

## OFF THE MAP: LEARNING FROM THE INFORMAL CITY CASE STUDY. LAS FLORES, COLOMBIA\*

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### Abstract

Most of the urban dwellers live in communities that, while composed of buildings that range from simple shacks to permanent structures, belong to an urban geography that is literally “off the map”: undocumented, illegal, mobile, ephemeral, and generally beyond the reach of government services and infrastructure. Lacking even an agreed-upon descriptive term- they are variously referred to as slums, informal settlements, shantytowns, or unplanned cities – they are often seen as nothing but undifferentiated pockets of misery, wracked by poverty, crime and unsanitary conditions: in other words, an unfortunate but inevitable waste product of the uncontrolled urban growth that characterizes our time. This view is as unfortunate as it is misguided. While undeniably precarious in construction, informal cities exhibit underlying urban and architectural patterns of remarkable resilience, and that moreover reflect their inhabitants’ enduring cultural values. Built without the assistance of architects and/or planners, they are folkloric expressions of a given people worthy of study. To date, the informal city has largely been described in social, political and economic terms. Very little scholarship has been devoted to the study of these cities as works of architecture; and questions of representation- or how to map and record these sites- seem to be missing from the debate. While it is undeniable that Architecture represents only one aspect of a more complex reality; we believe that it the ultimate and verifiable expression of any given reality. To this end, the paper will present the work of the studio entitled: Off the Map: Learning from the Informal City. The group initially visited the ‘Las Flores’ informal settlement in Barranquilla, Colombia to learn from its existing landscape and see firsthand how it works. Students were asked to look nonjudgmentally at this environment by studying, mapping, and documenting its existing conditions.

### Keywords

Informal settlement, urban growth, architectural pattern, poverty, unplanned cities.

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## FUERA DEL MAPA: APRENDIENDO DE LA CIUDAD INFORMAL. ESTUDIO DE CASO DE LAS FLORES, COLOMBIA

### Resumen

*La mayoría de los habitantes de las ciudades viven en comunidades que, aunque compuesta de edificios que van desde chozas simples a estructuras permanentes, pertenecen a una geografía urbana que es, literalmente, "fuera del mapa": indocumentado, ilegal, móvil, efímero, y generalmente fuera del alcance de los servicios públicos y la infraestructura. No existe un acuerdo sobre un término descriptivo, sin embargo, comúnmente se les conoce indistintamente como barrios marginales, asentamientos informales, villas miseria o ciudades no planificadas, que a menudo son vistos como nada más que los bolsillos no diferenciadas de la miseria, azotados por la pobreza, el crimen y las condiciones insalubres: en otras palabras, un producto de desecho lamentable pero inevitable del crecimiento urbano descontrolado que caracteriza a nuestro tiempo. Este punto de vista es tan lamentable, ya que es un error. Aunque innegablemente precaria en la construcción, ciudades informales exhiben patrones urbanos y arquitectónicos subyacentes de la notable capacidad de recuperación, y que además reflejan perdurables valores culturales de sus habitantes. Construido sin la ayuda de arquitectos y/o planificadores, son expresiones folclóricas de un determinado pueblo digno de estudio. Hasta la fecha, la ciudad informal en gran parte ha sido descrita en términos sociales, políticos y económicos. Muy pocos estudios se han dedicado al análisis de estas ciudades como obras de arquitectura. Si bien es innegable que la arquitectura representa sólo un aspecto de una realidad más compleja; creemos que la expresión última y verificable de cualquier realidad dada. Con este fin, el documento presentará el trabajo del estudio titulado: Off the Map: Learning from the Informal City. El grupo inicialmente visitó el asentamiento informal 'Las Flores' en Barranquilla - Colombia, para aprender de su paisaje existente y ver de primera mano cómo funciona. Los investigadores analizaron este entorno mediante el estudio, la cartografía, y la documentación de sus actuales condiciones.*

### Palabras clave:

*Desarrollos informales, crecimiento urbano, patrones arquitectónicos, pobreza, ciudades sin planificación.*

*“Learning from the existing land scape is away of being revolutionary for an architect. Not the obvious way, which is to tear down Paris and begin again, as Le Corbusier suggested i n the 1920’s but another, more tolerant way; that is, to question how we look at things.” Venturi, Scott and Izenour, (1972).*

