A CASE STUDY IN HYDROLOGY AND CULTURAL IDENTITY: 2,500 YEARS OF LANDSCAPE-MAKING IN MENDOZA, ARGENTINA

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1 ABSTRACT
Through an analysis of the Parque General San Martin in Mendoza, Argentina, this paper examines the work of 19th century landscape designer Carlos Thays alongside the material contributions of the indigenous Huarpes people to consider the discipline of landscape architecture as part of a long line of landscape practice in the challenging environment of western Argentina. Mendoza, Argentina is a modern city of nearly one million inhabitants situated on the border between the great agricultural plains of Argentina and the desert foothills of the Andes Mountains. Historically it has been a frontier settlement of utmost strategic importance, existing variously at the southern edge of the Incan Empire, the eastern edge of colonial Chile, and now the western border of Argentina. In addition to its location at the political and geographic margins, it leads a perilous existence at the edge of environmental sustainability- the region receives less than seven inches of rainfall a year, is located in a highly active seismic zone, and is susceptible to flash flood events. In the late 19th century a large public was projected on Mendoza’s western edge. Parque San Martin was intended to mediate environmental extremes for the growing urban population and offer a new form of public cultural expression. In this context landscape architecture developed to mediate challenging environmental conditions and help form and reflect shifting cultural identities. This paper presents this landscape as both an early example of modern landscape design in western Argentina and as part of a long lineage of cultural landscape transformation intimately bound up with hydrological manipulation and shifting cultural values.

1.1 Keywords
urbanism, indigenous landscape, hydrology, cultural landscape, Argentina

2 INTRODUCTION
On the western edge of the city of Mendoza, Argentina there is a large park whose origins date to the late 19th century. In the park a sinuous lake and verdant forests and lawns combine with tennis courts, soccer fields and cultural monuments, all set against the sheer wall of the Andean Cordillera rising just to the west. From the interior of this landscape a visitor can see the great, jagged heights of the mountains and sense the expanse of the arid semi-desert that surrounds the city in all other directions. While dramatic, from inside Parque General San Martin these feel far enough removed to impress without overwhelming.

In this paper I explore a simple hypothesis: that the Parque General San Martin, and the modern practice of landscape architecture in this place, is part of a long, complex history of landscape-making in the American borderlands that mediates exaggerated and difficult environmental conditions while also actively forming cultural values amid shifting political alliances. My methods include historical and theoretical research in Spanish and English in landscape architecture and related fields, including planning, archaeology and anthropology, as well as site visits and discussions with current administrators. By decentering the European tradition of park-making and considering the landscape in a broader cultural and ethnographic context, I reveal the role of hydrology and landscape design in shaping cultural identity and position the Parque General San Martin in Mendoza, Argentina as a project that figures indigenous intellectual and material contributions alongside those of colonial and post-colonial societies, and the ideas imported from Europe.

2.1 Historical Context
For over five hundred years the city of Mendoza has been a frontier settlement of utmost strategic importance. This history extends beyond the modern, republican, and colonial periods back to the Huarpes society of the 15th century. Before Spanish contact the area existed at the southern limit of the Incan Empire and was inhabited by the Huarpes (Michieli, 1983). The Huarpes constructed
a sophisticated network of irrigation canals enabling agricultural production and habitation in an arid, seismically active environment subject to flash floods and far from traditional centers of power (Echagüe, 1945; Michieli, 1983). Later, in the colonial period, travelers and soldiers moving through the Southern Cone of South America between the capital of Santiago and the port city of Buenos Aires would stop in Mendoza to rest and resupply right after, or just before, beginning the difficult journey over the Andes Mountains through the Libertadores Pass, located at ten thousand feet above sea level (Gobierno de Chile).

