

Design Research Seminar

Paper Lamps; Metaphors of Light

M.Des | ARUN SHAH | 156130016

Guide; Prof Purba Joshi



IDC School of Design
अभिकल्प विद्यालय

Design Research Seminar

“PAPER LAMPS; Metaphors of light”

By
Arun Shah
156130016

M.Des Industrial Design
2015–17
IIT Bombay

Guided By,
Prof. Purba Joshi



Approval

The design research seminar

“Paper Lamps; Metaphors of Light”

By Arun Shah

156130016

M.des Industrial Design, 2015-17

Is approved as the partial fulfillment of post graduate degree in Industrial design at IDC, IIT Bombay

GUIDE; *up to*



Declaration

I declare that this written submission represents my idea in my own words and where other ideas or words have been included, I have adequately selected and referred the original source. I also declare that I have adhered to all principles of academic honesty and integrity and have not misinterpreted or fabricated or falsified any ideas / data / facts / sources in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources that have not been properly cited, or from whom proper permission has not been sought.



Arun Shah





Acknowledgement

This Project is a creative outcome of the continued studies and explorations in the Packaging and labelling design course at IDC. I am thankful to my guide, Prof. Purba Joshi and Prof Mandar Rane for the valuable inputs and Guidance. Also I thank my classmates for sharing their views and ideas.





Abstract

Lamps have a primary function. To provide light. But why do we need the light and how do we need the light? This is where Design becomes an answer. Light, color, shadow, pattern.. All these can be manipulated to bring in meanings and emotions.

Paper lamps are known as very common and very simple products. The catch here is the play of light and shadow. This is what makes the whole emotion of the lamp. Where light and shadow creates visual metaphors, it creates another meaning to the product.

This project aims at the exploration of the design of a tea candle paper lamp, by developing the design, improving its usability and the aesthetics.





The Design Story

The lamps were designed from the packaging design of tea candles.

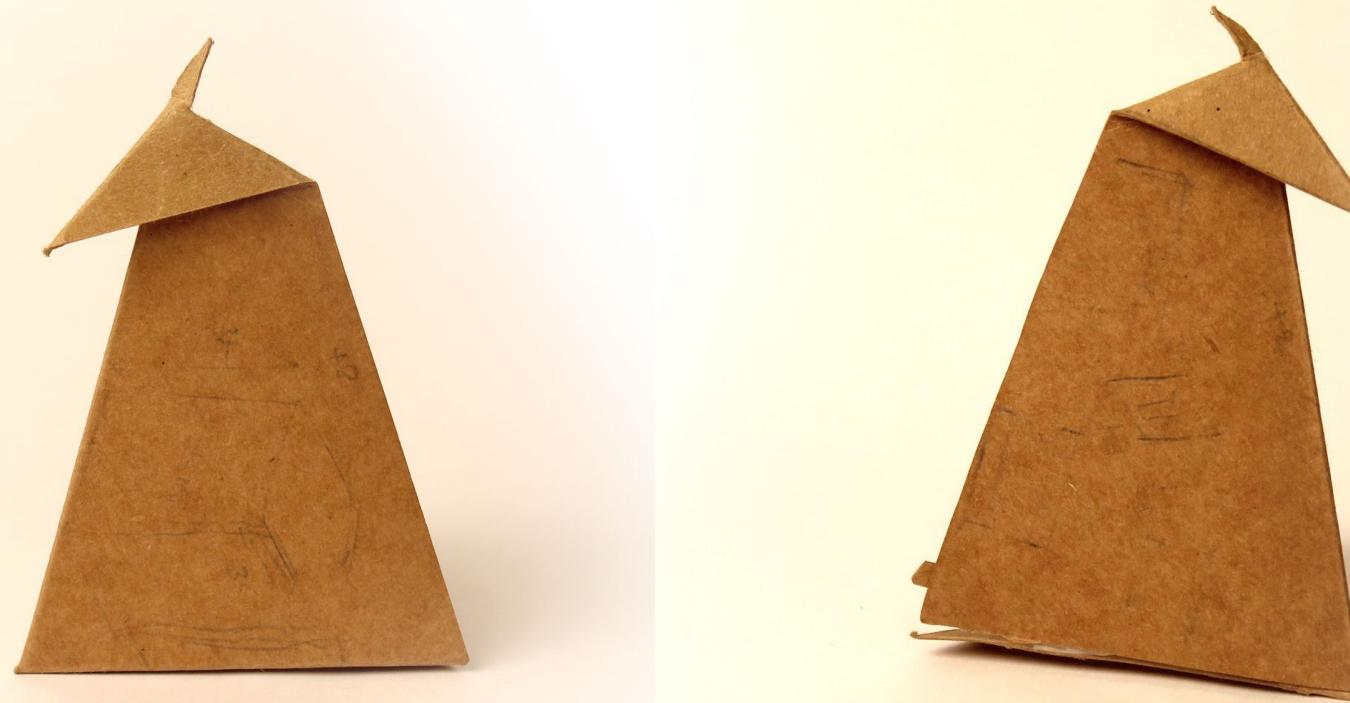
The designs were supposed to be a packaging for tea candles, which can also be used as a lamp. My approach to the design was to bring in an interesting atypical packaging for the candles.

