

Finding "Nature" in the City: the Intersection of Geography, Culture, and Urban Change in Valparaíso, Chile

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ABSTRACT

The complex relationships that exist between "nature" and the built environment of cities are often both simplified and neglected in practice. Focusing on a coastal city in Chile, this paper illuminates various definitions and social constructions of nature and their inclusion or exclusion in practices of urban life, and environmental management. Drawing interviews and participant observation, this article analyzes how conceptualizations of nature affect urban environmental planning and management in the metropolitan area of Valparaíso. Analysis of these data shows that nature is primarily viewed as separate from cities, often leading to its exploitation or invisibility; when included in the urban form, systematic planning rarely prioritizes nature's intricate interrelationship with the built environment. specifically, More the impact conceptualizations of nature and urban space can be seen in an ecological conflict in the region, in the town of Laguna Verde, and its connection to the coastline and nature of Valparaíso. This article suggests that we must define nature beyond the dichotomy of preservation or exploitation, in order to understand the various ways in which humans intersect with nature and to consider alternative paths for ensuring a sustainable relationship between the urban and natural components of our cities.

Keywords: nature, environmental planning, urban planning, Valparaíso, Chile

he professor stood at the front of the room and asked us what type of relationship a young boy living in the hills of Valparaíso might have with nature. How would he interact with la naturaleza on a daily basis? At first, the classroom was guiet and the students around me seemed unsure how to respond. Eventually, one student mentioned *las* quebradas, steep ravines between residential plateaus in the hills of the city, as places where the boy might encounter nature. The professor quickly refuted this thought, remarking that las quebradas are generally used as informal urban garbage dumps and are not conducive to physical interactions with nature. Another mentioned the plazas scattered throughout the city, because of their inclusion of grass and trees. A third pointed to the beach and the city's connection with its ocean, although this water edge is only accessible at the far reaches of the city. Finally, students began to name green spaces. Yet, very tellingly, the names they could recall were all spaces outside of the boundaries of Valparaíso. Their final conclusion was that the boy from the hills, or los cerros, would have to escape the city in order to find la naturaleza. In doing so, they defined Valparaíso's environmental context by the nature that it lacks, instead of by the nature it contains.

This classroom discussion provided a context for the research that I had been trying to define during my first months abroad in Valparaíso, Chile. From my arrival, the city and its relationship to nature fascinated me. Valparaíso lacks open spaces and public access to its long coastline, but there is a magical charm in its winding streets, colorful houses, and hidden pockets of green. Drawn urban environmental studies, I wanted to know why "nature" was so invisible within the city and what "nature" meant in the daily lives of

residents and for the future of Valparaíso.

Exploring the themes that captivated me from my arrival, this article examines the ideas and practices of "nature" in the metropolitan area of Valparaíso, asking how citizens, municipal academics, and employees conceptualize it, and in what ways "nature" is then interwoven into processes of urban planning and growth. More generally, I ask, how is "nature" defined in contemporary urban society in Chile, and how is it currently debated, given its historical and social context? Additionally, how do these divergent definitions interact in the current regional discourse and practice of urban planning and environmental management? These questions, while locally significant, are also important on the global scale of urban development. Political actors and residents in cities have a responsibility to consider the consequences of rapid urban growth, which typically prioritizes economic benefits over environmental, social, aesthetic ones.

Using the above questions as a guide, this article will show how urban planning and the management of nature are related to multiple understandings of nature as a theoretical concept. Currently, the metropolitan area of Valparaíso offers a limited inclusion of nature in the urban sphere, in a culture that does not consider cities as ecosystems with important connections between the human and nonhuman components. In the specific case of Valparaíso, and its relationship to the nearby area of Laguna Verde, I argue that this initial evaluation begs for a redefinition of commonlyheld ideas of what nature means and how we connect it to our urban spaces, in order to envision a more inclusive system of urban environmental planning and management. In planning for more sustainable cities, we must understand and evaluate people's conceptions of nature, recognizing how they will affect the future paths of global cities.

Investigating Social Conceptualizations of Nature: Theory and Methods

My research connects to a wealth of academic resources on human conceptions of nature, environment, and sustainability, and how these

concepts influence the growth of our cities and the practice of urban planning. Fundamentally, this article builds on and responds to the work of William Cronon, which deconstructs North American and European conceptions of wilderness as places that are virgin and separate from humans. Cronon has argued for a new conception of wilderness that includes and built humans their environment, suggesting that we would then adjust our interactions with the environment to be more responsible (Cronon 1995). In a similar theoretical vein of nature analysis, I rely on the work of Emma Marris, who writes that we have lost nature in two senses: we have destroyed it, often through urban construction, and we have "misplaced it. We have hidden nature from ourselves" (Marris 2011, 1). She also argues for a new conservation paradigm that would focus on more than the preservation of "pristine wilderness," so that people begin to value and see nature in other places. Building on these two works, I ask if this same crisis of identification of nature is happening in Chile, and whether understandings of la naturaleza need the same type of redefinition that Cronon and Marris imply.

Another important component of my research framework comes from authors who have written about how these new conceptions of nature can influence our ideas of urban especially on themes of the planning, environment and sustainability. They focus on the ways in which nature can be incorporated into the design, planning, and management of urban places, understanding the city as an ecosystem (see Beatley 2000; Hough 2004; Laurie 1979; Spirn 1984). Hence, they argue that our conception of nature and humans as separate elements limits our cities, as we ignore the important relationships that are at work between the human and non-human organic components of our urban landscapes.

