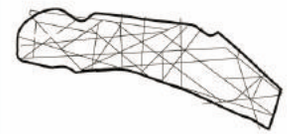
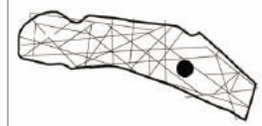
Photographs of the final BA thesis viva in the Faculty of Architecture and Urban Planning, Central University of Venezuela. _____ Caracas 18 December 2008.

The thesis was awarded the Best Thesis Prize in the section and obtained a maximum score of 20 points.

Photographs by Arnaldo Áñez

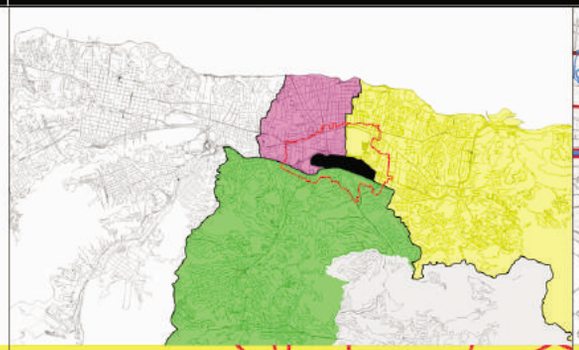
INSTRUCTIONS FOR READING

_Black is used to indicate the pages belonging to the first chapter and the front pages of the subsequent four chapters. In the heading, the top line is always the title, while the two lines below it provide a key reflection on the given topic.

chapter I	chapter II	chapter III		chapter IV	chapter V
metropolitan scale	urban scale	local scale		local scale	urban design scale
analysis caracas	**analysis la carlota**	**la carlota's edges**		**regulatory plan**	**urban design scale**
					
This first section presents the area of study within its greater context, as well as identifying the aspects of how the city works that repercute on possible actions to be taken on the area. Issues such as density and the target area's historical evolution situate the area in the city's current dynamic and reveal its potential as an urban area.	Having selected the areas adjacent to La Carlota that have an immediate impact on it, the study will carefully evaluate their characteristics, considering, for example, districts, road networks, hardness, block formation, building heights, urban grain, land use and zoning, existing vegetation, topography and hydrography.	The boundary or perimeter of the current La Carlota Airport will be studied in order to observe in even greater detail the area's contact with its surroundings. In terms of use, shape or environmental factors, the Airport does not behave in a uniform manner but according to seven clearly differentiated patterns.		Once the data about the place has been compiled on three different scales, the next step is to list and explain the project's main objectives according to four premises: removing edges, connecting it with existing nodes, incorporating new uses of space and recovering the environmental system (made up of the ravines that come from the Avila Mountains and the River Guaire, which is currently seriously polluted).	The final section discusses the topic in terms of urban design. It will explain the different systems that make up this new organism in the city, such as bridges, security, walkways and cycle paths, water features, programs for the space's use and activities, user services, and green areas, among others. Each of the decisions made in the project will be justified.

TARGET POLYGON

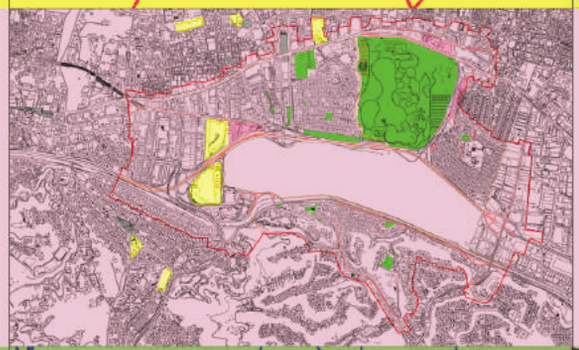
_The La Carlota airport polygon has been cut off from the evolution and dynamics in place in the rest of Caracas. Consequently, it has a very particular set of characteristics that are hard to find in cities whose growth is orderly.