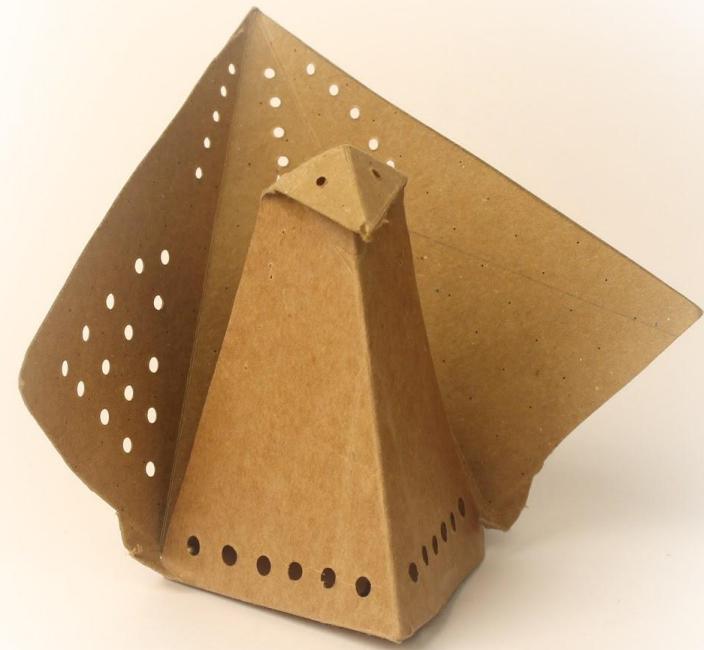
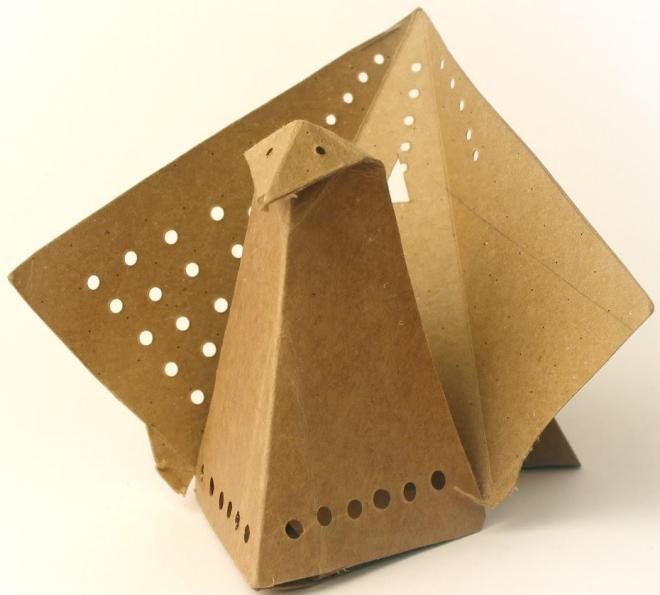


The Packaging for the candle was designed as a triangular box, just to try out a different shape. When folded up, it should form, the shape of a flower. This Idea was further developed to make a pyramidal form

Playing with the pyramidal shape led to the formation of a bird, a peacock.

Hence the basic form of packaging was decided and the idea of developing the packaging into a lamp was tried out.





A large flap at the back would form large tail.

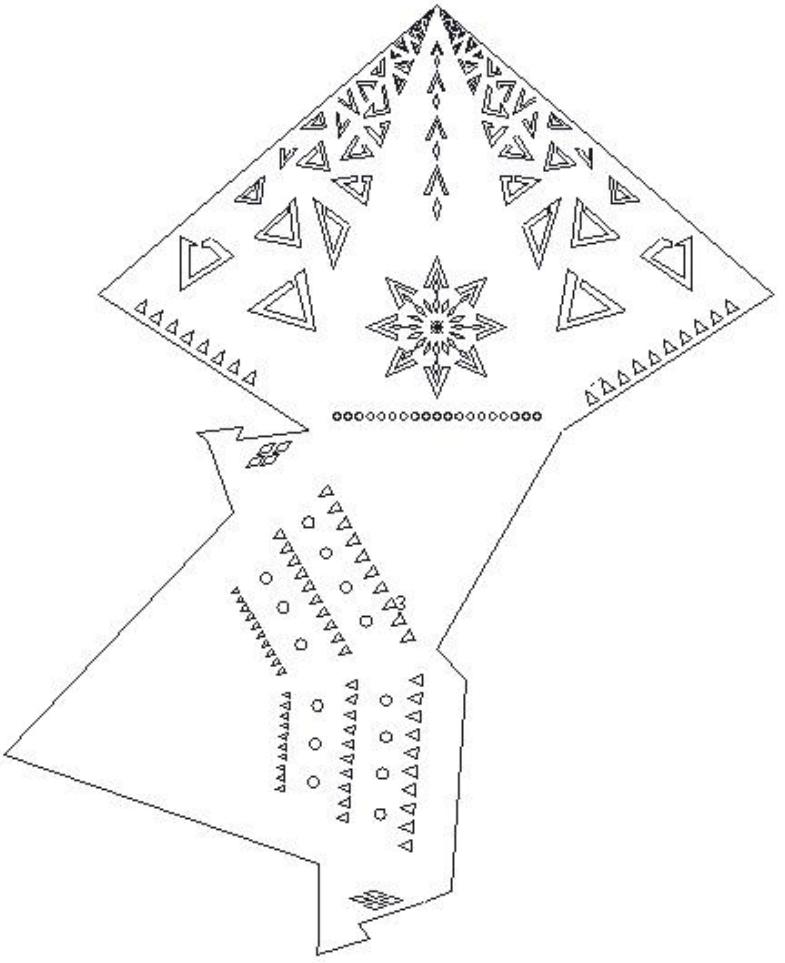
In this test model, perforations were made to experiment with light and shadow. The patterns at the bottom of the peacock gave a nice pattern of shadow in the ground.

The first laser cut model was this.

