THE DROUGHT OF 1869 IN CARACAS, VENEZUELA: ENVIRONMENT AND SOCIETY AT THE EDGE OF MODERNITY

by

María Victoria Padilla

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Abstract

Here I examine the 1869 drought in Caracas, Venezuela in order to explore how people’s response to natural phenomena and hazards reflects the particular historical understanding of nature at the time and can be wielded in certain contexts as an economic, political and ideological tool. With the use of newspaper articles, archival public records and travel writing I was able to reconstruct the environmental crisis that took place during last months of 1868 and the beginning of 1869 and determine its significance for socio-environmental relationships in postcolonial Caracas. During the drought, as political conflicts escalated in Venezuela, in Caracas the rates of infectious diseases rose alarmingly, fires consumed El Ávila Mountain and a water shortage took place. Yet, only the city’s poor were severely affected by the hazards; for the elite the drought only represented an inconvenient opportunity. I argue that the 1869 drought disclosed how, despite early republican Venezuelan’s modern and secular understanding of nature and enlightened liberal rhetoric of social equality, socially unjust conditions of differential vulnerability to environmental risk and differential access to natural resources were reinstated and even entrenched during the 1869 crisis by Caracas’ postcolonial elites and authorities. I suggest that the study of disastrous junctures such as that of 1869 presents an alternative entryway into environmental history that allows us to examine the changes and the continuities in the relationship between people and nature and the social and environmental implications of said relationship when they are at their more heightened state.
Preface

This thesis is original, unpublished, independent work by the author, Maria Victoria Padilla.
Table of Contents

Abstract ......................................................................................................................... ii
Preface ......................................................................................................................... iii
Table of Contents .......................................................................................................... iv
Acknowledgements ...................................................................................................... v
Introduction .................................................................................................................. 1
Urban sanitation, fires in El Ávila and the modern iron duct project ......................... 13
Water shortage, public fountains and the unified elite .................................................. 26
Conclusion .................................................................................................................... 39
References ..................................................................................................................... 43
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Introduction

The disastrous summer for months now is annihilating and destroying large areas of vegetation in our coasts and towns, as it also does in the rest of the American continent, continues at an alarming pace. Due to the influence of the exaggerated heat and the excessive drought, pastures perish and water is depleted, the sustenance of all animals, they all die tired and thirsty. The streams and rivers dry up, and while the beneficial cloud does not arrive, an atmosphere full of earthy materials covers like a thick veil the valleys, hills, rivers and coast of Venezuela. Eclipsing the sun as it rises and sets, every moment covering the horizon of almost all towns and reaching large distances over the Sea of The Antilles.¹

This is how in May 1869 Don Arístides Rojas—prominent member of Caracas’ intellectual elite—described the horrific effects in most of Venezuela of the drought that began the previous year. In particular, Caracas, the country’s administrative capital and most populous city, must have resembled hell during the ongoing drought. As the reddish haze permanently obscured the city sky and political rivalries menaced civil war, scorching heat afflicted Caraqueños while the dried foliage jarringly contrasted with the usually lush vegetation of the valley where the city sits. Garbage piled in every street corner of the city and infectious diseases rose at alarming rates. Widespread fires were consuming Caracas’

emblematic El Ávila Mountain and the Catuche River, the city’s source of clean water, had become nothing but a trickle. A severe shortage of clean water ensued.

Caraqueños were rightfully restless during the hazardous drought. This was reflected in the articles, letters and editorials published daily in the city’s newspapers, which were comprised of Caracas citizens’ disparate opinions, concerns and demands about an intricate mixture of customs and beliefs, the political crisis, and the drought calamity. Regardless, the natural hazard and the havoc it wreaked were too fleeting to linger in the country’s memory or history. With the arrival of the rain in late May, the fires subsided, the haze dissipated and Catuche replenished the fountains. Nonetheless, the historical merit of the 1869 drought in Caracas lies in revealing the inextricably intertwined but obscure connections between nature and post-emancipation nineteenth-century Venezuela’s ideological, political and societal struggles and transformations.

This is possible because natural hazards and disasters such as droughts are expressions of the indelible yet evasive interactions between the biophysical and the sociocultural; they, as disasters scholar Virginia Garcia-Acosta pointed out: “elicit behaviors that reveal certain relationships, rules of conduct, or social functions that might otherwise be

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2 El Ávila Mountain is officially called Waraira Repano National Park.
3 I use the term citizens here, not to refer to all of Caracas’ residents or Caraqueños, but in accordance with the exclusionary language of the time of vecinos or ciudadanos respetables and padres de familia (respectable neighbors or citizens and male heads of households), meaning members of the educated and propertied male elite whose voices are the ones directly reflected in the sources. This language is often found in opposition to la población and el público (the population and the public), referring to the non-elite and the poor. I will discuss later the implications of these exclusionary practices during the 1869 crisis, mainly in terms of class/status. For an interesting overview in the case of gender exclusion in Venezuelan history see: Arlene J. Diaz, Female Citizens, Patriarchs, and the Law in Venezuela, 1786-1904 (Lincoln: University of Nebraska Press, 2004).
In this case, the 1869 drought in Caracas revealed that by the 1860s the aspiration for a modern and liberal Venezuela worked as the discursive driving force behind the power struggles of the post-independence nation building process. As a result, early republican authorities and elites had come to uphold the modern belief that nature is controllable and malleable, and had adopted the rhetoric of racial and social equality preached by enlightened liberalism. However, I argue it also became clear that neither of these tenets had come to inform postcolonial infrastructure or polity. In fact, they could be readily sacrificed or distorted for the benefit of a political party or other privileged group. Accordingly, in early 1869, at the height of the drought, authorities and elites deployed a ready-made yet flexible ideological toolbox. This allowed them to justify their incompetence in environmental management, to exploit the hazard for political and economic gain, to argue for the need for order and progress and, perhaps more importantly, to adjust and even invent new postcolonial structures of inequality that could sustain their privileged access to resources—all at the expense of Caracas’ vulnerable poor.

By looking at the 1869 drought in Caracas, I seek to further our understanding of Caraqueños’ everyday life connections with their environment. I also hope to contribute to the study of the neglected period of Venezuelan history after the Guerra Federal (1859-63) and before Antonio Guzmán Blanco rose to power in 1870, and presumably transformed Caracas and Venezuela’s landscape and culture. In order to do this, I’ll examine the

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numerous newspaper articles published in Caracas between January 1868 and December 1869 that report on the city’s political, climatic and environmental crisis. I will also consider public administrative records, decrees and foreign travel writings. As these documents allow me to reconstruct the public representation of the events of 1869 in Caracas, they also offer a partial view, as the only voices recorded in their pages come from the elites. This limits the kind of claims I can make regarding the experience of the more vulnerable sectors of society. However, the nature of many of the newspaper articles, laws, decrees and measures allows me to infer the side of the story that is not explicitly told. These primary sources along with Venezuelan historiography and specific analytical approaches will allow me to uncover the intricacies of the 1869 drought in Caracas in order to examine the broader configuration and transformation of complex cultural and socio-environmental relations revealed by disastrous junctures.

In this sense, the study of natural hazards or natural disasters can be pivotal in understanding how cultural and political conditions and relationships are also inscribed in environmental interactions. Fortunately, in the last few decades there has been important historical and contemporary interdisciplinary research on natural disasters with particular attention to Latin America. In Venezuela, this pioneering research has focused on the structural social conditions of vulnerability that place past and present Venezuelan society at

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risk in the presence of natural hazards. However, this perspective, while jointly considering the biophysical aspect of natural hazards and the social construction of vulnerability, does not often engage with broader issues of socio-environmental relationships beyond disastrous events. Beyond this, little has been written about the relationship between Venezuelan society and nature. The biggest contribution to an overall understanding of Venezuelan history in relationship with the environment comes from geography. In particular, the work on Venezuela of Chilean-born geographer Pedro Cunill Grau has offered the most comprehensive examination of Venezuelan environmental relationships throughout history with special focus on urbanization and ecological degradation. Nonetheless, Caracas and Venezuela’s environmental history remains unwritten.