My research pins these theories geographically to an urban region that could make an important contribution to scholarship on cities and their nature. Chile is a rapidly developing and urbanizing country with a complicated history of both protecting and abusing its natural resources. The metropolitan area of Valparaíso is a principal urban

conglomeration within Chile, due to its nearly one million inhabitants, its diversity economic activity including a burgeoning tourism industry, and its cultural heritage. This case study takes into consideration the region's particular mix of governmental bureaucracy, geographical challenges, historical antecedents, and cultural conceptions of nature and urban life to make its argument, but its conclusions applicable elsewhere. This research suggests a way in which other researchers can combine place-specific theories of nature with technical process of planning sustainable development, arguing that how we think about nature matters.

In order to include information specific to Chile and the region of Valparaíso, and expand on the sources that are mentioned above, I draw on a range of personal experiences. My primary data come from living in the area for six months in 2015, conducting interviews with local government employees, academics, and citizens, as well as recording informal observations of the city and its surroundings, while studying at the Pontifical Catholic University of Valparaíso. This article draws on a set of thirteen interviews from a range of participants: three government officials, two from the municipality of Valparaíso and one from the regional government; five citizens or activists engaged in issues of urban planning and development or environmental conflicts; two university students: and three professionals and academics based in the capital city of Santiago. Twelve of these interviews were conducted in person between May and July 2015, while the last one was conducted over Skype in September 2015 after I returned to the United States. All interviews were conducted in Spanish, although one included English, too. The interviews focused on urban planning and environmental management, and sought to uncover participants' professional and personal connections with their surrounding urban and natural environments. They represent a wide breadth of viewpoints, but there are also missing voices. For example, the government officials that I interviewed are all employees, and not elected officials. Although this article will refer to their ideas in relation to the municipality of Valparaíso, they do not

represent the views of all municipal employees. lust as citizens differ in their conceptualizations of "nature" and their beliefs about the city of Valparaíso, so do government officials. Beyond interviews. 1 collected anecdotes observations from various conversations and related classroom discussions from my months abroad that inform my thought process and These interviews and informal ideas. ethnographic material are important in my research because they expose the details of situations that are often not visible on the surface. Comparisons between interviews can uncover the miscommunications that run so deeply in this region's processes of urban planning and relationship with nature.¹

This article begins with a short section explaining how I define and situate "nature" within my research, with particular reference to language and the differences between English and Spanish. The following section looks at geography, history, and conceptualizations of nature in Chile and in Valparaíso. After establishing this framework, the article focuses on a case study of the port of Valparaíso and its connection to the town of Laguna Verde, where a guarry will be built to allow for expansionary projects in the port. This final section examines the complex relationship that the city of Valparaíso has with its natural surroundings, particularly in light of the perception that the city lacks a significant connection to nature and the environment.

Placing Nature in Valparaíso

The ways humans have defined and continue to define the word "nature" are so varied that it can seem impossible to write about this word without explaining its particular meaning each time I use it. "Nature" is a complex term because it can represent an abstract idea, as, for example, when we talk about escaping the city to return to nature. It can also be something tangible when we attempt to define the physicality of nature and its existence, such as determining that a tree in the woods is nature, but maybe a stray dog in the city is not. My intention in this article is to use "nature" in an open and inclusive way, instead of limiting. In this definition of nature, I borrow from Anne Spirn:

It is the consequence of a complex interaction between the multiple purposes and activities of human beings and other living creatures and of the natural processes that govern the transfer of energy, the movement of air, the erosion of the earth, and the hydrologic cycle. The city is part of nature. (Spirn 1984, 4)

Ideally, I propose, every time that I use the word "nature" in this article, I would base it on a definition such as Spirn's. In practice, the word will not always be used in this way because I discuss a range of conceptualizations based on social meanings diverse and personal experiences. In referring to other people, or a history of conceptualizations, the definition of "nature" will shift depending on the situation, and I will then clarify its meaning. When I use word "nature" apart from experiences. I will be referring to this restructured conceptualization of nature, as something beyond the idea of wilderness and the world outside of our cities, and which now embraces the many ways in which humans and their built environments are inextricably tied to the natural world.

Beyond this theoretical delineation of nature, this article grapples with the complexity of the specific words and language that we use to convey the concept. In this study in particular, this is more complicated and significant because all fieldwork and interviews were done in Spanish, but written about in English, with translations throughout. Since this research is based, in part, on how people's language choices betray their conceptualizations of the idea of nature, it is important to discuss how participants label the concept.

In a direct translation, the word nature would most easily correspond to the Spanish word *naturaleza*, as they both come from the same Latin root, *natura*, which means "course of things; natural character, constitution, quality; the universe" or literally, "birth." *Naturaleza* is the word that I used most commonly when describing my project to potential participants and in conducting interviews, because I see it as better enveloping

the theoretical conceptualization that I seek to explore. In Chile, the word *naturaleza* evokes ideas of wilderness and conservation and is often used in advertising the beauty of Chile, both to promote it to tourists and to generate national pride.

Moving away from the linguistic connection that "nature" shares with naturaleza or natural, the concept of "nature" overlaps with many other words, as the meaning fragments in various directions. In trying to define the physicality of nature, medio ambiente captures the connotations of "environment," referring to the effects that humans have on nature. It is generally used in a more formal register in official written documents and professional conversations. Espacio verde or área verde refers to green space, which is particularly salient in the urban context of nature, while sustentabilidad borrows the form and meaning of sustainable from English to discuss caring for the environment into the future. As I use these words throughout, I will clarify what a participant's or document's word choice means, but these generalizations provide important context for understanding how we use language to identify and place nature. As we will complexities of language conceptualization often create tension when colliding interest groups want to define and use nature in conflicting ways.

