

# SESSION N°6: URBAN PUBLIC HEALTH



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# Design & Health

13TH WORLD CONGRESS & EXHIBITION

REVITALIZING HEALTH BY SALUTOGENIC DESIGN

Healthy environment | Healthy people

*The critical role of urban environment in the health of its inhabitants, a “non-place” analogy. Case study “El Recuerdo” residential complex, Montería, Colombia*

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# THE FRAGMENTATION OF URBAN SPACE

**City as a dynamic organism:** The city is seen as a living system in constant change, where diverse cultural, economic, political and social dynamics converge.



**Importance of urban and architectural design:** Architects and urban planners play a fundamental role in interpreting these dynamics and transforming them into ordered physical spaces.



**Integration of technological advances in construction:** The evolution towards a more technical architecture is recognized, but the need to integrate these advances with social principles is highlighted to avoid disconnection with the environment and the creation of spaces without identity.



**Risks of social disconnection in urban projects:** It warns about the danger of generating projects that alienate the inhabitants of their environment, generating fragmentation and creating urban spaces without identity or historical sense.

# What are non-places?

- Non-places are transient spaces without cultural sense or significance for their users, lacking variables such as comprehension of habits, emotions and wellness, that separate the authentic salutogenic design from the generic conception of architecture. The residential complex (RC) presents a unique situation, transforming into a realm of "transient sojourn" within a structure that lacks the essence of a home. It functions akin to a building constructed for the building itself, resembling a vast waiting room: **uncomfortable, unsafe, and evoking a sense of unease.**

# OBJECTIVE

Analyze RC with a salutogenic lens, exploring its impact on the mental, physical and environmental health of the residents of the El Recuerdo urbanization in Montería, Colombia, through a parallel with Marc Augé's concept of 'non-place', to propose specific urban and architectural design improvements that foster a more anthropocentric and conscious environment.

# METHODOLOGY



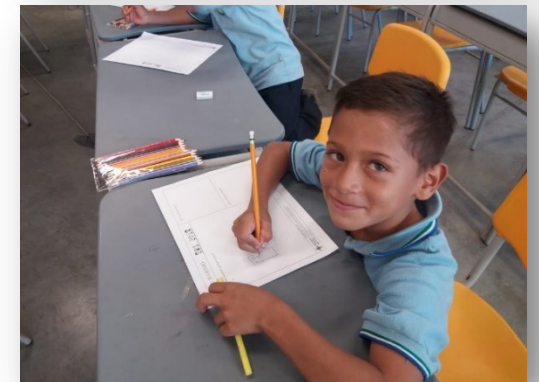
We conducted targeted inquiries aimed at comprehending and analyzing the emotions evoked by the inhabitant's respective environments, and to identify impediments to the free development of their lives, such as the provision of secure spaces for children's recreation, proper sewage systems, sanitary security, arborization, and adequate spaces.



We worked with children from the local school, aiming to tap into their imagination and innocence to identify what they envisioned as their dream living space. Expressing their thoughts through drawings, they represented the good and the bad things they saw in their neighborhood.



We conducted a physical analysis of the space, considering design and bioclimatic aspects. This involved evaluating factors such as temperature readings, materiality, spatial configuration, and sanitary conditions.



