

The New Tent: Architecture as Social Infrastructure

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INTRODUCTION

"Architecture is neither pure technology nor pure art, it is a dialogue with the place and the people."

—Peter Blundell Jones, *3 Kinds of Participation*¹

Architecture is mainly seen as a privilege for the wealthy. For refugees, migrants, and displaced populations, architecture becomes seemingly unachievable, and the spaces where people live are subjected to the randomness of necessity. This spatial randomness increases childhood risk factors related to health, sanitation, violence, education, and abuse. To use architecture as social infrastructure, COLAB Manifesto² has developed a flexible model, The New Tent, to address the need for designed, culturally appropriate, and dignified shelter for displaced and marginalized populations. Our spatial reconfiguration tackles child protection at the forefront by redefining the spaces in which children play and live and providing market opportunities for families to thrive. The pilot model was built as an emergency response to the refugee humanitarian crisis in Reynosa, Mexico, to amplify its range and address similar communities around Latin America, doubling down as a conflict mitigation strategy and emergency humanitarian response through the dissemination of architecture. Strategically placed on the southern bank of the Rio Grande and the northern border of Tamaulipas, Reynosa quickly became the hotspot for immigrants after Matamoros³. The migrant population continues to grow exponentially in 2021, from 700 refugees in May to nearly 5000 in August, according to the Border Report.⁴

A FRAME FOR BELONGING

From pre-interviews with displaced persons in camp-related conditions, the frame was elected as the primary structure for The New Tent. With inherent flexibility and potential for user participation, its primary depiction from Le Corbusier's Dom-ino House of 1914 served to represent the project's idea. Although open-ended and even ephemeral in some architectural interpretations, the frame can also be seen as the permanent structure, the essential portion of a space to be transformed and reinterpreted as is suited for its use. Using the permanence of the frame

as the generator of space in a refugee camp allows autonomy and the freedom that can come from indeterminacy. As Bernard Leupen noted in his book, *Frame and Generic Space*, "designing out of the permanent means designing for the unknown. This is not a question of charting that unknown aspect, but of developing the permanent out of a particular perspective on dwelling to create freedom for the unknown."⁵

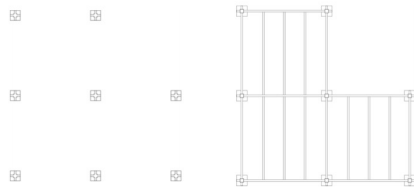
The New Tent's floor plan design allows for accessibility, connectivity, and sustainability. The main idea is simple: we build a frame, and the families have full autonomy on deciding how to fill in approximately 8-10 panels using local materials. Additionally, the design allows users to connect their shelters to increase community safety and create a semi-private community space, the courtyard, only accessible by the families living in the shelters. The project's framework translates into contextually developed solutions and addresses the needs of families on a more personalized level. Each New Tent cost approximately \$2,000; with only \$1,500 covering the unit's structural integrity, families were given the other \$500 through Cash and Voucher Assistance for Protection to appropriate their space and determine the functionality of their New Tent.

Since the units are developed with local materials, and because over 80% of displaced persons live in developing nations, the cost per unit is funneled into the local economies of these nations. Hence, accelerating social transformation through collaboration, economic impact through local investment, and environmental sustainability through locally sourced materials. Our model allows us to analyze how refugees choose to spend their Cash and Voucher Assistance for Protection through suggestions by architects, design professionals, local community members, and family members, revealing priorities, cultural needs, aesthetics, and personalities. Using CVA for Protection to culturally appropriate migrant temporary infrastructure lays the foundation for social infrastructure between refugees and existing communities, encouraging users to interact with locals to obtain materials, share building techniques, and inhabit space together, uncovering a secondary layer of participation.

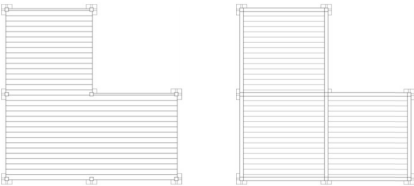


Figure 1. The diversity of skillset showing the power of Latin America refugees . Made by the authors.

