

The background of the slide is a photograph of a hand-drawn diagram on a piece of paper. A hand is visible on the left, holding a yellow ruler. The diagram consists of several geometric shapes, including triangles and polygons, drawn with black ink. Some shapes are more complex, with internal lines and arrows indicating relationships or flow. The overall style is that of a hand-drawn sketch or diagram.

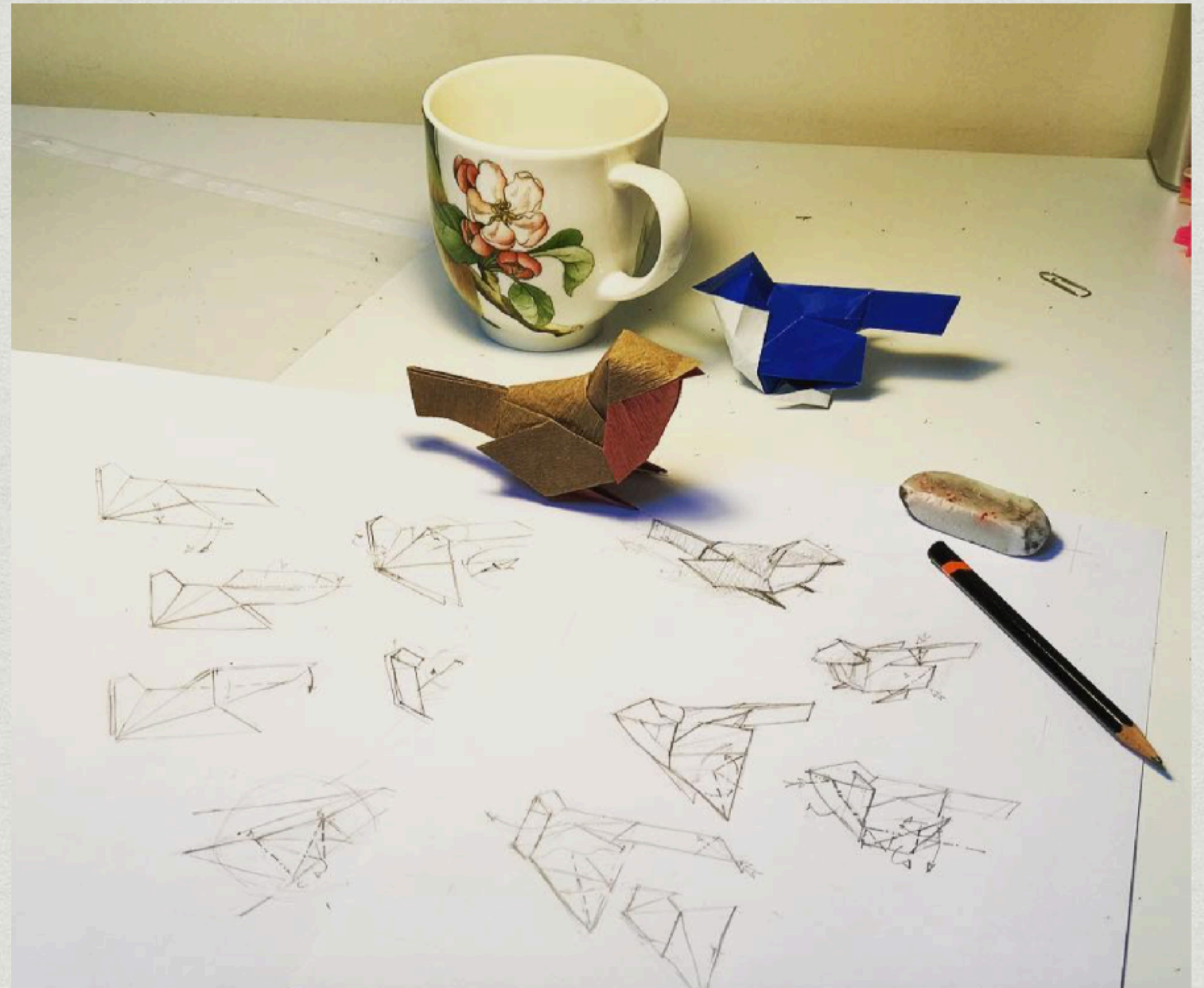
# BRILLUSTRATOR

**The case for hand-drawn diagrams**



# What do I diagram by hand?

- For the same reasons I took up origami: few tools or equipment needed
- Origami need only paper
- Free hand diagrams needs only pencil and rubber
- I'm a dinosaur...
- Direct
- Expresses handwriting of creator
- Personality
- Shows clear movements of paper in folding
- Completes the artwork/creation process





# Teaching the pig to sing

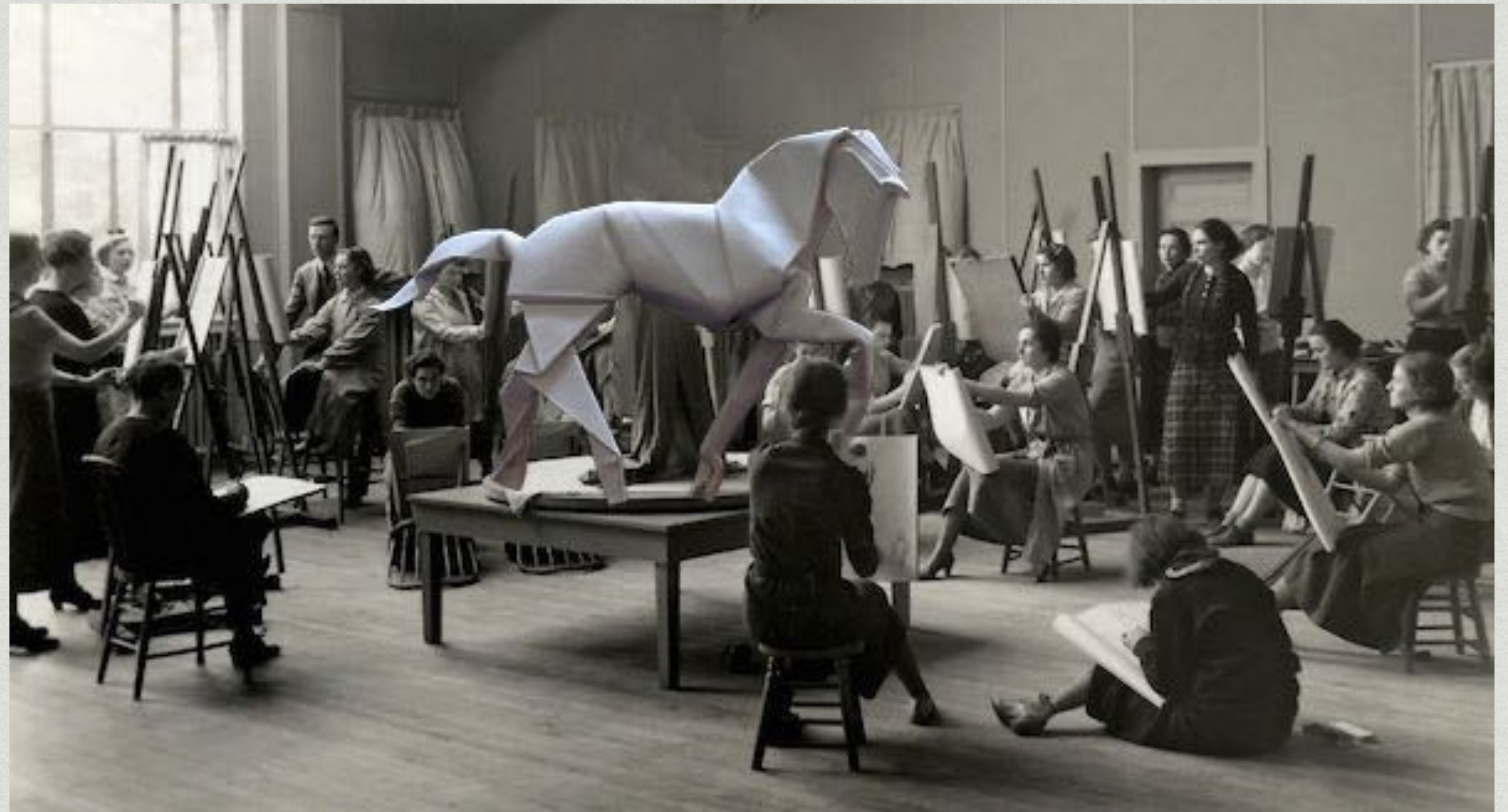


**Inadvisable: the pig doesn't like it, and neither does anyone else**



# Challenges

- Artistic skills?
- Time
- Less suitable for printing
- Photoshop?
- Tendency to enlarge successive steps
- Keep in practice
- Attend life class?





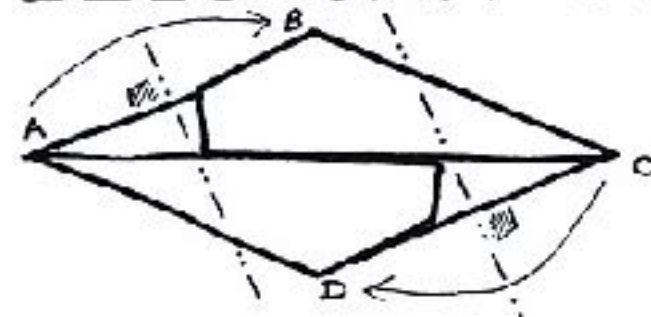
# Gallery quiz

- \* Many have gone before
- \* Some examples to inspire us
- \* Which artists can you recognise?
- \* Write down your answers
- \* Don't cheat or shout out answers

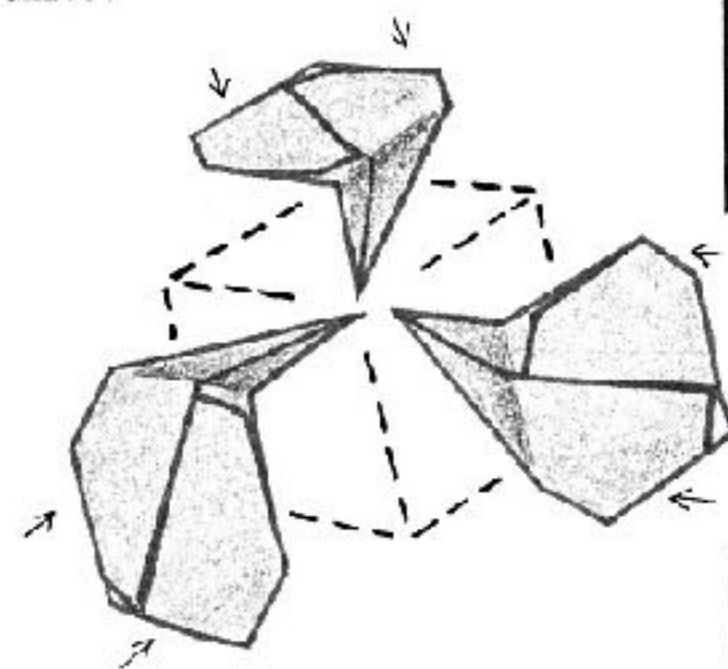




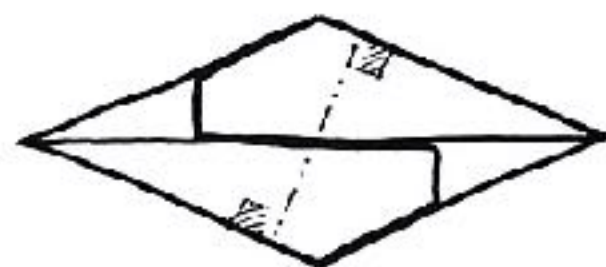
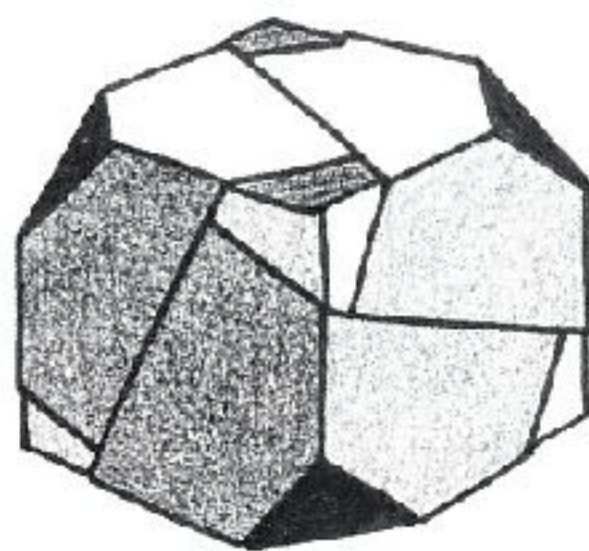
## DECO UNIT CUBES



1. Choose a colour scheme for six units, making each one (from a small square) as shown in **Deco Unit Block** (qv). Fold tip A to meet B and fold tip C to meet D in order to make two 90° creases. Repeat with all six units.

