



1. Cerro Loma Larga
2. Cerro El Manzano
3. Cerro Dieciocho
4. Cerro Del Medio
5. Cerro Alvarado
6. Cerro Los Piques
7. Cerro Calán
8. Cerro Apoquindo
9. Cerro San Luis

10. Cerro Santa Lucía
11. Cerro San Cristóbal
12. Cerro Blanco
13. Cerro Rinconada
14. Cerro Renca
15. Cerro Navia
16. Cerro Amapola
17. Cerro Lo Aguirre
18. Cerro Chena

19. Cerro Hasbún
20. Cerro Adasme
21. Cerro Negro
22. Cerro Los Morros
23. Cerro Las Cabras
24. Cerro La Ballena
25. Cerro Chequén
26. Cerro Jardín Alto

Santiago's green areas and hills (Santiago Cerro Isla)

## Cerro Isla: An Archipelago of Hills

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### The misperception of a city's geography

For some time the noun expression *Cerro Isla* ("island hill") has been of public knowledge, no longer reserved only for the intellectuals of the metropolitan region of Santiago. It is remarkable how this pun can be part of the daily reality of Santiago when one considers that until five years ago there was no documentation on the capital's landscape. Almost all the definitions under which one tries to catalogue the city of Santiago are by no means accurate. It is neither exactly a city, nor a metropolis. Of a megalopolis, it possesses only the size quality. Basically, it resembles a large town that has overextended itself to the point of losing control of its borders. Thus, artifice and nature come together in the same seemingly endless geography. The city grows within a valley, enclosed by the Andes mountain range to the east bordering with Argentina, and the coastal mountain range to the west, shielding it from the Pacific Ocean. The direct confrontation between these two dimensions, one predominantly horizontal and the other virtually vertical, generates a completely erroneous perception of the geographic landscape of the city. An inattentive eye could prematurely define the topography of Santiago as a horizontal plane within two distinctive borders. In reality, the geography of the city is full of natural extrusions that uninterruptedly span from one mountain range to the other.

The city as we know it now seems like a horizontal line which has completely eliminated the geographic richness of the valley, accentuating, therefore, the perception of an archipelago of hills.

In the imagination of Santiago citizens, the city appears completely flat, divided between north and south by the Mapocho and Maipo rivers and separated from the horizon by the slopes of the Andes. The valley where Santiago is nestled is an area where the wavy sea of buildings extends over twenty-six hills – in most cases are a source of pride for the district that has developed around them. Apart from a purely perceptual reason, there is a rhetorical influence that strengthens this erroneous approach to the design of the city.

The Santiago of today stands on the area predominantly occupied by indigenous settlements, although the structure of the city as we know it today has been based on the pattern of the Spanish military occupation. The Spanish imperial settlement which is characterised by the repetition of blocks, or *cuadras*, was a direct consequence of the typical army camp structure. The influence of the *castrum* (the Roman Empire army fort) is evident. It is a clear example of the theory that all cities founded by Spanish occupation in this age keep the same characteristic and plan: other examples include Lima, Panama, Cordoba in Argentina, Mendoza, and Buenos Aires.

All these cities of military establishment are based on a common diagram dictated

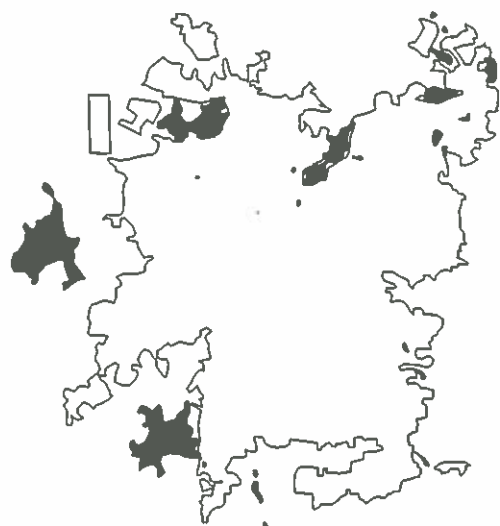
1600



1900



2010



Santiago's expansion (Santiago Cerro Isla)

by different polygons (*cuadras*) separated from each other to make roads. This system of separated blocks revolves around a central space that mirrors the city's main square: Plaza de Armas.

