

Caracas New Urbanism: Cota Mil

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INTRODUCTION

After two decades of planning, the project for extension of the Cota Mil highway in Caracas Venezuela has yet to break ground. This delay highlights the reality that the Cota Mil project cannot be thought of as a simple urban expressway extension detached from the city that it purports to serve. Rather it must be considered as a comprehensive strategy that incorporates social, economic and political improvements along with the more obvious physical and infrastructural enhancements.

More than any other factor, it has been the political opposition of the residents to the proposed path of the highway which has delayed the extension. Beyond demonstrating an ability to impede construction, there is a negative aspect to this local empowerment if it fails to contribute to the larger public benefit. An equally negative prognosis may be read in the apparent inability of the municipal or local government to construct a participatory model that can put emerging local empowerment to good use. This lack of political infrastructure illuminates the problem of legitimizing seventy-five percent of the urban population that live in illegal "barrios." This raises one of the greatest and most pressing conceptual dilemmas,

specifically what is a "legitimate" vs. "illegitimate" community?

The proposed extension of the Cota Mil highway provided the basis for the international research collaboration between the Columbia University Urban Design Program and the UNESCO funded Caracas Institute for Urban Studies. Over a two-year period, the project researched how this highway extension could be placed into the barrio, developing different site strategies for public review and discussion.

Initially, we accepted the construction of the highway as a necessity and the specific path of the engineers as a given. Building the highway seemed an obvious priority given the need to normalize the larger system of urban movement infrastructure. As the studies progressed, however, there remained persistent doubts about the basic concept of the highway relative to the surrounding urban fabric. Solutions began to focus on "streets," as much as on the "highway" and on the integration of public service infrastructures. These differing infrastructures included social and physical, local and metropolitan, and avoided the singular goal of providing efficient vehicular flow over the existing neighborhoods.

From our perspective, the contribution of this work resides in broadening the definition of the highway proposition without which,