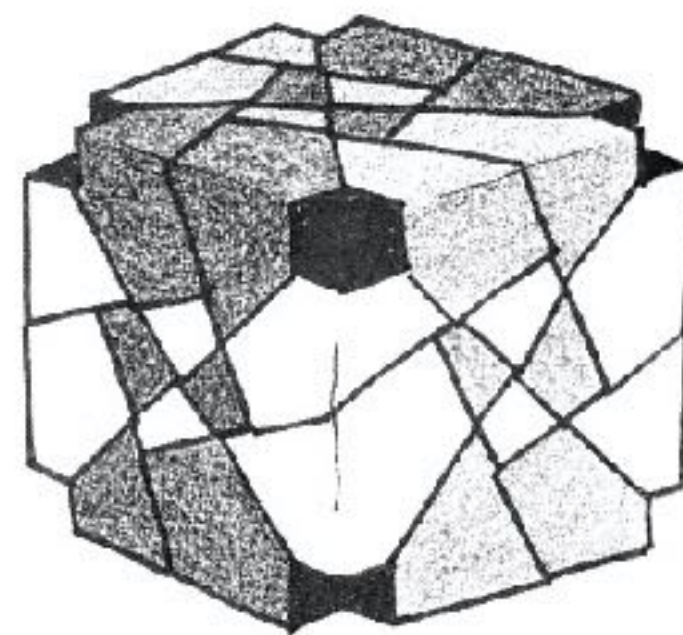
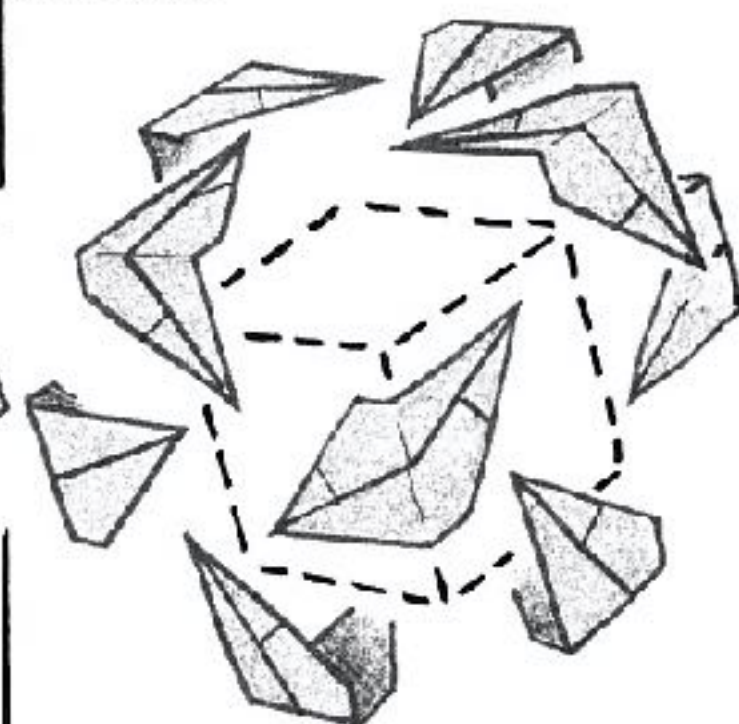


2. Form the cube as indicated here, interlocking the units using the method outlined in **Deco Unit Block**.



1. This time choose a colour scheme for twelve units, again folding them as shown in **Deco Unit Block**. Locate the centre point and make a 90° mountain crease where shown. Again repeat with all units.

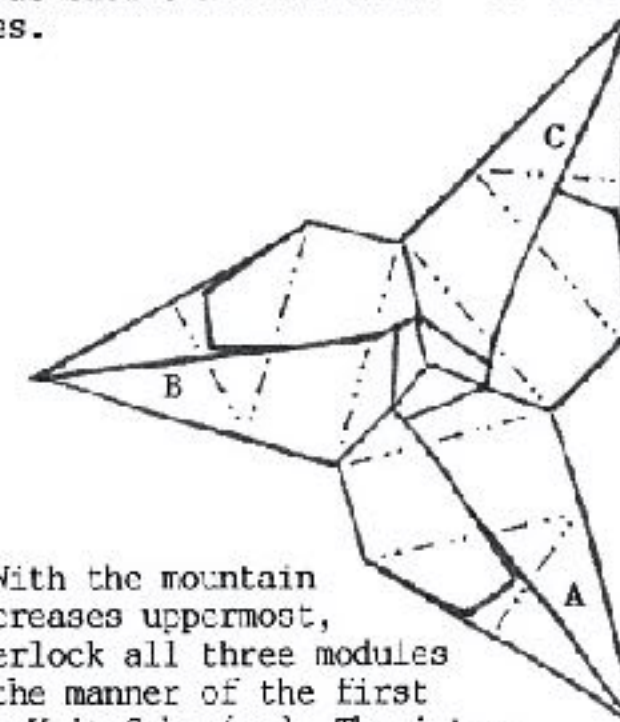
2. Form the second Cube as shown here again using the same interlock method for the units as indicated in **Deco Unit Block**.



## DECO UNIT VARIANTS

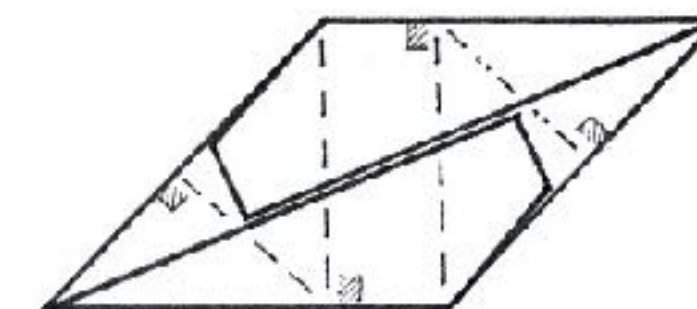
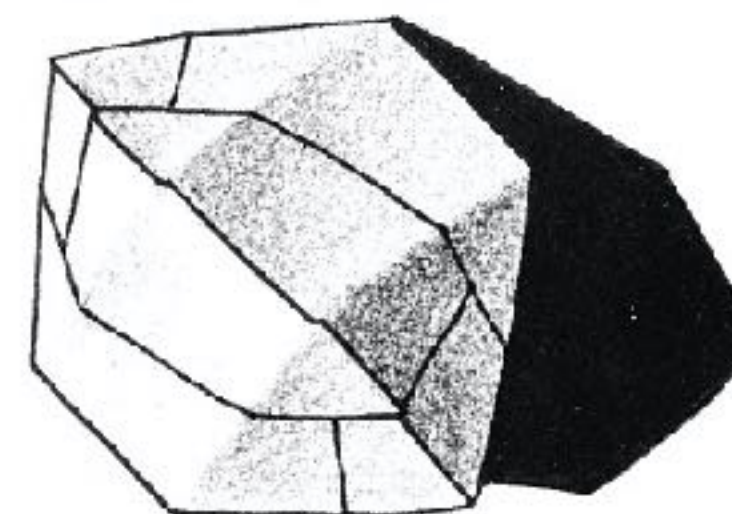


1. Make three modules in the manner of those used in **Deco Unit Block** (qv) and add four, light mountain precreases as shown. All are at 90° to outer edges.

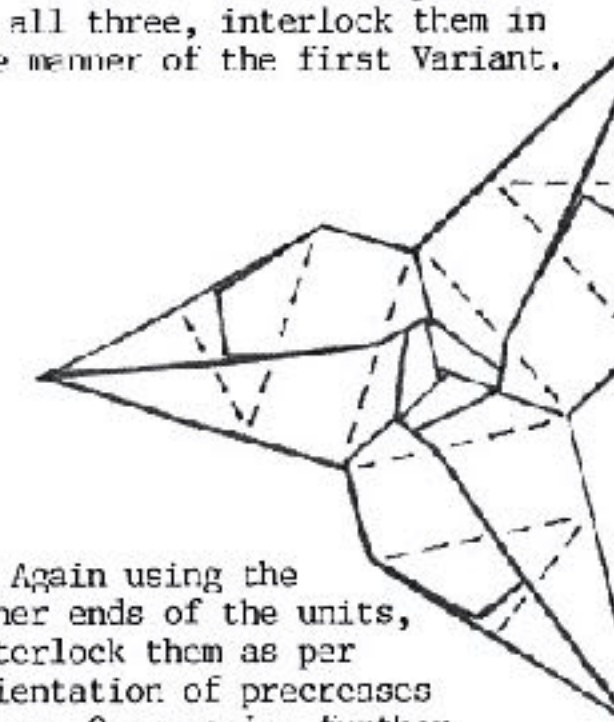


2. With the mountain precreases uppermost, interlock all three modules in the manner of the first **Deco Unit Cube** (qv). The interlocking is facilitated by further precreasing. Then similarly interlock section A with section B, then B with C, and lastly C with A.

## CRYSTAL

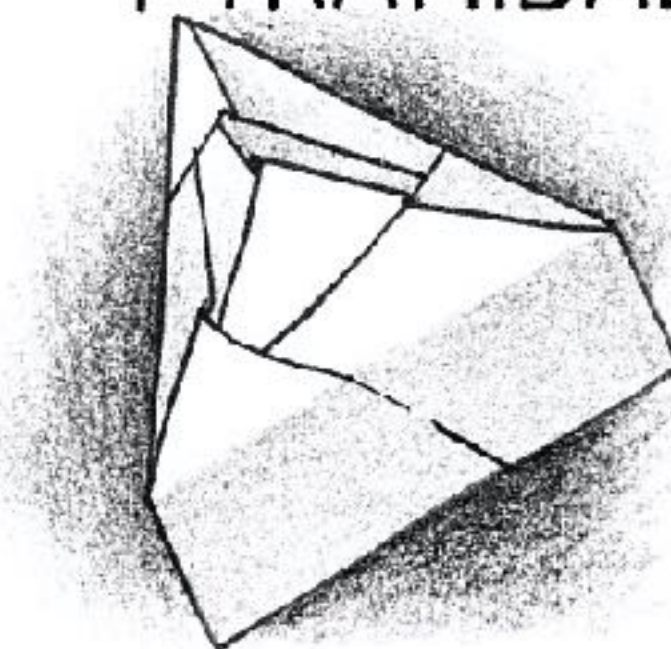


1. This time, lightly precrease three **Deco Unit Block** modules as shown here. Using the right-hand end (That with the mountain precrease) of all three, interlock them in the manner of the first Variant.



2. Again using the other ends of the units, interlock them as per orientation of precreases shown. Once again, further precreasing can facilitate the interlocking.

