



Valay

Bamboo Lighting System

- Tanmay Bhavsar

Design Intent

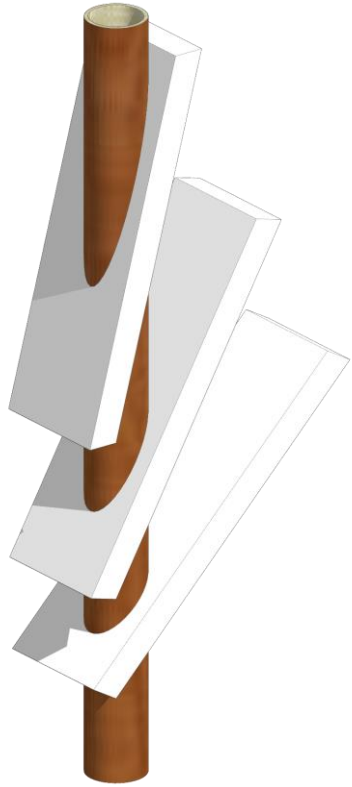
Bamboo has long resisted standardization as an industrial material — being a natural, organically grown resource, no two culms are perfectly alike in diameter, wall thickness, or curvature, making it difficult to fit into the precision and repeatability that industrial manufacturing demands.

Valay addresses this head-on through a deliberately simple design logic: rather than forcing bamboo into a fixed mold, the system works *with* its natural variation, using a single repeatable cutting and joining method consistent angles, a halved profile, and offset staggering that absorbs irregularity instead of fighting it. This turns bamboo's inherent unpredictability from a manufacturing liability into a design feature, allowing each unit to be slightly unique while the overall system remains modular, scalable, and industrially viable.

Objectives

- Reinterpret organically grown bamboo as an industrial, modular material
- Design a system that allows multiple lighting typologies from one module
- Explore staggered geometry to create directional and atmospheric lighting
- Maintain the visual integrity and warmth of bamboo