In this regard, disastrous junctures such as the 1869 crisis are exceptional entryways into environmental history. They not only allow us to explore what Michael Watts called ”the darkest corners of environmental relations,” but also grant us an opportunity to ask important questions about the power relations through which profoundly unjust socio-environmental

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conditions are produced and maintained in time. This is a critical socio-economic problem in present day Venezuela. In the case of the Caracas region, natural disasters are endemic (particularly earthquakes, flashfloods and droughts) and their effects, especially on the poor, are not only dramatic but often recurring and cumulative. As a result, displacement and homelessness due to unjust socio-environmental conditions and heightened vulnerability to natural disasters are some of Caracas’ and Venezuela’s perennial struggles. This is not to say that Venezuelan socio-environmental relations have not changed through time; each particular manifestation of one of Caracas’ endemic hazards sets into motion specific and contingent sets of socio-environmental relations. Historical inquiry into these hazardous processes can allow us not only to explore the particularities of a given event, but to see and reconstruct the changes and the continuities in the relationships that people establish with each other, the environment and natural phenomena. In any case, it is easy to assert that the environmental relationships between the Valley of Caracas and its people have played key social and political roles throughout Venezuelan history.

The Valley of Caracas is a long and narrow irregular topographic depression created by a fault zone along the southern slope of the Cordillera de la Costa (Venezuelan Coastal Range). It is located near the center of the Range, about thirteen kilometers inland from the Caribbean coast and is surrounded to the north by El Ávila Mountain and to the south by the Guaire River. Facing Caracas, El Ávila’s southern slope is very steep and Anaucio, Chacaito, Gamboa and Catuche Rivers cut v-shaped ravines into the mountain as they flow

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11 The valley was first known as Valle de San Francisco or Valle de Los Toromaimas.
southward into the valley.\textsuperscript{13} The valley has a moderate average yearly temperature of 21º Celsius, a defined wet or rainy season from June to November and a dry season from December to May.\textsuperscript{14}

These natural features of the valley were what first appealed to Spanish colonial officials as they suited the economic interest of the empire. Perhaps the initial motivation for settlement was that El Ávila Mountain was rumored to harbor gold.\textsuperscript{15} However, what drove the consolidation of the settlement was that the valley fulfilled all the requirements for discovery and settlement prescribed by Carlos V in 1523; with criteria based on altitude, healthfulness, and access to water, agricultural and building resources the valley seemed ideal.\textsuperscript{16} The mountains provided safeguard from coastal attacks incoming from the Caribbean Sea, the weather was of the kind Europeans considered to be healthful—fresh, not too cold and especially not too warm—and clear fresh water streams descended from the mountain.\textsuperscript{17}

\textsuperscript{13} Ibid.
\textsuperscript{16} Mario Sanoja and Iraida Vargas Arenas, \textit{El agua y el poder: Caracas y la formación del estado colonial caraqueno, 1567-1700} (Caracas: Banco Central de Venezuela, 2002).
The valley became an official Spanish colonial settlement in 1567. In 1723, chronicler José de Oviedo y Baños echoed the established attitude towards the Valley of Caracas:

Caracas lies in a beautiful and fertile valley that stretches from west to east for four leagues in length and a little more than a league in width. . . . It occupies an area that four rivers encircle without any danger of flooding, so that this spot has every detail to qualify it as a paradise. Its location brings such a heavenly climate that, without any contradiction, it is the best in America. Besides being very healthful, it appears that spring chose the city as its permanent abode.

Regardless of the seemingly idyllic nature of the valley, much of these geographic and climatic characteristics are accompanied by many recurrent potentially dangerous natural phenomena. The presence of a mountain range and a valley in the region is, in itself, determined by the existence of the San Sebastian fault system, which contains several active faults that have produced destructive earthquakes in Caracas at least once a century since its foundation. Furthermore, even as El Ávila protects the valley from hurricanes that might reach the coast, the moderate wet and dry climate of the valley is somewhat unpredictable and heavily influenced by climatic anomalies, such as El Niño-Southern Oscillation (ENSO). This climatic anomaly consists of an irregular change in the pressure of the atmosphere and

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18 Conquistadors failed to take over the valley in several occasions; they encountered the resistance of a confederation of natives lead by famous Caciques Guaicaipuro and Paramaconi. For an account of the Spanish conquest of the territory that is now Venezuela see: José Oviedo y Baños, The Conquest and Settlement of Venezuela, trans. Jeannette Johnson Varner (Berkeley: University of California Press, 1987).
19 Ibid., 185.
the temperature of the ocean in the tropical Pacific region. This affects several geographic areas around the world; in Venezuela’s northern central region the warm episodes of ENSO (El Niño) produce seasonal droughts: the decrease of rainfall and a rise of the temperature during the rainy season, and this diminished rainfall is followed by a regular or harsher dry season. While the cold phase (La Niña) increases rainfall often to deluge proportions. This climatic variability represents several hazards for the inhabitants of the region: flashfloods, debris flows, crop failure, water shortages, plagues (especially locusts) and fires. The potential effects are disastrous: displacement, famine, chronic malnutrition, chronic dehydration, chronic gastrointestinal diseases and outbreaks of infectious diseases such as malaria, yellow fever, dysentery, dengue and cholera. As a result, the Valley of Caracas often becomes a place more akin to hell than to Oviedo y Baños’ paradise.

Nonetheless, settlers established in the valley and kept to the natural north-south borders provided by El Ávila Mountain and the Guaire River and to the east of the Catuche River. Often described as frugal, the Catuche River was a medium sized clear stream that originates in El Ávila Mountain and flows downwards into the valley through its southern slope. Catuche was not only the easternmost border of the settlement, it was also Caracas’

24 Oviedo y Baños, *The Conquest and Settlement of Venezuela.*
main source of clean water until 1873. To be precise, a now extinct small tributary of Catuche, known as Catuchecuao, carried Catuche’s clean waters into the incipient Spanish colonial settlement of Caracas. In 1610, when the settlement had consolidated, the Cabildo of Caracas (Spanish colonial municipal administrative unit) commissioned the building of a masonry dam, called Caja de Agua (literally box of water) to collect the water from Catuchecuao and distribute it via a gravity powered underground stone and mortar canal system that carried the water into buildings, homes and public fountains. In 1675 the Caja was replaced by a larger reservoir that collected the water directly from Catuche, making the first transformative urban intervention to the landscape of the valley by effectively eliminating Catuchecuao.

This colonial water supply system was never a wholly realized project. Bits and pieces were frequently added, changed or removed from the network to provide water to certain important buildings located in the city center—hospitals, convents and monasteries, to include new mantuano (Venezuelan Creole aristocracy) households at their own expense, or to decommission or inaugurate public fountains. By 1870 there were 20 public fountains in Caracas: semicircle or octagon shaped ponds with animal shaped faucets usually found on

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26 The mix of tenses here is intentional, Catuche still exists and originates in El Ávila, but it is no longer a clear stream, the provider of water for Caracas or its easternmost boundary. Nowadays Catuche is heavily polluted and systematically used for waste disposal.
27 “Caracas,” Diccionario de historia de Venezuela; Sanoja and Vargas, El agua y el poder.
28 Ibid.
the busiest street corners of the city, where most of the population (who did not have in-house piping) could collect the liquid in earthen pots and carry it home.\textsuperscript{31}

The water supply system described, like most of Caracas, remained essentially unchanged until the 1870s, even as it became increasingly inefficient. This is because urban development completely halted in the valley during the post-independence period and the early republican era.\textsuperscript{32} Throughout this period, Venezuela, as much of Latin America, lived in a constant state of civil war that is often described as a perennial conflict between liberals and conservatives.\textsuperscript{33} Opposing political ambitions, rivalries, armed conflict, and economic crisis caused a state of unrest in Venezuela that led to republican authorities materially putting aside issues such as urban development or environmental management—even as they were often part of the rhetoric of incumbent sectors, parties and individuals.\textsuperscript{34} Accordingly, by the second half of the nineteenth-century Caraqueños still lived amongst many of the ruins of the 1812 \textit{Jueves Santo} earthquake, the city was still nothing but a small colonial grid town

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\textsuperscript{31} Ibid.
\textsuperscript{32} Pedro Cunill Grau, \textit{Geografía del poblamiento venezolano del siglo XIX} (Caracas: Ediciones de la Presidencia de la Republica, 1987).
\end{flushleft}
of sixteen by seventeen streets surrounded by a few peripheral clusters of adobe huts, and the water supply system remained unchanged as it grew inadequate.\textsuperscript{35}

