

# The Great Urban Parks of Havana

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## INTRODUCTION

The great urban parks of Havana are associated to the Almendares river watershed that, in spite of its small size, it is the biggest in the capital and an emblematic site. Several parks settle in their margins or cover the two banks.

As a part of the mentioned basin, on its northern end, including the mouth, a barren earth territory has been designated as the Metropolitan Park of Havana (MPH). This park, still to make but summoned in a very central area of the city, should become the main one of the capital. It is integrated by some others of smaller span that existed already together with certain lands dedicated to very varied uses, the urban agriculture among them. Through their space the waters of the last ten kilometers of our bigger river lapse, those of two tributaries – the Mordazo and the Santoyo –, several intermittent narrow canyons and some artificial gutters that drive raw sewers. In spite of that whole polluting load, the fluvial structure is the main frame of the Metropark and the support of the other ones: at the same time that the morphology of the land determines the design (or redraw if preferred) of the landscape that the ecosystem will have to assimilate. In summary, the Metropark is based up on the natural end of the river Almendares and its basin.

A description of the territory would be long and it doesn't correspond to the central objective of the present but, by the way, it should be said that the contours of this park have been shaped according to several factors that have gone impacting along the planning studies. Special mention should be made to the limits of the basin although these have disguised with the urban occupation but they constitute a decisive factor to define the most *sustainable* limits, if the expression is allowed. The 700 hectares of the Metropark are organized to serve as a support for the recovery and clean up of the Almendares River, that so many people is clamming for, as the surveys show up.

## Some Historical Facts

The Almendares River has been an important element, if not the main, for the creation of Havana. The development of this city whose current location depended on the wind protected bay and of an appropriate supply of water, it was pulled up by those two forces: from the balance among both the capital arose. Some of their current problems, as the shortage of the liquid, showed up from the early time of her foundation. Havana doesn't settle on a previous city, like it happened with several of the American continent. However, the aboriginal inhabitants founded communities, some of great antiquity, on the open plains at the bends of the river *Casiguaguas* aboriginal denominated of the Almendares. These establishments have been recently discovered by the research teams, one of them in a place close to the *El Husillo* dam. A handful of men obtains water in many ways, a village or a city demand something qualitatively different and that has been proportioned by Havana's bigger river.

The multiple foundation of Havana jumping from the Mayabeque River to the Almendares and then to the *Port of Carenas* is well known. If the river previously served or not as a basis to the current location will be defined by studios of the topic. The reality is that the city since so remote date as 1566 guided its efforts to obtain water of surer sources that the small torrential rivers overturned to the bay. The marshlands nearby the main square did not offer what was required. It was the Almendares the only one that could solve the problems with the powerful "spout" of clean water and those first residents dedicated important part of their resources to look for a permanent water supply. It would be interesting to investigate how the explorations were made and why the place, actually known as *El Husillo* (The Screw), was chosen to establish an important water reservoir. It is also fair to mention with admiration the efficiency of that installation that worked during almost three hundred years sending water to the capital, even after the bankrupt intent of substituting the system by the so called *Fernando VII* aqueduct. Only the brilliant hydraulic

works directed by Francisco of Albear made pass to retirement the *El Husillo* dam and its driver the *Zanja Real* (Royal Cutter).

Spaniards that founded the village were divided in two big groups. The first were those that looked of the port toward the Atlantic to trade and to maintain bonds with the conquering Spain. On the other side those that came to cultivate the earth and to live upon her. The second group, needed more the river and its their basin than the port. The differences between conquerors and settlers showed up very soon and they became more complex as the society was developed. The landowners of certain range were occupying clusters and corrals while the most modest settled in small parcels, next many of them to the rivers. The Almendares, more than two leagues far of the recently founded city, became a fringe of distant attraction that stimulated the population's growth since it offered water, wood, farm lands and until seat of outposts for the defense. In this way tobacco plantations were created and smaller cultivations the long of their two riversides, taking advantage of the fertility of the alluvial deposits of its banks and valley.

