IRENO-ARCHITECTURE: A Possible Adaptation of Architecture for Peace in Honduras

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Abstract: Young people living inside informal communities around the capital of Honduras are easily recruited by gangs. These neighborhoods demand better quality architecture that is able to play a role as promoter of peace. In order to provide solid bases for new architectural solutions, data from various resources were used to perform several analysis and studies, in order to develop and exemplify design criteria for architecture for peace. In this way, it is possible to find a target audience to whom social architecture, in the specific context of Honduras should be aimed, and provide a starting point for future investigations and management on the subject.

Key words: Urban renewal, community, social architecture, architecture for peace, Honduras, urban acupuncture, violence.

1. Introduction

The neighboring cities of Tegucigalpa and Comayagüela, make up Distrito Central (MDC), the Honduran capital, known worldwide just as Tegucigalpa (see Fig. 1). During the last decades of the XX century many informal communities settled down in the outskirts of Distrito Central, but since they were not considered an official part of the city, they were forgotten by local governments. According to IUDPAS-UNAH [1] these communities are also considered violent and young people who live in them, especially those under 18 years of age, are recruited by gangs due to financial hardship, feelings of belonging, or power within their community. In this way, many children turn to criminal activities since a very young age [2].

2. The Implosion of Tegucigalpa

During the 1970's many formally urbanized neighborhoods were created, especially in the area of

Tegucigalpa, aimed for wealthy bureaucrats, managers and politicians. These were located along the most important streets, greatly contrasting other informal neighborhoods settled in the slopes at the outskirts of the city, which lacked every basic service needed for decent living [3].

The creation of these informal neighborhoods goes hand in hand with the biggest population growth the city has had: between 1974 to1983, the population of the city went from 72,835 to 300,000 people. During the 1970's, 44 neighborhoods were created, but almost half were product of illegal claims of land, specifically in western Comayagüela where most of the vacant land was located [3]. The problem with this land was its difficult topographic characteristics that made urbanization expensive. This created incredibly marginal conditions for the people who lived there, especially because some parts of the terrain were in risk of collapsing due to instability caused by construction.

This created a situation of urban implosion, were the city's formal growth, including the majority of goods and services, was developed only along the main boulevards and roads built in the central part of

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Tegucigalpa during the same time. Thus, creating a big division between a formal Tegucigalpa, which included many commodities for modern life, and a forgotten and unplanned Comayagüela, where commercial activities and other services were scarce.

3. The Explosion of Central America

The second half of the XX century was especially hard for many Central Americans, as Honduras was going through a series of military coups that spanned from 1956-1979, and civil war had exploded in Guatemala, El Salvador and Nicaragua [4].

Many people, especially those from the war in El Salvador, chose to flee their country to the United Sates. This was a crucial part of the creation of urban violence; since, many gangs that are present today in Tegucigalpa were formed and influenced by the gang culture established by Mexicans and Salvadorans in California during this migration period [5]. In the 1990's the United States enforced its immigration laws, and many illegal immigrants were forced to return. The newly imported gang culture, which according to Orellana [5] was more violent in nature than traditional gangs, combined with the amount of firearms that were left in circulation after the armed conflicts in the region, set the bases for the period of violence that the country had to face in later years.

4. Current Conditions of Informal Communities in Distrito Central

While driving around, it is easy to notice that the neighborhoods in the periphery of the city are also informal communities. When one goes inside, it is possible to see that these communities lack places that allow people to use the streets and perform outside activities. Jacobs [6] says that this situation is unhealthy for a city, since as necessary as police are, security is also provided by direct or indirect observation of ordinary people in the street. The absence of well-defined private spaces, buildings with public spaces and large windows that allow seeing the

outside, can impact negatively in the sense of security in an area.

Informal communities are home for 25% of the population in Tegucigalpa, a city that has 51.5% of its residents living below the poverty line [7]. These communities lack public services like sewage, drinking water, and paved roads. Non-government organizations (NGO) working in the sector inform that parents in the community have monthly wages of $90, which include long working days of almost 10 hours [8]. Moreover, on average, a child from an informal community like Nueva capital (see Fig. 1) must travel a minimum of 8 km to get to the nearest school in downtown Comayagüela.

This situation forces children from these communities to spend a great amount of time alone, both at home and in the street, where many of them end up joining gangs (known as "Maras" in Central America). According to Save the Children UK [2], for many children, organizing in gangs and assuming power based on fear, has been the only way of making society know of their existence, in the middle of an exclusive economic system.

Many Honduran newspapers also report that gangs take advantage of children since Honduran law can not send them to jail before they are 18 years old; making children between the ages of 8-20, highly desirable as new gang members [9]. Numbers support this statement: the statistics department from the Honduran Supreme Court of Justice reports that in 2018 alone, there were 996 cases of children accused of committing crimes such as robbery and illegal ownership of guns [10].