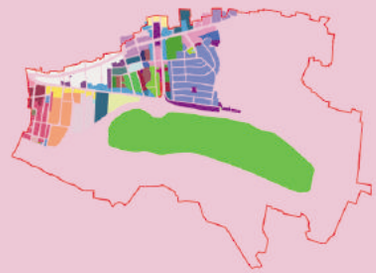


EDGES

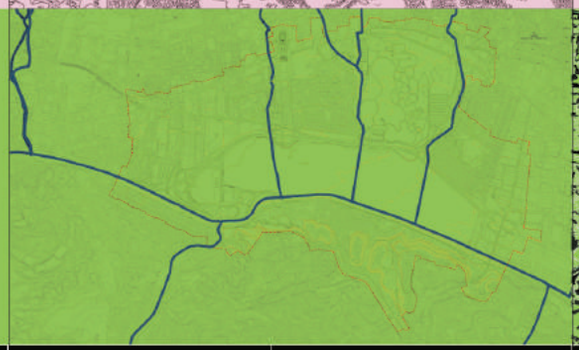
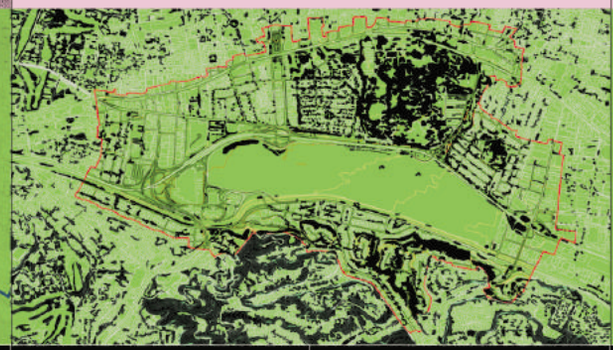


FORM





FUNCTION


ENVIRONMENT

LOS RUICES SOUTH INDUSTRIAL AREA

_The design proposal for this edge must also include changes in land use in the industrial area of Los Ruices, where over recent years increasing changes have resulted in uses that are incompatible with the park project.

Top: Los ruices interchange edge. Center and Right: La Carlota east edge, space between buildings. Bottom: photomontage new industrial edge

EDGES

FORM

FUNCTION

ENVIRONMENT

NEW CARACAS FAIR CENTER

_ La Carlota fair center is a new meeting place for Caracas that can be used for large-scale organized events, as well as for spontaneous and everyday activities.

EDGES

The Fair Center is designed for open air events or public shows, situated next to the northern entrance to La Carlota and next to the shopping malls, where an underground parking lot and respective pedestrian system will be built to connect it to other nearby parking lots. Its function will be to organize, promote and hold different types of shows or concerts, just as used to happen in La Carlota, even though it was not equipped for it. The services on offer in the fair center's buildings will be designed to respond constantly to high visitor footfall.