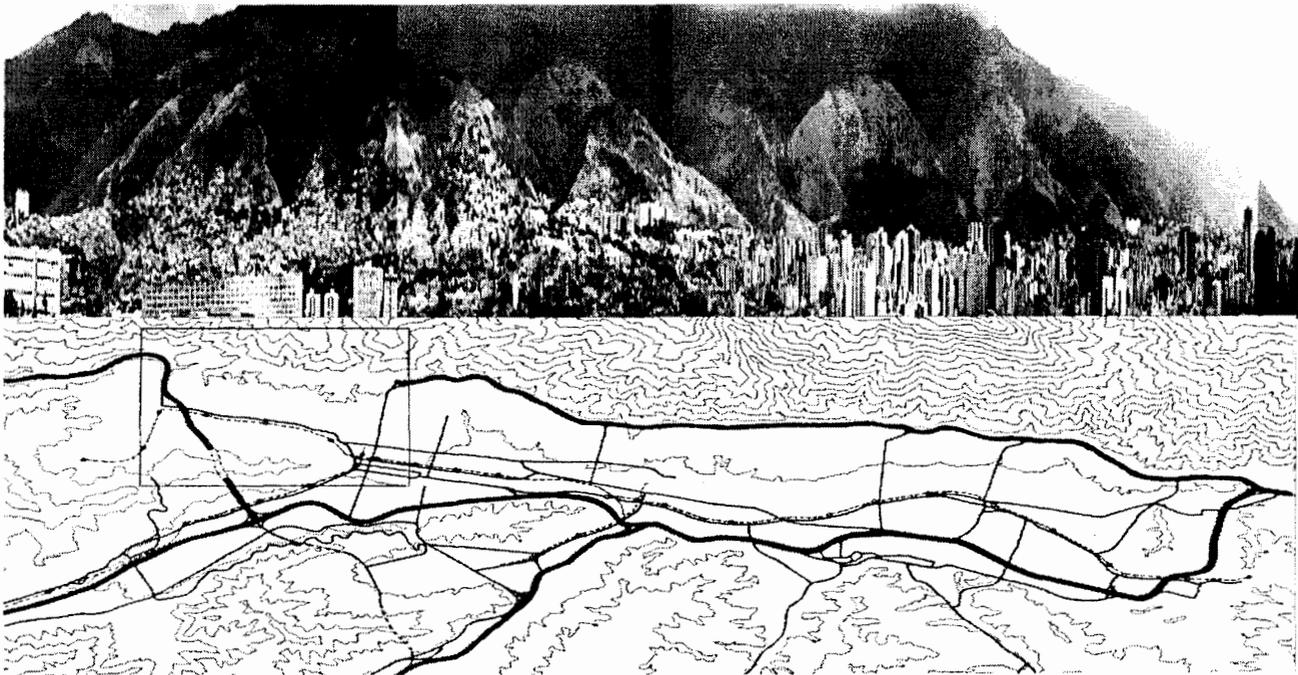


Fig. 1. Site Panorama and Plan.

we have argued, there can be no conceptual or operational basis for action beyond totalitarian measures that seem destined to failure. Herein lay our opportunity to demonstrate that as the definition of the "problem" is broadened, the isolated concept of the "highway" becomes less and less valid. As our studies evolved, we began to speak not of a highway, but of a linear urban fragment, 1000 meters above sea level, which could catalyze the transformation of the barrios. We envisioned a programmatic and methodological prototype that was relevant to other situations in this and other Latin and South American cities. Therefore the question of the highway became refocused and generalized, rather than magnified and localized.

SITE DISCUSSION

Through the questions and ideas raised in the students' work, certain opportunities and necessities for the completion of the Cota Mil extension have become clear. It is apparent from the numerous failed attempts to complete the extension of the Cota Mil that the communities in its path must be included in the decision making process and must benefit from its realization. Consolidated within the enormous investment needed to construct this road system is the opportunity to introduce new local public amenities and improve local infrastructures. Parks, schools and markets must be considered in concert with housing relocation strategies and high speed turning radiuses.

Phasing

The Cota Mil project must be phased to build community consensus, first through local improvements, then followed by the highway project itself.

In the project "Assemblage," Lamar and Segu observe the rapid infill of ranchos into the open space of the modernist towers seeking access to the consolidated services. Therefore, preceding the introduction of the Cota Mil extension, Phase One would include densification through the consolidation of services along two east-west armatures and a primary avenue, Principal del Manicomio. Also included would be the consolidation of the La Pastora neighborhood into a historical district. Preservation is considered a catalyst to development while maintaining the important historical legacy of

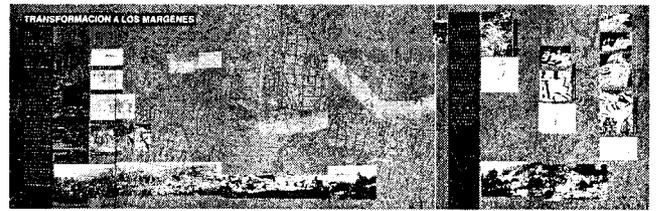


Fig. 3. Transformation at the Margins.

the city. Also seen as a catalyst, large-scale retail will be encouraged at the Manicomio highway exit. Construction of the Cota Mil Extension would then follow.

In "Transformation at the Margins," Naprawa and Rice suggest first providing links between the site of the future highway and the greater city. These links include the construction of new boulevards and roads, and the widening and upgrading of selected streets. This will link the currently marginalized fabric with both the existing city center and the extension of the Cota Mil. Phase Two suggests improvements for the existing barrio fabric. As necessary land is cleared for the completion of the Cota Mil, a local network of public open spaces is developed. The insertion of these neighborhood plazas and programming them with schools and small locally owned businesses will promote self-governance, social stability, and cultural production within the community. Phase Three includes the development of the highway project and a regional-scale development zone at the Manicomio exit.

Maintain social patterns

In order to minimally disturb the existing social fabric, the displaced residents along the route of the Cota Mil extension must be relocated in comparable or better quality housing in near proximity to their former homes. The design of the new housing must consider the predominant forms and morphologies of the existing fabric and must be organized to maintain or improve the local daily living patterns of the relocated residents.