According to the World Bank, since WWII global population has increased from two billion to 5.5 billion, and nearly all this growth has taken place in the developing world, where the urban population has grown from 300 million to 1.7 billion today. Most of these urban dwellers live in communities that, while composed of buildings that range from simple shacks to permanent structures, belong to an urban geography that is literally “off the map”: undocumented, illegal, mobile, ephemeral, and generally beyond the reach of government services and infrastructure. Lacking even an agreed-upon descriptive term—they are variously referred to as slums, informal settlements, shantytowns, or unplanned cities – they are often seen as nothing but undifferentiated pockets of misery, wracked by poverty, crime and unsanitary conditions: in other words, an unfortunate but inevitable waste product of the uncontrolled urban growth that characterizes our time. This view is as unfortunate as it is misguided. While-undeniably precarious in construction, informal cities exhibit underlying urban and architectural patterns of remarkable resilience, and that moreover reflect their inhabitants’ enduring cultural values.

Built without the assistance of architects and/or planners, they are folkloric expressions of a given people worthy of study. To date, the informal city has largely been described in social, political and economic terms. Very little scholarship has been devoted to the study of these cities as works of architecture; and questions of representation- or how to map and record these sites- seem to be missing from the debate. While it is undeniable that Architecture represents only one aspect of a more complex reality; we believe that it the ultimate and verifiable expression of any given reality. To this end, the paper will present the work of the studio entitled: Off the Map: Learning from the Informal City. The group initially visited the ‘Las Flores’ informal settlement in Barranquilla, Colombia to learn from its existing landscape and see firsthand how it works. Students were asked to look nonjudgmentally at this environment by studying, mapping, and documenting its existing conditions.

These initial discoveries and insights directly informed the various design proposals which ranged from small-scale architectural projects to larger, urban and landscape proposals.

## Comparative Urban Mapping

The studio's investigations began with a comparative urban mapping of eleven informal cities in the southern hemisphere including Shakha in India, Khayelitsha in South Africa, Kibera in Kenya, Orangitown in Pakistan, La Chacarita in Paraguay, La Perla in Puerto Rico, Villa 41 in Argentina, and Barlovento, Santa Cruz del Islote, and Las Flores in Colombia. (Figure 1) Most examples were located on flat parcels, immediately adjacent to the formal city. The flat terrain facilitated the mapping

effort by eliminating the need to document these sites in section; and their proximity to the formal city allowed for a direct and poignant comparison of their respective physical patterns.

The selected cities ranged in overall area from 2.3 acres to nearly 13,000 acres. Smaller settlements (Barlovento, Shakha and La Perla) were documented in their entirety, while emblematic sectors of the largest cities (Orangitown, Khayelitsha and Kibera) were selected for comparison.



Orangi Township, Karachi, Pakistan



Villa 31, Buenos Aires, Argentina



La Perla, San Juan, Puerto Rico



La Chacarita, Asunción, Paraguay

Figure 1. Urban cartography

Photos investigated by the author, Adib Cure (2014)

The eleven examples were drawn at the same scale - a necessary graphic convention for any comparative analysis- and represented as figure ground drawings that document the totality of the city or sector at a fixed moment in time. The figure ground plan, a long established architectural drawing convention, distinguishes between built form and space, rendering the former in black and the latter in white, and is fundamental when analyzing the morphology of a city. For our purposes, no graphic distinction was made between the formal and informal city, doing so unnecessarily prejudiced the reading of the drawing.

Recently, scholars have claimed that the informal city is incomprehensible two-dimensionally and must be perceived as a city in motion- a three dimensional construct of incremental development. While it is undeniable that the informal is a kinetic and ever - changing urban condition; it is also true that once these settlements are established, their sites are fixed. They are not relocated –unless their inhabitants are forcibly displaced- and even then these individuals return time and time again to rebuild the city in a similar pattern to the original. One such example is the informal city of Villa 41 in Buenos Aires.