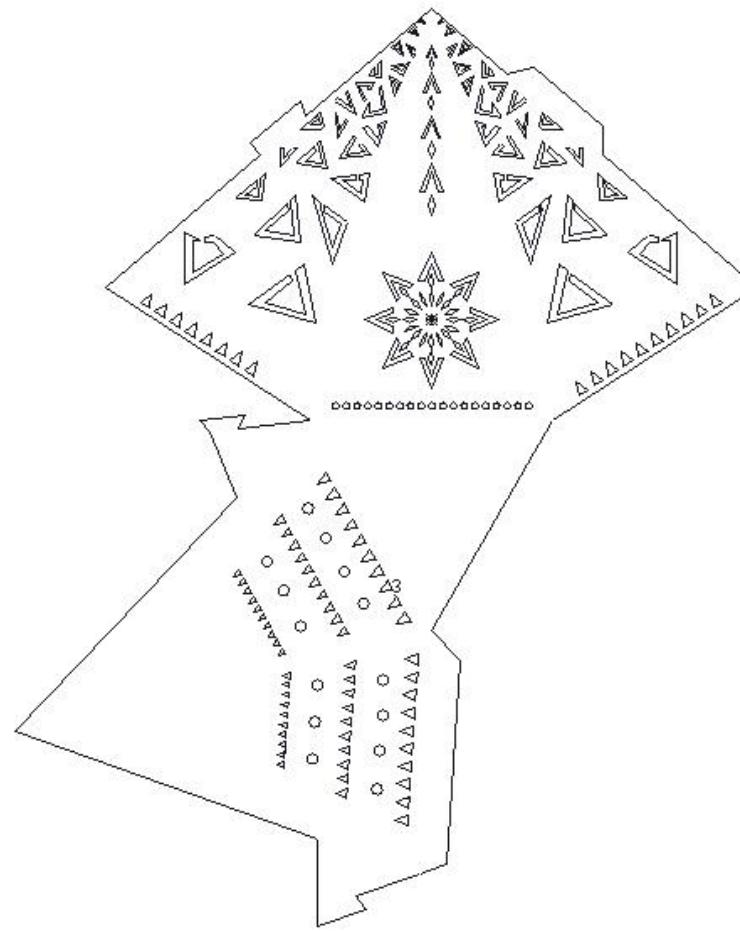
The position of perforations in the design did not give the best shadows. Therefore they were repositioned to get bigger shadows.

The Graphics were designed to suit the triangular structure of the lamp. They were modified to Later.

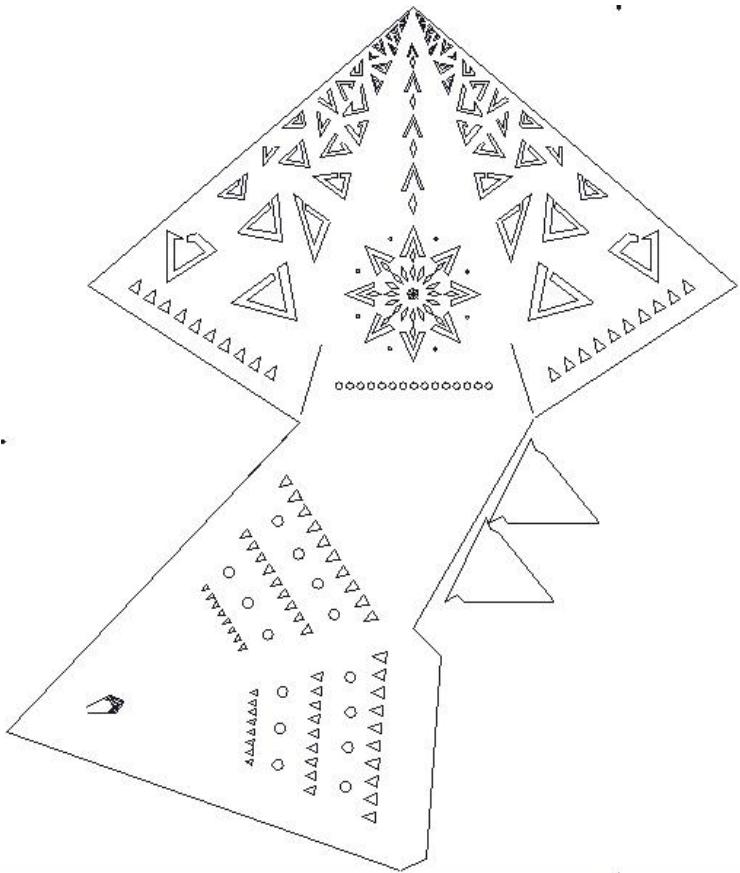




Artwork 1



Artwork 2



Artwork 3

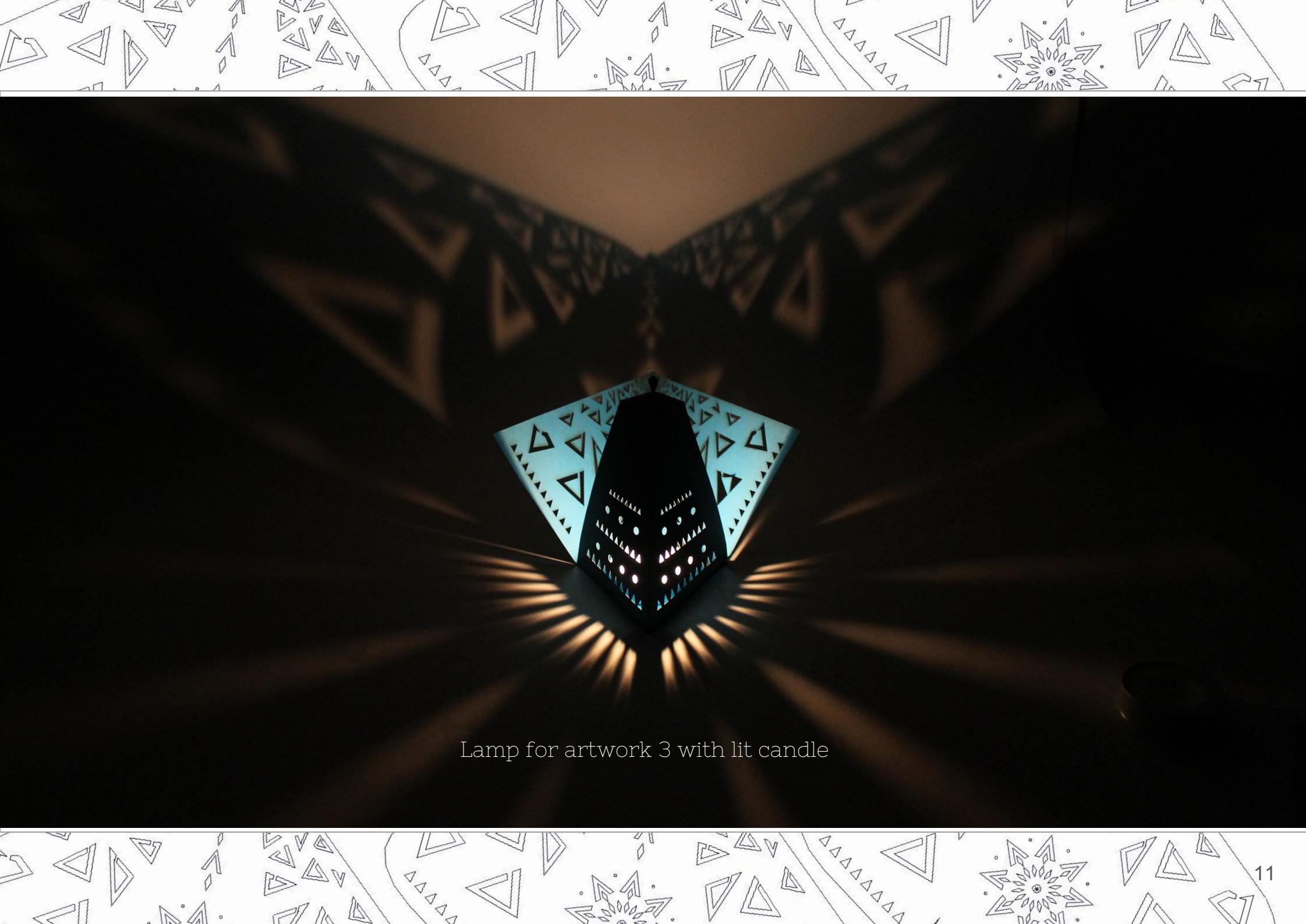
Since the tail part was too big, it needed support.