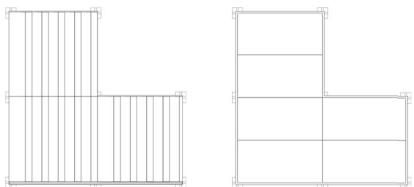
plan



foundation



frame



roof

construction

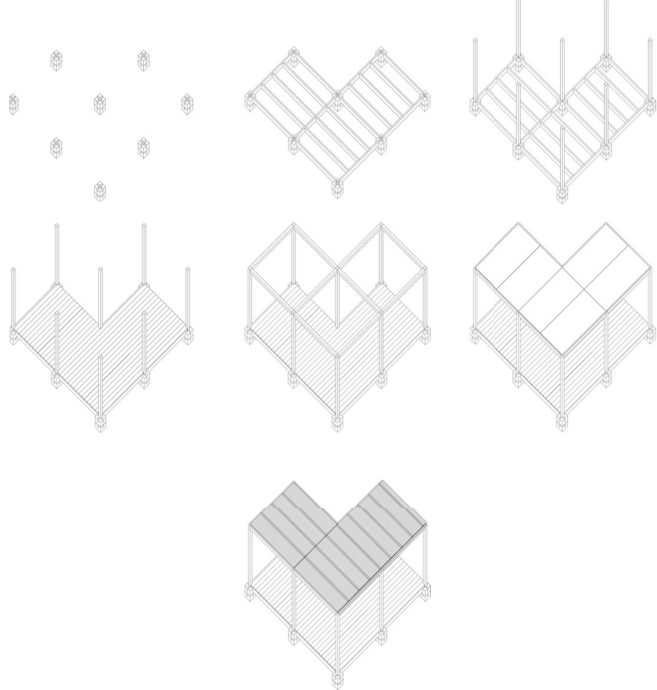


Figure 2. Plan organization. Made by the authors.

Figure 3. Construction scheme. Made by the authors.

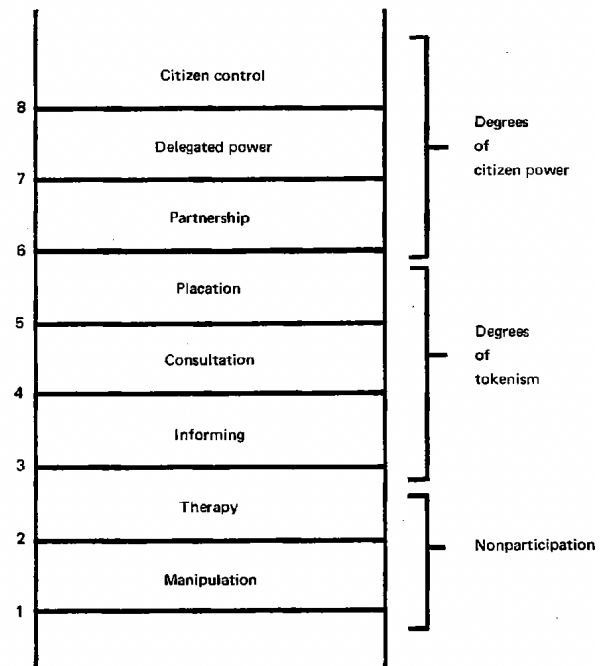
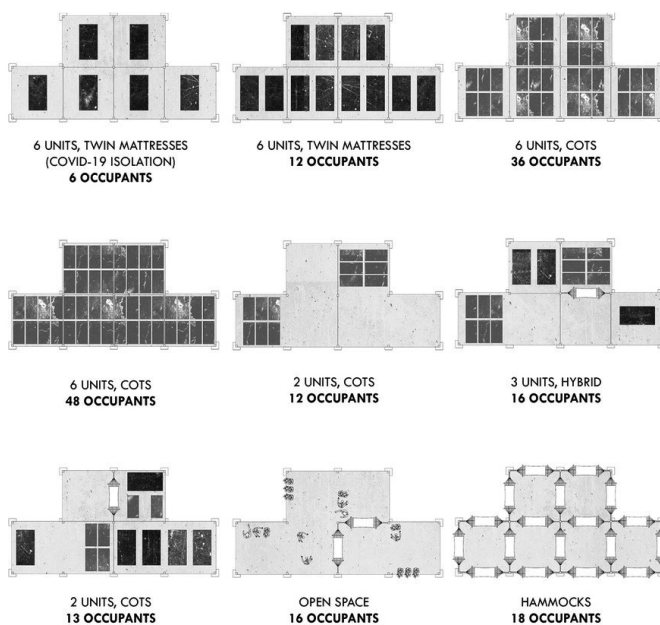


Figure 4. Occupation vs. program vs. participation. Made by the authors.