In more recent time that the moment of the foundation and first expansion of Havana, several populations already existed with organized town councils. Such they were the cases of Guanabacoa and Marianao. This last establishment was made on the basin of the river Quibu. The Almendares was between both villages (Marianao and Havana) with few residents along its margins. It is interesting to observe as the growth of both cities has been fulfilled from very early connecting them along the river. Almost parallel to the coast, the *Calzada Real* (Royal Roadway) of Marianao (today Avenue 51) was linked with that of *Puentes Grandes* (Big Bridges), and continued with that of *El Cerro* (The Hill) and it concluded in that of *El Monte* (The Mount) until penetrating through the wall in the old city. Upon the coast and the one mentioned vial axis the urban fabric has been established in a such way that in the years 1950s wilderness only existed, more or less, in the space that our park is actually located. Why did the Metropark land was kept with so low soil occupancy? This is a question with multiple answer. A cause could have been the tendency to floods that until relatively recent times had the territory. The agricultural use of the valley could have been an impediment to the urban geophagy. In some cases the uncertainty about the legal property of the lands should be cause of the abandonment, taking advantage of other more affordable places. The ecological aspect doesn't seem to have intervened in this situation. The certain thing is that such an important allotment as *El Vedado* (The Forbidden) did not look toward the Almendares, and at most looked at it as a side glance, preferring the views toward gardens, parterres and neighbors than those offered by a riverbed crossing between ravines and *regas* of great landscape beauty. This problem was not so sharp for the side of Miramar but it's appreciated that there was a lot of enthusiasm for that, on the other riverside.

### The First Ideas on a City Park

With the coming of the Republic, after the ups and downs that brought the fights for the independence, the Havana bourgeoisie, formed in the European way, began a new accumulation of capitals. The politicians, on the other hand, made proposals to satisfy demands and necessities that could be oriented in different ways in accordance with the social group that supported them. The expansion of the capital at expense of the rest of the country was used with demagoguery by some that raking the chauvinism, made conceive impossible dreams and proposed utopian urban ideas inspired by the Paris of the Second Empire. Nevertheless, toward 1912 they registered the first proposals tending to endow Havana from a great city park to the style of the Bois of Boulogne. Fortunately it was never seriously thought of a tropical Versailles. Starting from that moment, an important sector of the stakeholders were concerned about the lack of real urban parks and decided to make proposals although they were not planning experts. The urban planner, at the moment, was not a recognized professional in our society and much less the landscape designer that didn't exist as he is currently understood.

The stay in Havana between 1926 and 1928 of a professional of the urban and garden design as Forestier was competed by a strong cultural work, at least in certain means, in the strictest sense in the expression. The professional sectors of our city, and of the whole country, made echo of the renowned French designer ideas, considering as their own the most of his propositions. The stay of Forestier left an indelible mark in our country. The most progressive in professional sectors of our society kept carrying out many renovating ideas of the city starting from the opening made in that moment. Havana will always remind him.

More than twenty years after the first ideas about the necessity of the urban park were launched, with a World War (1914-1918), a national economic crisis (1923) and another international one (1929) in the lapse, the idea of the park arises again and in 1937 the *El Bosque de La Habana* (Forest of Havana) appears this time well settled on the Almendares river, not to far from the mouth. Covering a larger surface than today it has been profited what the river offered taking advantage, of some existing roads and creating some other ones. Support works were performed to use a portion of land forested by nature that later has been completed by man. A fluvial island was available at the moment – the Island *Josefina* – today disappeared by the descent of the water level of the river. Close to the *Bosque*, and practically being a part of it, were established the so called gardens of *La Polar* and of *La Tropical*, both brewing companies that fought for the bear market, offered the possibility of contact with nature and several attractions to the possible consumers.