Furthermore, while methods of construction are continuously evolving from less permanent to more permanent materials, the urban pattern and the subdi-

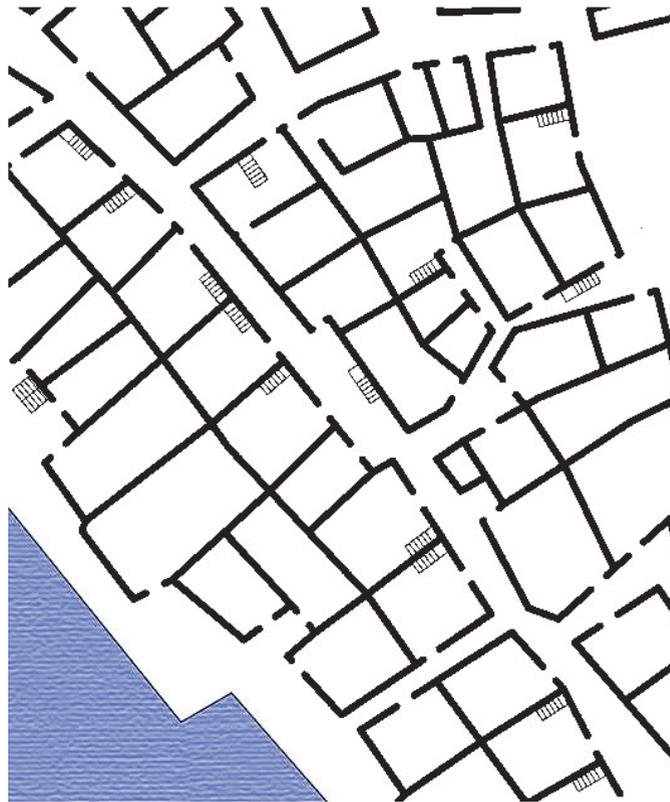
vision of land is remarkably resilient. For this reason, the figure ground drawing is a useful and valuable tool in understanding the overall (and in many instances) permanent aspects of the informal. (Mehrotra, 2010).

The figure ground drawings produced in the studio reveal striking similarities as well as several notable differences. Generally, the informal cities were compact with clearly delineated boundaries (either natural or manmade) and very few points of entry. Their physical patterns were organic and irregular, adapting and developing incrementally over time as the needs and circumstances of the community changed; and their built fabric was denser than that of the formal city, with a complex network of small pedestrian – scaled streets and relatively few public open spaces. Often, there was no clear hierarchy between the public realm and the built fabric; and many buildings were mixed-use with commercial and/or public functions occurring in small increments throughout the city. This last observation has been confirmed by on-site documentation both in Latin America and abroad.

Despite these similarities, the drawings also revealed differences that could be attributed to the local history, culture and/or geographic circumstance of a given city. Typically, the Latin American examples were composed of parti-wall buildings grouped to create small blocks that continuously defined the edges of

the street. This manner of developing cities has been systematically used by diverse cultures and comes to Latin America by way of the Spanish colonization. Conversely, the African examples were a continuous patchwork of small detached structures that appeared at first glance to have no recognizable order or hierarchy. However, upon closer inspection, a more subtle pattern emerged.

Individual structures were loosely organized around communal courtyards, not unlike vernacular tribal settlements of the region. Generally, the African examples were also far denser than the Latin American ones. However, the densest settlement (by a significant figure) was Shakhā in Mumbai, India (Figure 2). Here the population density was over 1,100 persons per acre, nearly three times that of the Latin American examples.



## THE HOUSE – SHAKHA

*Left: Detail plan, Shakhā, Mumbai  
Right: Views*



Figura 2. Detail plan and houses of Shakhā, Mumbai

Taken from: Local revolutionizing coverage in Mumbai: Shakhā (The Indian Republic, 2014)

The figure ground drawings served as a point of departure for analyzing these informal cities. However, to gain a more profound understanding of the complexities of these settlements, it is necessary to draw and document them in situ. To this end, the studio traveled to the northern coast of Colombia, South America to learn from Las Flores, an informal settlement located at the intersection of the Magdalena River and the swamp of Mallorquin. The specific study of Las Flores -by way of drawing- analyzes the structure of this informal city including its districts, blocks, streets, public, and private buildings. The degree of specificity challenges existing classifications of the informal which are often unverified hypothesis described by scholars that have never visited or drawn these places and which lead to vague generalizations.