Bolivar’s South American unification project of Gran Colombia dissolved in 1831 and competition for control of the Venezuelan state as a mean of personal enrichment accompanied the tumultuous era of nation building.\textsuperscript{36} Revolts, coups and uprisings sparked by the social instability of the nascent republican project went almost uninterrupted during this period.\textsuperscript{37} In March 1858, the coup that overthrew the disastrous 10 years long rule of the Monagas brothers (1847-1858) lead to the Guerra Federal, Venezuela’s biggest and longest clash between conservatives and liberals.\textsuperscript{38} The five years long war was costly. The death toll was over two hundred thousand. The war also destroyed field after field, and with that people’s livelihoods and the country's agriculture and livestock industry.\textsuperscript{39} On May 1864, in the outskirts of Caracas the fighting parties signed a peace treaty that officially ended the war.\textsuperscript{40} The Federation (liberals) had won and a federal government was established.\textsuperscript{41}

However, during the three years that followed the armistice, both liberals and conservatives became dissatisfied with the Federation’s administration and plotted together a new revolt known as \textit{La Revolución Azul} (Blue Revolution). By December 1867 the entire country was at war again; there had been no time for economic or social recovery. The

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\item\textsuperscript{35} Cunill Grau, \textit{Geografia del poblamiento venezolano del siglo XIX}.
\item\textsuperscript{36} H. Micheal Tarver et al. \textit{The History of Venezuela} (Westport: Greenwood, 2006); Julie Skurski, "The Leader and the ‘People’: Representing the Nation in Postcolonial Venezuela" (PhD diss., University of Chicago, 1993).
\item\textsuperscript{37} “Guerra Federal” \textit{Diccionario de historia de Venezuela}.
\item\textsuperscript{38} Frankel, “La Guerra Federal y sus secuelas;” Tarver et al. \textit{The History of Venezuela}. The Monagas brothers’ regime was characterized by brutal repression, peculation and corruption, however, during their rule was enacted the abolition of slavery act in March 1854—albeit in fear of revolt.
\item\textsuperscript{39} Cunill Grau, \textit{Geografia del poblamiento venezolano del siglo XIX}.
\item\textsuperscript{40} Edgar Esteves González, \textit{Las guerras de los caudillos} (Caracas: El Nacional, 2006).
\item\textsuperscript{41} Ibid.
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revolution was precariously led by octogenarian José Tadeo Monagas, who died in November 1868, soon after the establishment of the new Azul revolutionary government, leaving his son and nephew to vie for leadership of the new regime. This mixed Azul government of liberals and conservatives, which had become so reminiscent of the nepotistic administration previous to the Federal War, became highly unstable. By 1869 the country was again in the center of a political crisis as the liberals abandoned their posts in the mixed government and formed a group opposed to the Azul regime: Liberales amarillos (yellow liberals).\textsuperscript{42} In brief, between 1868 and 1869 Venezuela was essentially leaderless, in critical financial situation, in the midst of widespread political conflict, dependent on inadequate infrastructure and facing a slow on-set environmental crisis in its capital city.

\textbf{Urban sanitation, fires in El Ávila and the modern iron duct project}

During 1869, the presence of a moderate warm episode of El Niño caused a seasonal drought in Caracas.\textsuperscript{43} The climatic anomaly was not known at the time; however, its effects came into full force between the end of 1868 and the beginning of 1869.\textsuperscript{44} Unseasonable heat afflicted the valley city as yellow fever caused an epidemic scare, widespread fires consumed

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\item \textsuperscript{42} “Revolución Azul,” \textit{Diccionario de historia de Venezuela}. The colors of the different factions come from the Venezuelan flag: yellow, blue and red. During the Federal War, conservatives were identified as red and liberals as yellow. The Azul Revolution chose blue to represent the mixed nature of their group. The liberal opposition to the Azul regime, since their leader Antonio Guzmán Blanco and many of their members were part of the original yellow liberals, re-identified as amarillos.
\item \textsuperscript{43} César Caviedes, \textit{El Niño in History: Storming Through the Ages} (Gainesville: University Press of Florida, 2001).
\item \textsuperscript{44} The anomaly now known as ENSO was not formally studied as a whole until the 1970s.
\end{enumerate}
\end{footnotesize}
El Ávila Mountain and the clean water supply was becoming scarce. Caracas’ citizens focused on the incompetence of the authorities in taking preventive measures for securing public health and attaining some degree of urban sanitation. Citizens’ complaints to the city’s Administrative Council and Chief of Police about issues such as piling garbage, polluted water, stagnant puddles, animal waste, sick stray dogs and the sale of spoiled meat became usual features on the city’s daily newspaper and represented the main response in the face of the impending hazards. That is to say that during the 1869 drought, Caraqueños understood and responded to environmental hazards in a complex and essentially modern way. They viewed natural processes, especially potentially dangerous ones, as matters of public concern in the exclusive purview of the scientific community and the authorities.

However, this interpretation of nature—characterized as secular, scientific, utilitarian and institutional—had only been gestating since the beginning of the nineteenth-century. Before the nineteenth-century and throughout the entire colonial period, the people of Caracas understood nature through a paradigm that existed in perfect accordance with the moral precepts of the Catholic belief system that sustained Spanish colonial society. Nature was God’s creation and natural hazards were accepted as a part of God’s will. As a result

46 Here, “District Council,” “Administrative Council,” “Municipal Council,” and “City Council” are used interchangeably according to the sources. However, they all refer to the same administrative body in charge of the municipality of Caracas.
48 Noria, “El pensamiento sobre los terremotos en la sociedad venezolana durante el siglo XIX.”
Caraqueños endured hazards resignedly and recognized them as either godly punishment or heavenly reward. The only response the people of colonial Caracas had in the face of the constant natural hazards that threaten them was piety and prayer.⁴⁹

This “acts of God” logic—borrowing the term from Ted Steinberg—prevailed until the nineteenth-century, when the emancipation from the Spanish Crown prompted a process of socio-cultural transformation in Venezuela. This, in turn, allowed for an epistemic and ideological secularization and institutionalization of peoples’ understandings of nature.⁵⁰ The most significant marker of this ongoing transformation (according to the extensive work on the subject of Venezuelan anthropologist Rogelio Altez) came on 26 March 1812, during Holy Week, on Jueves Santo (Maundy Thursday), when an earthquake of an approximate intensity of 6.9-7.2 in the Richter scale struck the valley city.⁵¹ Over two thousand people died and more than half the buildings in Caracas were destroyed. As the disaster occurred in the midst of the Independence movement that had begun the previous year, the Realistas (Royalists) were quick to argue that it was the result of divine punishment for the movement and its defiance of King Fernando VII, God’s emissary on Earth. The Patriotas (pro-independence Creole elite) explained the earthquake for the first time in Venezuelan history as an observable and explainable natural phenomenon.⁵² They were compelled to do so by

⁴⁹ Altez, “Vulnerabilidad nuestra de cada día.”
⁵² Altez, El desastre de 1812 en Venezuela.
the unexpected natural occurrence that was so harmful to their cause, and were able to do it by making use of their enlightened intellectual baggage.\textsuperscript{53}

The transformation of Caracas’ citizens understanding of natural phenomena was part of an overall shift in postcolonial Venezuelan’s interpretative paradigm towards a modern one, especially after the dissolution of Gran Colombia (1818-1831).\textsuperscript{54} Early republican Venezuelan modern mentality was initially self-fashioned through break and contrast with the perceived archaic and static Iberian colonial Catholic past.\textsuperscript{55} It was anchored—as James C. Scott would put it—in a supreme confidence in continued linear progress, which could be obtained through, amongst other things, the insertion of Venezuela into the world market and positive knowledge.\textsuperscript{56} These required and allowed them, respectively, to understand nature as a separate entity from society and, thus, potentially—although not absolutely—controllable and pliable.\textsuperscript{57} Nonetheless, bridging the gap between these new modern values and political principles grounded in liberalism and the crumbling colonial social structures was not an

\textsuperscript{53} Ibid.
\textsuperscript{54} Noria, “El pensamiento sobre los terremotos en la sociedad venezolana durante el siglo XIX.”
\textsuperscript{56} Straka, “La República fingida; James C. Scott, Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed (New Haven: Yale University Press, 1998), 80-90. This can be interpreted as part of the early stage of what Scott called high modernism.
easy task, the result was almost constant civil conflict. New republican Venezuelans needed to generate their own elements of social, political and ideological cohesiveness in order to draw on their modern liberal goals. Franco-Venezuelan historian Nikita Harwich Vallenilla argues the figure of the caudillo emerged as a result of these needs and became “modernity's demiurge.” But also, perhaps in a more modest way, a positive discourse of control over the nation’s nature worked as an element of thrust towards modernity for early republican Venezuela.