Mendoza is situated on the border of two of the major geographic regions of South America. To the east lie the great Argentine plains, known as the pampas, which stretch over seven hundred miles to the Atlantic edge of the country and become progressively more humid. To the west are the Andes, the South American portion of what geologists know as the American Cordillera, the mountainous spine running throughout the Western portion of North and South America. The Argentine historian Juan Pablo Echagüe described the province of Mendoza as a dry and rugged land tucked roughly against the highest portion of the Andean Cordillera. Seventy miles to the west of the city is Aconcagua, at 22,841 feet the highest peak in the Americas (Peakware). The difficult crossing here is mandated by its position directly between Buenos Aires and Santiago and the presence of the Libertadores Pass; if one drew a straight line between the capitals of Santiago and Buenos Aires, Mendoza would be on it. It is here where the great Inca Road network reached its southeastern limit (Hardoy, 1968), here where General San Martin’s Ejército de Los Andes (Army of the Andes) began its journey through the Libertadores Pass and into Chile as part of the South American War of Independence (Ponte, 1987), and here where the great railroads of the Argentinean agricultural heartland had their terminus during the post-colonial, republican period (Mignone, 2012). And today it serves as the critical land link between Chile and the MERCOSUR trading block (similar to NAFTA); annually over one and half million people and four million metric tons of cargo move through the Libertadores Pass (CIE, 2014).

### 2.2 The Edges of Feasibility

Mendoza typically receives a little under eight inches of rainfall per year, about half of what the parched city of Los Angeles, California enjoys (NOAA). Like many Andean cities, Mendoza relies on melting snows and glaciers carried by fluctuating and temperamental rivers for much of its water. Infrequent floods produced by the breaking of ice dams deep in the Andes have historically been the cause of massive flooding on the Mendoza River, and occasional rain events in the region produce more frequent and smaller events (Ponte, 1987). The climate is arid like many places throughout the American Cordillera. However, when irrigated the soils are incredibly productive and Mendoza has long been home to agricultural societies (Michieli, 1983). This region is not marked by scarcity but rather by a complex, syncopated interplay between scarcity and excess (Figure 1). Living here requires the construction of a landscape that both “speeds up and slows down processes of nature” (Jackson, 1984).

The alliance between the city and its river is a powerful and delicate one. Describing this relationship Echagüe (1938) informs us that:

> Without a doubt, the area would be a wasteland without its always timid and always ferocious rivers... Wherever there is irrigation, the land produces a magnificent bounty. The Mendocino, therefore, loves their river, even though at times they fear it... Truly! How sweetly the domesticated waters of the ditches and irrigation canals murmur. To them the Mendocino owes the sweet-smelling marvel of the gardens, yards, and vineyards and all the places that generate life in the whole province; that is, work, industry, economy, customs, well-being, domestic life, and public life in the province are all conditioned by the desires of the crops and the demands of the water system. (p.17)

In this passage Echagüe develops an interesting strand. He suggests the idea that this situation demands more than mere cultural response or adaptation. Instead, together with the desires and expectations of its inhabitants it seems to conjure forth culture- political life, domestic habits, processes of production, labor and consumption are all generated from the rhythms of the regional hydrological systems, and the need to modulate its extremes. The regional landscape of Mendoza throws into relief the fact that landscapes are historically produced rather than simply offering a background or screen upon which culture and society are projected, or the raw material from which they are carved. This sentiment is something between the environmental determinism of Frederick Jackson Turner and the idea that universal knowledge and practices must be adapted and applied locally as a “hybrid or pale copy” (Raj, 2007). This third way suggests an
alternative framework for conceiving of landscapes, one that “cannot be confused either with the causal chain of ‘historical’ events, or with a sequence... of customs and law, ideals and ideology, and socio-economic structures or institutions” (Lefebvre, 1991).

Cultural landscape theorists such as Setha Low have shown that these places are best understood as syncretic products (Low, 2000). In the case of Mendoza, the landscape both results from and creates the asymmetrical and dynamic relationships of exchange, conflict, and collaboration between local elites, distant cultural powers, quotidian concerns of everyday people through time, as well the material demands of local hydrological systems, soils, and vegetation.