"Oscillation," by Brewer and Sheridan, look for clues in the existing blocks and building types as a step towards mediating the impact of the Cota Mil on the intricate local fabric. Wary of

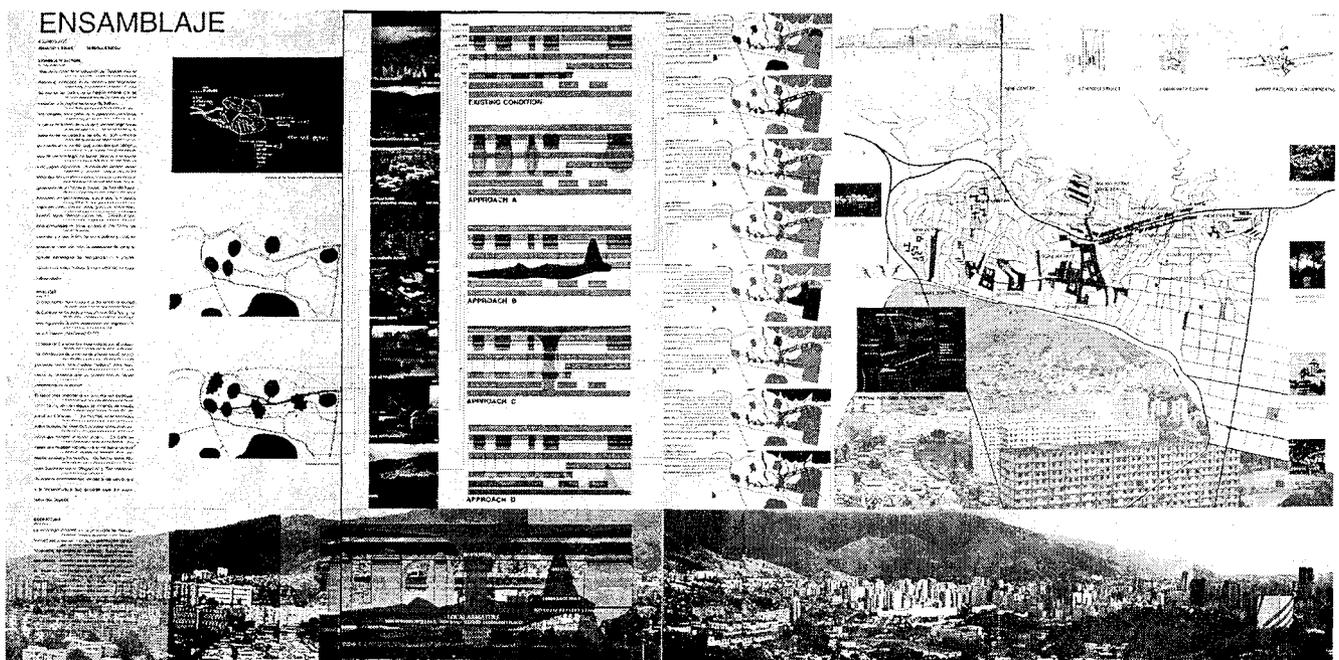


Fig. 2. Assemblage.

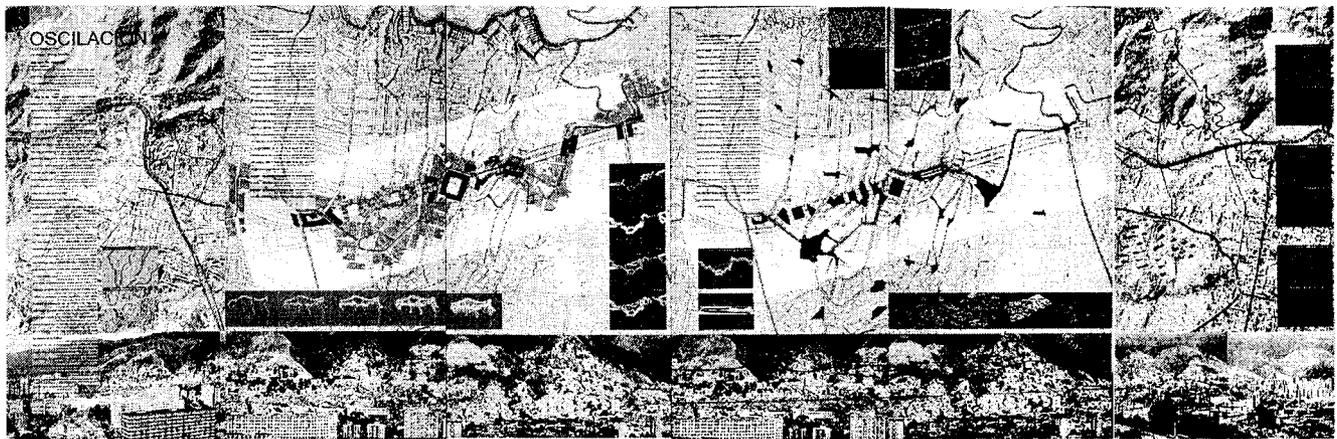


Fig. 4. Oscillation.