## PYRAMIDAL





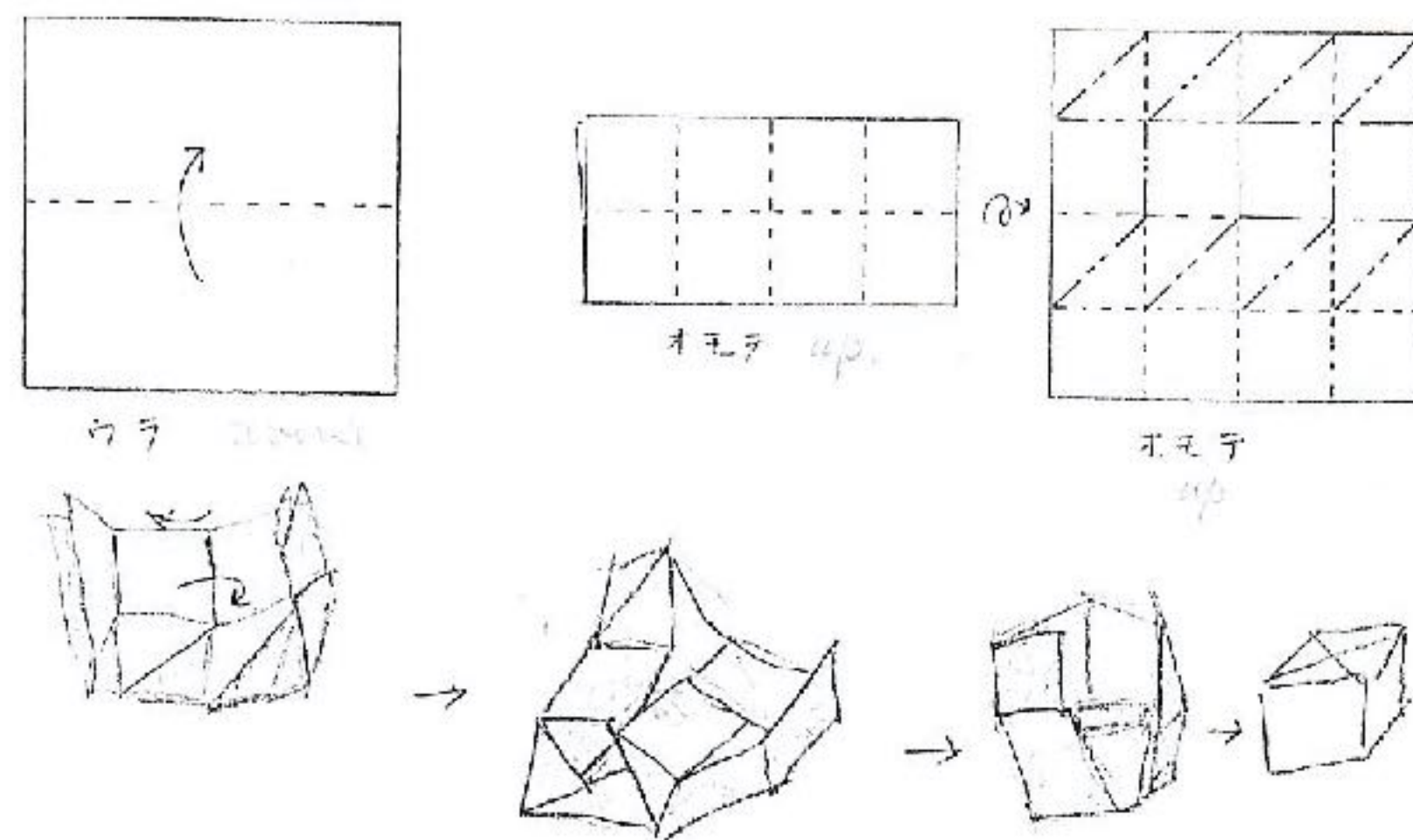
# JEFF BEYNON

UK

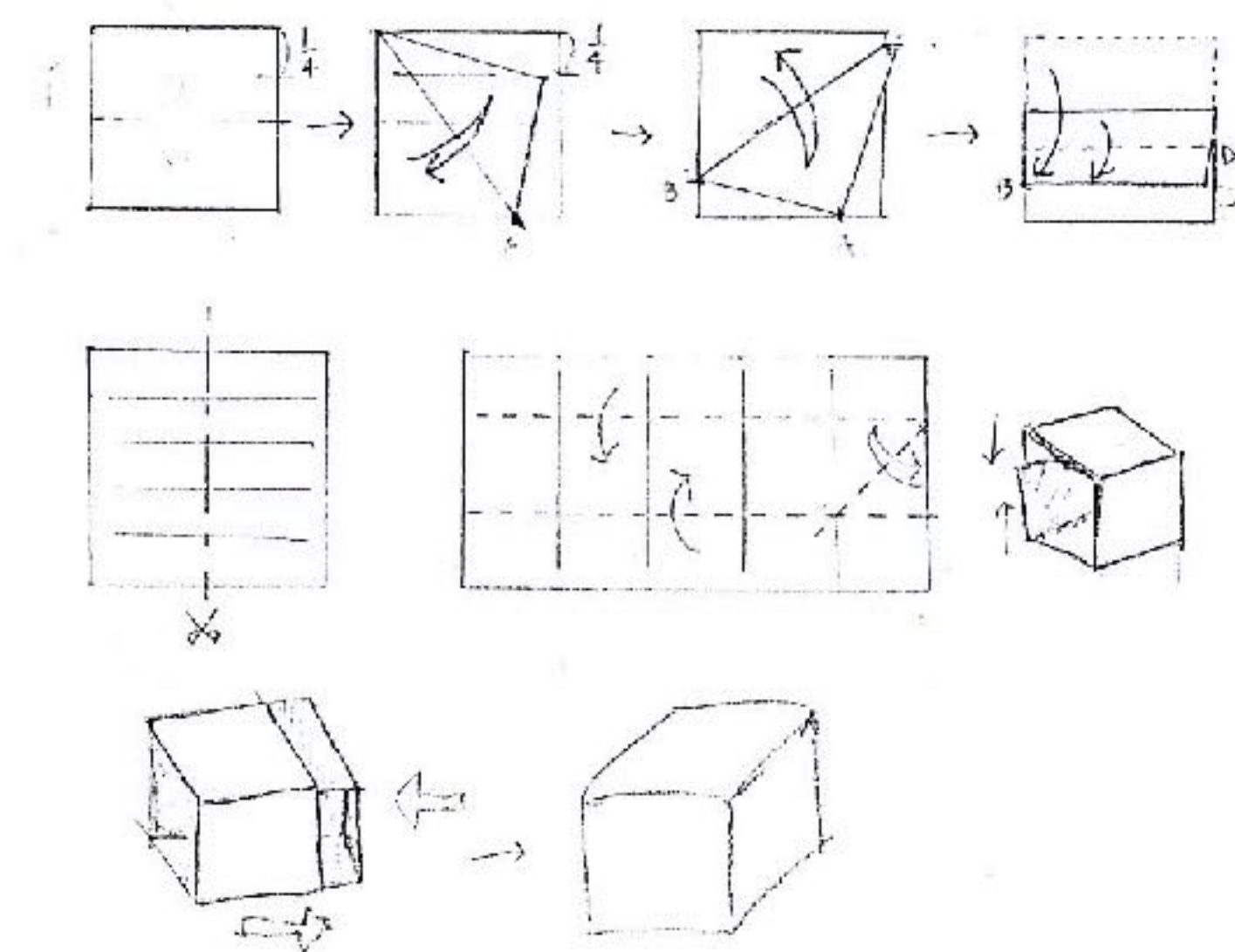




Cube with a square  
正方形より立方体を折る (1) One piece



(2) Two piece



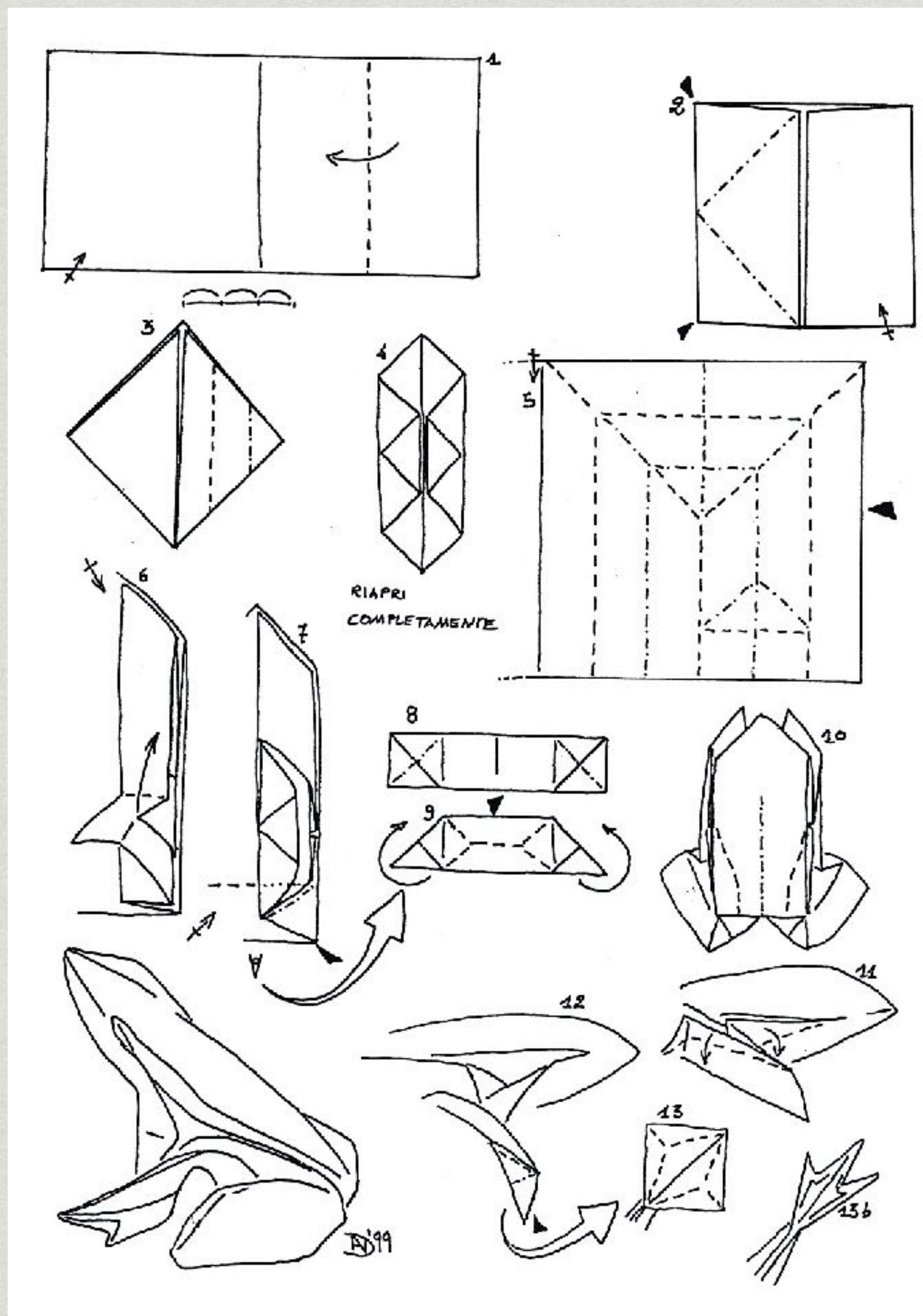


# SHUZO FUJIMOTO

JAPAN









**DAVID DERUDAS**

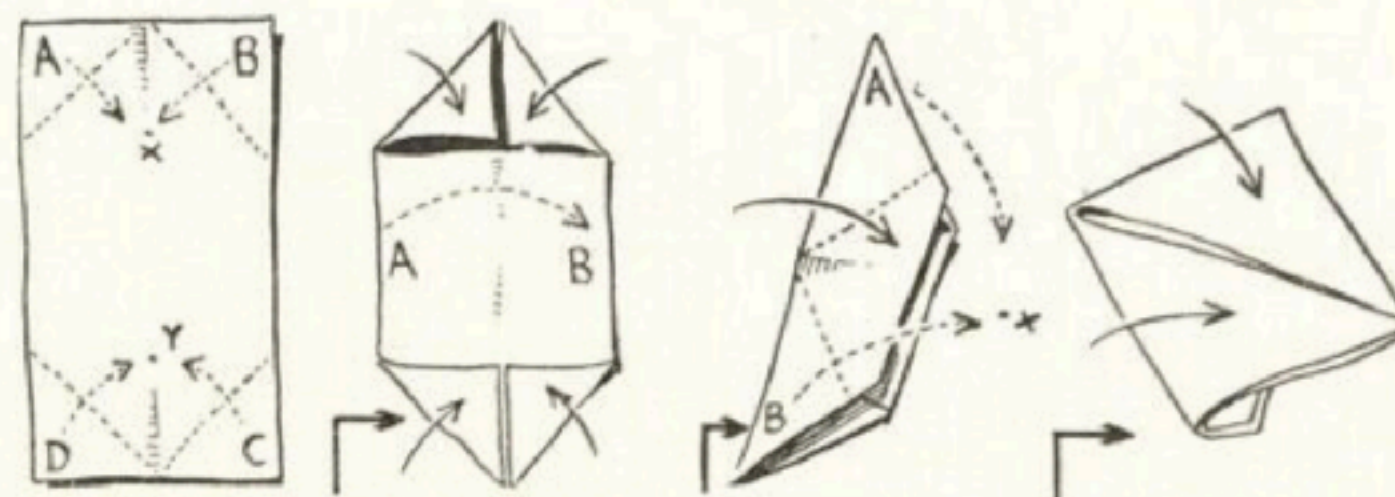
**SARDINIA**



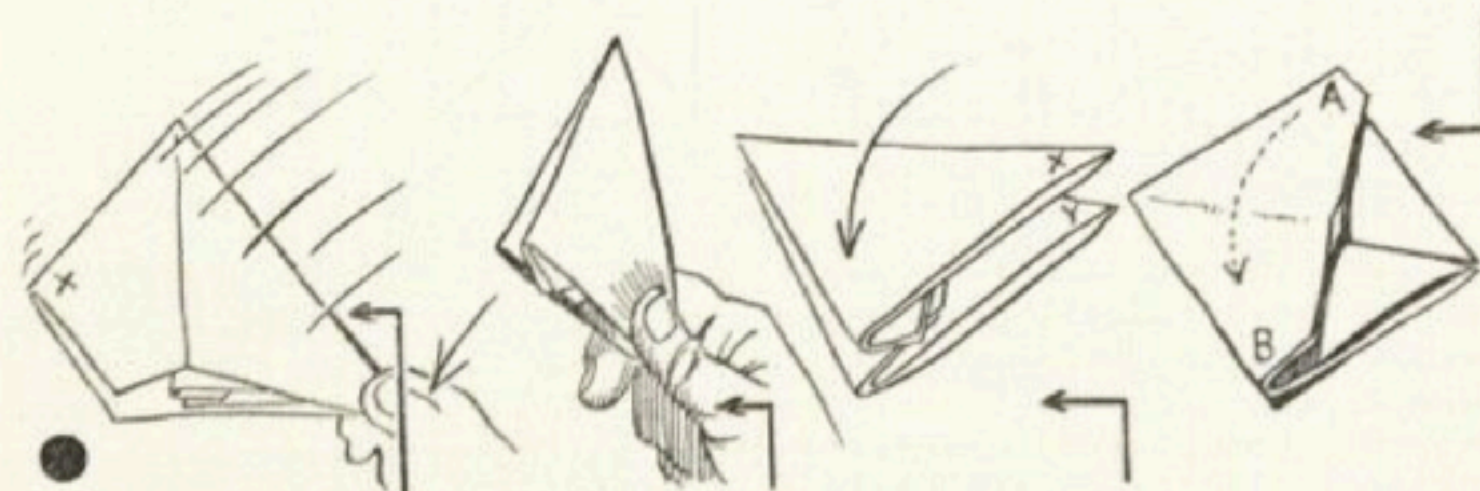


## THE BANGER

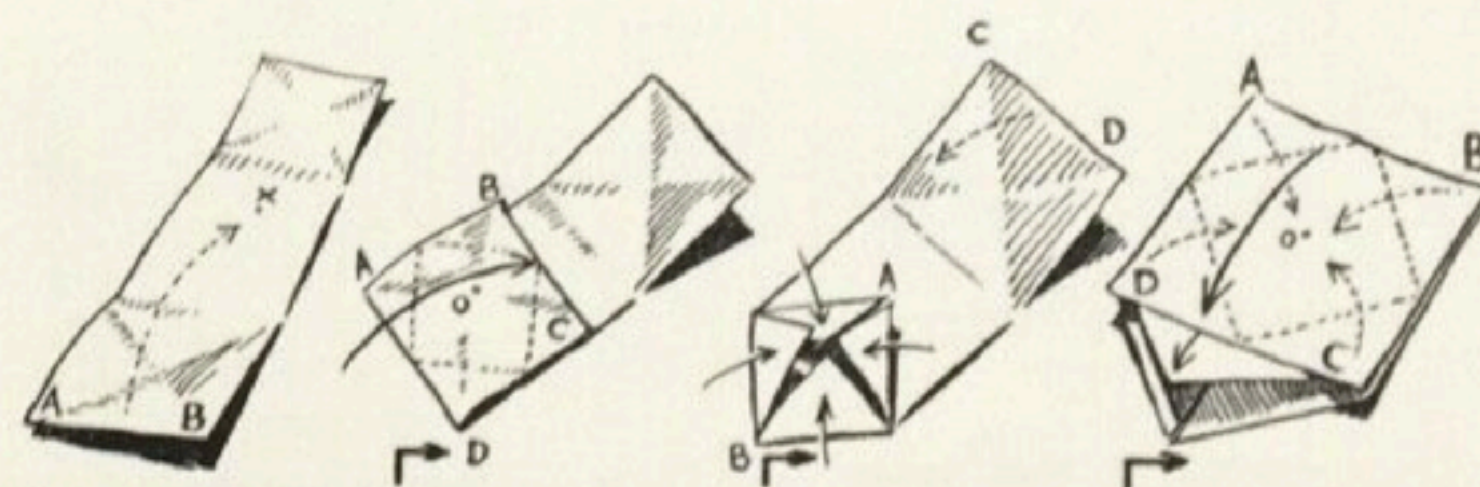
For the *Banger* you need a rectangle of thin paper, foolscap size, about twelve and three quarter inches by eight.



1. Crease your paper lengthwise across the middle, fold corners A B C and D at dotted lines to points X and Y.