### **Case Study- Las Flores**

The foundation of Las Flores lacks proper historical documentation. Anecdotal evidence suggests that the settlement was originally established by a small group of fishermen who were displaced by the armed conflict taking place throughout the Colombian countryside beginning in the 1940s. This violent, economic, and political turmoil eventually led to the massive displacement of people living in the hinterlands. The first builders of Las Flores were the fishermen who arrived from nearby fishing hamlets in search of a better life. They relocated to a flat, desolate, and

geographically isolated area commonly known as Bocas de Cenizas, a site of great natural beauty located at the mouth of the Magdalena River and adjacent to the swamp of Mallorquin (Villalon, (2000). At this time, the vast fluvial landscape was populated by a variety of fish and wildlife that provided sustenance to the early settlers. The first unpaved streets lacked names and were most likely located closer to the now well-developed Vía Cuarenta along the south western edge of the settlement known as Barrio Nuevo. In time, the original wattle and daub houses gave way to more permanent wood structures that slowly began to reclaim the edges of the swamp.

Today, sixty years later, Las Flores is a slowly growing, picturesque, and dusty settlement of approximately 10,000 inhabitants. This improbable settlement, now encompassing nearly .5 square miles, is bounded on the easternmost edge by the Magdalena River, on the southernmost edge by the Vía Cuarenta, and on the northern edge by the swamp of Mallorquin. Most of the urban fabric is composed of concrete and clay block dwellings sparsely surrounded by dusty almond trees, and tightly assembled to protect itself from the intemperate sun. The many public improvements- most notably, access to running water and electricity, as well as canalization to prevent from flooding- have been the result of public/private initiatives generally funded by the generosity of private local businesses.



Figure 3. Map of Las Flores - Barranquilla

Photos investigated by the author, Adib Cure (2014)

### The Structure of the City Districts

A map of Las Flores does not immediately reveal a spatial system composed of distinct districts; yet the local leaders begin their descriptions of the place by pointing to the “neighborhoods” of the settlement.

They carefully trace lines over maps naming the districts - the Barrio Nuevo, Barrio Amarillo, Nueva Esperanza, CaJuan, Barrio Tambo, La Cuchi and Chipi Chipi (Figure 3).

The oldest sector, ironically called the Barrio Nuevo (new neighborhood), is a

triangular parcel of land bordered by the Vía Cuarenta to the south and industrial lands to the south east. It contains the only two-storey residential structures and the most important public buildings of the community. Currently, the Barrio Nuevo appears isolated, cut off from the rest of the urban fabric by the enlarged Vía Cuarenta. Yet at the time of its founding, the geography of the area was quite different. The edges of the swamp of Mallorquin were located alongside the present - day road, providing the fisherman direct access to the Caribbean Sea.

Las Flores has grown incrementally through progressive landfills that have

extended the informal city into the swamp; and the successive districts are connected to this evolution. The physical boundary between districts is not immediately discernable to the visitor. Yet as one lingers -carefully mapping the city's form- more subtle morphological characteristics are revealed. The physical landscape echoes the social fabric of the city. Older districts are denser with more permanent buildings built largely of concrete and clay bricks, more landscape, clearly defined public spaces, and access to public services. The more established and wealthier settlers live in these areas. Newer districts are far more precarious in construction, lack public spaces and access to running water. The poorest residents live here.

### **The Individual Dwelling**

A city can largely be characterized by its individual dwelling. The development of the insulae in Rome, the casa patio in Latin America, the Viennese housing block, and the detached house in the American city are but a few examples that reveal the intimate connection between the form of the dwelling and the form of the city. Moreover, the dwelling materially presents a people's way of life and can be viewed as a precise manifestation of a given culture. Its salient characteristics develop slowly over time and are not only a response to the local geography but also the constructive, social, and economic realities of the place.

The first act of building in Las Flores is to lay claim to an empty parcel of land. This is done by staking two, large wooden posts approximately 4 – 4.5 meters apart. The posts are tied together with a taut rope that demarcates the future front elevation of the new dwelling. The overall width of the lot is remarkably consistent and determined by technics – specifically, the maximum allowable span of a conventional wood rafter.

The dwelling begins with the construction of a single room measuring 4 x 4 meters and a covered front porch. The space is used for living, cooking and sleeping; and the porch serves as an intermediate space-between the single room dwelling and the street. The original structure is built in wood- the cheapest and most readily available material in the area. In time, the wood house is replaced by a masonry shell built of hollow, clay, block walls and a concrete structural frame.