Very near to the brook Mordazo the second botanical garden in the capital city was fomented in a place that was devoted at the same time to the exhibition of forest species at the end of the fifties with lunchrooms and kiosks that were created to give it a park character. This green space is crossed by several gutters of drainage sewer that pour raw served waters to the Mordazo and create many problems for the appropriate use of the space. Later, in the years sixty, some efforts has been carried on to endow the capital of a true Botanical Garden and, at the same time, of recreational park.

### Recent Antecedents

The Almendares continued being the main axis for the development of the green areas in the capital. In 1960 the initiative of creating a park arose again Using the river's name and taking advantage of a wide *vega* on which crossed the well-known Bridge Almendares that connected, near the north coast, the old municipalities of Havana and Marianao – today the municipalities of *Plaza de la Revolucion* and *Playa* – connecting two important roads of the capital. The Great Park Almendares – it was named this way – has been the most important work carried out in the nineteen sixties to take advantage to the historical river. With an efficiently subordinate architecture to the vegetation, this leaned on in the wide end of the riverbed and in the almost centennial trees that grew in their vicinity. The gardening and the equipment completed the atmosphere. In these moments it is part of the Metropark and one can say that it presents a great vocation to grow, jumping to the other riverside and expanding in longitude. The Almendares would thank it.

The definitive proposal of the Metropolitan Park was made in the 1964, the year when the first master plan of the capital issued. With very similar contours to those of now, it showed the importance of the river for the development of the green areas. Between 1963 and 1988 they were carried out some studies but works were not attacked in this sense. Starting from 1989 the project is recaptured and works are begun in function of the park, however still not with the required recuperative character of the environment. From 1995 something has been done, modestly, to reforest the depredated areas and to clean up the Almendares and the tributaries.

### Relationship with the Almendares River

It has been said that the river in question is the most important in the city. Currently it also forms a sort of axis of given north-south symmetry due to the magnitude of the urban development to both sides. The bay of Havana, that is the geometric center of the capital, gives part of its importance the fringe that introduces the river. The Almendares has worked as the suture that unites the urban fabric of both riversides and although few

crafts can have moved to tracts for a long time, it is feasible that the future roads of border of the park channel certain traffic types. Some existent ones as the Avenue of the Independence and the Street 100, they are good to frame it.

Additionally to the Metropark there are other three huge parks of the city that settle along the river or their tributaries. Up waters appears the National Zoological Park, with some 350 ha is that is summoned in the oriental bank on a meander of the river. Two narrow canyons were dammed inside this park being created three artificial lakes, one of those which – the bigger – it is used, besides, to complete the purification of the waters treated in a primary treatment plant that works nearby.

Not far from the zoological the *Parque Lenin* is summoned, it occupies territories on both banks of the Almendares and possesses the small prey of *Paso Sequito* (Little Dry Pass), created with recreational purposes. In this place, that is to say in the Lenin's oriental border, the imposing presence of the *Presa Ejercito Rebelde* (Rebellious Army Dam) opens horizons at the same time it divides the river in two parts when impeding water flow to the mouth.

The National Botanical Garden with its 600 ha, is located on the stream *Pancho Simon*, of intermittent waters. In spite of that it is the most important tributary in the upper Almendares river. The Botanical Garden, thoroughly forested as it should be, also has a small artificial lake that pours water to the mentioned brook. In front of the Botanical, in a big parcel of land of 25 ha approximately, there is EXPOCUBA that cannot be considered a park. In fact it is an important installation including many buildings that also pour waters, not clean but sewage, to the same basin. There are other parks and barren spaces along the Almendares, such as the well known *Rio Cristal* (Glass River) that takes advantage of the exuberant vegetation of the place for recreational purposes.

As it can be deduced from that said up to now, presently, the most important and wide use that makes the city of this whole fluvial network is as sewers of waste waters (the most poured raw) and here shows up the main contradiction: those sewers, in spite of its polluting load, are necessary to the network because the original sources of the Almendares, located in nearby de village of *Tapaste*, don't contribute waters to the inferior and half portions of the river. The seasonal rainfalls are not enough filler of the flow.