As reflected in the terms above, concepts of nature in Chile are primarily shaped by scale and geography. Today's Republic of Chile formed through the combined influences of its dramatic geography and its human, social, economic, and cultural history. Major historical features include relations with Indigenous people, colonization by the Spanish Empire, independence in 1818, and later political transitions, including the turn towards socialism of the 1960s-70s, a period of military dictatorship (1973-1990), and a return to democracy. A full exploration of how distinctions of culture, history, and geography shape the meanings and use of nature is beyond the scope of this article. Most important here is recognizing that meanings of nature in Chile are formed by the particular geographies and ecosystems of the place, and defined more specifically by who controls and interacts with them over time.

Geographically, Chile is an extremely long and narrow country, stretching around 2,600 miles north to south (about 4,185 km), with an average width of about 90 miles (about 145 km). Ezequiel Martínez Estrada, an Argentine writer, called it "the worst-located and worst-shaped nation on the planet" (Collier 2004, xix). Situated west of Argentina, south of Peru, and southwest of Bolivia, Chile spans climates ranging from arid desert in the north, through rich agricultural land and lush forests in the middle, to alpine environments, including the Andes Mountains along its eastern border and southern tip. The Pacific Ocean lies to its west.

Chile's range of geographies and array of natural resources have inspired complex relationships between the human and nonhuman components of its environment. Central to this is a conflict, particularly in the last century, between patterns of environmentally destructive mass production and a growing trend to protect and preserve the "pristine" landscapes of the country. Since colonization, both conquistadors and boosters have focused on the natural beauty of the country, and the range of economic products it could produce to attract European colonial investment and immigrants (Hutchinson 2014, 9). This focus continues today, with a national pride that boasts the success of Chile's free-market economy, which has long been based on industries of timber, fishing, agriculture, and mining. However, this economic connection to the land should not be romanticized: a historically narrow focus on mass production led to rampant exploitation deforestation and intensive cultivation of exotic species, chemical-heavy industrial agriculture, the destruction of fish populations and traditional, small-scale fishing communities, and a wide range of labor conflicts (Hutchinson 2014, 14). At the same time, Chileans now aim to promote their national environmental treasures, especially as a way of attracting foreign tourists. Accordingly, the country has to reconcile habits of production and consumption with the image of pristine natural beauty that the government and many citizens seek to promote.

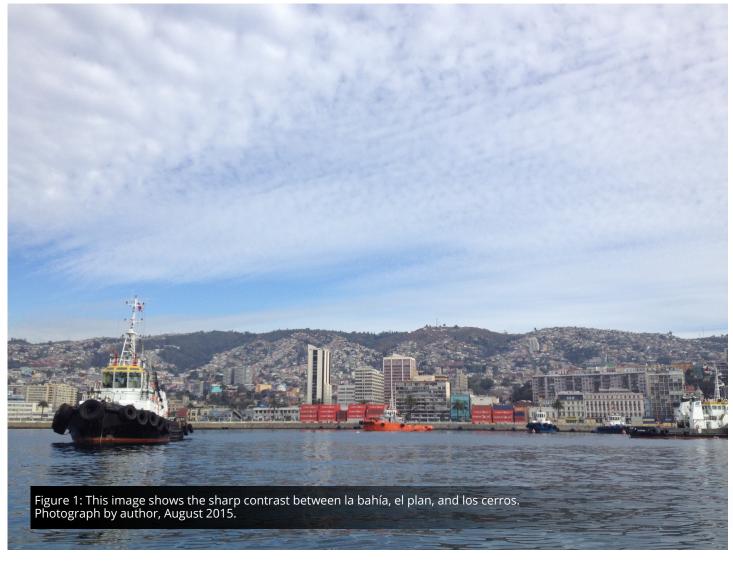
The region of Valparaíso has likewise been defined by its geography and utilization of natural resources. Rising dramatically above the

ocean, midway down the coast of Chile, the city of Valparaíso nestles in an amphitheater of hills that curve around a limited section of flat land in the center. According to Sánchez, Bosque, and Jiménez (2009), the city consists of three spatial components that affect its development: la bahía, el plan, and los cerros (p. 273, and see figure 1). La bahia is the bay, which now features a major shipping port; *el plan* is the flat part of the city, closest to the ocean, before the city rises into the hills; and los cerros are the hills, which refers to both the geographical features and the neighborhoods that are demarcated by the topography of hills and valleys, resulting in at least 45 separately recognized *cerros*. These physical divisions recur in discussions about nature within the city, as they come to determine where nature is seen to exist within Valparaíso and how los porteños (residents of Valparaiso - literally, those of the port) interact with it. As the following section will explain, it is a Chilean's

relationship to their urban environment that determines how they engage with and define nature.