# THE URBANIZATION EL RECUERDO (UR)

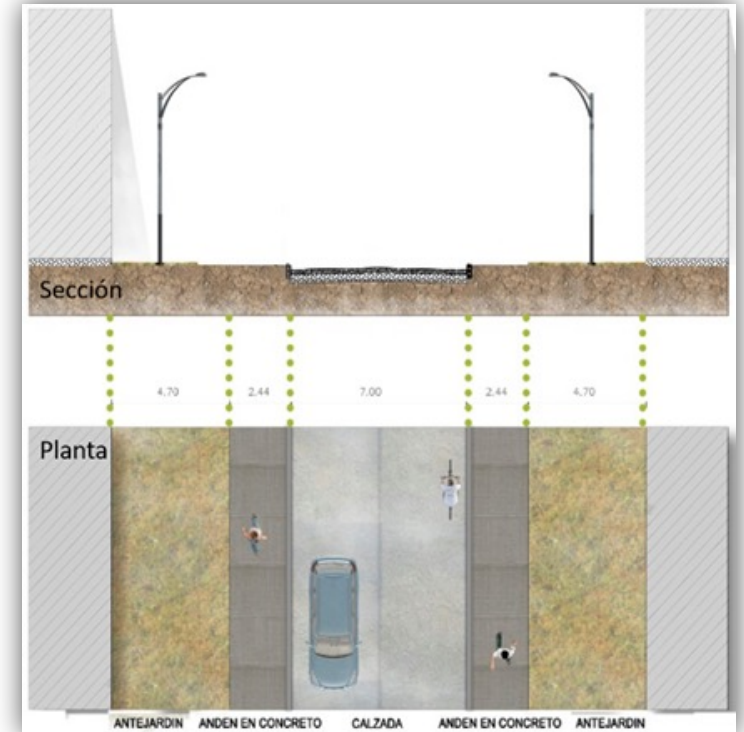


# THE PROBLEM OF URBANIZATION EL RECUERDO (UR)

- Urban-ecological infrastructure is fragmented.
- There is no perceived balance between the components.
- The general reading is, on the one hand, one of ecological poverty and deterioration.
- Green areas that are poorly used and have little communication with the residential dynamics of the sector.



**Figure 2:** In contrast to the environmental poverty within the residential area, the development contains large vacant lots that act as an insulating element. Authors' own elaboration, 2018.



**Figure 1:** Internal profile of the UR, made up of wide streets, narrow sidewalks and green spaces without trees. Authors' own elaboration, 2018

# RESULTS

## Ecological dimension

It was determined that the wooded areas were not designed for people, since the spaces that are intended for the use and stay of people do not have a significant presence of vegetation. On the other hand, the spaces that people do not use have greater coverage, a situation that in turn increases the sources of insecurity.

- There is a collection channel in poor condition, without proper treatment, this It runs through the entire urbanization and represents a potential for public space.
- There are large expanses of wastelands that increase insecurity. The people of the urbanization propose facilities for commercial use and productive spaces for the workers of the land.
- There is little tree planting in the busiest areas and the existing plant species do not have much variation or productivity.

## Social aspect

A total of 44 families were surveyed, 57% of whom considered that they did not live in an appropriate home. Most of them are due to space situations, as they think that the apartments do not have enough area for the whole family to be comfortable. The remaining 43% say that they feel comfortable in their home because they are used to more precarious situations of spatiality and trespassing, therefore, they are grateful for having this opportunity.

# RESULTS

## Social aspect

It was carried out with 20 children between 6 and 12 years old, students of the Megacolegio "El Recuerdo". In the activity, they were given three instructions: the first was to draw a picture describing what they would like their neighborhood to look like; the second, to identify the things they like about their current neighborhood and draw or write them; and third, to identify the things they don't like about their current neighborhood and draw or write them.

In the drawings, it can be seen that the children identify the elements that make up the urban infrastructure and the existing need for green spaces that serve them for recreational activities. In addition, it is noticeable that the drawing of the tree appears repetitively, implying that they lack the presence of these natural elements



Figure 3: Imaginary Workshop: House in the Country



# RESULTS

Measurements were made of internal temperature and on internal and external walls and mezzanines; relative humidity, amount of noise, amount of wind and natural light. In addition, thermal images were taken of the interior of the apartment and the urbanization in general.

The buildings contain few light inputs, which increases the feeling of confinement already generated due to the little space they have. In addition, they concentrate high temperatures and are not strategically located to receive adequate ventilation.

