

“The zinc of the roof “flows” down onto the walls and clads the volume with a double skin”

You made a highly audacious architectural proposition and you deserved to win this prize. What did you want to convey by using the name Matriochka?

The idea conveyed with the term “Matriochka” refers to the fact that in its composition, architecture – as with the creation process – is a succession of elements that fit together. In general, if one looks at the long term, architecture is a palimpsest that constantly re-uses the stones of the building it replaces, layer after layer, focusing on the climatic characteristics of its location, or reinterpreting uses to better adapt to the diverse practices of human beings. In this project, we clearly perceive the idea of superimposition and duality: the extension would not exist without its older base. Matriochka, a nesting doll that is foreign to its immediate environment, proposes a new vision of the extension. Respectful of its context, its design is enhanced by the surrounding buildings, but is distinct in its decidedly contemporary appearance.

The highly detailed analysis of the site’s environment received an excellent evaluation from the Jury. What are the most significant conclusions you retained to develop your project?

The order of things is sometimes difficult to determine: the project process is sometimes subconscious, but if there is one dominant environmental characteristic here I would say it is the temperature. In the south, summer temperatures can reach uncomfortable peaks, but winters are rarely harsh. It is clear that protecting inhabitants from extreme heat was a strategic priority when defining the project. The urban context also influenced the installation of the roof extension. I often passed by this beautiful abandoned building, that seemed repressed by the height of the neighbouring buildings. From the outside, it looks tired, but it is easy to imagine the interesting volume it offers. The urban context guided me to decide on the programme and the orientation of openings.

What were your sources of inspiration when designing the exterior image of the building?

There are multiple references in architecture today. From office blocks in New York to museums, double skins are widespread in facade design. But these references arrived later in the design process. Essentially, the concept revisits the Mashrabiya window architecture of the Middle East. Widely used in dry, arid regions, it is an interesting solution for our Mediterranean climates.

The double skin plays a central role in the project. What are its most significant purposes?

The double skin is the material continuity of the roof. The zinc on the roof “spills” over onto the

walls to clad the volume. This continuity creates an aesthetic game that turns this veil of zinc into a unique object. This strengthens the image of the “plug” and gives a contemporary style to the building. But before being an image, this double skin is a passive response to climatic issues that arise in summer. This comfort strategy is based mainly on the design of the new building envelope. It makes it possible to regulate solar gains: the perforated zinc panels act as a sun screen. The large gap between the double skin and the facade enables air to circulate freely in order to evacuate warm air as quickly as possible. Perforation of the elements that make up the double skin is also intended to absorb noise from the street and improve the acoustic insulation of the internal envelope of the extension. In short, this double skin responds to the climatic issues of the location and gives a contemporary character to the building. In this way, the double skin that clads the project also provides a solution to the various requirements I detected during my research, i.e. extreme heat in summer and the surrounding noise pollution.

What are the advantages of using zinc as a lightweight mesh in your project? In the collective imagination, zinc covers the rooftops of Paris and clads the urban horizon with a grey sheen. In Montpellier, this image is completely revamped. The idea in this project is to reinterpret and re-use the zinc material in architecture, both aesthetically and technically. In other words, the material is just an extension of the roof. As with other materials, it offers many advantages for this purpose. The difference resides in its high level of resistance to oxidation caused by humidity.

What are the advantages of the timber structure you propose? The new volume, which fits into the existing envelope, is designed with a supporting structure in timber. The latter meets the bare face of the existing interior walls of the Workshop. The rhythm of the timber posts along the existing interior facade respects the openings and the current cadence of the building. These posts support the floor on the second storey and the structure of the extension itself, which houses the double skin of the roof extension in a slight cantilever. The latter is suspended above the existing perimeter wall and protrudes slightly, aligned with this wall. The lightweight project seems to float above the mass of the existing building. As this exposed structure has very high ceilings, there is potential to create intermediary floors.

The Jury remarked that the eco-design tool could be further developed. In your opinion, which energy efficiency strategies could be improved? Hygrometry is often overlooked in bioclimatic calculations and strategies. Because of this, clay is undervalued as a building material because its hygrometric properties are not taken into account. It could be interesting to consider humidity as an important factor in thermal calculations of walls given the benefits of evaporation for thermal comfort.