Conflicting Conceptions of Nature in Valparaíso

In a conversation with Pablo, a university professor in Santiago, the capital city of Chile, we talked about the relationship that Chileans feel between their urban homes and "nature." He explained that, "People don't understand that their natural environment is part of [Santiago]. Or rather, that their closest system, the urban sector, which is really an urban ecosystem, fits within a much ecosystem."² In this reflection, Pablo recognizes the disconnect that Chileans identify between la ciudad and el campo, or "the city" and "the country." This division results in nature being identified in its associations with beauty and spectacle, which is physically expressed in the



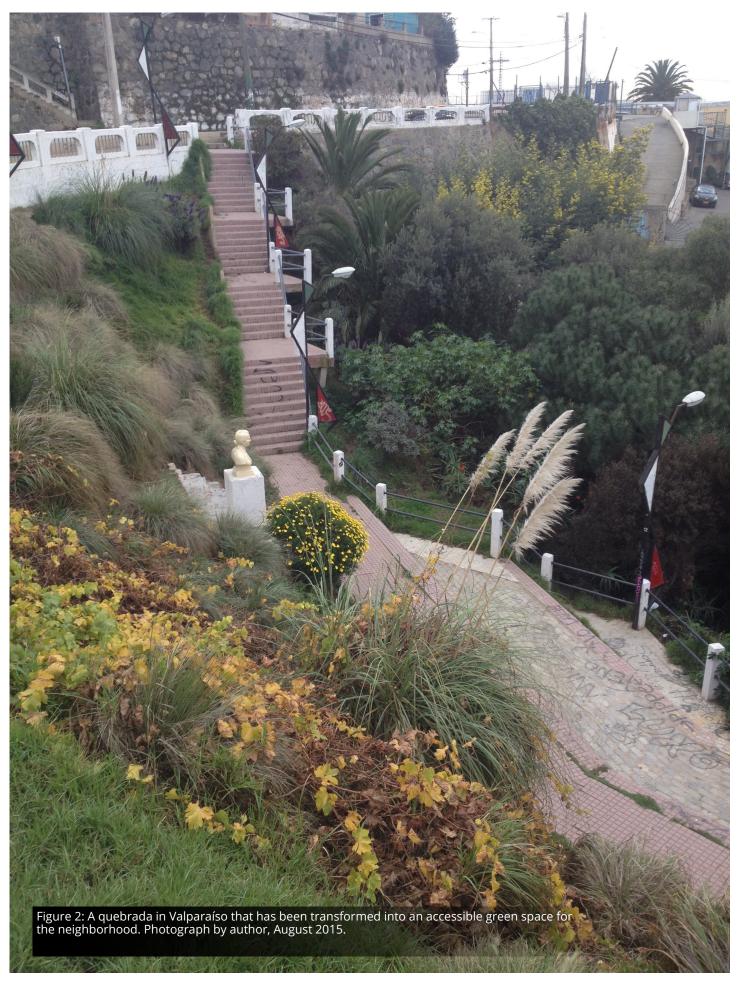
nature "out there" of protected preserves of wild and pristine nature. It is also identified in this way as a resource for economic growth, expressed physically in the nature "out there" of exploited and damaged landscapes, which are no longer seen as pristine. Here, we also see a key difference between nature portrayed as empty of human beings, although it has often been preserved to allow for public usage, and nature as natural resources, which are owned and exploited, directly involving humans. "Nature" is also identified as a powerful agent in the disaster it can cause, physically expressed in the "out there" nature that threatens fragile human environments in the form of fires and floods, earthquakes and tsunamis.³

Narrowing the focus to Valparaíso and its surrounding region, particular patterns emerge of nature's connection to defined physical spaces. These often come from formalized government recognition, but also appear in how everyday people talk and act. In some cases, nature is given a clear physical representation within the urban landscape. It is seen in the preserved green spaces of parks and plazas, especially in *el plan*, which are often conceptualized as separate from the city even when they exist within it, or in protected reserves and open space directly outside urban boundaries. In an interview with Nicolás, however, it became clear that not all parks and plazas in the city are considered equal in terms of the "nature" that they offer. In an ideal world, for Nicolás, plazas and parks would be a "place of rest," or an escape from the "accelerated life of cities."⁴ He clarified this by saying that plazas in the center of Valparaíso do not cultivate the same kind of *entorno*⁵ as this ideal, as they are filled with too many people, stray dogs, and activity to provide any relaxation. In this way, Nicolás reflected on the idea that nature can improve the quality of life in cities by providing an "escape," just as it does in the large parks and preserves that are found outside of cities. However, Valparaíso's public spaces may not be fully fulfilling this purpose.

In addition to *green* spaces within the city, nature is also seen in *la bahía*, in its physical aspects, such as public beaches and fishing docks, and in the form of a visual connection to the ocean. As has been mentioned, *porteños* ability to access their ocean is limited, due to

most of Valparaíso's coastline being privatized for port infrastructure and potential future growth. Due to this, protecting views and scenic overlooks, or *vistas* and *miradas*, is important because the visual connection between elevated areas in the city and the ocean is one of the only ways in which residents maintain an attachment to their coastline. Residents, especially long-term ones, who have treasured having a view of the ocean, react strongly when the city grows in such a way that it cuts off their last connection to the water. Víctor, a porteño architect and community activist involved in against port modernization movements projects, explained in an interview how it is Valparaíso's amphitheater-like shape makes its urban growth decisions so important. He said, "[Valparaíso] is a city in which everything affects you. There are few cities in the world that look inwards at themselves."6 This focus on the view in Valparaíso and the importance of having a visual connection with the ocean is a key way in which nature remains outside of the city and disconnected in a tangible sense.