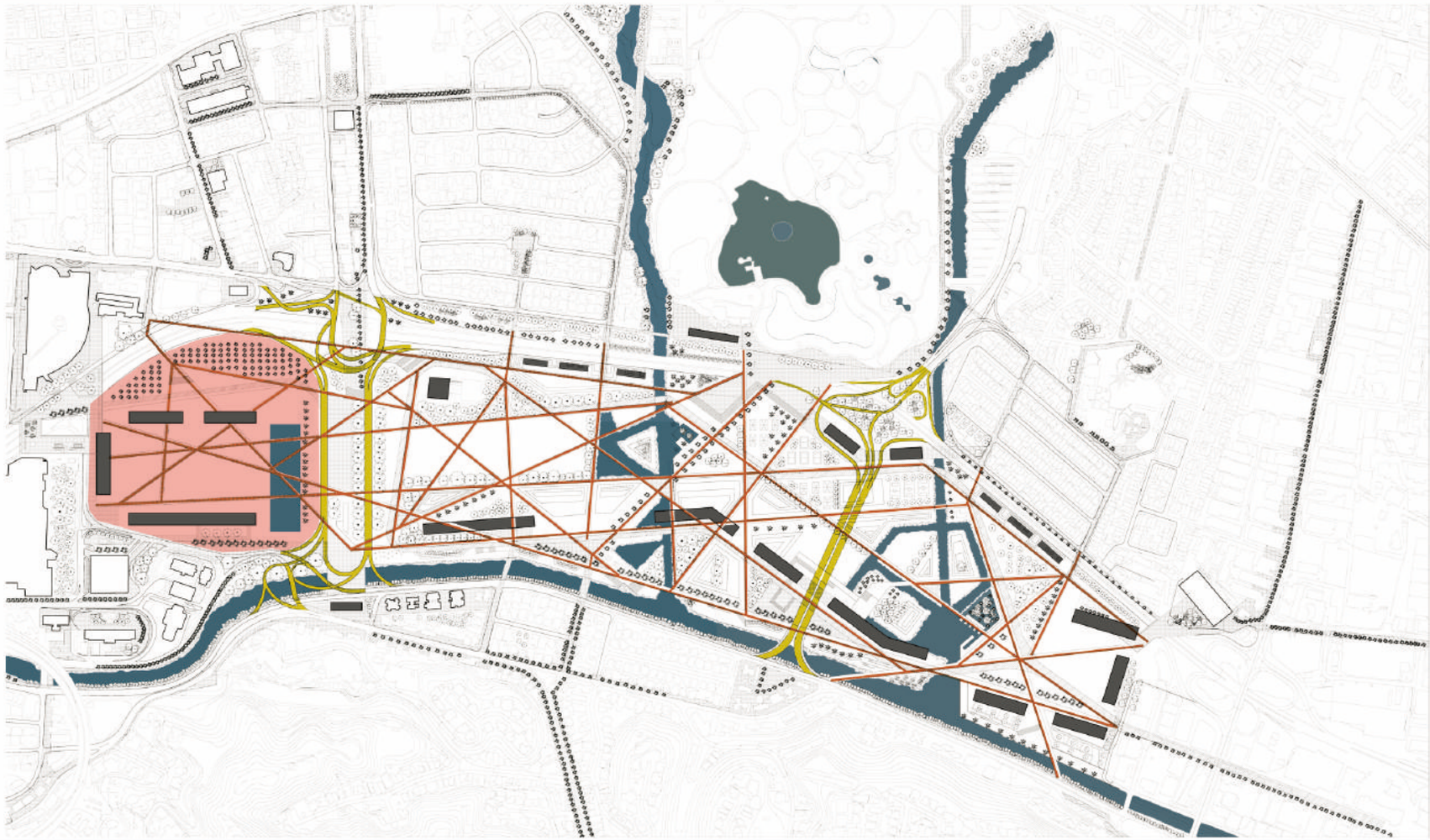
It is imperative to bear in mind that the presence of important metropolitan nodes, such as Altamira square, Sambil mall, CCCT mall, Las Mercedes, El Rosal and Chuao, each less than 1.5 km away, mean this area has a very high footfall and provides the greatest amount of pedestrian, vehicular and public transport links. Its location thus takes advantage of other activities that complement the fair center, such as hotels, shopping malls, parking lots and offices.

FORM

FUNCTION

30m 150m

ENVIRONMENT



Plan of the new La Carlota fair center, to the north is the parking lot and to the east is the seca ravine fountain and surface road network Altamira-Chuao

PROPOSAL

The project proposes to create an overall system that is sufficiently complex and flexible and that is based on a rational and orderly means of functioning. The aim is to propose actions that create identity, reference points, and activities that delimit space by means of a dialogue that respects its surroundings.

EDGES	lighting EO01 edges occupation 	benches EO02 edges occupation 	paving EO03 edges occupation 	vegetation EO04 edges occupation 	firemen ES01 edges security 	first aid ES02 edges security 
					surveillance ES03 edges security 	lighting ES04 edges security 
FORM	road networks AM01 axes mobility 	walkways AM02 axes mobility 	cross-country AM03 axes mobility 	extremes AM04 axes mobility 	skating US01 uses speed 	skateboarding US02 uses speed 
					bicycle US03 uses speed 	racing US04 uses speed 
FUNCTION	football US01 uses sports 	weightlifting US02 uses sports 	discus US03 uses sports 	basketball US04 uses sports 	abseiling UE01 uses extreme 	kayaking UE02 uses extreme 
	jogging US05 uses sports 	volleyball US06 uses sports 	tennis US07 uses sports 	gymnastics US08 uses sports 	diving UE03 uses extreme 	swimming UE04 uses extreme 
ENVIRONMENT	swimming ER01 ecology ravine 	diving boards ER02 ecology ravine 	climbing ER03 ecology ravine 	rowing AQ04 ecology ravine 		
	riverbanks ER05 ecology ravine 	showers ER06 ecology ravine 	children ER07 ecology ravine 	jetties ER08 ecology ravine 	trash can ET01 ecology trash 	sweeping ET02 ecology trash 

LA CARLOTA METROPOLITAN PARK

This concise project is based around mixed-activity urban centers, which form the focus points for parks and public spaces where a variety of public and private activities can be carried out. The city is thus made up of a network of balanced spaces.