### THE PROPOSED PARK

During several years we have been working in the planning of the assigned territory to our Metropark. Actually a territorial order has been achieved that allows the adaptation at the same time: to the changing circumstances of the daily life and the

precision in the necessary planning concepts managed in the project.

The park is an important social fact and a challenge accepted by authorities and planners but it is also, and eminently, an ecological task. Consequently, it has to be sustainable in all senses. To achieve it, studies, forecasts and proposals have been made to make arise a park with *sui generis* characteristics if it is kept in mind that the nature should be preserved, coexisting at the same time with facilities of the three sectors of the economy and that it should be protected from the impact produced by the visitors themselves.

On the other hand, the investment to carry out is considerable and taking into account the lack of funding and financial resources, the Metropark will never come up to real life. In order to achieve that, thorough studies have been carried on, and permitted to prioritize areas that can give back quickly some benefits once persuaded that in no way neither the reforestation neither the cleaning of the river would rend profits. It should not misunderstand the financing with the search of funds for small punctual projects in which could participate diverse types of non lucrative institutions. The proposal presents to the park like a profitable investment, besides sustainable.

### Delimitation

In the Metropark there are three territorial elements that come to be arranged: the tenancy of land, the surrounding land that is affected in way and the natural morphology of land in spite if it has been altered or not. It was necessary a political decision to create the park since the 7,007 ha assigned come form the contribution of four municipalities in the capital (*Plaza, Playa, Cerro and Marianao*). The characteristic territory of the park claimed for a clear frontier and a serious study to discriminate the elements that could be part of a park and these that never could have been. This way we finally arrived to the definitive delimitation, approved by resolution of the Council of Administration of the City of Havana. In the map attached it is possible to appreciate clarity those limits. Some boundaries exist and they are easy to recognize, as much in maps as in the land, other, as the boundary for Marianao, they should be established with landmarks because they only exist in the maps or in writings. Together with this it becomes necessary a signal system that informs everyone in the capital city about this demarcation.

The surrounding land next to the park area has been called area of influence, that is to say, the contour area that influences the most in the park or vice versa in which the park hits or should impact. In some moment it was planned to establish an uniform fringe around the contour but the great complexity of the park demonstrated that it was not appropriate, that which

led to make an analysis of the next urban environment determining the limits of this area. The map shows it up. The influence area is not the only one that affects the park, or is affected by it. The uncovered basin space nearby the park but out of its territory, is more distant than the influence areas but, according to the opinion of foreign specialists, that studied the project, it should be considered the space as a whole and to surpass in about 100 meters the basin limits. It is obvious that the park would never have jurisdiction on such a distant territory but it is necessary to consider this sort of interaction to prevent future damages. This means that the geographical area exerts influence on the park and the park affects that geographical area in a certain amount.

The structural planning of the territory has taken into account all the above-mentioned, besides the elements that exist inside its campus. The quarries, agriculture, industries, shops, commercial, recreational, cultural, sports and general service facilities, all together with housing and administrative activities, constitute a great group of investments, some profitable and other not so much but all necessary have been studied with a aim of using them. This means that you start with that you already have and then you decide and discriminate what is useful and what not. They every element has been re-accommodated on the base of improving creating a naturalized environment for the population's enjoyment.

### The Net of Poles

The existing group of facilities show that many of them are gathered in certain places, as artificially created centers that where people flush in search of something that they offer. In that way you can consider the Park Almendares, or the Brewery Miguel A. Oramas (*La Polar*), quite different centers that polarize a great quantity of people in certain moments. Following this analysis the 18 poles of our proposal arose. They have been classified in four fundamental types; those of free time (essentials for a park), the industrial ones, the residencial ones and the combined. They are examples of poles for the free time: the already mentioned Park Almendares, the Sport Complex Raul Diaz Arguelles and others. They are industrial poles: the Factory of Motovolquetas, the Chullima Shipyards and others. It is a residencial the well-known neighborhood of *Puentes Grandes* (Big Bridges). It is a combined pole the one named *La Tropical* that embraces the Brewery Pedro Marrero, the stadium of the same name, the *Jardines de La Tropical* and the Children Food Factory Osito. These examples only mentioned existing facilities. There are, however, some other poles that should be completely created as *El Camaguey*, *El Mirador* and the Mouth of the Almendares, always on the basis of respecting the environment, taking advantage of the existing investments and prioritizing population.