The more appropriate way to describe this design is indeed as a diagram, not as a project. The city of Santiago is thereby generated from abstract diagrams, which do not consider the geography and territory. The desire to literally take an abstract structure and repeat it indefinitely from the end of the 1500s until the present day has helped create this separation between reality and perception of the territory of the city. This approach, considering an abstract model of a city more than the actual geography of that city, has led to unexpected sloping anomalies.

On the slopes of the Andes, where now the system of *cuadras* can hardly compete at all with the territory, it is equally imposed, forcing the use of bridges and retaining walls that literally forced the geography of the Santiago valley inside a grid. It is very interesting how, in this case, not only the artifice was alien to nature, but also the fact that the military camp diagram was so successful despite the fact that nature and territory were imposing another scenario on to the city. For some years, there has been a theoretical project for the redevelopment of Santiago that foresees the possibility of joining the isolated hills together. Since 2011 the Santiago Cerro Isla foundation has been concerned with surveying and cataloguing the hills that surround the capital. The group is made up of architects and landscape planners who for the first time in the history of the city have turned their professional gaze towards the territory – and not just towards the structures on top of it. Their action is based on an official thesis (funded by FONDART) that redeems the geography of Santiago with the aim of protecting a natural heritage as yet ignored. The work of the foundation is not limited to research; their intention is to bring the institutions and the public opinion to observe their own territory and to respect it, and to educate them on the morphology of the valley. This educational phase has already

aroused political interests; for instance, competitions were held to incorporate the urban fabric of certain districts into the hills and the territory. It is a unique feature in a city like Santiago not to count many public spaces.

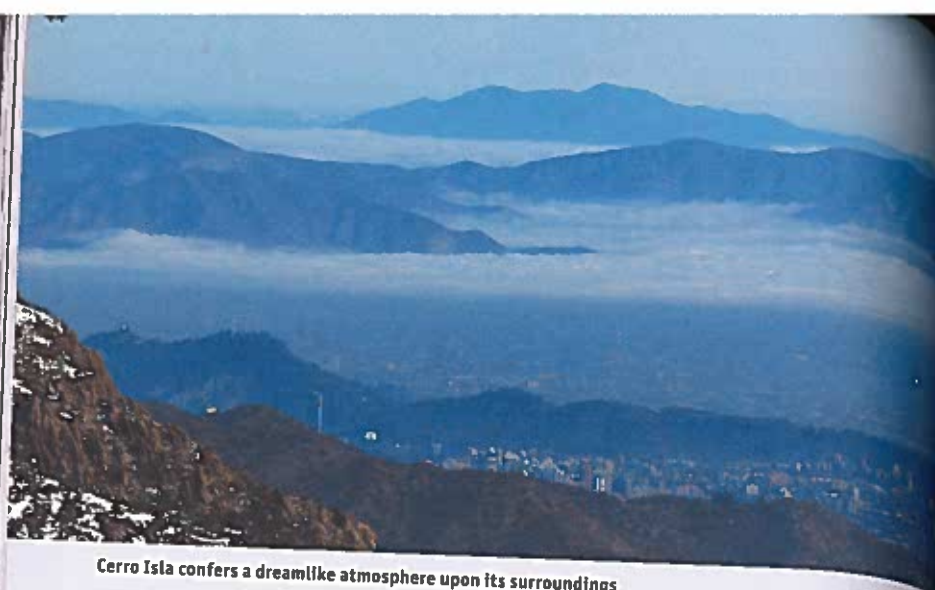
The final draft would be a protected area that foresaw the twenty-six hills included in one massive park system, constituting the largest metropolitan park in the world. Today, although there is no real park service, we see that the will of the citizens and the interests of tourists concentrate on the preservation of the hills in the city centre. The regular Santiaguino has the opportunity to completely escape from metropolitan life by travelling towards the mountain areas located within the boundaries of the city. Santa Lucía and San Cristóbal hills, for example, have acted like a natural *cardo* and *decumanus* and are inscribed in the history of the old town, appearing as the most impressive presence in the urban landscape of the city centre.

#### Cerro Santa Lucía and Cerro San Cristóbal as examples for the Santiago of tomorrow

San Cristóbal and Santa Lucía are the most memorable and described hills in the whole valley of Santiago. This article will consider these two hills as a matrix and an example of all twenty-six urban hills, explaining how the model of Cerro Isla could be considered as a concrete step for the future of Santiago.

The two hills that lie today in the heart of Santiago, as during its foundation, have played two very different, but crucial, roles in the development of the city, principally defining the general imagery for residents of Santiago.