2.2 Life on the Political Margins

The Huarpes people and their progenitors were an agricultural society that had inhabited and irrigated the valley of Mendoza for over 2,500 years (Michieli, 1983). Estimates put their population at about 20,000 (Pyle, 1976) in the 16th century when they were encountered by Spanish settlers, a number that would quickly fall to 2,500 through forced deportations to work camps in Chile. Historian Fernando Morales Guinazu (1938) noted that “when Francisco de Villagra in 1552 and Pedro de Castillo in 1561 arrived in the Valley of Huentota, they encountered a region irrigated by three canals diverted from the Cuyo River (today Mendoza), that according to tradition had been laid out by the Incan engineers, who had improved the rudimentary cultivation systems of the Huarpes. Those canals carried the names of the three principal chiefs of the region.” This evidence suggests that the process of linking landscape construction with local political life, which Echagüe (1945) identified in 1945, was not specific to any one era but instead stretched back at least two millennia. Through naming, the Huarpes practiced a tradition of symbolically uniting the hydraulic infrastructure with local political leaders, suggesting a process of synthetic cultural production (Michieli, 1983).
The conclusion that the canals were an Incan import is often drawn because the Inca came from a long tradition of hydraulic engineers, and archaeological and ethnographic evidence suggest that Mendoza served as an outpost to the Incan Empire as it was located on the southeast frontier of the empire and connected by the Inca highway network. However, the Argentinean archaeologist Catalina Michieli shows that this history was more intricate and subtle than the typical story of technological innovation being implanted by a distant colonizing power:

*It is possible that the Incan culture had exercised its influence in the construction of the irrigation works, but in no way should they be understood as solely and uniquely derived from and developed by the colonizers, as on one hand the historical-cultural progenitors of the Huarpes had utilized artificial irrigation for at least 2500 years, and on another the ditches and fields in the area that pertained to the Inca were already abandoned by the time the Spanish arrived to the valley.* (Michieli, 1983, p.23).

The reference to an Incan settlement that was exterior to established centers of power suggests that Mendoza was something like a *tambo*, a construction along the Inca Road that occurred at regular intervals. Here the chusquis, or runners who carried information, could stop and rest and soldiers would occasionally pass through to ensure that tributes from the local elites were properly accounted for (Protzen, 2006). This archaeological interpretation suggests that rather than wholesale importation, the irrigation network resulted from a more syncretic process in which foreign ideas and techniques that coincided with already-established technologies and beliefs were understood and then recreated in ways that satisfied local elites.

Combined with the symbolic relationship between the hydraulic infrastructure and the local politicians, this process is revealed to be an early example of a common phenomenon: the adoption and simultaneous renovation of a foreign technology considered to be innovative and prestigious by local elites. This schematic reinforces calls for a reconstruction of earlier narratives of European contact and settlement in the area currently issuing from post-colonial studies (Chanady, 1994). Huarpes society was traditionally understood to be a static, ahistorical group and Europeans are then both blamed and attributed with touching off the dynamism, destruction, and importation of modern technologies and ideas (the Laws of the Indies offer a primary example) that has marked the Americas for the last five hundred years (Emerson, 2010). However, rather than a difference in *kind* in which something fundamentally new was occurring, the history of Mendoza suggests that the encounters after 1492 created a difference in *degree*. Dynamics of cultural violence, exchange, and growth that had been operative in the Americas for thousands of years began to undergo a *scalar jump*, rapidly expanding the rate at which technology, ideas, and wealth were being exchanged, and increasing the amount of violence and landscape change that was occurring.

### 2.3 From Chilean to Argentinean Borderland

The City of Mendoza was established in 1561 as part of Chile, which was at the time a General Captaincy of the Viceroyalty of Peru. When Pedro de Castillo founded the City of Mendoza from Santiago in 1561, his band was given the land along the largest canal that was unused and considered undesirable by the Huarpes because it sat at a low point and was subject to floods and enjoyed less air circulation (Ponte, 1987, p.25). The founding acts of the city make no mention of the pre-existing hydraulic infrastructure or other constructed topographic features of the valley (Ponte, 1987, p.25). Historian Jorge Ricardo Ponte notes that this "was not merely an omission, but rather was indicative of the cultural attitude of the colonizers. The hydraulic system of the Huarpes, which predated the arrival of the conquistadors, was an expression of the indigenous culture, whose omission in the founding acts of the city can be attributed to the fact that the European worldview discounted the cultural production of indigenous Americans." (Ponte, 1987, p.25).

