

FRIDAY, APRIL 12
SESSION 5
14:30 - 15:30

ROOM B - SALÓN DE GRADOS

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Dwelling in Chamanculo C
Representing and Designing
the Domestic Space of an
Unplanned Environment

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This research originated from an agreement between Politecnico di Milano and Ars progetti S.P.A., a consulting firm that secured the REGENERA project in 2022. Funded by the Italian cooperation (AICS), the project's aim is to develop urban and architectural improvements for the unplanned Chamanculo C district in Maputo, Mozambique.

The PhD research is supported by a scholarship provided by the National Operational Programme on Research and Innovation that follows the objectives of the European Union's cohesion policy in disadvantaged areas and promotes sustainable and green thematic research. Additionally, the program encourages the PhD candidate to have an academic path within the university and an engagement in a real project with a company fostering a design-driven research approach.

The REGENERA project, in which I am involved as a junior architect and researcher, focuses on the urban reassessment of road infrastructure and its drainage system. Located in a vulnerable area of the capital and frequently affected by flooding, Chamanculo C necessitates a slum-upgrading intervention based on the urban reassessment of road infrastructure and its drainage system. The intervention, identified and designed by the REGENERA Project, involves the demolition of several houses along the main road of the neighborhood. This will demand the construction of new houses embracing in-situ relocation and the engagement of the community through a participatory design approach. The need to understand a suitable design and a sensitive approach within the delicate issue of demolition and reconstruction gives rise to some of the key research questions: How do the inhabitants of Chamanculo C dwell? How can their dwellings be represented and how can ethnographic analysis support the design phase?

Understanding how people dwell in an unplanned district implies, as a first step, a comprehension of the literature review related to the informal side of architecture. The focus on the architectural form of spontaneous dwellings and their representation stems from a critical question arising from the disparity between the widespread prevalence of spontaneous urban architecture, as a direct response to contemporary challenges in the Global South, and the limited research conducted on this subject. As Peter Kellet pointed out, spontaneous settlements were often viewed as visual and social pollution, reinforcing negative stereotypes and prejudices about the morals, abilities, and values of the residents. Over time, these settlements have been primarily interpreted through safety and overcrowding lenses, neglecting architectural considerations. While vernacular and rural architecture have gained attention in the last century, spontaneous urban dwellings, despite their extensive prevalence, are still overlooked.

This part of the research explains the need to understand and depict the architectural forms of informal architecture as they are becoming the common way of dwelling in the cities of the Global South. Today, the tumultuous development of the cities led to the incessant growth of unplanned districts, and to say that with Colin Ward's words: "limiting the discussion to monuments and squares is akin to reducing botanical science to roses and lilies". For the explained reasons, we might necessitate a shift away from folkloristic, sociological, and process-related perspectives to immerse ourselves in the architectural sight.

Beyond the critical examination of the architecture in informal settlements, the question of how to represent unplanned architecture drives the research to find ways to depict an architecture that is usually not represented and that doesn't follow the codes of the official architecture. This leads to experimenting different kinds of drawings aligning with an ethnographical approach, hopefully looking for a more sensitive understanding of the architectural characteristics and, furthermore, creating a base for the design phase. Indeed, the expectation of drawing a subaltern architecture belonging to a fragile context is an attempt to depict something that usually stays in the shadow. Ultimately, doing research on subaltern architectures and making drawings on them means giving a voice to something that is usually silent. This condition raises the relevant issue to understand the technique and tools that could be welcomed by the inhabitants.

Following the path of architectural ethnography outlined by Atelier Bow-Wow, various hand-drawing methods have been analyzed, with the Modernologio theory of Wajiro Kon, who was involved in depicting ordinary lives of common people, and the Uzo Nishiyama Investigation on living styles, serving as the primary drawing references. The choice of these case studies is influenced by the technique employed, thus the free hand drawing, and even more to the analyzed subject: the ordinary or "trivial" architecture. Additionally, the work of other architects, such as Hayuda Tayob in South Africa and the field survey of Balkrishna Vithaldas Doshi in India, has been studied as reference for the design phase. This part became fundamental to understanding the application of the tool of hand drawings already experimented by other architects.

