CARY CORTONA:
AN ALTERNATIVE DEVELOPMENT MODEL
FOR THE
RESEARCH TRIANGLE AREA

by

Isaac Hall Manning

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APPROVED

Hans C. Rott, Chairman

William W. Brown
Gregory K. Hunt
J. Thomas Regan

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Cary-Cortona is a city that lies on the periphery of two realities; the reality of pragmatism and the reality of abstraction. It was conceived as a response to the pragmatic questions posed by an uncertain, yet impending future. It was nurtured by the correlation of vaguely related information until the facts and figures themselves became an abyss of abstraction. From the cavernous depths of information came a night of dreams when Cary-Cortona first emerged as walls and columns that began to form a city of arcades and courtyards. On that night the inhabitants walked the streets and alleys and the fragments of a dream became the very real elements of a living town. The subconscious residue of that dream flowed together as expressions of order, hierarchy, and form, drawn into existence through the media of models, drawings and sketches. Those formal expressions have taken on a reality of their own even when seen as abstractions through pragmatic eyes because they represent aspirations not yet realized. Cary-Cortona is very much alive in the realm of ideas, and as an idea it can emote a different series of images from each viewer who sees it. Just as there are limitless images of the future each tied to the individual, Cary-Cortona represents only one aspiration for a small corner of a vast future. In its present form Cary-Cortona is an adolescent in a purgatory between the two realities of abstraction and pragmatism, belonging to neither world completely, yet existing to be judged and scrutinized by both.
TO HOWARD AND MARIANNA

Cary-Cortona is the product of a dream whose existence is the result of the support of my family, faculty, and friends. There are no words to adequately express my gratitude for all that has been done to make this project a reality.

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Unparalleled growth is an inevitable reality for the inhabitants of the Research Triangle Area. The Triangle is the diagram of a vast area with a seemingly limitless potential waiting to be transformed into a house composed of diverse rooms held together by the desire to retain its sense of place. The same transformations that develop a diagram into a dwelling are necessary to transform a group of cities into an urban area with a coherent sense of purpose and a physical identity.

The scales are obviously different, yet the process and the concerns that govern them are inherently similar. An area whose growth can be seen as a series of transformations has the potential to become an area that has a strong sense of place. Growth can be a random series of events or it can be a carefully conceived process that has strong sense of its direction and future. The Triangle can be transformed from a diagram into a dwelling if it has a sense of direction and future.
A critical aspect of the Triangle's development image is the introduction of a more hierarchical structure of circulation that can accommodate a range of transportation needs. Structurally, the system would encompass a range of scales from a mass transit system that can hurtle inhabitants from point to point while at the same time can incorporate a labyrinth of streets for discovery at the pedestrian scale.

In the Triangle, transportation is as critical to growth as the availability of water and sewer. A rail system can be an integral form of infrastructure that controls and directs growth. Stockholm, Toronto, and Washington are three examples of mass transit systems that have had a significant impact on the direction of growth. The Metro plays a dual role as a rail corridor as well as a development corridor.
The first stage of the Triangle Area Metro System is to be run along existing transportation corridors. The first phase has been designed to link the Research Triangle Park, Raleigh, Durham, and Chapel Hill and the areas in between. As development is integrated into the rail corridors and densities increase the additional lines of phase two will be constructed. As the system expands in the second phase the lines will tie the area together tighter and extend service to encompass more of the metropolitan area. The Metro will establish a hierarchy of circulation that will begin to define the integrally linked hierarchy of development. As the two mature together around the stations and along the lines themselves the places that develop with them will assume a character and identity ordered by the proximity and texture associated with each station.
The Metro and its subsidiary arteries dictate the boundries of development that occurs around them. These boundries are inherently linked to the hierarchial structure of the area. Each type of corridor needs to be addressed by a different boundry condition. This conception of boundry exists at two levels, the corridor both bounded and boundry. Just as the development that is built adjacent to the corridor should be addressed by a boundry that responds to it on its own specific scale.

Each of the corridors of movement generates a different geography of boundry surrounding it. The geography of the boundry varies at each scale. A street in a city has a very different boundry from an interstate highway or a line of track. Conversely each corridor perceives each boundry at a different speed so the boundries have their own sense of scale and enclosure. On a train in between stations there is different perception of enclosure, than when the train is in the station.
At the scale of the region Cary-Cortona is a room off the Metro corridor, bounded to the south by the Metro, with its entrance being the station itself. With the Interstate-40 as the northern boundary Cary-Cortona is the center of an urban room. The Triangle is an area that has to be addressed at many scales all of which are interdependent. The image of the area as a house is a vehicle to comprehend a large scale. Boundary is also a vehicle for generating architecture which translates to all scales.

