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Spaces That Enhance User Well-Being

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ABSTRACT

The proposal is to design and build a cultural center focused on promoting an ecological culture for the population of San Juan del Río, Querétaro, whose conditions are difficult due to social disintegration caused primarily by a lack of security and cultural interest. The main objective is to recover the identity of the inhabitants, as well as to raise environmental and sustainable awareness in the region. This lack of environmental awareness and information is reflected in the region's ecological reserves, where significant deterioration can be observed, as well as in illegal activities by youth and adults, setting a poor example for the younger generations. Furthermore, the lack of social awareness has been a major factor in the current situation of global warming, as this global problem is eradicated through a cultural shift in the social core. It is important to know who we are and to have a starting point for equality in our diversity so we can coexist without divisions based on origin, skin tone, socioeconomic status, etc. One of the biggest problems of violence today stems precisely from a lack of identity, given that young people between the ages of 11 and 20 cannot find anywhere the basic values and principles that govern any society. This requires a symbiosis between the different artistic expressions in which young people may be interested.

Keywords: Identity, Culture, Sustainability, Ecological

INTRODUCTION

Providing housing for the population of an urban center like Mexico City has been a topic of discussion since the beginning of the 21st century. The massive population increase has led to an exponential increase in demand, which has encouraged the search for solutions such as the construction of mega-housing projects.

Over the last 30 years, Mexico City has seen substantial changes in modern buildings, primarily those designed to house large numbers of people. This is a consequence of a neoliberal economic model and ideology that commodifies public space, the right to housing, and the right to the city. This has led to a fragmented and polarized city driven by the widening of socio-territorial and socio-spatial inequalities.

These buildings have undergone significant changes in both their design and the creation of work environments with a series of specific characteristics,

such as artificial ventilation systems, the proliferation of computers, extensive use of synthetic materials, general lighting systems, and the presence of direct pollutants, which generate health effects that are becoming increasingly recognized.

The Benito Juárez municipality has experienced intense construction and real estate activity. Of the four territorial districts that make up the central city, it is the territorial unit with the most buildings; proof of this is that approximately 7,893 housing units were built indiscriminately in this municipality between 2006 and 2009, without considering the pressures on public services and urban amenities in the neighborhoods where they were developed.

METHODOLOGY

For the following research, the qualitative process described in Sampieri's (2014) work "Research Methodology" was used.

The qualitative process deals with discourse, that is, the opinions, thoughts, and reflections of people. Therefore, its results cannot be expressed in exact numerical values, but are approached through interpretive methods. This means that information will be collected through consultations, interviews, surveys, and similar instruments, and the information will be studied in its natural, everyday context, seeking to understand the reality inferred from it.

To obtain the occupant sample, a determination will be made based on a questionnaire that will be distributed to the sample of residents of the residential complex. In addition, for the correct completion of the survey, the sample must have lived in the building for at least three months.

The instrument used in this research will be a survey, thus measuring the symptoms that the residents of each complex may experience.

This instrument will help us measure how architectural designs can influence the user health of people who have purchased an apartment within these towers and determine whether they have experienced any changes in their health since living in the space. For this purpose, a structured interview will be conducted.

DEVELOPMENT

In Mexico City, living close to where one works has become a privilege. The case of housing complexes on the outskirts of the city brings us closer to the megalopolitan reality. The rising cost of land reserves, especially in the country's large cities, as well as reduced urban mobility, are two of the fundamental elements that have led to the emergence of mixed-use projects, one of these places being Mexico City.

As Marx asserted, "everything today seems to carry within it its own contradiction"; 1 a statement that impacts the contemporary way of living, and even more so, how housing is provided. In the case of the current metropolitan area of the Valley of Mexico (ZMVM)—and perhaps at the national level—in the last half-century, the housing provision and production models of its urban environment have demonstrated broad contradictions

not only within the housing itself, but also due to the contrast offered by the housing stock as a whole in its processes and relationships. Facilities have been studied for decades. In the 19th century, they were defined as "spaces intended to serve a population" (Milizia, 1832, cited in Rossi, 1971). In the 20th century, urban architectural studies identified two types of elements: primary elements, which are facility buildings and housing (Rossi, 1971). Facilities are elements that constitute the city; like housing, they have functioned as aggregation nuclei.

The term "primary element" is adopted from the classification of city buildings proposed by Milizia (1832), cited in (Rossi, 1971), who refers to them as "principal elements." They are primary elements because they are considered to have an essential function in the city. Primary elements are public or collective buildings, designed for the urban community. The primary element or urban facility is the set of buildings and facilities predominantly for public use, used to provide public services to people in populated centers and carry out human activities complementary to housing and work (LGDU7, 2021). Among the functions of this facility are: health, education, recreation, sports, culture, commerce, security, cemeteries, and administration.