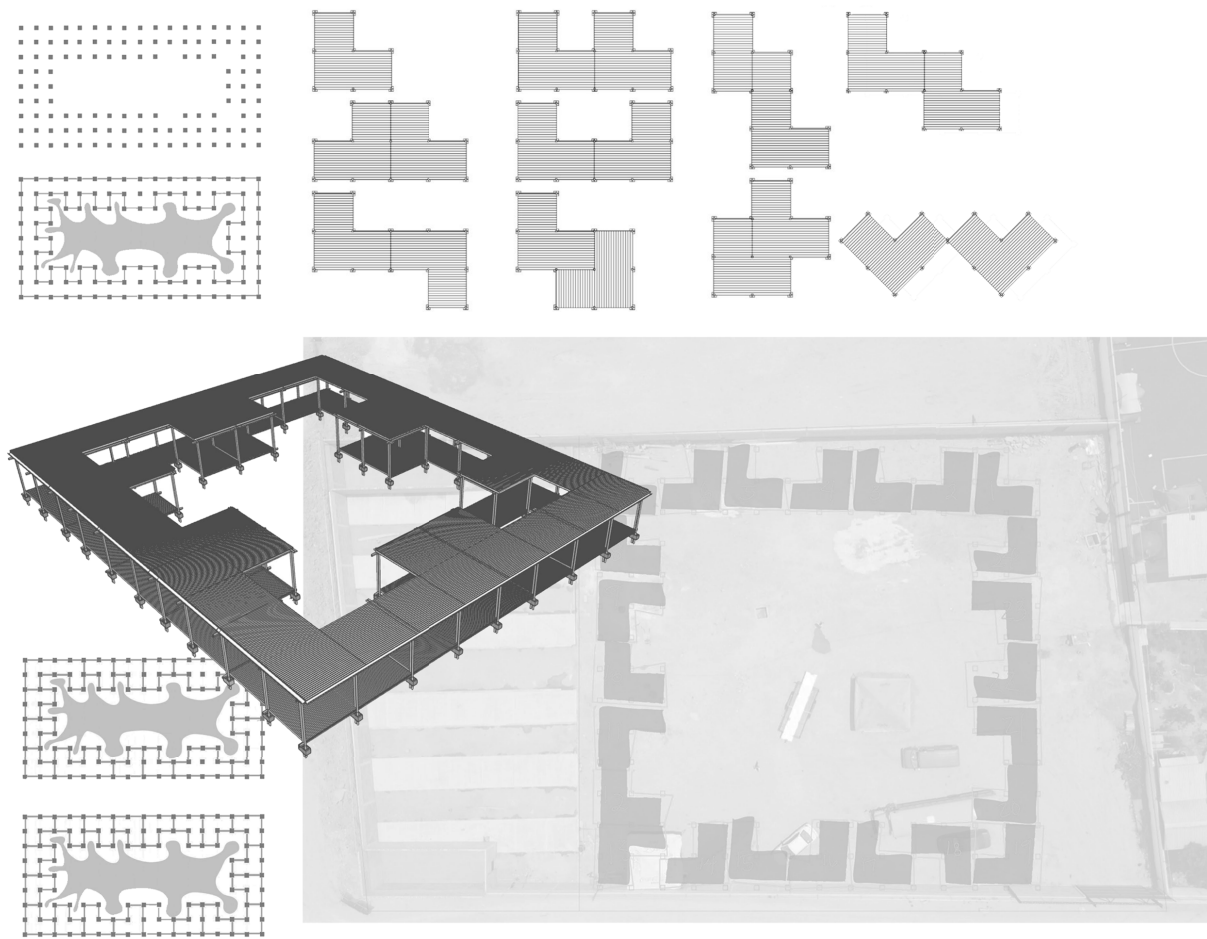


Figure 5. Distinct organizations of the New Tent Cell. Made by the authors.

PARTICIPATION AS DEMOCRACY AND REINVENTION

Using the frame as the main element of the project represented its physical characteristics as a shelter and as an open-ended canvas for user participation. Although participatory design in refugee camps is not a novelty, the processes and relationships that develop through design are defined mainly by the user's engagement with the project's overall concept. While most studies discussing participatory design in refugee camps focus primarily on user satisfaction, very few focus specifically on shelter design. Furthermore, recent research showed that the method of adapting a design proved more fruitful in engaging dialogue and modifications by the refugees rather than having them design their own⁶.