By the 1860s, mainly after the end of the Guerra Federal (Federal War) in 1863, this ideological transformation was fostered by the needs of triumphant republicanism and it produced changes in the treatment of nature that would manifest significantly during the 1869 crisis in Caracas. The administration and the authorities had acquired managerial obligations over the environment and frequently borrowed the legitimacy from scientific discourse about the resources and natural hazards that, more often than not, they could not effectively control. The scientific community and the systematic study of their environment and its natural phenomena had almost entirely replaced the Catholic Church and their moralistic interpretation of nature—then associated with backwards Iberian colonialism. In

58 Harwich Vallenilla, “Venezuelan Positivism and Modernity.”
59 Ibid., 342.
60 For an account of this processes in the wider Spanish Caribbean see: McCook, States of nature.
61 Noria, “El pensamiento sobre los terremotos en la sociedad venezolana durante el siglo XIX.”
62 Elena Díaz, “Aspectos sociopolíticos de la formación de la elite científica en Venezuela,” In La ciencia periférica, ed. Elena Díaz et al. (Caracas: Monte Ávila, 1980), 73-113. My treatment of the 1869 case is quite secular for reasons beyond my control, however, it is easy to recognize Latour’s modern “crossed-out God, relegated to the sidelines” in Venezuela’s first steps into modernity. Furthermore, Venezuelan and Latin American historiography recognizes a complex and diverse process of secularization or transformation of the role of religion in the region through the nineteenth-century. For a recent treatment of the topic that
1867 Adolfo Ernst (known as the father of Venezuelan positivism) expressed: “the exact knowledge of a country’s nature is the *sine qua non* condition for all social and commercial progress in the colonies.”  

This shows the transformation towards a modern and liberal logic regarding nature: from God’s creation to national resources, and in the case of natural hazards from acts of God to ills of the nation.  

As a result of this transformation, the way to deal with nature and calamities became essentially modern: demanding and implementing science and policy. This was the logic under which Caraqueños understood the hazards of the last month of 1868 and the further calamities that followed in 1869. The letters sent to Caracas’ newspapers and accounts from the editors—often published unsigned under columns such as “Echoes from Caracas” or “City Chronicles”—showed that Caracas’ citizens were rightfully concerned about public health. In November 13 1868, the renowned Sociedad Médico-Quirúrgica (Surgical-Medical Society) reported over 190 cases of yellow fever in Caracas in the course of the running week alone. In the presence of this hazard and with the miasmatic theory of disease still in full force, the city’s concerned citizens made the unfortunate conditions of urban sanitation the

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64 Noria, “El pensamiento sobre los terremotos en la sociedad venezolana durante el siglo XIX.”

65 Ibid.

66 Manuel V. Díaz, “Estado sanitario,” *El Federalista*, November 13, 1868. We know today that there is a correlation between climatic variability and certain infectious diseases. See: Sutherst, “Global Change and Human Vulnerability to Vector-Borne Diseases.”
center of their distress. The newspapers showed that they were openly placing the blame for these unsanitary conditions considered conducive to disease entirely on the Chief of Police Mr. Baez and the Administrative Council. A letter submitted to El Federalista asked:

Given this situation, will not something be done to remove the sewer waters that abound in our streets; to move away the dumpsters located in the suburbs; to make the drains of the houses running; to relocate the offices of the slaughterhouse and the sale of meat, and lastly, to monitor the burial system in all the city’s cemeteries?" This is but one example of the long list of complaints Caraqueños submitted daily to the newspapers. The complaints not only show the kind of sanitary problems that afflicted the valley city, but its citizens outspoken awareness of the environmental management responsibilities the authorities needed to assume in order to improve Caracas’ poor health conditions.

To add insult to injury, on February 5 1869, the lack of humidity in the air and the dry vegetation fueled the spread of a fire of unknown origin in El Ávila Mountain. Fires in El Ávila were worrisome for the people of Caracas who had always associated the mountain with the safety and relative prosperity of the city. La Opinión Nacional newspaper published a short but revealing account the ongoing fires:

Caracas mourns the horrible destruction of the mountains, which gift us with their pure springs, their cool breezes and their healthy emanations of oxygen—the perfume that Tropical Flora exhales in her sweet breath. Although we are

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68 “Estado sanitario de la ciudad,” El Federalista, November 16, 1868.
69 “Incendio en la montaña,” El Pensamiento Libre, February 18, 1869.
70 “Caracas,” Diccionario de historia de Venezuela.
told that we too often blow on the panic horn, allow us to sing a sad dirge on the ruins of the green mountains of El Ávila.\footnote{Ecos de Caracas,” La Opinión Nacional, March 3, 1869.}

This account exemplifies how under the utilitarian perspective towards nature that had become prevalent, in the wake of decimating epidemics of whooping cough, measles and worst of all cholera, facing similar threats and dealing with the authorities’ neglect, Caraqueños came to see El Ávila as the city’s supplier of the clean air and the clean waters that washed away the unhealthy miasmas of the poorly managed urban center.\footnote{Aristides Rojas and Eduardo Röhl, Humboldtianas (Caracas: Editorial Cecilio Acosta, 1942).}

The drought fueled fire of early 1869 was thus a problem of public health.\footnote{Yepez Colmenares, “Modernización, medicina, enfermedades y salud pública en la ciudad de Caracas,” Rojas and Röhl, Humboldtianas.}

Caracas’ scientific elite—assuming their newfound modern role—expressed their opinions regarding El Ávila and its importance for the urban center. Influenced still by Humboldt’s visit and informed of the desiccationist theories that had sparked utilitarian conservationist ideas in Europe, the scientific elite submitted several letters to the newspapers in which they judged the authorities on their systematic neglect towards the harmful phenomenon of desiccation.\footnote{Manuel V. Díaz, “Variedades del fuego y el agua,” Vargasia 4 (1868): 71-79; Lucena Giraldo, "El espejo roto." Humboldt visited Venezuela between 1799 and 1800, soon after independence he became the single most important reference for positive natural science in nascent Venezuela. For more on Humboldt in Venezuela and South America in relation to independence and nation building see part II of: Mary Louise Pratt, Imperial eyes. Travel Writing and Transculturation (New York: Routledge, 2003). For an interesting approach to Humboldt’s role in relation to Creole environmental science see: Gregory T. Cushman, "Humboldtian Science, Creole Meteorology, and the Discovery of Human-caused Climate Change in South America," Osiris 26 (2011): 16-44. For the Imperial Europe origin of desiccationist theories and conservationist ideas see: Richard H. Grove, Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860 (New York: Cambridge University Press, 1995).} Their letters ended in demands to the authorities:
increase policing, fining and prosecution. This shows the way that under Caracas’ modern view of nature, El Ávila and its waters became directly susceptible to humans and therefore in need of protection, which could be scientifically proven—albeit all for utilitarian reasons. In the same way, Caracas’ citizen’s response to the fires was yet again to demand the intervention of the seemingly incompetent authorities: “The immense pyre that lifts up to the clouds its red tongues of flame seems like a protest against the negligence of the authorities of Caracas, that in a few days have allowed for the destruction of many centuries of nature’s work.”