Cary-Cortona is an exploration of the geography of boundary that occurs at the scale of the city. The Metro station acts as the entrance threshold from the scale of area circulation. As the threshold of the station is crossed, the scale of urban geography changes to the scale of the car and the pedestrian. The development that occurs around the station is a diverse mixture of offices, restaurants, small shops and some housing, all geared to the scale of the city. Cary-Cortona takes that diverse mixture of development and transforms it into an architecturally structured city that can be a model for urban rooms within the hierarchy of the area.
The physical image of Cary-Cortona is an interpretation of the city as a series of walls that bound public and private places within the city. The structural hierarchy of these boundaries is based on a hierarchical order of public and private spaces. The physical geography of Cary-Cortona's site reinforces this idea of hierarchy because the site the city occupies follows a ridgeline down to a series of ravines and creeks that act as the natural outer boundary of the City.

Each of these layers that acts as a strainer is made up of streets and the buildings that border them, each varying by the type of street, its location in the structure of the city and by the interaction between the buildings that border the streets and the streets themselves. With the streets defining the edge conditions of buildings an internal room is created between the buildings that face the streets. These urban leftovers are critical to the texture of the city because they create another focus for the inhabitants. A focus that is not as public as the street and one that is not as private as the internal focus within the dwelling units themselves. This third focus is a critical element of the structure of the city.
The street, the buildings bordering the street, and the area in between make up the unit that functions within the city's structure as the urban conditions. The urban conditions are the building blocks of the city. Each of Cary-Cortona's four conditions represents a translation of existing urban characteristics that have been ordered to reinforce the hierarchy of this specific site. The four urban conditions are the Urban Theatre, the Urban Oasis, the Urban Wall, and the Urban Garden. All have their own individual responses to the scales of the city. Each has its own dwelling unit as its generator. The conditions maintain a dialogue with the three focuses at each scale between themselves and with the city as a whole. The conditions were conceived as individual layers with common characteristics that reinforce the hierarchy of the city. The degrees of public and private are inherent in each condition and are ordered from most public and to most private to correspond to the site's structure. The following two pages are diagrams representing the urban conditions at the scale of the city and at the scale of the unit.
Each of the urban conditions responds to the scale of the city, itself and its architecture. The image of Cary-Cortona began as an attitude toward urban areas that is directly influenced by the rituals that reinforce a definite sense of public and private within the city. The individual living unit has at least three focuses. Each unit addresses the street to provide a visual connection to the world, the urban left-overs or in between spaces as semi-public, yet private area, and finally the private internal focus of the unit itself. The units of all four conditions share certain common characteristics such as direct access to an internal source of natural light so that the private focus of the courtyard houses can be translated to the modern unit.

Each dwelling is designed around the degrees of privacy that the inhabitant structure their individual rituals around. The balconies on the street facades exist as places to watch and be watched. The rear balconies, terraces, and roof gardens are for spring evenings at sunset or early summer mornings. The light wells are for winter mornings or afternoons with a book. The architectural scale and detail that reinforces human ritual and incorporates its existence as a design parameter has been an original tenet since Cary-Cortona’s conception. The architecture dictates the strength of the urban conditions. The urban conditions are the sub-structure of the city. They create opportunities for ritual to survive. From the farmer’s market in square and the shopping arcades of the Urban Theatre to the roof gardens of the Urban Wall, each condition by its attention to the detail of each architectural element creates an opportunity for the inhabitants of Cary-Cortona to adapt themselves and their rituals to the city to give it a life and identity of its own.

THE FOUR CONDITIONS
Cary-Cortona’s most densely active and formally public place is the Urban Theatre. The name for the Urban Theatre is a residual one that has survived the permutations of the project from its origins as a city for the arts. The most urban of places in a city when thought of in terms of human activity are actually backdrops for the “world as a stage”. The amphitheatre beside the tower is juxtaposed with the spontaneous theatre of the open market and the shopping arcades of the building surrounding the market.

