

Louis Debray



Book 2022

Louis Debray,
1st year student in double
degree architect/engineer
at ESTP and ESA in Troyes.

I am looking for an internship for a period
of three months.

Through observation and practice, I would
like to know what being an architect is
about, to understand design and the
carrying out of projects.

I learn quickly and I am very motivated.

Available June-August
Do not hesitate to contact me
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Projects



Design of a wooden geodesic dome,
in a private forest.

Pays Basque.
2018 - ongoing

The dome is a project initiated with my father,
imagined as a space for relaxation and
observation area surrounded by nature.

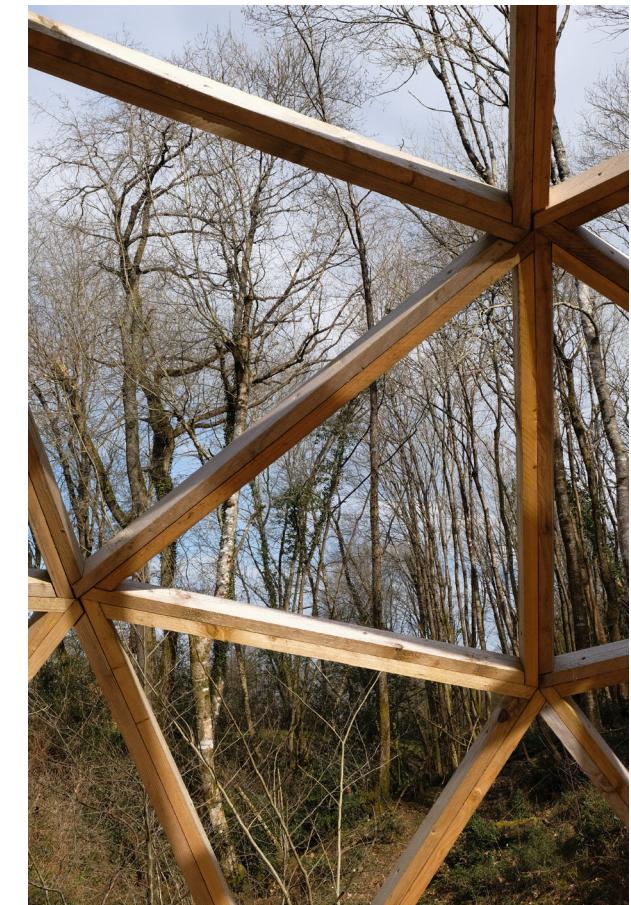
From the top of its three meters, this
semi-spherical geodesic dome rises
on an octagonal platform of 8 meters
of diameter. Mainly made of fir wood, its trian-
gular and self-supporting structure was a real
mechanical challenge.

I cut and assembled the
different wooden parts my self.



Portfolio 2022

Louis Debray



The geodesic dome is a freestanding spherical structure with many advantages. Connected to the ground with a connected triangular structure, any support pillar encumbrance inside the structure is avoided.

The structure of the dome is mainly made of treated fir wood.

Le Dôme



The platform housed on a gentle slope is mounted on 38 posts planted in a grid, not the strongest (7x7cm). Some heights reach downstream of the hill about 3 m. In the event of strong winds in the trench, it was necessary to install perpendicular bracing to avoid any buckling of the posts



The pieces, once assembled in hexagons, pentagons and then in triplets of three triangles, are mounted to form the geode. Starting from the bottom up; from the base to the last pentagon at the top.