For the next two hundred and seventeen years the small settlement served as an eastern outpost of the Chilean government (Arana, 1902). The colonial city remained almost completely within the original footprint. The western border of the settlement was formed by the *Paseo Publico*, a main street built alongside the Tajamar Canal. To the west of the *Paseo Publico* were agricultural fields. This spatial organization served to help buffer the city from diluvial floods and dusty winds coming off the cordillera further to the west. The town was difficult to manage, being cut off from the Pacific-oriented nerve centers in Santiago and Lima by the difficult Andes Mountains. Yet it remained an important settlement serving as a strategic logistics platform where travelers and soldiers could rest and refuel. It was of utmost importance in the efforts of the colonial Chilean government to maintain a presence in northern Patagonia, which
at that time remained a contested territory largely beyond colonial control.

In 1776 all of that changed with the creation of the Viceroyalty of La Plata, with Buenos Aires as its capital (Arana, 1902). While commerce and cultural exchange between Buenos Aires and Santiago had long flowed through Mendoza, suddenly the city was an Andean outpost to an agricultural export economy based on the Atlantic seaboard. During this period population growth began to outstrip the existing urban footprint and the city expanded to the north and the south along the pre-existing canals (Ponte, 1987, p.166). These canals would become particularly important in the social life of the city. In 1858 the traveler León Palliére estimated the population of the city to be between ten and fourteen thousand, and noted that “a large, long avenue of poplars which are very tall and quite old form a veritable wall of green between the mountains and the city.” (Ponte, 1987, p.164)

This tree-lined avenue on the Tajamar canal, now known as the Alameda, formed the primary social space of the city. Earlier in 1825 the Scottish mining engineer Francis Bond Head had described an incredible scene at length:

As soon as the sun rises the Alameda fills with people, and it takes on a singular and interesting aspect. The men sit around tables and smoke and eat sweets; the women sit on the adobe benches on each side of the walk. It is hard to believe, but when the Alameda is absolutely full of people, women of all ages come out without a single stitch of clothing on and bathe themselves in the canal that delineates either side of the Alameda... of all the scenes I’ve seen in my life, I’ve never seen anything to match that... the walkways are illuminated in a very simple way with star-shaped paper lanterns lit with a small candle. There’s usually a band playing, and at the end of the walk there is a small pavilion of adobe... (Ponte, 1987, p.127)

Through the coupling of three linear landscape types- the street, the allée, and the canal- the Paseo Publico, or Alameda, functioned as both defensive and domestic infrastructure on the western edge of the city (Ponte, 1987, p.164), (See Figures 2 and 3). It protected the population from floodwaters coming down off the hills to the west, and helped to filter the dusty dry air coming from the same direction. Additionally, it acted as an armature of social life, offering an elongated stage that was one of the primary social spaces in the everyday life of the city.

Figure 2. Mendoza in 1846. (J.M. Gutierrez, 1846)
Urban historian Jorge Ricardo Ponte (1987, p.240) noted that the conversion of the Paseo Public to the now-tree-line Alameda landscape (Figure 3) was the local instance of the general tendency in South America to create promenades with alleés of trees, a trend that was started by Carlos III in 1768 with the Paseo del Prado in Madrid. This seems to be a simple case of the importation and local materialization of a European ideal. Yet the Tajamar canal, originally constructed by the Huarpes, was a unique and critical element of this landscape, both creating the conditions for the verdant poplars to flourish in the otherwise xeric conditions as well as enabling the bathing rituals to take place which so astonished visitors and gave the scene much of its life. In addition, its location at the western edge of the city allowed the poplars to serve as a filter, mediating the effects of the dry, dusty winds from the west and creating a dramatic juxtaposition. From this landscape one could see the town spreading to the east along this spine, and to the west the great mountains of the Andes loomed. These facts, as well as the scene described by Head suggests that this landscape was not merely a local example of a universal ideal, but the syncretic result of a historical process that both enabled habitation in this difficult environment, and gave expression to newly forming cultural attitudes.