The architecture of the Urban Theatre is one that addresses life in an urban area. The functional structure of the building is one of vertical layers of use tied to each other by the shared focuses to the street, the market, and the interior galleria. The first two floors that open to the arcade and galleria are retail. The next two floors that are entered from the galleria and open out into the street are office. Above the galleria intermixed with the galleria’s skylights is the housing of the Urban Theatre. The shared focus of the three uses ties them together, yet the housing needs to be addressed by its own scale with its own sense of public and private. The roof structure which is made up of cooling ponds and skylights is the vertical garden for the inhabitants of the Urban Theatre. The unit has its own scale, focus and elements even though it is part of a massive structure. Its vertical separation allows for it to have its own sense of place while allowing it to be visually connected to both the street and the galleria.
THE URBAN OASIS
Between the formal geometry of the Urban Theatre amorphic shapes of the Urban Wall and Urban Garden is the Urban Oasis. This urban condition is the bridge between the two orders. The idea of oasis is an adaptation of the wooded squares of Boston's Beacon Hill where the streets open up onto wooded parks in the middle of a dense residential area. In Cary-Cortona the units that surround it act as the walls that protect a garden oasis in the center of an urban area. The architecture of the Urban Oasis has the elements of the urban scale with its loggia to the street where the arcade maintains the formal geometry of the Urban Theatre, while the units framing the other side of the Oasis begin to follow the contours of the site. The units of the Oasis are organized around a light well with the individual units being stacked vertically in twos joined by a common stair or as single four level units. The Oasis itself is discovered by walking between the units where it opens up into a garden. The Oasis' focuses are to the street where the rooms of the units extend into the street as part of the structure forming the arcade, to the oasis itself where the units have enclosed rooms and porches or enclosed gardens overlooking the oasis, and to the light well which acts as an organizer of the unit.
THE URBAN WALL
In any urban area there is a standard building block known as the row house, and Cary-Cortona is no exception. The Urban Wall accepts the row house as an essential ingredient in the textural composition of the city. It adapts itself to the contours forming the walls that help give the city its image. Its facades never seem to break although they do to allow vertical movement across the site and to allow the wall to hold the lines of the site. The street focus of the Wall is important as an entry with the primary focus being turned inward. The area between the units facing the streets is still used as a semi-private garden but not to the same extent as the Oasis.

The architecture of the Wall is a study in thresholds and layers of walls. The sophistication comes with the variation of elements between the fire walls. The standard unit has an elemental core of stairs and a light well with the rooms being organized off that core. The light well has the kitchen at its base and the rest of the rooms revolve and reference themselves back to the well. Each unit has a roof garden that overlooks the back garden with some units having back patios. Because of the adherence to the contours of the site there are breaks in the Wall where the units become separated. It is at these separations where the cross access occurs. It is also here that the most interesting variation can occur because the opportunity exists to extend the interior focus beyond the walls of the house and still maintain the privacy of the unit. This niche creates an opportunity to extend the design parameters of the row house beyond its ordinarily accepted boundaries.
THE URBAN GARDEN
The most remote of the urban conditions is the Urban Garden. The Garden is the condition which acts as the boundary between the city and the wooded areas that surround Cary-Cortona. As the area grows around Cary-Cortona the Garden will become the wall that defines the parklands. Its closest example would be Rock Creek in Washington. At another scale the Garden could be framing Central Park, but the strategy would be completely different. Both Rock Creek Park and Central Park are urban gardens whose wall of development is of a higher density, whereas in Cary-Cortona the low density approach is maintained to follow the city's hierarchy. The Garden acts as the final layer of the city before the transition from public to private is completed.

The architecture of the Garden is one whose primary focus is out toward the wooded areas of the site. The street focus is minimal and the interior focus is less concentrated than in any other condition. The unit itself is basically a wall to the street with an opening that overlooks a courtyard below and the ravines in the distance. A central stair and light well provides the primary organizing element from which the order of the rooms is generated. The house is open on the two sides which overlook the courtyard and the ravines with the remaining two sides acting as solid walls to maintain privacy.
The thesis is the first in a series of rites of passage in a lifetime pursuit of architecture. This project was conceived in a hospital bed in February of 1983, and since its conception I have been on an odyssey that has seemed never ending at times. As the time has gone by the project has matured and taken many directions. The original idea of restoring life to the ritual of commuters in the Triangle is still intact yet it has been transformed into a city and a direction for the area. Many of the ideas that seemed so radical in 1983 like the Metro and the new town as a development model are now being studied or implemented. I had hoped that this project would contribute to the future of the Triangle area, I trust that it still can.
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