### The Roads Network

The Metropark territory is crossed or surrounded by a set of road axes comporting a great importance within the capital. Two of the axes cross it out underneath with the help of two tunnels under the Almendares River (*Calle Linea* – Ave. 31 and *Calle Calzada* – 5a. Avenue). Another two avenues make it above with their respective bridges (*Calle 11* – 7a. Avenue and *Calle 23* – Ave. 41), an axis crosses the Metropark in the middle (*Calzada de Puentes Grandes*), and another runs along the eastern border (Ave. of the Independence). In the attached map clears up what said. The Master Plan of the Capital City projects two additional roads that would cross it. The study of the park proposes to build them high enough to prevent the continuous fractioning of its *campus*. This road network comes out determined by the necessities of the city itself, according to studies carried out to the effect. The consequent bus stops set depend of the above mentioned road network and of the urban transportation system that would be functioning in the park.

In the territorial study two internal roads are proposed; one on the western border in Marianao, and the north – south axis that partly coincides with the current highway of *El Husillo*. The main idea is to complete the contour and at the same time to concentrate the interior motorized circulation with the smallest length of roads as possible, in favor of pedestrian hike. A third proposed road network, will facilitate the pedestrian circulation possibly time that would give way, eventually, to some motorcars in charge of supply, repairs, maintenance and other similar service activities. The paths and trends, completely pedestrian, would be the fourth network.

The circulation with cycles has not been forgotten since it constitutes an important way of transportation for our population and, also, it is thought that many visitors of the Metropark will make it using such vehicles. The road network for them will be separated as much as possible of the motorcar roads and of the pedestrian ones but, certainly associating them some intelligent and safe way. The main objective of this separation is to protect the cyclists from the motorcars and the pedestrians from the cyclists.

### The Forest

The image of the Metropark considers the forest as a linking element that unifies the territory as a whole. With the forest the park will exist; without it there would only be a set of wild spaces more or less and unconnected. The forest will surround to the poles, assimilating them that will become a sort of small open areas where buildings and even gardens, will be subordinated to the naturalized landscape. In the Metropark the necessary built architecture will always depend on the vegetation, the true architecture of a park like this.

The agricultural areas will be surrounded too by the forest that will protect them and will frame the cultivations, creating a varied and enhancing landscape in order to propitiate, not only the view but the people's participation groups in many different ways and activities. The areas currently occupied by the old quarries, established for more than sixty years in the territory, will be progressively reforested and the modified existing topography will be used as a basis for an specific landscape design in this site. An example of this will be the pole named *El Tejar* (a tile factory), old industrial area, actually the center of a barren that should be transformed into a place for the development of arts and crafts, surrounded by forests to which the population would accede by bike, motorcars or using the future bus network of the park. The industries that should remain as the mentioned, will have forested contours surrounding them. This will help to avoid the air pollution and many other contaminating factors.

One of the most important functions, from the ecological point of view, is assigned to any forest, is the creation of an appropriate habitat for many species of the terrestrial and air fauna. The retreat of the butterflies of our capital that was taking place gradually in the last years, will be reversed thanks to the possibilities offered an opened by the forest. The birds will nest again, spend the nights and cross like it used to happen in ancient times.