The historical notions about the territories that would later become Santiago are drawn from the questionable Pedro De Valdivia's diaries. The dating of both hills therefore takes place through the narratives of the conquistadors who, like Christopher Columbus, did not discover a virgin land, but rather a territory that had been populated for several millenniums in a very different manner than that to come. Local indigenous people



Cerro Isla confers a dreamlike atmosphere upon its surroundings



had periodically settled these territories with a great respect and love for nature, and already occupied these hills as sacred sites and fortifications by means of a kind of urbanisation invisible to the eye of a westerner. It is useless to dwell on the fact that most of these cultures and traditions were completely erased by the arrival of the Spanish conquistadors. Both hills are linked by a common history and by two figures who have influenced the character given to them and the faces which they possess today. Both hills were baptised by Pedro de Valdivia. He appointed the name of Saint Lucía (in honour of Santa Lucía from Syracuse), patron saint of the day when he conquered the territories where Santiago was born; the second, San Cristóbal, in honour of the travellers' patron saint, a description common to all Spaniards battling for the Santiago Valley.

Saint Lucía has a key position in the historic centre of the city and, following the first Spanish invasion, became an important stronghold to outmaneuver the assaults perpetrated by the indigenous Mapuche<sup>2</sup> population. The conquest of Cerro S. Lucía thus represents the first attempted urbanisation of the geography of the future Santiago.

The first fate of the hill dedicated to travellers, San Cristóbal, was to be a quarry. With the stone of Cerro San Cristóbal were built the first great works of

the *triángulo fundacional*<sup>3</sup> of the city. All buildings which crown Plaza de Armas, including the current presidential palace, La Moneda, were built with stone mined from that hill. Santiago, like all colonies, has always suffered the influence of European fashion, and it was with superintendent Vicuña Mackenna that these arid cliffs were capitalised on to create the appearance we see today.

Vicuña Mackenna was the second influential figure to contribute to the development of these natural structures in the middle of the valley; he was the first to imagine the hills as having a joint role in the evolution of the city of Santiago. The first experiment was made on Cerro Santa Lucía - Vicuña Mackenna believed in an urban garden, an image most likely absorbed through his travels in Europe. The project comprised the construction of actual paths (stairs and walkways) and the complete forestation of the surrounding land, with implementation of water tanks and irrigation systems. Once completed, the local bourgeoisie could finally observe the extension of their blooming city from a great viewpoint high above the rest, after enjoying a walk through the pathways, small lookouts and balconies, and attractions of different types. Museums, gothic cathedrals, statues, and thematic gardens enriched the path to make it the largest urban park in the city, with more frivolous attraction and

intellectual fulfillment than a regular park. The shade of a thousand plants would refresh visitors, making them forget that these environments started out as rocky extrusions.

San Cristóbal, representing an extension of the Andes into the basin of Santiago, also received a strong forestation agenda. Already since 1916, thanks to Alberto Mackenna (nephew of Vicuña Mackenna), the process was similar to that of its neighbouring cerro. Expropriation of land, the inclusion of large amounts of vegetation, and the installation of an irrigation system laid the foundation for the great metropolitan park it is today. The first attempts to urbanise San Cristóbal were prior to its forestation. These started with the creation of an astronomical observatory similar to that of Santa Lucía and the project of a shrine, crowned by a large statue of the Virgin Mary which is now an integral part of the skyline of the city. The construction of the funicular tram in 1925 and the opening of a 4.8 ha zoo opened the doors to one of the most important public spaces in the city.

Despite the parallel history and development, the two hills have two completely different personalities. Santa Lucía features a heavily anthropogenic geography. Nature is part of the design but is curtailed by walkways and pulpits. The various squares and gardens are part of a tightly controlled, decidedly man-made

project, with several buildings now part of the thematic route. All these ingredients enter into Santa Lucía's historical-romantic perception by Santiago's citizens and visitors. The sunset from its belvedere and the appointment at noon with the firing of the cannons are part of a postcard-like image of Santiago.

San Cristóbal has a romantic character, enriched by its funicular and an early-twentieth-century style zoo completely surrounded by nature. Because the flora of this hill is entirely due to the forestation at the beginning of the past century, one can define San Cristóbal as an artificially wild environment, although nature has been left uncontrolled over time. If Cerro Santa Lucía remains crystallised as a sort of souvenir from *la belle époque*, then San Cristóbal is punctuated by beautiful anomalies, such as the funicular, the zoo, the monument to the virgin, theatres, and event centres which make it a democratic and accessible public space. The human infestation in the early twentieth century is evident in the inclusion of two public swimming pools in the 1970s, arranged at different heights to give partial and panoramic views of the city of Santiago. Today San Cristóbal, joined to the summits of Cerro Los Gemelos, Cerro Tupahue, and Cerro Chacarillas, is a corridor straight into the Andes. San Cristóbal has become the catalyst of varied sporting, social, and religious activities.