Apart from these more recognizable representations of nature within the urban landscape, nature is also present in places that are less well defined or regulated, and therefore easier to overlook, or even invisible. In Valparaíso, nature is often physically embodied in small spaces, outside of official government recognition. This manifests itself in underutilized urban spaces that become informally occupied, but are not valued enough by the government to be designated as green or open spaces, often because they do not resemble more traditional forms of nature. An example of this would be las quebradas, which have great potential to be cared for and utilized as green spaces in the city, but instead serve as urban garbage dumps because of the lack of regulation of them by the municipality (see figure 2). The same can be said of other instances of private nature, such as domestic gardens and windowsill plantings, as well as trees along roadways and urban fauna, such as bird populations or even the stray dogs that overwhelm the city. These types of nature do not fit into the planning for city parks and plazas, meaning they are ignored in official discourse and practice. They are only



emphasized if citizens choose to care for them. In this way, physical manifestations of nature outside of official discourse become invisible, contributing to the feeling that Valparaíso lacks "nature."

These general patterns of conceptualizing nature in urban space, as well as the earlier discussion of the specificities of language, become crystallized in the case study below, which incorporates these broader explorations of the relationship between Valparaíso's urban components "natural" into decisions and actions. From the port of Valparaíso and contestations of how the space should be used, to the town of Laguna Verde to its south and the environmental conflict being staged there, this case study uses participants' voices to look more closely at nature's identity in the region.

Managing "Nature": A Case Study in the Port of Valparaíso and Laguna Verde

The Metropolitan Region of Valparaíso faces the same sort of dilemma as Chile as a whole: how can nature be conceptualized in a way that allows for its industrial exploitation, while still maintaining an image of protection and preservation? This question is inherent in discussions of environmental management in Chile because established global and local economic and industrial forces have a great deal of power and, as happens around the world, their interests are often prioritized over those of the locale's nature. A clear example of this tension has emerged in the Region of Valparaíso, where the power of industry, as reflected in the port of Valparaíso and its governmental support, conflicts with the needs of porteños and residents of the town of Laguna Verde, to the south. This case study focuses on the ongoing discussion about the management of the city's port and coastline, looking at how this urban conflict intersects with environmental questions in Laguna Verde. It explores questions of public space and accessibility, while further revealing relationship that the city has with nature, both inside and outside of its urban boundaries.

This story begins in Valparaíso, a city defined

by its history as a port. Since the 1800s, the growth of infrastructure has been concentrated along its coastline. In 1912, construction began in earnest after the national government earmarked funds for port development. Yet, the rise of Valparaíso proved short-lived. Usage of the port quickly fell after the opening of the Panama Canal in 1914; there has been no new major construction in the port since 1930, apart from limited projects of maintenance and modernization. Recently, however, the Spanish conglomerate, OHL Concesiones S.A. was granted a license to develop a new project, Terminal II, in the port. The aim in constructing Terminal II is to expand the port's capacity by providing a dock that can accommodate two Post Panamax⁷ ships, adding to Terminal I's capacity to dock one Post Panamax ship. This expansion is mandated by the State, which has a national plan for all ports to intensify their activity. Some see it as a positive change because of its potential contributions to both the economic activity and historical identity of Valparaíso.

Anna, an employee of TCVAL, concessionary responsible for assisting in the management of Terminal II, discussed in our interview nature's relationship to the port expansionary project in terms of federally mandated environmental impact statements. She emphasized several times that the project has gone through multiple sequences of environmental studies and that it complies with all national regulations. She was careful throughout the interview to defend the project, worried that I was looking for ways in which the project is exploiting loopholes that allow it to avoid questions of environmental preservation.

In the context of the port, nature is contextualized within the word medio ambiente, the term most often used to talk about environmental issues in politics. In this "nature" becomes a checklist environmental protection evaluations that allow project managers, such as those at TCVAL, to follow certain regulations and work to ensure environmental protection. This type of scenario loses much of the broader context by which other words, such as *naturaleza*, might consider the coastline as a public space and a community resource. By only considering

"nature" once the project is underway, TCVAL defines the concept in a very limited way. Unable to look beyond environmental regulation compliance, nature becomes encapsulated in considerations of water pollution or species diversity; the potential to integrate it into the urban fabric of Valparaíso by developing a more open and accessible coastline with green space is lost.

The question that many residents ask, particularly the activists involved in the movement against the expansion, is whether, beyond following environmental requirements, citizens' interests would have been better served by bringing in other uses. In thinking about alternatives to expanding the port infrastructure, or expanding it in a different way, could the coastline be used to connect porteños physically with their ocean and open up green and public spaces? If nature were imagined beyond technical and defensive considerations of environmental protection, would decisions be made differently?

As noted, these questions of public space the coastline become particularly important because of the city's general density and lack of open or green spaces. As Víctor, the porteño architect and activist who earlier expressed concern for the loss of vistas in Valparaíso, said, "The issue is that they want to occupy the best of the city, which is the coastline."8 This reflects Víctor's belief that government officials who continue to support the projects of port expansion undervalue Valparaíso's possible, and historically valued, connection to its ocean. Without official acknowledgement of the opportunity for and importance of alternative types of coastline development, it seems unlikely that the port industry will be displaced.