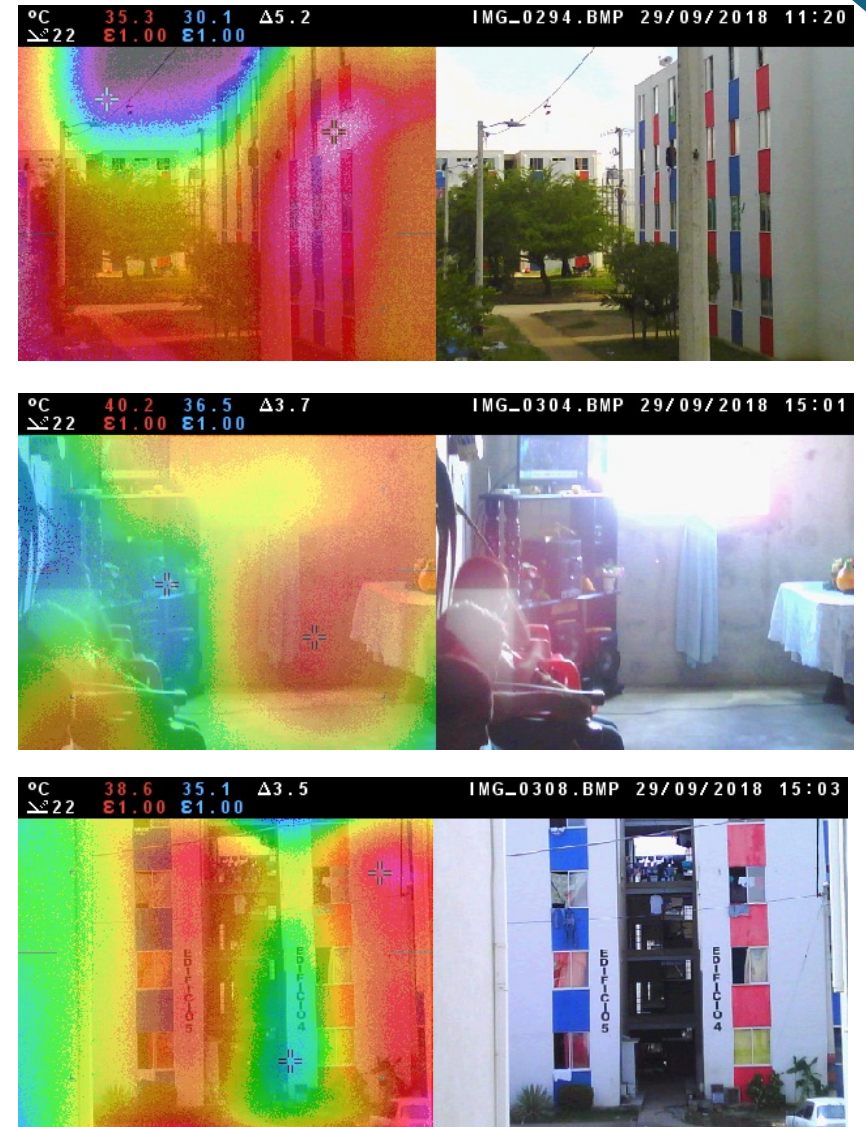
## Thermal comfort

Although the temperatures are not high, the wind chill increases due to the relative humidity and lack of wind in the social area of the apartment. Humidity remains between 71% and 95% at all times analyzed.

## Ventilation

When analyzing the results, it can be seen that the only air intake that the social area of the apartment has does not blow wind, since the values remain stable at 0.00 m/s.

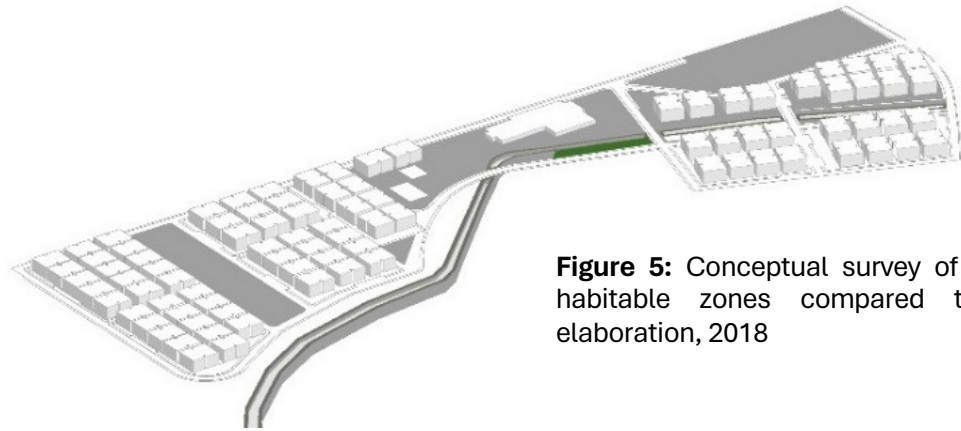
Figure 4. Temperature reading. Authors' own elaboration, 2018