2. Fold A over to B.
3. Fold A to B, crease and unfold. Fold A and B at dotted lines to X.
4. Now turn over.



5. Fold A to B and press down.
6. Grasp corners X and Y.
7. Flick hand downwards sharply, and there will be a loud bang.
8. Push back flap to reset *The Banger*.

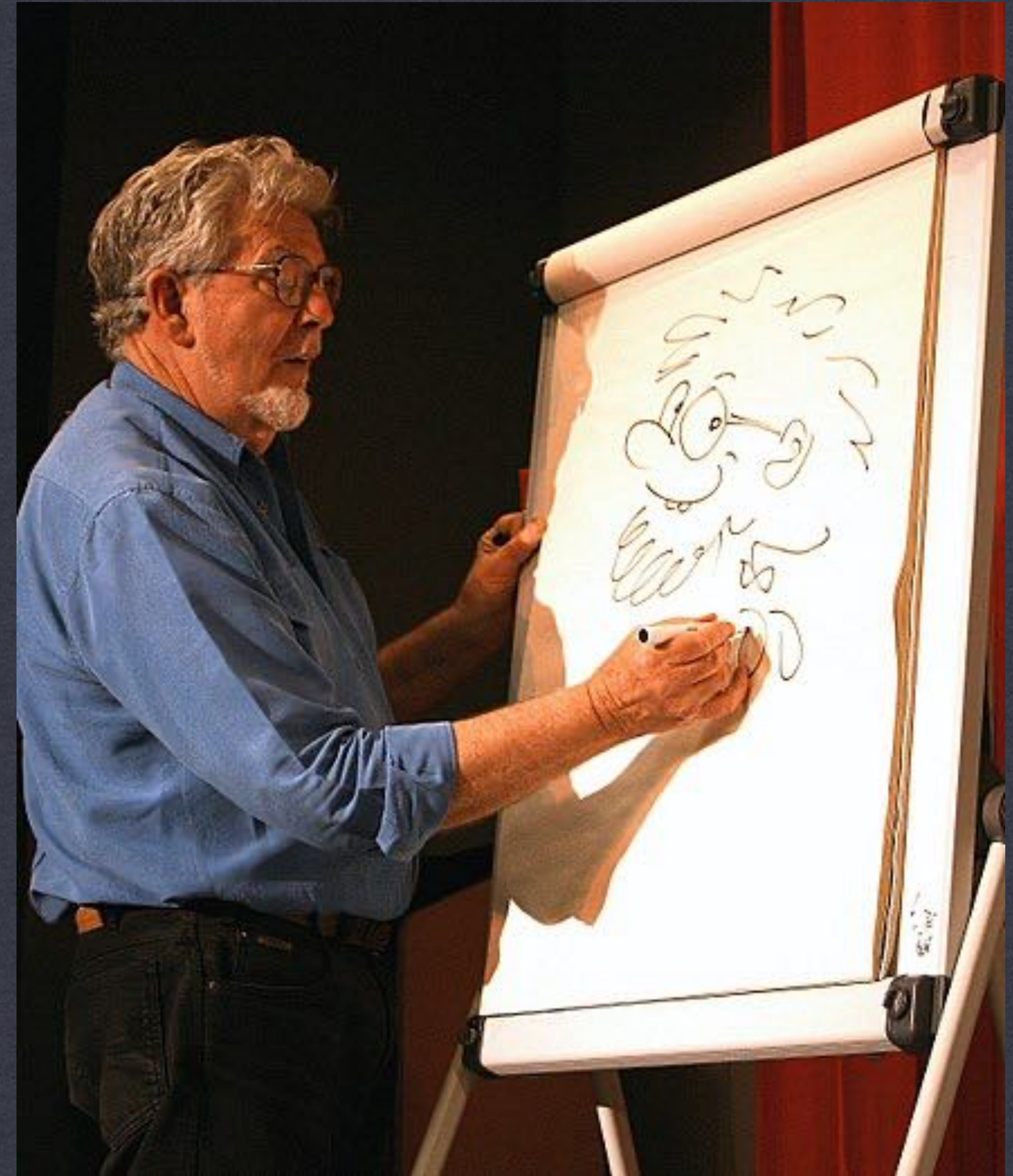


- ### ANOTHER BOAT
1. Fold at both ends to form the creases shown. Fold AB to X.
  2. Fold corners A B C and D to centre O at dotted lines.
  3. Fold point A to B and press down, and fold CD forward.
  4. Fold corners A B C and D to centre O at dotted lines. (See next page)