However, Alejandro, a professional working on urban development issues in Valparaíso, mentioned a particular strategy that activists are using to generate more pressure against OHL Concessions in the hopes that they will leave. Besides focusing on the negative effects that Terminal II will have on Valparaíso, they are also turning towards Laguna Verde, which is the staging ground for a related conflict. In his words, "They're making war in Laguna Verde and here in Valparaíso with the idea that at

some moment the concessionary will say, 'Sorry. It's not worth it. I'm leaving and I will pay you the seven million dollars." Here, Alejandro refers to the fine that OHL Concessions would have to pay if it backed out. He believes that if that were to happen, then activists would see it as an opportunity to change the plans of the municipality and instate a plan that could open up areas of the port to public use.

By expanding to include the related, industrial destructive activities in both Valparaíso and Laguna Verde in their movement, activists are arguing that the port modernization project is being realized in ways that are damaging to both communities and their local environments. In moving from looking specifically at the port to the nearby space of Laguna Verde, the debates about Valparaíso's coastline have intensified.

The town of Laguna Verde lies on a small bay to the south, in the commune of Valparaíso. It relies on fishing and agricultural production, along with some tourism, to survive. I had heard it mentioned various times as an important reserve of green space outside Valparaíso, one of the only green spaces that the city could really claim as its own. In an interview with María, a municipal worker for the city of Valparaíso, for example, she responded to a question about green spaces by saying, "We have one area of wilderness protection, which is Laguna Verde. As a city we have very few green spaces. We are one of the municipalities [in Chile] with the fewest number of green spaces...Our idea is to take advantage of it because Laguna Verde has a lot of potential." 10

From this conversation and countless others, it was easy to imagine Laguna Verde as a source of wild nature available outside of the city, legally protected by the city of Valparaíso for its environmental value, until I interviewed Laguna Verde resident Marcos. а environmental activist. In that interview, I realized that Laguna Verde - both the actual town and its surrounding natural area - is where TCVAL plans to build a quarry in order to extract material to fill in the expanding port of Valparaíso, if they receive the necessary government and legal approvals. In the interview, it became clear that the quarry, as an



exploitable "natural resource," threatens the public vision of a more pristine and aesthetic nature in Laguna Verde. Additionally, it threatens the community life and cultural value of the town itself. The natural area has been protected by the municipal planning department of Valparaíso in the past, and is still understood to be environmentally valuable. Nonetheless, it will now be exploited in order to benefit the port at the expense of threatening the environmental health of the space.

The image of Laguna Verde as a wild oasis outside of Valparaíso was quickly shattered on my first visit, when I met Marcos for an interview. We began talking behind a café in the small town before driving up steep hillside roads to overlook the valley that the quarry threatens (see figure 3). He began our conversation by presenting the history of neglect suffered by residents of Laguna Verde, caused particularly by the actions – or failure to act – of elected government officials in

Valparaíso. He described the community's lack of access to public transportation, healthcare, clean water, and electricity as "a violation of human rights." Although the space may have been historically protected for its natural value, this has not included a history of respecting the needs and wants of those who live there.

Laguna Verde, in fact, had the distinction of being designated a Biosphere Reserve by UNESCO in 2005, which recognizes its high levels of biodiversity, including an important biological corridor. Marcos contextualized the ecological importance of Laguna Verde for the metropolitan area by saying, "this is the lung of Valparaíso because, if one looks, Valparaíso single green space,"¹² doesn't have a emphasizing the importance of Laguna Verde to porteños. However, many in Laguna Verde also rely on the natural area for their livelihood, participating in agriculture, fishing, apiculture, besides potentially appreciating the

landscape for its aesthetic or recreational value.

The planned quarry stands in opposition to this shared understanding that Laguna Verde and its natural resources deserve protection, as it will pollute water resources in the valley, affecting flora, fauna, and the human community, effectively turning the community into a *pueblo fantasma*, or a ghost town, according to Marcos. He recognized the miscommunication present in Laguna Verde, saying,

We want to safeguard the cliffs, which are part of a [natural] reserve that would be affected by the exploitation of the quarry. They are protected places by the Chilean government and we believe that, today, they aren't respecting them by supporting a project like this.¹³

Marcos's comment calls into question the validity of preservation designations used by municipalities to protect green, open spaces outside of their urban areas. In this example, Laguna Verde is legally recognized as an environmentally important space, particularly because of the green escape that it offers porteños. Nonetheless, if local and regional government officials opt to support the construction of the quarry, they are choosing the economic benefits gained from exploiting the area's natural resources over its long-term environmental preservation.

Marcos also recognized the false hopes present in the promises made by the incoming company, particularly in their promises of mitigation. He laughed during our conversation, saying that their first mitigation would be to put one stoplight in the town in order to help regulate the increased truck traffic flow, and the other would be to "give presentations about the nature that exists here...to those of us that already know the flora and fauna, and which they are going to destroy. So, according to us, it is a really bad joke."14 Marcos emphasized the fact that the company in charge of realizing the quarry project has no connection to Laguna Verde and no relationship to the area, nor does it really care about the fate of the humans or biosphere. He expressed his disgust by stating,

"There is not any place in the world where a transnational company arrives, exploits riches, and leaves profits."15 Marcos has long felt disenchanted by the promises made by the Valparaíso government, and now by the incoming extraction company, because he can see that any commitment to protecting Laguna Verde is false. He cannot envision a situation in which the quarry is built and Laguna Verde survives as a vibrant community and a protected natural space. This is understandable given the degree to which plans for the quarry largely brush over the concerns of residents of Laguna Verde and environmental activists in the region. The project will be pushed through regardless, because those who have economic and political power deem its benefits more important than its consequences.