As mentioned before, in The New Tent's pilot project, user participation relied on using the basic shelter frame as a starting point for the refugees to contribute and use their CVA money for individual appropriation. What transpired even before the pilot shelter was built exceeded the expectations. The engagement with the local builders started right at the conception stage; there was a tectonic adaptation of our original idea to

take advantage of the materials available and a compromise between our technical perception of the project's execution combined with their skill-set and building culture. From this initial "charrette", we channelled their local knowledge and established trust amongst that diverse group of refugees from Latin America, which included master builders, welders, project managers, seamstresses, and more. Men, women, and children participated through designing, building, painting, and sewing, leaving room for other migrants to adapt to the transient space.

A semi-structured participatory methodology defined the negotiation of space, material, program, construction, and eventual ownership. Conversations, interviews, and collages, worked not only to avoid the pitfalls of participation outlined by Sherry Arnstein's canonical article, *A Ladder of Citizen Participation*⁷, but to achieve an organic degree of citizen control. That partnership led the community to transform a frame intended to serve as a pilot shelter, essentially private, into a communal space. The New Tent's program changed from the initial housing unit to serve as a covered plaza, then a community theatre, and most recently a health clinic. This redefinition of the program opened our eyes to the importance of embracing the reinvention that can occur when genuine participation is achieved in a project and reinforces the community's sense of autonomy and democracy.



Figure 6. Architecture adapts to local knowledge, local materials, knowledge, currency creating participation. Made by the authors.



Figure 7. Comunal ownership of the space. Made by the authors.

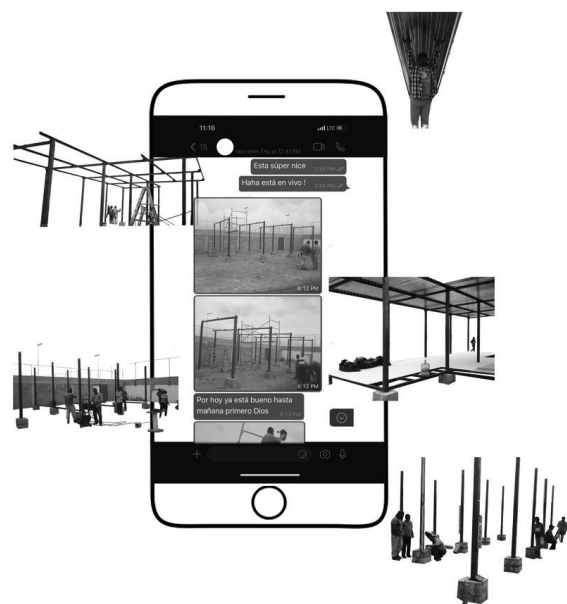


Figure 8. WhatsApp as a tool for project management. Made by the authors.

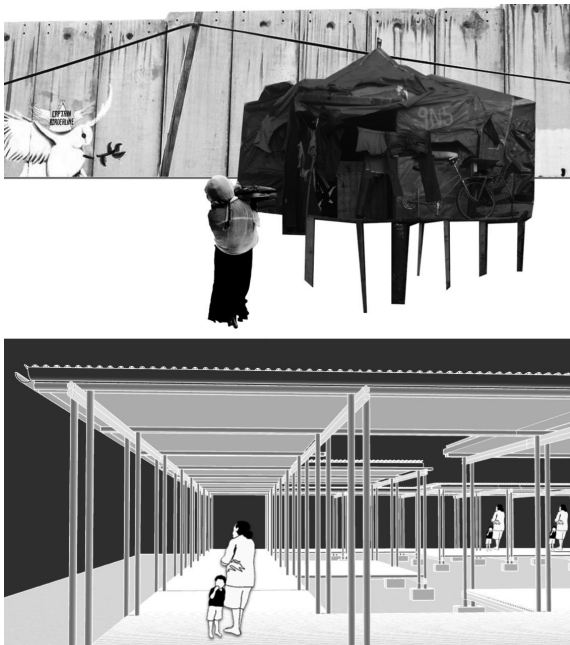


Figure 9. Loss of identity vs. frame possibilities. Made by the authors.