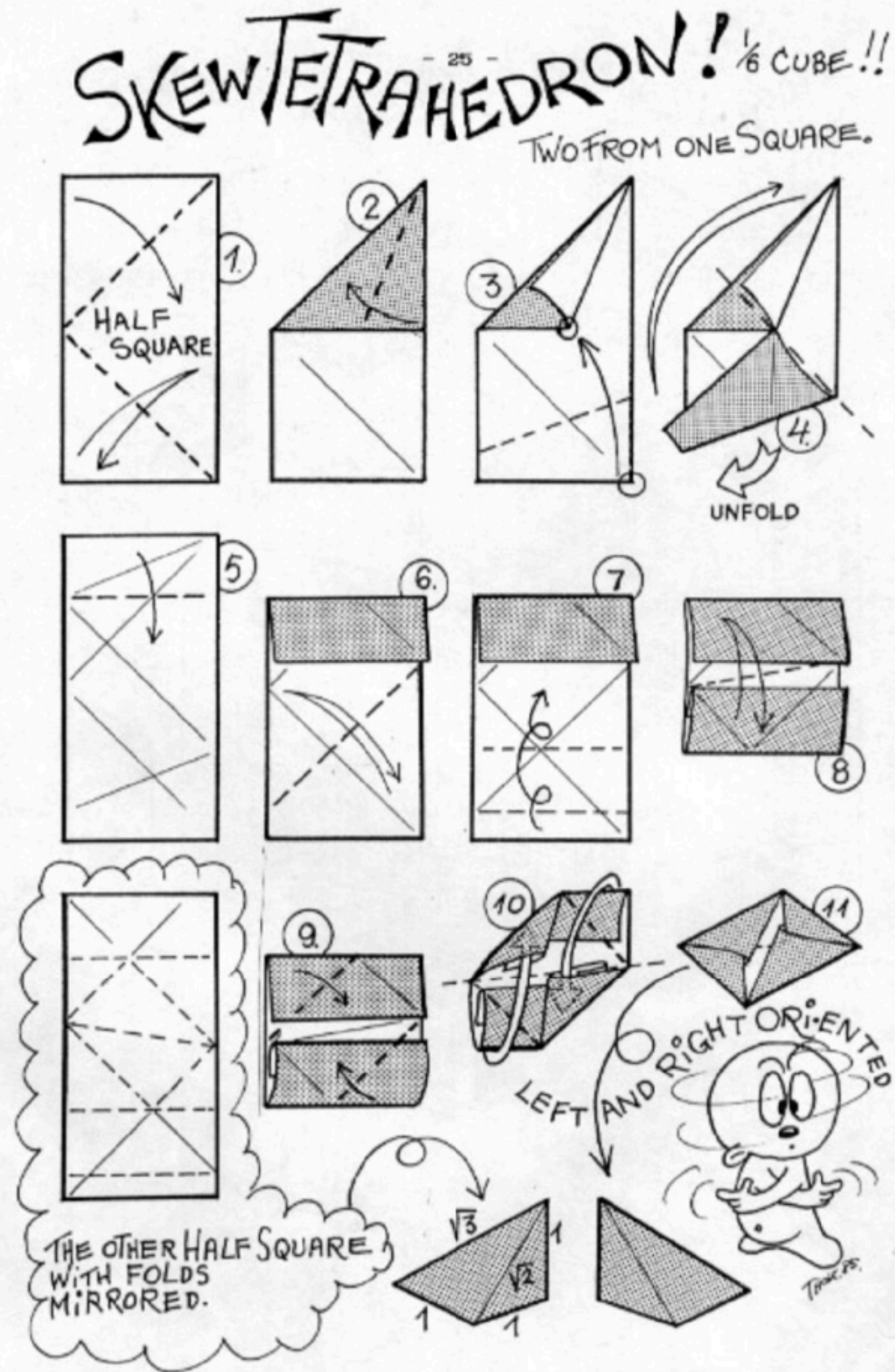
# ROLF HARRIS

UK





5





# THOKI YENN

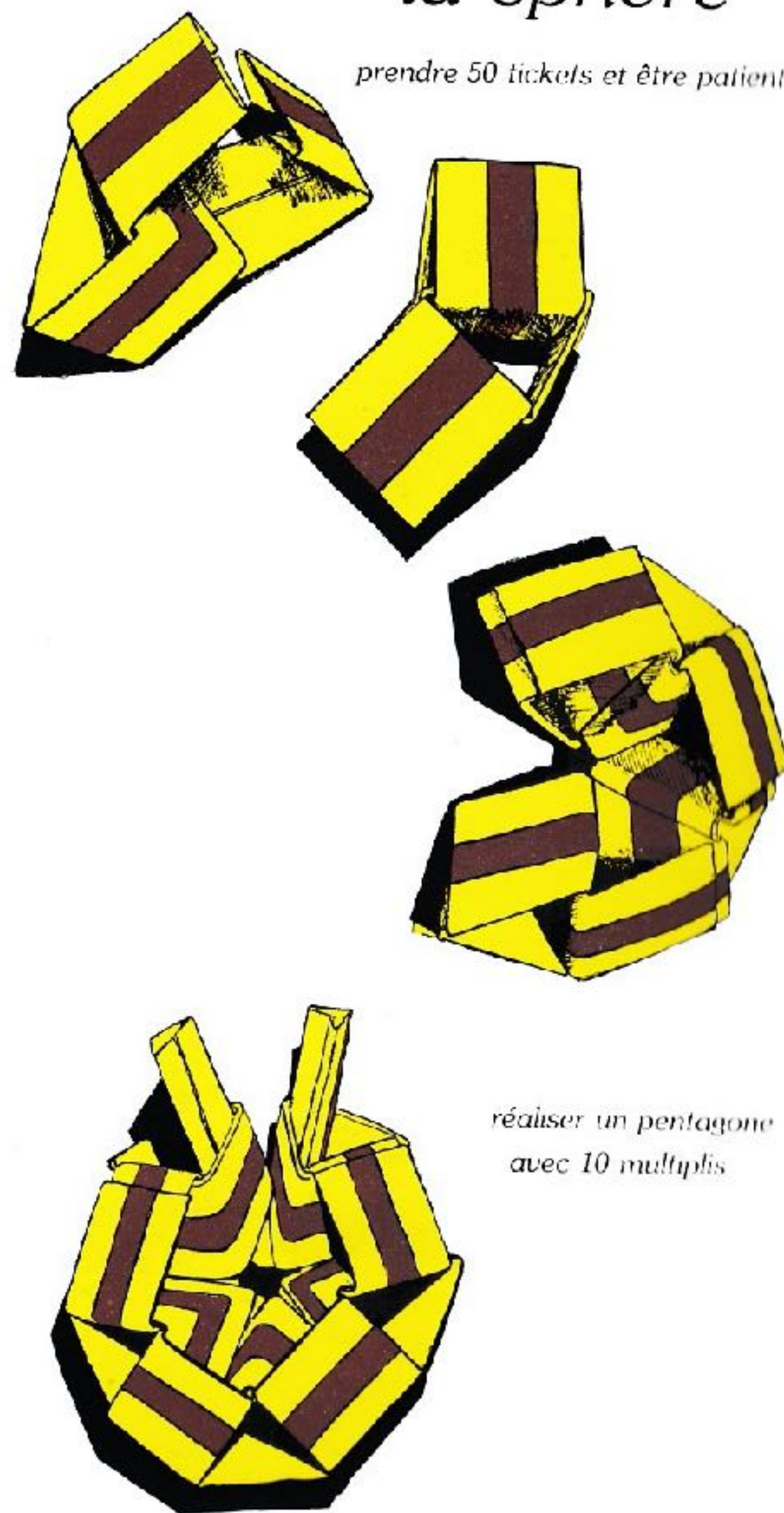
DENMARK





# la sphère

prendre 50 tickets et être patient



réaliser un pentagone  
avec 10 multiplis

le ticket plus 0,2

monter la sphère petit à petit  
par séries de 5 multiplis



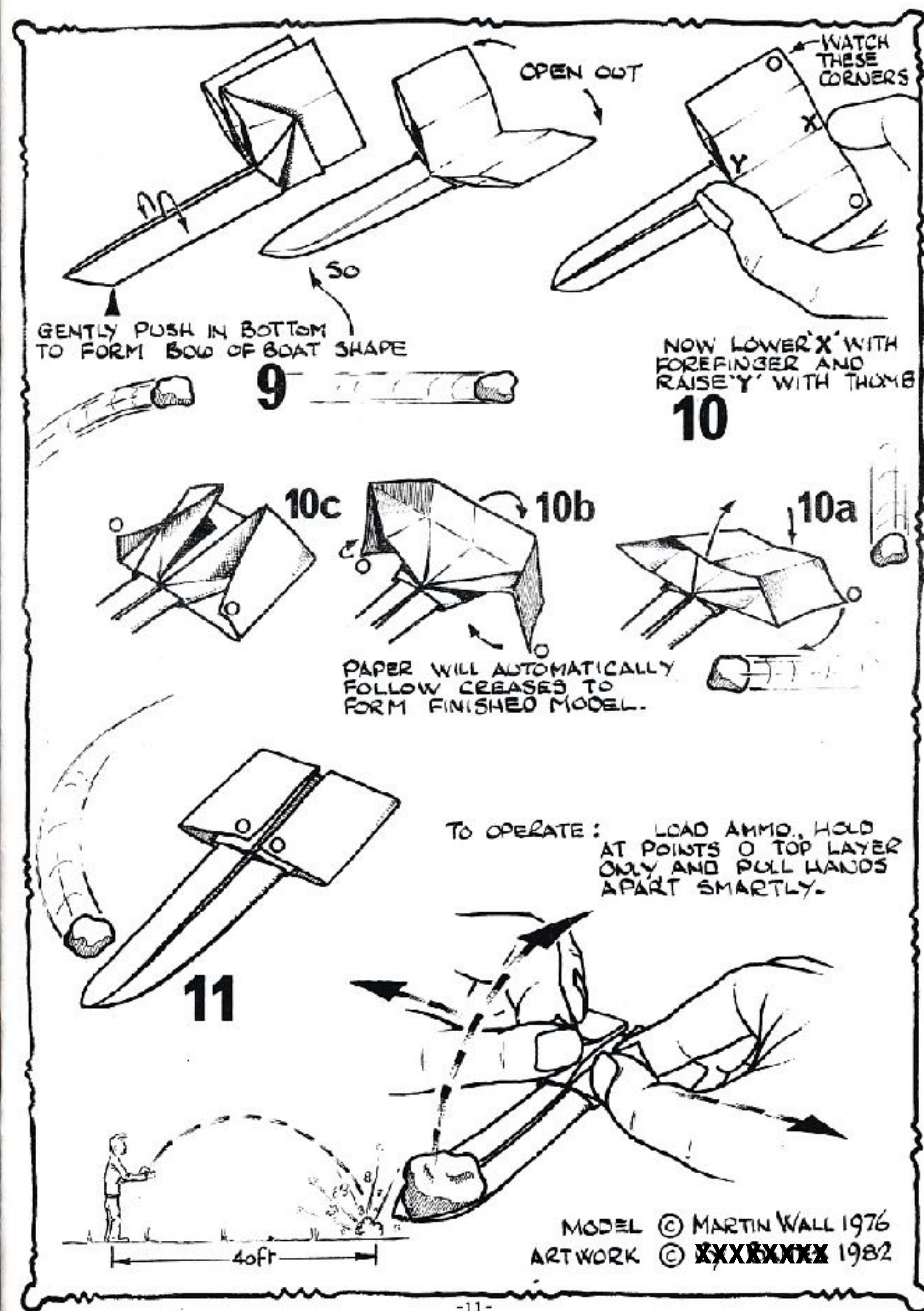
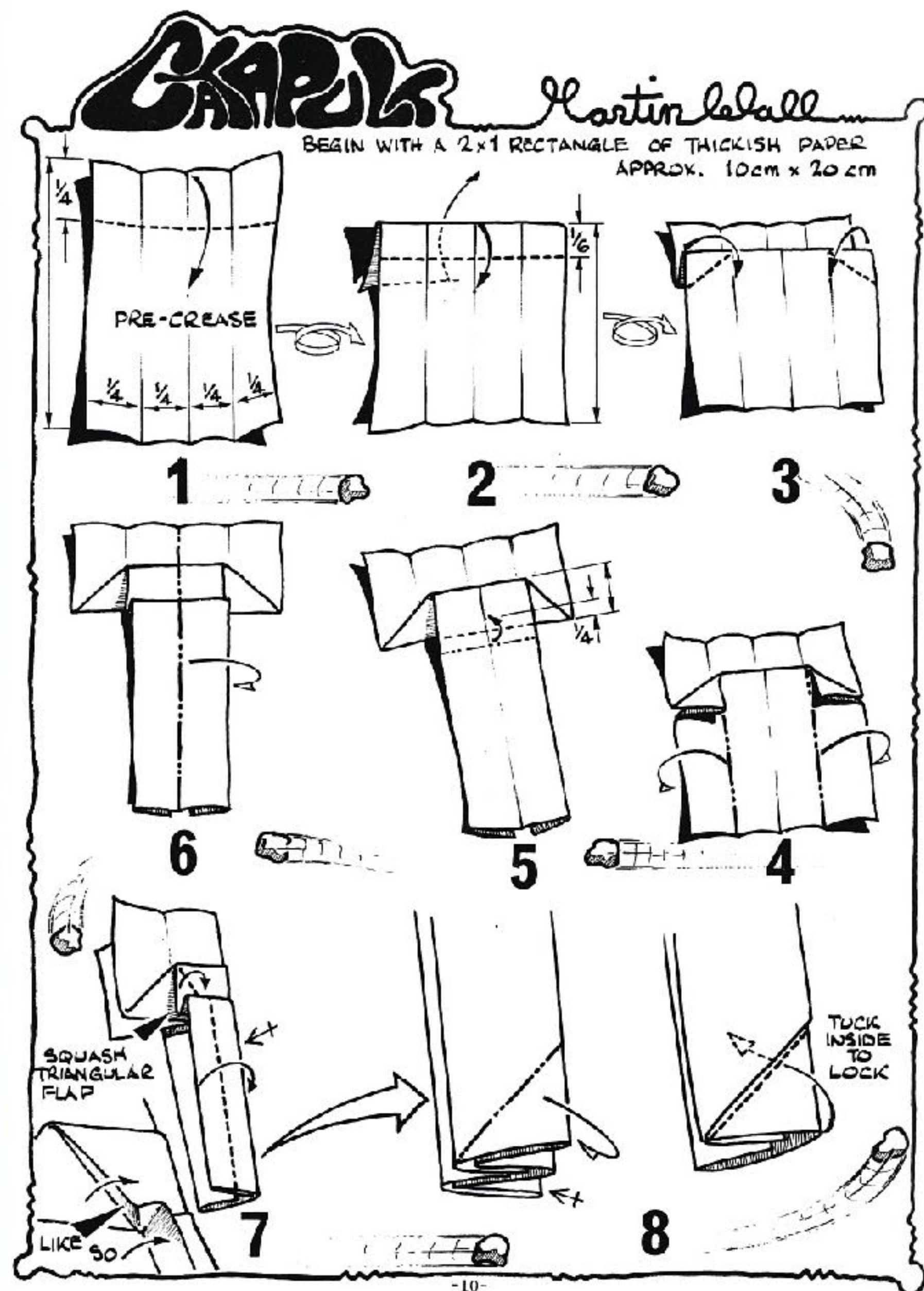