Two solutions thought initially was to connect the body with the tail with an extended flap within the design(Artwork 1 & 2)

Second one was to attach legs separately(Artwork 3)

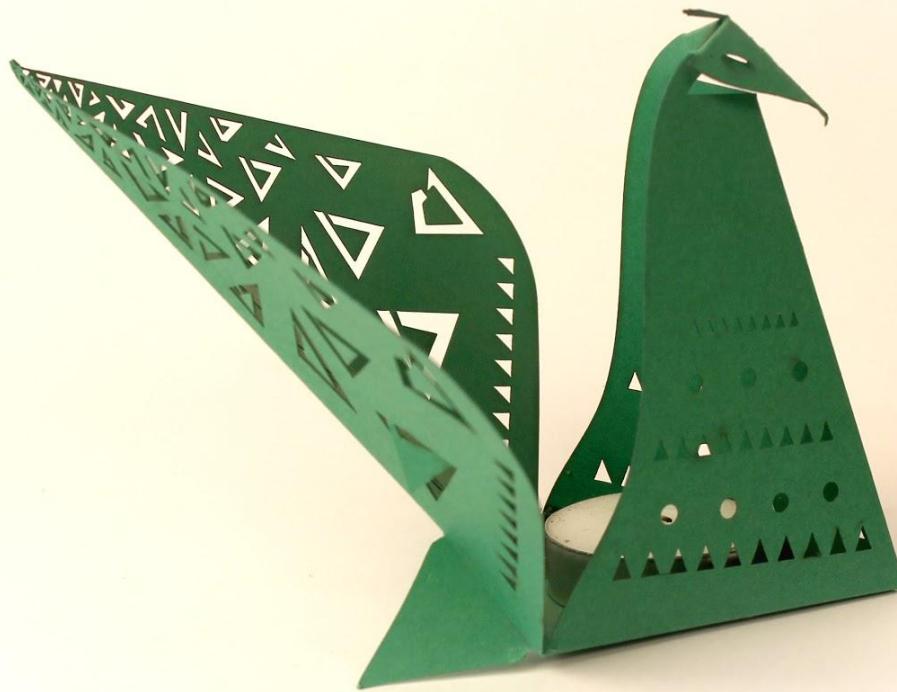


Lamp for artwork 3



Lamp for artwork 3 with lit candle

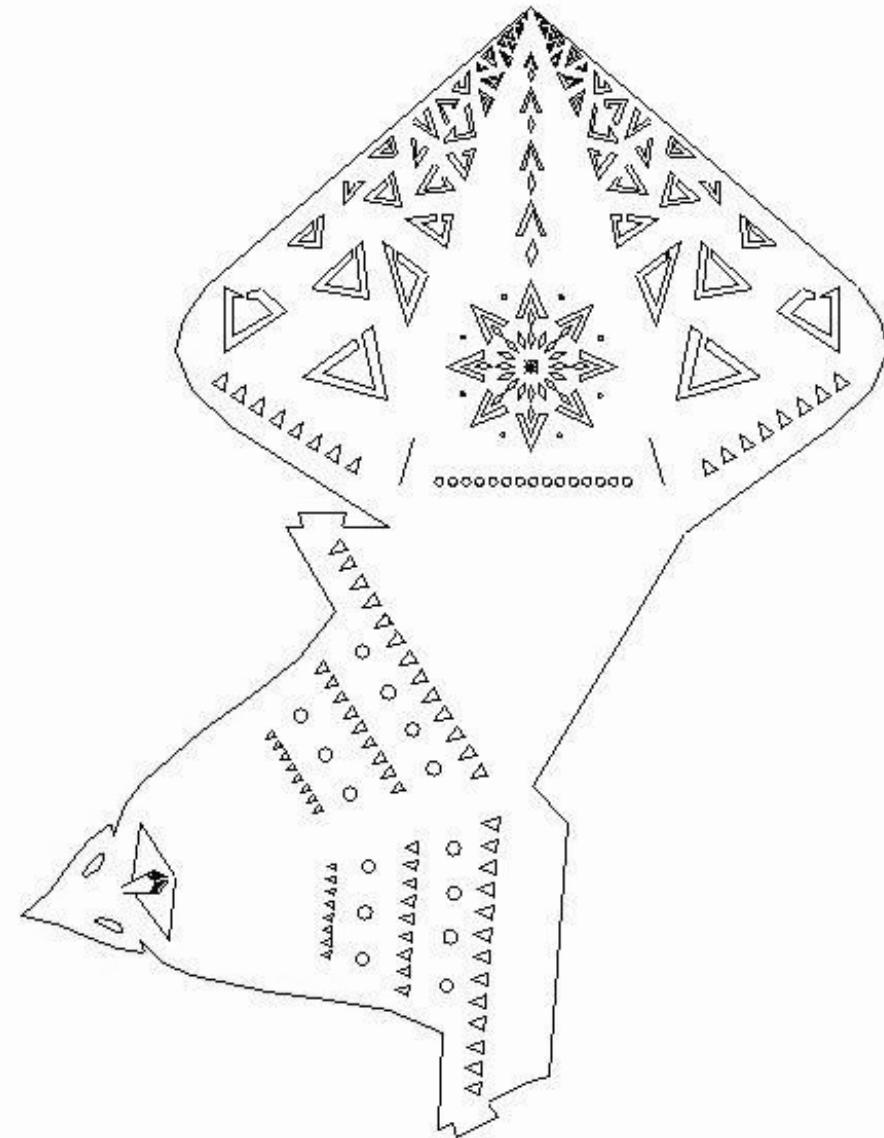
The overall design of the lamp was analysed and it was found to be very geometric in shape. To bring in the 'Grace in the overall form' some curves were introduced into the design, as well as a eyes and neck.