This set of responses exemplifies how much the modern way of understanding natural process and phenomena had become entrenched in Caracas’ elite citizens throughout the early republican era. By then Caraqueños no longer held the idea that nature was an unknowable divine mystery, nor was natural phenomena viewed as tools wielded by God to punish or reward according to the relative piety of the believer. Nature was knowable and controllable, yet at the same time these possibilities of knowledge and control were believed to be mediated by nature as a separate entity, with its own perceivable dynamics separate from human endeavor or morals. This paradoxical modern logic allowed them not only to claim nature as manageable when it was appropriate or useful to do so, but also to obscure the causality of natural hazards and disasters when in need by arguing that nature was, in the end, uncontrollable. This informed the sequence of responses and claims made between November 1868 and May 1869 by Caracas’ elites and authorities, as authorities found they could not positively control epidemics or public sanitation, El Ávila offered some healthful relief through its own natural mechanisms. Once the presumed human-set fires threatened the

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76 Latour, *We Have Never Been Modern*, 12.
mountain, romantically undoing “nature’s work,” the authorities had the responsibility to control the elements, put out the fires and find the culprits. Since they could not achieve this, it was again up to nature to bring the rain that would put out the conflagration.

It was almost certainly impossible for Caraqueño authorities to control such a widespread and long lasting fire during a drought and with the technology at hand. Yet the Secretary of Interior and Justice responded to the hazards early-on by demanding of the Presidency of the Bolívar State —where Caracas was situated—the attention that the fire required, and providing funding from the National Treasury to form a commission with the sole responsibility of controlling the fire.77 The authorities’ efforts were meager and sensibly ineffective, but they discursively responded to the ideological control over nature they endorsed.

By May 1869, the rain continued to delay its arrival and the fires were still burning atop El Ávila. But for Caraqueños, what had become even more worrisome than the fires themselves, was the perceptively reduced volume of the Catuche river: the city’s source of clean water. As the water shortage worsened, the political context also became increasingly critical. The recently established government of La Revolución Azul was facing a growing liberal opposition and armed uprisings in the interior. Both parties, Azules and Liberales, were clearly represented in the two most influential running newspapers of the time, El Federalista and La Opinión Nacional respectively.78 Nonetheless, the response to the water shortage hazard published in the newspapers was shared by both factions: the authorities

77 Secretaria de Interior y Justicia, Tomo DCCCIII Folio 24, Archivo General de la Nación, February 11, 1869; Adolfo Ernst et al. “Quema de nuestros montes,” El Federalista, February 12, 1869.
78 “Prensa,” Diccionario de historia de Venezuela.
needed to take charge of the water crisis and foster the modernization of the water supply system—as part of the wider entry into modernity for Caracas and Venezuela.

By the second half of the nineteenth-century the water supply system in Caracas had not undergone any significant renovation or expansion since 1675. As a result, water in the valley was as a rule costly and insufficient. In the 1850s Lawyer Pedro Núñez de Cáceres wrote this of Caracas’ waters in his memoirs:

The water in Caracas is fresh, thin and very good, but is scarce. This is because it is poorly managed and usually not enough for general consumption. . . . The pipes are clay pipes that break at every step causing numerous leakages and water spills. If the water was well managed it would be enough for the entire city. Those pipes are filled with a deposit of pestilential silt and this putrefaction is considered the cause of most diseases. . . . A family house needs four to six barrels of water for drinking, cooking and any other chores, and that if they are using it with economy and parsimony, because if they bathe, then the expense is much greater. Now, not counting the months when water is expensive, but putting them all to two barrels per 0.5 pesos, it is about 6 pesos a month, or 72 pesos a year. Reduce it to no more than 5 pesos per month, calculate the interest of money and you will see that it is necessary to have a capital of at least 500 pesos to provide water for a family, and not very clean, often filthy, and some months so limited that by lunch time they have not been able to get it.79

By 1869, the situation described by Núñez de Cáceres had only worsened. Caraqueños still depended on the colonial water supply that had become increasingly inadequate for the requirements of the recovering population.\textsuperscript{80}

By May the drought continued, the tensions between the Azul regime and the Liberales heightened and the water shortage reached its peak. Catuche had reduced to thirty percent of his normal volume.\textsuperscript{81} Public fountains were empty, calamities abounded, Caraqueños were restless. In this precarious context, Ricardo Becerra, editor of El Federalista and fierce defender of the Azul cause, was quick to publish on the front page a defense of the Azul Administrative Council of Caracas—which he recognized as responsible for resource management:

If the President of the Council could completely change our current weather conditions, nothing would be more correct than the criticism that is addressed to him because of the scarcity of water; but since that is impossible, all it had to be ascertained was whether such corporation has done or not everything possible to mitigate the adversity of nature. We claim that it has done so, it is a fact we can personally corroborate.\textsuperscript{82}

As it is often done (under the modern paradigm) when authorities are unable to redress natural hazards, Becerra in support of his favored Azul administration, blamed a higher entity for the resource crisis, in this case he blamed nature.\textsuperscript{83}

\textsuperscript{80} Carmen Clemente Travieso, \textit{Las esquinas de Caracas} (Caracas: El Nacional, 2007). By then Caracas’ population was 47,000 inhabitants, near the number it had before the Jueves Santo earthquake, War of Independence, and subsequent civil conflicts decimated by more than half.


\textsuperscript{82} Becerra, “Servicio Municipal.”

\textsuperscript{83} Latour, \textit{We Have Never Been Modern}, 32-35.
What the administrative Council had actually implemented “to mitigate the adversity of nature” was a series of palliative measures, such as temporarily suspending new licenses for in-house water supply and mending certain broken pipes. But more importantly, according to Becerra, the Council had “produced many preparatory materials for the important work of the iron ducting.” In mid May, the shortage aggravated and in an effort to guarantee more people got access to the scant liquid, the Council was forced to propose more radical measures that could deprive Caracas’ elite citizens of their privileged access to the resource. They received these proposals with outrage and argued the drought was transitory and not to blame for the scarcity; the issue was the archaic colonial piping system. What needed to be done, the elite claimed, was to implement the project for the new iron ducting. This was the strongpoint of the elite’s response during the water shortage and even more so afterwards.

The causes of the elite’s fixation on the need for a new ducting system are manifold. Firstly, not only did it divert attention from the more immediate responses that seemed to threaten some of their privileges, but the proposed project represented financial gain by cutting in half the cost of the yearly tax for in-house water supply. The project also contemplated the reduction of the cost of new licenses for landlords with several properties, who additionally, expressed the proposal, could transfer most of the cost to their tenants while increasing the value of the property. Also, the current stone and mortar pipes were indeed precarious: many of them were over 200 years old, cracks and leakages caused the loss of much of the water.

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84 Becerra, “Servicio Municipal.”
85 Ibid.
86 The social implication of this will be discussed in detail later on this paper.
scant liquid and sewer water often filtrated into the clean water ducts through the fissures.\textsuperscript{88} However, perhaps as importantly, replacing the archaic piping system represented one small first step towards the infrastructural break with Spanish colonialism. Caraqueño elites at this time of the republican era felt modern, yet they lived in a city practically frozen in the colonial past.\textsuperscript{89} Industrially produced and imported iron ducts were thus a glimpse of the longed-for modernity and progress in Caracas: “We cherish the founded hope that the day has come when the capital has the work it required for so long, not just by of an overriding communal need, but by civilization and the progress of science.”\textsuperscript{90} Caracas’ authorities and citizens wanted to definitively attain the modern control over its resources that they upheld discursively, especially during this tumultuous juncture when the idea of a liberal modern nation was the shared driving force of conflicting political interests.

\textbf{Water shortage, public fountains and the unified elite}

During the height of the water shortage the public fountains remained empty as private residences maintained their privileged access to the liquid. At the same time the elite’s profitable iron ducting project was set in motion, Caracas’ poor endured the short-term sacrifice that is often justified in the name of progress.\textsuperscript{91} Progress was what both the Azules and the Liberales—in short, Caracas’ elite—demanded for the valley city. However, the lack

\textsuperscript{88} Alegría, \textit{Apuntes documentales para la historia de la salud pública en Caracas.} “Salubridad Pública,” \textit{La Opinión Nacional}, November 24, 1868; Becerra, “Servicio Municipal.”

\textsuperscript{89} Straka, “La República fingida;” Scott, \textit{Seeing like a State}, 95. Here we can see one glimpse of Scott’s \textit{high modernism}: “[In high modernism ideology] the past is an impediment, a history that must be transcended; the present is the platform for launching plans for a better future.”