# JEAN-CLAUDE CORREIA

FRANCE









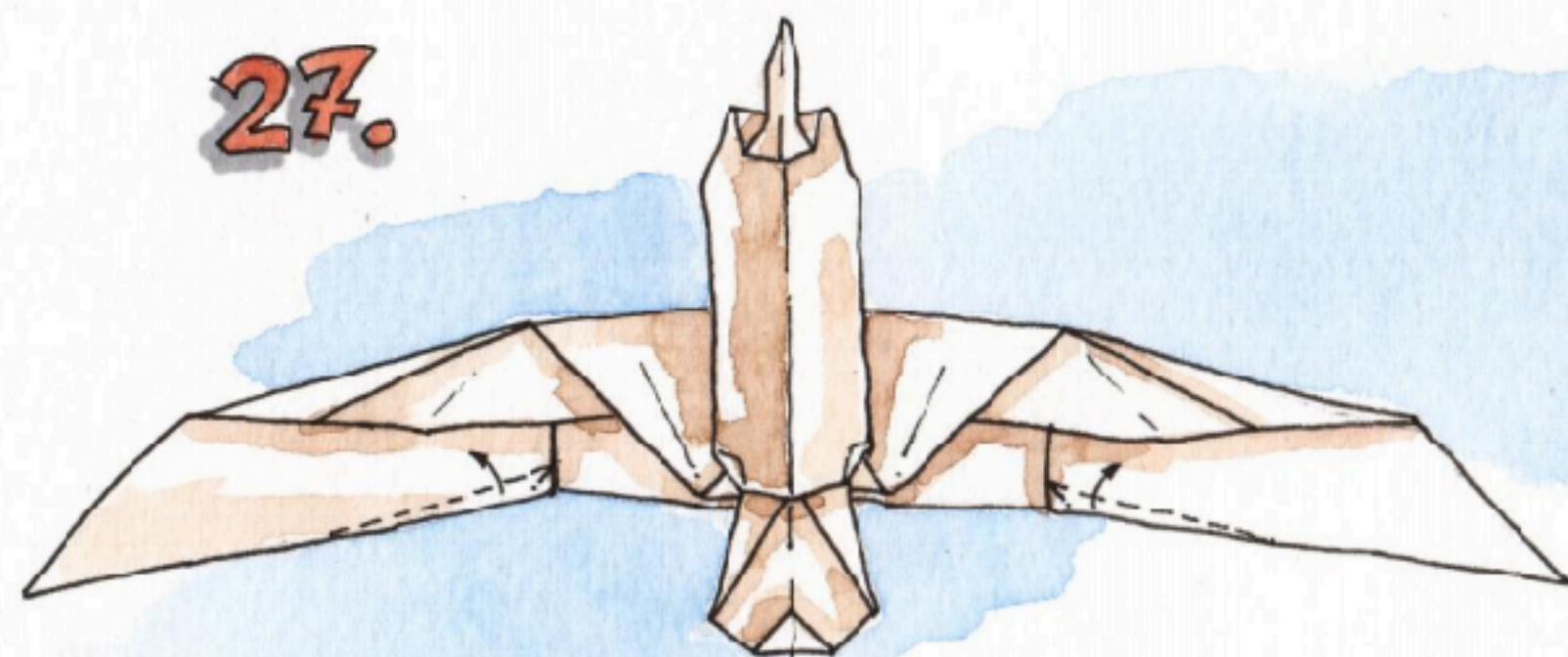
**CY BATES**

**UK**

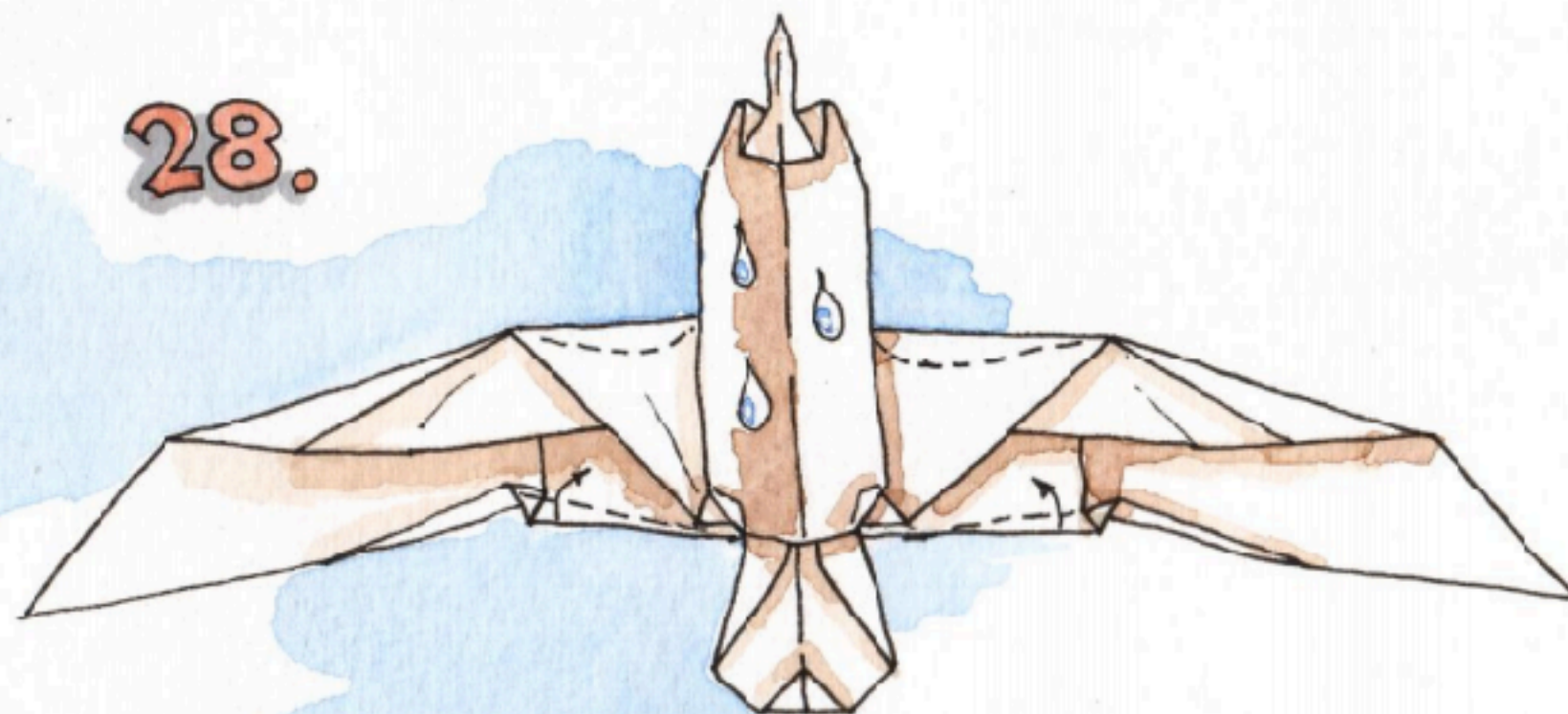




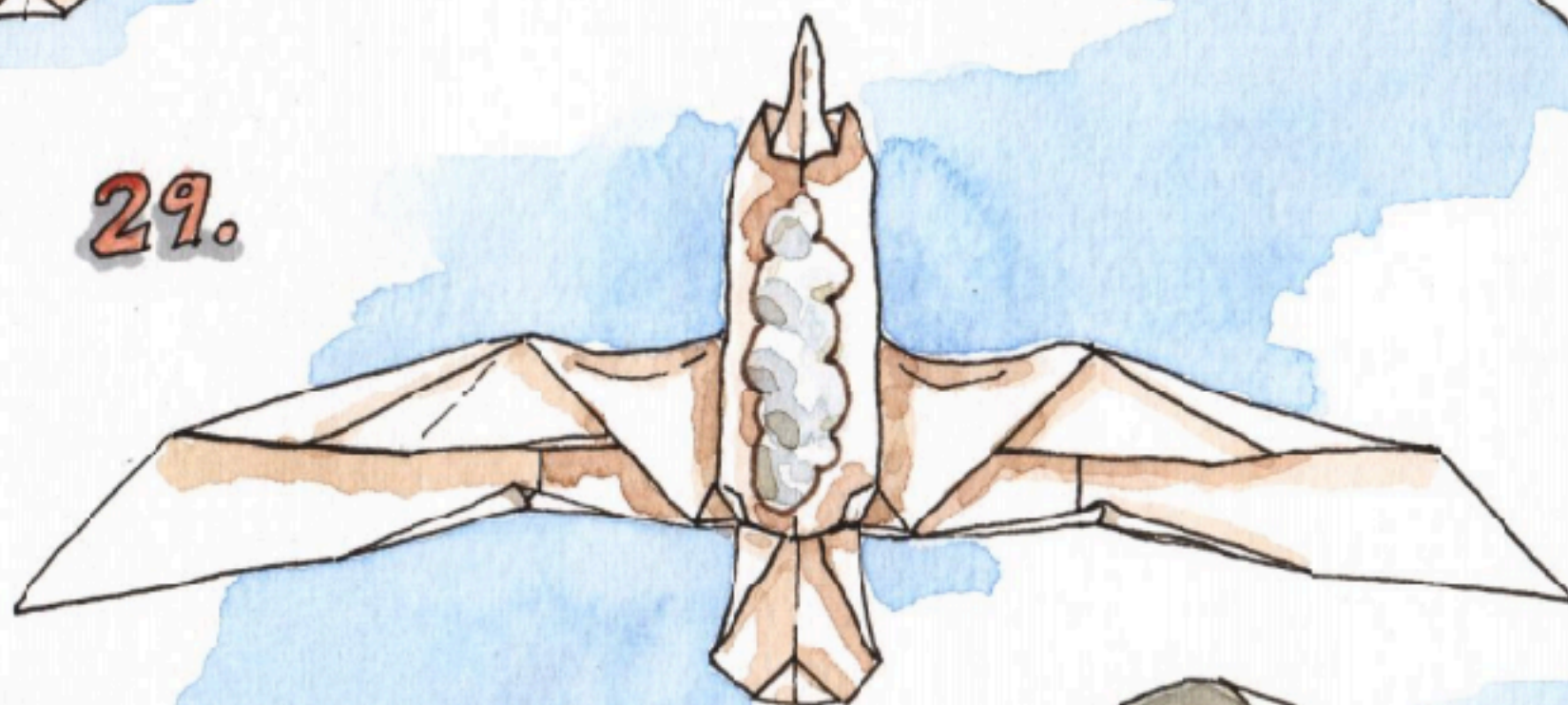
27.



28.

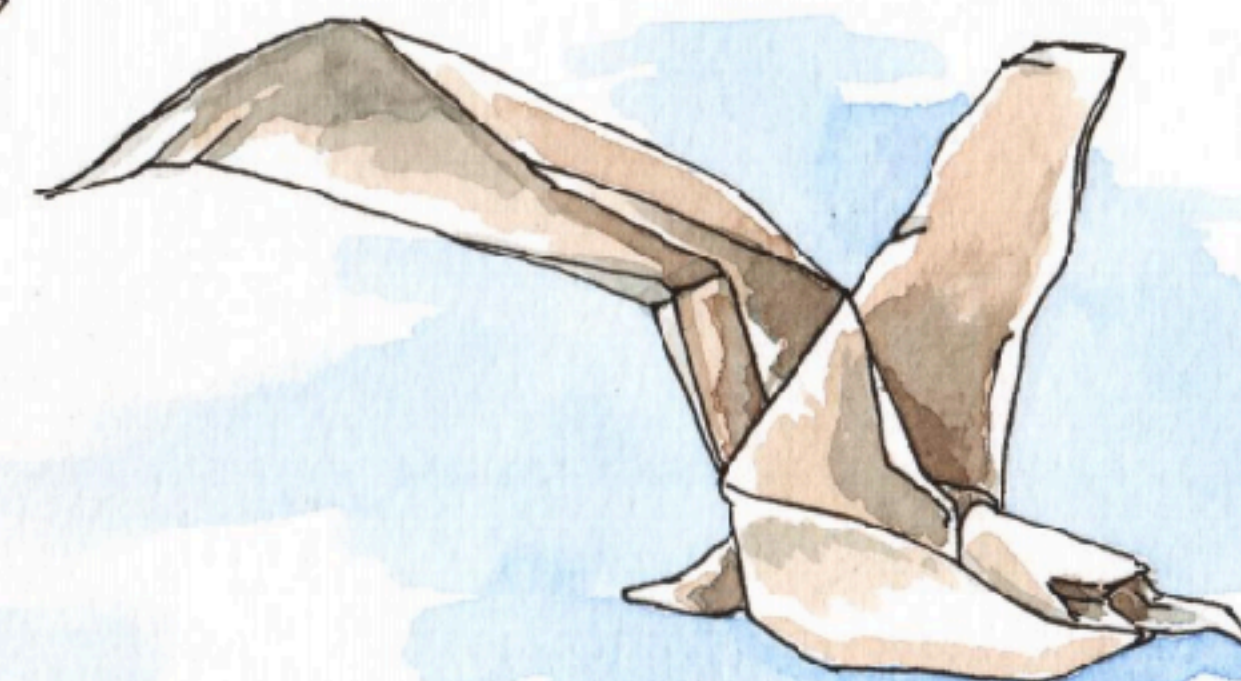
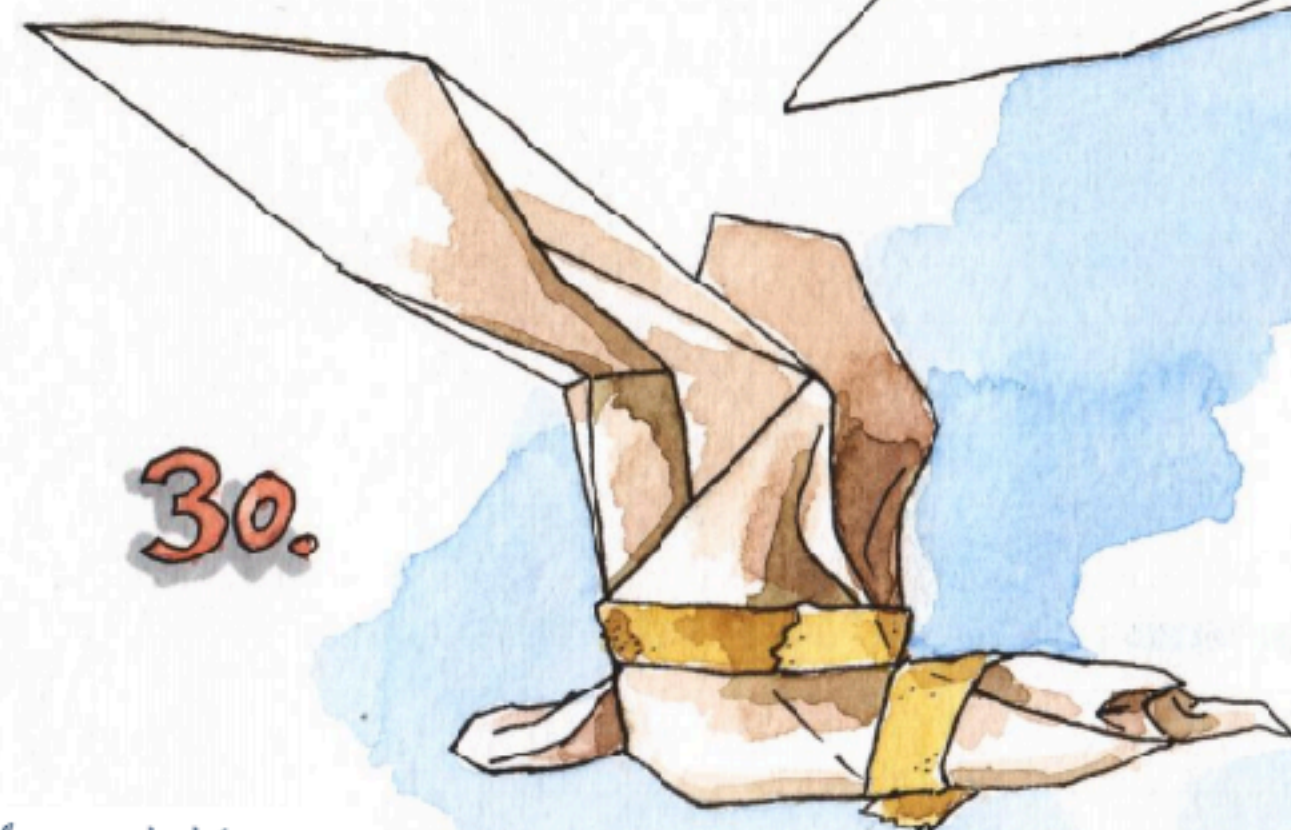


29.



