansion while longtime residents did not (Nates Cruz and Velásquez López 2019; Cardoso and Acosta Nates 2020). This recalls the effects of urban gentrification, including “green” gentrification by researchers in different parts of the world (Gould and Lewis 2016; W. Curran and Hamilton 2017; Anguelovski et al. 2019; Dooling 2009; Checker 2011; Rigolon and Németh 2019).

Another approach comes from the long tradition of suburbanization studies. In the global North, early migrations away from the city started around the late nineteenth century—when cities were also growing—and were made mostly by elites who wanted to obtain a “triple dream,” as historian Dolores Hayden (2003) calls it: a house, a yard, and a community. The biggest migration from cities to suburbs in North America was in the mid-twentieth century after World War II with strong support from state programs for housing and highway construction, as well as government-backed mortgage loans to veterans (Jackson 1985; Fishman 1987; Gans 1967). This movement was originally exclusively thought of as “white flight” to the suburbs but was somewhat more diverse in terms of race, as clarified by sociologist Gregory Smithsimon (2012). A large part of suburban residents’ motivation was to get closer to nature and to enjoy an idyllic life away from pollution—a motivation that has recently emerged in other parts of the world as well, as in Mexico and Brazil (Herzog 2014), South Africa or Indonesia (Keil 2013). To be sure, and again as Keil’s work reminds us, not every urban periphery is a

wealthy enclave—like the French *banlieue* would readily show (R. Harris and Vorms 2017; Topalov 2017)—, but getting back to nature is a major driver for contemporary suburbanization processes in many countries.

Urbanizing rural spaces like La Calera present a complicated picture with elements of both suburbanization modeled on the global North and rural gentrification.

Like its urban counterpart, rural gentrification also has at its core a class-based appropriation of space. In its simplest terms, this process involves the replacement of a lower-class population by a higher-class group (Clark 2005). Gentrification has consequences in material conditions, such as a rise in land value, as well as consumption patterns, exemplified by the replacement of traditional shops to a new retail ecosystem catering to the tastes of the new population (Zukin, Kasinitz, and Chen 2016; Tissot 2011; Smith 1987; 1979). Despite significant differences in spatial contexts and social consequences (Lees, Shin, and López 2015), the actors are always similar: two (or more) groups of residents, real estate developers, and state authorities foster or enact favorable policies to the higher social class. In “Latin American gentrifications” (López-Morales, Shin, and Lees 2016), the state plays a key part because it imposes, sometimes violently, “urban renewal” policies aligned with private capital and new residents’ interests or the expectations of tourists and foreign investors instead of long-time residents’ needs and wants (Janoschka and Sequera 2016; Janoschka, Sequera, and Salinas 2014; Lederman 2020).

The rural idyll of green space and tranquility (Phillips 1993) that motivates urbanites to move into far-off areas in the countryside has similar effects to urban gentrification: an increase in land prices, a change in residents' consumption tastes, and struggles over defining the future of the space between a newcomer population and the long-time residents (Ghose 2013; Mamonova and Sutherland 2015). Most rural gentrification studies have focused on global North countries where the class disparities are not so stark between the incoming middle class and the existing farmer middle class in these areas (Phillips 1993; 2002; Bell 1995; Cloke and Thrift 1987). In addition, the economic differences between farmers and wealthy newcomers may also be hidden by cultural, racial, or ethnic commonalities. However, rural areas in Latin America are significantly different.

First, rural areas in Latin America are very poor, with peasants being among the lowest positions in the class spectrum (Portes and Hoffman 2003). In Colombia, 91.2% of the rural population lives in, or at risk of, poverty (DANE 2020). This difference is important because it crystallizes the already highly unequal class relationships in the region, which in Colombia are both stark and tolerated without much reflection, as sociologist María José Álvarez-Rivadulla shows (2014). Having a heterogeneous class composition in a single space is unusual in the subcontinent, which makes studying rural gentrification here even more interesting.

Second, there is an important scalar distinction between rural areas in the North and in the South. Although global South cities had a significantly rapid growth in the twentieth century and most of the

population lives in them, peri-urban areas—including the countryside—are not as distant from the urban core as in the global North. This point is important because gentrifying rural areas in the global South are not as geographically remote as their Northern counterparts, which creates sites to study the complexity of the “rururban.” The remote location of rural and pristine nature in the North is also the result of a longer process of suburbanization that expanded the city borders.

In sum, these three processes of urbanization of the countryside described by other scholars—rururbanization, suburbanization, rural gentrification—are overlapping in La Calera. This project focuses on the *effects* of that overlap of categories, spaces, and actors, in contested arenas to appropriate nature.

Urbanization and Third Nature

Nature is the key that binds all the actors—longtimers, newcomers, the state, private developers—together in La Calera. It is what sustains longtimers’ livelihoods through agriculture and cattle raising; it is the prime motivator for newcomers to move there; and it is what the state regulates, protects, and allows people to exploit. Yet, as these different uses and contexts show, nature has multiple meanings and can be used by the actors in various ways, including as mechanisms for new, unexpected collaboration. Therefore, it is important to conceptualize the roles nature can take under urbanization

processes.

As I mentioned before, the opposition between the rural as “natural” and the city as the antithesis of nature is naïve. Urbanization, in the view of historian William B. Cronon (1991), creates *layers* of nature. For him, “first nature” is what the ecosystem is like in a place—the rivers, mountains, fauna, flora, climate. These are an area’s available resources that can be useful for people in many different, especially productive, ways. When humans arrive there, they build “second nature” interventions to take advantage of those natural resources for both human habitat and capital gains. People reshape first nature through dams, for example, to channel existing waterways for transporting goods by boat or to create water sources for home consumption. Cronon’s example is the U.S. city of Chicago, which was developed in a prairie that could connect goods and money easily through railways to other parts of the country and the world. The rich soils for agriculture and existing bodies of water in that area (first nature) were good for extracting financial value. But since these ecosystems could develop problems from seasonal changes, humans built a second nature on top of them—including canal systems and railroads—to keep and raise that economic value.

First nature in La Calera is abundant with water and soil resources, which has been the main source for longtimers’ livelihoods dating back to colonial times. People in the area used to exploit charcoal and lumber to sell in Bogotá up until the early twentieth century; later, the limestone deposits were the main source of resource exploitation and revenue for La Calera’s inhabitants. Second nature

interventions included the roads to transport the goods as well as a cable car system to transport them to the capital, but there were few large-scale infrastructure interventions to improve residents' quality of life.

This extractive use associated with longtimers is based on the idea that cities require natural resources from their hinterland, as John B. Foster (1999) noted when speaking of the "ecological rift." Borrowing from Karl Marx's idea of metabolic rift, Foster argues that cities deplete resources from their rural hinterland, creating a cycle where the former can continue to grow and the latter becomes even more exploited. In Latin America, the rapid pace of urbanization has been coupled with two macro-processes that created a specific model of resource extraction from the countryside. On the one hand, there is a high concentration of rural land ownership, which creates a strong system of inequality in rural areas and puts peasants in one of the lowest positions in the class scheme (Portes and Hoffman 2003). On the other hand, the region also became a kind of global pantry, where the largest economic activities in rural areas are agriculture and mineral resource extraction exporting natural resources to countries in the global North (McMichael 2012).

The relationship between resource extraction, economic growth, and the different actors involved in these processes is better understood borrowing the concept of the "treadmill of production" (TOP) used by sociologists like Kenneth Gould, Allan Schnaiberg, and others in environmental sociology (Schnaiberg 1980; Gould, Pellow, and Schnaiberg 2008). Like Cronon's layers of nature, this theory

argues that natural resources are exploited by humans for capital gains. And, like Foster's idea of the ecological rift, the TOP highlights that the over-exploitation of those resources for economic growth will entail further depletion of ecological "goods" and create ecological "bads" in a constant cycle. What this theory adds, though, is the state's role in this process, which can act as an enabler of further exploitation without limits, a manager of resources, or as a protector of the environment. The treadmill conjures the image of a feedback loop where extracting ecological resources will lead to more depletion and further exploitation, all in the name of economic growth—in other words, using and further expanding second nature interventions to use first nature resources.

However, with processes such as the settlement of urban newcomers in La Calera, parts of the countryside in Latin America are becoming more profitable for housing development than for the previous agricultural and mining activities. This type of development is also tied to exploiting "nature"—in the forms of green space for landscapes and clean air—but for consumption rather than extraction (Bosworth and Bat Finke 2020). It is important, therefore, to keep an abundance of nature in place to maximize financial gains from land development. This is the same logic as in eco-tourism and conservation programs like REDD+ that aim to protect resource-rich land from further economic exploitation (Ojeda 2012; Rocheleau 2015; see e.g. Fairhead, Leach, and Scoones 2012). Here, first nature becomes valuable as a place to live and, in turn, is modified by second nature interventions made by and for newcomers. More than a treadmill of production, there is a "treadmill of

consumption” (Wright 2004; Zehr 2015; D. Curran 2017), where the resources exploited do not necessarily put natural resources at risk but rather create environmental inequalities that enable wealthier people to enjoy the goods while leaving others to deal with the bads.



Figure 1.4. A graffiti in urban La Calera depicting the overlap of first and second natures to create third nature. Photo by the author, March 2018.

In the case of La Calera, newcomers want to enjoy a first nature landscape with second nature comforts while longtimers need first nature resources to sustain their livelihoods. The social

relationships that form around this tension between uses and values is best understood as a “third nature.” On the one hand, newcomers want to preserve pristine nature but they do not want to return to a “rough” first nature in the area—a place without roads or pipes. On the other hand, longtimers still grow crops and raise cattle, but they are also concerned with environmental regulations that might prevent them from earning a living. These positions are halfway points that create a third nature, where different layers of nature can coexist, overlap, or change at the same time (see fig. 1.4).

Other scholars have used “third nature” to talk about these simultaneous layers. On the one hand, researchers in geography use this term to refer to conservation efforts that try to maintain an area’s first nature layer through human intervention like laws or regulations—for example, nature reserves (Hughes 2005; Brooks et al. 2011). On the other hand, as anthropologist Anna Tsing (2015) suggests, creating third nature is a more complex process because humans and non-humans continuously shape and interact with each other. She shows how human intervention in growing and consuming mushrooms has ecological consequences that create problems that must be resolved by more intervention to keep growing and consuming, creating a repeating cycle: a treadmill of production. This conception opens a space for understanding the relationship between humans and the environment as a more interactive one; instead of being a passive repository for human intervention through extraction or protection of resources, nature acquires a more active role.

I use the idea of third nature to understand how the environment and people in La Calera form an

active and reciprocal relationship. Instead of a linear and chronological process, human intervention (second nature) coexists more explicitly with the environment (first nature) in different contexts. Third nature, in turn, encapsulates the way people's ideas of nature affect the landscape and viceversa. It is through third nature that residents frame their demands to the state as an issue of environmental justice, especially when the state both protects and extracts natural resources.

Scarcity in Abundance

According to many Latin American laws enacted throughout the second half of the twentieth century, the state is the sole authority that owns, manages and distributes natural resources in its territory (Lamprea Montealegre 2019). This legal foundation enables the state to grant exploitation licenses for minerals, protect areas from ecological degradation through nature reserves and parks, and create restrictions to land tenure and building regulations for environmental reasons. But when these laws are applied to specific spaces, the issue of who owns what part of nature and for what purpose turns more complex.

The treadmill of production theory describes the state's environmental protections under a logic of capitalist extraction of financial value as a "managed scarcity synthesis"—an example is sustainable development. Under this arrangement, the state continues to pursue economic growth at the cost of

environmental degradation, but tries to regulate some of the negative effects of development through laws and other mechanisms. This model is different from an “ecological synthesis” where major limitations to resource extraction are put in place despite potentially halting economic development; such an arrangement is enshrined in projects like *suma kawsay* (*buen vivir* or good living) of indigenous groups in Ecuador (Lewis 2016), as well as in Colombia and Brazil (Rodríguez Garavito and Baquero Díaz 2020).

In La Calera, residents see abundant ecological resources all around them, but the state’s regulations and its management of those resources—either for economic or ecological reasons—create an artificial scarcity, a “scarcity in abundance,” for newcomers and longtimers alike. State regulations prevent residents from enjoying access to clean water and green space that surround them “in nature” while enabling capitalists, often in collaboration with the state, to extract financial value from them. A clear example of this is water infrastructure: although La Calera is located in a *páramo* ecosystem (Guhl 1995)—a key component of the water production cycle in the country—the state does not provide enough pipelines and pumps to bring clean drinking water to every household. Moreover, the state contracts with private or public-private enterprises to sell clean water to the residents. Meanwhile, the Coca-Cola has a license to exploit some of the watersheds in this area for the bottled water brand that they sell in the town and across the country. In other words, despite an abundance of clean water in La Calera, the state induces scarcity by refusing private households and individuals access to it and

forcing them to buy it from a transnational corporation that holds a state license.

In terms of land, the state-induced scarcity comes from the shifting of zoning laws to accommodate a mega-project development that will also benefit the state and its favored private-sector partners. Through various regulations, the state designated certain plots of land in and around La Calera as nature reserves—meaning that there cannot be any built intervention in them—which prevented land development in the area. But the state maintained the transnational Cemex company's cement storage facilities in an area where industrial uses are prohibited according to current zoning laws and environmental regulations. Then, the state used that protected land to build parks and water reservoirs for residents living outside La Calera, inducing another form of scarcity in abundance, in terms of what land can be developed, for what purposes, and for whose benefit.

As both the protector of nature and the driver of scarcity in La Calera, the state is a key actor in local politics. Given the ecological importance of the region, about a third of the whole municipality's area was declared a nature reserve through legal mechanisms like the Chingaza Natinal Natural Park in 1977 and organisms like the Corporación Autónoma Regional in 1993 (CAR in Spanish, similar to the Environmental Protection Agency in the United States). Yet, with the approval and assistance of the state, big capital continues to extract resources through Cemex, Coca-Cola, and other private companies. For residential purposes, the management of scarcity has been more fragmented. There have been some private developers building gated communities, but the bulk of newcomers moving

into La Calera are people who buy individual land plots from longtimers and build their own houses.

Because of this residential development and the ecological scarcity induced by the state, population growth in La Calera has put pressure on available resources and created a paradox of growth. Newcomers want to enjoy clean and drinkable tap water from the area's reservoirs, but they are forced to hook into longtimers' networks, which are not of the highest quality and have no state support for water treatment. A similar paradox occurs with land, when newcomers and longtimers alike see abundant land all around them, but face restrictions on building permits because of ecological reasons. The increase in wealthier residents also poses a paradox of growth for safety reasons: they have built houses to enjoy the calm of the countryside but now, because there are more roads and richer houses, there are more burglaries and more need for police protection.

Because of these pressures, newcomers and longtimers could resort to either competition or collaboration. La Calera shows that the latter route can be taken despite different class positions because residents share similar goals (clean water, green space, safety) and face a common obstacle (the state). Studying the relationships that newcomers and longtimers create suggests that environmental issues can bridge class divides when facing an unresponsive state. Third nature is useful to understand these relationships, especially while taking into account "whose nature" and "whose culture"—to borrow geographer Cindi Katz's (1998) words—is imposed, discussed, or discarded. In La Calera, neither residential group has a monopoly of either first or second nature, but third nature makes it

possible for them to collaborate despite their different class positions. But the power differentials between both residential groups give way to different environmental privileges that I examine in the following section.

Environmental Privileges and Inter-Class Relationships

Nature is not a neutral word; different actors fill it with different contents depending on class, race, power, and other characteristics (Castree and Braun 2001; Williams 2003; L. M. Harris 2014). Those positions, in turn, are located in social hierarchies that will determine what group has the power to define what nature is for others. Moreover, in recent years, ecological discourses have become a vehicle to reinforce existing inequalities or displace people into undesirable or risky spaces. Such is the case of urban zoning and toxic waste, where people from lower classes or discriminated racial groups end up bearing the high costs of living in spaces that threaten their health because of exposure to different ecological bads (Pulido 2000; Auyero and Swistun 2009; Ojeda 2012; Taylor 2014; Zeiderman 2016).

Most discussions of environmental privilege have focused on those who end up receiving the worst consequences of dispossession and environmental risk (for a critical examination of these topics in Colombia, see Ojeda et al. 2015; Ojeda 2016). Recently, however, a growing literature is studying those at the top, focusing on the way elites and other powerful groups use nature to perpetuate or

reinforce social hierarchies. A notable example comes from sociologists Lisa Park and David Pellow (2011), who study how rich white residents in a tourist town in the United States combine environmental concerns with nativists arguments against the immigrant population. Through this process, immigrants are characterized as polluters and are expelled from enjoying the environmental goods of the area, even though they work in maintaining the “pure” natural environment for the benefit of the richer group.

The relationship between environmental privilege, class and space is particularly relevant for studies on green gentrification. In recent years, more cities are using green arguments to redevelop previously “brownfield” or neutral areas to improve their environmental features and, with it, spark gentrification processes by displacing the long-time population and attracting richer newcomers who can afford the new developments (Dooling 2009; Quastel 2009; Anguelovski et al. 2019). Much like earlier urban “growth machines” (Molotch 1976), green growth machines enable coalitions between the state and developers to develop exclusionary urban renewal practices with a green rationale (Gould and Lewis 2016).

Nature is also relevant in rural gentrification. In the global North, scholars have pointed out that tensions arise between residents in terms of what practices around nature are considered moral (Bell 1995) and who, on a moral basis, can claim ownership of the area (Cloke and Thrift 1987). In the global South, however, the issues discussed in gentrifying rural communities relate more to material

life conditions like infrastructure and land. In some cases, the state is aligned with newcomers to fulfill their needs only (Timo 2017), while in others, newcomers develop solutions for themselves although their benefits might “spill over” to other residents (Nates Cruz and Velásquez López 2019). Although in these and other cases powerful actors use “nature” and “sustainability” as a politically neutral banner—who would say they are against environmental improvements?—their program might deepen existing inequalities in mixed-class areas (Checker 2011).

In urban gentrification, newcomers use similar neutral or ideal categories to alter the social order. In the quest for “authenticity,” sociologist Sharon Zukin (2010) writes, the tastes of the middle and upper-middle class population in gentrifying neighborhoods lead them to appropriate and subsequently change landscapes and relationships that longtimers have built in and on. Sylvie Tissot (2015), another sociologist, shows how well-intentioned white middle class gentrifiers try to maintain a neighborhood’s “diversity” in Boston, but eventually their definition of that category turns into a mechanism of including some people and excluding others from political decisions or certain spaces. Finally, Japonica Brown-Saracino (2004), also a sociologist studying Boston, talks about “preservationists” as those newcomers who want to protect a neighborhood’s existing diversity but end up imposing a *specific kind* of diversity based on class and racial lines.

Urban gentrification studies highlight that the struggles over social control in these neighborhoods reflect the different aesthetic and political positions of the different groups of residents, which can turn

into conflict between them. Sociologist Mary Pattillo (2010) examines the mechanisms of control that Black middle-class newcomers try to exert over lower class Black residents in a gentrifying Chicago neighborhood, showing how previously accepted behavior like barbecuing on the street or fixing cars on the front lawn is not tolerated for aesthetic and safety concerns. In New York, Richard Ocejo (2014) shows how different groups of residents dispute bar licenses because of noise and nuisance complaints, and local community boards turn into spaces where old and new residents battle over neighborhood change and rising rent costs.

In Latin America, research on social integration and gentrification is impacted by the difficulty of finding mixed-income neighborhoods to study. Latin American cities are highly segregated in terms of social class (Rodríguez Vignoli and Arraigada Luco 2003). Particularly in Bogotá, the Colombian capital, class and not race is the main driver of segregation (Villamizar Santamaría 2015) and has been so for many years (Aliaga Linares and Álvarez Rivadulla 2010). Although some cities in Colombia, like Cartagena, and in other countries have high levels of racial segregation (Telles 2004; Duarte et al. 2013; Valle 2018), the class divide is a common feature among Latin American cities, in which the higher classes usually live in a cone-shaped area from downtown to the outskirts (Sabatini 2003). Moreover, in a context as unequal as Colombia's where inequality is highly tolerated, people in different class positions naturalize differences in how they treat each other.

Despite the lack of empirical cases, some studies in the region have tested the potential of

integration among residents in mixed-income neighborhoods. Like Teresa Caldeira's (2000) well known work on walls as social barriers in São Paulo, urban scholars Francisco Sabatini and Rodrigo Salcedo (2007) analyzed the effects of building high-class gated communities in poor neighborhoods in Santiago, Chile. Like Caldeira, they say that walls are usually thought of as creating isolation and fear of others, but sometimes, unlike Caldeira's research, they find that people from either side of the wall can interact and even integrate *despite* the barrier. They differentiate between three types of integration. The first one is functional, with cross-class distribution of resources (like power and money), jobs, and political rights. The second type is symbolic: there is a feeling of attachment to the place among all social classes, even if there is social or economic inequality. And finally, community integration may mean stronger interpersonal ties between residents, for instance in friendships or marriages.

Using in-depth interviews, Sabatini and Salcedo find strong evidence for the first two types, but not for the third one. There are functional arrangements in the sense that there are new jobs in the area, like maids, gardeners, carpenters, shopkeepers, plumbers. The previous residents also have a sense of being included into modernity by the arrival of supermarkets, sewage, roads, and other types of infrastructure. Residents see this type as the one with the most beneficial effects, but there is also some tension because this modernization came after the newcomers' arrival and is therefore associated with them. The same may be seen in urban gentrification, when policing and grocery stores "improve" after

higher class and whiter groups move into a neighborhood. In symbolic integration, the authors find that people feel less stigmatization; they have a greater sense of belonging in the neighborhood which is expressed in pride of living there; and that they see walls as natural because of high levels of crime, as Teresa Caldeira (2000) describes for São Paulo. Finally, the authors say that there is no evidence of the third kind of community integration—there is no befriending others, no strong ties, but there could be resentment.

That said, some studies in the global South point to the idea that there are potential avenues of cooperation and coalition between residents from different groups. In fact, collaboration might arise among people from different positions in order to obtain services from the state. Such is the case of Cairo, Egypt (Singerman 1996), where male and female residents in a popular neighborhood came together through informal networks to meet basic needs like earning a living or navigating institutions. A similar story of collaboration is El Alto, Bolivia (Lazar 2008), where members of different occupational groups come together to protest the state's economic reforms and the privatization of water.

Cooperation between people from different classes can even occur in contexts undergoing green gentrification. By talking about “just green enough” coalitions, Winifred Curran and Trina Hamilton (2017) argue that newcomers and longtimers can rally together behind environmental initiatives in gentrifying spaces. They use the case of Greenpoint in Brooklyn, where residents wanted to support

the cleanup initiatives of this industrial and polluted neighborhood while at the same time protecting the existing jobs for longtimers to remain there and avoid their displacement. In this case, residents were able to come together because the state became the main actor against which they could cooperate.

The question of conflict or cooperation when speaking of environmental privilege and inter-class relationships remains open for rural areas. In La Calera, longtimers already had devised solutions for some basic needs but they needed newcomers to help sustain their operation—paying for the use of aqueduct systems, for example. Meanwhile, newcomers shared a sense of risk because of both the state's decisions, like the construction of a mega-park that would bring more visitors, and its inertia in the face of the need for clean drinking water. At the same time, both residential groups were involved in zoning and planning discussions in the town to prevent further urbanization and demand the enforcement of existing environmental regulations. The longtimers' experience—and their acceptance of newcomers as contributors and allies—encouraged them to develop more functional and symbolic interactions in Sabatini and Salcedo's words. As in Cairo, El Alto and Brooklyn, in La Calera the state becomes a common target for both newcomers and longtimers. As the state induces scarcity of water, land, and safety, both groups see an opportunity for inter-class alliances to pressure the state to meet their demands.

These alliances are the result of an additive process where newcomers and longtimers generate an

overlap of first, second, and third nature. Residents from both groups establish relationships of trust with one another in everyday life scenarios, and these gradually become a basis for further consensus. Scholars of urban social movements see these micro-level interactions becoming a foundation for collective actions at a macro-level (McAdam 1988; Viterna 2006; Jasper 2014). The interactions can happen when there are shared public spaces or shared concerns between immediate neighbors, involving both human and non-human actors (Amin 2015). In other urban contexts, they can appear for housing issues (Zheltnina 2020) or for environmental concerns (W. Curran and Hamilton 2017). In the case of La Calera, the overlap of first, second, and third nature draw from the different types of integration between neighbors to sustain joint actions in three key sites of environmental conflict: (i) infrastructure, (ii) land, and (iii) urban planning.

First, infrastructure is where the more material examples of this overlap can be seen. The area is rich with water sources given its ecological structure, but human intervention—in the form of pipes, reservoirs, treatment plants—was necessary to bring them to both newcomers and longtimers' homes. Studying a new suburb's infrastructure is important because it enables population growth and determines who can benefit from the resources (Filion and Pulver 2019). Infrastructure condenses the sequence of forming the different layers of nature and crystallizes the role of different groups of people in this process.

The second overlap of nature layers comes through land. When a land plot can be simultaneously

used for agriculture and housing, it creates a tension over what kind of nature residents can impose. While longtimers use nature mostly for production, newcomers use it mostly for consumption, and the question of which nature will power the treadmill of production results in environmental and other legal regulations that create third nature. Moreover, when a vast area was designated to become an ecological park, residents were concerned because their needs were not taken into account in the designs and the plans would put their shared natural ecosystem at risk. These discussions have at their core an issue of governance common to new suburbs (Hamel and Keil 2015): whose interests are pushed forward and under what circumstances. Disputes over the uses of space reflect the varied values that nature have for different people, where are they mobilized, and what spaces they create.

Finally, out of all of the sites where longtimers and newcomers interact on environmental issues, planning is where residents showed the strongest cooperation; planning also consolidates the importance of third nature. As I conducted fieldwork, La Calera was undergoing the mandated participatory meetings for a new zoning plan, which residents firmly opposed based on environmental reasons. Against further urban growth, newcomers and longtimers drew on third nature images to make their voices heard in enforcing environmental regulations and thus preventing more urbanization. In the end, it was because of the overlap between layers of nature and the state's induced scarcity that residents could maintain "green enough" coalitions.

Thinkers like Henri Lefebvre (2014) remind us that ours is an urban society that should abandon

the dichotomy between the urban and the rural—a call that inspired sociologist Neil Brenner to argue that we live under a “planetary urbanization” process (Brenner 2014). What matters is to think of the *process* of urbanization rather than the *object*—a city, a countryside—that is urbanized. Following this logic through Cronon’s layers of nature, we can critically examine the role of nature in urbanization—especially in Latin America and other regions of the global South where nature and its champions are fragmented and disputed. If we see first, second, and third natures as overlapping in the effects of urban expansion in the countryside, we can observe the various ways in which humans relate to the environment, especially when and how they choose cooperation over competition. In that sense, the light shed by studying inter-class relationships and the state’s induced scarcity is refracted through the prism of nature. Examining how residents of La Calera understand nature to build coalitions against the state is the central focus of this dissertation. I use participant observation, interviews, and archival research to track relationships between peasant longtimers and upper-middle-class newcomers in different scenarios of third nature.

Moving to La Calera

Growing up mostly in Bogotá, my first experiences in La Calera were about consumption and leisure. When I was about 10 years old, I remember going to La Mazorca, a restaurant that still sells

fritanga, a Colombian barbecue of sorts with fried *criolla* and *sabanera* potatoes, plantains, arepas, and different cuts of meat. This is a traditional dish of the area, but middle class families such as mine went to the outskirts of Bogotá to have this dish in a “countryside/rustic” setting: logs for seats, baskets for plates, no cutlery, and big grass fields to play with other kids or pets. Later, when I was a teenager, around the mid-2000s, the clubs and bars on the road to La Calera were “in” and the young crowds went to Compostela, Massai, Sameron, and other venues for proms, pre-proms, and general parties.

My first contact with *residential* La Calera, however, was in 2012. A friend from work had moved there the year before with his family, and he invited some colleagues to a barbecue party. Since it was outside of Bogotá, we would have to take an inter-municipal bus or a car, which I could borrow from my parents. I drove up there with some friends, for the first time without my family and after a long time of not going to La Calera (the “hip” clubs had already moved to other areas inside Bogotá, about which I wrote my undergraduate thesis). I did not have a clear idea of what to expect, but I quickly noticed new upscale homes on the road and in the mountains, very different from the peasant-style houses and ranches that I knew from before. After getting a little lost on the road, we ended up arriving at a two-story, modern-style house, with big windows, a fireplace, a huge garden at the front, and four dogs (some stray, some purebreed) running around greeting and frightening the guests, and a cow in the back.

In conversations with my friend’s parents, I asked them why they moved there. In my mind, La

Calera was too far and too cold, although the scenery was very beautiful. They told me then—and repeated a few years later—that they liked the open space, the clean air, and the tranquility, and that Bogotá was too “chaotic” (field notes, January 2019). Also, it was easier to have a cow in La Calera—they wanted to have one. In a later visit there, we rode quad bikes around the dirt roads of the veredas, and I noticed that the architectural change went beyond the main road to more remote, secluded, and rural areas further into the mountains.

This realization deepened when my parents decided to look for a house there. They were selling their house in a middle class neighborhood in Bogotá, Cedritos, because I was moving to New York City and my brother was getting married. In Colombia it is very common for children to live with their parents until their 30s or so, when they move in with their spouses or leave the city, as was the case with my brother and me. My parents could not afford to buy a new apartment or house of a similar size in the same neighborhood, so they thought they would try in the outskirts instead. Around this time, too, I was taking a Nature and Society class for my Master’s degree in Geography at the Universidad de los Andes, where we read political ecology texts. These readings opened my eyes to the new world of commodification of nature that I was seeing while accompanying my parents in their search for a new house.

The first time we went together to La Calera I saw the billboard on the road about the new “nature” neighbors. Those houses were far from my parents’ budget, so they ruled out living in one of

them. Nonetheless, they still were excited about the idea of living in the countryside, close to Bogotá, and found a broker who helped them find a plot of land where they built their current home.

Adriana, the broker, has been selling land plots and houses in La Calera for almost fifteen years. She was born and raised in one of the veredas, but business has been slow in the past two years because “land is very expensive now” (interview, January 2019). She sold my parents a land plot that was a subdivision of an old farm, which now was becoming a gated cul-de-sac like many others in La Calera. The original owner of the subdivided *finca*, “estate,” died and one of his children sold the resulting plots because it was a better business than keeping the unproductive farm.

My parents made the layout and design, and they hired an architect to make the calculations for the structures, materials, and other specifications. They also hired different construction workers throughout the whole process, by word of mouth—someone knew a guy who was very good with electricity, he in turn knew someone who had a drywall business, she knew another person who was great with ceramic tiles, and so on. Although they had enough money from their previous house sale, my parents still had to take a small loan to pay for the finishing touches—between miscalculations in materials and unforeseen conditions (rain, for example) that prevented a steady flow of work, the construction project went over budget. In total, from the signing of the title deeds, to getting the permits (construction license, aqueduct source point, electricity connection, etc.), and the actual building of the house, around two years passed. But, at the end, my *parents* became the new neighbors,

not “nature.” And that realization was the key to reflect on my position in the field both as a newcomer and a researcher.

For this project, I used a qualitative approach divided in four parts. To understand how people use the environment to create coalitions, it is important to see, hear, and reflect on how they interact. Although I wanted to include a quantitative component of changes in the landscape and land tenure through mapping, the available sources in Colombia were not good enough for this task.² My qualitative data, by contrast, came from several years of rich fieldwork when I carried out (i) an ethnography of daily life in the town and participant observation in community meetings, (ii) in-depth interviews with different kinds of residents; (iii) a digital ethnography of residents’ use of social media; and (iv) archival research in the city council’s minutes. The research was approved by CUNY’s Institutional Review Board.

To understand how people interacted, I needed to first see how they did it. Because of the university semester schedule, I was only able to live there for a couple of months at a time. I spent most of the summer and winter breaks in my parents’ house since 2015 until 2019 in La Calera, with some extended periods in 2017 and 2018. In total, I lived there for almost twenty months. Ethnographies are important because they let the researcher observe how people do things instead of just relying on their word, and this was especially key for my project because I kept hearing that people got along with their

² For example, the last two censuses were recorded in 2005 and 2018, while other large scale surveys were not representative for La Calera.

neighbors *in general*. My initial hypothesis, based on research about environmental inequality, was that there would be deep struggles between newcomers and longtimers around the uses of nature, but I found a different story by engaging with my neighbors—attending social and community gatherings, and seeing what happened in the main square, at the stores, and other places of potential exchange.

During those months, I did participant observation in different scenarios. I went to “neighborhood” meetings discussing crime and security, to city council sessions discussing aqueduct projects, and to Calera-wide meetings discussing the new POT and the San Rafael park project. Some of my neighbors invited me to their homes to have afternoon snacks or bake pizzas, and we had them over for birthday parties and other events at my parents’ house. It was the different encounters I had with people in the stores, the cafeterias, the arepa *campesina* stalls by the road, and in their own homes, that informed and enriched this project. Through their family stories, their frustrations with the current administration, the eye rolls and facial expressions, suggesting both explicit and implicit tensions, I was able to have a better grasp of what they are facing, how are they dealing with it, specifically, how they navigate living in a rapidly urbanizing rural town facing environmental change. In total, I participated in 15 of these meetings, which ranged from about two hours to half-day workshops. In them, I saw people from both groups of residents participating, and, more importantly, I did not see any conflict between them in these highly politicized and crucial decision-making spaces, unlike what other scholars saw in their research about gentrification. In fact, the conflict I observed in

these spaces was by both groups acting together *against the state*.