romanticizing either the barrio or the highway, they propose a series of alterations that arbitrate between these two extremes of scale and velocity. To the north of the bridge, the improvement of an unpaved road will provide access to the northern reaches of the urbanization, stimulating densification at the perimeter and creating a buffer zone to limit the spread of the ranchos. South of this zone, new courtyard blocks, three to four stories in height depending on the height of the terrain, will accommodate the families displaced by the construction of the viaduct.

Reinforce social identity and a sense of place

The Cota Mil extension provides the opportunity to reinforce the social identity and sense of place for each neighborhood while also enhancing and legitimizing their relationship to the greater city. This must include the improvement of existing street linkages; the making of new parroquias with their civic authorities; and urban centers and services with their plazas, markets, churches, libraries and schools.

With the intention of maintaining the soft and transitory nature of the ranchos, the project "Interstitial Metamorphosis" by Gerber, Kornkamsem and Hseuh replaces the traditional plaza of Spanish colonial planning with the concept of a "thematic quebrada" to restructure the barrios. Like the plaza of the past, the quebrada would offer an active public, social life and spiritual center. They would provide a way of rationalizing and controlling further urbanization of the city. Nature and urbanization, the two main site forces would be overlaid, each transforming the other.

"Oscillation" (See Figure 4 above) imagines the construction of the bridge section of the highway could be used to positively transform the fabric of Lidice by introducing a more regional scale and varied vocabularies of form and passage. Given the scale of the viaduct, the potential for intensive mixed-use development and the investment required to realize that potential, the new construction

will be of a higher density than the existing fabric. While the bridge will reorganize the fabric of the neighborhood, the local patterns and terrain continuously inflect this reorganization. In this manner, the new construction oscillates between infill and abstract object, transforming the potentially devastating impact of the highway into a catalyst for legitimization and the provision of services and access.

In the project "Re-Centering," Povatong and Titley assume that the proposed highway offers an opportunity to provide Caraqueños with needed amenities, both physical and social. The historical development of Caracas becomes a source of precedents for the growth of the contemporary city. For example, the "center" as described by the Laws of Indies is redefined to incorporate the personal car.

The New Gateway to Caracas

The completion of the Cota Mil extension will result in improved connections to the seacoast, the airport and the seaport and will become the new entrance to the City. It will provide a new landscape with a ten-mile continuous panoramic view with access to the city, its valley geography and to the eastern provinces beyond. This strategic importance of the new highway segment will inevitably revalue these neighborhoods within the spatial politic of the greater city, creating rapid densification, gentrification and development interest. Responses to these processes must be carefully prepared prior to development of the highway.

In "Conditional Aggregates," Banin and Kempf view the Cota Mil as an opportunity for a compressed experience of the city. Movement along the highway extension will create an unfolding experience through a complex landscape of temporal layers. Additionally, the extension of the Cota Mil will serve as a catalyst for cultural and economic growth by encouraging metropolitan and regional development along its length, increasing the connections between the inhabitants of the barrios.



Fig. 5. Interstitial Metamorphosis.

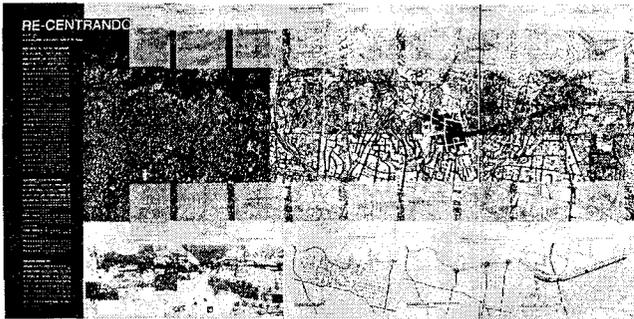


Fig. 6. Re-Centering.