3 PARQUE GENERAL SAN MARTIN

In 1861 the city was leveled by an earthquake (Romano, 2010). The difficulty in rebuilding amongst the ruins combined with the fact that the original site offered to the colonists by the Huarpes had been the least desirable, due to its being lower and more prone to flooding, led Mendocinos to rebuild the city from scratch in an adjacent area just to the west of the Alameda. During the rebuilding process provisions were made for additional plazas within the urban grid. However, as the population continued to grow in subsequent decades new pressures were exerted on the hydrological infrastructure of the city—contamination of the drinking water from using the canals as both water source and domestic sewer intensified to the point that yellow fever and diphtheria became endemic among the population (Ponte, 1999). In addition, the air quality in the city continued to be an issue due to the dust from the streets and surrounding desert (Ponte, 1999).

As in many growing cities throughout the Americas at this time, these issues gave rise to a new public health and sanitation imperative (Ponte, 1999). As part of this, in 1896 the Provincial Governor and his Treasury Minister, Emilio Civit, made a list of recommendations to guide the future growth of the city (Ponte, 1987). Two points in particular stand out; Mendoza was to 1) begin a forestation project to the west of the city that would (ostensibly) clean and humidify the air coming from the west, and 2) extend plumbing service for potable water throughout the city, allowing drinking water to be taken upstream from the city itself. The form this was influenced by the aspirations of local and national elites, the influential urban design concepts emanating from Europe (especially France), and the existing hydraulic infrastructure of the city (Ponte, 1987, p.278).
In the same year as Civit made his recommendations, a law was passed for the purchase of 813 acres to the west of Mendoza (Ponte, 1987, 291). The land was to become a municipal park and real estate venture, as provision was made for eighty lots around its edges (Figure 4).
4) (Ponte, 1987, p.296). The original designer for the park, contracted in 1896, was Carlos Thays (Ponte, 1987, p.297). Thays was a French landscape designer who worked for Jean-Charles Alphand in Paris. In 1889 he came to Argentina to work on a new public park for the city of Cordoba. He soon settled in Buenos Aires and in 1891 he was named the Director of Parks and Promenades for the capital city (Berjman, 1998). Carlos Thays was part of a cadre of second-generation French paysagistes, including Jean Claude Nicholas Forestier in Buenos Aires, and Havanna and Edouard André in Montevideo, that fanned out across South America in the late 19th century, working in the burgeoning capitals of the young republics of the continent (Berjman, 1998). At the behest of local and provincial elites Thays was contracted to create the design for the park (Ponte, 1987, p.296) as well as the adjacent grounds of the penitentiary and military barracks, as shown in my analysis of the original plan (similar to Figure 4). The plan was inspired in part by the popular French style, with sinuous pathways spiraling out from a central lake. The lake was to act as recreational space for regattas and strolling, as well as a reservoir for the irrigation of the botanic garden located near the entrance. The entire park was to be densely vegetated and heavily forested, with rolling lawns between bosques of trees, and the straight axis of the Avenue de los Andes lined with an allée of trees and pointing directly west toward the Andes Mountains. However, this was something completely different from an exaggeration and domestication of existing vegetation, geologic features, or hydrologic processes, such as was created in New York City’s Central Park. It was an oasis in the middle of the desert! And yet like those great landscapes it was to be the cultivation of radical aesthetic and performative juxtapositions at the scale of a major urban landscape. The park was intended as the manifestation of the aspirations of local and national elites, as evidenced by their choice of designer and the programming of the forestation project as a new public park. While they attempted to provocate widespread support for the park by employing narratives from the public health and sanitation discourse of the day, there was resistance to such an exorbitant and ostentatious undertaking. The tone of local papers at the time preserved dissenting opinions as to the construction and design of the park, calling it the “aristocratic landscape par excellence” (Ponte, 1987, p.295).