Ethnographers almost always play with the idea of being an insider-outsider. That was true in my case as well, because although I am Colombian, I did not grow up in La Calera and my living in the area was sporadic. I was initially seen as a triple outsider. People were confused about why I was in all these meetings and places. Given how I speak and look—my *habitus*, in Bourdieu’s (1984) terms—Caleruno newcomers and longtimers alike read me first as one of the upper-middle class newcomers. In the community meetings, people mistook me for a public official from the Bogotan aqueduct company or one of the POT consultants because I was a new face—and had unfamiliar last names—in the area. Finally, when I explained that I was “studying in New York City,” my informants were more open to discuss different matters because they saw me as a more neutral party and that, as I overheard someone say in a community meeting, “he’s putting La Calera’s name out there” (field notes, January 2018). It was this latter role that I used to introduce myself after the meetings and other places, and people started recognizing me as the “doctoral dissertation guy” (*el de la tesis del doctorado*).

It was in those meetings and get-togethers where I also found most of my interviewees. In total I interviewed 45 people including newcomers and longtime residents, city officials, and councilmembers (see Appendix 1 for a summary of the sample). Usually I struck up a conversation with one of them after the sessions were over, and they introduced me to other people to interview—what qualitative researchers call snowball sampling. I asked residents questions regarding their motivations to move to

La Calera, the changes they saw in the area in the past few years, the challenges they are facing, the battles they have won, and their relationship with their neighbors. To public officials, I asked them about the programs they were implementing and, because they were also residents, I included some of the previous questions as well. Interviews helped me piece together the local situation as it changed over time—my ethnography was evidently bounded to a particular timeframe, and these interviews allowed me to ask about the past. With this, I could also compare what interviewees were saying to me and what I confirmed in the community meetings about how they join together to demand services from the state.

Alongside this work, I also conducted a digital ethnography in different Facebook and WhatsApp groups (Varis 2016; Murthy 2008). This digital connection allowed me to maintain my (virtual) presence on the research site when I was (physically) in NYC. In total I was part of five groups, including two focusing on general issues in the town and three more specific groups dealing with safety in my vereda and the San Rafael park project. These groups included more people than the physical meetings sometimes and were more diverse in terms of length of residence in La Calera, including both newcomers and longtimers. In them, I could see more real-time interactions between residents, and, given the more immediate nature of this type of communications, people were more unfiltered in their exchanges. That is not to say that physical meetings did not include very hot-tempered discussions; but sometimes people could not speak because there were too many

interventions or some voices were louder than others. In the chat rooms and Facebook posts, all voices carry a more equal weight—at least they seem to, on the computer screen. This method was especially useful because it allowed me to continue doing research even under COVID-19 restrictions that prevented travel.

The last methodological strategy that I used to study La Calera's transformation of layers of nature and the state's induced scarcity was archival. Because the first arrivals of newcomers to La Calera date back to about thirty years ago, it was important for me to have a more historical view of how the town dealt with their arrival. For that, city council meetings are key because it is in that space where many decisions are taken regarding zoning regulations or resource allocation—which affect how residents, companies and others buy and sell land—, and I could also track the conversations people were having in the area before my arrival. Given the limitations of record-keeping, as well as access, I was able to obtain minutes from 2011 onward, which is also when they started to keep them digitally—just after the town approved the new planning and zoning program that is active to this day.

Coding and analyzing these four kinds of data allowed me to understand the social and institutional spaces where consensus appeared and the importance of nature in them. My own experience in La Calera was a result of the different layers of nature put in place over water, land, and landscape power in the town. My family was part of the group that put pressure on existing infrastructure but that also wanted to build a community with the longtimers, much like the “good

neighbors” described by Sylvie Tissot (2015). Inevitably, there were tensions between newcomers and longtimers regarding noise complaints and other nuisances, as I describe in Chapter 3. However, contrary to Tissot’s neighbors, my parents and other newcomers in their vereda were actively engaged in conversations with longtimers that resulted in a cross-class collaboration when facing institutions instead of a competition for resources. And that finding in and of itself is an important one for a country such as Colombia, with its history of class inequality and civil war, as well as for a broader audience interested in urbanization processes in the global South.

Summary of Chapters

This dissertation is divided into six parts. In this first chapter, the introduction, I spoke about the importance of La Calera as a site where people from different classes use third nature arguments to contest the state’s induced scarcity in abundance of natural resources. I explore this finding in the next five empirical chapters. The following chapters are organized using a logic of scale—from micro-interactions to more encompassing macro-processes—that show the additive character of environmental consensus.

Chapter 2 gives the general context of La Calera, focusing on its ecological importance in the region and the ways in which newcomers and longtimers use nature. Here, I explore the differences

between nature for production and nature for consumption for longtimers and newcomers respectively, which create a different relationship between them and the local environmental resources. Additionally, I present both groups of residents and the types of community interactions they developed.

In Chapter 3, I examine the specific and conflicting relationships between groups of residents in terms of third nature. First, I show that newcomers' idea of "ecological awareness" contrasts with longtimers ecological practices, creating sites for disputes among neighbors. Second, I discuss how longtimers use those disputes to talk about the imposition of new "green" practices and displacement. Up to here, these findings resonate with what previous gentrification studies found but it opens the way for new types of arrangements between residents for environmental reasons beyond micro-interactions.

Chapter 4 focuses on first and second nature, particularly on the struggles over water infrastructure. Despite abundant water sources, many residents in rural La Calera lack access to aqueducts and sewage pipes. Part of this stems from environmental regulations preventing unlimited water usage, but another part of this comes from the state's monopoly over a large reservoir located in La Calera but that sources Bogotá. This lack of state support in local infrastructure for water led long-time residents to create self-managed community aqueducts, but longtimers welcomed or allowed newcomers to join them for their financial and environmental sustainability. This paradox of growth is

the result of how the state induces scarcity in an area with abundant water resources.

Taking the discussion from water to land, Chapter 5 presents the development of San Rafael Ecological Park as a way to crystallize third nature. This mega-project has been in the works since 1993 when the water reservoir described in the previous chapter was built. Residents found out about the new designs for this park in a meeting almost by accident, which led to them pressuring both La Calera's and Bogota's city governments to create a participatory mechanism in which they could voice their concerns. After realizing that the park would be built despite their repeated efforts to make it both environmentally and economically viable for La Calera's inhabitants, a lawsuit halted the project on ecological grounds. Here, third nature is exemplified by residents' use of images and ideals that affected existing interventions and resources.

The last and strongest instance of consensus is analyzed in Chapter 6. Planning discussions in an urbanizing rural town are a key site to understand what kind of nature residents want. Here, both groups of residents showed anti-urban growth sentiments and a mistrust for state authorities, which lead to a more cohesive response in the participatory planning mechanisms to demand the state to enforce environmental regulations. As before, it was residents' shared views on third nature that allowed for this coalition to exist to protect the environment in legal documents such as zoning plans.

Finally, I end this text by examining the different meanings of "nature" in La Calera. Despite different *uses* of nature, residents of La Calera attribute similar meanings to it—a shared third nature.

The urbanization of the countryside creates particular types of nature that can be contested; and after COVID-19, many people are leaving the cities to pursue a life in nature with more open space. In La Calera, that can create coalitions between people from different classes against a state that does not provide enough services to a population that is increasingly concerned about environmental damages and climate change.

CHAPTER TWO - Layers of Nature and Population Change

Few landscape transformations are as stark and sudden as when going from Bogotá to La Calera. Bogotá, the metropolis, is home to almost nine million inhabitants, densely packed in the rectangular grid of gray paved streets descending from the Western side of the Eastern Andean Mountain Range. On the other side of these mountains lies the small, rural town of La Calera, which houses only about 27,000 people, spread out through the hillsides and the valley of the Teusacá River. The only way to go to La Calera from the city is to drive over the mountains, and there are only two roads in and out.

With no traffic on the Circunvalar Avenue—the main road—it takes twenty minutes by car or half an hour on the bus to travel from Bogotá to the town. Just two kilometers up from the capital, there is a privileged viewing spot overlooking most of the Bogotan plateau where you can see the tall buildings and the imposing brick façade of the city, under the perpetual gray that fuses the cement of the streets with the rainy clouds that almost permanently block the sky. The viewing spot belongs to an ecologically protected area—the Cerros Orientales, or Eastern Mountains—that display different shades of green representing the thick, native vegetation of the high Andean forest, foreign pine trees planted in the mid-twentieth century, and some pastures made in recent years for small-scale cattle raising (see figure 2.1). There is a second road to La Calera from the city, although it is mostly unpaved and is much narrower and inclined. The contrast between urban and rural in it, however, is just as

striking—from the run-down streets of one of Bogotá’s poorest neighborhoods to the open green fields of La Calera.



Figure 2.1. La Calera’s partial landscape. Note the change in the “layers” of nature and the scattered constructions. Photo by the author, 2018.

Environmental historian William Cronon states that “the distance we travel between city and country is measured more in the mind than on the ground” (Cronon 1991, 8), and that is certainly how it feels when driving up to La Calera from Bogotá. Whether one takes the main or the secondary road, a new landscape unfolds after reaching the highest point marking the administrative border

between Bogotá and La Calera. The capital's dense urban footprint is almost immediately replaced by a scattered housing sprawl through the forest—an overlap of first and second natures. Easily spotted among the trees, the houses on La Calera's side of the mountains are dispersed along curved roads, unlike the buildings side by side in straight rows on the city grid. Some houses are tall, with floor-to-ceiling windows to admire the views, built with cement and brick, in cubic shapes and exposed stone in a style that Caleruno construction workers call “modern.” The gated communities and most of the newer houses are built in this style (see fig. 2.2). The rest of the constructions are what locals call “peasant-style”: much shorter, with small windows to retain the heat, made with adobe (sun-dried bricks), with triangle-shaped roofs for the abundant rains to easily slide down. Most of these peasant houses also have some cattle or crops in their surroundings—traditional signs of farm production.



Figure 2.2. A newcomer house (left) built using a longtimer house (right) as its foundation, showing the two most common architectural styles of La Calera. Photo by the author, December 2016.

With visual changes in the landscape, the sounds change too. When coming up the mountain from Bogotá you sometimes hear car horns down in the plateau and an occasional cement mixer going to the cement plant nearby. But the mountains act as natural sound barriers and the silence on that side is mostly broken by dogs barking, birds chirping, and the casual donkey braying, almost accurately marking each new hour. Ignacio Gallo, a middle-aged newcomer who has moved here from the city and serves as president of the Territorial Planning Council (CTP, in Spanish)—a citizen group that acts as a monitor in all matters related to land development—highlights how different the sounds are.

“In the morning,” he says, “the birds wake me up. I set my alarm for 5:20 a.m. and I know what birds are there by the song they make and how they take turns singing. At night we have the frog concert, the creek, and the stars” (interview, June 2019).

Ignacio also remarks on the Caleruno air quality in contrast to the capital. Bogotá is a very polluted city: between 2014 and 2015, air pollution spiked to almost 20 ug/m³ PM_{2.5} (double the limit set by the World Health Organization) (El Tiempo 2016). In the very few sunny mornings in the city, you can see a thick gray layer of smog and other harmful gases hovering over it (Fig. 2.3). But in La Calera, one can “feel the clean air,” stated Laura, another newcomer and an audiovisual producer in her mid-30s, echoing the sentiment of many residents that I interviewed. When I came to my parents’ house in La Calera, I could also smell the near onion field—an unthinkable scent in the city.



Figure 2.3. The thick smog layer over Bogotá from the Circunvalar Avenue on a rare sunny morning. Photo by the author, January 2018

This chapter illustrates how residents' different visions of nature that are based on their relationships to first, second, or third nature influence their attitudes and actions toward environmental issues in the home they now share: La Calera—whose very name represents a relationship to second nature. Longtimers and newcomers want to preserve the pristine resources from first nature around them for their use-value, from agriculture to contemplation. But this nature quality will attract new residents that will build more second nature interventions, making the area

more urban and less pristine, thus diminishing its exchange-value. Simultaneously, the state's environmental laws induce scarcity of land and water for the municipality's inhabitants and affect building qualities that allow longtimers to keep their land and newcomers to arrive to new subdivisions.

A Water Producer

La Calera has abundant water. Due to its specific ecosystem, La Calera has many waterheads, creeks, rivers and small lakes. Calerunos have taken advantage of this first nature availability to use water for consuming at home, growing crops, raising cattle, but also processing cement and selling it in bottles. Both residents and big companies need this water, but the scale and purpose of each is limited by the available infrastructure. In other words, second nature interventions over the waterscape create inequalities between who has access to water and how.³

The Andean Mountains—the longest mountain system in the world—start at the Southern tip of South America and split into three distinct ranges at the northern end of the continent in Colombia. La Calera is located on the Eastern Range, the widest of the three, which sources one of the most important rivers in the country (the Magdalena River) to the West and receives all the tropical winds and rain from the Amazon in the South East. This range also includes snowy peaks that turn into lakes

³ I explore these issues in Chapter 4.

and river affluents, and its highly fertile soil nurtures the historic potato crops in the region around Bogotá and La Calera. The indigenous Muisca nation flourished in these slopes, taking advantage of the rich water and soil resources and creating a vast network of settlements throughout the Bogotan high-altitude savannah.

Among the different ecosystems of the Eastern Range, páramos are one of the most important. This ecosystem, found in tropical latitudes and high altitude, is a bleak environment, and Colombia has more than 50% of the world's páramo surface (Guhl 1995; Rivera Ospina 2001). Their average temperature ranges between 2°C (35°F) to 10°C (50°F) year-round, depending on the altitude, but during the day it can reach about 20°C (68°F). That harsh climate makes it very hard for vegetation to grow; frailejones (from the *Espeletia* genus)—one of the most iconic plants of páramos with thick trunks and hairy leaves to retain moisture—grow only about one centimeter per year. Water retention is a response to the most important function of páramos. With almost perpetual clouds, fog, and rain, some páramos can receive up to 2000 mm (79 in) of rain every year—a bit more than the wettest cities in the United States (Petković 2018). The páramo plants store some of this water, but most of it is deposited in lakes and river headwaters that will end up feeding the most important water bodies downhill. In that way, páramos act like water producers for the ecosystem.

La Calera is home of the Chingaza Páramo, which provides two companies with fresh and high-quality water. The Coca-Cola Company obtains the liquid for its Manantial bottled water brand and

has a processing plant up by Chingaza. This páramo also sources the most important fresh water reservoir in the region, owned by the public-sector Empresa de Acueducto de Bogotá (Bogotan Aqueduct Company—EAB, in Spanish). San Rafael reservoir is the result of a second nature intervention to the páramo, because it takes advantage of the natural waterways and distribute the water through artificial pipes and tunnels that feed the deposits. It has a volume of 71 million cubic meters (more than 18 billion gallons), in La Calera's side of the Eastern Mountains. The reservoir provides water mostly to Bogotá and other municipalities North of the city, like Sopó and Chía—but surprisingly, not much to La Calera.

The lack of good aqueducts and sewage systems in this municipality—despite all its surrounding water—is a big issue for residents. In other words, despite all the water resources from its first nature, the second nature works over it have not benefited Calerunos explicitly despite their proximity. All the engineering feats required to build the dams, tunnels, and tubes connecting the Chuza and San Rafael reservoirs to Bogotá's aqueduct system in the 1980s and 1990s, went *through* La Calera but they did not provide it with most of the benefits except a number of connections to individual plots or the selling of treated water to the municipality.

To supply water in the rural areas, La Calera residents resort to community aqueducts. They are privately owned, small networks of pipes that bring water from waterheads and creeks into people's homes. The biggest of them treat the water, but most have good water quality because of how it is

sourced. Because population growth in these areas, some of these aqueducts reached their capacity and are over-used. In a display of a third nature logic, residents believe they have to protect the water for future use while also needing it right now, and they use a combination of environmental protections and legal actions to achieve this.

This scarcity of water provision despite abundant resources is the result of human intervention on the environment of La Calera as well as the state's role in granting some people access to it. But first nature in La Calera is more than water; land is perhaps equally important because of its food and cattle production capabilities as well as its potential for real estate development.

Land, Extraction and Construction

By far the largest economic activities of La Calera are related to the extraction of resources in the soil through second nature interventions. In colonial times and after independence in 1810, La Calera was a source of timber and especially charcoal that the population traded in Bogotá. The town itself is named after the *caliza*—limestone—deposits all over the area. Limestone exploitation was a crucial industry for La Calera's development, at least until the late 1990s when the Cementos Samper processing plant shut down. But currently, the land of La Calera is more valuable for housing than for agriculture or mining, thus shifting from a pure treadmill of production to one of consumption of

landscapes.

The early Muisca indigenous nation called this area Teusacá, which is also the name of the most important river in the area. The Spanish name of La Calera belonged to the hacienda owned by don Pedro de Tovar y Buendía by 1765 and that included a small village and a parish for whites (Alcaldía de La Calera, n.d.). In 1772 and with the expansion from parish to church, the town of La Calera was founded. But it was not until 1851, forty-one years after the declaration of independence, that the town obtained its status as a district.

By then, many of the Calerunos were known as *patiasados*—burntfooted—because of the charcoal exploitation. Residents of La Calera burned the thick Andean forest layers to create charcoal and, when stepping on it, got their feet burnt. They carried the heavy loads of charcoal to the marketplace in Bogotá and Usaquén (then a separate town, but now a neighborhood of the city), that people used for their cooking stoves and heating. Along with this charcoal, the Eastern mountains around Bogotá were also a source of timber and wood for construction. With the rapid urbanization process in the mid-twentieth century, most of these mountains facing Bogotá were completely logged, leaving the hillsides almost stripped completely bare (Alcaldía Mayor de Bogotá 2006). It was also around this time (in the 1960s) that the Bogotan administration and the newly created national environmental agency planted eucalyptus and pine trees—endemic to Europe, not Colombia—to instate the plant layers in the mountains.

In the following decade, the Colombian government saw some environmental damage from logging and deforestation and passed the Administrative Decree 30 of 1976 that protected different ecosystems in these mountains, including the páramos. This decision was issued by the Inderena, the Colombian environmental protection agency created in 1968, which was replaced by the Corporación Autónoma Regional (CAR)—the Colombian equivalent of the U.S. Environmental Protection Agency—in 1993 along with the new Ministry of the Environment. During this quarter century, many areas in La Calera, and elsewhere in the country, were declared zones of special environmental interest, and nature reserves and national parks were also created.

However, these legal decisions grandfathered existing economic activities in La Calera, of which limestone exploitation was the most important. With the change to gas stoves and an overall decline in charcoal consumption, combined with the development of new technologies, people in La Calera shifted to its first nature limestone deposits as their main source of income. Cementos Samper, the company in charge of the process created in the early twentieth century, had a full blown processing plant, called Siberia, in La Calera (see figure 2.4). This second-nature plant provided almost three thousand jobs, and its grounds included a church, a school, parks, a hospital, and other amenities (Silva 2016).



Figure 2.4. The abandoned Siberia plant. Photo by the author, July 2018.

The importance of Samper was such that, when the company closed the plant due to the country's economic crisis in the late 1990s, La Calera felt a blow from which it has not fully recovered. Some people now do ghost tours in the abandoned Siberia (Defelipe 2015). A few years later, though, Cemex—the Mexican cement conglomerate—opened a new Santa Rosa packaging and distribution plant in the municipality. Bogotá benefited from the products of both companies for its booming construction business. It is because of the limestone deposits that people in the area have been able to connect first and second nature, modifying the local landscape by extracting mining resources and

using cement structures for tunnels, roads, houses, and buildings.

After the cement business crisis, many Calerunos returned to agricultural activities and cattle ranching. Peasants in La Calera have taken advantage of the creeks and small headwaters to grow a variety of crops using the highly fertile soils of the Eastern Range. Mostly, they have grown potatoes, of which the big *sabanera* and starchy *criolla* are the most common varieties. They also grow onions, wheat, and other “cold land” staples, and fruits such as goldenberries (*physalis peruviana*), feijoas (*acca sellowiana* or pineapple guava), and blackberries (*rubus glaucus* or Andean raspberries) grow in the wild.

Agriculture, however, was a small productive activity in comparison with mining or cattle raising. Peasants usually rent land to grow their crops, but most of them prefer renting or owning land for cattle. In fact, raising dairy cattle is one of the biggest sources of income in the area for the rural population, and some ranches also produce meat. A few peasants sell the milk to their neighbors in small batches—my mom buys at least one bottle every week from Rosa, her only peasant neighbor—, while others sell it to dairy companies for processing.

By using the first soil and ground layer of nature, Calerunos have historically exploited the land for its resources. First it was charcoal extraction, and then both the booming limestone business and the healthy cattle ranching activities were economically profitable but at odds with the environment—a textbook situation of the treadmill of production, where the more resources extracted for their profit,

the more depletion of said resources, and higher waste and water pollution. However, after the economic crises that affected these activities, there was a need for a new natural resource to be exploited from the ecosystem.

Newcomers' need for land for their new homes was a perfect conductor for this new capital accumulation: the consumption of landscapes and aesthetics. Instead of withdrawing a material element from the ecosystem, what is valued now is preserving it as "pristine." Yet, currently, one of the biggest sources of employment in the town is in the construction sector, thus putting that same "natural" landscape at risk from further urbanization. Building homes for newcomers to La Calera has replaced some jobs lost from Cementos Samper earlier; and former cement workers have knowledge and skills useful for new construction. Ironically, at this time, the environmental protection regulations from the different agencies, as well as a growing concern from different newcomers to protect the environment, gave way to third nature—a paradox of building new things to keep nature as intact as possible.

Protecting the Environment as a Real Estate Development Strategy

The environmental protections affecting La Calera's ecological structure have helped in creating a new value for conservation. Instead of extracting resources, the value now lies in keeping nature as

undisturbed as possible for admiring and contemplating. I am not suggesting that newcomers are environmentalists and that the area was protected because of them; I argue that the combination of legal environmental protections put in place in La Calera with what Neil Smith (2008) calls the bourgeois ideology of nature changed the process of who extracts value from land and how this is done. This conservation for aesthetic extraction is an example of third nature: residents, the state and developers use certain images of nature that affect first and second layers that, in turn, create a paradoxical result.

The most important regulations come from the national level, through the CAR's stipulations of environmental protection as pre-emptive measures against degradation. The Corporación Autónoma Regional is the body that has the final say in any kind of intervention done by humans to the environment. It is also in charge of establishing boundaries of the different ecosystems to zone land considered as environmentally important. At the local level in La Calera, the different norms and decisions that regulate land use and zoning have been more reactive than preemptive—as the lowest body in the hierarchy, they have to re-adjust plans or other regulations based on new developments in the CAR, the Ministry of the Environment, or the Governorship.

The CAR has two major regulations that came in response to charcoal and limestone exploitation. The first is the designation of 34.56% of the municipality's land as nature reserves. Most of these are páramos, but they also include sub-páramo areas and high Andean forests—buffer zones for the fragile

water factories. Because of this designation, any kind of economic, commercial, and residential activity on land higher than 3000 meters (about 9,850 ft) above sea level is prohibited—and the median altitude of La Calera is 2746 meters, just under the limit. However, this prohibition did not stop Cemex and others from building plants or buildings in some of these protected areas above the limit. It is unclear why they were allowed to do it, but people point to corruption schemes between them and the state to confer exploitation rights to them.

The second of the CAR's regulations is to protect water sources. There cannot be any construction in a 100 m (about 30 ft) radius of any kind of creek or cascade, or within 300 m (90 ft) of a waterhead. The reason is to maintain the water as clean as possible, without any construction debris, human or animal waste, or industrial byproducts that could contaminate the water, as happened earlier with Cementos Samper. Despite these protections, however, the Teusacá River, the biggest in the municipality, is the second most polluted river in the Cundinamarca Department (a rough equivalent to a state in the U.S.) (fieldnotes February 2017). This law's enforcement suffers from budget or personnel constraints.

On the local level, the first zoning regulations came after Law 388 of 1997 that created the Plan de Ordenamiento Territorial (POT) for every municipality in the country. Through this participatory instrument, the government of each municipality is supposed to receive input on future development priorities from its inhabitants. The process is long; it starts with a diagnostics phase called for by the

Mayor's Office, then a negotiation phase with the community, then the POT goes to the CAR for approval, then to the Consejo Territorial de Planeación (the organization of which Ignacio, the person who said he wakes up with the birds, is the current president), and then, finally, to the city council. But even if the plan is rejected along the way, in the end the Mayor's office can approve the plan as an administrative decree. Currently, La Calera is discussing its new POT, the second after the law was passed and the first since 2010.

As I examine in Chapter 5, the POT in La Calera has an identity crisis. While other peripheral municipalities of Bogotá have clear uses or "roles" (Sopó and Mosquera are mostly industrial, Chía and Cajicá are mostly residential), La Calera is a mix of both because of its industrial past and residential future. Because of these historical layers, modifications to the POT over time have responded to different waves of urbanization. Now, in terms of protecting nature, the POT has two major restrictions for new constructions in rural areas. The first one is that the built area (for example, a house) cannot occupy more than 10% of the total plot; this cap can rise to 20% if the owners build a second story. The second restriction is that the minimum area of a plot must be 1000 square meters (10,700 sq. ft), thus preventing any more subdivisions. Effectively, these two measures hope to maintain "empty" spaces between new single, detached houses. Between them, there should be pastures, forests, and other "green spaces", thus keeping the image of a less urban, more pristine environment.

The different POT waves from 1998, 2010 and the incoming 2020 plan have these environmental concerns at their core. And given that these documents are partly the result of the community's input, both residential groups have different goals at stake in terms of what type of nature should be preserved. It is in these discussions that contested third natures are used to influence zoning plans and environmental policy enforcement. Therefore, it is necessary to turn to who longtimers and newcomers are and what are their agendas regarding nature.

Long-Time Neighbors

If nature, my parents, and I were the new neighbors to the area, who are the long-time ones? La Calera has been a full-fledged municipality for more than 150 years and had a stable population of residents until the waves of newcomers started arriving. As I mentioned earlier, most of them were *campesinos* (peasants) or miners who worked in the various cement plants, and there are still many people dedicated to these activities. Despite selling some of their land to the newcomers, these “longtimers” are owners and still live there.

It is interesting to hear some residents speaking about their Caleruno pedigree. We Latin Americans sometimes use both our father's and mother's last names, but Calerunos pay special attention to that. When I interviewed Councilwoman Dora Lucía Díaz de Venegas in a local *cafetería*,

people approached her to talk to her and she always asked people she just met for both of their last names. That is something that Juan Cruz Escobar, the reporter for *Caleroscopio* (the only local newspaper), told me when I interviewed him in 2019. He said, “there are a number of last names from people that have always lived here in La Calera [...] the Almécigas, the Cifuentes, the Escobars, the Ayalas, the Martínezes.” Those families are the biggest and most powerful of the town. They owned the land in the municipality, and had large *fincas* (estates, farms) where they raised cattle or grew crops. Family names helped Calerunos know with whom they were dealing in any situation and enabled them to confirm if someone was a longtimer. With that knowledge, they can establish trust with the other person or, sometimes, mistrust based on old family feuds.

Newer generations of local families moved from property in the peripheral rural districts to the urban core of La Calera, where there are more education and job opportunities. One of the *veredas*—rural districts—is even thinking of closing its single public school because there are only 17 school-age children (field notes, January 2018). Moreover, given that the only hospital in La Calera closed for good in 2015, there have been no children born in La Calera ever since—people go to Bogotá or neighboring Sopó for maternal care.

Alongside this depopulation of the countryside—which is far from being the exception in Latin America because of the extensive rural-to-urban migration—, some long-time Calerunos also experienced a kind of upward social mobility. When campesinos sold farmland to the big companies

(Coca-Cola, Samper, and the big private developers of gated communities) or to the newcomers, they got a large sum of money. Farmers in Latin America are one of the poorest occupations in the region (Portes and Hoffman 2003), constantly facing issues derived from a lack of state support, fluctuating crop prices, and overall harsh market conditions. These problems, combined with the depopulation of able workers, were a breeding ground for selling land to newcomers who showed an interest in it.

According to doña Alicia, a native Caleruna who has owned a store selling everyday goods in one of the veredas for decades, some of her former neighbors who sold their land moved to La Calera and bought an apartment and started a small business selling general goods (interview, June 2016). Some moved to Bogotá thinking they would have better life conditions but ended up in lower-class neighborhoods because of the cost of living, and some even moved to a town on the opposite side of Bogotá with warmer climate.

She is now a longtimer in her vereda, which has received one of the largest amounts of newcomers. And, being a savvy businesswoman, doña Alicia started selling products that cater to the new neighbors. She still sells candy, milk and beer, but now she also sells brand-name yogurt, carbonated water, and her son opened a brick-oven pizza spot with live music and artisanal beer. Despite these changes, she is proud of being a campesina and even hangs this pride on the wall (see fig. 2.5).



Figure 2.5. A poster with a campesino, an Andean cóndor flying above her, and the caption, “Resisting, sumercé⁴!” Photo by the author, 2017.

The campesino identity of longtimers is a crucial part of their lives, even if their livelihood is no longer related to farming. The Día del Campesino (Peasant Day) is one of the most important holiday-parties in the town, and in many of the San Rafael Park meetings people asked for “campesinos to be

⁴ *Sumercé* is a somewhat formal second-person pronoun derived from the honorific *Su Merced*, which is not even used in Spain anymore. However, in the Cundinamarca and Boyacá highlands, it is very alive. Its use is mostly associated with peasants and lower-class populations, but anyone could use it.

included in the design” (field notes, March 2018). Doña Alicia, in fact, affirms that “country life stopped belonging to campesinos,” and now has to include newcomers who want to live in it. It is this configuration, as a result of the movement of people from the city who want to live in nature, that gave way to a process of rural gentrification. But unlike other gentrification stories when both groups of residents in gentrifying neighborhoods have a tense relationship (Tissot 2015; Pattillo 2010), new and old groups in La Calera have more complex relationships that I explore later in this chapter.

The “True” New Neighbors

While La Calera had traditionally been an area for productive exploitation of natural resources, newcomers to the municipality have had a different view. In every interview with this latter group, consumption of “nature” featured prominently as one of the main reasons to move into La Calera. The meanings they attribute to it, however, vary. Margarita, a retired woman in her mid-50s who does consulting every now and then, moved from Bogotá in 2004 looking for “an open space” where her then 13-year-old son could play. She mentioned that her mother “was [emotionally] close to the countryside” (interview, June 2019) which also made her want to move away from the city. Alfredo, a middle-aged man and CEO of a major company in the country, moved here with his family in the early 1990s to be near his daughter’s private school but also because of amenities like “having a garden

[...] being able to have pets. In my case, for example, I'm fascinated by bonsais, so where I was before I was very restricted" (interview, July 2017).

Both interviewees show that, contrary to longtimers' productive uses, nature now becomes something that can be consumed and contemplated. Nature for passive consumption is even furthered by trying to leave it intact as much as possible. But for this to happen, nature must be socially reconstructed or domesticated using different landscape techniques, machinery, and labor. A plowed field requires significant labor for planting seeds and reaping crops, as well as for having a garden with native species and maintaining the purity of the water sources. Both require skills and knowledge deepened by experience, and both appear in La Calera, sometimes even in the same land plot: a newcomer might have a small orchard in the back of the house and a floral garden in the front.

In general, the landscape of La Calera juxtaposes of these two archetypal uses through the contrasts in the design of houses and the way they insert themselves into "nature." Take Alfredo's home, for instance. His house is located 5 Km (2 miles) after the toll booth at the top of the mountain, on a little paved road drifting off from the main road. The house has two floors, built with exposed wood beams and rustic finishes combined with cement and stone. It is situated in a cul-de-sac of sorts, that was originally open to the public but is currently guarded by a single person who controls a thick chain preventing access by unannounced guests. When I interviewed Alfredo, I counted five employees working in his garden, kitchen, and driveway. As I mentioned before, he arrived with his

family in the early 1990s, and most of the houses this close to the tollway have similar aesthetics and design. After being there for almost thirty years, these houses have more amenities, like paved off-roads, because the owners have had the time and resources to improve their built environment.

Margarita is an example of a second wave of newcomers. She lives further North from the town, after a 20-minute drive in an SUV (30 mins, if a regular car) over a mostly dirt road diverging from the main traffic. Here, houses are sparse, with some of the most expensive gated communities in the town sprawling over the landscape. The detached homes, however, are less imposing: they are not necessarily as big, and they are not completely closed off from their neighbors. They do have barbed wire fences, but more as a boundary marker and to prevent neighboring cows, buffalos or goats from entering and eating the grass, than to prevent human trespassers. Like Margarita, the second wave of newcomers resulted from a higher demand of ex-urbanites wanting to live in the countryside around the mid-2000s “because of a regained trust in the safety” of these areas after former president Álvaro Uribe’s democratic security policy, according to Pedro, a native Caleruno who worked at one of these gated communities (interview, July 2016). Margarita had two employees working in her garden and driveway when I interviewed her, who also happen to be her neighbors. Like Alfredo’s, her house keeps the rustic style but with higher quality materials, because she believes that “if one is going to live in the countryside, then why would one have a house like what one has in Bogotá?” Because of the increased demand for housing from these two waves of newcomers, the POT was revised in 2010 to

regulate this residential growth.

Finally, the last wave of newcomers are the more recent ones, from 2010 onwards. The modified POT was set, the regulations clear, and Bogotá's real estate prices high. Some people saw that they could buy a land plot and build a much bigger house when buying outside Bogotá. That is the case of my parents. They bought their land plot in 2014 when I moved to New York City to pursue my PhD, and they ended up moving to their new home with me in February 2016. They followed the architectural rules of their own cul-de-sac association, that mirrors most of the recent homes: the "modern" style, as construction workers in La Calera call it. This style has cubic shapes for the structure, with floor-to-ceiling windows, cement walls, eugenia plants as fences instead of visible wire, and decks for enjoying the view. The houses for this wave of newcomers are more spread out, and while some have taken advantage of the infrastructure networks put in place (in part by earlier newcomers), they are located along dirt roads.

Through these three waves of newcomers, nature becomes a good to be consumed rather than to be exploited for production. This view stimulates the land market, because it creates a new profit opportunity for landowners, which in La Calera were mostly peasants. Old farm land was divided in plots and sold to newcomers, usually following the death elderly grandparents whose children and grandchildren did not want to work on it.