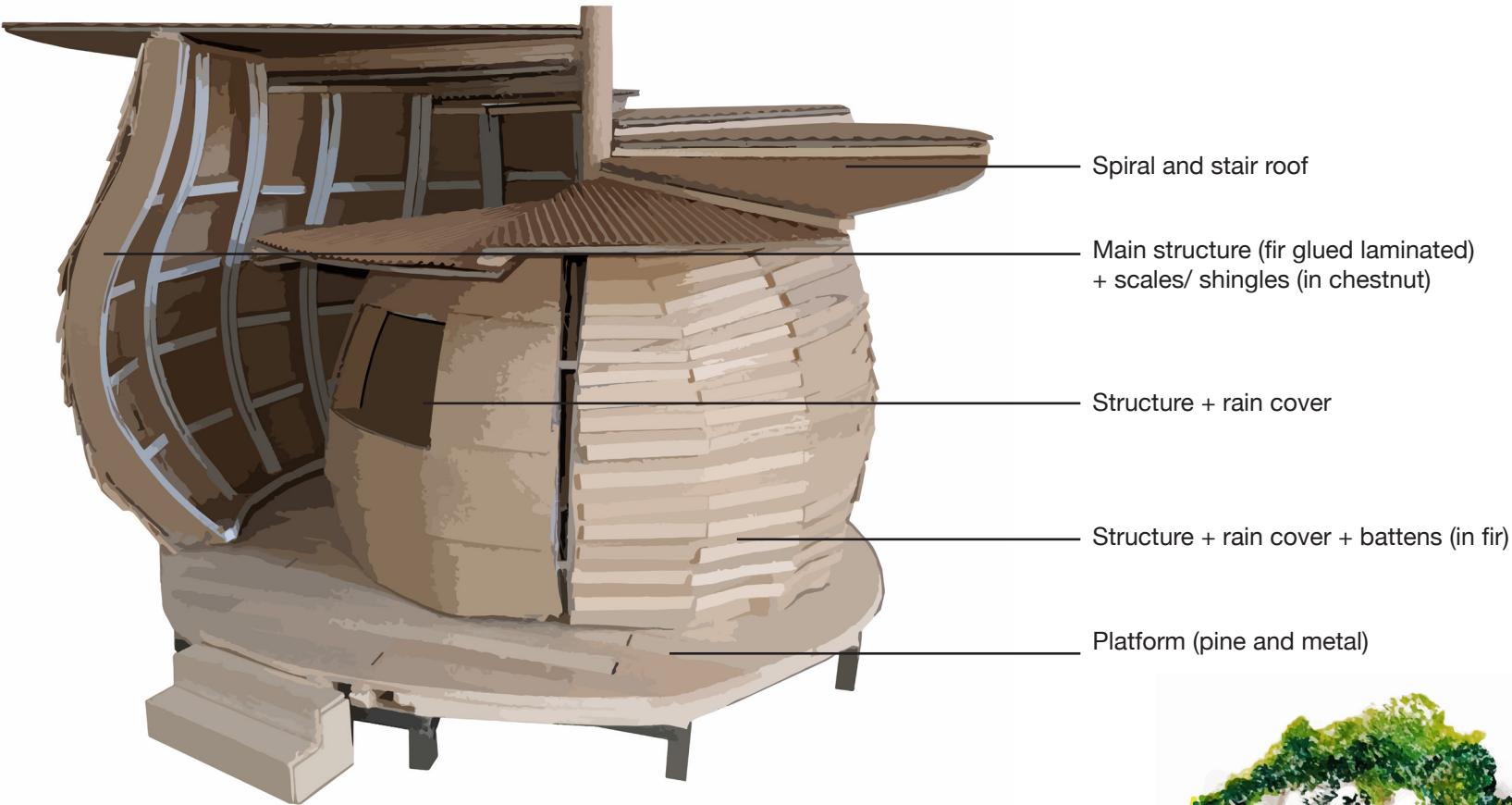
Today the dome is still under construction. Recently, I covered it with a waterproof rain shield and plywood scales tinted with a protective varnish. Finally, all I have to do is put the polycarbonate windows in the dedicated locations.



Design of a refreshment bar located in a natural area frequented by athletes.

Troyes
2021-2022

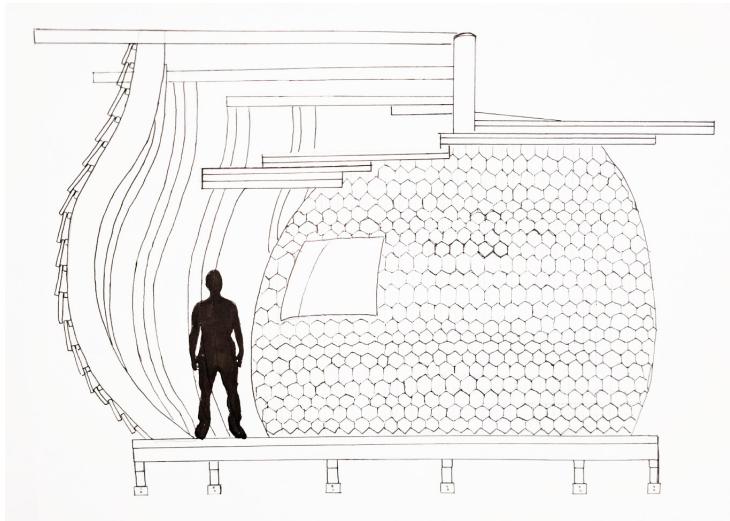
The wooden refreshment stand unfolds as it grows. Its scales and curves unfold to form an organic volute that will refuel the most athletic. Group project.