Replacing the original wooden structure with a masonry one is a willful aesthetic act. Wood is fragile, weathers quickly and is considered by locals to be a “poor-man's” material. Masonry, on the otherhand, is the prevalent building material of the formal/historical city. It is more permanent and associated with greater stability, both structurally and economically. The new masonry houses built in Las Flores directly resemble those of the Barrio Abajo (or lower neighborhood), a low income neighborhood in the formal city. This mimetic act carries with it the hope of building a better environment and with it a better way of life.

The construction of the dwelling in the informal city is never a singular act. The house grows slowly over time, expanding incrementally towards the rear of the property with the addition of individual rooms (measuring 2 x 3 meters) connected by a narrow corridor. The oldest houses – those with access to running water- contain a small bathroom, adjacent to the living room (Figure 4).

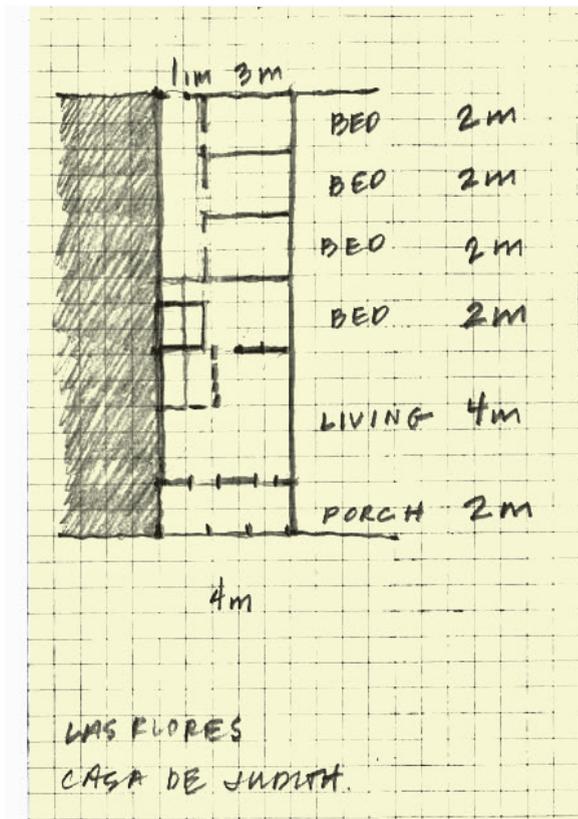


Figure 4. Plan of Judith's house.

Taken from: author's research Adib Cure flat picture (2014)

The type resembles an African shotgun house in plan. But the similarities end there. Unlike the shotgun typology, the Las Flores dwelling is a parti-wall construction. The former detached house yields interiors of abundant light and cross ventilation, the latter is dark with little air circulation. As a result, the inhabitants spend most of their time outdoors on the porch where they are protected from

## THE HOUSE – LAS FLORES

Left: Plan sketch  
Right: View of typical house from the street



Figure 5. The House - Las Flores Barranquilla

Taken from: author's research Adib Cure flat picture (2014)

the intense heat by large overhangs. In the shade, they can enjoy the prevalent breezes that sweep through the city from the Caribbean Sea. The porches abut one another to create nearly continuous urban facades (Figure 5); and the small, repetitive, housing units provide a fine grain to the city, creating a dynamic urbanism that promotes social interaction.

The greatest shortcoming of the existing, single family dwelling is the lack of proper light and ventilation. However, the studio came to the conclusion that the

small repetitive parcel promoted a quality of urban life that was worthy of preservation. Students interested in developing housing alternatives for Las Flores, began by defining the sizes of the existing parcels and working within these dimensions to provide alternatives to the current housing stock. The proposals were principally concerned with designing houses that were properly lit and well ventilated, built with the materials of the place, and that moreover could be assembled over time by the residents themselves. (Figure 6)