Humedecer, si no lo estaba ya, y dar forma o introducir algodón para obtener el volumen del cuerpo

30.



Fijar en la posición deseada y dejar secar.



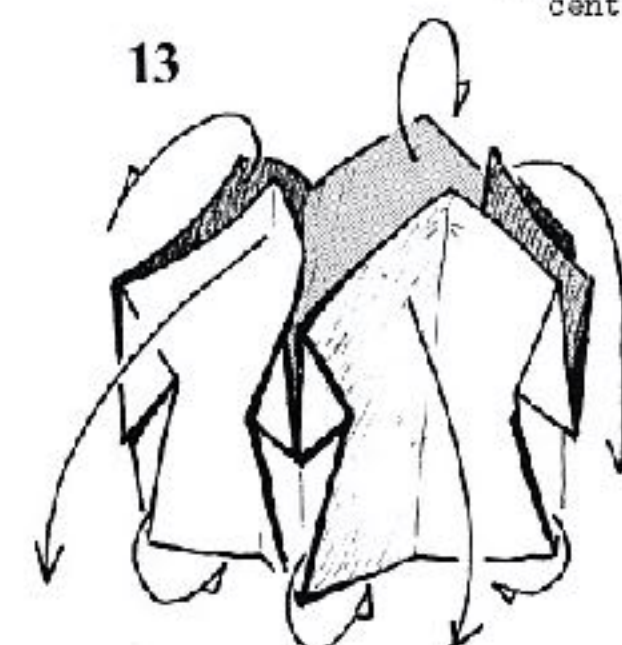
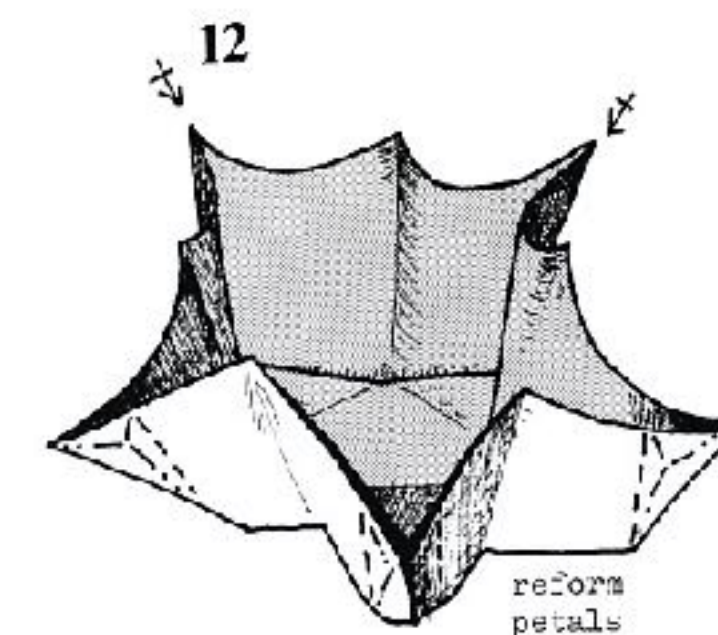
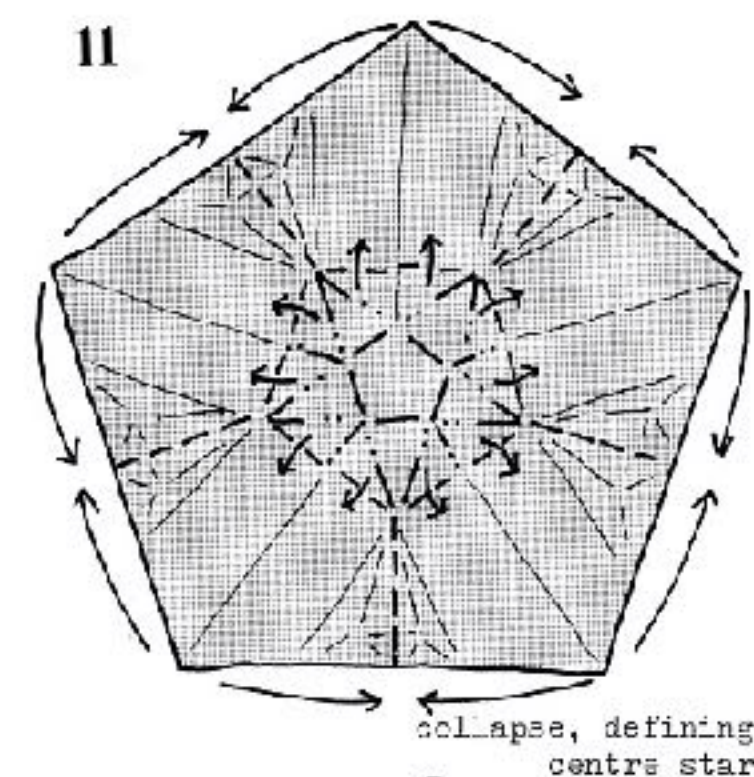
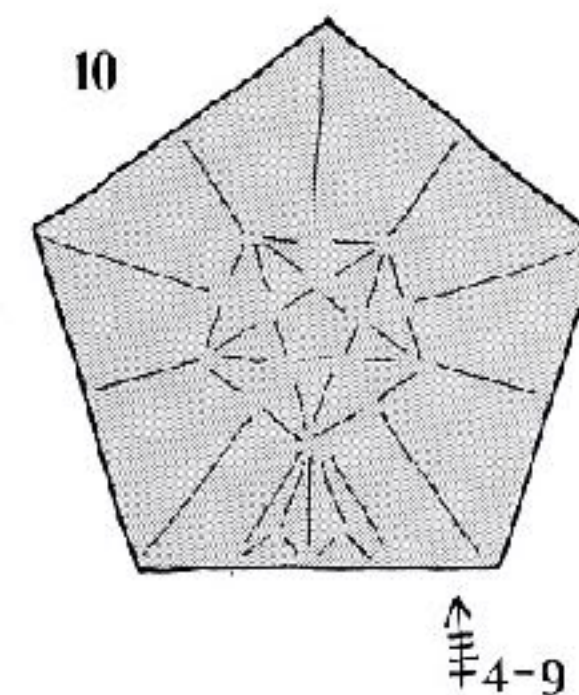
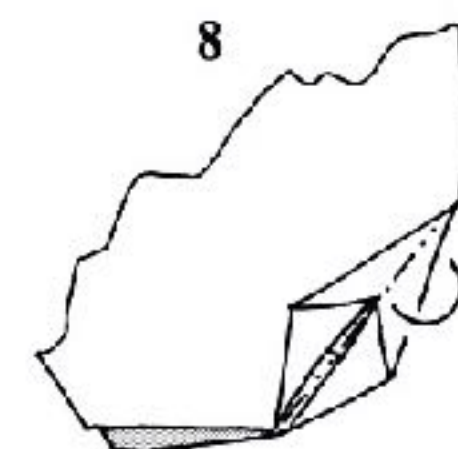
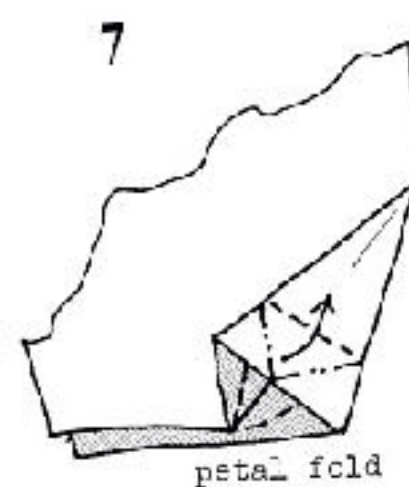
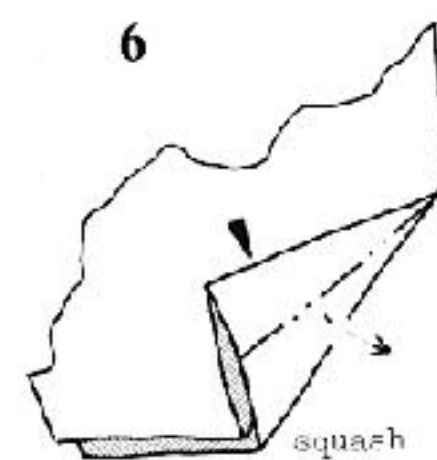
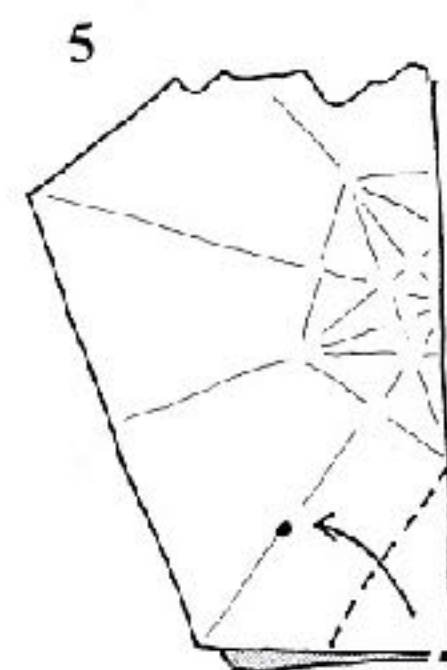
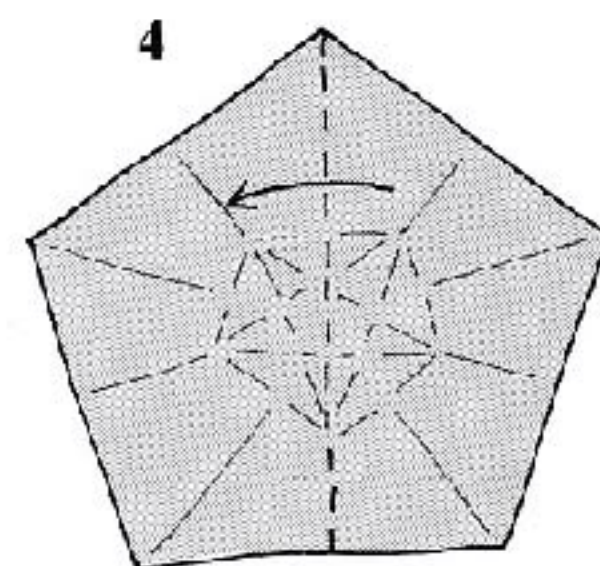
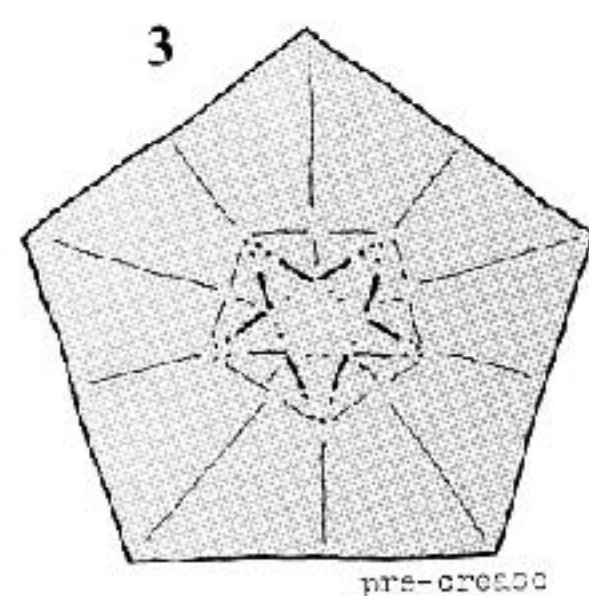
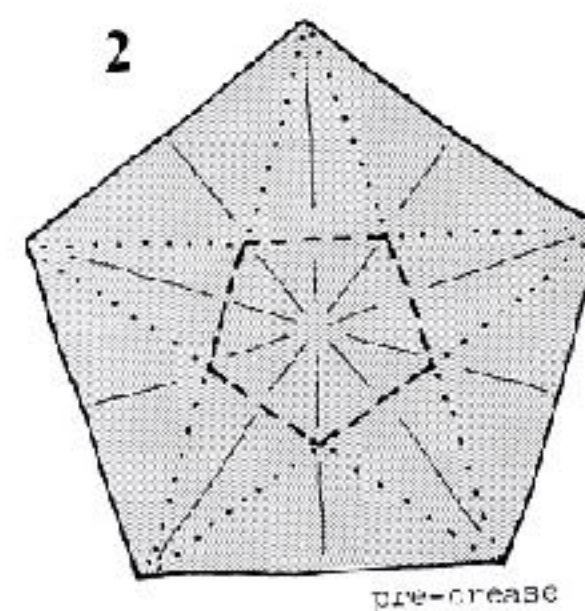
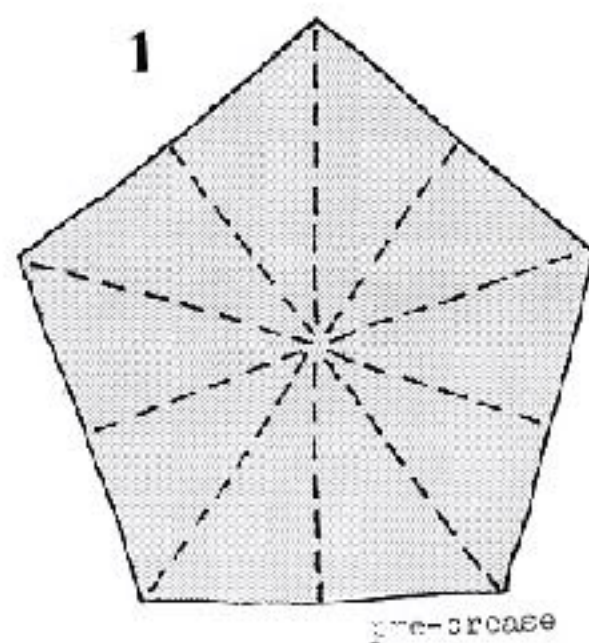
# ANGEL MOROLLON