5. Current Social Architecture in Honduras and Other Latin American Countries

Through the success stories of the Library Parks in the Colombian city of Medellín [11], and some smaller efforts in Venezuela through the project "Spaces for Peace" in 2014 [12], it is possible to see that educational and recreational architecture has a
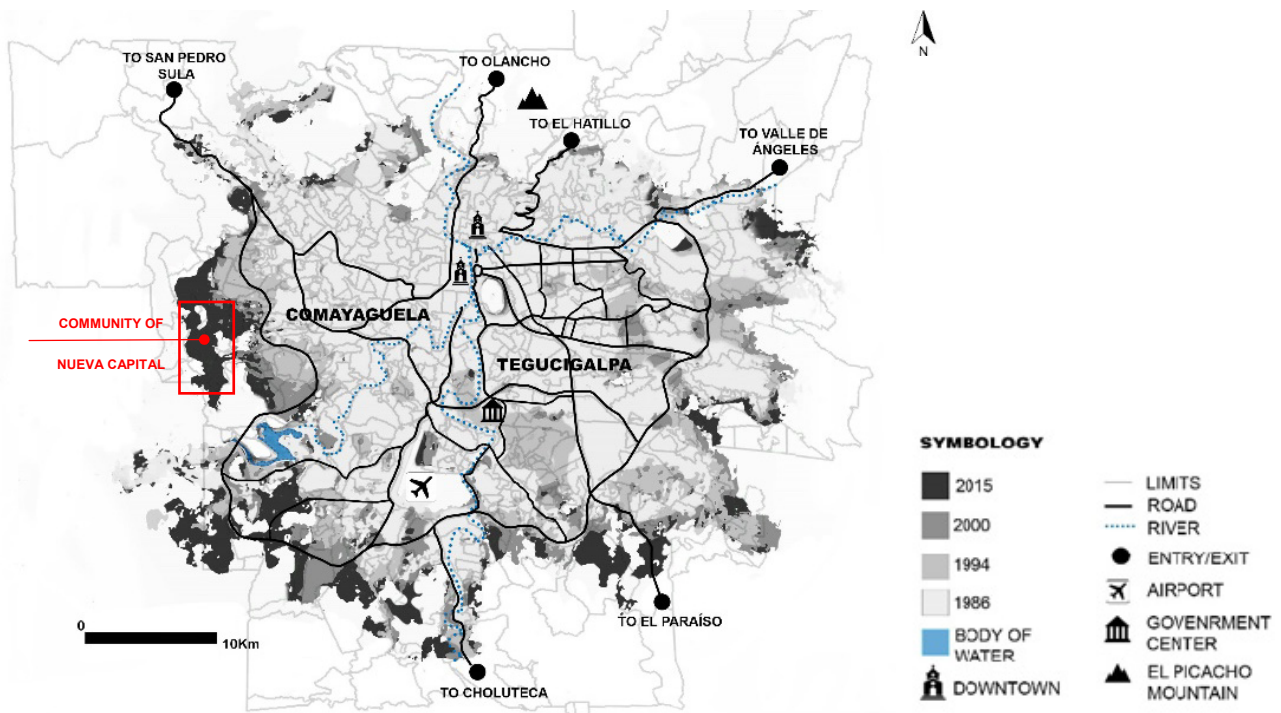
Fig. 1   Urban growth of Distrito Central according to Metro Plan. (Source: Authors, Landsat images, AMDC).

significant influence in the reduction of urban violence in the communities where these buildings are inserted. Currently the government of Honduras through the "Convive Mejor" Foundation has made 10 new public parks in conflictive and informal neighborhoods from different cities around the country. At the same time, other NGOs like the Tegucigalpa Ecological Foundation (FET) are building parks to create places for social interaction and opportunities for Peace. Among these, one that stands out is ACOES, a Honduran religious nonprofit organization committed to work in the most conflictive areas of Tegucigalpa.

Using voluntary donations from Spanish organizations, they have built schools and community centers for the youth in some of the most dangerous neighborhoods in the city. Most of them are made of brick, steel or concrete block, and in 2017 they managed to attend 4,000 children [13]. This NGO already has many success stories from its graduate students, who have managed to improve their life thanks to the opportunity they were given. More investment in this area, with the right quality of

architectural design and constructive techniques, could represent a major turning point for the situation of "Maras" in these communities.

6. Building Typology and a Target Audience

In order to propose an architectural typology and maximize its impact in the community, a user base had to be defined first. From the *Report of the Situation of Maras and Gangs in Honduras*, published by UNICEF in 2011 [14], combined with statistics from the Honduran National Police, it is possible to conclude that the largest age group of people involved in crime is between 20 to 30 years old [15]. At the same time, according to Orellana Maglioni [5] once a person becomes an active member of a gang, there is no way of leaving it. This information provides the basis for the election of the target audience: children and teenagers up to 19 years old, who are either in process of becoming a gang member, or have not yet entered the gang.