It is important to note that private developers built a series of gated communities throughout these

waves. The oldest one is Macadamia, a former golf court and club that was turned into a residential space spanning several hectares. Other gated communities, like Macadamia del Río and Arboretto, appeared after Macadamia's success among the Bogotan upper classes. These elite spaces promise not only the first nature elements of green pastures, tranquility, and lakes, but they also include several second nature comforts like club houses, private aqueducts and electricity grids, and sport courts. I tried to contact these developers, but I was unable to reach them.

Unlike most longtimers', newcomers' economic activities do not depend on the land they own. They are highly educated, with college degrees or higher, and work in jobs that range from consulting and management to university professors, actors and tv producers. Beyond their class positions, newcomers also shared a general positive image regarding nature in the countryside. Rural tranquility was the sensation that frequently appeared when they describe the reasons why they moved to the countryside. When newcomer Jorge was looking for a place to live, he was struck by the "impressive feeling of peace" of La Calera, which was "almost hidden, it was green, I didn't see any traffic, and then I really fell in love with the place" (June 2016). Similarly to Margarita's family connection to live outside the city that I described earlier, most newcomers told me a variation of that feeling when explaining why they felt tired of urban life and lured to the countryside. La Calera has been in Bogotans' minds as a distant and rural, tranquil place for a long time, and those images were put to test when interacting with longtimers.

Mutual Benefits

Because in La Calera people from distinct classes now might live next to each other, and that is an uncommon spatial configuration in Latin America, it is important to study how they interact. Specifically in gentrifying contexts, there are tensions between newcomers and longtimers regarding social order and control, with newcomers usually imposing certain behaviors on the area (Pattillo 2010). Sometimes, though, certain newcomers aware of their position try to act as “good neighbors” (Tissot 2015) or even as “social preservationists” of the neighborhood (Brown-Saracino 2007). These relationships are further complicated in Latin American contexts, where class inequality is high and mixed-income relationships are met with resistance (Álvarez Rivadulla 2007; 2014).

In La Calera, instead of preserving a social past, newcomers want to work towards the future. Longtimers, on the other hand, feel that they are losing their community but also see potential economic benefits from the arrival of newcomers. This opportunity is even more important given that peasant work is one of the lowest paid occupations in Colombia and that almost 90% of the rural population in the country lives under or just above the poverty line.

There are three types of interactions I observed that entail arrangements between residents with the goal of “improving” La Calera, as informants called it, following the relationship classification by

Rodrigo Salcedo and Álvaro Torres (2004). In a similar spatial configuration of upper-middle classes and lower classes in Santiago, these Chilean researchers found functional arrangements, symbolic improvements, and community integration between residents. Specifically in different interviews, newcomers and longtimers used the word “collaboration” when speaking of actions with positive impacts in terms of economic effects and civic relationships.

By economic relationships, I observed two kinds of instrumental actions. On the one hand, newcomers employ longtimers in different capacities. For example, when I interviewed Alfredo, I counted five employees: two domestic workers, a gardener, a groundskeeper, and a handyman. These occupations have replaced the previous work in the agricultural fields as peasants, which some see as negative (like don Javier and doña Alicia), but others see as positive, like Pedro, the young longtimer who preferred working as a sports instructor than doing the hard labor of plowing and harvesting. Margarita says that she employs her longtimer neighbors “whenever I need something [...] The young man across the road, I know he has three sons, so when I need additional workers, he’s the first one I call. One of his children is in charge of sweeping and picking grass up when I mow the lawn.” Inevitably, these relationships entail not only a class difference between neighbors but also an authority difference (employer and employee).

But longtimers have used some of this new employment relations as a bargaining tool. Alberto owns a big cattle ranch, but he has found it hard to “find someone who works as a daily laborer,

swinging a mattock, digging holes for a fence or stuff like that, because now Bogotans pay them daily salaries of 60 or 70 thousand pesos [between 20 and 23 US dollars] just for mowing their lawns.” Alberto knows that other newcomers are paying more money to longtimers for jobs that are less arduous than peasant work. And much like James Scott (1987) when he spoke about peasants’ small acts of resistance, where the powerless can do small things like delaying a process or requesting more aid even though they keep being exploited, longtimers rise their daily rates for their labor and through that, they can earn more money to bring home.

The other economic transactions are commercial. For example, as I mentioned, my mother buys bottles of freshly milked cow every week from Rosa, her campesina neighbor. Laura, the newcomer concerned with separating trash, also buys potatoes from her campesino neighbor when in harvest. And even Emilia, an upper-class longtimer, says that “her neighbor produces vegetables and what I do is that I say ‘don Rodrigo, I need this’ or I write him on WhatsApp about what I need and I go and pick it up.” In this kind of interactions, the power differentials are less than in the employment scenarios, but they still speak to a feeling upper-class newcomers or longtimers have of “helping out” their peasant neighbors. Instead of buying produce from the supermarket, neighbors establish economic relationships based on the idea of each class benefiting that they name as “collaboration,” or a win-win situation: Newcomers can have fresh produce at below market rate, and longtimers can sell their products without intermediaries in the market, which enables them to have a slightly higher

earning.

The second type of positive interactions between newcomers and longtimers shows that there are some good neighborly relations. Although longtimers complained that newcomers are isolated and do not greet—as in many other gentrifying areas (see i.e. Drew 2012)—some newcomers actually want to reach out to their neighbors because they want to be “good” neighbors, unlike *other* newcomers. “Since we know many of the peasants around, when I go jogging I stop and speak to some of them or if I’m walking with my [8-year-old] son, he knows people. They know him as ‘el mono’ because his hair is very blond,” declared Christian, a northern European immigrant to La Calera. He wants to know his neighbors because he feels that this is how he builds community and trust between people, and that unlike other newcomers, he wants to be part of it and not isolate himself or his family. When I asked if he knew his neighbors, Mauricio, a newcomer in his late 40s who works as a professor at a university in Bogotá, gave me a long list of “who’s who” in his area. “There’s another man that lives around here who’s also a Caleruno, Mateo, who has some horses. We met because his granddaughter went to the same pre-k as my son [...] we’ve made a nice relationship with them because they come, he brings his horses to eat here sometimes, and we go to his farm and so we’ve met many neighbors like that.” Like Christian, Mauricio expresses a willingness to reach out to other neighbors, to feel that they can have more equal relationships with longtimers (as he calls it, “a nice relationship”) not based on economic transactions but in their proximity as neighbors. La Calera newcomers do not act like

Tissot's "good neighbors," where there is only discursive willingness to reach out to others, but are actually talking to longtimers in different everyday life spaces.

Another kind of neighborly relationships comes from the willingness to talk to each other and develop friendships. The example of Christian and Mauricio's sons is important in this sense: they have met other children in the area and because of that, their parents can meet and build other relationships. That is how Liliana met most of her longtimer acquaintances: when celebrating her son's birthday, she invited all his friends from the pre-k, that had newcomers and long timers alike. But these interactions can come also without children. That is the case of Mario, a newcomer, and Javier, a longtimer, who met more than 20 years ago when Mario moved to La Calera. I originally was going to interview Javier, who owns an *estadero*, a kind of local bar that also offers horseback riding tours, but Mario was there hanging out with him, drinking some coffee. I could tell that they were good friends; they cracked jokes on each other, talked about serious things like the incoming elections, and overall were very comfortable with one another. When I asked them how they met, Mario said "I liked horses and had horse-back riding lessons when I was a kid, and when I moved to La Calera I was able to have my own horse and went out with my neighbors, including Javier, to ride at night." Horseback riding was something that united them, although they did it for different reasons: Mario because he wanted to practice riding and Javier because he was starting his business. Like Javier and Mario, Mauricio and Mateo, or Liliana and her friends who are mothers, these kinds of friendship relationships between

newcomers and long timers also occur in La Calera, as a product of both groups having spaces of encounter, even if that encounter is transactional, and similar interests.

These spaces of interaction are the third type of neighborly relationships. Besides the pre-k schools that have students from both groups, there are other spaces of socializing that serve them. That was the explicit goal of Guillermo, a newcomer who opened a theater in rural La Calera:

One goal that I wanted to accomplish started happening the very same day we inaugurated and opened the theater. We had the idea to say “well, we came here with this activity, we are the new people, we have to invite the neighbors.” So, in that sense, there was something that was very nice and that filled me with satisfaction: the first invitation. Because I had lived here for eight years, I knew the community, so the first invitation was very formal and it arrived to the milker, the peasant, the guy at the store, at the little house up there... and it was a formal invitation. It wasn't like we met on the road and said “hey, drop by” but that they got their own invitation, printed, with their names written by hand, as we did when we invited all the bureaucrats and theater critics in Bogotá [...] It gave me great satisfaction. And the day comes and I see the humblest person, from the humblest occupations, coming very well dressed [*divinamente puestos*].

In his theater, longtimers have a special discount ticket of a quarter of the price that everybody else pays [10,000 pesos, or about 3 US dollars]. By handing out formal invitations and having special prices to longtimers, Guillermo wants them to know that they are welcomed there, despite theater being a “high class” activity, and that it is a space where they will be treated equally. His insistence on the formal invitations for the first show was for people in the area to know, from the start, that they would

welcome any kind of person and that the theater would not be geared exclusively towards newcomers.

Finally, aside from economic and neighborly exchanges, the third type of positive interactions come from a more civic duty. The first kind is more related with fund-raising or making voluntary financial contributions for improvements in the area. Adriana, the broker, said that in her vereda newcomers “help out when they ask for money for buying Christmas presents” to her vereda’s children. Amparo, one of the office assistants, mentioned that in the community board meetings in her vereda they “newcomers to help out and many do”⁵ with money for an event. Rodrigo, a longtimer who works in a factory and former community board president in a mostly rural vereda, saw that “most newcomers are cordial, nice [*amables*], they help out a lot with the roads, with the school’s activities, with the vereda [...] Most are generous, when asked for a donation, they helped out, some with money, some with gifts, labor, and so on.” In Colombia people use the word “collaboration” to talk about all these fund-raising activities: longtimers ask for particular things of newcomers, like help with road improvement or children’s gifts, and the latter contribute with donating money.

The second civic interactions are more political, and specifically, environmental. This is what Camilo, a longtimer in his early 70s that owns a hardware shop, said to me when explaining that the arrival of newcomers has had some good outcomes. He sees that “one of the benefits of [newcomers moving in] is that we’re not only two or three people concerned about the environment or the issues in the community anymore. Now there are many more people, mostly young ones, that are involved

⁵ *Les piden a los nuevos que colaboren y muchos colaboran.*

[*metidos en el cuento*].” Even people from the elite gated communities “are involved now and they are very high-class people, and us residents have not closed the doors and we have accomplished some things, and I’m satisfied that we have accomplished these things. We have stopped more urbanization.” With these quotes, Camilo is saying that despite opposite class positions, some newcomers and some long-time residents have aligned political interests related with the environment, and with protecting water sources specifically.

The spaces for socialization and development of economic relationships between the two groups of residents create a behavioral base for cooperation on environmental demands. Camilo’s interest in protecting the environment is strengthened, as he says, by the arrival of other environmentally “aware” newcomers. It is important to note, however, that the potential conflicts arising from new and long-time residents in how to use nature for productive or consumption activities appear in the micro-level. Moreover, although newcomers want to impose the practices they consider as ecologically friendly, they still have not changed regulations that could be used to enforce those practices.

Summary and Conclusion

In this chapter, I described the different uses of nature that have shaped the landscape of La Calera and represent first, second, and third nature, each of which is connected to the interests and lifestyles

of long-time and new residents. On the one hand, there is a productive use of nature based on the extraction of resources such as charcoal, limestone and water. These activities have been mostly done by Calerunos themselves, who also use land for agriculture and cattle ranching. On the other hand, newcomers mostly want to consume nature passively, as scenery and a resource for healthful living. Both types of uses are sustained by residents and state agencies with their environmental protection laws or exploitation permits through the POT. Residents' shared goal, however, is to maintain the ecological structure as undisturbed as possible, protecting and trying to recover the ecosystems of the area. But the newcomers' arrival leads to a paradox: despite their wanting to keep the landscape as unchanged as possible, newcomers alter the landscape in different ways through the building of the new housing.

These different uses of nature echo Cronon's idea of first and second natures. By using different technologies to extract resources and facilitate their transport, Calerunos have built a second nature that enables that resource exploitation. But newcomers also have built another type of second nature as houses that allow them to enjoy modern comforts with a "rustic" landscape. Both types overlap in La Calera, creating a third nature layer when including the state's intervention through zoning and environmental protection laws. For example, newcomers plant native trees or have small vegetable gardens to maintain their idea of first nature, supported by the work and knowledge of longtimers. Long-time residents, too, influence third nature through their own interventions in the landscape or

through their influence in local politics for planning decisions.

In this process of overlap, the economic structure of the town changes. The treadmill of production theory tells us that capital interests in natural resources will deplete them eventually and thus the environment and economic growth are usually at odds. In La Calera there is a double treadmill. First, newcomers want to build houses to live in but also they want to preserve pristine nature, but instead they put more pressure on the ecosystem and the infrastructure. And second, some longtimers still need first layer resources to sustain their livelihoods—a need that is especially true after the cement factory closure. When newcomers hire Calerunos to work as gardeners, construction workers, and domestic workers, there was a shift from resource extraction to a particular way to keep nature “as is.”

Despite these economic and other social arrangements between both residential groups, one key site remains as a place of struggle: how to use and understand nature. Each group understands and uses nature in different ways, and inevitably some of them clash. Newcomers have championed a conservation discourse while recognizing their own power position, and longtimers fight back to maintain particular peasant practices. I examine these third nature relationships in the next chapter, focusing on micro-interactions among residents.

CHAPTER THREE - The Greening Class and Its Influence in La Calera

When I interviewed Police Inspector Solano in February 2018, she told me she has seen a change in the types of disputes her office resolves. Before, Solano stated, grievances between neighbors were easily solved because they were between family members and they “ultimately had common interests: keeping the family together.” It also helped, she mentioned, that plots were bigger then, lowering the chance of conflicts arising between more people. Now, Solano added, the newcomers do not have close ties with the long-time residents and the new constructions increased density, which means that there are more chances of people meeting each other and, thus, complaining. Instead of the previous family interests in preserving family structure and claims of land ownership, what matters now are “individual interests” in the land such as “having a landscape [...] When you move to La Calera, especially to the countryside, you want everything to be pretty.”

Inspector Solano signals that the interest in preserving certain natural characteristics like beautiful landscapes—an interest brought by newcomers—has reinforced private property boundaries but also altered the issues she has to mediate in her job. Complaints now are more related to residents’ ability to define which uses and features of nature are acceptable: who can use a creek separating two land plots, whether smells like manure are a nuisance, like tractors blocking the road while loading crops or animals, including dogs and chickens, trespassing on someone else’s property.

If, following William Cronon, the first layer of nature is the ecological structure and the second

layer are the material interventions over it, these disputes over the uses and aesthetics of the environment suggest a third nature made up of social conventions—an intervention over nature that results from socio-environmental interactions. As I explained in the previous chapter, longtimers use natural resources for agriculture and other productive economic activities, while newcomers consume them for aesthetic and environmental reasons. And since they now live next to each other, clashes between these conflicting images are inevitable. Given the class differentials among residents, the question of who gets to decide these issues and how becomes a site for power struggles between residents that, eventually, speaks of how environmental privilege is constructed and maintained.

Here, what most interpersonal conflicts between newcomers and longtimers have at their core is the way they want the environment to be used. These issues resonate with other studies of environmental inequality in urban spaces, where residents from different groups fight over the best practices to take care of parks (Newman 2015), community gardens (Aptekar 2015), and green gentrification interventions (Gould and Lewis 2016; W. Curran and Hamilton 2017). Of particular note is the work by Lisa Park and David Pellow (2011), who study what happens when rich residents blame poor and immigrant residents for ecological bads, being unaware of their own harmful practices to the environment like heating driveways.

In rural spaces, imposing ecological practices by newcomers is at odds with longtimers' use of natural resources. Newcomers appear to have the values of social preservationists in a gentrifying

urban neighborhood (Brown-Saracino 2007) because they want to preserve longtimers' peasant livelihoods and ways of life, but they also act like green gentrifiers (Dooling 2009; Quastel 2009) because they curtail longtimers' practices that they consider ecologically harmful. Besides social class tensions, there is another tension between living in and "greening" the natural environment. This is played out in interpersonal relationships between newcomers and longtimers.

As Inspector Solano mentioned, disputes between neighbors stopped being family feuds and now are between strangers. Losing personal relationships in urbanizing spaces has been highlighted in the classical works of Émile Durkheim (1984), Ferdinand Tönnies (1963), and Louis Wirth (1938) who observe more anonymity and less familiarity in urban settings compared to rural ones. Their work is also implied by the frequent observation that long-time residents in gentrifying spaces feel a loss of community when newcomers move in and fail to greet or associate socially with longtimers (Valli 2015; Tissot 2011). In La Calera, when longtimers feel this loss of community, they express concern and even rejection of newcomers. Inspector Solano said that longtimers "are reactionary" on this point, adding that "They frequently say [in disagreement with newcomers], 'You're not from here!'" I found those sentiments repeated in the Facebook groups I followed, where people used length of residence and place of birth as reasons to criticize or legitimate others' comments, contemptuously calling newcomers "those who arrived" or "outsiders [*foráneos*]." With those statements, longtimers in La Calera echo other older residents in gentrifying areas, who reject newcomers because they feel a

threat to their way of life or to the authentic culture of the area (Zukin 2010).

At the same time, newcomers are aware of the resistance to their complaints about longtimers' environmental practices and they are aware that they are speaking from their own class positions. For their part, some longtimers are glad that newcomers have arrived, because they can now use their numbers, their expertise, and their social and economic resources to put more political pressure on the state for better access to ecological goods and more enforcement of environmental regulations. Motivations on both sides inspire them to overcome resistance and rejection with strategic interactions against the state.

This chapter analyzes four sites where the arrival of newcomers affect longtimers and the environment. First, I talk about longtimers' experiencing a loss of community—a similar effect in other gentrifying areas, both urban and rural. Second, I focus on the changes brought to longtimers' uses of the environment, where clashing visions of third nature alter the types of accepted behaviors in La Calera. Longtimers feel that newcomers are trying to curtail their customs, from the way they hang their laundry outdoors to their agricultural practices because they are visual nuisances or not eco-friendly. Third, I analyze the perspective of the newcomers, who feel that they have an “ecological awareness” that legitimizes their imposition of new environmental practices, such as “scientific” waste management. And finally, I talk about newcomers' keen awareness of the social distance between themselves and their peasant neighbors that makes them self-conscious about their treatment of

longtimers. As the rest of this text is organized from least to most cooperation, this chapter focuses on those tensions between residents before giving way to the surprising ways I discovered where both groups manage to bridge their differences for macro-level environmental issues.

A Changing Country Life

Don Javier and Doña Alicia, the oldest longtimers I interviewed, mentioned that the customs in the area have changed, and they relate some of those to environmental regulations. Don Javier mentioned one clear example of a change in traditions related with ecological practices: hunting armadillos. In the past, he told me, Calerunos used to do this around Easter, but since armadillos are now a protected species, they had to stop this practice. These concerns echo what other sociologists have observed elsewhere, of newcomers disrupting a previous social order and implementing mechanisms to regulate practices.

Remember the quote from Doña Alicia that I used before that said "country life is no longer a peasant life." With this, she wanted to draw attention to two simultaneous processes. First, she was aware of a change in the practices that are accepted or frowned upon in the new countryside, like the ones I discussed in the previous section, as a result of newcomers' environmental awareness. And second, doña Alicia also was signaling what other gentrification studies have highlighted as losing

community. Although in the interviews with longtimers and the meetings I observed no one used the word “community” in this sense, they felt a loss in terms of social capital: knowing their neighbors or people whom to ask for favors, having a strong network of people they can rely on when something bad happens.

Urban gentrification studies have underscored this feeling that long-time residents have when facing a rapid change in their neighborhoods. For example, with new shops catering to the gentrifiers’ taste (and pockets), traditional stores are closing or changing their products, which the older population sees as a sign of losing ties to their neighborhood (Zukin, Kasinitz, and Chen 2016). Residents also feel at a loss when participating in public discussions where key decisions are made that would affect the entire neighborhood (Ocejo 2014) and when the “authentic” character of the neighborhood is lost after new arrivals of people and businesses (Zukin 2010). These emotional responses of loss and anger result from longtimers’ confrontation of material inequalities with newcomers, for example, as Latines in Bushwick feel unwelcome in the new “White hipster” bars and stores (Valli 2015). (See fig. 3.1).



Figure 3.1. A “True Hipster Barber Shop” in the town of La Calera. Photo by the author, January 2020.

In La Calera, residents feel some of those losses. When I asked Pedro, a longtimer in his mid-20s who works as a sports instructor in an elite gated community, about his relationship with his neighbors, he replied “The closest are those who have been there forever [*los de toda la vida*]. Some who have arrived from Bogotá are not so close. It is not the camaraderie of a close neighbor; it’s like they’re a neighbor and that’s it. We see each other in the meetings, but it’s not a frequent camaraderie.” Although he is young, his family has been living in the same land plot for at least three generations, and he feels that they do not have the same level of friendliness with the new neighbors as with the old

ones. Pedro, however, does not express a particular longing for those relationships; rather, he stated that this is an expected effect of the population change in the area, but does not attribute a particular value to it more than feeling a different strength of the tie.

Other long-time Calerunos also point to how newcomers not only socially but also physically isolate themselves. Besides the scattered gated communities that are closed off completely from the outside, plots in La Calera are fenced off with naked barbed wire or with big, bushy plants like eugenia or chusque. Part of the reason William's neighbor planted chusque was so that she could keep her privacy and block the sight from outside—a similar concern for those who plant eugenia or build other tall walls. “They fence their plot and forget about the outside,” said don Javier, a 70-year-old longtimer. “They came and said hi, asked if the area was nice, built their houses and they left and forgot about peasants,” he added. Don Javier talks about this newcomer isolation not with rage, but with disappointment. By saying how they forget about peasants and longtimers like him, he expresses that there is not much interaction between him and his new neighbors, even less than what Pedro suggested before. Long-time residents in other rural spaces undergoing gentrification mention similar feelings of community loss(Phillips 2002; Michels 2017).

The community loss symptom is not only common in other gentrification stories, including those of green gentrification, but it also speaks of a broader relationship between residents framed in moral terms. For example, greeting others is an important interaction for residents in La Calera. Compared

to newcomers, longtimers care a lot for saying hello to their neighbors and people they meet on the street. The concern about newcomers' lack of manners according to longtimers in other gentrifying areas has been documented before (Drew 2012), and greeting is part of how residents in rural areas also gauge the morality of newcomers (Bell 1995).

About La Calera, William said that other long-time neighbors near him “are nicer [*más amables*]. They say hi more cordially and all that. They are more interested in saying hi, which is a custom that has been lost a bit, right?” By greeting others, long timers feel that they are seen, that they are acknowledged. They feel they can build more trusting relationships with those who at least say hello. As in the Childerley of Michael Bell (1995), these pleasantries are related to what residents think of as the true rural life, where community can be built with neighbors and develop strong ties. In a way, what rural residents are missing is the close relationships that classical sociologists juxtaposed to the more formal and distant demeanors of urban dwellers.

Interestingly, newcomers have the same complaint about *other* newcomers in the gated communities. “We have to be honest. They go by in their SUVs, in their luxury cars, and don't roll the window down, don't stop. They come and lock themselves up there,” said Jorge, the advertising executive. He compares this type of neighbors to the ones he had in Bogotá before he moved: people who are not interested in knowing who the next person is, who are highly individualized. Like Jorge, Alberto says that he dislikes “Bogotans” despite being a newcomer himself; “there's this Senator next

to us and it's a pain because it's a bodyguard caravan. They block the road and come with their motorcycles and SUVs." He does not know the Senator, and he is not interested in her either. He prefers talking to his longtimer neighbors because he feels that newcomers want to isolate themselves. Jorge and Alberto signal an interesting position of identifying themselves as a good type of newcomer, that they are concerned about saying hello to their neighbors and build community, unlike other newcomers who are not interested in that. In this, they act like other urban gentrifiers concerned with maintaining an area's authenticity.

Without greeting each other, there is no basis for more interactions. Doña Alicia said that, even though today "we rub shoulders with rich people," there are no deep connections with them. "It's not like before; they don't come visit the family, they don't do any favors," she added. She feels the loss of community in two ways. Emotionally, doña Alicia sees the losing of neighbors as reflected in the possibility to socialize (visit the family). Additionally, she feels a more functional loss: by losing neighbors, she has lost certain ties that could be useful for her (asking a neighbor for favors). With population change, the people whom longtimers knew are leaving and are being replaced with newcomers who they do not know.

In La Calera, however, what changed in the country life was not only customs but also economic relationships. The countryside is less a place for working and producing, and now it is more a place for consumption and residence. This has an effect on uses of nature; the newcomers have created a

treadmill of consumption in the sense that they need to protect the environment for aesthetic consumption purposes. Doña Alicia and don Javier, on the other hand, suggest that longtimers' families also alter the treadmill of production because the younger generations do not want to work in the fields. The changes felt in the area are even more evident when these different third nature visions clash and alter how residents interact with each other and with the environment.

Changing Natural Practices

Gentrification studies have examined how the new arrivals change long-time residents' practices. As I mentioned before, Pattillo (2010) and Tissot (2015) observed newcomers trying to impose new behaviors on longtimers and establish a new social order in relation to the uses of nature. What motivated both changes is newcomers' sense of what their new neighborhood *should* be like in terms of aesthetics and core values, like diversity or participation in public scenarios. In gentrified urban spaces, building facades are changed to appeal to the newcomers' aesthetics (Hwang and Sampson 2014), and these visual concerns are even mobilized for policies like "broken windows," which relate building decay to social disorder and crime. In cases where the environmental concerns are imposed by higher-class groups on lower-class ones, rich residents usually exclude poorer groups from environmentally good areas (see i.e. Park and Pellow 2011), leaving them with the ecological bads, like

pollution or toxic waste (Taylor 2014).

As in cases of green gentrification in cities, in La Calera, newcomers' pressure on longtimers has also been brought by their aesthetic concern over what nature *should* look like, and by environmentalist core values. The struggle that newcomers have with teaching environmental awareness to longtimers in the case of waste management or appreciation of natural resources comes from an idea of what they think their natural environment is or should be—not polluted, green, safe. But these conceptions have very practical effects: not only they want to separate trash and make compost, but they also generate tensions with long timers over what they (and the animals they keep) can or cannot do. These tensions are important because longtimers depend on natural resources for their agricultural practices, and the newcomers' imposition threatens campesino long-time residents' livelihoods.

A first source of tension over change of practices is water use. At its core, most disputes I heard about this resource were related to who can use a creek that acts as the border between two land plots. On the one hand, newcomers want to keep the creek trash- and pollution-free, just as Jorge mentioned in the previous section. On the other hand, longtimers may keep cattle or crops too close to the creek, risking pollution through manure or pesticides. This conflicting use has resulted in the police inspection's intervening, whose decisions most of the time support newcomers' ideas of conservation because they are backed by environmental laws. As a result, peasants have to adjust their agriculture

and cattle practices to the new ecological sensibilities of the newcomers *and* the state's new environmental regulations.



Figure 3.2. A land plot with buffalos grazing next to one of the elite gated communities in La Calera. Photo taken by the author, August 2018.

Animals, especially hens and dogs, are a second source of tension over use practices. Both newcomers and longtimers keep cats, dogs, and sometimes hens and horses—only one newcomer

family I knew kept a cow in their property, while that is more common for longtimers who might also keep goats and sheep. There is even a buffalo herd grazing next to an elite gated community (see fig. 3.2). Land plots are usually divided not by tall fences, but by barbed wire that is easily trespassed by small animals. When these pets cross over to another plot, problems arise between neighbors. Claudia spoke of a common fight she had with her longtimer neighbor:

A neighbor lady over there had hens. The hens got in here [to our plot] and we were growing some plants, and the hens were happily digging. They uprooted our little trees, the little plants, and the dog ate one hen—he killed it. So the lady came and said “my hen got killed” and we said “no, ma’am, I’m so sorry, how much was your little hen worth?” Super expensive [Claudia said ironically]: 5,000 pesos [about 1,5 US dollars]. Then it happened again, and again, and it became frequent, so one day I told her, “hey, you come here every week to charge us for a hen; do something, lock them up,” and she replied, “you are rich, so give me the money to buy the net so I can lock my hens up.” And I stared at her and said, “Ma’am, your hens are getting in my property, they are killed by my dog in my property so the only solution I see is that you take care of your hens in your property.” She said “you speak that way because you have the means [*tiene con qué*],” and I go, now also upset, “if you put it like that to me in that language, then since you’re poor then you shouldn’t have hens; no, that’s not how it should be.” She never let her hens come here again.

This exchange highlights two things about interactions between the social classes in La Calera. First, it shows class awareness: both Claudia and her neighbor know where to place each other in class terms, and that helps them put some expectations on what the other should do—Claudia knows she

has to repay the hens that her dog killed, and her neighbor knows that Claudia can give her money to make Claudia's request (lock the hens up) happen. They frame the discussion between them in terms of class—the haves and have nots—, and both residents speak openly about that. Moreover, as I already explained, newcomers are self-conscious about their class position, which in turn makes them feel responsible for some things, like repaying the hens in this case. This open discussion about class is what María José Álvarez-Rivadulla (2014) found when studying tolerance to inequality in Colombia, where people from contrasting positions in the class spectrum almost naturalized their differences and spoke overtly about them.

Second, this exchange is also related to what uses of nature are allowed and under what circumstances. Claudia also keeps hens on her property, so that is not an issue. What is problematic for her is the *trespassing*—when the neighbor's hens cross over onto Claudia's property. Instead of allowing these free-range hens to roam around the field, Claudia wants her neighbor to lock them up. But this is not how things were done before. The issue thus becomes one of controlling and limiting certain practices but not prohibiting them altogether—people can keep hens as long as they are confined to certain spaces.

This conditional acceptance of certain agricultural practices goes beyond individual land plots to encompass other common goods. Catalina, a longtimer in her early 20s who works as an office assistant in the town, mentions that in her vereda there have been issues with road maintenance because of a

tractor. “[Newcomers] make their big houses and fix the roads, and sometimes they have problems with people who grow crops when they use their tractor or truck.” As with the hens, newcomers do not take issue with peasants’ livelihoods, but rather expect the latter to adjust agricultural practices to new conditions and sensibilities set by newcomers: tractors damage and block the few roads. Apart from tractors and manure smells, a particularly difficult tension that newcomers have is with growing practices that use inexpensive, ecologically harmful agricultural chemicals like Round Up—a glyphosate-based⁶ herbicide. For newcomers, peasants ultimately should avoid or modify these practices that sustain their livelihoods to keep them in line with new environmental concerns.

Other times, newcomers create ecological bads by their own environmental practices. That happened to William, a longtimer in his early 30s who works as a teacher in Bogotá. He lived with his wife in a plot that had a creek that flooded their “patio a few times,” he said laughingly and continued, “One day it rained really hard and our washing machine was floating... Our [newcomer] neighbor had planted *chusque*⁷ in the fence, but chusque has a lot of residue, so it clogs the ditches in the road, and clogs the creek.” When I asked him why his neighbor planted it, William said “because she did not want people to be able to see inside her house” and thought that chusque would be an environmentally and aesthetically good means of concealment instead of a tall fence or wall. But despite her ecological awareness, her lack of practical ecological *knowledge* created a problem for

⁶ The World Health Organization classified glyphosate as a carcinogen, but it is one of the cheapest herbicides available in Colombia. It is also used in the large-scale illicit crop spraying in the country, to several environmentally adverse effects.

⁷ Also called Andean bamboo, *Chusquea scandens*. The plant looks like lemongrass.

William and his family—she was not aware of the potential risks of having this plant near a creek.

Besides wanting to change agricultural practices, newcomers also take issue with other practices that jeopardize their ideas of the idyllic and quiet rural landscape. In many interviews, I heard newcomers complaining about longtimers hanging their clothes to dry in the fences. For example, Amparo, another longtimer office assistant in her early 20s, said that “before, people hung their clothes in the ropes of the fences, and now they cannot do that because the [newcomer] neighbor doesn’t like that and says that it looks ugly, that it looks bad.” Adriana, a longtimer in her late 40s who works part-time as a land broker for newcomers and part-time in a factory in La Calera, says that most of her clients “get bothered by peasants because they hang their clothes... so the majority want to have better surroundings [*vecindario*].” By disliking the way longtimers hang their clothes to dry, newcomers are not only expressing a class-based aesthetic judgement but also an environment-based one: wet clothes are not part of the “natural” views that newcomers sought when moving to La Calera. This is similar to rules enforced by homeowners’ associations in some gated communities, who see the sight of laundry as harmful to property values (Tuttle 2015).

A longtimer practice that newcomers see as breaking the quiet of rural nature is the loud sport of *tejo*.⁹ Antonio Castrillón, the former Head of Safety at the Mayor’s Office, said that disputes between

⁸ In Colombia, the word *barrio* is much more frequent than *vecindario*. In this case, she is not talking about an urban *barrio* but rather about the area surrounding a rural land plot.

⁹ *Tejo* is one of Colombia’s most important sports, which was recently declared cultural and historic heritage in the country. It involves throwing a metallic disc to a clay surface with small gunpowder patches, which explode on impact. It also is practiced mostly by lower classes.

neighbors “are about noise, speeding cars, about the lady that has a store and peasants go down there to drink beer and play tejo, and the other guy likes cricket and golf.” Most of the times, he continued, these “concerns (*señalamientos*) are raised by these people [newcomers] to peasants.” In contrast to the dirty and loud tejo, La Calera *should* be home to a very quiet and *green* sport: golf. There is one public golf court, aside from those in the elite gated communities. What Castrillón signaled is, again, stark class differences derived from aesthetic judgements that impact what kind of environment residents have.