01

Selecting 3 different angles
30°, 45° and 60°



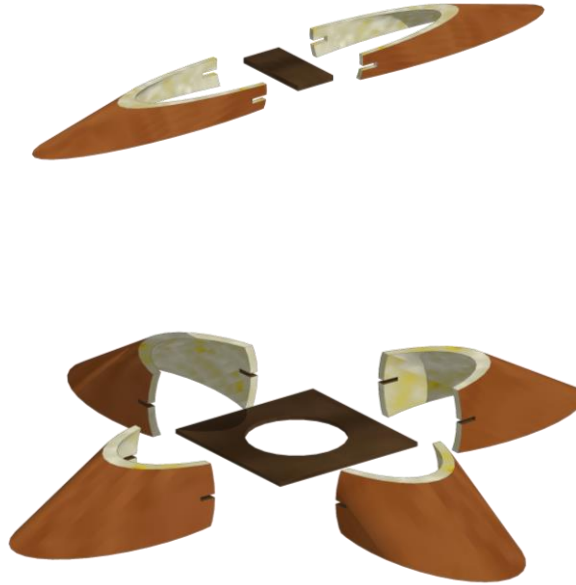
02

Cutting the culm
respectively



03

Cutting them again
into half



04

Making the cuts in the middle
and taking a bamboo strip

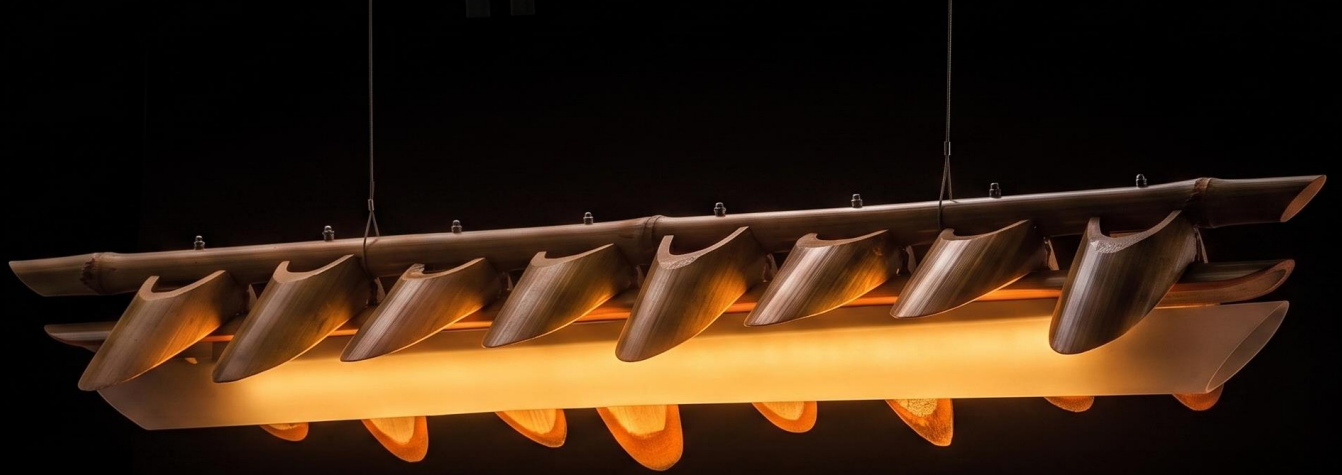


05

Joining all the parts by putting
the bamboo strip in between.

Process





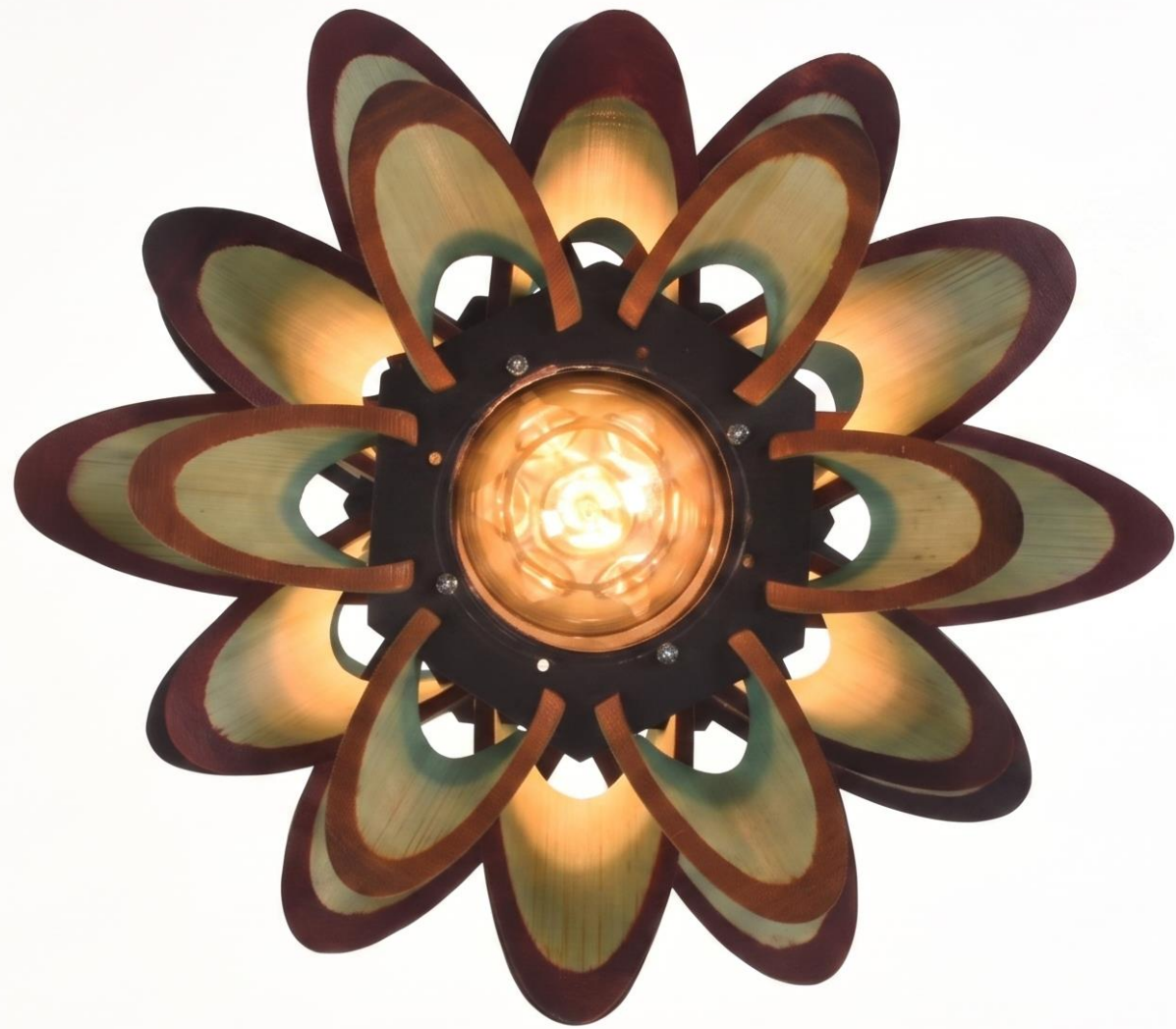






Image rendered on AI