Barrier to Growth

Consolidation of the borderline between the upper neighborhoods and the Avila Mountain is needed to eliminate further invasions into the Avila National Park. Conceiving this border less as a wall and more as a *buffer zone* seems both *opportunistic* and *ultimately more effective*.

In "Urbanism of Order," Loes and Scheiber, propose a linear park as the door to the Avila. Throughout the development of the valley, the Cota Mil has served as an effective barrier against the various invasions into the Avila. Within their study area, it was extremely difficult for local authorities to control the invasions to the park due to the lack of physical barriers. The project takes this macro-intervention as an opportunity to create a new border by introducing the park as a buffer area. This park will be for public use, a place of

civic interaction with sport facilities, amphitheatres, camping grounds and recreation areas.

"Assemblage" (See Figure 2 above) envisions the natural edge of the Avila to be developed as a productive park, an agricultural school, solar energy generation plant, and a water supply system. These functions will serve as a definitive physical boundary to the park while providing resources to the community. The proposal also includes the incorporation of the quebradas into this open space system along the north-south connections. In this way, the national park becomes more integrated into the community. Similarly, "Interstitial Metamorphosis" (See Figure 6 above) uses the quebrada to counter the trend to build further up the hill by extending the national park into the city. The team believes that the process of encroachment of the hillside by informal development requires a proceeding housing density and by dissipating that density one effectively neutralizes the growth.

Development of an obvious and functional system of avenues and streets.

The completion of the Cota Mil extension *must improve* the permeability and accessibility of the affected neighborhoods that cannot accommodate the projected increases in traffic volume. The existing narrow and informal network of streets only function for small vehicles. Currently, public and school transportation, garbage collection, mail delivery and police patrolling are nearly impossible. Additionally the organic growth patterns responding to the quebradas have limited the number of east-west connections through these neighborhoods. An obvious and functional system of avenues and streets must

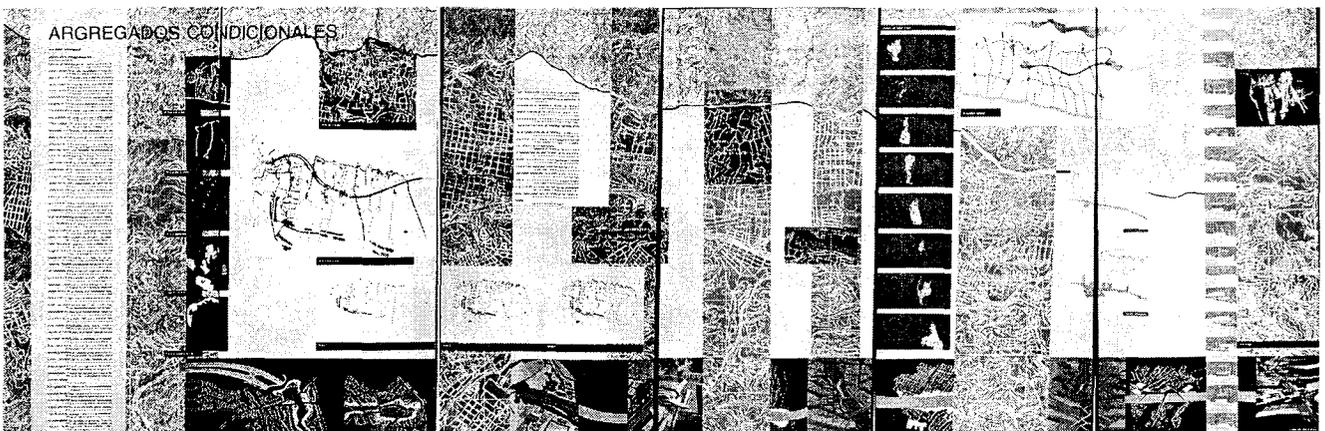


Fig. 7. Conditional Aggregates.



Fig. 8. Urbanism of Order.

be developed which incorporate improvements in lateral east-west connections.

"Oscillation" (See Figure 6 above) suggests the reorganization of traffic through a series of insertions and grafts. Topographic analysis reveals the "islands" created by the flow of the quebradas through the barrio. Existing points of connection across these ravines have developed into a pattern of local centers. The zone of destruction made necessary for the construction of the viaduct provides an opportunity to create a continuous east-west avenue through the barrio, by adding small segments to the existing system of streets. The resulting principal avenue will span the quebradas at key points, providing improved connections to the rest of the city, and opening up a new zone for growth in the heart of the neighborhood.

