



WOODEN FABRIC LAMP

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Research purpose. Presentation of the teaching contents of the alternative expressive techniques subject in the Wood Technology School Maribor in the design program.

Keywords: illuminant, lamp, light, textile, wooden fabric

Research Methodology. The assignment we were given was to create a light that would be useful and aesthetically designed. Our starting points were the relations between geometric shapes and their contrasts – the contrasts between soft and hard, sharp and round. We also had to predict how we will it. Although light is a part of our everyday a designer must know its characteristics that have to be taken into consideration while designing. With an illuminant or lamp, we are talking about ambient lighting that differentiates based on its purpose (direct, indirect). With that we can create a certain ambient or mood in a room and so affect the people in it. With that concept the first sketches were drawn. I implemented the contrast between shapes, between soft and hard, sharp and round and organic and inorganic as a theme. After the first consultations I also looked at the wooden fabric developed by Elisa Strozky. It is where I got the inspiration for the decision which I thought would be a good challenge regarding the planning and execution of the design.

Results / Findings. The first step was sketching. I came up with an idea of an illuminated cube that has a wooden mass spilling off it. The mass was meant to be fixed, so it had no way of moving. With consultations we came to the final shape which represents the contrast between hard and soft, organic and geometric, strict and playful, warm and cool. Next was the planning with basic measurements and the drawing of patterns. By printing the patterns using a 3D printer I was able to conclude that the “fabric” wrinkled the best with simple geometric shapes. Organic shapes need to have different shapes in one pattern so they can wrinkle effectively so I did not pursue that idea any further. Then I drew the chosen pattern in a computer program (AutoCAD) so that it was ready for laser cutting. At school we then cut the pattern out of 2 pieces of glued together veneer that were 1 mm thick. I was able to find a cube of plexiglass on the Internet, but it was clear. Because I wanted the shape of the cube to stand out more, I used some window foil on the inside to give it a matt effect. The fabric was glued on the outside. I made the fabric with gluing individual pieces of the pattern on white tulle. On top of the tulle, I placed the negative of the cut-out pattern that stayed in one piece. I used wood glue to glue the pieces on one by one. For more sturdiness I used one drop of super glue on each piece. I chose white tulle because it is a light color, and I wanted the light seeping through the lines between the wood pieces. The base of the lamp is the same width and length as the plexiglass box, the height 17 mm. In the middle a light bulb is sunk in with a channel for the cable so that it does not cast a shadow on the side of the box. I glued the fabric onto the box in a few places so that it is still flexible to further bring out the contrast between stiff and flexible, static and moving.

Originality / Practical implications. It can be used as a decorative and practical product that is something special. Wooden fabric can have many different uses and purposes and can be further developed into more complicated patterns.

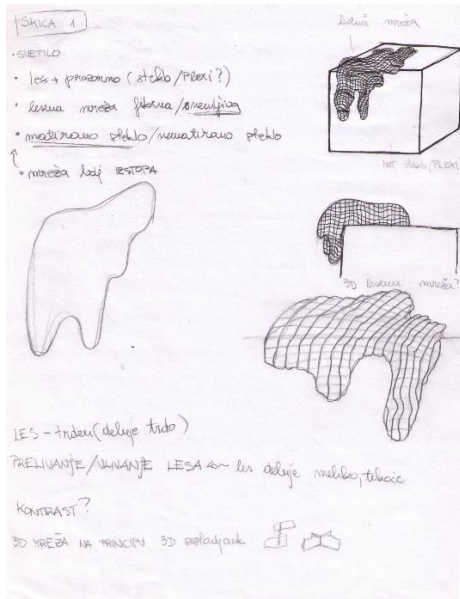


Figure 1. Original sketch
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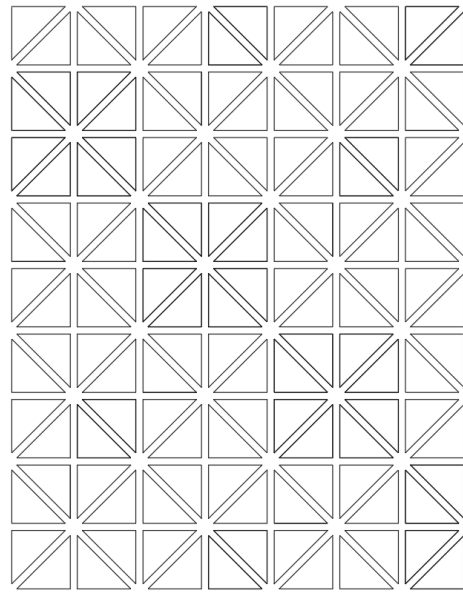


Figure 2. Chosen pattern
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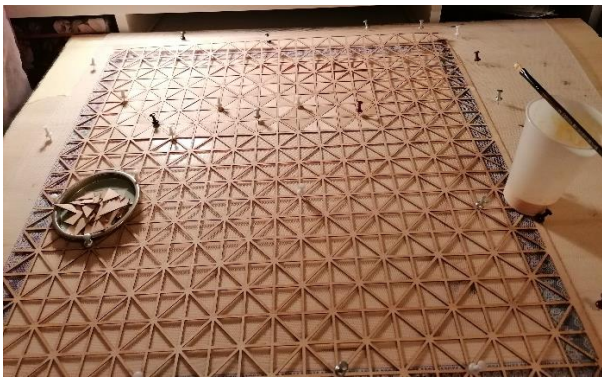


Figure 3. Making the wooden fabric
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Figure 4. Finished product
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Figure 5. Wooden fabric
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