All these examples are manifestations of changes in practices that newcomers impose to long-time residents. Newcomers do this because they think their own practices are better, much like the rationale urban gentrifiers had in the examples of Tissot and Pattillo where neighbors used quality of life arguments to prohibit certain behaviors. But unlike in those neighborhoods, in La Calera newcomers try to exert class power over longtimers’ use of nature. In this case, newcomers think that the way they do things is environmentally better: their uses of nature are less noisy and smelly, and eco-friendlier than those of longtimers. It is because they claim having an ecological awareness that they want to limit peasant’s practices that supposedly endanger nature in material and aesthetic terms. Thus, class relations are translated into environmental practices, which have impacted longtimers’ behaviors and even their own homes—like locking up their hens or drying their clothes away from neighboring eyes. Longtimers have not only endured these efforts from newcomers imposing their environmental

awareness on the longtimers' agricultural and everyday life practices, but they also have experienced a larger change: a feeling they are losing their sense of rural community to the newcomers.

Teaching Ecological Awareness

Jorge, a 50-year-old advertising executive, lives in Márquez, the same mixed vereda where Margarita, whom we met in the last chapter, lives. He gave me a tour of his house, where he lives with his wife and two teenage children, two cats and an aquarium, surrounded by a large lawn and a small fruit garden with *uchuva* bushes (golden berries), *feijoa* trees (pineapple guavas), and some recently planted strawberries. Throughout my interview with him in June 2017, he frequently mentioned that he is concerned about trash, but the response he has received from longtimer neighbors in his vereda has not been very supportive. In fact, he has been the subject of many fights online and off-screen with other Calerunos about waste management and what he calls environmental “awareness.” He said that he notices that longtimers have “less awareness” in the sense that “campesinos, whether because they don’t know better or out of necessity, pollute with chemicals bought in Agrocentro [one of the local farming stores] to grow different crops.” Besides agricultural waste, he has found “[plastic] bottles, glass, diapers” along a nearby creek, which he attributes to longtimers’ lack of ecological awareness. “They don’t have ecological practices,” Jorge continued, but he makes it clear that it is not because

peasants want to pollute, but that they are constrained by knowledge or money. That difference notwithstanding, he argues that the effect on the environment is bad. And besides denouncing littering on Facebook, he took up cleaning up the creeks and other spaces to “leave them as they were before” human interventions.

Like Jorge, many newcomers I interviewed or observed were concerned about trash. In a community planning meeting of a vereda, a newcomer declared that “almost everyone here does compost” (field notes, February 2018), signaling how seriously they take organic waste. For example, Liliana, a university professor in her early 40s, said that “something that has struck me about living here is realizing the amount of trash you produce... you become a bit more aware of the piles of trash that go out” (interview August 2018). Laura, another newcomer who is an audiovisual producer in her mid-30s, sees trash as a problem of living in La Calera. “Something negative here,” she said in my interview with her in June 2017, “is that there is no trash separation” and that has made her change some of her consumption habits, whether it is by reducing her use of plastic products or by switching to more eco-friendly ones to keep her home waste water clean. Because La Calera does not have a municipal dump or a recycling facility, she travels every few weeks to a supermarket in Bogotá where they “collect used oil, deodorant packages, batteries, bottle caps” to dispose of these hard-to-recycle products.

Jorge and Liliana use “awareness” to signal their concern with the environment, in contrast to

some of their neighbors. They are dismayed by the amount of trash they and others produce, and they are mindful of that when they have to dispose of something they bought or consumed. This awareness is new for them, though; it developed after moving to La Calera. They think others who do not have this mindset are putting the natural environment in danger; they argue that others would benefit by having it. Their awareness leads them to change their behavior: like Laura, other newcomers separate trash, collect materials to dispose in specialized areas elsewhere, and make compost to use in their own vegetable gardens.

Jorge goes one step further in saying that longtimers pollute not because they want to, but because they do not know better—in other words, they lack environmental “awareness.” Confirming his point, none of the longtimers I interviewed even mentioned trash or waste. Only longtimer Carlos Pinzón did so in his capacity of former CEO of Espucal, the company in charge of waste collection, and water and electricity provision. Trash is something that mainly concerns the newcomers and places them in conflict with longtimers: the nature they want to preserve is being threatened by longtimers’ trash, showing that the longtimers do not know how to “take care” of nature. Researchers studying the issue of where to put the trash and how to deal with it highlight that this is a highly contentious topic that results from not only political decisions from the government but also about power differentials that aim at maintaining environmental privileges for some and leaving others to deal with the ecological bads (Pellow 2004; Nagle 2013).

The issue with trash is further complicated by the poor collection infrastructure. The single garbage truck has to serve a municipality of over 25,000 people, of which the majority live in rural areas where there are only dirt roads that frequently are muddy because of the constant rain. Where I lived, the truck went by at around 6:30 am on a weekday—and so I had to either put the trash on the street the night before or wake up before the truck went by and take it outside. Unlike in other places, there are no containers for the trash, and so the bags must remain exposed on the road, risking that one of the many stray or freely running domestic dogs will rummage through it, causing me to be fined for littering. If I missed the truck, I would have to wait a full week for its next visit, with the trash sitting and smelling at home. Liliana succinctly puts it this way: “because the [garbage] truck only shows up once a week, you realize that not everything disappears [...] in a building, I throw the bag in the chute and it disappears from my sight, but not here.” Liliana and other newcomers can now see the amount of trash they produce at home, and that influenced them into reducing what they consume and separating trash to help the environment.

Despite what newcomers say, longtimers are not the only trash offenders. In the city council minutes of May 19, 2015, Zulma Alayón, a longtimer and CEO of Espucal before Pinzón, is emphatic in saying that a big part of rural trash comes not from peasants but from newcomers. In fact, construction debris from all the new houses and canned goods that outside hikers leave behind are some of the most common types of trash in La Calera. “When we verified the consumption patterns of

our peasants, it's not like they use a lot of canned goods" (Minute 31, 2015). Population growth in the municipality not only increased the amount of waste but also changed its type.

Because newcomers understand trash and waste are harmful to the environment, they want to teach this ecological awareness to longtimers but have faced problems. Margarita, the newcomer I described in the previous chapter, talked about these initiatives when she told me she has tried to bring up

issues like waste education, waste management, keeping the creek banks clean. I don't think it's an education issue, but about sharing some things to create different habits like taking care of the environment. It's been very hard for two reasons. First, because you don't know the native people; I mean, I know those who are around my house, but that's a group of five people [...]. Second, because of the problems with Espucal's waste collection.

Margarita's quote summarizes the idea newcomers express when talking about longtimers' waste practices, that is partly patronizing in terms of their social class and partly derived from cultural capital in terms of their environmental concerns. In their eyes, longtimers are not evil pollutants like oil companies, but they lack an ecological awareness that would condition better behavior. Newcomers feel a moral obligation both to behave better and to teach longtimers how to behave better, like protecting the creeks and disposing of garbage in the right containers. Thus, newcomers frame the issue of waste management both in a language of education and a moral duty that signals class differences. This is similar to what geographer Martin Phillips (1993) described as "class colonization"

from urban elites in the countryside, or the idea that certain practices considered “green” by some groups should be the norm (Katz 1998; Castree and Braun 2001).

Sociologist Michael M. Bell (1995) reminds us about the intricate relationship between the environment, morality and class in rural areas. He argues that residents in rural areas have anxieties over their class identities, which in turn influences their desire to be considered as “country people” or, in other words, people who developed a “natural conscience.” These residents link nature and class and evaluate others based on this relationship, and this is similar to what newcomer Calerunos do when trying to rescue the environment from trash.

Education is a frequent class marker, but in La Calera it is applied to understanding new environmental laws and learning the importance of “taking care” of natural resources. In the past, Police Inspector Solano mentioned,

Everything belonged to the peasants; the whole area belonged to them, all the water belonged to them. But [...] peasants have to update their chip¹⁰: the creek, that before was for their cows and crops, today has regulations and they don’t own the water anymore. The state owns it, and to use it, peasants require certain authorizations. And that is complicated for them.

It is complicated for campesinos because they were not trained in these regulations or they did not expect them to be enforced; after all, they could still share these natural resources with other families as they used to. With the arrival of newcomers, however, this changed. The newcomers are aware of the

¹⁰ *Cambiar el chip* is an expression used widely in Colombia to signal a change of mindset.

environmental regulations because they know the law (or know someone who does), and so they have the tools to win complaints they bring to the police inspection when longtimers use pesticides or dispose of cattle manure near creeks. Lacking training in the law puts longtimers at odds with newcomers.

But more than winning a dispute, newcomers want to teach peasants good environmental practices and the value of natural resources in their own terms. “These things [environmental resources] are very, very expensive,” stated Alberto, a newcomer I described in the previous chapter who is a CEO of an important Colombian company in the construction sector. “And, I believe,” he continued, “people who live here don’t have money to pay for them. For now, we need more education, to make people more aware [*más concientización de la población*], explaining to them, teaching them how you should do water management. At least the Japanese can do it in rural sectors.” Alfredo is arguing that newcomers can *teach* longtimers good environmental practices, because newcomers *know* the value of the environment. He also shows how well informed he is by referring to a foreign context like Japan’s, which has a long history of having “sustainable” practices from the Edo period (Morris-Suzuki 1995).

His statement exemplifies what I showed in the previous chapter about the differences between how each residential group establishes a value for nature. For newcomers, the value lies in preserving it for the future, but for peasants it comes from the ability to raise cattle or grow crops today. For

example, Mr. López, a longtimer with whom I had an informal conversation before a community planning meeting, told me he was worried by that year's drought that resulted in very yellow grass that is not good for his already thin cows. His appreciation of nature as a source of needed income contrasts with Alfredo's appreciation of a pristine natural environment, but Mr. López knows how valuable the environment is for his livelihood.

For newcomers, teaching ecological awareness is almost a moral duty that is also derived from their class position. As Margarita mentioned, she has tried to talk to her neighbors about waste and trash management, just as Jorge did. They feel the need to instill this awareness to those around them because they understand nature as frail and needing protection. And because they think they know the "true" value of all these resources that are at risk of pollution and depletion, they want other people to be as mindful as them in their use and disposal. Newcomers' willingness to impose their moral authority over their neighbors' use of the environment reflects their class position.

My informants' use of the word "awareness" is twofold. On the one hand, they relate it to their knowledge of environmental "best practices" that are exemplified by their concerns with recycling, proper trash management, and the frailty of water sources. On the other hand, they also use it to reflect a consciousness of social class divisions. Here, newcomers use their higher class position to justify their understanding of how "valuable" natural resources are and that they have a duty in teaching these values because they have the cultural capital required to do so, while peasant longtimers do not. This

combination of morals and nature, as discussed by Bell before, is at the core of inter-class relationships in rural areas. But La Calera newcomers' class consciousness also is related to how they interact with longtimers, and they see that their privileges are the principal obstacle for their pedagogical efforts surrounding the environment.

Class Obstacles

When Margarita explained one reason why her attempts to do waste management education have been unsuccessful, she said, "When you go to work with the community, well... you are a stranger but also a suspicious stranger, so organizing people hasn't been easy." By saying this, Margarita is noting that she is aware of her position as a newcomer; she knows that longtimers see her with suspicion, and so she expresses a degree of self-consciousness. Ignacio, the president of the CTP who lives in one of the most expensive gated communities in La Calera, puts this self-consciousness in even clearer terms: "there is also an aversion to the newcomers, especially to gated community newcomers, because they [longtimers] see them as Richie Rich [*ricachón*] coming to invade." He says he has heard comments related to that, but also that "we've been working on a process to integrate." Ignacio and Margarita did not state having any real problems with their immediate neighbors, but they expressed an awareness about their own outsider status that is also tied to their higher class position compared to longtimers.

Other newcomers, however, experienced disputes with their longtimer neighbors, which ran along class lines. Claudia, a CEO of a finance agency, narrated an encounter she had with a peasant neighbor a few years before our interview in January 2019. She arrived in La Calera with her husband in the mid-1990s after living for a couple of years in Europe, because they wanted a more tranquil space to live in and to raise their children. They live in a socially mixed cul-de-sac that was later gated when some neighbors pooled resources together to protect themselves from potential robbers as they heard more stories of burglaries in La Calera. The fight was with Claudia's longtimer neighbor over the fence that divided their properties, which this neighbor "left us to fix by ourselves," even though that work is usually split in half when it happens among longtimers themselves. When they asked their neighbor

why should we do the whole fence if half of it is his, [he replied] "oh, because you have the means [*tienen con qué*]." There is a hidden discourse, associated with a Christian tradition, where the haves must give, like in a charity [...] and one is like that, a person with higher economic resources, and so if I have money, then I contribute.

What Claudia is signaling here is that there is a perceived moral responsibility to give. Newcomers feel the moral need to teach environmental awareness as part of a felt duty to give and help because they are aware of their own higher class position. This moral responsibility is further reinforced by longtimers constantly reminding newcomers that they have more economic resources.

These reminders make newcomers self-conscious, to the point that they even feel highly

uncomfortable sometimes. During our interview, Margarita kept a formal tone until she said,

Now, there's something that I don't like, but I'm going to say it. I think that the natives are very jealous of us, who are arriving, and they describe us as rich, so they talk about "the rich people." I have to confess never ever in my life I had felt discriminated against; I mean, I am a woman, I worked in an absolutely male industry and I never felt discriminated against. Here, I feel discrimination because I'm part of the "others," the other group.

Sebastián: Can you maybe give me an example of when you've felt that?

Margarita: Yeah, in the meetings when they speak of "the rich," for example. Not necessarily those of us who come from Bogotá are rich; I guarantee you [...] that there are peasants here with lots of money [*posibilidades económicas*], so it's not an issue of how much money do I have, but the idea that the Bogotan newcomer is rich. That's how they see us, and it is very unpleasant.

Margarita is raising three issues. First, like Ignacio and Claudia, she has reflected about her own class position in the sense of understanding that she is part of a higher class of newcomers but that it is a more heterogenous group than longtimers think. Second, by saying that there are richer peasants than some newcomers, she is trying to show that the class composition of the area is more complex than people think. And third, by talking about discrimination, Margarita is expressing how bad she has felt when interacting with some longtimers. The perceived aversion, as Ignacio called it, to newcomers creates a problem for them because, like many urban gentrifiers, they feel they want to improve the area, including protecting its environment.

Some longtimers, however, see those intentions as patronizing. Doña Alicia, the longtimer store owner I described in the previous chapter, has seen the changes in demographics of the area and responded, for example, by changing the products she sells from loose produce to packaged chips and yogurt. When I interviewed her, doña Alicia told me she “hate[s] when the new people call them ‘little peasants’ [*campesinitos*].” Her hating the diminutive comes from her strong campesino identity, which she feels is seen as inferior by newcomers. She feels that that “little” reflects a patronizing treatment from newcomers, and she does not want any of that. She wants to be treated with respect.

Other times, newcomers’ intentions to teach and improve are not patronizing, but paternalistic. They feel an obligation to do these things *despite* longtimers’ resistance because campesinos, according to the new neighbors, do not understand how they could benefit nature and benefit themselves by changing their behavior. For example, Claudia had a problem with persuading a longtimer to join when neighbors pooled money to fix the dirt road:

We are ten plots [of land], six [owners] are from Bogotá and the rest are campesinos. So we managed to have a road and the same thing happens, the “because you have, then you give and we don’t.” And so we tell them “hey, well, try to collaborate, at least with some labor” and they go “no, I only need my rubber boots to get to my plot. You are the ones who need the road because you use cars, we don’t have the need.” [And we say] “But look, this benefits you;” [they reply] “No, what does it have to do with me? I live over there;” “But your plot will increase in value,” we say and they reply, “No, but I’m not even selling it.” I mean, we speak a completely different language and they are right because they have a different logic: for this man, who has a plot for his cows to graze, he’s not

thinking of selling it.

Claudia is aware that newcomers and longtimers have “different logics” because the former see owning the land as an investment while the latter see it as the source of their livelihood. It is a typical case of use value *vs.* exchange value: because she works in investment, she sees the value of a potential good sale that would come by increasing a land plot price through infrastructure development, and she tried to make the peasant aware of that potential. But he was not interested in it because the plot of land is not something that he is thinking of selling, but rather keeping for his work or leaving it to his children. Newcomers want to improve the area’s living conditions, which in their minds will result in everyone benefitting through better use values (consuming nature) and higher land prices (commodifying nature).

But longtimers can see these strategic interactions not as educational but as patronizing or paternalistic. They are aware of their own and others’ class positions, and, in an economically redistributive argument, ask newcomers to put the money longtimers think they have into the local improvements newcomers want. The overt way people speak of class is also derived from the long tradition in Latin America, and certainly in Colombia, to use that category in everyday life speech and understanding of inequality (Álvarez Rivadulla 2014; Uribe Mallarino 2008). Longtimers also are proud of their campesino heritage, which makes them look for more equal footing in their relationships with newcomers and to not be treated as “little.” And longtimers did not ask for

newcomers' financial or environmental advice.

However, longtimers are happy to receive that financial and environmental advice in other areas beyond inter-personal and micro-level interactions in La Calera. Take Camilo, for example, whom I introduced in the previous chapter. As a longtimer involved in several public discussions about environmental protections in La Calera, he said that he welcomes newcomers "involvement" in discussions about "the environment or the issues in the community." In other words, he points to the fact that newcomers can help longtimers in different scenarios to influence political decisions based on shared environmental demands. Specifically, I saw three of such strategic collaboration sites in water provision, the development of green public space, and enforcing zoning regulations to protect the environment from further urbanization. I explain those sites of third nature in detail in the following chapters, focusing on how residents from both groups used joint legal actions and other mechanisms to press the state to enforce its own environmental regulation.

Summary and Conclusion

Interactions between newcomers and longtimers in La Calera are complex. The main cause of this complexity comes from the contrast between social class distance and the need for social interaction, including economic transactions. These interactions are also framed in environmental terms,

specifically in what types of uses of nature are allowed and what are the consequences of those actions in the landscape. In other words, what can be done over and in nature becomes a site of class interactions, which oftentimes result in an imposition of “green” practices from the top down, as the literature on environmental privilege shows for other cases where powerful groups push less powerful groups out into less ecologically desirable areas (Pulido 2000; Park and Pellow 2011; Taylor 2014). Other times, however, these interactions lead to resistance from the bottom up at local or national levels (Checker 2011; Lewis 2016). But sometimes it can lead to cooperation between groups of people to push for a common environmental agenda. This results from a “just green enough” logic in other green gentrifying contexts (W. Curran and Hamilton 2017), where rich newcomers and poorer longtimers find a common ground in protecting the environment against new developments, as well as trying to improve residents’ quality of life.

Regarding tensions between neighbors, and as happened in other gentrifying areas, newcomers impose, control and limit social practices that the long time population had. In La Calera, however, these practices are not for abstract concepts like “diversity” or “beauty,” but with a very concrete concern over the environment: reducing pollution, limiting smells, preserving pristine areas. With that, they feel they can protect the first nature characteristics of the area while limiting the second nature interventions (the built environment, for example) over the landscape.

Newcomers, however, are not oblivious to their own position of power in this process. In a

paternalistic logic derived from what they call their “environmental awareness,” they want to teach longtimers “good” practices because they feel that peasants lack such awareness and it is their moral duty to teach them how to take care of the environment. In that process, newcomers are also reminded of their class position by longtimers, who resist by, for example, requesting money from the new residents to make the changes they want.

But interactions between groups can also be more equal and more functional, as with the examples of the pre-k and other job relationships. These symbolic and community ties are the first step to preserve La Calera’s environment that I found in more macro discussions when the state was involved. The coalitions I observed were “just green enough” to include common environmental concerns because there was a shared base for these concerns but also because the state becomes a key actor in affecting the environment while at the same time providing environmental protection laws. It is through the demand to enforce these laws that residents develop a third nature framework to affect the natural landscape by keeping it free of further human intervention.

One of the main interventions in second nature is related to the need to build new pipes for aqueducts and sewage, maintain the roads, and bring electricity and internet services. But although La Calera has an abundance of water resources and, residents have problems getting acces to them. This “scarcity in abundance” is what I examine in the next chapter, following the unusual strategies of inter-class cooperation that residents put in place to obtain water, as the first scenario of collaboration

related to environmental issues in La Calera.

CHAPTER FOUR - Waterscapes and the Paradox of Growth

Residents of the Salitre vereda “are already in the worst of two worlds,” Ignacio Gallo, the Territorial Planning Council (CTP in Spanish) president and a newcomer who I introduced before, remembered telling them at a community meeting about planning a few months before our interview in June 2019. “You came here thinking of the countryside,” he said, “but there are so many of you now that this is not rural anymore; this is a neighborhood with the worst environmental conditions because you don’t have sewage, the aqueduct is vulnerable and so is the electricity.” Ignacio pointed out that life in a rural area might seem good on the surface, but the infrastructure for residential development in La Calera is absent at worst and deficient at best. Julio Vásquez, a longtimer and Vice President of the CTP, agrees with Ignacio: “La Calera is greatly behind in residential utilities.”¹¹

Both CTP leaders speak of the problems of infrastructure arising from urban development. Specifically, they exemplify how a first nature necessity—water—and a second nature improvement—aqueducts and sewage—are issues affected by urban growth. In this chapter, I examine how residents of La Calera use a third nature approach to deal with these problems, using the long-standing tradition in Colombia of community aqueduct development and its relationship to the state. The state’s role in this process is paramount, because, as I showed in an earlier chapter, it induces a scarcity despite the abundant water resources in La Calera. The San Rafael reservoir, one of the largest drinking water

¹¹ “La Calera tiene un atraso grandísimo en el tema de servicios públicos domiciliarios”

reservoirs in Latin America, is located in La Calera but very few residents have access to it. Through privatization efforts, the state becomes an interlocutor for residents who want to obtain clean water, both from protecting the fragile water resources and developing good infrastructure.

Infrastructure development and urban growth has been a relevant topic for scholars in Latin America. Scholars studying informal settlements in the region have documented for a long time how slums and other forms of peripheral urban growth face difficulties in public service provision (Fischer, McCann, and Auyero 2014; Murphy 2015; Álvarez Rivadulla 2017). Yet Bogotá has historically been one of the Latin American capital cities with the highest rates of coverage of public utilities (Gilbert 1996), especially for water—in the 1990s, the rate was above 90%. However, this is not the rule for the surrounding areas. The Colombian capital guarantees the provision of some public utilities, especially aqueducts and sewage systems, at the same time that informal service provision (for example “pirate” cables for electricity hooked to the main power lines) appeared in the city outskirts or its rural peripheries.

Water infrastructure and provision are key discussions in Latin America. Most of the time, the struggles are between residents and the state, who wants to make a new dam (Rodríguez Garavito and Baquero Díaz 2020) or wants to privatize existing water networks (López 2016; Díaz-Espitia 2017), leaving many people without access to water or displacing them to build the dams. Highly publicized cases like the water wars in Bolivia (Lazar 2008; Perreault 2008) showed that residents can organize to

fight against these state impositions. Similar findings have been documented in other countries in the global South, like México, Nicaragua, and Indonesia (Kooy 2014; Pacheco Vega 2014; Romano 2019). In Colombia, community aqueducts have a long history, with some of them appearing as early as 1925 (Quintana-Ramírez 2010). Most of these community aqueducts have been built by peasants in rural or peripheral urban areas as a response from the lack of state plans and a resistance against privatization (López 2016; Roa-García, Brown, and Roa García 2015; Roa-García and Pulido-Rozo 2014; Barreto-Moreno 2014).

The need to fill in incomplete infrastructure has recently become more pressing in “rururban” areas (Nates Cruz and Velásquez López 2019). With the arrival of exurbanite newcomers to rural areas comes a paradox of growth: new residents’ needs for services puts pressure on existing infrastructure, but they also bring funds to repair or extend it by paying service fees. Moreover, given the class differences of the populations in these types of urbanizing countrysides, infrastructure development usually works only in benefit of the newcomers, as is the case near Buenos Aires, Argentina (Timo 2017), where newcomers developed infrastructure only for themselves.

Yet in La Calera, the outcome is different. Longtimers and newcomers are aware of these first and second nature problems of water provisions and the state’s involvement in perpetuating these issues. Using the strong community aqueduct networks build by longtimers and new legal and financial resources brought by newcomers, residents create a shared third nature approach to this issue in which

they want to protect water resources and strengthen existing infrastructure to obtain a better service. This chapter looks at this process, focusing on the inter-relationship between residents made in the community aqueducts and their shared demands for guaranteeing their right to water.

The State of Services in La Calera

Behind the façades of La Calera's beautiful new houses, sometimes people have to take showers in buckets. Whether it is because of an unannounced water cut or an electricity outage preventing electric heaters from working, many residents of La Calera sometimes cannot wash themselves, much less cook or water crops. Some decide to shower by heating water in the stove when possible and some have a quick one with the freezing cold water—as Colombians call it: “a cat's bath.” If I had an important meeting in Bogotá and I knew in advance about the cuts, I would arrive first at my brother's apartment in the city to shower there, but not everyone has the same privilege.

This precariousness in La Calera's services is old. After all, this was a remote green space in the minds of Bogotans, even despite its geographical proximity. When newcomer Claudia and her family arrived in the mid-90s, she remembered “it was another time. Just to tell you: the wait to get a telephone landline from the public company was one year. There was no ATM in the town; just the Caja Agraria bank that the guerrilla bombed every time they showed up.”¹² Although ATMs or

¹² According to official records, though, there has been only one guerrilla takeover in La Calera.

telephones are not exactly a basic service, Patricia used that example to show how precarious the situation in La Calera was for the first wave of newcomers. But despite the absence of guerrillas, infrastructure problems are still present today: longtimer Rodrigo mentioned that “just this month [March 2018], we’ve been three times without electricity for more than two days. The strong winds have damaged the cables.” These services—water, electricity, communications, financial services—are used in everyday situations, but residents of La Calera still face many coverage and quality problems with them, especially because of the residential growth in the last three decades.

In other words, La Calera grew on the surface, but the underground networks did not. Housing development was rapid, but infrastructure development has not caught up with the outstanding pace of residential growth. Although new constructions need a “water point”—a connection to an aqueduct—and an “electricity point”—access to power lines—to get a building permit, the existing network of pipes and cables are not enough to satisfy a growing demand from both newcomers and long timers. And besides availability, the pressure that the demand puts on the existing network required constant repairs. As Councilwoman Camacho put it “in El Hato vereda, electricity is gone all the time, and that’s not new; it’s been a disaster ever since I lived there because they have the same network, the same transformer, for more people”

Yet the situation today is better than a few years ago. Newcomer Alberto told me that, after he arrived with his family in early 2000s, “electricity was not enough for a fridge. We had to start by

bringing three-phase voltage from the lampposts to the house.” Newcomer Oscar remembered that “every time we had a heavy rain, we had power outages.” And more than an inconvenience of not having enough voltage to power a tv or a fridge, longtimer William reminded me of the risks of this poor infrastructure: “in the first house I lived in, there were many power spikes, those that sometimes burn appliances and damage lightbulbs.” These three residents acknowledge that the situation with electricity now is better than a few years ago, but it was not an easy start: there was a need to bring better cables to prevent power spikes or to have a small power plant for essential appliances when there was an outage.

Nevertheless, electricity is the poster child for services in La Calera. By 2005, it had a coverage of 97.9% (Bogotá had 99.4%) (DANE 2005). “Whenever we talk about an indicator of service coverage, Codensa [the electricity company] is always on top...it is almost 100%” said then-Planning Secretary René Casas. But despite the coverage, as Rodrigo pointed out, there might still be outages that last for a few days.

On the other side of the spectrum there are few natural gas pipes (just in the urban core of the town, according to Secretary Casas, only 60% of the population is connected to the gas lines). People have access to gas by buying small tanks for household consumption. Where I lived, for instance, we had to buy a 100 lb. tank for the stove that would last about one year, costing \$160,000 pesos (around US \$50). To buy or refill these large ones, you have to wait until the gas truck comes by; if you wanted

a smaller tank, you have to go to specific local stores. Many houses do not have conventional ovens because that would use up the gas in the tank very quickly, instead they use electricity-powered ovens that are subject to power outages. To prevent that (and to bake pizza when they want to), my neighbors across the road decided to build their own brick oven fueled by wood, the material many long-timer peasants have used traditionally for their own stoves.

Despite this lack of second nature conditions, people still want to come to live in La Calera to enjoy first nature views. This puzzled newcomer Andrés Martínez, who is also the coordinator of the Civil Defense of La Calera—a volunteer group required by law that acts as a first response team in case of natural disasters. “Why would people come to live in *rustic* wood cabins and pay two million pesos in rent for that?”¹³ For him, rustic meant without water, electricity, gas, and other services. His question points to a larger motivation that newcomers have when moving to La Calera: to live closer to nature, to get away from the city. For this goal, residents of La Calera accept these fluctuating services. “You have to learn how to deal with it,” told me newcomer Mauricio, “it is a house located in the countryside but with the comforts of the city, we have everything... alright, the internet is not very fast, but we have all the comforts and clean air.” For newcomers, there is a trade-off of not having all the infrastructure services that a city provides for gaining environmental amenities like clean air.

But the infrastructure service about which people complain the most in La Calera is water. More than any other problem, the lack of water has been at the forefront of the discussions about growth,

¹³ His emphasis. Rent would be about US \$650.

planning, and justice in the municipality. “It is unbelievable that we’re the only place in the world that is in front of a dam, which is also the biggest drinking water dam in Latin America, and we don’t have any water,” declared a vereda community board president in a January 2018 meeting with the Bogotan Aqueduct Company (EAB in Spanish), that reservoir’s owner. La Calera residents’ dissatisfaction with their water service comes from the ironic fact that there are many water sources available around—including that reservoir—but they cannot access them.

By 2005, La Calera had an inadequate aqueduct coverage of 79.8% and a sewage coverage rate of 49.9%—compared to Bogotá’s at 98.5% and 97.9% respectively. Moreover, the municipality zoned 34.56% of its total land as a hydric reservation zone, which means that those lands are water sources for the Teusacá River, the Frog Reservation, and the Bogotá River High Basin Reservation. These three water sources, along with the Chingaza páramo, are abundant first nature resources that provide the majority of the water to the San Rafael reservoir. The latter is located in the Eastern Mountains that divide Bogotá and La Calera, and almost across the street from the home of the community board president in the previous paragraph.

The issues residents face regarding the water service are twofold. First, they complain about the intermittent service. “Here, there was a time that they closed an aqueduct and we were left without water. And it’s brutal to know that you cannot go to the bathroom, you cannot take a shower, you cannot cook, something as basic as washing your hands, nothing,” declared newcomer Laura

(interview, June 2016). Residents like her see that everyday life activities like using the toilet or cooking are effectively denied by the lack of a continued water service. But, as longtimer I introduced before told me in a community meeting, this problem also affects productive activities: because of the recent drought in June 2019, the grass for his cows has been yellow and he cannot water it, and his cows are now thin.

The second issue around the water service is quality. Except for San Rafael's, there are no water treatment plants. The water comes directly from the mountains, which is pure at the source but less so when it arrives to every household. Figure 4.1 shows the different water qualities available even during the same week. On the left, there is bottle water bought from the store, because the one from the aqueducts is not fully drinkable. In the middle, it shows tap water from a regular day. On the right, that is tap water after a heavy rain—murky and dark brown because of the mud sliding down the mountain. It is evident why residents are hesitant to cook or brush their teeth with it.



Fig 4.1. Three water qualities available in La Calera. Note the three water colors that signal their quality. Photo by the author, August 2017.

Given the speed of rural-to-urban migration in Latin America, most of its urban peripheries are made up of informal settlements populated by poorer residents who do not have access to water, electricity, and other amenities. For that reason, most of the programs to formalize peripheral settlements in the region have begun by giving land titles and, after that, extending coverage networks (Murphy 2015; Álvarez Rivadulla, Montero, and Villamizar Santamaría 2019). In other words, slums and the city outskirts of the region's cities face a lack of service provision, and the state plays catch up

in terms of infrastructure for the sprawling urban growth.

Because of rapid residential growth in La Calera, the state has not been able to provide services at the same rate. Engineer Carlos Bello, from the Bogota Aqueduct Company (EAB, in Spanish), put it succinctly in our interview in July 2015: “Infrastructure is hard [to develop] because the state is absent. Population settlements get consolidated, but the state’s services don’t get there.” Or, as Councilwoman Díaz explained it, “the hard part was the municipality’s responsibility in generating public service access. At the same time, [growth] must have been controlled in terms of services.” Contrary to common narratives of state absence in Latin America that speak of the emergence of para-legal institutions (Migdal 1988), in La Calera the state’s absence is a failure to respond to everyday needs for water to which residents must develop solutions by themselves.

In slums, residents resort to private alternatives or collective actions to solve the lack of infrastructure. In some cases, slum residents pirate electricity connections from the lampposts to their homes, solving their need for power while at the same time preventing the state to charge them for the service—charging money that they might not have from the start. They use similar strategies for water provision. In other cases, these residents organize in neighborhood associations to press the state to bring those services. For example, in Montevideo, slum leaders used election seasons as a way to leverage votes for specific concessions to their neighborhoods (Álvarez Rivadulla 2017).

In peri-urban spaces around the global South, residents do something similar (Zwarteveen et al.

2017; Acevedo Guerrero 2018). Michelle Kooy (2014) writes about this relationship between informality and the state for water provision in Indonesia, and argues that the state tolerates these types of connections because those networks are useful for maintaining an urbanization model that does not require the state's financing or intervention. In Colombia, the state intervenes nominally or legally by passing laws to protect water resources but not providing the infrastructure necessary to grant the right to water to different groups, inducing a scarcity where there are abundant water resources (Roa-García and Pulido-Rozo 2014). This is also the case of gated communities in La Calera, which have their own private water aqueducts and other public utilities from specific arrangements with the municipality, the relevant environmental agencies, or the utility companies.

La Calera's residents have used the same mechanisms to obtain water as in other places in the country (see i.e. Quintana-Ramírez 2010; Guerrero, Furlong, and Arias 2016). They created collective actions to make themselves heard by the state authorities in the case of the construction of new aqueducts. And they also used DIY (do-it-yourself) initiatives to get water, such as the first community aqueducts in the 1970s, which enable residents to get water from the many sources available in La Calera. But, contrary to most experiences of rural development where newcomers obtain infrastructure only for themselves, in La Calera newcomers and long timers collaborated in strategies to get water that were beneficial for both groups.