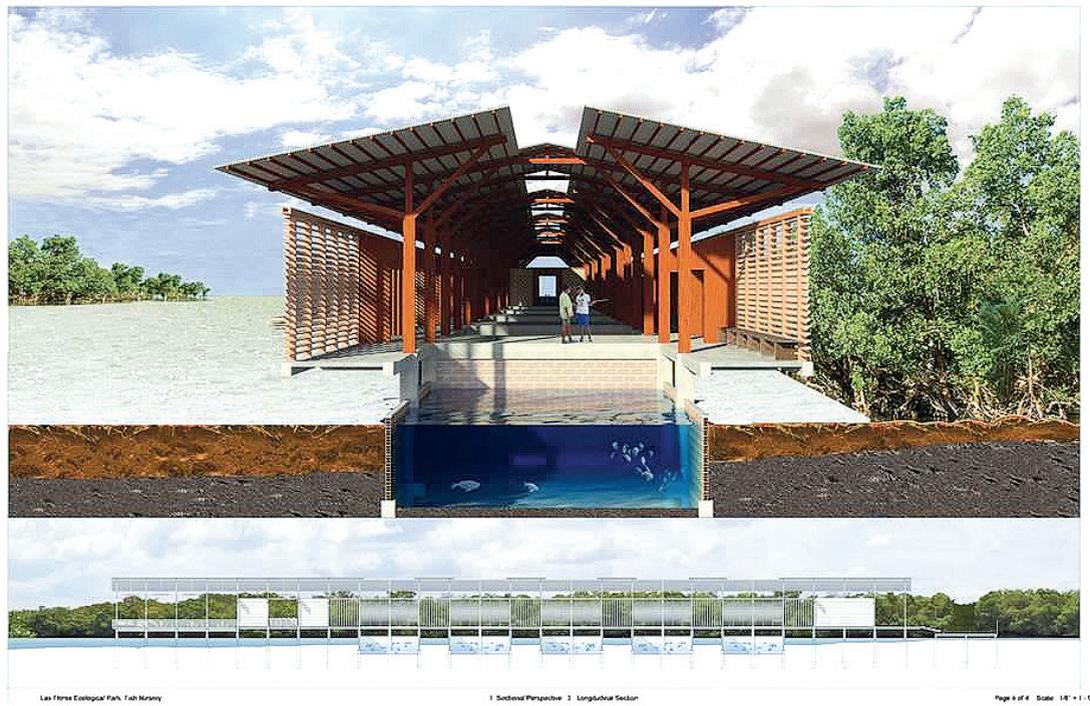


Figure 6. Student Project, Las Flores Fishery, 2011

Photo file Author Adib Cure (2014)

## The Urban Block

Las Flores is composed of approximately seventy-five, thin, quasi - rectangular blocks ranging from 100 x 300 feet to 200 x 500 feet. Originally, the blocks were laid out with their longest edges fronting the swamp of Mallorquin; but recently, the direction of the block has shifted to run parallel to the edges of the River - the more typical orientation for towns founded along the banks of the Magdalena.<sup>1</sup> This orientation captures the primary breezes sweeping into the city from the south east.

The older sectors have more clearly defined blocks composed of parti-wall buildings - constructed of concrete and clay brick- that press themselves against the street, producing a continuous and often picturesque street section. In the newer sectors, the blocks are just beginning to be defined. Yet even here, the street can be considered the urban space par excellence, with individual wood shacks marching alongside one another to define small, pedestrian-scaled, dirt roads.

Although precarious in construction, these detached, wooden buildings have better light and cross ventilation than their masonry counterparts. This

may explain why most citizens spend their days outside, sitting on the porch or gathering at the small corner stores found throughout the settlement.

The scene is reminiscent of a frontier outpost with the cast of characters gathered underneath the shadows of their front porches, calling out to one another from opposite sides of the street.

## Public Open Space

There is a striking lack of public open space in Las Flores. The most important spaces - the soccer field and the Plaza de los Pescadores (Fisherman's Plaza)- are located near the geographic center of the settlement, in close proximity to one another. The former is a large dirt field, the latter a small triangular plaza defined by one- storey masonry buildings on all sides.

Soccer is undeniably the most important sport in Latin America; and on any given day, large groups of children can be seen playing barefoot on the sun drenched soccer field at Las Flores. Despite the high population density and the increasing need for shelter, no one squats on the large open space occupied by the makeshift field. This is truly remarkable, and not only attests to the importance of this sport in the daily lives of the people but also the more fundamental human need to play and interact.

<sup>1</sup> One such example is the historic city center of Barranquilla. The typical block measures approximately 220 x 520 feet with its longest edges facing east and west, parallel to the Magdalena River.