But the stability of the legs in those designs were very weak. Hence Designs of artworks 1 & 2 were modified in the same manner to get this design.

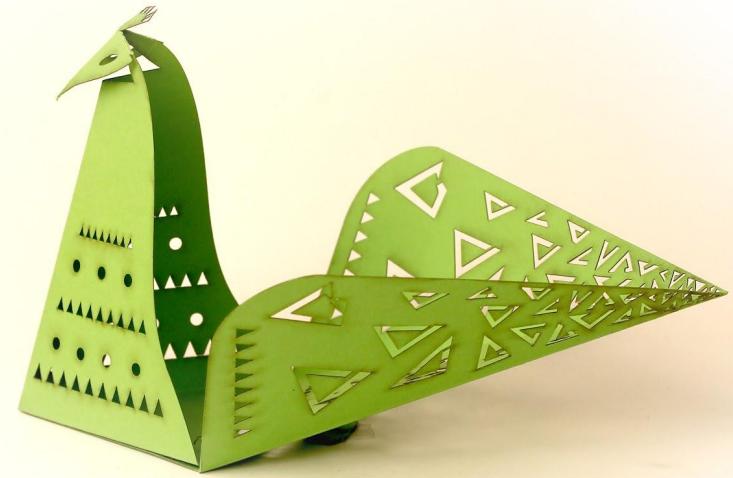
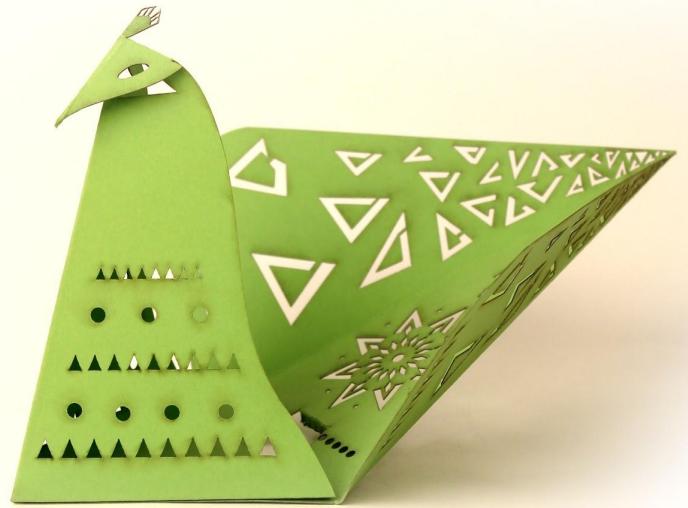


Artwork 5



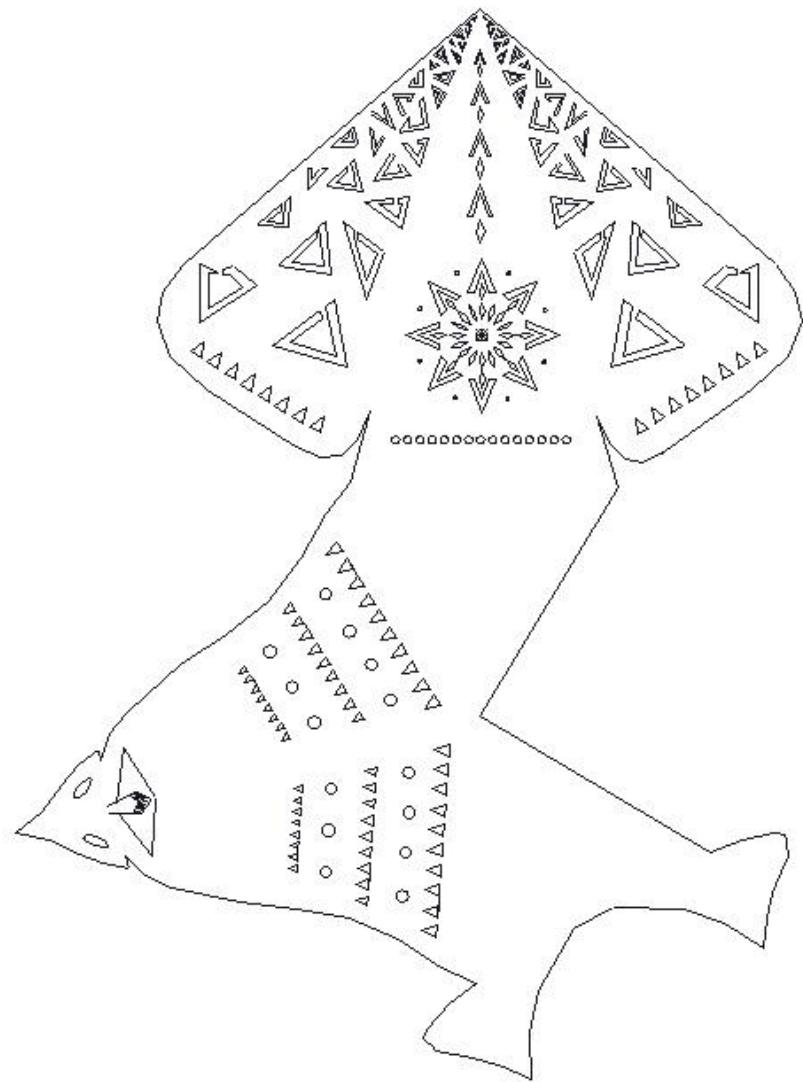
The tail was supported well in this design. But putting and taking out the candle was a task.