Laguna Verde's environmental conflict underscores how complicated conceptualizations of nature determine the ways in which it is incorporated into urban planning and managed. Many of participants, residents and government employees alike, clearly stated that they see the outlying community of Laguna Verde and its natural surroundings as an irreplaceable green space outside of the city. Since urban planning in Valparaíso has not emphasized the consideration and inclusion of nature, the city relies on places like Laguna Verde to be their reserves of "nature" outside of the city. In this way, municipal officials can still tout the "green" that surrounds the city, although there are hardly any green spaces in the city proper, nor other ways in which nature is recognized. However, despite its purported importance to the municipality, Laguna Verde is being converted to an extraction site that will contribute to port development in Valparaíso. This position views Laguna Verde and its nature only in terms of natural resources to be exploited and economic benefits to be gained for the city of Valparaíso.

Marcos sees this as another example of Valparaíso planners and elected officials putting the central city's urban needs and wishes above the needs of rural, outlying Laguna Verde. He sees that they are prioritizing port development in Valparaíso, regardless of the potential environmental and human costs. Explaining the

role of politics in the conflict, he said,

...the municipality, as I told you, has consciously abandoned us and, even more, done so in clear and open support of property developers and transnational companies entering here. So, our fight is not only against the companies, but also with the politicians of this country.

This abandonment is even more complex because the city government, and many of those who call Valparaíso home, continue to identify Laguna Verde as crucial to their relationship with nature. If Laguna Verde becomes contaminated or the town becomes a "ghost town," it will sever a strong connection that porteños feel they have to their surrounding natural environment. Both those in Laguna Verde and those in Valparaíso will feel the damage to and loss of an important nature in the region if the quarry is built and Laguna Verde becomes unrecognizable.

However, this conflict is greater than just Laguna Verde because of the consequences that the construction of the quarry has for Valparaíso. In the event that the quarry is constructed and Terminal II is built, powerful industry and supportive government officials in Valparaíso will have made two very poor decisions. First, the city will have ignored appreciation of Laguna citizens' Verde's ecological resources and its status as an accessible green space outside of their urban sphere, in favor of industrial exploitation of its "natural" resources. The city would be turning its back on the movement made to preserve Laguna Verde as a Biosphere Reserve in the since this massive operation will past, fundamentally transform ecological relationships and diversity in the area. Second, the negative consequences of constructing a quarry in Laguna Verde are only exacerbated when one realizes the purpose of extracting the rock material. These resources from Laguna Verde will be fueling a port modernization project in Valparaíso, which will effectively permanently close most of the port of Valparaíso to residents. If Terminal II is built in Valparaíso, it minimizes the available land and

water that can even be considered for projects promoting urban open space. Moreover, an infrastructure project as invasive as Terminal II is irreversible. As Víctor said earlier, the coastline is Valparaíso's best feature, but expansion projects guarantee that it will remain in the hands of industry, for the economic benefit of the city, instead of in the hands of the people, where it could be redesigned to provide environmental, civic, and aesthetic benefits for the city.

Reimagining Nature in Valparaíso, Chile

Following the lead of William Cronon (1995) and Emma Marris (2011), this article sheds light on varying conceptualizations of nature in Chile, looking at how Chileans identify nature, where they see it located within their country and their cities, and how they might include, exclude, or even destroy its existence. Cronon and Marris, others, write about among а new environmental paradigm that recognizes humans within nature and encourages the acceptance of nature as existing in our cities, not just behind the boundaries that we build around it in our national preserves and parks. In this article, I have pursued these insights in a new context - Valparaíso, Chile - through both a general examination of diverging ideas of nature and a case study.

From the outset, it was clear in my interviews and observations that conceptualizations of nature in Chile still focus strongly on its existence outside of cities. For many, if nature is within cities, it is only visible and protected in areas carefully set aside for it, such as preserves and parks or manicured plazas. There is a limited conceptualization of cities as existing within natural systems that connect humans and nature in far more diverse ways than just visiting a "natural" area such as a city park or beach. This research pulls apart the various social meanings that nature has been assigned, looking carefully at how it is conceptualized in the abstract and also expressed and identified physically, in relation to particular places. The case study of Laguna Verde illuminates this further, by providing a conflict that foregrounds diverging conceptualizations and valuations of nature.

As I noted in the classroom scene in the introduction, my classmates struggled to identify ways in which a young boy living in the cerros of Valparaíso might connect with nature in his urban surroundings. In the end, they settled on the preserves and parks outside of Valparaíso's boundaries, which become the only "urban" nature that *porteños* really see since nature has become so hidden in or excluded from the city. This narrative of the preservation of natural spaces outside the city is complicated by the example of Laguna Verde, wherein industrial leaders and the economic development of Valparaíso have taken precedence over any natural or cultural value that was once recognized in Laguna Verde. Municipal employees, activists, and porteños commonly refer to Laguna Verde as the primary green space of Valparaíso. Yet this is ignored in the current plan, which will exploit it in order to develop the coastline. This plan will render both Laguna Verde and the coastline inaccessible as public, open spaces, demonstrating that nature primary concern in а developments. Within this conflict, nature is reduced to environmental health environmental impact statements development has begun. Without the work of activists, nature's permanence and precedence outside of that definition would never be considered as valuable.