The forest is also understood as a wide space to the coat of the sun, where people can circulate alone or in groups while they enjoy the contact with wilderness within the town. The paths will be designed to propitiate this and, besides, an intelligent and harmonic signaling is needed, just to guide and not controlling the scene, in each place that it is necessary, to conduct the visitors along the beauties of nature and the general ambience, allowing the simple pedestrians to understand what they have in front of his eyes. At the same time that the main natural facts are explained many things can be offered along these journeys. But forest will be enjoyed not only by pedestrians because, in some measure, cyclists have been considered as people circulating in motorcars. However, in this proposal it is our aim to discourage the drivers on the crossing for the forest just to get a short path along the way. For this purpose some measures has been taken, first by means of the appropriate design and secondly by a set of rules to use the space, so that, besides facilitating a calm journey, the use of its spaces must be propitiatory for the human relationships, the meditation, the reading, the study of nature and countless activities that it would be long to relate.

In order to make the forest an effective investment, it is necessary first to create it and then to take care of it. The last doesn't mean just to avoid the wrong use of their spaces or the attack to their trees. To take care of it also means the appropriate use. If the forest only exists to be contemplated, it would not be more than an image, a picture. The best way of

taking care of it is using it with intelligence and an important part of the care is achieved creating the conscience that the environment is the mark of our lives. The teams of inspectors and keepers should be the first ones deeply persuaded of this reality and therefore, they will cooperate to the rational use of the forest. Agriculture should help a lot in this sense.

### The River Almendares in the Proposal

Until here we have been speaking practically in present, or at most, in a very near future, about what has been conceived for the Metropark. However, it is not useless to insist in the fact that the park's main frame is the Almendares river that is, at the same time, the oldest and most relevant element within the park and a sort of inherited possession. The peculiar morphology of the territory that has propitiated the creation of the park, is due, mainly, to the river and its tributaries. The fertility and finally the existing vegetation in some places and the possible additional one, also owes its existence to this fluvial network. The existence of still eddies where people meet with nature, in almost all the cases, have the river like main character. The terrible contamination that suffers the whole network, has not even been able to annul the primordial paper that carry out, the river, the streams and the narrow canyons in this singular context. For that reason the Almendares is the spine of our park. The so pondered in previous paragraphs forest, it is not more than a consequence of the fluvial network of the Almendares. The proposed planning has its base therefore in the existence of the river, of the vegas, of the wide valley that opens up toward the east and the other narrow valley located along the Santoyo creek. It is not terrible that the river is now divided in two. The part of the basin in contact to the park is the base of its territorial design.

In a given moment it was sought to channel the river, deviating their bed, with the idea of foreseeing exceptional floods of very low occurrence in the time. The proposal has preferred to foresee those floods letting that the nature takes advantage of them, because, like the specialists say, not everything is harmful in these cases. What would have not been possible to allow in the future the erection buildings for housing programs or any other expensive investments in places that could be flooded or, at the same time, to move out some other existing facilities that already exist. The periodic floods accumulate slime and they propitiate strong buds of trees. The meanders lower the water

speed that runs in the riverbed and make profit of it in favor of the environmental conditions, even above or under the soil level. A tree that fell with a strong waterfall is a natural pruning, not the death of the vegetation in the place.

If it is clear enough that the Almendares river is the support of the environment in the Metropark's territory, consequently it becomes necessary to assist it, to restore it to some state that, if non initial because it is not possible, at least it should be taken to stability as far as possible. There are studies on the minimum sanitary water run and about other depurating possibilities. In these moments the investment may seem impossible but the environment claims it and, if we do not take it into account, nature would take charge of passing the bill in many painful forms. The river decontamination and the preservation of the waters is a task that should have begun seven decades ago or before. However, it is now that we have an exact conscience of this necessity and of the exponential development of damages that are happening since recent date, that make us think of the speed of the deterioration for the near future. It is necessary to begin it – or to recapture it – in some moment. This is the most sensible in spite of the economic difficulties. In summary, if the forest gives a body and cohesion to the park; the network of the Almendares river frames and reinforces it.

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