Locals regard the Fisherman's Plaza as the social center of Las Flores. It is situated within one of the oldest sectors of the settlement, where a clear sense of community is most palpable. The land adjacent to the plaza is the most desirable in the neighborhood; and some of the most established members of the community live here. Recently, many of these individuals have been granted land tenure- a notable achievement, and a clear sign that the community is no longer as temporal or ephemeral as it once was. The center of the plaza is raised, most likely to protect it from flooding; and the residents living in the houses flanking the plaza keep watch over the space to ensure that children can play safely by day, and that makeshift street lights are illuminated by night. In contrast to the vast majority of the settlement, the plaza is pleasantly shaded by a row of trees (planted by these same residents); the much needed landscape offers respite from the intense tropical heat, making the picturesque Fisherman's Plaza a desirable place to linger and relax.

The urban fabric defining the triangular plaza is largely residential, with front porches serving as intermediate spaces between interior and exterior. Like many buildings in the older sectors of Las Flores, the houses are built of clay brick and concrete; but those flanking the plaza are plastered and painted in a variety of brilliant colors. The painted surfaces are both a sign of economic status and individuality.

## Public Buildings

Informal settlements, like Las Flores, are in their early stages of development. Individuals are primarily concerned with staking claim to parcels of land and addressing the fundamental need of building a shelter. Slowly, a collective consciousness emerges that permits a community to define its own identity.

When this occurs, public buildings are erected as physical manifestations of these shared values. Las Flores has four, existing, public buildings: a school, clinic, small community hall, and Catholic Church. The school, funded by a private firm, is located near the existing soccer field; while the remaining buildings are set adjacent to one another, flanking the busy Vía Cuarenta at the edges of the Barrio Nuevo. The Catholic Church, most recently built by another private firm, acts as a landmark for Las Flores as the Vía Cuarenta turns west towards the town of Puerto Colombia.

The new public buildings are larger and more difficult to construct than the residential fabric. As a result, architects have been commissioned to design them; and public/private initiatives have been established to fund the projects. The buildings are modest, lack any clear architectural style, and are oftentimes less inventive or authentic than the vernacular buildings built by the locals. Nevertheless, the residents of Las Flores describe the new Catholic church as "modern"

and “full of light.” They view the building as an improvement, mainly because it resembles structures built in nearby Barranquilla.

Las Flores is still in need of important communal spaces including a large hall to feed the hundreds of children that roam the streets of the neighborhood while their parents work in nearby factories or as house maids in Barranquilla; and an Urgent Care clinic that can serve the community’s emergency health care needs. Students returned to Miami to develop designs for these proposals.

## Conclusion

When analyzing the building of cities throughout history, the informal (characterized by organic physical patterns built incrementally over time) has been the norm versus the exception. ‘Power’,-the quotation from Spiro Kostof is irresistible- ‘designs cities, and the rawest form of power is control of urban land.

When the state is the principal owner, it can put down whatever pattern it chooses. This was true of the royal cities of ancient Persia, the imperial capitals of China, and the Baroque seats of European princes...In the long history of cities from Western Asia and Mesopotamia to the new towns of today, this exercise in totalitarian design has limited currency. The vast bulk of the world’s cities do not go back to such single-minded begin-

nings. The power that comes of owning urban land is, as a matter of course, broadly shared, and therefore city form is a negotiated and ever-changing design.’

Seen through the broader lens of history, the formal and the informal are inextricably linked, sharing many of the salient characteristics that have defined cities for millennia. The splendor of contemporary Venice began with a series of wooden shacks built upon the desolate expanse of water, reed, and marsh that the first Venetians chose as their own to protect its inhabitants from the fury of Attila the Hun’s assault. New York City, the greatest American modern metropolis, was once a small commercial outpost of irregularly shaped streets facing the harbor; and London, one of the world’s most beautiful cities and leading industrial centers was once a conglomeration of primitive wood huts adjacent to the great Thames River. These cities are examples of “negotiated, ever-changing designs” richly layered and emblematic of the shared cultural values of a given people.

The studio’s research and drawings (both digital and analog) - with their quantifiable information regarding the urban composition of contemporary informal cities (particularly Las Flores) - reveal many of the salient and permanent characteristics associated with the building of cities; suggesting that in time, our present - day informal settlements may become the great cities of the future.

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