Abundance of Water and Peasant Aqueducts

“We had to carry water from the creek in buckets,” recalled Maribel in my interview with her in early 2020. She was born and lived all her life in rural La Calera, and she was quick to say that water access has been an issue in recent years. Maribel was emphatic in saying that Calerunos were self-reliant in obtaining water before the first aqueducts, and the state interventions, arrived. Growing up in the late 1960s in her grandparents’ house, she used to know where to obtain water from the different sources nearby for the different needs that her family had. Like hers, many other long-timer families knew the environmental conditions of the area and used the creeks, natural wells, rains, and other water sources to supply their everyday activities—from agriculture and cattle raising to cooking and baths.

For watering crops, Calerunos knew when was the rainy season and took advantage of the slopes to use the water that came from the creeks up in the mountains. For example, they timed the stage when the potato shrubs needed watering the most with the heavy rains in April to avoid using hoses or other irrigation systems that were nonexistent. The old weather in La Calera also helped them, because the dry season was not as strong nor long as it is right now because of climate change. Now they mostly grow onions that do not require so much water. In the case of cattle, they took the cows to the watersheds and creeks to drink. Peasants left the cows near grass fields with creeks nearby, so they

could eat and drink in the same spot. Sometimes peasants had to carry some water to drinking troughs for the cattle—an activity that is the norm today because of environmental regulations and ecological concerns.

For household consumption, Maribel recalled that they walked with buckets to the wells and other natural water sources. They used the water they carried for cooking and some washing; there were no washing machines or other appliances that relied on heavy water use, and so they could get by with the buckets. When they needed more, residents used donkeys to carry the heavier loads or for longer distances. Maribel said that they would sometimes use donkeys now but only for the cattle's drinking troughs when there is a heavy dry season.

These methods were the ones that Calerunos have used historically, which most likely come from the Muisca indigenous group that lived in the area long ago. They did not need to file any permits to any authority, local or national; if anything, they only needed to ask permission from a neighbor to go through their property towards a creek or to use a particular water source that was closer. As the population grew starting in the mid-twentieth century, there was a growing demand for water in La Calera, but the state did not provide it.

Because of this lack of state support or its ability to guarantee water to the residents, they started to organize themselves to build community aqueducts. Starting in the 1970s, these appeared in the veredas “where water was supremely scarce, and so in the summer [dry season], for example animals

had to go way up in the mountains for them to drink water, and for human consumption it was very restricted,” said in our late 2019 interview longtimer Camilo, who has been involved in creating some of these aqueducts.

Take for example the community aqueduct of Tres Quebradas (Three Creeks), one of the oldest. Founded in the late 1970s by peasants of the San José, La Toma, and Altamar veredas, this aqueduct is also one of the biggest, serving more than 700 households. The three creeks from which it sources water are located in the vereda Buenos Aires, next to the sources of Manantial, the Coca-Cola bottle water brand. I went close to that area with Juan Cruz Escobar, the reporter of the local newspaper *Caleroscopio* and grandson of one of the founders of the Tres Quebradas aqueduct. While on our way to the area in the veredal bus, he told me about his grandfather Jorge Enrique Escobar’s role in the aqueduct’s creation and how important it was to expand the water networks at the time.

San José is one of the driest veredas of La Calera. After years of deforestation for charcoal and some residential and cattle development, its native vegetation diminished and that, in turn, harmed the water cycle of that sub-páramo area. Before the aqueduct, neighbors had to ask for permission to take water from the owners of the creeks, which also required taking pots and buckets to the creeks to carry the water to their own homes for everyday consumption, as longtimer Maribel recalled earlier. Jorge Enrique Escobar had helped with the creation of other aqueducts, such as La Calleja—also located in San José—, which already used pipes for transporting water. With Clemente Lara and Victorio

Vanegas, his neighbors, they went to the vereda Buenos Aires to find other creeks suited for the aqueduct.

After finding it, “they obtained the license for the water from the Corporación Autónoma Regional (CAR, the state’s environmental agency), which gave them an authorized use for 120 families at the time based on a census they made,” Juan continued. The pipes had an original extension of 9 kilometers (about 5 miles) from the source to the Lara Tank, located on land donated by Clemente Lara, one of the three organizers; “it’s a long way, and peasants built it by shovel and pick, working for about nine months,” he added (see fig. 4.2). Juan highlights that this aqueduct, now more than forty years old, resulted from peasants organizing and working to bring it to their homes, despite some disbelief and outward mockery at the time from other native Calerunos. Its origins are like many other community aqueducts in rural Colombia that were organized by peasants even before the state regulated water use (López 2016).



Figure 4.2. One of the main water tanks of a community aqueduct in La Calera, that is not working anymore. The Lara tank probably looked like this one. Photo by the author, June 2019.

This same appreciation is shared by Camilo, who participated in the building of that aqueduct. He recalled that it was built “by the collaboration of most of the community, because we all suffered from that [lack of water]... Some collaborated with physical labor—we had to extend the network, dig, take the pipes, carry materials... Not everyone worked, right? Because of age or physical things, so some collaborated with money.” Another part of the money was given by the area representatives through a nascent program that aided community projects. A similar story occurred with Chorro de la Pita, another community aqueduct that was built some time after Tres Quebradas in which Camilo also

participated.

A key issue that he pointed out in this early stage of aqueduct expansion in rural La Calera was the lack of state responsibility. “The state has the obligation to supply the public services indispensable for human life,” he noted, but many of the creeks and watersheds were located on private property. Because of that, residents sourced water with their neighbors’ permission, not the state’s. The creation of the national environmental agency and other regulations appeared around the same time that these community aqueducts were built, and so there was a need for communal organizations to adjust.

Scarcity Induced

With the creation of the National Institute of Renewable Natural Resources and Environment (Inderena) in 1968—which was later transformed into the Ministry of the Environment and the Corporación Autónoma Regional CAR in 1993—, there was an attempt by the state to regulate environmental practices throughout the country. One of these was water use. Although the state had owned the water since the 1886 Constitution was adopted, there was little enforcement of the use of this resource. In La Calera, the environmental agency got involved in regulating water sources for agriculture and community aqueducts through licensing.

Veredal aqueducts had to file licensing permits for their exploitation of water. Because it is a

national resource, water cannot be sold or bought, and so what aqueducts sell is distribution rights. To do so, they have to obtain a permit from the CAR, which requires the formalization of the community aqueduct as a legal entity, a census of potential users, and a management plan. When the community aqueducts appeared in La Calera, the requirements were not as demanding and people “just needed a legal entity, which was done through the Community Boards” of the veredas, said Camilo. Now, the CAR asks for more, but there is no specific legislation for community aqueducts, which meant that many of them are “in limbo right now,” Camilo stated.

At the same time that the CAR (then Inderena) was making its appearance through regulations, there was another state agency directly affecting La Calera’s water resources: the Bogotan Aqueduct Company (EAB). It was also in the early 1970s when this public company from the capital started to buy land plots in the Chingaza páramo and other areas located in La Calera, to secure water sources and delimiting environmentally protected areas for that. EAB’s land acquisitions ended in the flooding of an old park for the San Rafael Reservoir—a dam of 71 million cubic meters (or a little over 2,5 billion cubic feet) sprawling over 371 hectares (or about 916 acres; see figure 4.3). This immense body of water sits in La Calera’s side of the Eastern Mountains but it is owned by the EAB, which creates jurisdiction and legitimacy problems with the municipality. The biggest problem for Calerunos, though, is that the reservoir does not provide *them* with water; this water goes almost exclusively to the capital. In fact, the San Rafael reservoir supplies about 70% of Bogotá’s water’s needs. That is why the

community board leader in the previous section said that they live across the street from a dam but they do not have a good water service.



Figure 4.3. The San Rafael reservoir from the top of the Eastern Mountain Range. It is at maximum capacity. The brick construction is a water tank for a defunct community aqueduct. Photo by the author, June 2019.

San Rafael receives water from nine sources, including the Teusacá River and the Chingaza páramo. The Francisco Wiesner Plant treats the incoming fresh water from the páramo, which makes the tap water in Bogotá drinkable without the use of many chemicals. The EAB bought the land plots

for the reservoir from 1956 to 1970, built the Plant in 1972, and formally inaugurated San Rafael in 1996 (see fig. 4.4). Before the inundation of the reservoir, there was a park where Calerunos and some Bogotans went to have day trips by the river and made *sancocho*—a traditional soup with potatoes, plantains, and meat. The EAB promised La Calera it would give the park back as part of the compensation laws in the country since 1992—when EAB closed it—but that has not happened yet.¹⁴



Figure 4.4. An empty San Rafael reservoir in a regular process of draining and cleaning. The Wiesner treatment plant is the building to the left. Photo by the author, March 2018.

¹⁴ I analyze this unfulfilled promise in the following chapter.

What is important is that Bogotá's Aqueduct Company owns this land and water, but they are located in La Calera's territory. At least in theory and in law, the residents have the right to manage it, but this situation has led to residents have the EAB as the main state interlocutor, even more than La Calera's Mayor's Office itself. The EAB is the target of many complaints, formal and informal, and the subject of residents' dissatisfaction. Moreover, the company holds community meetings with residents where they speak about risk management and other topics—they act as the main convener and interlocutor, without even giving La Calera's authorities a role in them beyond logistics. The EAB is aware of its problematic dominance, too. As John Zuluaga, a then high-ranking official from EAB in charge of negotiating in the park meetings, told me in early 2018,

This land belongs to a company from Bogotá, the Empresa de Acueducto de Bogotá. Whatever we develop there will comply with all the norms, environmental and urban—all the norms. But although that land is located in La Calera, we shouldn't forget the fact that there is a direct inter-relationship with Bogotá, and so we can say that it is part of Bogotá, it belongs to Bogotá.

Despite the appearance of a large state presence, figuratively in the CAR regulations and physically in the San Rafael reservoir, residents still lack water. Even if the state is responsible for guaranteeing the services indispensable for human life, not everyone in La Calera can get them. This problem worsens with the rapid population growth in the area, which creates more pressure on the infrastructure networks and leads residents to deal with the lacks themselves.

Functional Arrangements and Community Actions

Facing these water infrastructure problems, residents both new and old use two types of solutions. On the one hand, some people try to obtain water privately either by buying it from a water truck or filing an application for a license to exploit a creek in their property. On the other hand, and this is more common since not everyone has creeks in their land, they try to organize to obtain the water from the state.

One way to solve the lack of water is for both new and long-time residents to buy a supply from water trucks. After listing the water issues she had at home, newcomer Laura continued, “it was the first time in my life that we had water up to a certain month. It was right after New Year’s Eve and we only had water until February and if it didn’t rain, we had to call a water truck that charged \$250,000 [about US \$80] for water that would last about 12 days for us.” Keeping in mind that a monthly aqueduct fee in a rural home in La Calera is around \$25,000 pesos or less (around US \$8), this tenfold increase for only a third of a month is a very expensive option. Moreover, that water is untreated; the biggest provider is a longtimer that has a well and sells it. The price of treated water from EAB is double that. Since the aqueduct coverage is far from being total, many residents in deeper areas in the mountains use this alternative to get water, but most of the time the roads are in bad shape for any

transportation.

The other way to deal with these water issues is through community initiatives. From the early veredal aqueducts in La Calera the 1970s, by 2018 there were 55 sourcing the rural districts of the municipality, serving at least 4932 households¹⁵, but only nine of them treat the water, using chlorine or aluminum sulfate. Although they are communal, these aqueducts are not public; rather, they are private initiatives to which residents must subscribe if they want to access water. Currently, the CAR sets the requirements for them to function, and Camilo is in the middle of a dispute to renew the license after a change in the paperwork required.

It is because of those efforts from the longtimers in the community aqueducts that many newcomers can enjoy water access in their homes. Longtimers were the architects, literally and figuratively, of the veredal aqueducts in La Calera, and in many other rural communal aqueducts in the country. Newcomers, now, benefit from that work. There are few newcomers in the boards of these aqueducts, which means that longtimers have more power in the distribution of water in the municipality. But sometimes newcomers get involved in their management and in the fight for a better service, and thus two opportunities for building a shared third nature between the two classes appear.

The first instance is a functional arrangement between the two groups in financing these aqueducts. Building licenses need water points, and with population growth those points have increased; that means more pressure to the creeks and pipes, but the increase in population, especially a

¹⁵ I say at least because not all aqueducts had their numbers reported in the table the Planning Secretary gave me.

wealthier population, also means that there is more money available for repairs, maintenance, and extensions. For example, a native Caleruno pays \$1,200,000 pesos (about US \$330) for a water point, but a first wave newcomer pays double that figure (\$2,400,000 pesos, about US \$700) and a recent transplant must pay around \$10,000,000 pesos (US \$3,000). Because of those fees and the number of bill payers, the AGUASS veredal aqueduct has saved enough money to start looking for ways to build a treatment plant (field notes, February 2017). In other words, this first kind of cooperation comes because the longtimers built and govern the water infrastructure, which newcomers need to access, but the longtimers need the newcomers to help pay for its maintenance.

The reason for some newcomers to get involved in the community aqueducts is related with a selfish goal. This is what newcomer Daniel told me in his interview in January 2020. He is an esteemed member of his vereda, where both longtimers and newcomers seek his professional help as a doctor. He was also involved with his vereda's aqueduct management for about eight years—this is one of the very few veredal aqueducts that was built with the EAB's help. Daniel said that he ran for the board's presidency because he is concerned with water access in the future, “and if I didn't do it, no one else was going to think about that.” During his term and still today, the aqueduct's board was comprised of newcomers and longtimers, but he said that interaction was not easy. “I became president one year after arriving here—I was an invader,” he recalled people calling him and other newcomers, “and it was a lot of work.” That work was meeting with the EAB, raise money, hold community meetings, and

“you wear yourself out.”

Moreover, things did not go smoothly all the time. The major fight between newcomers and longtimers in these meetings was about money: “People wanted to purify the water, but that meant raising money from the monthly bills. And we could not even make a \$1,500 pesos (US \$0,40) rise in the bill to cover the two employees’ yearly salary increase, so how were we going to get the money for the water purification?” At some point Daniel considered disconnecting his water point from the aqueduct because of these tensions and thought of using a water tank because he could afford it.

However, his concern with the future stopped him from doing that. Although Daniel calls the inter-class collaboration “very complicated” in this case, his preoccupation with sourcing water for his son was bigger. That is why his was a selfish motivation. Nevertheless, guaranteeing good water service for his family could also be done by making a better aqueduct for the community. In the end, María, his wife, described Daniel as “oriented towards the community,” which also explains why he kept his post in the aqueduct for so long despite the complicated relationships between neighbors. Daniel is still part of the aqueduct, and the new board is also socially mixed. Daniel and María are unsure of how this new board will fare, but they are both hopeful for the new management and relieved that they do not have to deal with those issues anymore themselves.

Self-selection is an important source of community involvement. Daniel and other like-minded newcomers get involved with the aqueducts because of their individual goals. But unlike Daniel’s case,

where the people decided among themselves, sometimes the fight is taken to the state's representatives. That happened with a 2011 Popular Action—a kind of class action lawsuit—that was filed against the municipality of La Calera and the EAB for not granting the right to water.

This is the second instance of inter-class cooperation, which also goes opposite of other urban expansion experiences in Latin America. For example, in Tigre near Buenos Aires (the city in Argentina, not the vereda in La Calera), newcomers have developed infrastructure just for themselves (Timo 2017); in Pereira, Colombia, something similar happened (Nates Cruz and Velásquez López 2019). In La Calera, this has not occurred because the infrastructure—second nature—was already there in the first place, and the longtimers managed it. What newcomers to La Calera have brought to this relationship is helping longtimers deal with the CAR and other state authorities to grant more licenses or uphold environmental regulations to protect water but improve the service—third nature. As in slums in the region, residents of La Calera organize themselves to obtain services that the state does not provide. However, unlike in those areas, these communal and private enterprises here are in dialogue with the state, which grants them resource exploitation permits but not infrastructure, which is built by residents themselves.

The Popular Action is a mechanism enshrined in the law that enables citizen groups to make a legal claim against a state agency or a private actor that violates collective rights. In this case, the right to water was violated for the five rural districts, which currently house 2,265 people. The EAB “sells us

water at a rate of a little over \$1,000 pesos per cubic meter¹⁶. It's not expensive; it's the same price they have for other municipalities... But the CAR said that EAB only had to charge us for the treatment, not transportation. La Calera's price should be different because the water was ours and we are next to the reservoir," declared long-timer Diego, a person who has been at the forefront of many fights against the EAB. Diego is asserting a right to water because of a socially and state-defined territory and geographical propinquity. He also says the water "was ours," because the watersheds and creeks are located in Calerunos' properties that the EAB bought or the state declared as reservations in more recent times. The company has consistently expressed its inability or unwillingness to provide water to individuals or groups in rural La Calera (despite them being next to the reservoir), but it *sells* water wholesale to La Calera's Espucal, the public company in charge of providing water and other services to the town. The state entity refuses to allow Calerunos to access the water that they believe is theirs—while *selling* it to them through Espucal, the public water company.

The Action was started by Camilo Ramírez, a citizen that bought a land plot in one of those five veredas upstream from the San Rafael reservoir "about 13 years ago," he said in our interview in January 2020. He is a lawyer who wanted to live in La Calera, but because of these water problems he refrained from building his house for some time. In other words, as many other newcomers, he wanted to enjoy first nature resources with second nature comforts. Plaintiffs in a Popular Action can be individuals or a group of people as long as the effects of the violation are *collective*, which in this case

¹⁶ About USD \$.30.

was the whole community of these veredas that did not have access to water. He bought this plot “expecting water to come.” However, the water did not come despite his house being so close to the reservoir.

Although he presented the action by himself, “it took off because... it was absolutely clear from an objective point of view that [people lacked] water.” The action also took off because the community board from one of these veredas—Camino al Meta—heard about it and started to become involved in the legal process and asked counsel from the pro-bono wing of Gómez Pinzón, a major law firm in Bogotá. Claudette, a newcomer, headed the board—“a foreign woman [*una extranjera*]” was how people first described her to me—who got involved in organizing the community to be on top of the legal process against the municipality and the EAB. From the court minutes from the different instances that started in 2011, I could recognize names from both longtimers and newcomers who attended the hearings and testified, even after Claudette moved out of La Calera and the new community board took over. In other words, they got more involved than Ramírez, the main plaintiff, himself—as he also pointed out in his interview. After an appeal, the judge ruled to remove the EAB from the legal process in 2012, although it is unclear why. After all, that public company owns the reservoir and has the financial muscle to build the networks, unlike the municipality.

Four years after this ruling, in 2016, the Mayor’s Office of La Calera started to work on this issue through Espucal. After realizing they did not have enough funds to build an aqueduct to bring water

to the five veredas included originally in the lawsuit, the authorities made an open call for bids to form an inter-veredal aqueduct, which ended up being a public-private partnership. The private parties who won the bid were the coalition of Chafik Engineers and Urbes, who have experience in operating public services in other parts of the country. The new consortium, called Aguas de Teusacá, comprises the public company Espucal (which owns 51% of the shares) and these two private companies. The goal of this new company is “to provide aqueduct services in the veredas upstream from the reservoir: San Rafael, Salitre, Líbano, Camino al Meta and El Hato,” stated Aguas de Teusacá Vicepresident Clara Durán during our interview in February 2018.

This inter-veredal aqueduct started with good intentions. “We made a contract for a census, for a cadastral engineer, and for the route design, because not even the Mayor’s Office had them. We know the routes, the networks, the houses, absolutely everything,” Durán said. She mentioned that “some smaller aqueducts wanted to join us, and even some users said they wanted to have their veredal aqueduct and us.” Part of the benefits promised by Aguas de Teusacá was that it would be 24/7 water service without interruptions, unlike most veredal aqueducts that experience cuts during dry season or while doing maintenance. Eventually, the project dropped two veredas from the first phase because it was too expensive to bring the pipes to one of them and the other openly showed opposition to the project.

The main reason to oppose it was the privatization of water. This is one of the main critiques from

other experiences in communal aqueducts that the state wants to formalize (Romano 2019; Díaz-Espitia 2017; Perreault 2008; Zwarteveen et al. 2017). For example, in the San Rafael vereda, more than 90% of its residents claimed they did not want Aguas de Teusacá to be in charge (field notes, February 2018). Although what is privatized when the CAR grants a water license to an aqueduct is the distribution, not the liquid, the managing forms of the veredal aqueducts are more communal. At first they were managed by the Community Boards of the veredas, but the aqueducts grew so much that they currently have their own boards to which residents are elected. Another reason to oppose the inter-veredal project was the cost. Community aqueducts are cheap and, without a clear fee scheme, residents feared they would have to pay more than what was first announced.

Aguas de Teusacá was supposed to have a fee scheme and the designs by May 2018, but the project ran out of money and there is no clear future for it yet. The contract had “300 million pesos [about US \$90,000], the municipality put 151 million and the other two, 149 million. But they spent that money in one year and there is no more money approved; they made a study of potential users and they also figured out that those were not many,” said Diego.

Because of that failed project devised by the state, residents of rural La Calera keep using communal aqueducts to supply their need for water. And like Daniel, some of them get involved in its management despite the potential conflicts that have arisen. This scheme is alive and well, and it has actually increased coverage throughout the municipality. The EAB and the San Rafael reservoir serve

as a reminder that the lack of state infrastructure is not because of technical reasons, but political. Living across the street from a dam and not having access to water sends a clear message that the state, through the EAB, does not see Calerunos as important recipients of their right to water. Residents, however, see the potential in having the EAB as the interlocutor of the state to grant them this right. Longtimers—who have had to deal with the unfulfilled promises of the EAB since the late 1980s—began that process, but newcomers have also joined them in voicing their concerns and intervening in the legal sphere, like in the Popular Action against EAB and the Mayor's Office.

This unusual cooperation between peasants and former city dwellers, longtimers and newcomers, speaks of how similar environmental concerns about resources can be used in cases of urban expansion. Residential growth needs access to water, but unlike in other places where that resource is scarce, in La Calera its abundance enables people to see it and request it. And this lack of water unites both populations. The problem, in the eyes of Camilo—the longtimer who worked in the early community aqueducts—and many other residents lies in redistribution and, ultimately, in environmental justice: the water is La Calera's and all residents should be able to use it, but the state gave it away to Bogotá through the EAB.

Summary and Conclusion

La Calera faces a paradox of growth. On the one hand, infrastructure development needs a critical mass of users to occur—more people paying aqueduct fees means that the communal aqueducts have more money to invest. On the other hand, that same rise in users means that the infrastructure is pressured to levels beyond its initial capacity, which in turn creates shortages and other coverage problems. As Ignacio Gallo's quote at the beginning of the chapter shows, La Calera's is the worst possible combination of both worlds: it so highly urbanized now that it looks more like a city neighborhood but without the infrastructure needed to support that number of people.

To that paradox, residents like Camilo add a layer of environmental justice. Because residents can see there are water sources—first nature—and community aqueducts—second nature—, they are wary of the state's intervention to reduce their “water governance” (Zwarteveen et al. 2017). Through improving networks and, with it, privatizing the service, the state induces scarcity of a resource that residents can already enjoy if everything remained the same. Against this imposition from the state, longtimers and newcomers build a shared third nature through which they want to continue protecting the waterscape while at the same time asking the state to improve the service. It is in this back and forth between humans and the environment that new coalitions appear to achieve this goal.

Among those coalitions, there are new arrangements to maintain the self-management of existing

aqueducts and collective and legal actions against the state. Moreover, residents do this despite class differences. Through this process, La Calera creates a counter-example to infrastructure development in slums and other urban peripheries in Latin America. First, unlike in those cases where class is more homogeneous, in this town diversity in class composition has led residents from both groups to cooperate to obtain water service. These coalitions are a result of the work and network development of longtimers, to which newcomers add legal capacities and financing that favor both populations. In other words, both groups bring necessary resources to the water situation. Second, La Calera's residents are not going outside the law to get these services. They use legal mechanisms—such as popular actions and requesting water licenses from the environmental authority—to confront the state as the main interlocutor (and sometimes enemy) in these claims.

From these arrangements that operate in the household scale to get a resource at home, residents build up to another third nature arrangement at a bigger scale: multiple veredas. The impact of a state intervention on the environment is not only seen in underground pipes but also in more explicit projects to alter the landscape. The next chapter analyzes how newcomers and longtimers reacted to the San Rafael Park, the biggest unfulfilled promise of the EAB and the largest megaproject proposed in the area.

CHAPTER FIVE - The Unfulfilled Promises of San Rafael Park

As I drove with my mom from my parents' house to Casa del Carmen, the Bogotan Aqueduct Company's (EAB) clubhouse in La Calera, we picked up Oscar, a longtime neighbor who owns a horseback riding business and who was also heading there on foot. It was an unusually sunny morning in mid-July 2017, and the occasion was a meeting organized by the EAB and La Calera's Mayor's Office for the pre-opening of a new and highly anticipated park in the municipality.

The expectations around this park were immense. It meant that the EAB and the Mayor's Office would finally fulfill a promise made almost a quarter century before, in 1993, when the EAB flooded the old park to build the San Rafael Reservoir. Everyone was eager to learn about the results of the negotiations between those two public entities, representing the state's management of natural resources and land in La Calera. They were discussing a new "eco-park" that was bigger than the Reservoir and would connect La Calera and Bogotá through a new cable car and would keep the Eastern Mountains as a single ecological corridor. Given the project's scale and environmental aims, the state agencies worked as an inducer of scarcity of natural resources that perpetuated environmental privileges, this time for Bogotans and not Calerunos who would bear certain costs of the project—traffic, lack of infrastructure, overcrowding—without obtaining the park's benefits.

Because many of the deals did not include residents' opinions on what this place should look like

—a third nature view of the area—newcomers and longtimers started organizing at that pre-opening meeting I described. I got a glimpse of the importance of this meeting when I saw that, at the club’s security checkpoint, a bus full of employees from the Mayor’s Office arrived along with many other SUVs. Like our neighbor Oscar, other residents were walking because they either did not have cars to get to the meeting area or found out last minute about it. That was when I realized that something was not right: why were some given transportation and others not? Who was “supposed” to attend this pre-opening? I drove back and forth a few times between the grounds’ gate and the clubhouse’s entrance to bring people who were walking inside. As I was just starting my fieldwork, I did not know the residents, some of whom became interviewees or informants along the way. Many were carrying signs against the park and the project, including the EAB that represented Bogotá’s then-Mayor Enrique Peñalosa, and La Calera’s then-Mayor Ana Lucía Escobar Vanegas.

The “pre-opening” of the park turned into a full-on confrontation between residents and the Mayor’s Office and the EAB. There were about 30 state representatives from the Mayor’s Office, city council and the EAB, and more than 40 people from the community, who raised concerns throughout the event. The main problem that residents expressed was that the park would be for Bogotans and not Calerunos, which meant that the state would further limit residents’ access to green public space. Other issues residents discussed gravitated around safety, mobility, and participation. After more than two hours of community members expressing emphatically how much they were *against* this process,

the EAB explained their vision of what the park would look like. An ecological park, they claimed, with hiking trails, horseback riding trails, and even a steamboat and water sports on the reservoir's water.

But the community did not believe any of it. At the end of the meeting, a group of residents surrounded Mayor Escobar to keep voicing their concerns with the entire process and final result. She promised not to sign anything without people's consent. But a couple of months later, in October, she signed an amendment to the inter-institutional agreement between La Calera and EAB that effectively changed little the original agreement, besides extending some dates and asking for some community participation in the park's designs.

This vignette exemplifies another instance of residents coming together for a concern about environmental privilege. Newcomers and longtimers shared a third nature view of the park that was against what the state was proposing in its role as a natural resource manager. Unlike in the previous case, where residents requested the state's intervention to improve second nature elements, now they question the state because it wants to do things in a top-down manner without people's opinions on what they wanted this ecological site to be. Additionally, here the state is a combination of a city government (Bogotá) that owns and wants to manage land outside its own jurisdiction (in La Calera). La Calera's environmental resources were subject to a Bogotan decision, but Calerunos demanded their voices to be included in governing and managing those resources.

Through policies of urban renewal and renovation, such as interventions in public space through parks, the state can open the way for private capital to develop housing for wealthier residents or directly displace the existing population (Janoschka, Sequera, and Salinas 2014; Anguelovski et al. 2018; Angelo 2019). For example, in the case of an immigrant neighborhood in Paris, Andrew Newman (2015) describes the problematic designs of a new park that would be used by poorer immigrants, other lower-class Parisians, and richer newcomers, each pushing for different agendas such as spaces for little children. The state's intervention through a park or other green initiative also can spark gentrification, both in the Paris case and in other parts of the world (Anguelovski 2013; Safransky 2014; Gould and Lewis 2016). In the case of Brooklyn's Prospect Park, the surrounding areas became wealthier and whiter, pushing other residents further away from the park and creating an issue of environmental privilege (Gould and Lewis 2012). Parque Arví, a similar mega-park project in the outskirts of Medellín and connected with a cable car, created similar gentrification processes in the park's surrounding rural areas (Atehortúa Montoya, Rendón Sánchez, and Zapata Arteaga 2017; Medina Sánchez 2019).

Interestingly, La Calera's residents are not afraid of a gentrification result—richer people moving in—but they are rather concerned about the ecological impacts of such a mega-project, even if it is an “eco-park.” They fear that the park would make it even harder for Calerunos to enjoy the limited public green space and that it would only benefit visitors from other parts of the country and even the

world. Cities throughout the global South have little access to public green space (Ferreira 2011; Donaldson et al. 2016; Egerer and Fairbairn 2018; Landy 2018; Rigolon et al. 2018), and sometimes even transnational mega-park projects end up excluding local populations, as the case in the Great Limpopo Transfrontier Park in South Africa, Mozambique and Zimbabwe (Ferreira 2006). This chapter analyzes how newcomers and longtimers in La Calera used environmental and participation arguments in various scenarios against the state's mega-project of San Rafael Ecological Park.

San Rafael Ecological Park

People in La Calera have waited for a park that was promised almost thirty years ago in 1993. Rodrigo, a longtimer and community leader in one vereda, told me in an interview that

We had a park that was very pretty, that existed and was very attractive for tourism and all that. [Now] we hope that they build something very good, that would be good for the town, and that many of us can benefit from. I hope we're able to see it [*lo podemos conocer*], that would be fundamental because as I told you, we have been expecting this for more than twenty years and we don't know if it will happen or not.

In tune with Rodrigo's words, and after the pre-opening meeting, Councilman Edgar Flórez said that he is "very pleased because something that has been fought for over twenty years is finally achieved" (city council Minute 11 of 2018).

Because the old park was very important for Calerunos, the expectations around the new park were high. The municipality, despite all the “green” in the mountains, does not have much public space where people can go and enjoy nature. Of course, most newcomers have a piece of that nature—literally—in their back and front yards, but longtimers do not have that easy access to leisure activities in the woods or creeks. That is why the San Rafael Park, its name in the early 1990s, was so important: it was a space for Calerunos to enjoy nature and have *paseos de olla*, “cooking pot trips,” when they brought pots to cook *sancocho*—a traditional soup made with potatoes, yuca, plantains, and meat—and make barbecues by the river. Besides cooking in the outdoors, people used to hike, fly kites, play soccer, and have small gatherings. But the park’s visitors extended to the capital as well: some Bogotans, like my parents, used to go there because it was a “natural” space that was very close to the city.

All this changed when the EAB flooded the park’s 40 hectares (about 99 acres) for the reservoir in 1993. As I wrote in Chapter 2, the EAB bought several land plots in La Calera to connect the Chingaza páramo with the existing aqueduct networks in order to build this reservoir. The park was located inside a larger land area owned by the EAB, and the company signed an inter-institutional agreement with La Calera’s Mayor’s Office that stated the intention to relocate the park.

There were some relocation attempts after the flooding, but none of them were successful after a lack of political will or money. Bogotá had other priorities, and La Calera did not have enough power

to pressure the capital into fulfilling its side of the deal. Residents kept waiting for the park, but they were also used to not being heard or expect much and, like Rodrigo, only hoped that Bogotá would give the park back one day. That day came in 2017, when the Mayor's Office and the EAB called for the pre-opening of the park I described at the beginning of this chapter. The announcement took residents by surprise, because most of them were unaware of the negotiations or plans to open a new park.

According to architect John Zuluaga, who was the EAB employee in charge of the community meetings in La Calera, the reason for the company and the Bogotan Mayor's Office to build the park was because the EAB's mission is "to protect hydric resources," he told me in our interview in March 2018. "We want to provide adequate spaces because water is important for everyone, and because of that importance we can educate citizens about learning how to be more responsible with nature... and the San Rafael Park is one of the many projects we're doing with that goal in mind." Instead of fencing off spaces that are critical for the water structure of the region, according to Zuluaga, the EAB wanted to create spaces in which they can teach people how to take care of the environment. Planned as an "ecological park," San Rafael would bring a third nature site for human and non-human interactions in the name of environmental protections.

Zuluaga tied this project to Bogotá's Mayor Enrique Peñalosa's development plan and highlighted that it is "a strategic project for Bogotá. The San Rafael Ecological Park's strategic definition lies in that

the park is considered as part of the environmental structure of Bogotá even though it is located in La Calera... because it is part of the hydric resources.” Through this quote, Zuluaga emphasized that administrative boundaries are irrelevant when talking about ecological areas, but at the same time he is arguing that Bogotá should centralize and manage these spaces through the EAB. Put differently, he claims that Bogotá has the technical and knowledge capacity to manage this high-interest area for conservation, and could regulate people’s consumption of the environment. They want to make sure of it by including the park in the capital’s development plan, despite the project being in another municipality and thus another jurisdiction.

This trust in the EAB’s capacity of planning and managing an ecologically important area as a park comes from Peñalosa’s reputation with public space. He is credited with implementing Bogotá’s rapid transit system TransMilenio in the early 2000s as Mayor at the time, and is recognized because of his policies to reclaim public space in the capital. However, these so-called urban renewal policies meant displacement for the poor population—sometimes through crackdowns on informal street vendors — and as benefitting only richer Bogotans (Álvarez Rivadulla, Montero, and Villamizar Santamaría 2019). Because of this history, residents were wary of any kind of proposal made by Peñalosa, especially those related with parks and public space.