In the case study, nature is sacrificed in both Laguna Verde and Valparaíso because of the limits within which it is commonly defined. For the industrial powers that look to nature as something to be used and exploited, nature ceases to exist beyond the economic value that it is assigned. In the eyes of the municipality, nature is easy to protect and value until other needs take precedence, such as in Laguna Verde where nature was allowed to be green and open until a better economic option was offered. By supporting the quarry and the development of Terminal II, porteño officials have decided not to see or value the ways in which port infrastructure could exist alongside alternative port uses that would give porteños a physical connection with their ocean again. Conceptualizations among residents of Laguna Verde and Valparaíso are understandably everyone nature varied, as experiences

differently, but the plan of the quarry and Terminal II ignores many of their concerns. The need for more green and open spaces in Valparaíso, like *porteños'* desire to experience their ocean not just as a distant view, is ignored, and at the expense of all elements of life, human and non-human, in Laguna Verde.

The issue here is that, for far too long, nature has been thought of in Chile, as in other areas, in terms of two extremes: preservation or exploitation. On the end of preservation, humans are excluded, as they do not fit as part of "nature," while on the end of exploitation, humans become the central actor and redefine the value of "nature" for their own economic purposes. In thinking about cultural shifts that alter this spectrum, Emily Wakild captures an alternative in her research on Mexico's national park system. She writes:

"Few, if any, hoped to leave nature untouched, but thousands thought about the generations that would follow them and hoped to conserve the benefits of thick forests and healthy waters for recreation, agriculture, and daily life. This meant the nature these parks created was explicitly for people, not for nature alone." (2011, 14)

As Wakild reveals, Mexico's national park system does not define nature as pristine, but instead considers the ways in which human activity can be included in practices of preservation. This breaks from European and North American ideals of wilderness that say nature only exists when humans are excluded, and accepts that nature can be defined in ways prioritize the inclusion of humans. Particularly in cities, it is essential to recognize that "nature" is not for nature alone, but that it can be made for people, since the two are inextricable in an urban environment. In looking at nature in Chile, it is necessary to ask if this same crisis of identification is happening, and whether *la naturaleza* needs the same type of redefinition that Cronon and Marris offer in their work.

Moving forward, this research could be replicated in other cities and regions around

the world. Analyzing historical and cultural conceptualizations of nature in this way can help efficiently and successfully plan for local management of the natural environment in its complex interactions with the environment. Environmentally conscious urban planning is becoming more important as our world faces the consequences of climate change. For too long, nature has been seen as an entity separate from humans and the cities that we have built. It is time for cities and their citizens to reconnect with the diverse forms of nature, both obvious and hidden, that exist within their boundaries, opening themselves up to more productive and mutually beneficial relationships that recognize nature as an integral part of themselves.

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Endnotes

¹There is a point to be made here that interviews often betray specific intentions or a bias in the interviewer. As I was new to the process of interviewing, reflecting back on it now, I wonder what aspects of nature my participants left out because I had not explicitly raised them, and they therefore felt them irrelevant to our conversation. It now seems clear that some components of nature in the city were glossed over. For example, water is a central aspect of urban environmental planning, particularly in drought-plagued areas of Chile, but it was hardly mentioned. It is important to keep in mind what might be left out of the discourse analyzed here and why those particular themes might be more hidden.

²"La gente no entiende que su medioambiente es parte de aquí. O sea, que tu sistema más cercano, el sector urbano, que es un ecosistema urbano, está adentro de un ecosistema mucho más grande."

³As many critics have noted (such as David 1999, and Pyne 2001), this categorization also has an anthropocentric cast in that "natural" processes, which have occurred for millennia, only become "disasters" when their paths affect where human beings have claimed land or

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built settlements.

⁴"punto de descanso"..."vida tan acelerada en ciudades"

⁵"Environment", in the sense of atmosphere

6"...es una ciudad en que todo te afecta. Son pocas ciudades en el mundo que se miran a sí mismas."

⁷"Post Panamax" refers to a new ship design that is being used in ocean traveling, called Post Panamax because it cannot fit through the Panama Canal.

⁸"El tema es que quieren ocupar lo mejor de la ciudad que es el terreno de la costanera."

⁹"Están hacienda la guerra aquí en Laguna Verde y la guerra aquí en Valparaíso por la idea de que en algún momento el concesionario va a decir, 'Lo siento. No vale la pena. Me voy y te pago el siete millón de dólares."

10"Tenemos un área silvestre protegida que es la parte de Laguna Verde. En términos de ciudad, tenemos muy pocas áreas verdes. Somos una de las comunas con menos áreas verdes... Nuestra idea es ir potenciando eso porque Laguna Verde tiene mucho potencial"

¹¹"una violación a los derechos humanos"

¹²"este es el pulmón que tenemos en Valparaíso porque, si uno mira, Valparaíso no tiene ningún área

verde"

¹³"Nosotros queremos salvaguardar los acantilados que se verían afectados por la explotación de la cantera, que son reserva. Son lugares protegidos por el Estado chileno y que creemos que, hoy día, no se está respetando al avalar un proyecto como este."

¹⁴"entregar charlas de la naturaleza que existe aquí... a nosotros que conocemos la flora y fauna y de lo que ellos van a destruir. Entonces, eso es, según nosotros, un chiste de muy mal gusto."

¹⁵"No hay ninguna parte en el mundo donde una transnacional llegue, explote riquezas básicas, y deje ganancias."

¹⁶"...la municipalidad, como te digo, ha hecho abandono consciente y, además, en apoyo abierto y claro para que entren aquí las inmobiliarias y las transnacionales. Entonces, nuestra lucha no es solamente con las empresas, sino con las políticas de este país."



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