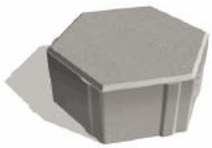
guard EP01 edges patrols 	dogs EP02 edges patrols 	cameras EP03 edges patrols 	alarms EP04 edges patrols 	bicycle EP05 edges patrols 	motorcycle EP06 edges patrols 	EDGES
				buggy EP07 edges patrols 	ambulance EP08 edges patrols 	
pedestrians UT01 uses transit 	taxi UT02 uses transit 	handicapped UT03 uses transit 	private UM01 uses meeting 	trash UC01 uses cleaning 	cleaning UC02 uses cleaning 	FORM
bus UT04 uses transit 	subway UT05 uses transit 	parking UT06 uses transit 	collective UM02 uses meeting 	cisterns UC03 uses cleaning 	supplies UC04 uses cleaning 	
museum UC01 uses cultural 	library UC02 uses cultural 	restroom US01 uses services 	showers US02 uses services 	handicapped US03 uses services 	babies US04 uses services 	FUNCTION
theater UC03 uses cultural 	audiovisual UC04 uses cultural 	waterfountain US05 uses services 	cafeteria US06 uses services 	restaurant US07 uses services 	cafe US08 uses services 	
		bank US09 uses services 	stands US10 uses services 	children US11 uses services 	viewpoint US12 uses services 	ENVIRONMENT
extraction ET03 ecology trash 	recycling ET04 ecology trash 	information US13 uses services 	communication US14 uses services 	internet US15 uses services 	mail US16 uses services 	

PAVING. FLOORS

_The paved surfaces in the project will be carefully designed to promote local activity. The different mobility systems, edges, squares and buildings will indicate their limits using floor designs.

EDGES

Monochrome tiles. Their color varies according to each place and patterns change to demarcate limits or restrictions in transit or crossing points.



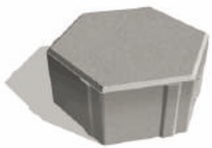
FORMAT
HEXAGONAL

radius = 30 cm
side = 30 cm

pattern
UNIFORM

FORM

Tiles with different designs will be used to reproduce a three-dimensional image or parts of a larger image, such as a mural or a design made by an artist.



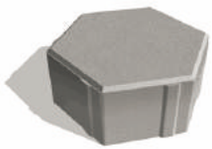
FORMAT
HEXAGONAL

radius = 60 cm
side = 60 cm

pattern
THREE-DIMENSIONAL

FUNCTION

Monochrome tiles. Their color varies to create a repetitive pattern. When it reaches uniform patterns, this will signal a slope up or down, or a curve.



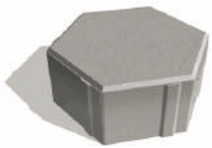
FORMAT
HEXAGONAL

radius = 30 cm
side = 30 cm

pattern
UNIFORM

ENVIRONMENT

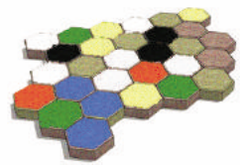
Monochrome tiles used to reproduce a chaotic or disorderly pattern, which can also be interpreted as a pixelated version of a larger-scale design



FORMAT
HEXAGONAL

radius = 30 cm
side = 30 cm

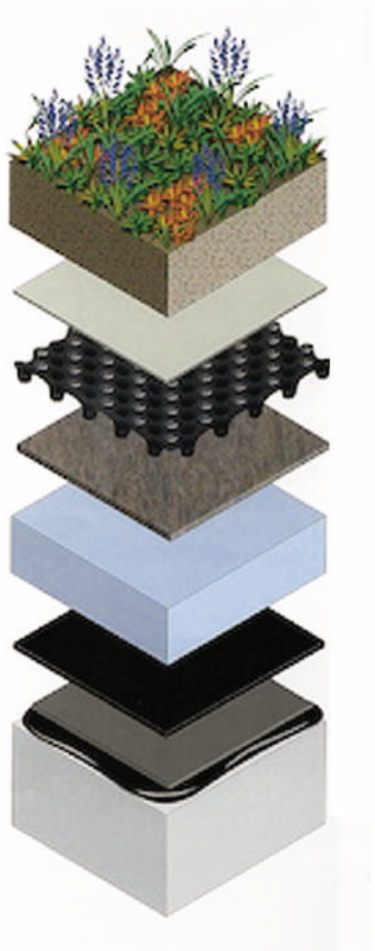
no pattern



Images of the different types of patterns in the park's paved areas.