\textsuperscript{90} “La cuestión del agua,” \textit{La Opinión Nacional}, June 5, 1869.

\textsuperscript{91} Scott, \textit{Seeing like a State}, 95.
of order (political, administrative and social) had seemingly always been in the way of progress for early republican Venezuela.\(^92\) Thus, Caracas’ elite seized the shortage as an opportunity to proselytize, to call for order and to reinstate their privileged social stand. Authorities discussed measures to alleviate the unsafe conditions of the city poor during the drought, yet nothing was put in place. This suggests that what was at play during the 1869 drought was differential vulnerability, as the drought hazards, the rise in infectious diseases and the water shortage did not affect all of Caracas’ residents in the same way. For the elite it was an opportunity and an inconvenience, for the poor the drought was, indeed, a disaster.\(^93\)

Not long before the ENSO induced drought struck Caracas, in January 1868, Adolfo Ernst published in a local newspaper an article titled “The issue of clean water in London and Caracas.” In this article he compared the data published in the “Journal of Science” by the Clean Water Commission of London with his own data for Caracas and the Catuche River. The Clean Water Commission claimed that in London each inhabitant of the City received over eight cubic feet of water daily. Ernst’s own calculations established that each citizen of Caracas: “receives only two-thirds of one cubic feet of clean water. This is without any waste, but the usual loss is one third of a cubic foot, this means that daily we are reduced to receive the scant amount of a half cubic foot.”\(^94\) On the one hand, Ernst’s assertions make it clear that by 1868 the water supply in Caracas was as a rule insufficient, on the other, his undifferentiated calculations, as if everyone in the city had equal access to the scant half cubic foot, were misleading. Those Caraqueños who could afford the luxury of direct

\(^{93}\) Piers Blaikie, et al. \textit{At Risk: Natural Hazards, People’s Vulnerability, and Disasters} (London and New York: Routledge,1994); Garcia-Acosta, “Historical Disaster Research.”

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residential supply enjoyed easy continual access to the liquid.\textsuperscript{95} While those who could not afford this, laboriously collected what little they could from the public fountains.\textsuperscript{96}

In fact, most of Caracas residents’ could not afford such luxuries. In a city that had forty-seven thousand inhabitants, there were only approximately eight hundred licenses for direct in-house supply.\textsuperscript{97} This is because by the 1860s, republican Venezuela still maintained so much of its Spanish colonial social structures and urban infrastructure.\textsuperscript{98} Even as the colonial \textit{castas} system based on racial divisions and the privilege of the elite was officially eliminated, and republican authorities adopted the rhetoric of racial and social equality preached by enlightened liberalism and required by years of internal conflict, a socio-racial hierarchy was institutionalized in the polity of the republican state.\textsuperscript{99} As a result, Europeanized Criollos occupied the upper levels of society almost exclusively and enjoyed unparalleled privileges. By the middle of the nineteenth-century, Caracas’ elite, the \textit{vecinos} or \textit{ciudadanos respetables} (respectable neighbors or citizens), consisted of less than ten thousand people. Some were descendants of the colonial propertied \textit{mantuano} elite, others became wealthy through the socio-economic advancement offered by a military career in a period of constant armed conflict, some were part of the recently self-styled mercantile

\textsuperscript{95} Ricardo Becerra, “Servicio de Agua,” \textit{El Federalista}, June 3, 1869. Not only did homeowners needed to build the pipes at their own expense, but they also had to pay a licensing yearly tax of twelve pesos and fifty cents.
\textsuperscript{96} Arcila Farías, \textit{Historia de la ingeniería en Venezuela}. This is not an isolated case in postcolonial Latin America and often extends to the present day, for a similar process in Ecuador see: Erik Swyngedouw, \textit{Social Power and the Urbanization of Water: Flows of Power} (Oxford: Oxford University Press, 2004).
\textsuperscript{98} Skurski, "The Leader and the ‘people,’” Cunill Grau, \textit{Geografía del poblamiento venezolano del siglo XIX}.
bourgeoisie—mainly merchants, importers and exporters, resulting from the incipient insertion of the country into the international market after independence.100 A small middle stratum was engaged in small trade, specialized crafts, and low level bureaucracy.101 Whilst the mostly colored popular masses of Caracas—former slaves, _pardos_ (mulattos) and indigenous people, called _el público_ or _la población_ (the public or the population)— worked typically as occasional day laborers, house servants, doorkeepers, lottery sellers and street vendors of ice, bread, water, or pots and pans.102

The urban landscape of the valley reflected this hierarchical postcolonial organization and resulted in the uneven distribution of urban environmental vulnerability. The city center and neighboring colonial parishes were occupied by the elite’s homes, administrative buildings, churches and hospitals.103 Even within the overall deficient urban maintenance of 1860s Caracas, the area enjoyed flagstone streets, gas lighting and the biggest concentration of public fountains.104 The condition of the buildings and the city’s infrastructure deteriorated increasingly towards the periphery. After a series of slowly consolidating new neighborhoods around the city center occupied by modest houses, small peripheral slums followed. Here, in huts and shacks surrounded by dirt paths, garbage dumps, leather tanneries, slaughterhouses and unoccupied land, resided the city’s poor.105 Unsafe conditions abounded for the residents of Caracas’ outskirts, yet during the 1869 drought these already heightened conditions of

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101 Ibid.

102 Ibid.; Wright, _Café con leche_, 50.

103 Cunil Grau, _Geografía del poblamiento venezolano del siglo XIX_, 1655.

104 “REMITIDOS. Agua potable y enlosado de las calles,” _El Federalista_, March 16, 1868; Landaeta Rosales, “Caracas en 1869.”

105 Cunil Grau, _Geografía del poblamiento venezolano del siglo XIX_, 1655.
vulnerability increased: as the remote public fountains remained empty, they were forced to collect water directly from nearby highly polluted rivers and streams, such as the Guaire.\footnote{Secretaría General Sección de hacienda y fomento, “El Río Guaire,” \textit{El Registro oficial de Estado Bolívar}, April 3, 1869.}

By April 1869, the water volume of Catuche was so low that the Secretary of Bolivar state (where Caracas was situated) issued a statement to the Administrative Council prompting them to put in motion an emergency plan for supplying water for the people of Caracas who could no longer get the liquid from the depleted public fountains.\footnote{Ibid.} The plan essentially institutionalized the heightened conditions of vulnerability of the city’s poor by assigning a police officer at the headwaters of the Guaire to impede its further contamination so that it could be used as a supplementary source of water.\footnote{For a clear treatment of the workings of environmental risk and vulnerability see: Blaikie, et al. \textit{At Risk}.}

In the statement, the Secretary Don Pedro Naranjo, expressed his knowledge of the by then regular use of the Guaire for waste disposal and the danger that the consumption of its polluted water implied. The Guaire was the river where blackwaters, excess drainage from the irrigation of nearby plantations, refuse from the leather tanneries, waste from the harvest and processing of coffee and from the public slaughterhouse were disposed of. Naranjo claimed: “As a result of all of this, the population cannot use the waters of the Guaire in a safe manner and when driven by necessity they do so, they are at risk of disease and epidemics.”\footnote{Secretaría General Sección de hacienda y fomento, “El Río Guaire.”}

Along with the police guarding for improper disposal of hazardous waste at the headwaters of the river, he proposed a scheduling plan for the disposal of the kind that he considered appropriate, so that it would not be done at the time people could be collecting water. Thus, the plan called for the designation of specific places for the burying of the slaughterhouse disposal and it
required that irrigation and discarding of waste from sewers, tanneries and coffee plantations would be done during the night. The emergency plan reveals several aspects of the republican policy regarding environmental management. No clear regulations were actually in place for any kind of waste management issues, and if the legislation contemplated any they were not frequently enforced, which explains the constant complaints from Caracas’ citizens regarding poor urban sanitation. But more importantly, the plan clearly favored the elite, by guaranteeing that the little amount of water left in the Caja de Agua would reach the private fountains in their homes, whilst the public fountains remained empty and the poor would be collecting from the polluted Guaire.\textsuperscript{110} In the face of the hazard, Caracas’ authorities recognized the harmful environmental oversights systematically condoned in the city, which allied with the shifting postcolonial social structures to place the poor at risk, even as this was so contrary to the modern liberal rhetoric they endorsed.\textsuperscript{111}