In the EAB’s proposal, the park would have four types of users. As their “basic users,” the park would receive Calerunos. “We consider that this is a park for La Calera due to proximity and necessity.

The municipality has a very high need of public spaces, so we consider Calerunos as the constant user,” Zuluaga explained. The second users are “Bogotans. They have a high deficit in public spaces, but they also have a high deficit in spaces where they can relate and interpret nature.” Again, the EAB’s goal with San Rafael Park was to instill a third nature project of environmental awareness by educating visitors in taking care of nature and ecological resources. Moreover, this protection comes as an induced scarcity, where the state limits people’s interactions with those resources for the sake of its protection and, in turn, protecting all the water in the reservoir and its derived revenue. The park’s designs were geared towards creating a contemplative space that could be passively consumed and not degraded. The third group conceived was researchers and specialized people that would like to know more about “Bogotá’s water circuit and its environmental advantages.” And finally, the fourth group were national and international tourists. Thus, residents felt that the park would mostly benefit Bogotans and not La Calera.

The park was initially projected to be 1,200 hectares (almost 3,000 acres) and cost 326 billion pesos (a little over 100 million dollars at the time). For comparison, it would be five times bigger than Simón Bolívar park—the largest in Bogotá—and three and a half times bigger than Central Park in New York City. It would have amenities for passive recreation, such as hiking trails, but the initial designs included a horseback riding path—one of the economic activities that long-timers already offer to tourists in La Calera—and even a part for aquatic sports and a ferry to go around the reservoir (see fig.

5.1).

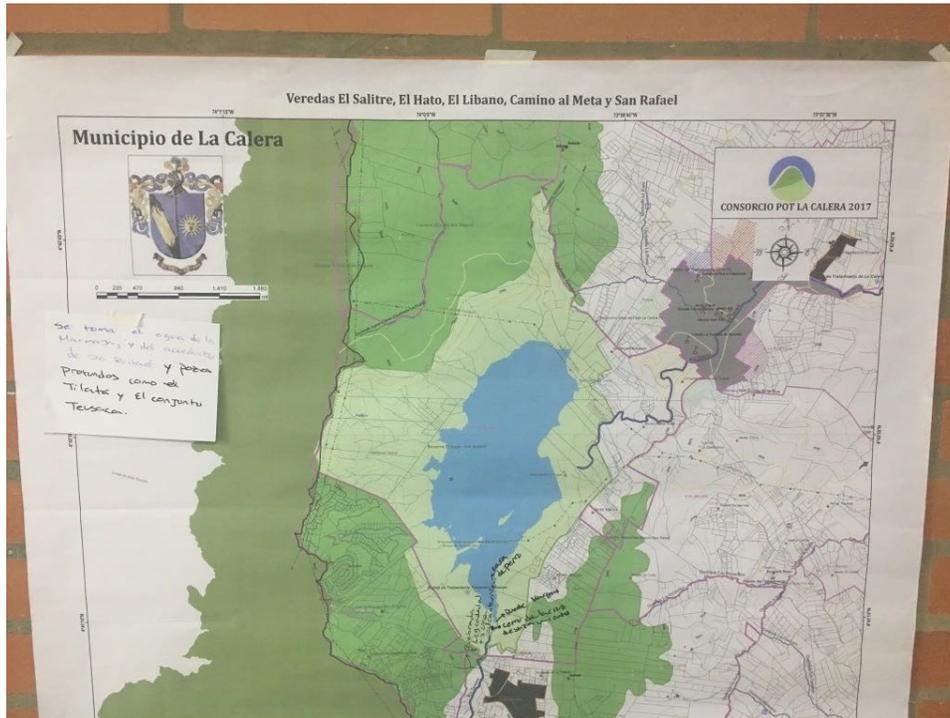


Figure 5.1. A map depicting the San Rafael Reservoir (blue and light green), its surrounding veredas (jade green) and the nature reserves (dark green). Photo by the author, February 2018.

According to one of the first presentations the EAB made in La Calera’s city council, the park would have 96% of its land dedicated to forests, lawns and water, and the remaining 4% dedicated to visitor services (field notes, August 2017). Among those, they said they wanted to have “an ecological

park for everyone... to go back to spend time with the family.” They wanted to build a playground for children, resting areas for the elderly for them to “play chess or read a book,” a vegetable garden, and what they called a “little Caleruno town,” a kind of theme park with a farmer’s market, local gastronomy, and a cultural space. There was also an area for extreme sports and horseback riding at night—all of them activities that were not very ecological but rather driven by economic concerns. In many ways, the new park would not only be much bigger than the flooded park from before but also the activities would be very different: no river around which to cook, few barbecue areas—in short, not the same kind of local public space it was before.

Along with the park’s construction, this mega-project involved the building of a cable car to transport people to and from Bogotá. This idea was not new in Colombia; the widely recognized cable in Medellín connects the city with Parque Arví, which is also located in that city’s outskirts, and the newly built Parque Chicamocha near Bucaramanga also had a cable to transport visitors around it. Regarding the former, researchers found that rural gentrification processes started developing after its construction (Atehortúa Montoya, Rendón Sánchez, and Zapata Arteaga 2017; Medina Sánchez 2019). It was one of the consultants that made the first designs for EAB who suggested “a mobility solution through a cable car between Bogotá and La Calera that allowed relieving the pressure in mobility as a consequence of Bogotans going to the park,” said Zuluaga. He continued, “in the community discussions we’ve always said that it should be a transport solution more than a tourism

benefit,” echoing what many residents demanded when they heard about the cable project: it should serve Calerunos as transportation. The cable car would ease car traffic on the road from Bogotá to La Calera, which was the object of community protests in 2018.

Needless to say, La Calera’s Mayor’s Office saw the project very positively. Carlos Pinzón, a long-timer and one of Mayor Escobar’s advisors, told me in our interview that “for the administration, [the project] is important and the possibility of generating jobs, generating economic resources, development is interesting.” This concern about jobs was also a result in the inversion of the treadmill of production, which was dependent on the mining business before it switched to a treadmill of consuming nature for aesthetic purposes. Pinzón added that, aside from the economic opportunity, “what is important is the social impact that the project has... it is a possibility for development but we have to be very careful and disciplined with the social impacts.” Those social impacts upset the community the most.

The administration kept relatively quiet about the project until the day when they invited community leaders to the pre-opening I described earlier in this chapter. It is unclear why this information was not widely publicized, given its potential boost to the Mayor’s much eroded public image, by being the broker of such an important project for Calerunos. It was the combined efforts of the newcomers and longtimers during that event that pressured Mayor Escobar to sign the amendment to the contract. But the authorities still were not very transparent, even after that day,

when the Mayor created working sessions with residents to voice their concerns. But in words of Councilwoman Camacho, “those first meetings were terrible. They were simply giving the Mayor some peace of mind to sign the addendum and they did it perfectly: they massaged people’s feelings [*manosearon a la gente*] and it was all baloney [*pura paja*]... nothing came out from those meetings, nothing; that addendum does not include anything from them, nothing.” That was the last straw for residents: this amendment did not respond to many of their petitions, and they requested the administration and the EAB to be included in discussions about the park, its design, and related infrastructure.

Environmental and Economic Concerns

Designed parks like San Rafael are a third nature space where ideas about nature are implemented on first nature resources and second nature infrastructure. In most of these cases, it is the designers’ third nature conceptions—usually the state’s, aligned with capital in an “urban growth machine” (Molotch 1976)—that get built on the land, opening the door to gentrification processes and facing opposition from neighbors (Egerer and Fairbairn 2018; Rigolon and Németh 2019). But in Latin America, public spaces like parks also suffer from a bad reputation given the high levels of crime in these spaces (Caldeira 2000; Zeiderman 2016), which in turn creates fear among residents that their

neighborhood will become unsafe. In La Calera's case, although the San Rafael ecological park would help achieve conservation efforts that residents and some state agencies share, residents opposed the project based on environmental and material concerns. The general disapproval from residents was probably best captured by the city council minute 28 of 2017, a year and a half after signing the park's contract amendment. It reads:

Mr. ORLANDO CASTRO, Vice-president of the Community Board from Vereda Camino al Meta [and a newcomer], comments that the park is related to both Bogotá and the municipality. He talks about how [the park's consortium] would try to create the designs of the route from Bogotá to La Calera.

Mrs. YEIM PINZON, legal representative of Arboreto Bosque Residencial [one of the most expensive gated communities, which overlooks the reservoir], speaks about the San Rafael Park's boundaries. She doubts that the CAR gave them permission already, and talks about restricting the horseback riding in the area.

Mrs. FLOR GARZON [a newcomer], resident of Vereda San Rafael, speaks about trash and horse manure that is in the area.

Mr. NELSON AVELLANEDA [a longtimer], resident of Vereda San Rafael, asks what will happen with the community that got their right to work violated when they flooded the zone and asks why there has not been much dissemination about the project with the community of the affected area.

Five other community members also spoke during that time, asking about which territorial entity

will own the park, the effects of privatizing public space, the environmental impacts of the “ecological park,” and the possibility to have the horseback riding business inside the park. Here, and in contrast with the water acquisition goal that I analyzed in Chapter 4, each group of residents highlighted different problems, but that did not prevent them to unify against the state authorities in the meetings. Calerunos knew San Rafael was going to be built no matter what, so they focused on trying to make it what they wanted the park to be.

Both groups framed their concerns in an environmental discourse that included ecological concerns—such as the state’s induced scarcity of access to natural and economic resources—and social issues affecting how they conceived this location as a third nature space. The five large categories of residents’ dissatisfaction were (i) large numbers of people; (ii) mobility; (iii) safety; (iv) economic potential; and (v) governance.

The first major problem that residents voiced was that there would be too many people coming to the park. In our interview, Councilwoman Camacho said it is crucial to “avoid urban development around the park, because there is nothing more attractive than a project [allowing people] to live next to a park like this.” Through this quote, the Councilwoman echoes the risks of gentrification that these kinds of developments have both in urban areas and rural areas, as occurred in Medellín’s Parque Arví. She does, however, warn against “working under the assumption that [these projects] will bring the rabble’ [*chusma*],” which is how I heard some newcomers speak in passing about the potential

users that would come to the park. They were concerned that their vereda would now be crowded with people from lower classes. In this, she also was cautious of a widespread conception from some newcomers that thought their property values would deprecate because of the park's "popular" visitors. To these economic arguments, Longtimer Javier added that "there will be a problem of overcrowding" with all the people that would visit the park. As a consequence of the large number of people visiting La Calera, advisor Pinzón told me that there will be "an enormous quantity of waste"—from trash but also from the park's bathrooms—that the municipality would not be able to manage with the existing second nature infrastructure networks.

Tied to overcrowding, residents from both groups also mentioned mobility as a key challenge. All those people arriving will do so through the dirt roads, the only paved road, and, potentially, by cable car if it was built. Newcomer Eugenia said in our interview that "even if they widen the roads, it will be insufficient" for all the additional vehicles arriving. Like her, the amount of noise and traffic brought by the park would fracture many residents' conception of a tranquil third nature. Moreover, Eugenia was also concerned because one proposal to solve mobility issues involved building a tunnel through the mountains. This work "would demolish my house," she declared, but also said it would be an ecological disaster to intervene in the Eastern Mountains.

The state agencies' response to this point about mobility was the proposed cable car, but residents were skeptical of that solution. Councilwoman Camacho pointed to several problems of that project:

“That cable would take several years, it’s not like ‘oh, there’s a cable now’ and it happens. I’ve always told them, where’s the environmental license for that? That doesn’t happen overnight.” She is skeptical not only about the overall cable project given the empty promises that the EAB and the administration have continuously told the community, but also about the lack of environmental policy enforcement from the state itself—the cable car project does not have the CAR’s license. Despite the lack of approval from the competent environmental agencies, the consulting team in charge of the park’s plans was already doing some designs and holding community meetings. This lack of synchronization from the state itself shows the contested process between conceptions of third nature, even within state agencies.

Despite the skepticism against the cable, residents were aware that it might benefit the municipality. Newcomers own cars and some have more than two because of the *pico y placa*¹⁷ restriction in Bogotá, but supported the idea because it could improve the commute to long-time neighbors and other people in the town who use public transportation to go to the capital. Eugenia told me that residents in the community meetings “are emphatically demanding that the cable service goes to the town, because it is part of the impact that it will have on all of us.” Like her, many newcomers as well as longtimers requested that the cable station should be either in the town itself or as close as possible to it. Like the cable car in Parque Arví, this means of transportation would connect

¹⁷ This is a policy that started in the 1990s in the capital. It restricts the use of private cars depending on the license plate for a number of hours every day. Currently, the restriction works depending on the license number being odd or even, and so many newcomers own at least one car of each group to avoid the restriction.

the city and the town through a low-impact project in the ecosystem instead of blowing up part of the mountain for a tunnel or building a new road.

A third problem raised by residents spoke was lack of safety. Again, Councilwoman Camacho reflected on some community's reasons behind this problem in our interview, and said that "people are afraid of that, of more people roaming around, which means that there are more people looking for something bad to do."¹⁸ This fear of potential threats in a country like Colombia is not unfounded, given the country's struggles with public safety, and in other parts of Latin America where parks might become sources of danger (Corbacho, Philipp, and Ruiz-Vega 2015; Villarreal Forthcoming). Longtimer William echoed this fear when he told me that "there's a fear that delinquents [*malandrines*] would arrive, that the park starts to attract people that, since they don't have any other opportunities... it's very likely that it happens." Making reserves and other ecological spaces safe has been a concern for some governments in the global South, which many times end up with militarization of those areas in the name of conservation or profit (Ojeda 2012; Lunstrum 2014). In La Calera's case, the fear comes from disrupting their conceptions of third nature as a tranquil place after potential thieves and other undesirable others come to visit the park.

The administration also shared this concern about safety. Antonio Castrillón, who was the Head of Safety for the Mayor's Office at the time, said in our interview that "it is highly concerning

¹⁸ *Echando ojo*. This expression could mean both keeping an eye out for others, but also seeing if anything can be stolen. In this case, it was the latter sense.

because... [the designers] are working on the safety issue inside the park but not around it, like in the hiking trails they are offering. [In those trails] we have already heard about robberies, muggings and more.” It was in those routes included in the park’s designs that a highly discussed murder took place in 2016, which was still fresh in Calerunos’ minds and fueled their fear. Councilwoman Camacho took this reflection one step further in city council Minute 11 of 2018, when she asked the other Councilmembers to imagine “how much would lack of safety increase, how many robberies, muggings, and how will the authorities respond? With public safety? Private security?” She did not receive an answer on this issue from the EAB General Manager who was at that meeting.

Aside from these issues of first, second and third nature, residents also raised problems with how the state was inducing economic and ecological scarcity with the project. The fourth complaint that people highlighted, especially longtimers, was getting access to the economic benefits of the park. Councilwoman Díaz, who was the first elected Mayor of La Calera in the late 1980s, stated in city council minute 32 of 2018 that she was “very worried that the park’s deal is done and that they would not accept people from La Calera [to be vendors] because certain requisites are not met... There are many economic activities that can be developed outside the park... and so, what support will the community get to carry them out?” Her concern about the potential economic activities that Calerunos could develop in the park stems from two sources. First, one project proposed that the 40 hectares that the original park had would be returned to La Calera *inside* the new park, and that would

mean having an opportunity for longtimers to sell traditional food or other goods in a farmer's market or a Disney-like "Caleruno Town." Second, another project was for long-time Calerunos working on tourism to register as official vendors or guides in the park, so they could continue doing the horseback riding business they were already doing outside.

The original park designs did not contemplate any of this, but it was after residents' complaints that the administration included these activities. As in other contexts where ecological goals go against economic interests—discussed through the treadmill of production theory—, here long-time residents were worried that the new eco-park would limit yet another source of income. But instead of making it an either/or scenario, residents asked for including the eco-tourism businesses they already had in the park. Through this petition, residents tried to counter the state's induced scarcity of economic revenue from the park by making eco-friendly initiatives to sustain their livelihoods.

To the question of how would the employment opportunities in the park be, the EAB leadership stated that "there will be jobs: washing dishes, looking over cars." Calerunos took this very seriously and said that they "will not be the waiters of [Bogotá's Mayor Enrique] Peñalosa's park" (field notes March 7, 2018). Because many of the tourism vendors were concerned about how would the park benefit them—and given that there would be space for their activities in the 40 hectares of the original park—, they wanted to be guaranteed a space inside. They did not want food chains like "Crepes & Waffles, McDonald's and Coca-Cola," but they wanted to sell their traditional arepas and have kiosks.

To this, Zuluaga said that “the park would not be given to [those companies]. Everyone is welcomed here.”¹⁹ And in a free market logic, he added that both companies and Calerunos “will have equal conditions. The state will reach until it has to, and you all have to reach until you have to.” This quote signals that local vendors are welcomed as long as they can compete with chains and other vendors, and the state, through the EAB, would not interfere in the free competition for the space. In other words, the inclusion to the park had to be in the state’s and capital’s terms, not in the residents.’

The final source of problems for residents where residents presented a unified front was about governance of natural resources. EAB negotiator Zuluaga was aware of this issue when we spoke. He said that the park’s, “management is done through the CAR, but people in La Calera consider that that is almost a transgression to their autonomy as a municipality—the fact that Bogotá considers San Rafael Ecological Park as part of the city’s ecological structure and public space.” As I mentioned before, the EAB thinks that it has the appropriate technical knowledge to maintain the fragile ecological structure of this area, and they exclude others from this management. In other words, the state through the EAB creates a barrier to who can benefit from these natural resources, effectively excluding even Calerunos’ voices in this process. Perhaps it was longtimer Diego who summarized this feeling of being dismissed best when he told me that, “the fact that they will do the park now doesn’t mean that they are keeping their promise to La Calera because it will not be managed nor administered by La Calera.” In this issue of environmental privilege, even La Calera authorities acknowledge their

¹⁹ *Aquí deben caber todos.*

own minor role. Advisor Pinzón said that,

of course, as a municipality, we are worried that [the project] is developed keeping the environment in mind, that it would be the least invasive, the least aggressive possible... Despite the EAB being a public company, [the park] is a private project, so to speak... In it, the municipality has a certain saying only in terms of planning.

That the own administration is aware that La Calera can only do so much and that the project is in the hands of EAB reflects the issues around urban expansion, and, with it, extending the reach of the capital's institutions. These issues of governance are at the core of some planning discussions in peri-urban spaces around the world (Keil 2013; Hamel and Keil 2015; Romano 2019), but are even more relevant when coupled with environmental issues because the ecosystem does not care for administrative borders. By keeping La Calera authorities out from the management of this park, the state further creates environmental inequalities to Caleruno residents, who would be the project's immediate neighbors.

In this power imbalance, residents from both groups wanted to intervene to create a more equal distribution of natural and economic resources derived from the park. Longtimer Javier, who owns one of the horseback riding tours in La Calera, said in our interview that “there is no one here that can manage [the park] and, of course, the town cannot manage that mega-project but, instead of kicking the whole town out, why doesn't EAB leave part of the park for the municipality to manage? That's the most logical thing.” Javier's question speaks of a logic of “to each their own”: La Calera should

manage what it can, which in this case is a small portion of the park, while Bogotá administers the rest.

In the end, Calerunos were not *against* the idea of having a park, but they demanded to be included in the designs to guarantee more environmental justice for residents and the town. The park is something that longtimers wanted and felt entitled to after the old one was flooded back in 1993, while newcomers and longtimers saw that the project could bring potential economic and environmental benefits. Councilwoman Camacho summarized this joint idea when she said in city council Minute 11 of 2018 that she is not “saying that everyone disagrees with the park, nor that I disagree with the park. What worries me is the terms of the [community] participation and the joint building of the designs.” With this quote, Camacho is signaling that what she wanted, as well as Javier, advisor Pinzón, and others, was the right to be included in such a large scale project that will affect not only their environment but also their mobility, safety, and economic opportunities. Because of those impacts, and given the window of opportunity that the contract addendum opened for residents to be heard, longtimers and newcomers took actions to have their voices heard. These actions were the community meetings and another legal Popular Action, which I describe in the following section.

United Fronts

I heard most of these concerns in my interviews with residents, and some were also expressed in the

city council meetings. But residents took additional actions to speak with the EAB and La Calera's administration—as representatives of the state—to voice their concerns about the ecosystem and the economy. Although the five sources of problems affected newcomers and longtimers differently, that did not prevent them from working together in the community meetings with the EAB and from supporting other legal actions taken against the park. The common thread in these actions was a united front through which residents shared an image of third nature: preserving the ecological structure of the area through enforcing environmental policies already in place.

After citizen pressure, Mayor Escobar delegated someone to convene a series of community workshops that would meet regularly. These workshops took place in the Sena—the national institution for technical and technological education in the country—which was big enough to house the more than 40 people who attended the original pre-opening meeting and others participants that got involved along the way. The results from these meetings were supposed to be included in the contract when the Mayor signed the addendum, but as Councilwoman Camacho said, that was more of a smokescreen to give the green light to the project as it already was. Despite this, one of the addendum's commitments was that there would be a “permanent space” for the community to be heard.

The EAB enabled that space after the addendum's obligation to do so. They called for different community meetings, which were the ones where I was mostly involved. I participated in seven of

them, each one with a particular topic like environment, safety, mobility, tourism, among others. It was in those spaces when architect John Zuluaga entered this landscape, as the EAB negotiator in charge of the meetings and was interested in including residents' input in the plans. But he was concerned that there were no community representatives from the different interested parties. In his words, "the municipality has to create representatives to make the interlocution more effective with them and the operators that would arrive in the park." With this, his concern was the lack of a unified body with whom to negotiate, instead having to mediate various residents' requests.

Zuluaga's quote speaks about a fundamental problem with community organization in La Calera, and it is that there are no formal mechanisms to decide who are the leaders. This is why I would not consider residents' joint actions as an organized social movement, but rather a result of neighbors concerned about their surroundings, that in this case they are environmentally relevant. To be sure, there are community leaders in the town, but many do not occupy an elected position; there is a community board for each vereda, but many board members do not go to meetings. Many residents thus attended these meetings as individuals with shared concerns about the park and its area of influence.

A typical community workshop led by the EAB in La Calera went like this. It was scheduled for two hours, from 9:00 am to 11:00 am on Wednesdays, but it always started much later and carried over noon. It took place in a small room of the Culture House, La Calera's public arts and culture

space where they taught some classes, made presentations, or lent for public meetings such as these EAB-led workshops or the new zoning plans discussions. In these meetings, Zuluaga was both moderator and presenter. He started the meeting by reading the minutes from the previous session and answering questions that were left pending that he needed to consult with his team. He then later made a presentation of the day's topic, which sometimes included a slideshow or large prints with maps and other materials. Throughout his talk, he let people interrupt him to ask questions or clarify things, which was a surprise for me—state authorities in the meetings I observed in La Calera usually got very defensive when questioned by the community and tried to avoid questions. After Zuluaga's presentation, people asked some more questions and signed the attendance sheet. He always asked residents to sign the maps, so that there was a record that the community participated in the meetings (see fig. 5.2).



Figure 5.2. One of the resulting maps from the social cartography meetings depicting the park boundaries around the reservoir in light blue. See the signatures of the few attendants at the bottom of the document. Photo by the author, 2018.

This participatory mechanism did not go without problems, though. The first one was that the time only worked for people who were free on a weekday morning. This immediately reduced the number of people who could attend, which was usually around ten participants, including me. Despite residents insisting several times to change the schedule so more people could come, the EAB kept it the same. A second problem was that many residents did not sign the attendance sheet because they thought the EAB would use those signatures as “legitimizing” the minutes or supposed agreements without their consent. This profound lack of trust with the institution is not unwarranted

—it was that same company who promised the park two-and-a-half decades before and who does not provide water to the rural residents that live next to the reservoir, which already makes people mistrust it. Finally, the last problem was that after a while, residents felt that the discussions were not going anywhere. In other words, they felt that they were being “consulted,” but none felt that their suggestions around big issues were taken into account. Despite Zuluaga’s power in the negotiations, many decisions around design, costs, and other “technical” issues were in the hands of the consulting teams that would build the park and not the EAB.

Those problems aside, these negotiation spaces were important to those residents who could attend. Participants were newcomers and longtimers, who presented a unified front in the demands. There were some “regulars” to the meetings—including Eugenia, whom I interviewed, Councilwoman Camacho, Advisor Pinzón, representatives of a social housing complex near the park, and community leaders belonging to either of the residential groups. There were others who came to the meetings depending on the meeting’s topic. For instance, when discussing tourism, many longtimers went to ask about economic opportunities for horseback riding, para-gliding, and other businesses in the park; when talking about safety, representatives from gated communities and other newcomers came to talk about their concerns. At some point, after having a few community meetings, Zuluaga declared that “we, as a company, have failed to fulfill agreements. We have made mistakes” (field notes, March 2018). Many attendants saw this as an important step in creating a better

relationship with the state authorities for this project.

As part of this relationship building, the EAB used open online platforms to dialogue with residents after they asked for this mechanism. Since many people could not attend the meetings because they had full-time jobs, regular attendants asked for this solution so that more people be informed about what was happening. Instead of trying to close the space of negotiation to the same ten or twelve regulars, they asked for others to be included in different capacities. Because of this goal, they asked for the creation of a common email account and a WhatsApp²⁰ group. In the former, and against many digital security good practices, anyone could be given the credentials to log in the Gmail account where Zuluaga would upload the PowerPoint presentations, minutes, maps, and other elements used in each meeting. Residents could also upload their own petitions and communicate with each other and with EAB there. Currently, the group has 51 members, and almost 400 documents, links, and pictures have been shared. It has been mostly inactive since early 2019, but when the negotiations were happening, the group was very active asking for meeting times, pdfs, presentations, and links to newspaper articles about the park.

²⁰ The most popular instant messaging app in Colombia and other parts of the world except the U.S.

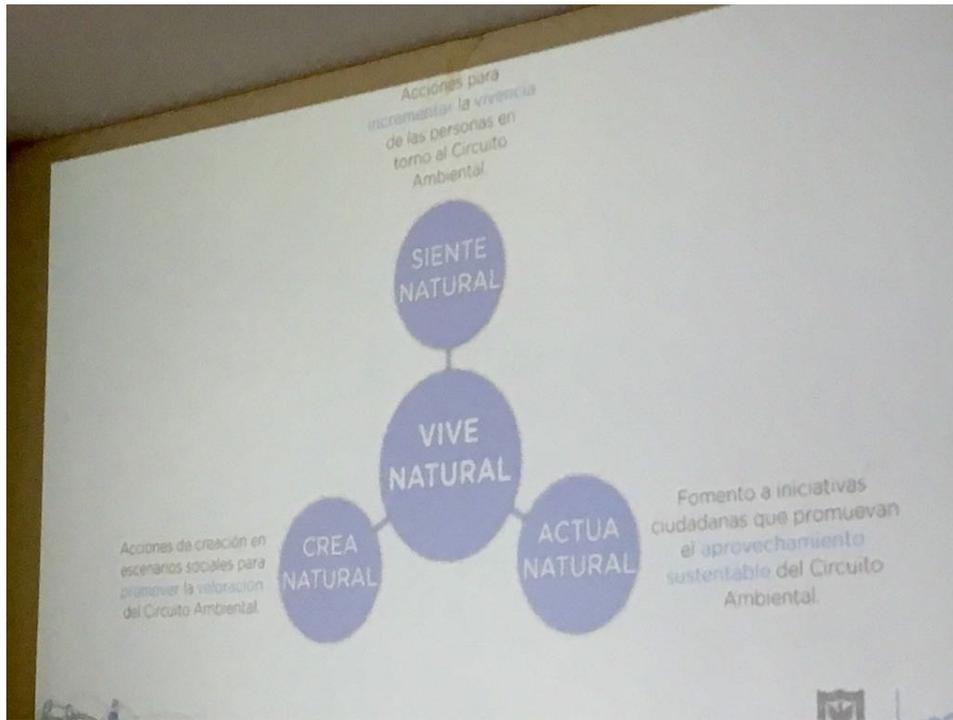


Figure 5.3. A diagram depicting the “Live naturally” strategy from the EAB for the San Rafael Ecological Park. Photo by the author, 2018.

Residents’ pressure to the EAB and La Calera’s administration in these community meetings was solidified in the project’s inclusion of some of their concerns in their “Vive natural” strategy. This *live naturally* program was divided into three spheres that represented third nature: feel naturally, create naturally, and act naturally (see fig. 5.3). This three-part division showed the way the EAB felt that people would interact with the environment in the park, which meant that people would “increase people’s lived experience” in nature (feel naturally), “promote the value” of the ecosystem (create naturally), and enable the “sustainable use” of the ecosystem. To this conception of how people

should behave around nature, residents added their own ideas of third nature around this land, which included a better distribution of natural and economic resources (through cooperatives or autonomy in the decisions) and maintaining the area free of human intervention.

As a result from these different third nature conceptions, the EAB included some residents' concerns and ideas in the initial park designs, always pending on the technical studies. Some of those suggestions were easy to agree upon, such as when residents asked for the park to protect the native vegetation, which the designs already contemplated. Both residents and the state shared this ecosystem protection goal, which was solidified through the live naturally strategy. But other suggestions were bigger, like including local vendors of food and tourism services, which were also part of the economic benefits from the park that residents wanted to obtain.

Despite the shared goals and the trusting relationship that was being built with the EAB, residents knew that many of their petitions could get discarded very easily. This was the case with the park's name that was discussed in the meetings. In the original project, its name was Parque El Rocío (the Dew)—a name that conjures a very explicit image of the area's water resources and that signals a shift to focus on the environment. But because the flooded park was called San Rafael, like the reservoir, residents wanted it to keep that name—a demand pressed in many community meetings and to which Zuluaga and other EAB representatives agreed and started calling it San Rafael Park. Then, on July 28, 2018, Bogotan Mayor Peñalosa tweeted a picture of an empty land plot with mountains in the

background saying that “This is where the cable to Parque El Rocío will arrive in the San Rafael Reservoir” (Peñalosa 2018). Residents were enraged. If the Mayor could change the park’s name even after it was consigned in the meetings’ minutes signed by residents and officials, and after the EAB representatives agreeing on it, residents felt that none of their work mattered. They saw that, in the end, Peñalosa, as Mayor and head of EAB, would do whatever he wanted. To add insult to injury, this same tweet signaled that another of the residents’ demands—that the cable would arrive to the town—was overtly ignored.

Unsurprisingly, the voice of protest against *how* things were being done—and not against the park itself—led to the project being stopped in its tracks. In February 2019, long after Zuluaga left EAB and when the consulting group in charge of the technical designs and execution started handling the negotiations, the EAB Union made a Popular Action against the park arguing potential environmental damage. That was the same legal resource that residents used in the water case in the previous chapter. The action argued that the park’s construction would have unassessed negative environmental impacts, and that violated people’s right to a healthy environment. Nevertheless, and despite the EAB’s responses that they would plant trees to counterbalance the negative environmental impacts, the call for the works of the “San Rafael Ecological Park” were suspended indefinitely in November 2019 (*El Espectador* 2019). It is unclear at this time whether the new mayors from both Bogotá and La Calera would pick up the once again failed park project, especially after the pandemic’s hit on public

resources.

This failed project not only is another example of the EAB's unfulfilled promise, but it also shows how similar conceptions of third nature can be put to test by how economic and ecological resources become scarce by the state. As Territorial Planning Council president Ignacio Gallo told me in our interview, "we fought for Parque San Rafael to be inclusive," and they won by raising several questions to the entire project along the way. Some of those questions aimed at including other interactions with the environment that were not contemplated in the original park's designs without the community, such as including eco-tourism initiatives that already existed. It was because of a shared goal among residents—not against the park but against the process that ignored their demands—that they saw as a victory the Popular Action using an environmental argument to halt the project.

Summary and Conclusion

This chapter examined the connections between third nature and scarcity in abundance for the case of land in La Calera. The San Rafael Ecological Park project showed how a similar goal to redistribute environmental privileges can trigger a consensus among residents to work against the state. Both longtimers and newcomers were not against the park itself, but against the design process. They complained that the state authorities did not take their voices into account, while the state wanted to

impose a particular view of third nature where first nature ecosystems were protected by second nature fences delineating a green public space. To this restrictive third nature, residents wanted to include other interactions between humans and non-humans that would benefit them economically from such a project but also that protected the environment, such as eco-tourism. After battling the state in many instances, this double goal was achieved in the park's designs, which effectively hampered the state's induced scarcity of natural and economic resources coming from the project.

Unlike other depictions of Latin American states being absent in rural areas, the park's negotiations had a strong state involvement. From the beginning, when the old park was flooded, it was different state institutions that negotiated these agreements. And this state also had a strong third nature project that it wanted to implement in the area through its "live naturally" strategy. To this imposition, residents created different mechanisms to get their own third nature views into the designs, and although they were initially included, there was no guarantee that they would materialize—as happened with the park's name. It took the intervention of another state authority—a court—for this project to stop, despite all the pressure from both residents' groups. The environmental argument from the lawsuit included a discussion about the right to a healthy environment, which speaks of environmental justice issues derived from this case.

One of the absent topics in the discussions about the park was the zoning implications of its construction. The park's community meetings coincided with the initial stages of the new zoning

plans that were to be approved by La Calera, which was also an arena where longtimers and newcomers were able to pressure the state together. Nature again was in the middle of these struggles: contrary to the underground water or the landscape alteration by the park, residents' ecological concerns from urbanization took the center stage when debating the upcoming zoning plans in the municipality. I analyze these images regarding urban growth in the following chapter where I use the planning community meetings as another example of inter-class coalitions against the state.