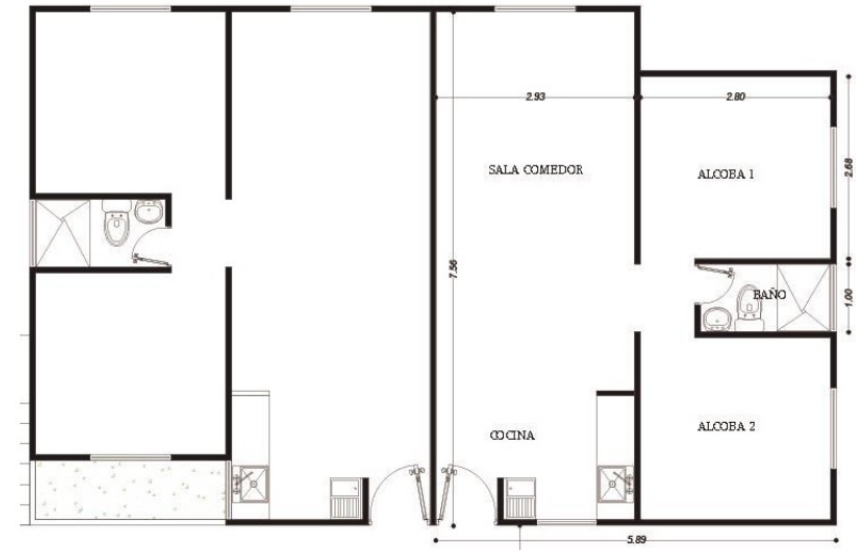
## Occupation

When analysing the Urban-Architectural dimension of El Recuerdo, the first impression is a large percentage of density in the living areas, with a materiality and aesthetics that visually increase their weight in relation to the place that supports them, giving the image of being a group of large concrete masses successively placed on a space. It is evident that the environmental-built relationship is in a situation of imbalance, since the level of density that exists in each block generates a feeling of isolation from the environment.

The typical apartment has an approximate area of 43 m<sup>2</sup>, which are divided into a living-dining room, a kitchen, two bedrooms and a bathroom. It is important to note that these are quite forced measures that do not comply with the minimum regulated frontage for multi-family constructions, which is 7 m. The separation between the apartments is 1.50 m, which proves to be a correct circulation space.



**Figure 5:** Conceptual survey of the UR showing the density of habitable zones compared to wastelands. Authors' own elaboration, 2018



**Figure 6:** Floor plan of apartment types. Source: Municipal Housing Office.

# CONCLUSIONS

- Architecture should emotionally connect with users. As architects craft spaces for people's well-being, it's challenging to admit these spaces may be the cause of discomfort due to unconscious design.
- Given that we need spaces for activities supporting emotional and physical health, meticulous design is crucial. Social housing architecture should go beyond standardized structures, creating culture, life, and health, avoiding the pitfalls of non-places.
- Environmental health and built spaces are intrinsically linked, as the design and planning of urban environments have a direct impact on the physical and mental well-being of inhabitants. Air quality, access to green areas, availability of adequate sanitation and safety in the built environment are key elements in promoting good environmental health. Therefore, it is crucial to seek a balance between urban development and environmental preservation, creating built spaces that foster a healthy and sustainable lifestyle for present and future generations

**Thanks!**