Cutting a member from the tail itself and using it for support was a failed attempt :(





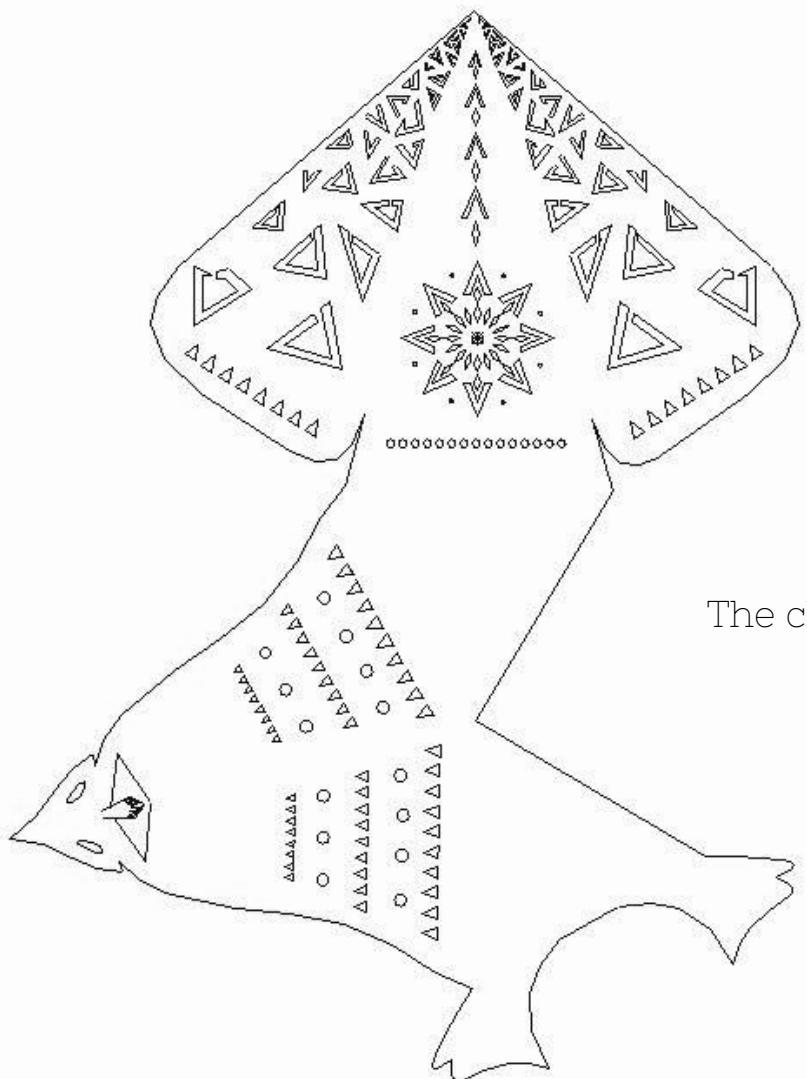
After many unsuccessful and partially successful attempts, The design was made a bit complex. ;)
The base of the lamp was extended to form a folded member that supports the tail from behind.



It functioned well
enough, but,



There were some error in the angles, also the grooves which held the tail had to be bigger.



The changes were
made!



It looked great!



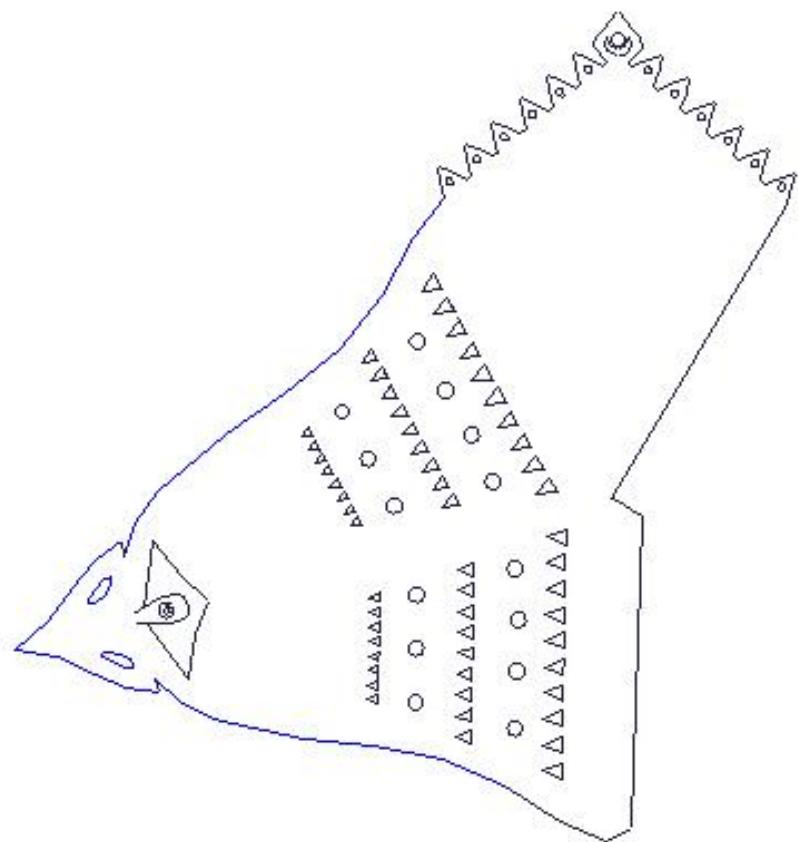


It is advised to clean
the cutting area in
the laser machine.