CHAPTER SIX - Wardens of the Mountains Against Urbanization

In Latin America, rural-urban spaces such as La Calera suffer from a lack of planning that incorporates environmental issues more prominently. Previous research in the region, especially in Chile and Argentina, found that zoning and planning exercises have a strong urban-centric bias that must be abandoned to include ecological functions, landscape ecology, and environmental services in rural areas undergoing urbanization (Armijo Z. 2000a; 2000b; Barsky 2005; de Prada et al. 2012). Specifically in Colombia, this urban-centrism must face the problem of silencing peasants' voices and concerns in planning processes, especially in post-conflict scenarios (Mendoza Jaramillo 2015; Coscione 2016).

With the appearance of upper-middle class newcomers, participatory planning exercises in La Calera may have an additional obstacle in the power imbalance among stakeholders who want different things. However, it was in these scenarios where I saw the most consensus between newcomers and longtimers. In fact, early experiences in planning in other contexts show that participatory meetings are a good way to bridge differences among people from various social positions (Beierle and Konisky 2000), even under war-torn contexts where tensions could break at any point into outward armed conflict again (Broome 2002). In San Francisco, for example, a “community of hundreds of very different, angry, reactive voices united into just one informed and very sophisticated collective voice” (Parker and Pascual 2002, 56), showing the enabling capacity of these spaces to create consensus across social divides. For La Calera, this collective voice was raised for environmental

reasons against further urban growth.

In one of the participatory planning meetings that I attended in late February 2018, participants from both residential groups especially focused on the environmental problems in their veredas. Drawing from an environmental awareness, they complained about gorse (*Ulex Europaeus*)—an imported thorny shrub from Europe in the twentieth century for building “live fences”—, wild fires, endangered fauna—like the endemic “eyeglasses bear”—and the reduced native vegetation cover. One participant added that “We are the caretakers and wardens of the mountain,” followed by several nods of agreement from the audience. Residents ward La Calera against further urbanization, which they see as the major threat to the ecosystem. “We live in the countryside. We want a green vereda and to stop Bogotá in its tracks [*ponerle un tatequieto*],” stated a newcomer in the same meeting. “We have the right to watch the stars,” claimed another when discussing how they should install lights with movement sensors to reduce the glow from electric sources, “so that owls might return” he added. Most of all, another longtimer said, “big houses are visual pollution.”

Although the zoning plans in these meetings could act as instruments to contain urban growth, residents were wary of these regulations after a recent corruption scandal of *volteo de tierras* or “land flipping,” where a developer aided by the Governor bought a large rural land plot expecting to be converted into an urban use, which would multiply its value significantly (*Las 2 Orillas* 2018). Similar corruption and zoning scandals occurred with the building of a gas station with a supermarket in an

environmentally protected area (*W Radio* 2013; *Grupo Éxito* 2014), and a gas station that was going to be located only a few meters away from the San Rafael water reservoir, risking an oil spillage into the drinking water. Seeing that these land flipping schemes were common, and that the state did not fully enforce environmental regulations, newcomers and longtimers in the planning meetings wanted to fight for a better control in how La Calera should grow.

Residents want to take control of the planning process because of land flipping and lack of enforcement of environmental regulations in the municipality. Additionally, as I mentioned before, there is a tendency in the country to ignore peasants' concerns in metropolitan expansion plans, which over-emphasize urbanization goals. In La Calera, these goals include restrictions to agriculture and building more social housing and elite gated communities, which puts even more pressure to the already fragile water infrastructure. Therefore, the Plan de Ordenamiento Territorial (Territorial Order Plan, POT in Spanish) is a building block to construct third nature—human interventions over the ecosystem and built environment to maintain a “pristine” environment.

With this participatory interest, residents could limit the amount of new people moving in, and also use an environmental logic for how these rural spaces should be kept as “green” as possible. The lack of environmental planning in rural areas has led to a reduced agricultural capacity and to alter ecosystems that further triggers climate change (Casas, Godagnone, and de la Fuente 2020). In other words, when land values rise in rural areas, the agrarian frontier expands into ecologically protected or

untouched spaces, which end up becoming “islands that must be protected from human activity derived from economic development” (Miranda et al. 2015, 174). Thus, these meetings’ results in La Calera not only affect images of “green” and “ecology,” but also affect land markets and natural resource maintenance. In that sense, planning becomes a site of third nature that brings together human interventions to protect ecosystems (or first nature).

A lot is at stake at any local planning meeting: residents discuss to decide what activities can be done in an area, from specific land uses to building permits and conditions. In La Calera’s, both residential groups expressed disagreement with the state because of its non-enforcement of environmental regulations and formed a consensus to strengthen their voices in the planning meetings for this goal and, faced with climate change, to maintain their ecological habitat. In both urban and rural areas where land values are rising, the stakes are even more dramatic. A first issue is the displacement of the long-time population that moves the agricultural frontier to ecologically protected areas in the páramos and has little room to bequeath land to younger generations. A second issue comes from newcomers acquiring subdivided land plots from previous farms to live “closer to nature.” A third issue comes from the institutional arrangements from developers and politicians to redevelop “green” resources to provide amenities for higher social classes in the face of elite gated communities or to provide large-scale social housing without proper infrastructure. Although in other examples of countryside urbanization in the subcontinent the issue focused mostly on peasants (Canabal Cristiani

et al. 2020), the inter-class component of La Calera and the alliances forged to protect both an environment for production and for consumption is relevant in this case.

In the POT meetings I attended, both residential groups expressed a similar stance towards environmental and development issues. Residents used these shared third nature stances against a state that, in this case, wants to expand land development through legal mechanisms in a place with abundant nature reserves. Thus, it was important for them to make sure that the POT included restrictions against urban growth. These rules, residents claimed at the meetings and city council minutes, should guard against not only richer “Bogotans” coming to the municipality but also against social housing projects built by private developers with the state’s sponsorship. This “growth machine” (Molotch 1976), where elites from the state and private capital join to develop land to advance their own interests—the same mechanism found in “green growth machines” that achieve the same goal using an environmental discourse (Gould and Lewis 2016). In Latin America, most of these machines come as urban renewal policies that residents—including the displaced population resulting from those—fight against these state’s policies (Álvarez Rivadulla, Montero, and Villamizar Santamaría 2019; Cuenya and Corral 2011; Szajnberg, Luna, and Roitman 2014). In La Calera, these policies are not urban renewal but urbanization that jeopardizes first and second nature—the ecosystem and the infrastructure—: social housing for the poor and elite gated communities. Residents use an environmental protection argument at the POT meetings to fight back.

Envisioning Exercises in La Calera's POT

The Plan de Ordenamiento Territorial (POT) is the most important planning document in Colombia. POTs aim to protect natural resources, aid collective social and economic wellbeing (both dimensions present in what residents call “development”), and strengthen risk management. Each municipality has one, and it should include a sociodemographic study, an environmental risk assessment (in terms of landslides or floods, for example), an ecological structure evaluation, among other components. The environmental protection capacity of the Colombian POTs was a welcome addition to planning discussions because these areas in between the rural and the urban in other parts of the world were facing ecological challenges such as resource depletion and the established planning framework did not deal with these new difficulties (Zhang 2013; Yan, Wei, and Zhou 2003; Zhu et al. 2009).

These land policy instruments, once approved through several participatory stages, regulate zoning and the allocation of financial resources. Before Law 388 of 1997—that created the POTs and defined how they worked—planning in the country was centralized, without the local community’s participation. Long-timer Emilia, who studied environmental management and owns a civil engineering business, described POTs as a way for the state to democratize planning: “Through this

law, the state said that each municipality must plan its own territory, that they'd have power over land use because they are the ones who really know it, right?" Instead of deciding from a distant governmental office desk, the POTs would give each town the power to decide what spaces and facilities they needed—residential spaces, institutional spaces, sports facilities, educational areas—and establish zoning laws to place them in specific locations. The instruments also set the minimum amount of land a peasant family would need to sustain its livelihood, which determines the designation of agricultural and rural uses.

But the democratic process of drafting a POT entails a contentious discussion. Every interested party has a say as to what they want and where they want to place it. Inevitably, the result depends on the power wielded by each of these parties, who can influence the process in various steps along the way. In La Calera, the biggest tension lies between environmental protection and housing development, and balancing these goals is what residents find the hardest. "The most important question is, who controls that balance?", said newcomer Christian when I interviewed him in mid 2016. A Northern European immigrant, Christian was very concerned about this balance between protecting the environment, guaranteeing housing for people who need it, and limiting elite gated communities. In his words, planning "should not end up with you being a Nazi, saying no to everything, but it has to be studied and understood—what is happening and what is the impact it would have." For him, "you don't have the right to tell certain kinds of Bogotans that they don't have

the right to what they think is a good lifestyle in the countryside, but at the same time there should be a balance.” Through these quotes, Christian is saying both that he is aware of the various actors interested in building houses in La Calera but also that the planning discussions should be rigorous and technical to limit the impacts of these new constructions on the environment.

These discussions are battled throughout each step of the POT process. First, there is a diagnostics phase, where the municipal administration collects residents’ concerns, goals, problems, and potential solutions regarding their territory. It was during this phase when I conducted most of my fieldwork. Second, the first draft plan goes to the Cundinamarca Department’s environmental agency (the CAR) for its approval. Third, the plan goes back to the municipality’s Territorial Planning Council (CTP in Spanish) for further input. The CTP is a citizen body comprising elected representatives from different districts and topics, which monitors planning processes and other issues related with land use or development. Fourth, the modified document goes to the city council for approval. But if it fails to get approval there, or the council takes longer than stipulated by law, the Mayor can still sign the plan as a municipal decree. This process should be done every twelve years—or three Mayoralty terms—and La Calera’s was starting in late 2017.

Starting from December 2017, the administration and a consulting group in charge of the POT’s designs called for community meetings as the first step of this land policy document. As the diagnostics phase, its main goal is for people in a municipality—as residents, business owners,

transportation workers, tourism vendors, and so on—to voice their concerns about their area of residence or business. They could raise issues regarding land use, building restrictions or environmental concerns, and any other problems they could see. I was expecting to see more vision conflict between newcomers and long-timers, given the different issues affecting each population, but what I found was more of a consensus between resident groups to make the state enforce environmental policies to limit urban growth.

The local administration selected Siglo XXI Consultores after an open call to act as the consulting agency in charge of all the stages in the POT. Its team included architects, engineers, and other professionals related with planning. They had to provide the materials and logistics for the vision exercises with the help of the local administration. The latter would make available different spaces, like public school classrooms and every vereda's *salón comunal*²¹, to host those workshops. Along with this agency, by law there should be an auditor who would monitor the entire process and make sure that everything went according to the guidelines.

The diagnostics phase's community meetings in La Calera were divided by geographical area and social sector (see fig. 6.1). Social sectors included different occupational groups—healthcare, tourism, transportation, retail stores, among others. They were usually held on Saturdays and Sundays, and sometimes on a weekday evening, to try to accommodate different people's schedules. To publicize the

²¹ These are semi-public spaces that veredas and neighborhoods have that function as community spaces. Anybody could request a time slot in that room to host things like workshops, special celebrations, and other community activities.

invitations, the consulting group and the administration used mostly WhatsApp chain messages and Facebook posts, along with ads on the local radio station and *perifoneo*—going around in a car with a loudspeaker or megaphone to tell the information about the meeting time and place.

Secretaría de Planeación

CONVOCATORIA PARA SOCIALIZACIÓN DEL POT

GRUPOS DE REUNIÓN VEREDAS Y BARRIOS

VEREDAS	LUGAR DE REUNIÓN	UN GRUPO
Manzano, La Hoya, La Polonia, La Jangada	Salón Comunal Manzano	Sábado, 13 de enero De 9:00 a.m a 12:00 m Grupo 2
Aurora Alta y sector la Capilla.	Colegio	Sábado, 20 de enero De 8:00 a.m a 12:00 m
Aurora Baja, Márquez, San José del Triunfo y San Cayetano.	Salón Comunal El Triunfo	Sábado, 20 de enero De 2:00 p.m a 5:00 p.m Grupo 1
La Calleja, La Toma, Las Mercedes, San Rafael y San José La Concepción	Salón La Toma	Sábado, 20 de enero De 2:00 p.m a 5:00 p.m Grupo 2
Mundo Nuevo	Salón Comunal	Domingo, 21 de enero De 9:00 a.m a 12:00 m
Altamar y La Portada.	Escuela Altamar	Sábado, 27 de enero De 9:00 a.m a 12:00 m Grupo 1
Epifanía, Buenos Aires, Santa Helena	Escuela Buenos Aires (Los Pinos)	Sábado, 27 de enero De 9:00 a.m a 12:00 m Grupo 2




Figure 6.1. An ad on WhatsApp for a POT meeting. It includes the target population—in this ad, by vereda, meeting date, and meeting location.

A typical diagnostics meeting went like this. Depending on the vereda, there would be more newcomers or more longtimers—in the Southern veredas that were closer to Bogotá, there were more newcomers. Sometimes the municipality’s mascot Calerita—a giant human girl with braids, jean overalls and a straw hat hinting at a farmer-like outfit—was also there. At every meeting that I attended, the consulting team started with the same PowerPoint presentation that explained what POTs were (“a place for everything, and everything in its place” is how the facilitators defined it), under what laws they work, the different phases for a POT renewal, the goal of that meeting—the “diagnosis” of the area—and how they would proceed. Attendants usually complied with all of this, except in the Salitre vereda, where they protested against the entire process and demanded a rescheduling in residents’ own terms. First, they explained the legal instruments of a POT and all the institutional framework—filled with juridical and technical terms that were out of people’s grasp, including mine. The facilitators then broke the audience into small groups. Every meeting included the same snack of a cold ham and cheese croissant sandwich and a boxed juice.

One of Siglo XXI Consultores’ team members acted as a facilitator in these small group meetings and wrote on a large newsprint sheet or paperboard divided into a 3x3 chart. It included three thematic axes—environmental, economic, social—and three categories—problem, wish (*anbelo*), and project. The facilitators asked the audience members about the issues relating to each of those themes they have faced in their vereda or sector and collected any potential project or vision on how to deal

with them. Most of the times, the environmental and social themes had the largest volume of interventions, and the facilitators clarified that the economic issues were always subject to other instruments beyond the POT (like each municipality's Development Plan and each mayor's policies). I will speak of the results of those charts in the following section, but for now I want to focus on the general interest in the POT.

When I participated in the meetings, La Calera's then-POT was outdated and residents felt that the municipality was being urbanized at a faster pace than before. Because of that, the new POT attracted great interest from most residents. The regulations in place came from a 2010 modification to the 2000 POT. Although it should have been re-negotiated in 2012, the existing POT remained in place because of overlapping mayoral terms that prevented the document to go through the different stages on time. The overlap came after one Mayor was removed from office after a government investigation found funds malversation and influence trafficking, which then changed the mandate schedules. He is Mayor Escobar's husband and had a position as a legal advisor when I did my fieldwork. As Councilman Edgar Flórez stated in Minute 1 of 2019, a new POT is being "cried out for by the whole municipality, especially campesinos who cannot build on their inherited land." Inheritances, subdivisions, and building restrictions are among the issues that gather most attention from peasants and developers alike. Newcomers also were interested in these topics because they limit their ability to build homes and move there.

La Calera's POT would determine the type of building development the municipality would have in relation to the rest of Bogotá's surrounding towns. "La Calera is a privileged spot because its POT does not allow for industries to be here, unlike other areas near Bogotá. That reinforces its conditions for housing," said newcomer Aída in our interview. This feeling was the same of then-Mayor of Bogotá Enrique Peñalosa, who was quick to say that he did not want poor municipalities that were "mere bones, that generate expenses, not revenue" (El Espectador 2018) in a project to constitute an inter-connected metropolitan area around Bogotá. He wanted the meat from land taxes that other municipalities with elite housing would provide, like Chía and Cota to the North of the capital, and La Calera to the East. What Aída added to that logic was that she knows that residential development is closely tied to environmental protections and zoning laws in the POT, which would "last and not depend on some council member."

The POT plays one of the most important roles in designating environmentally protected areas and other nature reserves in Colombia. The national government can also decide where and how big these areas should be—as it did with the Río Bogotá Basin and the Páramo reserves in La Calera—but the POT can strengthen or extend those decisions. But, additionally, as longtimer and then-Mayor advisor Carlos Pinzón said to me, "How can [La Calera] keep being so pretty and interesting for those who come? It depends on planning, on the vision we have of planning, because that is where [those characteristics] start to be lost." According to him, and other interviewees as well, if La Calera does not

halt or control urban growth, then the town's major attraction—nature—will be lost.

Even before the first POT appeared, Calerunos were aware that the municipality would grow by offering land developers and other newcomers the opportunity to build housing. According to CTP Vice President Julio Vásquez, right from the early discussions of Law 388 in La Calera, the area “already started to be seen as a dormitory space for Bogotans.” Moreover, when the town's first POT was approved in 2000, “that is when development and growth in La Calera started, when we see that our model is to offer housing.” The early in-movement already began in the 1990s, when upper-middle-class families like Aída's and Alberto's came from Bogotá, but it was in that 2000 POT that the municipality regulated this growth. Some of those regulations included a limit to the built area of 10% of the total land plot—up to 20% if the house had two floors—, the mandatory distance of at least 100 meters away from watersheds or other sources, and limiting subdivisions of land plots.



Figure 6.2. Greenpark, in English, is the name of this apartment complex built next to the Teusacá River despite existing environmental and zoning regulations against this type of developments. Photo by the author, June, 2017.

But despite the POT, there were issues regarding its compliance and enforcement. Christian was very vocal about it, “La Calera, in objective terms, is a total mess. In planning terms. You have a number of buildings that should not have received construction licenses... Our house is still recorded in the Planning Office, for land taxes, as worth 8 million [pesos, around \$2,500 USD], which is absurd. I mean, that the land and the house are worth 8 million! There is so much intended and accidental mess.” Christian’s home was worth several times more than that figure, not including the land plot,

and his quote points to two issues: (i) some buildings should not have been permitted; and (ii) his property is “absurdly” undervalued for tax purposes. On the one hand, government agencies in charge of issuing permits did so despite regulations against them, as the case of Greenpark’s apartment complex right by the Teusacá River (see figure 5.2), which was built even after the POT prohibited buildings in rural areas and constructions near water sources. On the other hand, even if there are mechanisms to confirm a property valuation, many houses are undervalued on the books, which means that residents pay less income tax than they are supposed to. One explanation for these “irrational” or “illegal” uses of land must be corruption: although the laws are in place, people can bypass them or their enforcement mechanisms through deception, bribery, or under-the-table deals. Sometimes, as one person mentioned in a POT meeting, “even if they don’t have the permit, they build it, and then who’s going to tear it down once its done?” (field notes January 2018).

Corruption is one of the many threats that residents see affecting the current POT. As Councilman Jairo López stated in Minute 13 of 2013, “Planning is a dead letter. Better yet, we’re in no man’s land, local authorities do not have the competence to enforce planning, and here anyone can do whatever they want.” Councilman López is pointing to the corruption in La Calera, where money can pay for officials to disregard violations of the zoning and planning regulations. Moreover, citizens believe that local authorities cannot enforce those rules. This feeling is echoed by newcomer Camilo R., who told me that “in Bogotá’s peripheries there are no strong institutions... urban planning and

development is all the time subject to political fluctuations and if you add to that the great corruption of municipal mayoralities, then any kind of work in those areas is practically impossible.” In other words, the battle is lost from the beginning: if the state will not enforce rules, then no planning is going to work. I heard this feeling in some of the POT diagnostics meetings, where residents asked “what is this good for?” if “in the end you can do whatever you want” (field notes, February 2018).

Although the actual diagnose resulting from this phase were supposed to be delivered by August 2018, they were only provided in late 2019 to the administration and by February 2020 the POT was on step 3: the CTP evaluation. The residents’ monitoring momentum was completely lost because of a lack of transparency. No one was really sure when the CAR would approve the plan after the delay, or what stage was everything in. The CTP and other community leaders asked about the delays in the city council and other institutions, but clear answers were not provided. People finally obtained the diagnostics document after a Councilwoman filed a *tutela*²² asking for it, more than a year and a half after the original end date.

In the end, these planning issues suffered from a vicious circle. People did not trust the authorities or the consulting team because of the lack of enforcement to existing planning rules. In turn, this lack of trust prevented some residents from getting involved in the planning meetings. POTs in Colombia “became instruments that functioned as the gateway for corruption,” said CTP President Gallo. “It

²² This legal instrument is a fundamental provision the Colombian Constitution. Anyone can file a tutela against an institution after a right is violated, and it forces the institution to guarantee the right—for example by informing about a process, reversing a decision, complying with a previous decision, etc.

was supposed to be participatory because it was supposed to gather the long-term vision of the whole municipality to negotiate their interests, but it ended up being more political than technical: its strength comes from politics.” Gallo is referencing the buildings that should not be there, the lack of transparency and outreach in the POT process, and the previous instances of “land-flipping” in La Calera.

Because of the lack of trust in the process itself, the CTP and other residents resorted to other state authorities, like city council, to clarify what was happening. Most importantly, however, these sentiments that the planning process was meaningless were shared by newcomers and longtimers alike. Moreover, since this document is outdated and new types of developments have sprung in the area, along with a population growth from both newcomers and longtimers, residents in La Calera have identified several issues with it, which I will explain in detail in the next section. Overall, these problems reflect the tension between maintaining the rural ecology of La Calera and enabling urban growth.

Urban Development Threatens Nature

As I wrote earlier in this chapter, La Calera’s residents are quick to point to some problems regarding the POT. The biggest are framed as a concern for the ecosystem that is at risk from

urbanization, especially the one derived from corruption. Residents try to balance the environment and human interventions through third nature, by negotiating a shared vision to include in the state's regulations to protect both that environment and their homes. It is through the POT that this balance can be negotiated among the different parties, including residents and the state. Because of that, residents identify three problems with the POT for this goal: agriculture, housing, and environmental protections.

Agricultural issues are the first type of problems. That planning instrument prohibits soil exploitation activities in sub-páramos, or areas higher than 3,000 meters above sea level, and designates which land plots under that altitude are rural. Jaime Danilo Rincón, director of La Calera's UMATA²³, stated in Minute 13 of 2013 that his office is "between a rock and a hard place. On the one hand, we have to enforce the altitude rule and, on the other hand, the social piece," by which meant enabling families to continue growing potatoes and other crops to sustain their lives. In fact, as Mr. Simón suggested in the same minute, many residents wanted the POT to be revised so they could keep growing crops despite the norm. Mr. Simón said, "we are farmers, we're here not to fight with anyone, we want to leave agriculture in your hands... We ask you to please don't leave us out of the POT modification." For longtimers like him, the environmental protections of the POT were going against their livelihoods.

²³ The Unidad Municipal de Asistencia Técnica (Municipal Unit for Technical Assistance) is a public office that helps peasants and others in all matters related with agriculture. They sell seeds, give advice for growing different species, and provide other technical assistance to improve earnings from agricultural and cattle activities.

This paradox between economic growth and environmental protection is long-studied in the environmental justice literature (McMichael 2012; Jorgenson et al. 2019; Jorgenson 2014), but it is in planning scenarios where it can be challenged. In urban spaces, Melissa Checker warns that “low income residents challenge contradictory and selective sustainable policies that threaten their displacement” (2011, 211)—a similar finding from green gentrification cases (Gould and Lewis 2016). In La Calera, the risk of displacement comes not only from a spatial displacement, but as Mr. Simón said, from an economic displacement in the name of maintaining ecologically protected areas intact.

A second problem with the current POT is related with housing, mostly for newcomers. While some people ignore the environmental regulations, others follow the law closely, which means many restrictions to their housing plans. Longtimer Adriana, who is also a land broker in La Calera, said in her interview that

twenty or fifteen years ago, and even ten years ago, people told me “I need to live near water, where there is a creek or a watershed.” And people wanted those land plots a lot. But now, with the POT, there is a norm that says that if you have a land plot with a watershed you will not be granted a building license because you have to be at least 100 meters [approx. 33 feet] from it.

This restriction impacted the land markets, and Adriana’s business, because previously sought-after land with water sources was no longer legally available for housing construction. It also modified construction plans and designs because people would now have to abide by new architectural rules for

environmental protection.

Finally, the third set of problems with the POT are about selective enforcement of environmental regulations. “According to the POT,” newcomer Alberto said in our interview, “supposedly none of those Eastern Mountains should have constructions. So, unless they are paying bribes to get building licenses, none of [those houses] should be there... because in La Calera everything can get fixed with money.” Alberto is concerned with the ecological structure and relevance of the Eastern Mountains, but he is also aware that some developers and other fellow newcomers are able to build wherever they want because of corruption that ignores the POT’s environmental regulations. Sometimes, the premium placed on living near nature involved building in protected or restricted areas. In other words, it did not matter that these rules were in place because some people could do whatever they wanted anyway. As a consequence, the POT’s goal to protect the environment is put at risk because of these illegal constructions.

In short, no matter what the POT says, corruption threatens its ability, and the ability of any law in Colombia, to protect the natural environment. As Christian put it bluntly, “in planning terms, they accept any crap [*aceptan cualquier porquería*], because there is so much money in it.” It is hard to trace the money in these cases, but the architectural evidence of these under-the-table deals stick out as a sore thumb. Examples of this include the gated community that Alberto pointed out in the Eastern Mountains or the Greenpark apartment complex I earlier. These are material testimonies of how some

people can violate zoning regulations without penalty.

The POT, whether enforced or ignored, affects land markets. These regulations can generate forms of gentrification because land plot values will rise, depending on newcomers' demands and developers' supply. CTP Vice President Vásquez provided an example of how this usually works in La Calera. He said that "If a peasant's farm is worth 200 million and someone offers 300 million, well yes, the peasant earns 100 million. But when they make the zoning change [to urban], these values rise and the earnings go to the developers... La Calera's planning has focused on favoring developers." Compared to other gentrifying areas where renters are priced out from their apartments, homeowners in La Calera and other urban settings face the chance to rapidly profit from a sale, much like what geographer Neil Smith described as a "rent gap" (Smith 1987; 1979). Developers know that they can profit even more when they sell plots with new houses built inside, long after the original peasant residents are gone, as is the case in other gentrifying areas with recently built large-scale residential developments, like the Brooklyn waterfront (Gould and Lewis 2016). In rural spaces, peasants sell their land and might spend the money on things beyond housing, thus creating opportunities to squat or develop precarious housing which, in turn, involve further infrastructure problems (Thuó 2013).

Then-Secretary of Planning René Casas put it in simple terms: "agriculture is disincentivized, because selling land plots for housing development offers better economic conditions." This opportunity for profit should be revised carefully, especially in a context where peasants have some of

the lowest material conditions like in Colombia, and indeed in Latin America (Portes and Hoffman 2003; Torche 2014). The campesino population in the country is aging, which means that it is becoming harder for them to do all the manual labor involved in growing crops or ranching with livestock. Moreover, these activities are fluctuating businesses that depend on seasonal effects, global market prices, and many other variables that can negatively affect a farmer's income. This means that selling farmland to a housing developer or an individual newcomer may give peasants an easier way of earning money than farming. I am not arguing that developers are "saving" peasants from poverty; what I am saying is that some of my informants used the proceeds from land sales to send their kids to college, move to a warmer climate, or start other businesses. A similar effect occurs in other gentrifying urban areas where lower-income people sell their homes to developers or gentrifiers. But the sales also mean, for others, burning through the money quickly and then end up being employed in low-wage service jobs without owning any land. Still, Secretary Casas's point stands: land in La Calera became more profitable for housing than for agriculture as a consequence of the POT's regulations.

The municipality would theoretically benefit from land taxes—as long as house values were updated and accurate, unlike Christian's. CTP President and newcomer Ignacio Gallo explained to me the POT's influence in this process. According to him, the current POT of 2010 was "surveyed hectare by hectare. They went, 'do you want us to make this plot a suburban use?'"²⁴ The model they

²⁴ Suburban use is a classification of rural land that allows for building *casas campestres*, or country houses: new single-family homes with a surrounding land plot, which are among the most profitable uses in La Calera.

created was that the municipality would be funded by gated communities, but behind that there was a money deal. And that is what opened the valves for all the new gated communities.” What he is arguing is that there was an excuse for the administration to allow these modifications in land use for potential profit. If new homes get built, then there would be new revenue—more than from any other source in La Calera. In the end, this land use change was what enabled housing development to take place on such a scale that it created a gentrification process.

If the POT’s goal is to plan for the future, then all the long-term environmental and social concerns should be in the document. Yet Christian says they are not. “No one, as far as I know, is doing a study about social and housing development and its relationship with the future in twenty or thirty years of an area like La Calera, so close to Bogotá.” He continued, “no one is seeing how is the area’s development being impacted by all those country houses [*casas campestres*] and gated communities. It is very important—10, 15, 25 and 30 years from today. Precisely in La Calera there should be someone asking about this long-duration vision, not for the near future of two or three years depending on crappy politicians [*políticos de porquería*].” For Christian, the planning process should be looked at in the long run and not to fill somebody’s pockets in the short term. And it is precisely these future envisioning exercises with the community that provided the site for most of my fieldwork, where I saw the negotiations between newcomers, longtimers and the state authorities.

Coalitions Against Growth

There were four main issues that were discussed both in the planning meetings, my interviews, and city council: (i) land plot subdivisions; (ii) unregulated growth; (iii) social housing; and (iv) elite gated communities.²⁵ The first one affected mostly longtimers, but that did not prevent newcomers to join them in voicing their concerns regarding that. The other three, though, were mentioned by both residential groups. What is important to note from these four issues is that they were all planning problems about land use and infrastructure that conflicted with residents' ideas of ecological awareness and first nature.

As I mentioned, subdivisions are an issue that affects longtimers the most, especially peasants. In La Calera, following the POT, rural land plots are low-density zoning for single-family houses; they must be at least one hectare for plots titled to newcomers and 1,000 sq. meters for native Calerunos. Doing subdivisions of large plots was one of the most common ways for longtimers to sell land for newcomers—because previous titles contained so much land that was going unproductive, longtimers subdivided their plots and sell some of them while keeping their own houses and small-scale crops for sustenance.

However, this model became a problem for inheritances: if a peasant who did not sell their land

²⁵ Gated communities in Colombia, and indeed in Latin America, are not only for the elites; middle classes, and even lower classes can live in gated apartment complexes (Caldeira 2000; Álvarez Rivadulla 2007; Villamizar Santamaría 2019)

wanted to bequeath it to their children, they could not subdivide it unless they owned enough land to make each child's inheritance at least this minimum size. In the vereda Buenos Aires's POT meeting in January 2018, a longtimer crudely stated: "us peasants are screwed" because of this rule, pointing out to the differential treatment for newcomers because "gated communities don't have that restriction," he added. While he and other peasants had trouble building houses because of the low density restriction, newcomers could build their houses in smaller land plots if they were part of gated communities. Longtimers at the meetings rightly saw this as an unjust rule. In the other POT meetings I observed, this sentiment was repeated throughout. According to the complex zoning scheme in place, there were three major types of permitted rural land use: (i) production—farms, cattle ranches, with small houses; (ii) country house development—individual plots with a newcomer's house; and (iii) gated community development—enormous land plots with many expensive houses for elites.

Councilwoman Luisa Camacho explained the effects of this arrangement to me in our interview in July 2018. "If you have a land plot, and you're a Caleruno native, you can build, even if it's in a smaller plot," she stated, clarifying that "The minimum dimensions to build in a buffer zone [*zona de amortiguamiento*] was one house per hectare [10,000 sq. meters or 2471 acres], but if you're from La Calera you can build in 1,000 meters [0,247 acres or 10,763 sq. feet]". "However," she added, "there's a limit in terms of inheritance, so you divide and divide and everyone has a right to that. [...] There was a crucial point in that POT and it's that it was determined that Calerunos could request the license,

right?, in theory to protect rights to equality and inheritance and all that, but what ended happening was like a license mafia.” In other words, native Calerunos had restrictions on their subdivisions but at the same time could build houses on smaller plots compared to newcomers; and because of that, some newcomers paid native Calerunos to sign licensing papers with them for building permits on smaller plots.

All these subdivision regulations were in place in the POT because of its goal to protect ecologically important areas and longtimers’ rights to land. However, people could go around the rules to build houses in places where they should not, to use these legal safeguards to benefit them (both for longtimers and newcomers), and now, almost ten years after the last POT revision, they are seeing the consequences of this illicit licensing of new housing construction. Then-Secretary Casas explained this process with a play on words: “It is easier now to grow [*sembrar*] houses than to grow food.” Acquiring a building license as a native Caleruno and then selling a land plot with a license was much more profitable than farm work, and this enabled such a rapid growth since the 2010 POT in rural areas.

But both longtimers (peasants or not) and newcomers are now rallying against urban development and overall housing growth in La Calera—which is the second problem residents discussed in the meetings. Newcomer Alfredo had a very strong opinion about this: “We should practically paralyze this urbanization. As long as they keep building that many houses and things, approving and

approving [licenses], this place tends to collapse.” La Calera’s growth has been so steep since 2010, that infrastructure and many services are inadequate—aqueducts are not enough and there is a growing demand for public green spaces. He is framing this problem in a Malthusian logic: the resources will not last for this many people if La Calera continues to grow. Moreover, growth has resulted from a lack of POT enforcement. He continued, “the POT says that you cannot build [in areas] higher than 2,800 meters, but more than 60 or 70 percent of the municipality is higher than that altitude.”

Longtimer and CTP Vice President Vásquez directly connects this to risk to the natural environment. He said that La Calera should not be developed further because “it is full of mountains, of landscapes and it produces water. Therefore La Calera should not be destined for construction and if it is, then it should be in a very controlled manner to protect the environment.” He is arguing that citizens cannot stop urbanization from happening, but he is pushing for the administration to keep the goal of environmental protection in mind. This connection is also what Councilwoman Camacho explained to me when she said that “Here in La Calera you have areas that should be a nature reserve or that should be protected, or areas that shouldn’t have such a high occupation index for simple predictions of [what will happen] to the water resource, for example.” She explained that “economic pressures” from bribery or land speculation prevent that enforcement and the negative environmental consequences of that are high.