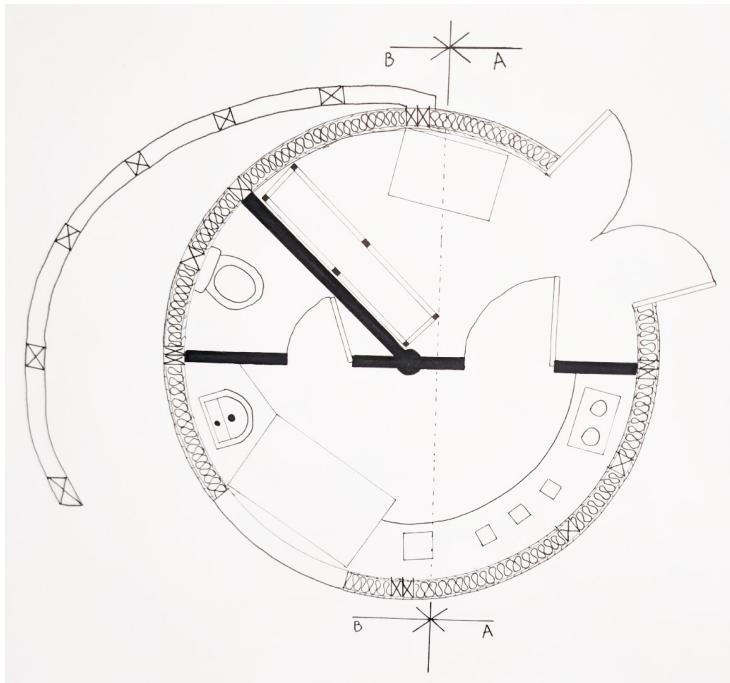
Model of the bar that can be dismantled into quarters showing the different layers forming the wooden frame:

- 1 the structure (vertical / horizontal uprights)
- 2 the rain / vapor barrier
- 3 beds
- 4 scales





1



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1 Elevation view
2 Section plan view