INITIAL CONCLUSIONS

The New Tent aimed to address the physical, mental, and spatial needs of the families and provide the opportunity to research how community-driven design solutions would work as a humanitarian response. The pilot project yielded some powerful reflections about how the meaning of shelter can be explored as a flexible concept that goes beyond just housing. The diversity of programmatic uses that a single covered area provided amongst the group became an essential aspect of their engagement with the project. Moreover, we were able to experience in real life something that we only discuss in architectural theory: how the simplest of designs can provide complexity, significance, sense of place. Looking back at the simplicity of Corbusier's Dom-ino and observing the self-effacing character of the New Tent pilot, we return to discussing design in its fundamental principle. Hence, moving away from platitudes of form and pure aesthetics and moving closer to its inherent, psychological, and emotional attributes.

How will families culturally appropriate their shelters in different areas around the world? What panels will they decide to fill in or leave open? By allowing community members to determine their levels of privacy, we can study whether or not families feel safe in the community and if they enjoy cooperating. We will also examine how the space is utilized: Will other community members only use the shelters for housing? Will they take down panels in the morning and use them as a store set up? Will children be able to take down panels and increase their play space? How will our research impact the pedagogy of play in camp-like situations? Will families begin to connect their shelters to allow for the children to play together? Will the community space in

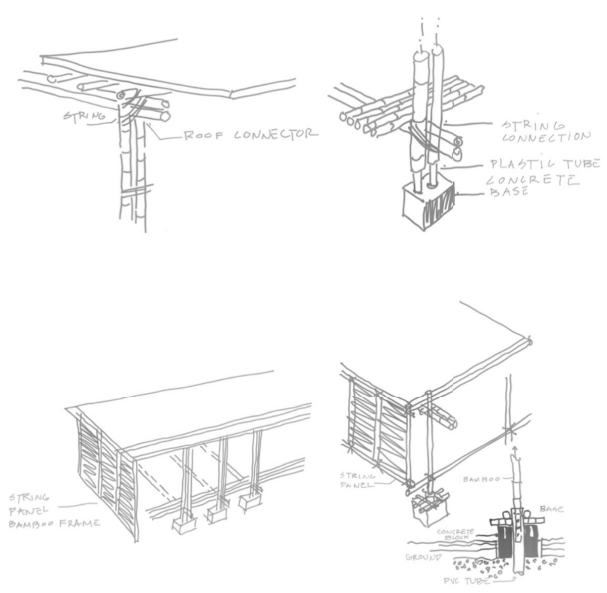


Figure 10. Initial sketches of The New Tent. Made by the authors.

the center be utilized? The New Tent offers an affordable and adaptable community-driven approach as a conflict mitigation strategy. The participatory design methodology of the project gives families a voice. The design intent of the frame allows them to physically construct their sense of identity.

To export this design as a flexible model worldwide would allow us to study an even bigger question: how do different cultures appropriate the same frame? Usually, emergency response solutions address each family as individual units, but our design allows these units to connect and work together. Through the New Tent, they can perceive that the frame is an opportunity to embed the sense of place that is already carried within each of them, that they are themselves their own home. Ultimately, our goal is to reconnect their sense of community, belonging, and more importantly, citizenship.

"I don't see myself in the word
Female, hunting ground
I rather burn the map
Retrace the road
See colors in the ashes
And reinvent life
A man does not define me
My house does not define me
My skin does not define me
I am my own home"

—Francisco, El Hombre, *Triste, Louca ou Mã*⁸

ENDNOTES

1. Blundell Jones, Peter, "3 Kinds of Participation", *Architectural Review*, August, (2016)
2. COLAB Manifesto is a Think-Tank created by architects Livia Loureiro, Alejandro Borges, Davi Xavier, and Andrea Batarse. Our goal is to use architecture as a tool for social empowerment.
3. The city of Matamoros, located in the northeastern Mexican state of Tamaulipas and on the southern bank of the Rio Grande has a tradition of receiving thousands of immigrants and hosting refugee camps. Currently, the city of Reynosa appears to be the new preferred Mexican town for migration.
4. Sanchez, Sandra, "Reynosa migrant camp swells to 5,000; Preps underway as tropical storm threatens region," *The Border Report*, August 16, 2021, <https://www.borderreport.com>.
5. Leupen, Bernard, *Frame and Generic Space*, (Rotterdam: 010 Publishers, 2006), 20.
6. Albadra, Dima, et al., "Participatory design in refugee camps: comparison of different methods and visualization tools", *Building Research & Information*, 49:2 (2021): 248-264.
7. Arnstein, Sherry, "A Ladder For Citizen Participation", *Journal of the American Institute of Planners*, 35:4 (1969): 216-224
8. Francisco El Hombre, "Triste, Louca ou Má", track 6 on *Soltasbruxa*, 2016, compact disc.