

THE USE OF COLOR IN THE DWELLINGS OF THE INFORMAL SETTLEMENT “LA PERLA” IN SAN JUAN, PUERTO RICO

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ABSTRACT

This paper aims to explore the importance of color in a particular self-built informal settlement called La Perla in San Juan, Puerto Rico. The neighborhood is located next to the historic attractions of this important tourist island, but is not incorporated within the tourism industry even though its vernacular architecture may have strong appeal among tourists. The artistic use of color by its inhabitants makes La Perla an area with high tourism potential. The objective of this research is to present partial results of a color survey in the settlement and to understand what are the main colors used in the façades of La Perla. Photographs of the façades of the dwellings were analyzed using image color summarizer software and the main colors of the façades were calculated. The results show how La Perla is very colorful and also the important use of bright colors. Future research is necessary to complement this pilot study and to understand also the use of colors in the public areas.

INTRODUCTION

Puerto Rico, a Caribbean island, is a semi-independent country linked in a “commonwealth” relationship with the United States. San Juan, the country’s capital, is a sprawling city with a metropolitan area population of about 2.5 million inhabitants. Puerto Rico is one of the most visited islands of the Caribbean and among its top attractions is Old San Juan, a historic colonial neighborhood protected as an UNESCO World Heritage area. Between the north ramparts of the city of San Juan and the ocean there is a stretch of land with a strong topographic inclination on which is located a slum or informal neighborhood called La Perla. “The term *informal settlement* usually refers to a piece of land that is invaded by settlers who build dwellings without an urban plan or building permits. As with many other informal settlements, La Perla has been socially segregated from the rest of the city and some of the inhabitants of San Juan are apprehensive about the level of criminality of this neighborhood due to its very bad reputation.

La Perla has many social urban problems; however its location between the only beach of Old San Juan and the city ramparts is unrivaled among any other neighborhood of the island. La Perla also has the inner beauty of its colorful vernacular architecture. (Fig.1)

This research is exploring the use of color in the La Perla dwellings. Color is an ubiquitous yet essential part of the city, it help to create and shape the urban form. [1]. La Perla has been studied by a small number of scholars and there are few articles, mostly related with health issues or popular music have been published about the neighborhood. One article related with the housing conditions and residential satisfaction of the neighborhood has been published by the author [2], in addition to a second article related to the tourism potential of the sector [3]. There are no publications concerning the use of color in La Perla, therefore this research is justified.

Color has been used in some informal settlements in order to ameliorate the image of the neighborhood. Some researchers criticize projects such as the one of the suburb Jalousie in Pétiön-Ville, Haiti, where informal dwellings, in very bad condition and lacking proper services, were

painted in bright colors. [4]. Colorful paint will not improve the dwellings, however, in the case of La Perla the use of color is not generated by an external funds but is part of the artistic idiosyncrasy of the inhabitants.



Fig. 1. La Perla is located between the city ramparts of Old San Juan and the ocean.

COLOR IN LA PERLA

La Perla has been traditionally inhabited by artists. Several popular singers and musical groups were born in La Perla, which also boasts many plastic artists. This fact has transformed La Perla from a crowded poor neighborhood of dilapidated wood houses during the 50's to the colorful community it is today. Most of the houses in La Perla are lively, painted and colorful murals occupy the surfaces of most of the neighborhood community areas. To the surprise of visitors many urban elements in the neighborhood are painted, abandoned houses, dwelling roofs, the floor of the basketball court: anything can be transformed into a canvas. (Fig.2) The colorful neighborhood could be the perfect complement to the historical buildings of Old San Juan.



Fig. 2. Graffiti's in La Perla abandoned dwellings.

OBJECTIVES

This article is part of a bigger research project aiming to improve the standards of living in the neighborhood of La Perla. The interesting vernacular architecture of La Perla and the use of bright colors in the neighborhood are catalytic elements that have the potential to transform "La Perla" into a tourist area. The fact that La Perla is next to the main attractions of San Juan and it is the only neighborhood in the area with access to the ocean is also an important factor to consider for the development potential of the neighborhood. This article is the first step to understanding the variety of colors presents in the neighborhood of La Perla. The use of chromatic surveys in architecture has

been studied in the past in historical sites, [5] but no research in slums was founded. Here are presented results related with the main colors of the façades of private dwellings in La Perla. Future research will present the rest of the survey and will explore the use of color in the public areas.