Whether Naranjo’s emergency plan was ever set in motion is unclear. In any case, the water shortage only worsened during the following weeks. It was mid May when the city’s Administrative Council was forced to propose a more radical measure: suspending all licenses for private residential water supply and redirecting of all water incoming from Catuche to the public fountains.\textsuperscript{112} The proposal was intended to show that an effort was being made to guarantee some sort of equality in the distribution of the little water that was coming in from Catuche. Since the voices of Caracas’ thirsty poor are not reflected in the sources, one can only infer that, by then, they had not been getting enough water for long enough that the Council could no longer ignore it. Additionally, the municipal ordinances

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\textsuperscript{110} Ibid.
\textsuperscript{111} Noria, “El pensamiento sobre los terremotos en la sociedad venezolana durante el siglo XIX;” Skurski, "The Leader and the ‘People.’”
\textsuperscript{112} “Servicio de Agua,” \textit{El Federalista}, May 14, 1869.
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instructed the implementation of precisely this measure in case of such crisis. Francisco de P. Acosta (tellingly also the secretary of the Scientific Society) and Luis Padilla, the two members of the Comisión de aguas y montes (Forests and water committee) of the District Council who put forward the measure, expressed the need for the press to raise their voices “for that unfortunate people, living on a meager salary earned through harsh physical work, who wait until the night, carrying a barrel or a pot in search of some water, only not to find any available in the public fountains.”

The response was quite the opposite, Caracas’ elite rejected the measure in unison and the editors of the two major (and opposing) newspapers were the main voices of the outcry. Hazards and disasters often instigate social cohesion and at the same time segmentary conflict (following disaster scholars Anthony Oliver-Smith and Susanna Hoffman) and in this case, the shortage and the proposal of the emergency measure spurred the unity of the elite, regardless of their political alliances, and in direct antagonism with Caracas’ poor. In the euphemistic language of the self-fashioned liberal elite, La Opinión Nacional explained the problem as: “the delicate water distribution issue, where the interest of the respected individual and the needs of the public are at stake, but not in conflict, even though that is what they say.” One can only infer that “they” are, amongst others, the city poor who

113 “SERVICIO DE AGUA,” El Federalista, May 15, 1869. The seventh article of the “Aqueducts, public and private fountains regulation” of 1860 states: "If the scarcity of water, the poor state of the public water systems, or the proven abuse of the licenses made it necessary, in the opinion of the Council, to suspend this privilege, the private fountains that are most harmful to the public supply are the main ones to be suspended, and the beneficiaries will not be entitled to claim all or part of the paid tax for the semester in which it was agreed to be suspended."


116 “La cuestión del agua,” La Opinión Nacional, May 19, 1869.
likely expressed their awareness of the blatant episode of environmental inequality they were suffering. Becerra—as revealing as ever—published in El Federalista:

There are homes in Caracas with 3 and 4 fountains, and their inhabitants use this abundance for their flowers and gardens, for their hunting dogs and for the mules and horses of their stables. Whilst it [rain] does not fall from the sky, necessary is that these people only use [the available] water for drinking and cleaning. This is as far as the action of the Council should go, nothing more, it is unlawful and inconvenient.117

The reason for the outcry is clear in Becerra’s editorial: so far, those who had direct water supply to their homes had not been troubled by the shortage, some were even profiting by selling the leftover water from their private fountains at one or two cents a barrel.118 The proposed measure, the eradication of the privilege, leveled the vulnerability to the hazard. If the measure came into effect all of Caracas, rich and poor, would be equally dependent on the rain that would not come.

Aside from their case for the iron duct project, the reasoning that supported the elites’ outrage published in the newspapers was manifold. Their main argument was always one of acquired privilege, namely regarding the rights that the respectable neighbors of Caracas had gained by paying water taxes and by having built, at their own expense, the piping that carried the liquid to their homes. This was as important as “the necessities of the public,” claimed the anonymous editor of La Opinión Nacional, who was actually recalcitrant yellow Liberal and part of Caracas’ merchant bourgeoisie Fausto Teodoro de Aldrey.119 He argued

119 Ibid.; “Fausto Teodoro de Aldrey,” Diccionario de historia de Venezuela. de Aldrey was not only the owner of the printing press that published La Opinión Nacional, he was also the exclusive producer and vendor of ice cream in Caracas.
that even if the elites that enjoyed the service tolerated the measure, so that all incoming
water was directed to the public fountains, all Caraqueños would swarm to the limited
sixteen or twenty fountains and incontrollable brawls would take place: “It would rain down
punches and bruises! For some, blood would flow instead of water!” Furthermore, de
Aldrey claimed, it was not privilege but necessity that had driven the wealthy to build the
pipes and pay the taxes to get the liquid in their homes. Since there were not enough public
fountains they simply had to build their own. The editorial asserted, “No one pays for
something they can find for free and easily by the bucketful!” Nevertheless, the real issue
behind all this argument was that even during the drought the elite had been able to get water
easily and by the bucketful in their own yards and had no intention of changing this for the
needs of the population.

Climatology enthusiast engineer Agustin Aveledo’s data was used in de Aldrey’s
May 15 editorial, to give positive scientific rigidity to his claims. Aveledo had determined
that even as the volume of the Catuche had indeed decreased due to the drought, it still could
supply the approximately 50,000 people of Caracas with 20 liters of water each every day.
The 20 liters of water per person was not considered exactly abundant, but the editorial
claimed it should suffice while they waited for the rain. The editor proposed an alternative to
the Council’s measure: scheduling, or alternating the hours of supply between the public and
the private fountains so that “in the distribution of water a spirit of justice presides.” However, the authorities did not embrace the scheduling proposal and the outrage continued.
The Council met and it seemed they wanted to go forward with the measure. Adding to the

120 Acosta, “Untitled.”
121 Ibid.
122 Ibid.
petty grievances of Caracas’ elite was Water Committee member Francisco de P. Acosta’s defense of the measure. Acosta explained it as the only real immediate solution to the crisis. He argued that the waters of the Catuche had diminished to one third of their usual volume, that some people had abused the water license by selling the water out of their home fountains, and that the bylaw recommended and supported the measure in such circumstances. Editor of La Opinión Nacional, de Aldrey was quick to argue in response: Acosta’s claims were unfounded. The Catuche had enough water according to Aveledo, it was senseless to punish all the water license holders for the wrongdoings of a few, and the bylaw was simply wrong in this particular instance: “The Council should ponder these reasons and the ones presented earlier. Ponder them well, before putting in effect an inconvenient measure.”

On May 21 a poem, simply titled Agua (Water) signed under the pseudonym K-Listo appeared on El Federalista’s pages. In the poem a young girl asked her mother why, in a land widely considered beautiful and abundant, people had to endure such thirst. She asked why the poor had to return home after a long day of work to sadly realize that their families did not have enough water. The mother responded to the girl:

In the infallible lips
of some very wise men
different phrases I heard:
one claims out loud:
"the summer” and others note:

123 “La cuestión del agua,” La Opinión Nacional, May 19, 1869.
124 Ibid.
"that the rich waste the water

that the poor needs"

My daughter, they deceive themselves.

Listen to my words…

is not the heat of summer,

it is not disdain for the poor,

is not that the rich have to spare

that for which his brother begs:

It is only the storm of war,

the wastage blood

that is the cause of the hex

that the earth is suffering from.\footnote{K-listo, “Agua.” Emphasis in the original, also note that the metric and verse were lost in the translation.}

The poem claimed that what caused the water shortage was not the drought, nor was it an issue of unequal access to the water, the origin ultimately was the political unrest of their time. K-Listo’s metaphorical argument was manifold. First, it acquitted nature (the drought was not responsible for the shortage) in order to place blame on human actions. Second, it discredited unequal access as the core reason for the crisis, reiterating that the measure to redistribute all the water to public fountains was futile—since it was inconvenient for the elite. Third, and constantly throughout the poem, K-Listo blamed the lack or order, the conflict and the political unrest for the shortage: “girl, there will be thirst for water, whilst there is still a thirst for peace.”\footnote{K-listo, “Agua.”} The accusation was dual, the main cause of the crisis was
the ongoing armed conflict prompted by the Liberales, and the secondary cause was the overall disorderly state of the past. This, in turn, fulfilled two tasks: it used the ongoing resource crisis to make a call for appeasement and order in a moment when the uprisings menaced war (especially in the neighboring Aragua state) and the Liberales seemed ahead in the struggle; and it absolved the Azul administration of any responsibility, since the crisis was not only caused by the insubordination of the Liberales, but the conflicts and instability of the past, thus beyond their control.\textsuperscript{128} They could only take responsibility for the future, given that order cleared the path for progress. In short, order and progress were the discursive premises of the elite’s modern response towards a natural hazard, and worked as a way to reinstate their environmental domination.