"Assemblage" (See Figure 2 above) suggests the opportunity for two urban armatures. One links the plaza La Pastora with the proposed new center at the social housing projects. The other located under the viaduct structure generates an axis of pedestrian and vehicular circulation. These armatures structure the subsequent growth within the affected areas and suggest scales of future development.

Designation of a local development Authority

To assure the coherence, efficiency and quality for all actions and investments to be made in the area of the Cota Mil extension, the government should designate a local development Authority. This Authority must be charged with coordinating the myriad of interests. These would include the public sector; such as the Ministries of Transportation, Urban Development, Health, Education, Family, and Environment; the Governor, the Mayor, and the Centro Simon Bolivar. Equally important, coordination must include neighborhood representatives and private sector developmental interests including electricity, communications, construction, real estate and retail.

An integrated Master Plan

The main tool for administration by the coordinating development Authority would be an integrated master plan. This plan must establish and coordinate the different actions and investments by involved entities and integrate them into a comprehensive solution. It must include the collection and organization of information obtained in previous studies, such as surveys of properties and inhabitants, services, green areas and topography. These must be integrated into the projects for the Cota Mil extension, local street restructuring, urban renewal components, housing relocation and the provision of services and the management of financial requirements, budgets and job phasing. A legal framework must provide for rezoning, new parroquias, park, borderline uses, land properties and expropriations. Collectively these planning, design and management strategies will aid the completion of the Cota Mil intervention, which is integrally connected to the future of Caracas urbanism.

CONCLUSIONS

Framing this entire discourse is the issue of urban management,

particularly the interconnection of territories and centers. Approaches to the design of spatial and social connections become an important focus of the work, and the array of possible alternatives can be generated in a fairly straightforward manner. More elusive is the method of choosing one alternative over another. Herein lie the complexities of understanding history and cultural identity. One major task is developing the conceptual basis on which to document and explain the vast barrio fabric; this, more than highways and towers, has emerged as the present and future Caracas.

Historical precedents of real relevance seemed to revolve around the Laws of the Indies, less for their immediate potential to posit spatial order within apparent chaos than for their cultural value in pointing out precedents for urban management which have been lost in the urban implosion of recent decades. In a literal sense, the Laws of the Indies emerged as a useful prototype for charting the existing barrio fabric, through providing a conceptual hierarchy that could allow an indigenous order to become apparent. There was much discussion about the plaza and parroquia and of the possibilities and impossibilities of finding contemporary equivalents for sixteenth-century urban ideals. In the end, this discussion highlighted the necessity for new modes of urban representation as well as the impossibility of governance in the absence of a system of social and spatial hierarchies. The enduring value of the Laws of the Indies is precisely its paradigmatic role as one such system.

In contemplating urban transformation in Caracas, a delicate matter is the preservation of both "old" and "new" typologies, the critical balance between superimposition and self-regeneration. Caracas nudges our understanding of old and new into uncharted territory, giving some credence to the concept of a "post-historical" urbanism. More and more credible have become our suspicion that the barrios are not at the beginning of an evolutionary cycle, but rather at an end; and the origins of their spatial ordering represents a complexity which we do not yet fully comprehend. For this reason, evolutionary biological analogies were suspect: "amoebic" versus "vertebrate" urban structure and the like. One tempting historical reference for the barrio fabric type is "medieval," but this label could explain little of the scale of the phenomena. Features like crooked streets that are shared with medieval cities seemed of little consequence in modeling the modern barrio.

As a result of our work on the Cota Mil highway extension project, we found that the equilibrium between old and new is dependent on the dialectic interconnection of opposites, the balancing charge from within and without. Barrio fabric cannot be reproduced, let alone understood with a conventional interpretation model. Imposed new construction can only be seen as precisely that, "new" and "imposed." This reality requires the change of both old and new fabric types, and of both "legitimate" and "illegitimate." The power of the urbanism of Caracas is so direct in this sense that the city serves as an invaluable pedagogic tool for us. It exposes the semantic and practical contradictions inherent in believing in an old "new urbanism." Caracas places us squarely at a new frontier, with no easy answers.