Otherwise these
marks would appear
on the paper :(





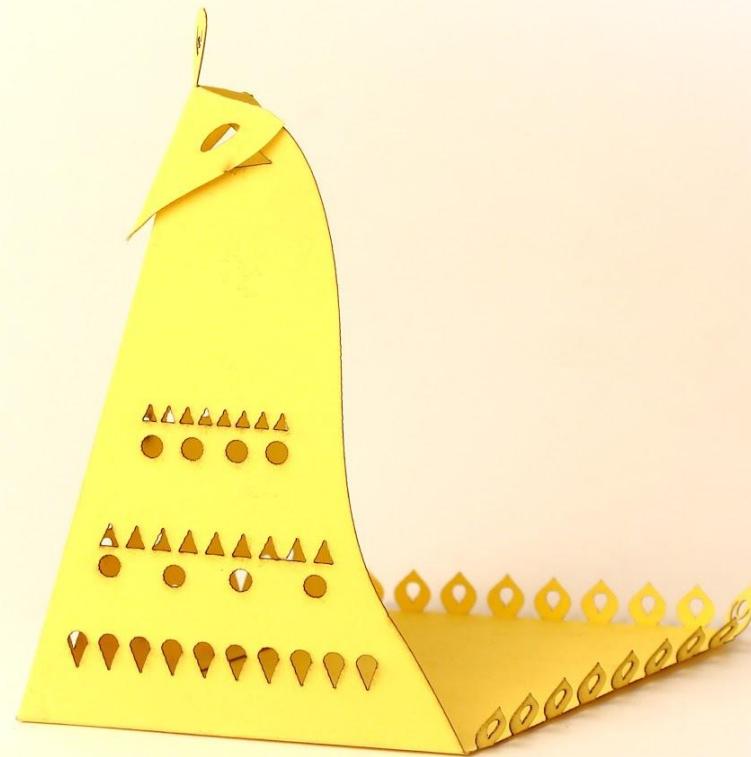


The next iteration in design was made with the intention of making the design of the lamp very much simpler.

The tail was removed and a pattern was introduced to cast a shadow which adds to the design.

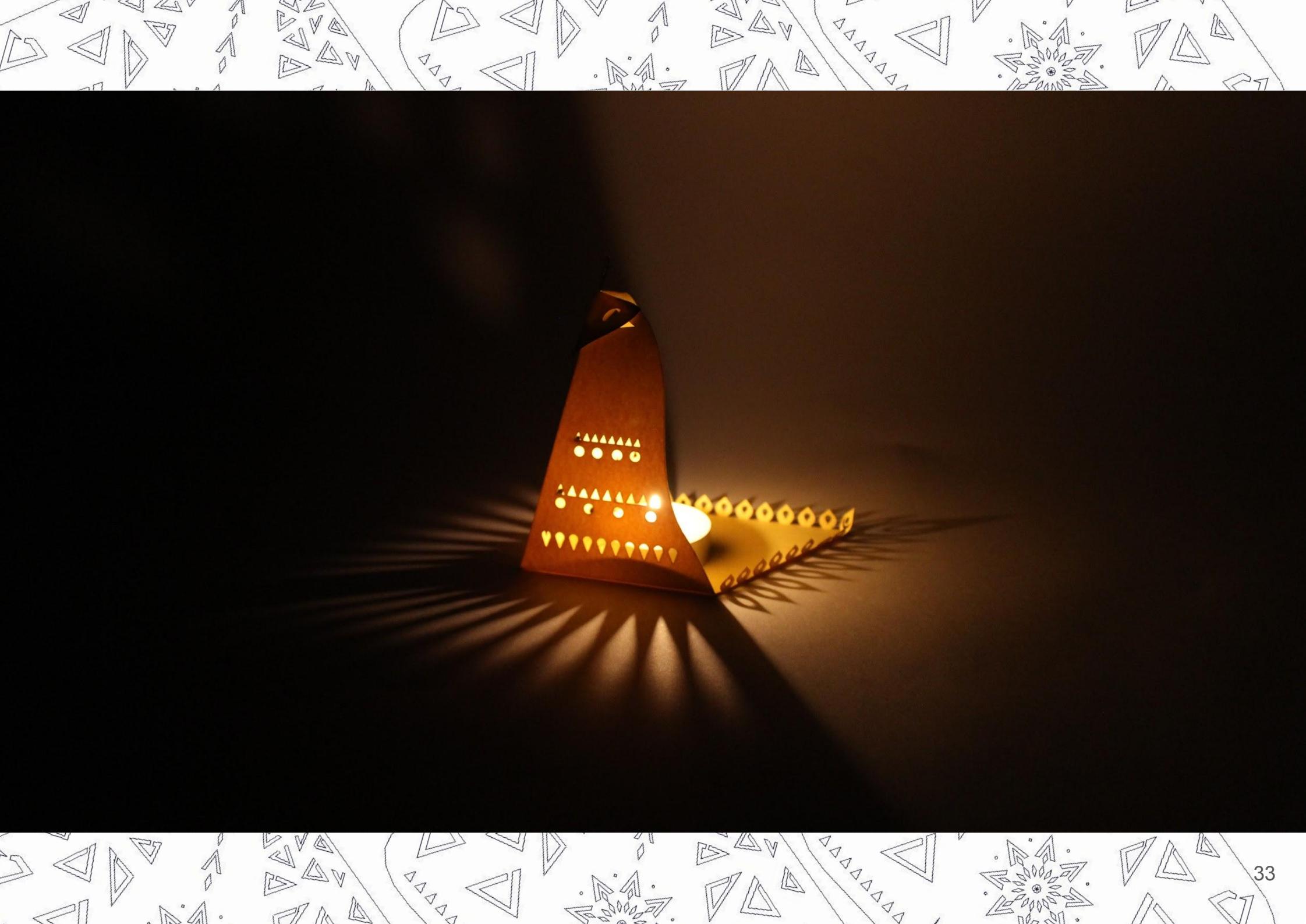


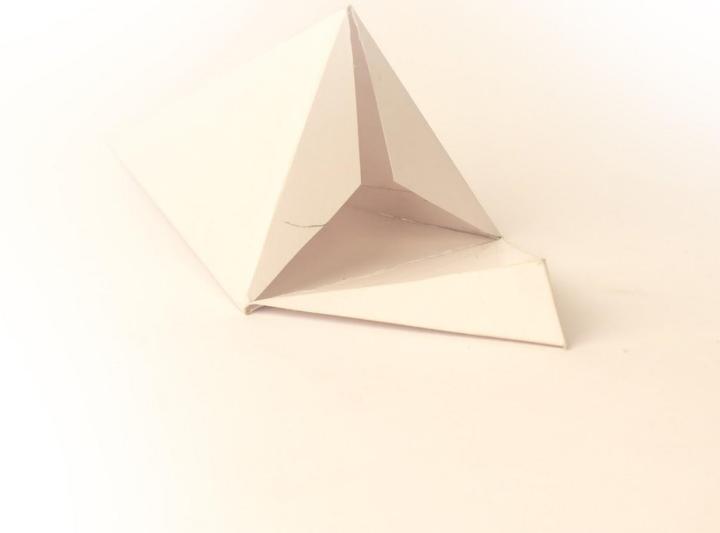
The tail part was extended to a certain length to get even shadows