3.1 Borderlands of Intentionality: From Botanic Garden to Productive Landscape

In this design there was no pretense of it being anything natural. Similar to Central Park in New York City, the verdant landscape would offer a stark aesthetic juxtaposition relative to its surroundings, in this case contrasting both the city to the east, and the desert and jagged mountains to the west. It would be the great gathering space in the city, offering a wide range of sensuous pleasures, edifying experiences, and social interactions. And yet an analysis of the project plan (see Figure 4) reveals its situation to the west of the city, with an elongated form and north-south orientation. These facts suggests that, following the recommendations of Civit, it was also intended to function as a buffer or screen against the dry, dusty winds and stormwater floods from the west (Ponte, 1987, p.295). Even as it materialized aspirational and ostentatious desires of local politicians, the park was an outgrowth of the existing hydraulic infrastructure, functioning as a larger, thickened version of the earlier Alameda. The park was an apparatus, “having a concrete strategic function and always being located in power relations,” (Agamben, 2009) but one that was complex and contradictory. In this case the landscape design was not reduced to either cultural meaning and expression or hydraulic infrastructure. Rather, the Parque San Martin project exhibited a both/and capacity, drawing from the ability of landscape to negotiate multiple competing agendas simultaneously.

As the park slowly took shape in subsequent years a number of major adjustments and reconceptualizations occurred; the real estate venture was redrawn from a perimeter band encircling the Parque San Martin (then named the Parque del Oeste) to a cluster of development on the southern end of the parcel (Ponte, 1987, p.431). This was perhaps because at the time the urban street grid still didn’t extend to the south and so there was little immediate benefit from having a forested area to protect that tract. In addition to many programmatic changes such as concessions to local sports teams or the construction of tennis courts intended to provide for active recreation, in the twentieth century the park more than doubled in size through westward expansion in order to include the Monument to the Army of the Andes, and through the relocation of the barracks and penitentiary (Parque General San Martin). The former presence of the barracks, and the later construction of the monument, are a result of the military legacy of Mendoza- this is the place where
General San Martin trained his army and marched over the Andes to kick the Spanish out Chile and free the Southern Cone from Spanish imperial domination. In the place of the barracks and prison, a tree nursery now exists as part of the park. This tree nursery is especially interesting for understanding the transformation of the park over time, and its role in forming and expressing Mendocino culture.

The original Thays Plan from 1896 (similar to Figure 4) indicated that a large botanic garden was to be constructed at the main entrance of the park, nearest to downtown Mendoza. In Buenos Aires, Thays would eventually design the first public botanic garden that would feature indigenous plants from around Argentina (Thays, 1910), a result of his plant collecting and documentation on trips throughout the country that would anticipate the efforts of Roberto Burle Marx half a century later.

The botanic garden in Mendoza was to be a semi-circle organized with radial pathways that centered on the main administrative building for the park. Interestingly, a plan drawn in 1911 exhibits the same pathway geometry but there is no administrative building and the area is labeled “tree nursery.” My discussions with current administrators and park designers in 2012 confirmed what these plans suggested that a tree nursery had been established in order to acclimate and propagate plant material for the reforestation project in the park. Drawing on the agricultural knowledge of residents, a decision was made to do away with the landscape dedicated to ornament and exhibition in favor of the pragmatic and productive enterprise. More surprising, its situation by the main entry suggests it was more than the result of practical considerations. Perhaps it was also a celebration of the labor and knowledge employed in the great undertaking: the continued cultivation and enlargement of a desert oasis at the foot of the Andes.