The construction of facilities depends on the resources allocated by the government to different regions, which are subsequently planned and distributed according to a prior ranking of needs (Bazant, 2007). When it comes to commercial facilities, these vary according to the socioeconomic status of the population, purchasing power, and spending distribution. The indices considered for the design and construction of commercial facilities arise from the analysis of each region and time period, considering medium- and long-term population growth projections so that the existing infrastructure functions optimally in the urban complex (CalderÓN, 2010) (Bazant, 2007).

However, this last consideration is not applied in most cases because the indices are used for market research and not for the study of the urban complex as a whole.

In practice, planning based on the above proposals is not always carried out, given that the prioritization of collective needs and knowledge of the historical context take a backseat when the economic factor is at stake, and the development of facilities responds to capital generation needs.

Facilities are closely related to consumption regardless of their use (Fourquet, 1978). From the above, it can be concluded that a commercial facility is a public or private architectural object (by use, resources, or ownership) whose main function is to provide consumer services to the population. It is difficult to deny these infrastructure needs, even if one supports environmental conservation or identifies with anti-globalization movements. These needs encompass areas such as drinking water supply, drainage, transportation, communications, and energy. Furthermore, in some cases, much of the required infrastructure could contribute to a more equitable and sustainable development model. This is reflected in projects such as drinking water treatment plants, wind farms in various regions of the country, or initiatives to improve urban transportation, reducing its

environmental impact and serving economically disadvantaged sectors of the population (Karaisl & Dominguez, 2011).

The infrastructure deficit poses a challenge in both technical, financial, and economic terms, as well as in the political sphere. From the general perspective of democracy, which involves public deliberation and influence in decision-making processes, means that the actors involved in discussions and decisions do so based not only on the abstract notion of the general interest, but also on their own particular preferences and interests. Therefore, the design and implementation of infrastructure projects are a real challenge for the country's democratic transformation and for the public policymaking process, due to the complexity of the projects and the diversity of society's preferences. In other words, as a society, we desire greater economic development, a more extensive water supply, a better transportation system, and greater availability of energy at lower prices, but we feel uncomfortable when we realize that each individual project entails significant environmental and social impacts, especially if these impacts directly affect us as individuals or members of a specific group.

Lighting is essential in any location, be it a home, an office, or another location, not only for the economic aspect of providing a comfortable work environment, but also for its direct influence on people's visual health. Inadequate lighting constitutes a risk in that a misjudgment of an object's position, shape, or speed can lead to errors and accidents, most often due to poor visibility and glare. Furthermore, inadequate lighting can lead to fatigue and other visual and eye disorders. Therefore, it is necessary to improve lighting in workplaces to enhance visual perception and thus ensure the correct execution of tasks and the safety and well-being of users.

Architectural lighting is a set of guidelines for using natural and artificial light sources to illuminate architectural spaces. It is a new trend in interior design that can transform traditional decor into a new experience of brightness, comfort, and harmony.

CONCLUSION

Since ancient times, humans have been considered part of the environment, so anything that harms nature will also harm humans. This remains a very relevant topic today, as we have become increasingly aware of this relationship.

Humans have always sought to improve their well-being and comfort, but this constant search has led to a massive increase in the consumption of natural and energy resources that can cause environmental impacts. However, many believe that sooner or later all the waste generated will degrade or disappear. However, human activity currently leaves a clear footprint around the world, creating problems that have local, national, and global repercussions.

The energy waste caused by excessive nighttime lighting not only creates light pollution but also contributes to exacerbating climate change.

The reduced energy generation costs resulting from rational energy use through proper lighting must be quantified.

Lighting systems contribute to pollution with waste from their components, especially light bulbs, since these (with the exception of incandescent bulbs) contain harmful components such as mercury, a heavy and toxic metal, in quantities ranging from 3 to 50 mg per bulb. Every year, millions of these discharge lamps are thrown into landfills (even more so when their bulbs are destroyed), causing significant pollution of ecosystems and harming the health of humans and other living beings. High-pressure mercury bulbs used in street lighting contain the highest amount of mercury, but they have gradually been replaced by more efficient systems such as high-pressure sodium bulbs, which also contain mercury, but in smaller quantities.

When it comes to humans, the relationship between health and the environment is certainly complex. At least the following negative consequences for well-being and health are evident.

If defective lighting can induce these dysfunctions and discomforts in humans, its profound influence on many other living beings is evident. Light is a fundamental parameter of life and natural environments, where it plays an informative and energetic role.

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