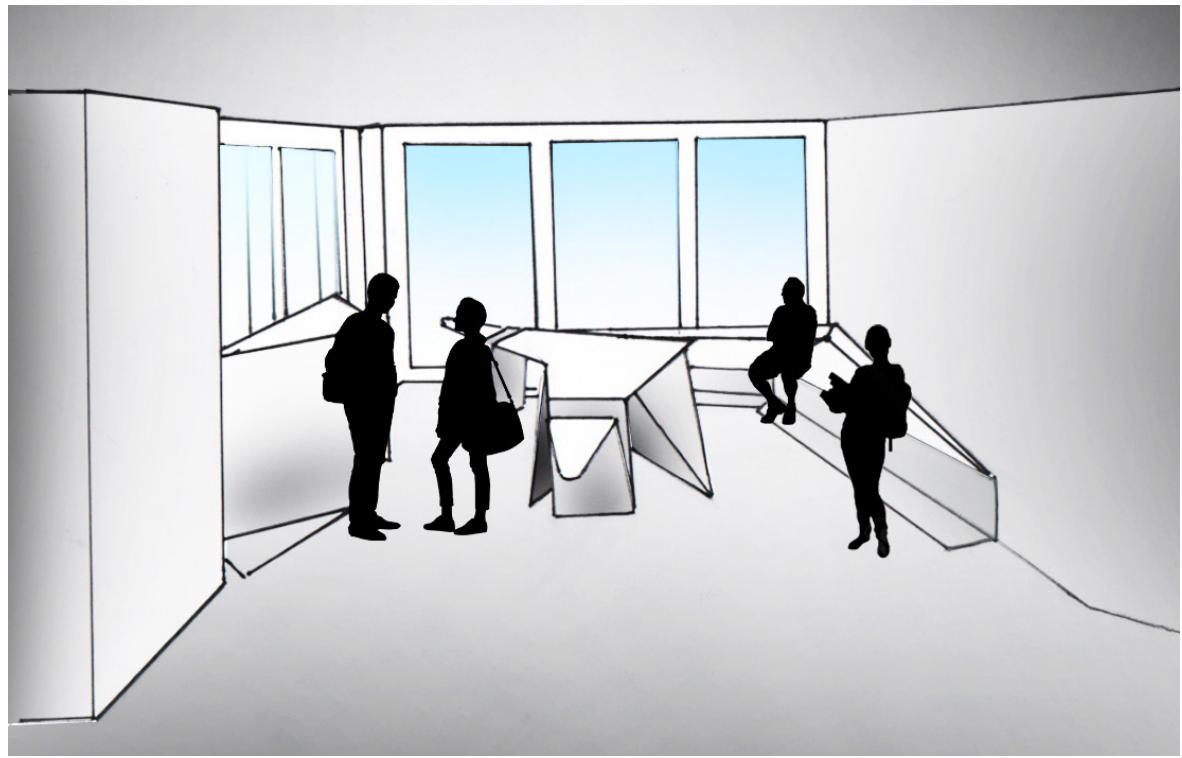


Vitamix

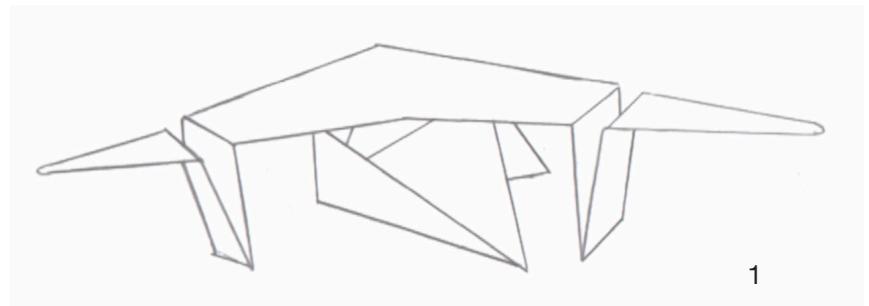
Design of an alcove within the school.

Troyes.
2021

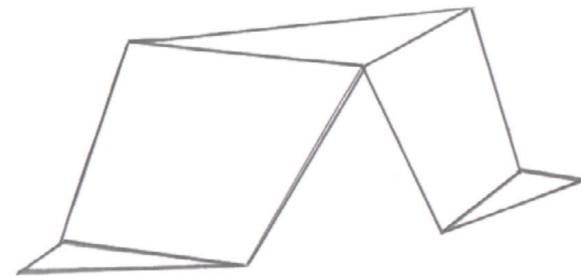
Orig Amis is a space for rest and work playfully designed like an origami folding. The students have three elements, a high table, a central table and a bench. Orig-amis is made from flat sheet metal steel, a material that is resistant, foldable and aesthetic.



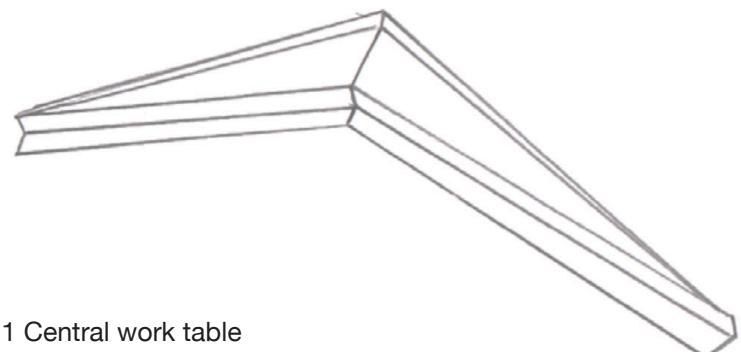
Sketch of a scenario in space.



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2



3

1 Central work table
2 High table
3 Bench

Merci !