The hybrid nature of the work encourages using a mixed methodology with a documentary phase in the university, followed by fieldwork in Maputo involving hand-drawings, pictures, notes, and analyses taken from conversations with the inhabitants and the design phase, which is developed in the office and on the field through a participatory design approach that will be reported in the thesis.

In June 2023, a preliminary site inspection was possible through a workshop with the students of the Politecnico di Milan's Master Design for Development course, where I worked as an assistant professor. Subsequently, a second site visit was conducted directly with the ARS company. The mission was followed by an on-site verification of data in the neighborhood, which was undertaken throughout August, giving the possibility of preparing assessments, documenting streets, public buildings, facilities, houses, open spaces, trees, communication routes, etc. During this phase, I worked alongside a Chamanculo resident, not only for security reasons but especially to strengthen the relationship between me and the local inhabitants. Parallel to the urban analysis, initial visits to the residences, called "quintal," were made, conducting a preliminary test on how to represent them in the research (see the attached picture). Hand drawings were supported by pictures taken with a camera when inhabitants allowed it.

The next month, February 2024, will be dedicated to the on-site deep analysis of the houses that will be demolished and rebuilt. A surveyor and a sociologist recently started the survey of the affected houses. From my side, the surveys that will take place from February involve in-depth hand drawings, pictures, and conversations that will constitute the preparatory documents for the participatory design phase that will take place in two months.

Due to the nature of my position, being a researcher and an architect located between the university, the consulting firm, and the community of Chamanculo C, the overall purpose of this work is to positively and effectively contribute to the redesign phase of the houses. The whole process will be nourished with deep and meticulous ethnographical analysis aiming at both understanding how people live and supporting the participatory design also through a deep involvement of the local residents. Expected outcomes include a detailed record of the houses to support the participatory design phase. Since the submission of the architectural project is set for August, the thesis will report the entire process of analysis and project design, while the construction work that will start next year won't be documented and might be reported in further researches.

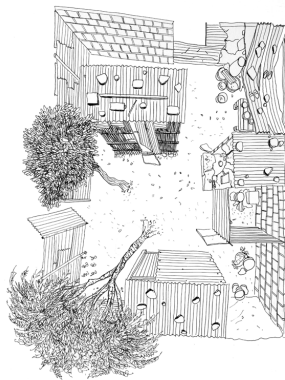
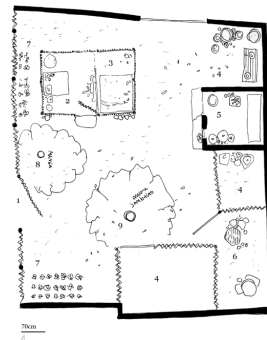


Image 01: central perspective from the top- page to the right sketch of the distribution
Author's drawing.



1 Entrance-2 Living room-3 Bedroom-4 Storage-5 Kitchen-6 Toilet-7 Vegetable garden-
8 Mango tree-9 Jambolao tree

Reflection about Experimentation

The act of experimenting conjures in my mind the image of a child escaping from an enclosure, aware that only outside that *perimeter* can one encounter the resources to generate an exchange and *experiment* to gain knowledge.

That child leaping over the boundary is the same one within me, urging me to seek and experiment with representation techniques different from the conventional ones to depict an unconventional and delicate subject – the self-built houses in an informal neighborhood of Maputo.

This compels me to test hand drawing as a common language that can be understood even by those who cannot grasp architectural technical language, creating a shared artifact originating from the hands – the body part most inclined to experimentation. From the hands, this experiment engages the entire body through fieldwork and direct contact with residents, becoming a fusion. At this point, the experiment transforms the thesis into a bridge connecting the voices and bodies of citizens in an informal settlement to the minds of consultants in a professional firm.

To experiment means to take risks, and it is through the tension of risk and the fear of the danger of failure that we strengthen our ideas because they require testing, relying on solid yet perhaps less-known references before being experimented upon. This condition brings to light hidden, understudied models that can support the experiment while simultaneously expanding the horizon of knowledge toward the Other.

Indeed, the conscious escape from the perimeter, exploring the unknown outside, may be the quintessential approach to experimentation.