Figure 5. Plan of Parque del Oeste in 1911; Plan Has Been Reoriented to Maintain Consistency with Previous Plans. (Ortega, 1911)
4 CONCLUSION

In the early years of Park General San Martín the low precipitation and temperature extremes of the Andean semi-desert, combined with the fact that the scale of the project was beyond anything that the commercial nursery industry in the city could support necessitated the creation of a new institution: the park tree nursery. This instance of a productive landscape tucked inside of and supporting a recreational landscape is rare, or is at least not a prominent part of the histories of 19th century park projects. That it was located up front by the main entry to the new landscape that was supposed to be the very manifestation of aristocratic taste is even stranger. In fact, just four years prior to the drawing of this plan that shows the nursery, a set of elegant iron gates had been purchased from France and installed at this main entrance. In 1911 a resident of Mendoza may have walked from the town to the park, through the great ornamental gates, past a working nursery where propagation and cultivation for the entire project was occurring on a large scale, over bridges crossing primary irrigation canals and stormwater infrastructure and seen the area populated with tiny whips planted in clusters and rows among the green lawns, winding pathways and sinuous lakeshores of the park, evidence of the nascent reforestation effort arranged to offer an array of social experiences and spaces. The aesthetic experience of the entry sequence created through the juxtaposition of the ornamental gates and the tree nursery is perhaps unique in the history of park design.

It has proven difficult thus far to discern exactly how the park project was initially received. However given formal changes that can be seen in the historical plans, the popularity and use of the place today, and the fact that it was similar in some of its performative aspects to the popular Alameda, it seems likely that early on it served as a primary social gathering place, offering residents a visual tableau of citizenship at the political and geographic edge of the young Argentine Republic. At the beginning of the twentieth century Argentina in general, and the city of Mendoza in particular, underwent a spectacular expansion in agricultural and industrial production as well as in population growth. The fact of the extension of the original Parque del Oeste (West Park) toward the mountains, the changing of its name to that of Parque General San Martín (after the hero of the War of Independence), and the reason for that change and expansion (a massive new monument of national independence, glory, and pride) attest to the fact the park was indeed the site of cultural expression for the ambitious young nation, local elites, and perhaps a plurality of citizens. In fact, the shrinking of its original north-south dimension and its expansion westward, which allowed for it to encompass the peak of a nearby mountain, now renamed the Cerro de la Gloria (Glory Peak), suggest that the original infrastructural aspects of the park were somewhat sublimated, outsourced to a larger, regional hydraulic apparatus, as its symbolic and social characteristics grew in importance.

More study is needed to contextualize and analyze these shifts. Nonetheless, two important realizations suggest directions for next steps. First, the tree nursery is still operational and is now larger and diversified. It is the oldest institution in the park, operating continuously since its founding in 1900, though it is no longer situated at the park entrance. This unique institution may offer insights into the history of park-making and public space, especially in the extreme, richly historical environments found throughout the American Cordillera from Alaska to Tierra del Fuego. In addition, the idea of an intensely productive space prominently featured in an important recreation landscape suggests new and unique possibilities for conceiving of aesthetic experiences in public landscapes, especially as we confront issues of climate change and the desire to expand social agency. In addition, though the exact reasons for the contraction and expansion of the park are ambiguous, the resulting effect of reorienting the park from a north-south axis to an east-west axis suggests that the landscape took on additional symbolic and social significance while its importance as landscape infrastructure diminished, with those functions of stormwater retention and improving air quality being primarily performed by other parts of the hydrological infrastructure.

In both of these cases the concept of a public recreation landscape as hydraulic apparatus for city-making in Western Argentina is a potent idea that suggests the possibility of new revisionist histories and future forms of landscape design and research throughout this arid and extreme region. Perhaps most important, the realization that this park is not merely a local manifestation of a hegemonic, universal, decidedly European practice of municipal park-making, but rather is the result of cosmopolitan ideas interpreted and translated by local elites over time for their own purposes, and built through material and intellectual collaboration with the cultural contributions of earlier local societies, demands a radical revision of landscape history. It forces us to understand that just because power relations are often asymmetrical does not mean that the each side does not possess its own
agency, and is not capable of its own form of resistance through translation and transaction in the production and use of landscape.

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