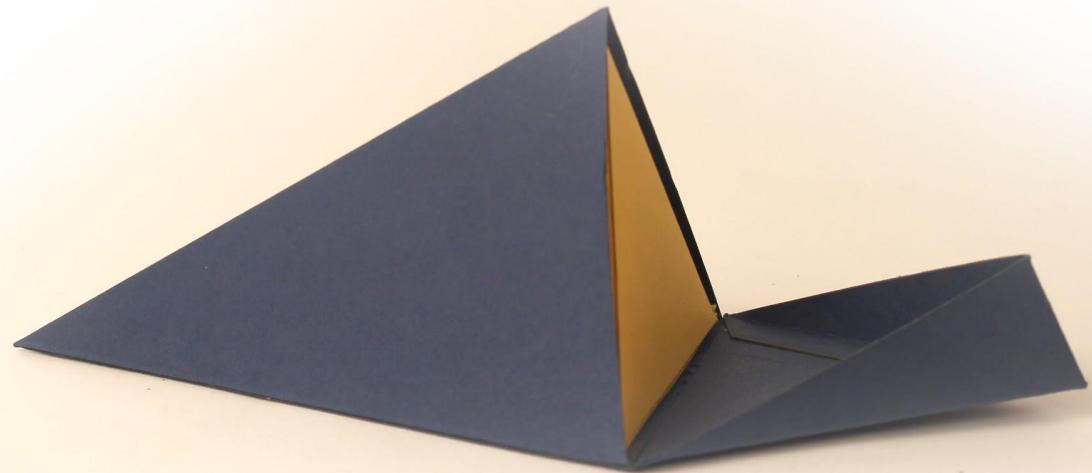


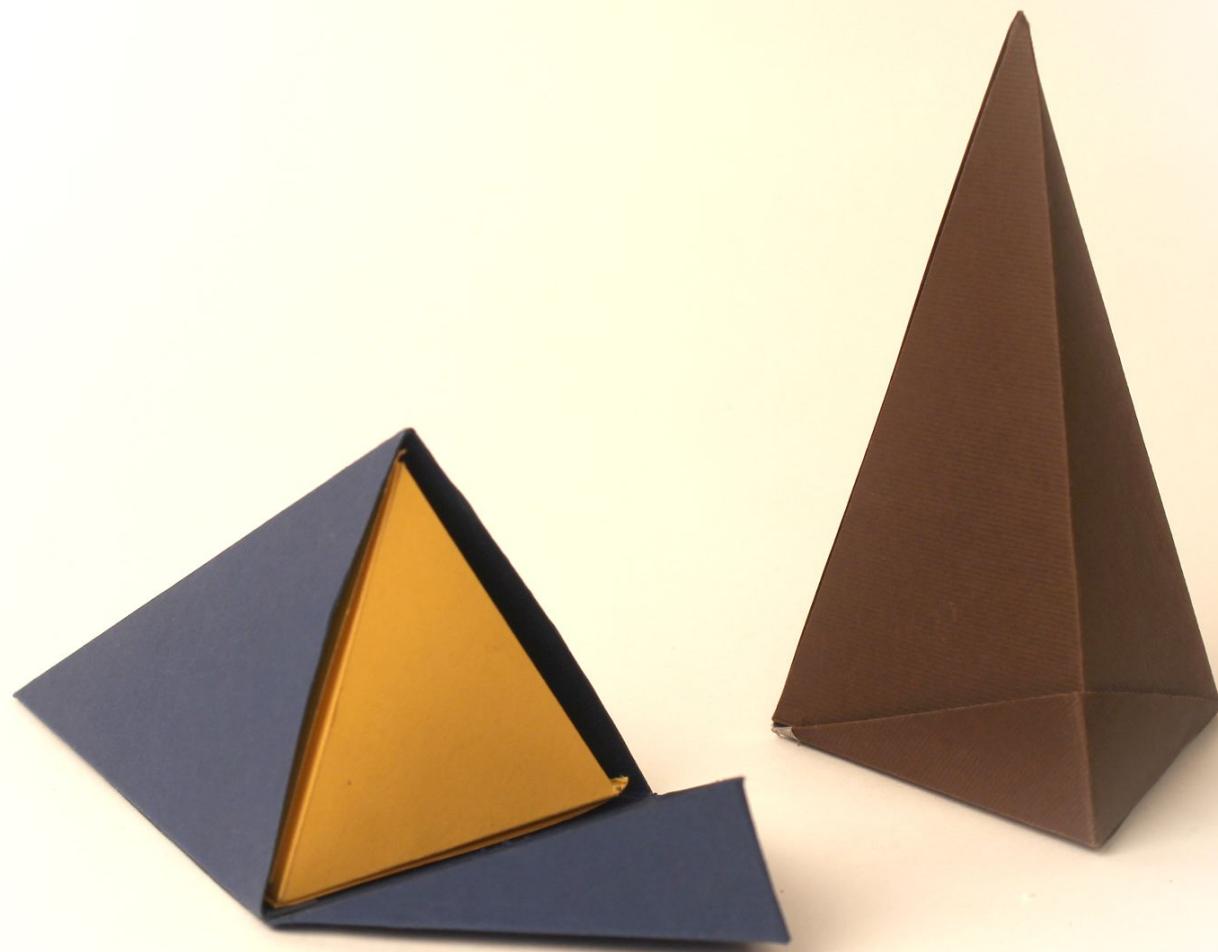




Packaging for the lamp was designed to keep the pyramid shape. The flaps had the negative undercut profile which locked and unlocked with ease.

The support flaps at the mouth of the box were removed for ease of operation





End.



Copyright 2017