INSULATION AND WATERPROOFING

_The latest technology in waterproofing for buildings means that hybrids of public and private space, landscape and built areas, and natural and artificial elements can be created, which enable spaces to be continuous, penetrable and transitable.



cross-section of waterproofing for grass envelope buildings in the park

1. coverage

The selection of the type of plant coverage for particular green surfaces will depend on different factors, such as use, the direction of the sun, the slope and percentage of shaded areas. Continuous ground surfaces are vital in La Carlota, and in turn will require a detailed maintenance plan. Pant coverage will be a key element in landscape design, allowing for variations in color and texture to signal changes in the plan, identify boundaries or encourage people to spend time in a particular place.

2. substratum

The composition of the substratum where coverage will be planted will be used to balance out the surface area's disadvantages. For instance, where there is little humidity, permeable ground can be managed better if it is kept damp enough for plant species that need more water. Or, in areas whose orientation means they are very exposed to the sun, it is better to select coverage plants that can resist drought and high temperatures.

3. insulation

The design of different layers of waterproofing is one of the most important elements in the park's construction, because it will be used underneath a significant amount of green areas. It will consist of a filter membrane, drainage membrane, waterproof membrane, themal insulation fibre, anti-steam membrane, and, finally, another water-repellant layer made of liquid asphalt.

4. slabs

The slabs to be covered with grass or plants will be specially designed to resist high levels of humidity. Reinforced concrete will be used for the structure, and its steel reinforcements will be also be covered with a product that can resist high levels of humidity. In addition, material with thermal insulating properties will be used for the slabs' formwork moulds as needed.

RELATION WITH THE PARK: UNDERGROUND BUILDING

_This type of building in the park is mainly designed for sports activities and to provide areas for their respective services.

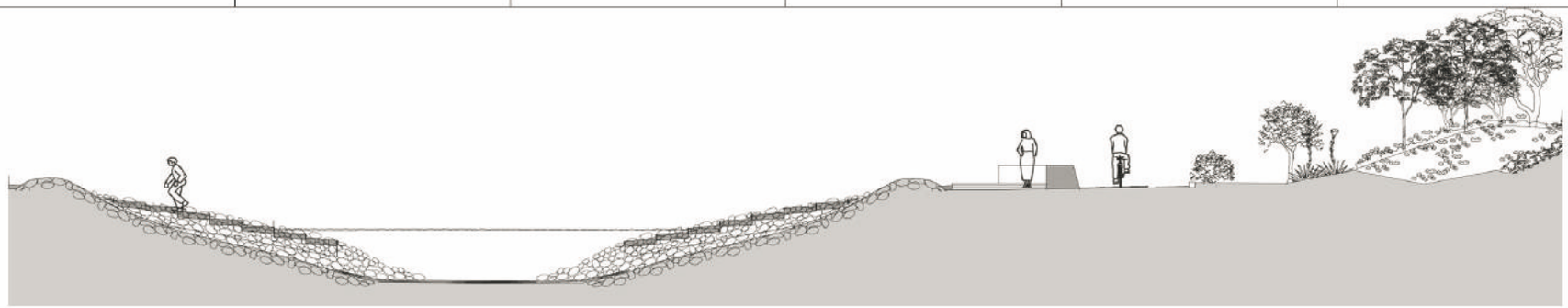
restroom **US01** uses services	**handicapped** **US03** uses services	**cafeteria** **US06** uses services	**internet** **US15** uses services	**first aid** **ES02** edges security	**library** **UC02** uses cultural
swimming **ER01** ecology ravine	**showers** **ER06** ecology ravine	**tennis** **US07** uses sports	**weightlifting** UD02 uses sports	**basketball** **US04** uses sports	**volleyball** **US06** uses sports

Photomontages using the image "Bond of Union" by M.C. Escher to simulate a mural in the entrance to an underground building.

PASSIVE CONTACT: SEBUCÁN RAVINE

_It flows close to the central garden, where visitors go to rest and relax. People can spend time on the banks of this ravine, which will have the necessary furniture. Sports activities will be restricted here.

EDGES



FORM

FUNCTION

ENVIRONMENT

Photomontages of new spaces around Sebucán ravine