Santiago's cityscape

In a city profoundly marked by an economic gap and social inequality, a public space that can meet the demands of the entire population makes this space a democratising force, one that does not limit participation because of class.

#### Draw according to territory

Cerro San Cristóbal and Cerro Saint Lucía therefore represent a project that could invest the whole capital valley. As shown by the city's history, the geography of Santiago and its main hills have been taken over by human intervention making them places of worship today. In the valley there are twenty-six hills of various sizes and characteristics which can be engaged in several ways.

Cerro Blanco, located at the end of a cemetery, could become the expansion of that cemetery itself and a symbolic landmark for the city. Cerro San Luis, located in the affluent neighbourhood of Las Condes, has been highly developed; its slopes welcome a golf course and a variety of buildings and private houses which stand out from the rest of the hills. Cerro Blanco and Cerro San Luis show two types of intervention in complete contrast to each other (one symbolic and the other speculative), albeit still effective. The question therefore arises: given the fact that there are already real examples of these hills participating in the social world and the urban

fabric, how is it that most other hills have been ignored? In most cases, the hills are not even considered in the mapping of the neighbourhood. This fact fosters detachment from the community, lack of interest by investors to see its potential, and a missed opportunity to exploit dynamic space for public or private use. The hill as a geographical feature in a city that is mainly flat has indisputable space and landscaping value. But, finally over the past few years, when we started to see the city not only as an artifact of construction but also in terms of its territorial value, public opinion and institutions have started to consider the hills as an important element for district development. Previously, hills were for the most part exploited as merely a geographic limit to delineate the various districts. This fact has caused several problems of appropriation and even today it is not obvious which district or owner has control over a certain hill. The work of Santiago Cerro Isla foundation addresses this point, trying to be the missing link between local communities and the town hall, and educate the population and public authorities with the purpose of observing the hills a certain way – not as a problem to be solved, but as a resource for the citizenship. The exemplary case of Cerro Navia, which now provides a green space for the members of its district, was accomplished by events involving the whole community.

The great value of a project that involves the archipelago of hills is the desire to identify and strengthen the unique aspect of each shape. It is more interesting to identify the diversity of each one, without wanting to concentrate everything at the centre, and achieve the union of twenty-six hills through a continuous system of parks. This intent is not based on the image of the green city in vogue. The projects take place according to the observation of the territory, through its shape it suggests this type of surgery. Most of the hills are located in the suburbs and in the most humble areas of the city. In this way, enhancing the heritage of the hills means giving a greater asset to places that are often forgotten by the inward-focused city centre.

In a city of five million inhabitants with an area of 641 km<sup>2</sup>, expanding the variety of the territory assumes more importance day by day. It is therefore important to take a position with respect to the geography of the valley, to create the image of the future Santiago. We must observe therefore the morphology of the valley, and mapping the various cerros seems a sustainable solution that aims to strengthen the natural character of the green areas of the city. The never-ending sprawl can be ordered accordingly thanks to the flat surface and the cardinal hills. In a metropolis, or in a city of great size in general, the citizen is forced into the

logic of the built environment where public spaces often have an inhuman scale and parks are suffocated by road infrastructure. The presence of naturally lush topographies plays a fundamental role in mentally escaping from the pressures of urban life.

In an area such as the Americas, where the big city and the main destinations for recreation are separated by large distances, citizens are often confined within the perimeter of their own city. Cerro Isla is a proposal with a strong local character which provides for the well-being of the land and its inhabitants. The challenge for Cerro Isla is to become an engine on a regional scale and an example for a future urban planning which takes existing geography as a primary discipline.

1. Pedro de Valdivia (17 April 1497 – 25 December 1553). Spanish conqueror, known for the founding of Santiago de Chile. Dates sometimes given as 1510 – 1569, i.e. Robert Chambers, *Book of Days* (1868). REF: Luis de Roa y Ursúa, *El Reyno de Chile 1535 – 1810*. Estudio histórico, genealógico y biográfico. Valladolid 1945
2. Indigenous populations of the territories of central Chile
3. First urban centre of the city