It seems that the scheduling proposal, the multiple back and forth discussions between the respectable citizens and the Water committee and even the poem worked as a scheme to stall any—either privilege disrupting or vulnerability leveling—emergency responses. At the same time, the authorities seemed able to pay ideological lip service to the control over the nation’s resources and the prompts of liberal equality. At least this is the way the crisis seems to have worked out, as the Council never put any emergency measure in action and, in effect, the elite were never inconvenienced and even managed to propel into action the iron duct project they claimed was the best response to the crisis (the modern control over nature). As it was prescribed by 1860s Venezuela’s modern—and paradoxical—republican approach to natural hazards and in compliance with the still rearranging

\textsuperscript{128} “Gobierno de los Azules,” Diccionario de historia de Venezuela; Fausto Teodoro de Aldrey and Rafael Hernández Gutiérrez, Rasgos biográficos para la vida pública del General Guzmán Blanco (Caracas: La Opinión Nacional, 1876).
postcolonial power structures the actual resolution of the water shortage crisis was up to nature.¹²⁹

Indeed, as the elite complained, used the drought as a political tool, focused on future plans for modernization, reestablished their environmental privileges and even profited, the ending of the disaster for the vulnerable poor had always rested on waiting for it to rain in the valley.¹³⁰ Luckily for Caracas’ poor, on May 22 it rained:

Today at one thirty, during the day, it started raining in the capital. Although it was of little intensity, we could still hear some thunders. Smoke continues to disappear, the atmosphere is clear, the blue of the sky can be seen everywhere, and clouds are shifting and shaking in all directions. May God allow for it to continue raining even harder and for many days so that the calamities of this drought that afflict the Venezuelan people may cease!¹³¹

As the worst seemed to be almost over for the valley city, Caracas’ citizens summoned God, as an interchangeable higher entity with nature, to further the resolution of the crisis.¹³² Pleading to God was the biggest concession Caracas’ modern elites were willing to make for the resolution of the poor’s disaster. Caraqueño elites shared belief in nature as its own entity, pliable, controllable and responsibility of the shaky republican state, inspired by their desire for a modern and liberal Venezuela, either Azul or Liberal Amarilla, could easily be distorted in the interest of inventing new postcolonial structures of inequality.

¹²⁹ Rogelio Altez, "Ciclos y sistemas versus procesos: Aportes para una discusión con el enfoque funcionalista sobre el riesgo," Desacatos 30 (2009): 111-128. For the paradoxes of the moderns see: Latour, We Have Never Been Modern, 30-32.
¹³⁰ “La cuestión del agua,” La Opinión Nacional, May 21, 1869.
¹³² For an interesting discussion of the role of God in the modern paradigm regarding the nature/culture dichotomy see: Latour, We Have Never Been Modern, 32-35.
Conclusion

In June 1869, just a few weeks after the long waited rainy season began, the Administrative Council approved the founding of a Public Limited Company for the construction of the new iron duct system that would collect water from Catuche and another stream called Coticita. The larger shareholders of the company were mostly Azul bureaucrats, ministers and generals. In the following months, the planning, budgeting and selling of shares for the iron ducting company continued as the political conflict intensified. In April 1870 the Liberales, lead by Antonio Guzmán Blanco, organized a coup that officially overthrew the Azul regime. Many Azul supporters and officials were force into exile and the iron-ducting project halted indefinitely. Yet, the need for a modern Caracas and Venezuela, which was precisely the driving force behind the project, became the main platform of Guzmán Blanco’s almost twenty years long autocracy (1870-1888).

In precise accordance with the wishes and beliefs of Caracas’ elite (of which he was an exemplary representative), Guzmán Blanco urged for an appearance of modernity in the capital, which, along with some troubling eugenicist plans, he thought could foster Venezuela’s authorities and elites longed-for progress. In this sense, urbanity and urbanization were posed as the only way to attract foreign investors and further the country’s admittance into the international market.133 As a result, squares, avenues, boulevards, theaters, museums and even palaces were built in the city and Caracas was turned into what travelers dubbed “a sort of one-story Paris.”134 New trees were planted in the city squares and

133 Straka, “La República fingida.”
streets, rendering the healthy breeze of El Ávila no longer a necessity; the mountain became a mere perk and a leisure location for the elite.\(^{135}\) Also as part of this plan for visible works of urban modernization in Caracas, a new aqueduct system that collected water from the Macarao River started operations in October 28 1873.\(^{136}\) The water supply system continued to be slowly improved in the following years, yet it remained insufficient, irregular and costly. By 1890, Caracas had over thirteen thousand homes and less than three thousand had running water.\(^{137}\) The apparent cleanliness of the city was part of Guzmán Blanco’s urban renewal plans, but urban hygiene and public health, although slightly improved during the Guzmanato, were still neglected well into the twentieth-century.\(^{138}\) It was in the 1910s when Caraqueño authorities started paying real attention to these issues, as mostly water-borne diseases along with tuberculosis were found to be the causes of Caracas’ alarmingly high mortality rates and continuous epidemic outbreaks. In 1911 the Oficina de Sanidad Nacional (Bureau of National Health) was created and in 1919 started the works for a sewerage network for Caracas.\(^{139}\) Catuche, like many other tributaries of the Guaire, became part of this waste disposal network.\(^{140}\)

It seems that many pieces of the ongoing processes of ideological and social rearrangement that the 1869 drought hazard spurred in Caracas started to fall into place during the Guzmanato. As the discourse of modernization intensified and economic and

\(^{135}\) Cunill Grau, *Geografía del poblamiento venezolano en el siglo XIX.*

\(^{136}\) Alegría, *Apuntes documentales para la historia de la salud pública en Caracas.*


\(^{138}\) Ibid.


administrative centralization in Caracas became an important part of the political agenda, the city underwent unprecedented renewal. Yet, at the same time, many of the issues and perils of urban dwelling were only aggravated, whilst the focus on public adornment and the quest for an appearance of order and modernity continued to shove aside the needs of the more vulnerable sectors of the population. Nonetheless, Caracas’ landscape and Caraqueños’ relationship with it were deeply transformed after the Guzmanato and even more so in the twentieth-century. The environment and natural phenomena, the valley of Caracas, Catuche, Coticita, Macarao, El Ávila, fire and rain, played key roles in these processes. An important part of these transformations, however, required the obfuscation of this role in the rhetoric of authorities and elites.

As a result, new specific socio-environmental relations arose after 1870 and continued to be transformed into the twentieth-century in the name of modernizing Caracas. Although outside the particulars of this work, certain qualities of the socio-environmental relations invented and implemented in the 1860s did continue, reproduced and transformed with time. This is especially evident in the heightened vulnerability that Caracas’ poor endures to this day. Nowadays, shanty towns accumulate in the margins of Catuche—as in so many streams and rivers that came to be part of Caracas’ sewer system—yet the pollution is so great that almost every rainy season garbage dams cause flash floods and debris flows that knock down the improvised homes. Caracas poor are forced to live at risk of displacement.

homelessness, disease and death. The reason for this is that Caraqueños’ awareness of nature is always fragmentary and mediated by political discourse and alliances that more often than not favor certain groups over others. This environmental awareness manifests almost exclusively when disasters and hazards turn nature into the center of most Caraqueños’ concerns. Then, nature can be seen as part of contingent political and social meanings and practices, only to be put aside as soon as the crisis passes. Accordingly, the connection between Caracas and its environment is often imperceptible and the heightened vulnerability of some groups hidden. The study of disasters and hazards such as that of 1869 helps us bring this to light.
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