METHODOLOGY

As previously explained this paper describes only a limited part of a large research project in the neighborhood of “La Perla” that involved many other surveys. For this study, the author with the help of students and teacher assistants, conducted photographic surveys in La Perla between September 2012 and May 2013. The group took photographs of the visible façades of all dwellings of the informal settlement in order to do a chromatic survey. The pictures of about 400 dwellings were analyzed using image color summarizer software. It measured the RGB, HUE, saturation and other colors values. In order to have a more comprehensive research the different tonalities of each color are not presented in this paper.

RESULTS

For each one of the dwelling façades several factors were analyzed including the RGB colors as in the example of figure 3. Thereafter the main color of the façade of each dwelling was classified.

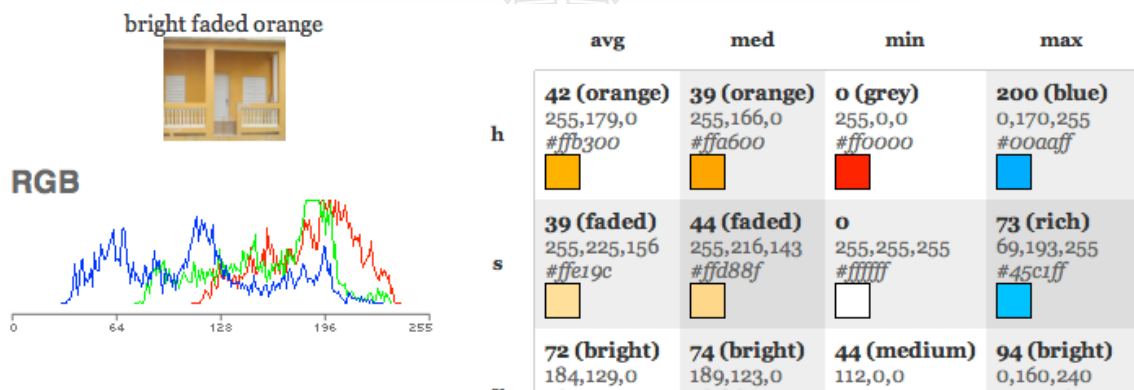


Figure 3. Example of RGB summarizer of façades in La Perla.

Table 1 represents an example of the color summarizer on one façades. In this article only the main color of the dwellings façades are presented, There is a strong presence of bright colors.

Main color of dwelling façades	Percentage of dwellings
Blue	21
Green	18.5
Yellow	16
White	15
Orange	10.5
Pink	6
Red	4
Other colors	2
Purple	1.5

Table 1. Main color of La Perla dwelling façades.

According to table 1, the most common colors on the dwelling of La Perla are: blue (26%), green (18.5 %) and yellow (16%). Jointly orange, red and pink comprise of 20.5% of the dwellings. The percentage of white, the most common color in the rest of the city of San Juan, is a mere 15% in La Perla. Tourists visiting La Perla for the first time are always impressed by the presence of bright colors in the neighborhood. As evidenced in table 1, with the exception of the 15% of white dwellings, the majority of dwellings are in color and many of those colors are bright. (Fig.4). Apart from the colorful dwelling façades of La Perla, the sector also has many public areas covered by murals. The strong presence of artists in La Perla has always generated the production of art.



Figure 4. Colorful façades in La Perla.

CONCLUSIONS

Many tourists are surprised with the intensity of colors in the Caribbean islands. The use of color in informal settlements can be considered a positive element to improve the appearance of a neighborhood; however, it can also be considered superficial. In the case of La Perla, color has been used as an expression of the culture of the neighborhood; it is not an external creation that is applied like a make-up to improve the appearance of the informal neighborhood. In La Perla color is the manifestation of the artistic abilities of a community. In the neighborhood, color is also used in murals as an instrument to express the feelings of the inhabitants and, in the case of many of the murals, to celebrate the neighborhood's idiosyncrasy. This extended abstract is only a first endeavor at future research that will investigate more about the artistic expressions of La Perla inhabitants. Without a doubt the use of color in La Perla has made the neighborhood more attractive and can be an important factor in the incorporation of the settlement in the tourist economy of the city of San Juan.

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