Regarding the typology of the architectural project, based on the experience from South American

countries and the example of ACOES, educational/cultural buildings may be a suitable option for the creation of architecture for peace; there seems to be a consensus that schools, families, and churches play a critical role in exposing youth to positive influences [16]. Thus, if organizations like ACOES were to use top quality architecture with a public orientation, then they could expand their impact on their communities and contribute to the reduction of children involved in criminal activity.

6.1 Ireno-Architecture

Throughout this research, the terms architecture and peace have proven to be closely related, when speaking of social change inside informal communities of Honduras and other Latin American countries. Nevertheless, there is still not a single term that brings together both words to create the meaning of architecture that promotes peace. Thus the term Ireno-architecture is proposed, in an exploration of an appropriate way of addressing the matter. The prefix Ireno comes from the Greek word Irene which means peace and its definition is also influenced by urban acupuncture. John Southern, a Los Angeles architect and professor, says that it sees the city as a living organism, and its projects become a surgical and selective intervention of the urban environment. He also mentions that urban acupuncture develops micro-targeting, low-cost, democratic, and empowering projects that revive the city [17].

By analyzing different projects classified as promoters of peace, one starts to notice that regardless of the country, they have common characteristics: (1) spaces must promote social interaction, through the implementation of public space; (2) generate security with no guards, but among citizens; (3) quality of architecture, not only in the architectural design and finishes, but also in the construction techniques; (4) use of construction materials that speed the construction process; (4) use of urban acupuncture: punctual projects in socially conflictive communities.

Hence Ireno-architecture can be defined as the architecture whose purpose is to improve its direct urban environment, which is usually considered violent or dangerous, through interventions in specific places identified in a previous analysis of the area.

7. Applicability

In order to exemplify and apply the concepts and criteria discussed in this research, ACOES was contacted to see if there was any opportunity to work with them in a social architecture project. They provided a plot of land in a community called Nueva Capital, with very difficult characteristics: it already had three existing classroom buildings, which made up the Virgin of Suyapa School, inserted in a 40% slope. Fig. 2 presents the development of an architectural shape using the ideas of Ireno-architecture. These criteria do not limit the architectural design and are capable to assist in the creation of buildings with a social program in mind. In this way, they contribute to the creation of designs that serve as landmarks in their communities and provide spaces for human development and interaction.

8. Conclusion

Many children living in informal communities of Tegucigalpa are victims of gangs, and this creates a context where architecture represents a great opportunity to reshape their environment, while serving as promoter of peace. That is why, the idea of Ireno-architecture aims to fill an existing gap where this kind of "Architecture for Peace", so common today in many Latin American countries, still has no proper name and its characteristics have not been formally defined.

At the same time, non-government organizations working in these neighborhoods, which usually have a religious association and no relation to the government, may represent a suitable alternative for the possibility of providing cultural, educational and

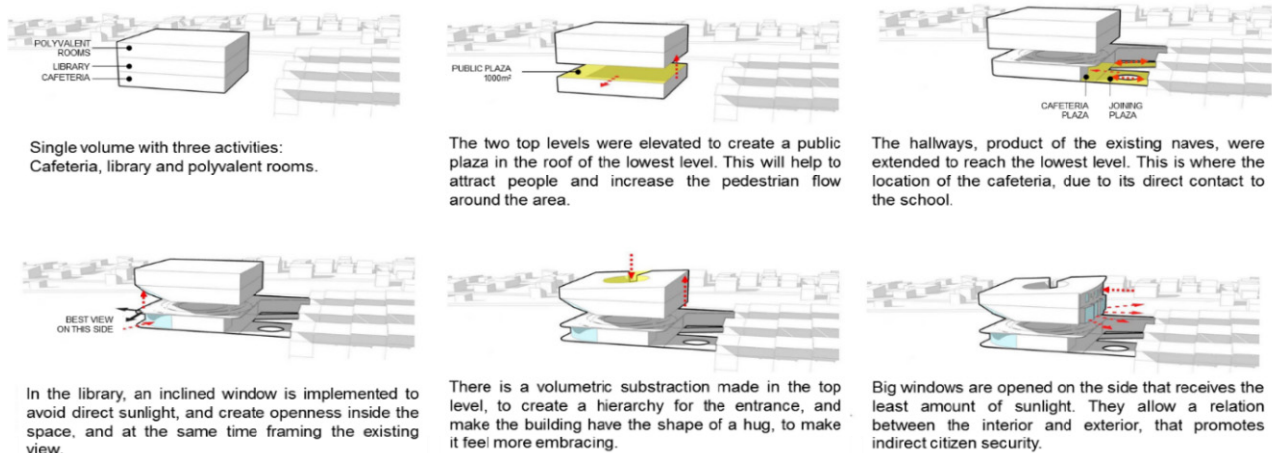social spaces, using international and private

Fig. 2   Principles followed for the development of an architectural shape.

Source: authors.

stakeholder donations. In this way, these investments may become a good way of using architecture to aid people inside informal communities in Honduras to improve their life quality conditions.

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