The fight against these economic pressures and growth is what led to the next two big issues for

residents: social housing for low-income people and elite gated communities. In the POT meetings, as well as the city council minutes, residents had a stark position against new developments, and they wanted to include several restrictions in land use in the incoming POT. In the El Salitre vereda meeting—which was one with the largest number of participants—, a newcomer directly stated, “We don’t want to regulate density. We want to *limit it*” (field notes, February 2018).

One victory of which people from different sectors told me were most proud, was the building license suspension for a social housing complex. The project, that included 2,500 apartments, was going to be built in a rural land plot just outside the urban core of the town. “The Mayor, the Mayor’s Office, the administration had that proposal, and it was about to be approved. The community was who opposed it, and they got to city council,” recalled longtimer and Councilwoman Dora Lucía Díaz in my interview with her in February 2017. The project was suspended on three grounds: because it would not serve Calerunos, residents of this rural area (both longtimers and newcomers) opposed further urbanization, and a corruption scandal.

First, as CTP Vice President Vásquez argued, “these social housing apartments would be worth 100 million pesos (about US \$31,000)—a lot more than what Calerunos can afford” (interview January 2019). The apartments would thus attract a wealthier group not from La Calera, but that still needed social housing, that could pay them. The risk of *new* newcomers, and ones that would move into an apartment complex that would break the natural landscape, was one of the biggest problems

residents had regarding growth. In other words, longtimers and newcomers criticized this social housing project because the apartments would be too expensive for native, low-income Calerunos, but framed their claims in an anti-growth language.

Second, this stance against growth was what residents took to city council. In Minute 24 of 2014, when this case was being discussed, Councilman Carlos Barreto Agudelo stated,

“I want to emphasize that this social housing is not for La Calera inhabitants but for other people from other places in the country, who do not have a sense of belonging because they haven’t lived here; they don’t have our customs, in many cases they are not used to this weather. This creates lack of safety, of public services, land devaluation, displacement of campesinos, lack of support to agriculture and the peasantry, the damaging of existing roads [...] I propose the administration to make this [project] not in the rural plots where campesinos are, where we still farm the land, where we keep our animals. Our conclusion is that we don’t want to belong to the urban core; we are a rural district.”

By representing the interests of peasants who want to farm, with this intervention the Councilman also highlights an important tension in rural districts. On the one hand, peasants and other rural residents are against urbanization and see newcomers as a conduit for that process. On the other hand, newcomers move to La Calera looking for wilderness and nature, and are also against urbanization. In the same minutes, Omar Cruz, a longtimer, stated,

I am a resident, and I present my community’s objection to this proposal because we are a rural area, and thus we don’t have sanitation networks and other public services, access roads, security, and other requirements to sustain

the planned multifamily communal apartments. Moreover, the social and environmental impacts for the vereda inhabitants would be devastating. The whole community is against it because we don't want to be incorporated to the urban core, but we want to keep being a rural part of the municipality.

To this intervention, Lucía Piedrahita, a newcomer, added,

We do not have the necessary basic services even to supply our own demand. How are they planning to supply 5-story buildings? Is there any explanation to why the urban core that has gas, water, electricity, sewage, phone, access roads cannot house this type of construction? But a vereda that doesn't have the minimum services for its inhabitants can host 5-story housing buildings? Is there any explanation as to why you pretend to build a whole development, even knowing that we don't have the minimum basic services required to build in a land plot? We don't want to be part of the urban core; we want to keep being rural.

These two statements show how longtimers and newcomers joined together against this project. Even later, in the POT meetings, the social housing issue was still on residents' minds. With phrases like "not to discriminate, but we don't want this municipality turned into social housing exposed to subsidies" (field notes, January 2018), both newcomers and longtimers expressed a strong anti-urban feeling mixed with an anti-poor sentiment. Against a potential third type of urban newcomer (one that lives in poverty), residents of rural La Calera used lack of infrastructure arguments as a vehicle to express anti-urban concerns.

Added to those arguments, the third reason they halted this social housing project was because of a corruption scandal. When a plot becomes available for residential development, its price rises.

Councilwoman Camacho was one of the people keeping tabs on this process and the opportunities it brings for corruption: “You have a land plot worth 2.2 billion pesos (about US \$690,000) and if you change its land use [from rural to residential], it is worth 34 billion pesos (about US \$10 million), and if you are a developer, it would be very easy to give someone two, three billion to make the land use change happen.” That was the case of the San Pablo land plot where the social housing complex would be built, which was owned by a developer and pushed by the then-Mayor to be zoned for residential use in the POT. But because of the pressure from residents and city council, this project was suspended and the restriction of rural land for social housing was supposed to be included in the new POT.

As with social housing, Calerunos have also very strong opinions against elite housing. They also see the development of gated communities as an urbanizing threat to rural areas that also includes a class component. In this case, however, residents both old and new feel that it is unfair for upper-middle class newcomers to be in the area and not pay enough land taxes, or being isolated without trying to build community with their neighbors. Because of these issues, Calerunos see elite housing projects with suspicion, and are trying to dis-incentivize new constructions in this form.

In La Calera, elite gated communities are a form of housing that has been part of the different waves of newcomers. The very first one in the area is called Pradera de Potosí [Potosí Prairie]. A former golf course and club for the Bogotan elite, Potosí became a gated community filled with houses for

Colombia's rich. It is located past the urban core by the main road—which makes it farther than the Southern veredas that absorbed most of the newcomer waves—, and it still retains its golf and tennis courts, a small lake, a gym, and other amenities. Nicolás, a resident of Potosí whose family owns a major company in the country, and like most of my interviewees, said they moved there almost 20 years ago because they were looking for a more tranquil life in the countryside since their neighborhood in Bogotá was becoming more commercial and unsafe. He does not miss living in the capital because of its “pollution, insecurity, noise [...] But the weather is the same,” he said in our interview in a chilly morning in mid-2016.

The people they employ in his house are from Bogotá, but most of Potosí's employees are Calerunos. Pedro was born and raised in a vereda in La Calera and started working in Potosí as a golf caddie when he was 12 years old. Now he is almost 30 and has been a trainer and instructor for one sport practiced in the club for more than seven years. His family, Pedro says when I interviewed him in one of the club's facilities overlooking the lake while a soccer match played on the TV, “has always lived in the rural,” and he sees the change that Potosí and all the other newcomers have brought to the area in the amount of houses and their aesthetics, the pavement of former dirt roads, and an increase in transportation to Bogotá. “Before, when I was a kid, there was only one bus to Bogotá every hour. Now there's one every 15 minutes.”

Pedro says that this movement of newcomers, specifically to Potosí, has brought positive changes

to the area “socially and economically.” But he is also wary of the long-term effects of these changes; he fears there will not be any green in the mountains anymore, “and people of the lower-middle classes [*estratos medios-bajos*] won’t have the chance to live here. Because of all those high-class people [*estrato alto*], land is getting more expensive, and taxes rise. I think at some point, I don’t know when exactly, that is going to happen.” I asked him if he knew anyone who already had to move because of higher land taxes, and he replied “well, no [...] but someone might offer good money for a land plot [to a campesino] and they leave.”

The threat of leaving that Pedro expresses is similar to other concerns of displacement that residents of gentrifying areas face. While for renters displacement is caused by eviction or rent rises, homeowners can be displaced when they are “bought out.” In La Calera, campesinos are selling their land because they see it as a way to get money, not unlike low- or middle-income homeowners in gentrifying neighborhoods. As I said before, peasants are among the lowest class positions in the country and farm work is tough on the body, so having an “easy” opportunity to obtain a big sum of money is something that does not come by frequently.

Pedro raises another risk of displacement peasants face: rising land taxes. That is where the POT becomes a key site of struggle, because it defines what is the land’s category for taxes and other utilities through a stratification policy. Houses and land plots in all of Colombia are categorized in what it calls “strata” according to their material conditions and location. The category determines utility prices and

other housing values. The logic of this policy created in the late 1980s, was for higher-income people to subsidize public utility costs to the lower-class, who paid less.²⁶ This policy developed into a way to refer to class, in which in everyday language people talked of *someone*, and not their house, as “belonging” to certain stratum—as Pedro did before (Uribe Mallarino 2008; Uribe Mallarino, Vásquez Cardozo, and Pardo Pérez 2006).

Rural areas exemplify a salient issue with this policy: what to do with a “fancy” house in a low stratum plot? By law, the National Planning Department categorizes housing units in rural areas in strata depending on two criteria: the housing materials (such as walls and roofs) and the plot’s productivity as measured in the Family Agricultural Unit (determined by the POT). Newcomers’ homes should make their strata high because of their characteristics, but they are usually in low productivity plots by size. Although the POT should clarify this question through updates on housing units’ strata, these are not always carried out.

Having such problems of classification and enforcement of the stratification policies in La Calera’s gated communities creates negative effects. CTP President Gallo described these, emphasizing the environmental disruption, the dispossession, and the few monetary contributions to the town’s finances even though these are among the richest people in La Calera. He lives in Macadamia, another elite gated community like Potosí, and said,

²⁶ In both urban and rural areas, strata range from 1 to 6, with strata 4-6 being the subsidizers, 1-2 the subsidized. Stratum 3 units pay the actual cost for utilities.

What does Macadamia contribute to the municipality? Nothing. It's gated, environmentally disconnected, and it exploited the land, took its money, and those of us who live there are very happy-go-lucky. The treatment plant is just starting to work, and we send all our waste water to the Teusacá River. You take a look at land taxes and we don't pay what we should; we pay a million and a half pesos [about USD \$400] for the yearly land tax, which is something—I haven't paid in two years, but it isn't a lot, really."²⁷

This concern with land taxes was what Christian mentioned earlier, when he spoke that his house is severely undervalued in the planning office. What they both are suggesting is that there is a lack of redistribution in land taxes, which impacts the overall municipality's finances while simultaneously benefitting rich newcomers. But not only self-conscious newcomers see that; a "community member" in city council Minute 76 of 2015 states, "I think that the city council should make a revision of the stratification policy. I've seen houses in El Salitre with sauna and jacuzzi and they pay very little [in taxes and utilities] compared to what we have to pay." By overlooking these land tax issues, the POT has enabled private developers—both in large and small projects—to build more houses in the area. And that is at stake for residents of both groups in the incoming POT: to define more clearly land values and to stop new developments from taking advantage of legal loopholes.

One of the main punches thrown by the administration in this fight for the POT was a gated community called Green Park (in English). This residential development is built *by* the Teusacá River, violating many of the restrictions in place for housing permits. Five families managed to move there

²⁷ Gallo later hinted at not having money as the reason for not paying land taxes, but is aware that the sum is not that high comparatively for people who live in these elite gated communities.

before the complaints about this development halted it around 2014, and I have not seen any more occupied apartments since. The complaints were based on environmental reasons (being very close to the river) and infrastructure deficiency, and the vereda managed to bring the matter to the attention of the city council. The discussions about it can be traced all the way to 2012, where some council members, the Planning Secretary, and the Mayor at the time blamed each other as to who granted the licenses and permits. One of the main issues was that Green Park had a permit to build as high as six stories—an eyesore in the mountain in the residents’ point of view, and an environmentally unsustainable development for the public utilities company.

In the POT meetings I observed and some of my interviews with people interested in planning, residents were questioning the apparently discretionary enforcement of environmental rules for new large-scale (and elite) housing projects. The CTP Vice President was perplexed because,

I don’t understand why urban developments [*urbanizaciones*] like Arboretto appeared, because while in Bogotá the Eastern Mountains were protected and any construction was forbidden there, on our side of the Eastern Mountains *urbanizaciones* like Arboretto showed up. And so one says, “OK, an *urbanización* in the mountains?,” like those up there by the toll booth, houses of high stratum, and one says “OK, why did houses appear in an area where they shouldn’t be, because it’s a protected area and it has a páramo altitude?” By law it should be forbidden, but here in La Calera it is allowed. Thus, that legal instrument 388 [the POT law] hasn’t been applied here in La Calera. There have been bad executions [*malos manejos*] behind that, from the administration and the planning offices.

What VP Vásquez is questioning, as did other residents in the meetings, is why can some people, in higher class positions, seemingly go over regulations that are put in place to the rest of them. This concern is especially true for campesinos, who have been subject to more environmental restrictions to their livelihoods because of their agricultural activities.

As a response to some of these concerns during the most recent newcomer wave, Councilman William de la Paz's intervention in Minute 54 of 2012 exposed the interests of the municipality in guaranteeing and protecting private property despite other regulations. In Colombia, he says, "we have the right to private property and we have to guarantee it in La Calera as municipal authorities. The question is whether we have clear norms that grant licenses to people, and whether they could restrict the right to private property." By using the language of a right enshrined in the Constitution and opposing it to "restrictive" laws, he is arguing that development should be allowed because of the rights to private property owners. But this pro-urbanization framing hides an anti-environmental attitude, which is what residents criticize.

In a change of heart in 2016, Councilman de la Paz proposed a regulation that would deal with the inequality between rural plots for home ownership and those for production. In minute 97 of that year, he asks a revision so that

Rural plots valued in more than 200 minimum legal monthly salaries [165 million pesos in 2019, about USD \$48,000] and whose land use has changed to country housing after the POT adjustment, will pay a rate of 7 pesos

per 1,000 [in land tax] as long as, significantly and mostly, agriculture or livestock activities are carried out in them. Once their license to plot the land is issued, they would pay 16 pesos per 1,000.

The resolution passed unanimously in city council, and it seemed that this change protects campesinos who continue doing agricultural activities even if their plots are zoned as residential, and thus, with higher taxes.

Through these discussions about subdivisions, growth, social housing, and elite housing, residents of La Calera were able to voice their concerns regarding land use for the incoming POT. The overarching argument against these four problems was an environmental one: by limiting urban growth through these types of land development, the ecological structure, small-scale first nature extraction and the natural landscape of La Calera would be protected. But despite being in different class positions and having different interests—some issues affected one group more than the other—, in the POT diagnostics meetings and other arenas of interlocution with the state, residents were able to form a consensus on needed regulation. Because of that consensus, the new POT could be an instrument to preserve La Calera's natural ecology, to keep it "green." However, given the different corruption scandals I described throughout this chapter, and the lack of transparency in the POT process, it is unclear whether the final version of the new POT will really protect "nature."

Summary and Conclusions

The planning meetings are perhaps the best way to understand how “just green” coalitions appear in rural areas facing urban expansion. Because the planning instruments in Colombia are so democratized by law, there are opportunities for different actors to impose their own views of development and planning. But what occurred in La Calera echoes other participatory spaces where environmental concerns brought people from a variety of social positions together. Moreover, contrary to other gentrifying contexts where groups of residents were in tension (see i.e. Ocejo 2014), newcomers and longtimers in La Calera could build a consensus to make their voices heard about what they saw were common planning problems that affected them both. For my informants, their joined vision was one of a protected “first nature”—the ecosystem—but they can only obtain it through “third nature” mechanisms—human interventions for ecological reasons—such as environmental protection laws.

Through the diagnostics meetings and the support from city council, longtimers and newcomers could have an interlocution with the state that was more frequent and more effective than all the others I analyzed in this text. While in terms of infrastructure and public spaces residents had also built coalitions and had similar goals, it was only in these planning scenarios where their efforts were more effective: a social housing complex that involved land speculation was halted, there was an open

discussion about a more redistributive land tax scheme, and some meetings were rescheduled at residents' demands. What united these populations was their desire to keep La Calera "green"—in other words, to prevent more urban growth in rural areas. It was because of this shared goal that people could build a unified front to present their demands to the state. In contexts such as New York City, legal decisions using environmental arguments have also been used in favor of a mixed-income group of residents (Weinstein 2015), and in La Calera this litigation mechanism seems to prevent further ecological damages after urbanization.

Planning procedures create a social space where contested meanings of "nature" and "green" could be fought in La Calera. Zoning laws shape land prices but also might maintain first and second nature land distributions. But if residents create a unified green "vision" and the state listens to them, it will determine the future of La Calera's ecology. It is to this future that I turn in the next concluding chapter, as more people move to rural spaces after the COVID-19 pandemic and urban fringes become key sites for further urban expansion that threatens agricultural land and natural reserves.

CHAPTER SEVEN - Nature's Identity Crisis

Like many peripheral rural towns in Latin America, La Calera has an “identity crisis,” as Territorial Planning Council Vice President Vásquez told me in our interview in his shop where he repairs electronic devices. The town has to reconcile its agricultural and mining past with an urban future that is swallowing everything around it, including the areas that were previously untouchable, such as nature reserves. “Pristine” spaces in the high Andean *páramos* and the fields for grazing or growing food are now at risk of disappearing from the desire of ex-urban people to live “in nature.” But peasants need those same fields to live “off nature.” These two simultaneous processes entail a commodification of nature for both aesthetic desires and productive goals, making the identity crisis and exerting two types of pressures on this former rural town.

The first pressure is ecological. As more people move into areas with a historic deficiency in infrastructure, water sources and other public goods have to satisfy growing demand from all the new houses. Although La Calera has abundant natural resources, residents are aware that these will not last forever, especially in the face of climate change—climate effects that residents are already living, as the dry season intensifies and the rainy season ruins ceilings and crops alike. This pressure also comes from the state's selective enforcement of environmental laws, which enables certain multinational corporations and private developers the use of those resources but prevents residents from getting them. In this scenario, the material and political pressures on the ecosystem pose the question of what

kind of development peri-urban spaces will take—will they be a hinterland pantry for cities, a “tranquil” green dormitory space for the well-off, or a stronghold of peasant work?

The second pressure that La Calera faces is social. The two groups of residents—newcomers and longtimers—come from very different class backgrounds, and this affects not only how they use nature but also whose nature and whose interests in it are going to be enforced. On the one hand, newcomers mostly come from the upper-middle class and want to enjoy aesthetic goods from nature, such as clean air, green spaces, and pleasing animal noises from birds and frogs. On the other hand, lower-class longtimers need material goods from nature, such as rich soils and water to grow food, raise cattle, and in La Calera, extract materials needed for cement. These competing uses of nature play out in a political space where different people promote different interests, creating avenues of conflict or, surprisingly in this case, consensus.

In La Calera, newcomers and longtimers share a metaphysical conception of nature that could be a starting point for creating consensus in ecological planning. For all the residents, nature is something that must be protected, nurtured, and taken care of; but nature also means freedom, communion, and something bigger than themselves. Longtimer Carlos Pinzón, who used to work in La Calera’s public utilities company, defined nature as “the space where human beings can develop as human beings, not as a member of a society but as an essence of being human.” This feeling of human development is also what newcomer Margarita suggested when she declared that nature “inspires a sense of freedom in me,

as if it connects me to that sensation of possibilities, of that what isn't there but that is reachable. I love the space, what it smells like, the smell of soil... I feel like I'm at a higher level [*un escalón más arriba*].” What these statements point to is the shared feeling of spiritual elevation that residents of La Calera have from being close to nature. And this proximity to nature opens interesting avenues for residents to share other conceptions of nature that, in this case, have already resulted in discussions about environmental inequality.

The shared attributes residents assign to nature are complemented by two significant shared spaces. The first one is residential, as newcomers and longtimers live next to each other. This is an uncommon spatial form in Latin American cities where residential segregation by class is high (Sabatini 2003), especially in Bogotá, where most newcomers come from (Aliaga Linares and Álvarez Rivadulla 2010; Villamizar Santamaría 2015). In La Calera, residents have to interact as neighbors, which includes dealing with noise complaints and angry dogs, but also developing more functional ties as workers and employers and more communal relationships as friends. The second space residents share is political. Because many longtimers as well as newcomers are property owners, they find themselves attending the same community meetings to discuss topics that affect them both, such as safety or zoning regulations.

These three shared spaces are the starting point of an additive and scalar process of consensus building around environmental inequalities. The micro-interactions between neighbors, although

sometimes resulting in tensions, create a behavioral basis where residents interact with one another. From personal exchanges, residents then find a common ground to protect a household service: water. The consensus then extends to discussing a larger area surrounding the park that involves several veredas. Finally, longtimers and newcomers go on to think of a larger scale in planning, that involves the whole municipality and larger state agencies. The process's endpoint is protecting environmental resources for residents to enjoy while keeping La Calera safe from ecological degradation. The key that binds all these stages together is what I call "third nature."

Drawing from environmental historian William Cronon (1991), I propose the concept of third nature to understand the relationships between people and the environment in rural spaces undergoing urbanization like La Calera. Cronon argues that the material ecosystem—first nature—is modified by humans—second nature—as a way to better extract natural resources for economic and population growth. To these two layers of nature, I add a third one that results from the way people use second nature interventions to protect first nature elements. Included in these interventions are infrastructure works that bring drinking water to residents, enforcing environmental protection laws, or being careful about what species are introduced in the ecosystem to maintain its balance. Third nature thus encapsulates people's environmental concerns and material actions in the name of protecting nature—even if that means, sometimes, undertaking more human intervention to achieve that.

But third nature inhabits a contested space between the state, capital, and residents. The relationships between this triad of actors and the environment must be analyzed in specific contexts. As suggested by the treadmill of production theory (Schnaiberg 1980; Gould, Pellow, and Schnaiberg 2008), the goal of economic growth will dictate how these actors relate to the environment—a relationship that is extractive most of the time. Extracting economic value from natural resources will deplete those same sources, which in turn create the need for new forms of extraction of environmental goods and addition of environmental bads, as in a never-ending treadmill. However, when the value extracted comes not from productive processes but from other types of immaterial extraction, a treadmill of consumption appears (D. Curran 2017; Wright 2004), where the value from nature comes from its aesthetic or material potential as a scarce resource. Then-Secretary of Planning Casas described this process when saying that in La Calera now “it is easier to grow houses than to grow food.” The state sets limitations to land use through agricultural and housing regulations, inducing a scarcity of this resource in the town.

The induced scarcity of environmental resources is how environmental inequalities persist. When trying access and use those resources, people will try to exert different forms of power. The power struggles between people from different positions in social hierarchies—such as class, race, ethnicity, gender, and others—creates an unequal distribution of environmental goods and bads. A good example of this kind of environmental privilege comes from sociologists Lisa Sun-Hee Park and David

Naguib Pellow (2011), who study what happens when rich newcomers blame and shame immigrants for the latter's lack of environmental awareness in an ecologically valuable town in the United States. The wealthier and white population see themselves as champions of the environment, despite their own lack of ecological practices—such as keeping heated driveways to melt the snow from the pavement. Yet, because they combine environmental with nativist feelings, they push immigrants further away from the environmental goods and into places with poor living conditions. Likewise, much of the environmental justice research shows that wealthier, whiter groups enjoy environmental goods while displacing other groups—mostly poorer and of color—into polluted and degraded spaces (Auyero and Swistun 2009; Castree and Braun 2001; Pulido 2000; Smith 2008; Taylor 2014). In peripheral urban spaces in Latin America and throughout the global South, including China, this has certainly been the case. Residents struggle over environmental decisions and only the powerful ones reap the benefits (Canabal Cristiani et al. 2020; Cardoso and Acosta Nates 2020; Cowan 2019; Huang 2019; Jaros 2019).

The unequal results from those environmental decisions partly come from a lack of interactions among residents. In mixed-income areas, integration can be hard to achieve. Yet residents in highly unequal spaces can develop integration in three ways when they have common interests, as sociologists Francisco Sabatini and Rodrigo Salcedo (2007) found for Chile. In a place with a wealthy gated community surrounded by a poor neighborhood, residents found integration as functional

relationships (trading work or goods), symbolic feelings (finding a sense of neighborhood pride), and communal ties (such as friendships).

In La Calera, functional integration comes through the new jobs in the area for which newcomers hire longtimers. These include gardening, construction work, and domestic work, which became primary job sources for longtimers after the cement factory closed down. Symbolic integration occurs when residents feel a higher sense of belonging to the area. This is the type that suffers the most under gentrification. Longtimers might feel estranged from their neighborhoods, while newcomers might feel they will never be accepted. While that is true in specific everyday interactions—like newcomers calling longtimers *raizales*²⁸ to make the separation explicit—in most public scenarios, residents present a unified front by expressing their desire to protect La Calera’s nature from others. Finally, although the Chilean researchers found little communal integration because people were still segregated, in La Calera there are more relationships among residents in terms of friendships, shared childcare spaces, and other instances where they feel more like part of the same community. In this, residents establish a behavioral basis of pragmatic interactions that they use in other scenarios to push for collective ecological goals.

This buildup of functional, symbolic, and social integration allowed residents to join forces to express their environmental concerns to the state. Then, the state, in its different structural and

²⁸ *Raizal* is a category used in the Colombian census to refer to the population of African descent living in San Andrés and Providencia islands. However, in La Calera, people do not use it with this racial connotation but as a way to talk about those whose *roots* (*raíces*) are from La Calera.

territorial levels, is the chief antagonist against which residents work together. It acts as both protector and predator of ecological, environmental, or “green” resources. It establishes regulations and laws that protect the environment, but it also is quick to create loopholes and exceptions for companies like Coca-Cola or Cemex to continue exploiting resources. By making a selective allocation of licenses to exploit the natural environment, the state induces a scarcity in abundance that is so evident to all the residents that it fuels their joint action.

To be sure, some seeds of upper classes blaming lower classes for environmental harms are planted in La Calera. Some newcomers feel that longtimers lack environmental awareness; they claim that the latter are not “educated enough” to avoid littering or to separate household waste in recycling bins. Facing these problems, newcomers like Alberto sometime pick up trash and post pictures of that on one of the town’s Facebook groups denouncing how dirty the road was. But they can also resort to a less antagonizing strategy of requesting more trash recollection services for the area, like residents in some veredas are asking the public sanitation company Espucal to do.

But in La Calera, contrary to a Malthusian zero-sum game, I saw that newcomers and longtimers unexpectedly found a common ground in environmental concerns, one that allows them to fight for better material conditions against the state. The integrating effects of third nature appeared when residents fought over water, land, and landscape. Despite being a key site for the water cycle in the region and having a large reservoir, La Calera does not offer residents access to quality water all year.

This paradox led residents to organize community aqueducts that were built by longtimers but are currently maintained by them together with newcomers, thus using third nature to fortify second nature interventions in first nature resources. In terms of land, the astronomical investment for San Rafael Ecological Park was going to reshape a large part of the mountains and put that protected ecosystem at risk, a change that angered both groups of residents. Longtimers did not see the economic opportunities that the proposed park would bring and newcomers were afraid of safety concerns; together they questioned how “ecological” the park was going to be since it involved a cable car and other amenities that required second nature interventions. This led to mounting opposition during the state-organized community meetings, and ended with a lawsuit halting the project. Finally, by engaging in planning discussions against new urban developments in La Calera, residents expressed a concern with landscape and aesthetics that would break with the idyllic image of nature that attached them spiritually and emotionally to the place. Although the results of that participatory process are still unclear, residents fought for restricting residential construction in the area to prevent the countryside from becoming a city.²⁹

The COVID-19 pandemic has created an even greater sense of urgency about these issues because people around the world are leaving cities to establish permanent residence in the countryside (Zaveri 2020). This is particularly striking in Colombia. Even though the country established a strict

²⁹ This last sentence is paraphrasing a very popular song in the 1990s by Colombian singer Shakira, with the lyrics “*y ahora estoy aquí, queriendo convertir los campos en ciudad*” (and now I’m here, trying to turn the country fields into a city).

pandemic quarantine in mid-March, by December it was still among the top 10 countries in the world in daily counts of new infections. Some well-off Colombians' reaction to the virus and the lockdowns, as in other places around the world, was to leave cities and head to the countryside for access to the outdoors, more space, and a sense of freedom. And these three reasons are, unsurprisingly, the same motivations for people moving to La Calera even before the pandemic. Therefore, it is likely that flight from the cities will have an even bigger impact on the urbanization of the countryside in Latin America, if not in the global South or even in other regions of the world. La Calera is only an early example of how these processes might play out, with strained ecological resources creating opportunities for either cross-class cooperation or mistrust.

La Calera's collaboration for environmental purposes raises questions for other contexts. The first one is for other urbanizing countrysides in Latin America, where most research has found that urban-to-rural migration reinforces environmental inequalities. Such is the case of Argentina (Timo 2017), Ecuador (Bayón Jiménez 2016), and in other parts of Colombia (Nates Cruz and Velásquez López 2019; Fioravanti Álvarez, García Arias, and Holguín Vélez 2016), where the gentrifying upper-middle class develops water infrastructure for themselves in their quest for nature and leaves the long-time population to deal with the negative environmental effects of their actions. While in La Calera three elements enabled collaboration—a shared third nature, residential integration, and a common enemy in the state—that has not been the case in other Latin American and Colombian contexts undergoing

similar transitions. Part of the reason for this might be spatial: many of those new residential developments elsewhere are gated communities that prevent interactions, but in La Calera those are a small fraction of where newcomers live. Living side by side, Calerunos could create some social interactions that became foundational in other shared scenarios.

These findings might have repercussions in a second context: other peri-urban areas in the global South. With dense, high-rise buildings taking over many of the Southern peripheries (Güney, Keil, and Üçoğlu 2019; Ren Forthcoming), infrastructure problems and other ecological concerns will be at the forefront of politics. Moreover, much of the suburban development in these regions is changing agricultural land into industrial and residential uses, especially in India and China (Cowan 2018; 2019; Jaros 2019; Lang, Chen, and Li 2016; Zhu et al. 2009) , and this will have repercussions on the negative effects of climate change and food shortages.

Looking away from the countryside, La Calera also speaks to gentrifying contexts in cities, especially in places where gentrification comes with green motives. Although sometimes the green growth coalitions exclude and displace the long-time population from initiatives aimed at making cities sustainable (Anguelovski 2013; Anguelovski et al. 2019; Checker 2011; Gould and Lewis 2016), environmental concerns can bridge social divides. Examples of inter-class coalitions *for* the environment have shown the potential for creating “just green enough” alliances among residents against different state policies that create environmental inequalities (Beierle and Konisky 2000;

Bryson 2012; W. Curran and Hamilton 2017). La Calera offers new insights for the latter group, where residents' shared ideas of third nature can create pathways to reduce environmental inequalities, especially by fighting the state.

A final context with which La Calera can dialogue is climate change. With this global process, natural resources will become even more scarce than what the state might induce, thus inciting new struggles over nature among residents with different power over decisions. But what La Calera shows is that even in spaces with high inequality, there can be a shared interest in protecting nature to better distribute ecological goods and bads.

Cities are going to keep expanding by incorporating rural towns, and these formerly rural areas will continue to grow in population. According to UN Habitat (2012), Latin America is the most urbanized region in the world, and there are no signs of this trend to stop soon. Ex-urban migrants will arrive in the countryside not only because of the COVID pandemic but also because of a continued interest in living in nature and, in Colombia, because the peace process has made rural spaces less violent. But this continued metropolitan expansion has its own set of problems, such as straining infrastructure capacities, introducing competing planning trajectories, and, not less important, changing land tenure schemes for peasants, plantation owners, and large-scale agribusinesses, who will now have to agree on zoning regulations to protect or continue exploiting nature. With the appearance of a new actor—upper-middle class newcomers with ecological sensibilities—power balances will

change and new environmental imbalances will arise.

The state's environmental protection regulations and residents' united front against urban growth might protect La Calera's mountains for now. But as well-off people around the world are fleeing from cities as a response to the pandemic, the question of environmental justice will remain urgent everywhere. Against a backdrop of increasing scarcity of ecological resources from climate change, cases like La Calera speak to how can divided societies find a common ground to reduce environmental inequalities. The identity crisis that some residents of La Calera observed in its position as a rural-urban space has the potential to develop into a new model for urban growth that encourages a more equal distribution of environmental privileges. By embracing a new identity where shared ecological problems create social integration, La Calera can become a beacon for green alliances elsewhere. And if we can create these alliances, we will be better equipped to face the negative consequences of both spatial inequalities and endangered natural resources.

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APPENDIX

Appendix 1. List of Interviewees by Name, Age, Occupation, and Arrival Date

Name	Age	Occupation	Arrival Date
Christian	38	Independent Consultant	2012
Laura	33	Audiovisual Producer	2015
Jorge	50	Ad Executive	2005
Nicolás	32	Chef	2000
Alberto	52	Cattle Rancher	2003
Pedro	28	Sports Trainer	Born there
Alfredo	65	CEO	1993
John Zuluaga	36	EAB Employee	N/A
Clara Durán	41	Aguas de Teusacá VP	N/A
René Casas	45	Former Planning Secretary	Born there
Zenaida Solano	53	Police Inspector	1985
Dora Lucía Ramírez	63	Council Member	Born there
Eugenia	64	Business Executive	2000
Carlos Pinzón	43	Former ESPUCAL CEO, Advisor	Born there
Luisa Camacho	38	Council Member	2016
Óscar	21	Student	1994
Juan Cruz Escobar	33	Journalist	Born there
Rodrigo	47	Low-Skilled Worker	Born there
Andrés	43	Civil Defense Coordinator	2004
Alicia	73	Storeowner	1985
Carlos Bello	48	EAB Executive	N/A
Rodolfo	75	Storeowner	Born there
Natalia	28	Cultural Aide	2016
William	36	Teacher	2005
Emilia	48	Environmental Manage	2000
Javier and Sergio	58; 59	Storeowner; Business Executive	Born there; 1990
Mauricio and Liliana	49; 43	Professors	2012
Claudia	55	Bank Executive	1992
Yaneth	49	Professor	1999
Catalina and Amparo	22; 20	Students	Born there
Julio Vássquez	50	Electronic Technician and CTP VP	Born there
Adriana	58	Land Broker	Born there
Antonio	42	Former Head of Safety	2010
Camilo	72	Storeowner and Aqueduct Builder	Born there
Diego	55	Unemployed	Born there
Margarita	53	Retired	2007
Ignacio Gallo	49	Architect and CTP President	2010
Guillermo	53	Theatre Owner and Board President	1990
Ramiro	51	Construction Worker	Born there

Rosa	34	Housewife and Peasant	Born there
Daniel and María	51; 46	Doctor; Consultant	2003
Maribel	48	Housewife and Milker	Born there
Juan Carlos	39	Community Board Association Pres.	Born there
María Antonia	63	Housewife	Born there
Camilo Ramírez	44	Lawyer	2006