ZARAGOZA

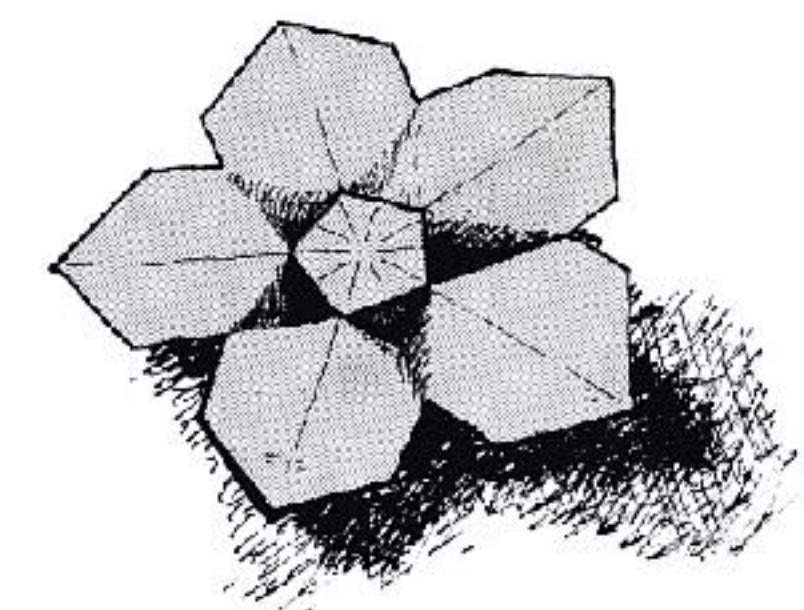




## FLOWER



14 Complete



Simultaneously flex all the flaps downwards and outwards until the 'Flower' locks in to its final shape under tension.



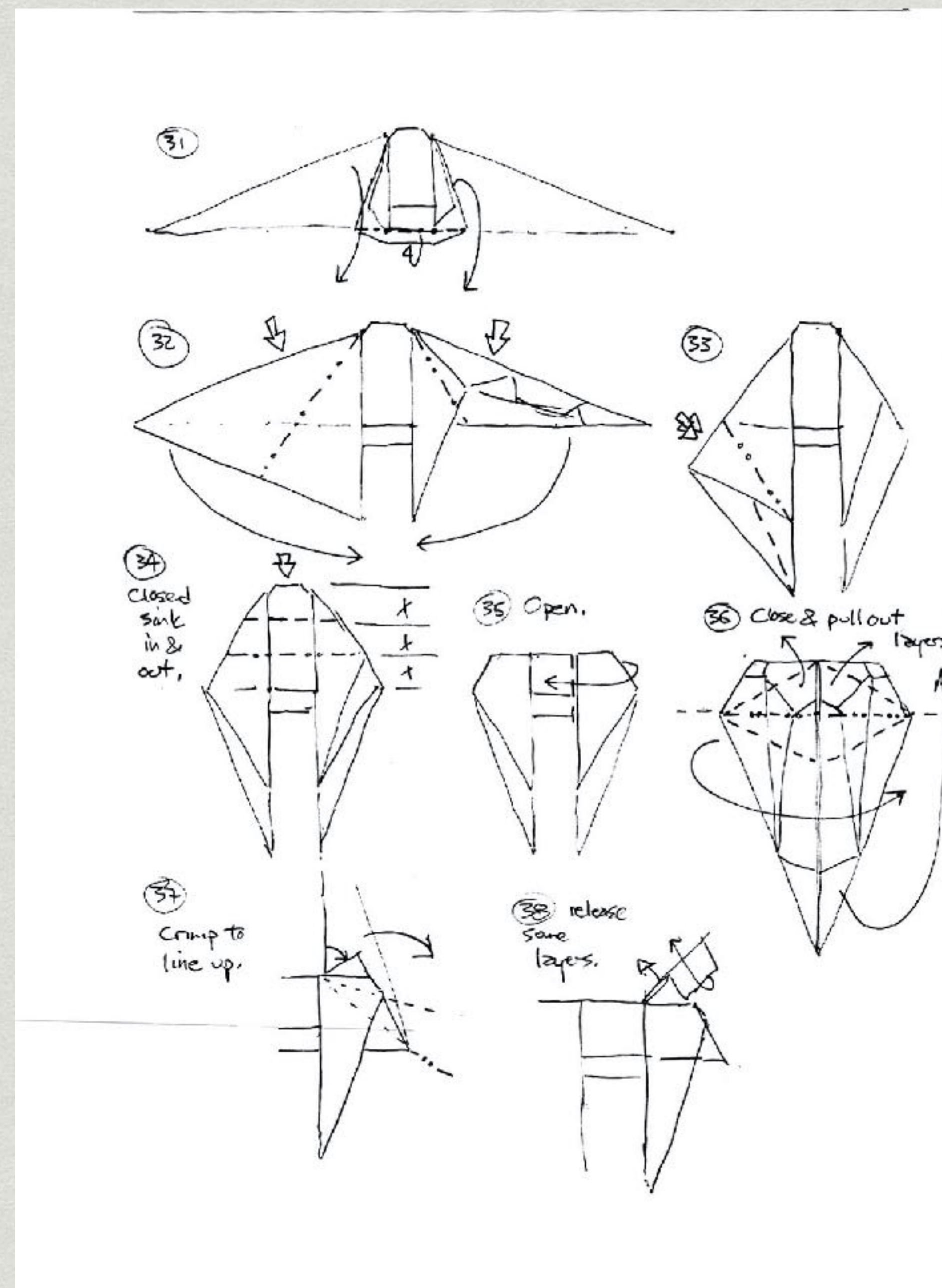
**PAUL JACKSON**

**UK/ISRAEL**





10





# ROBERT LANG

USA

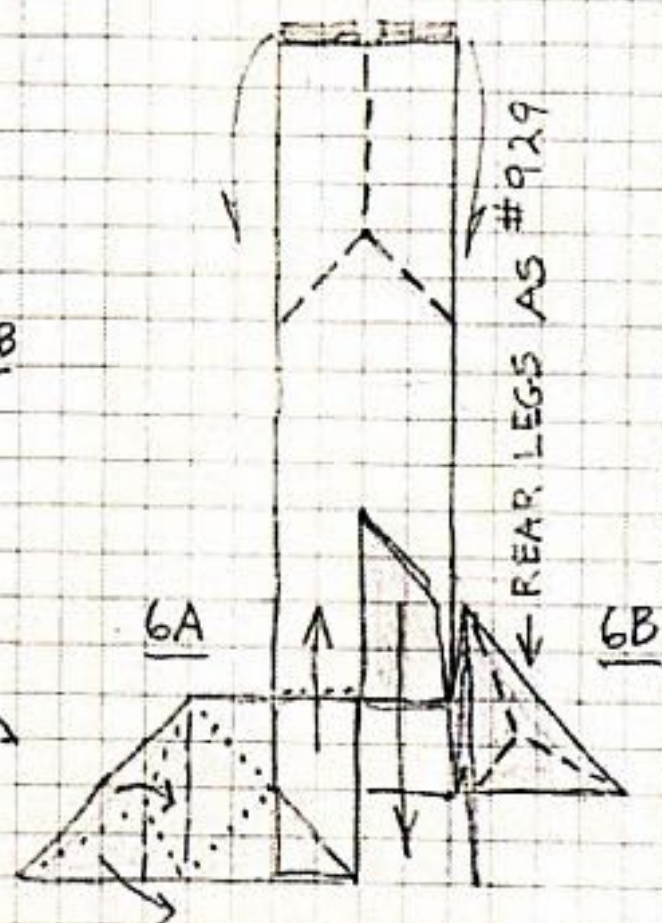
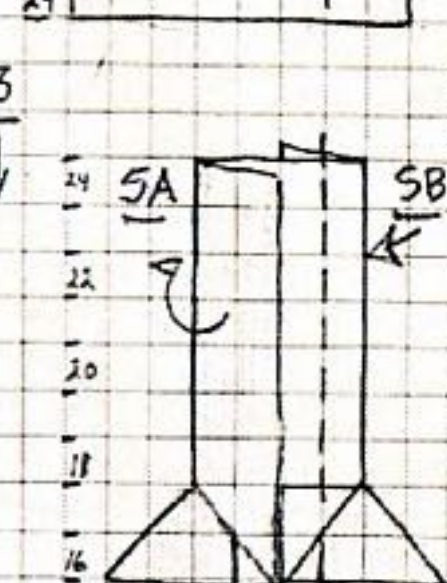
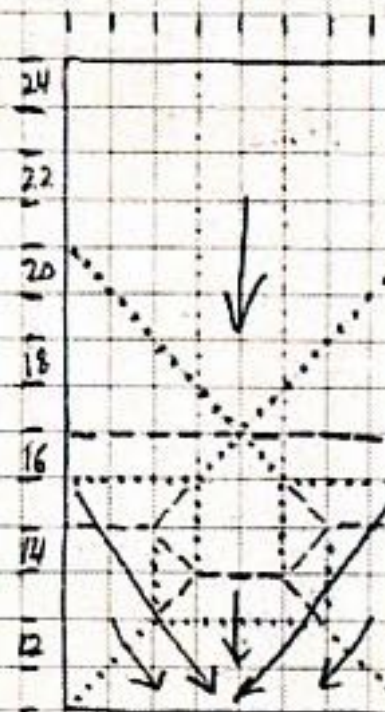
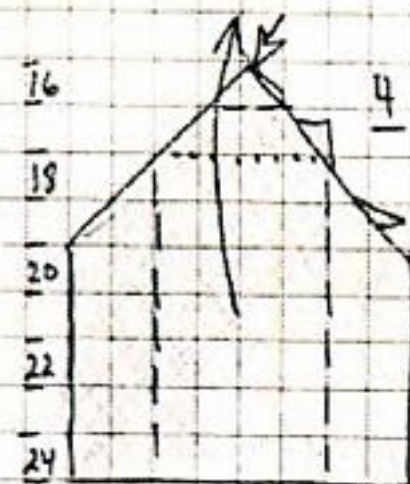
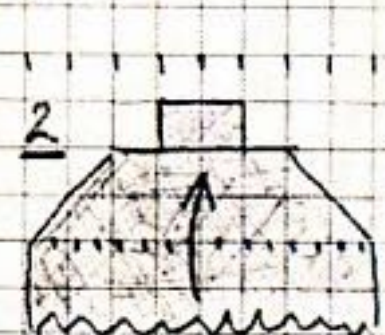
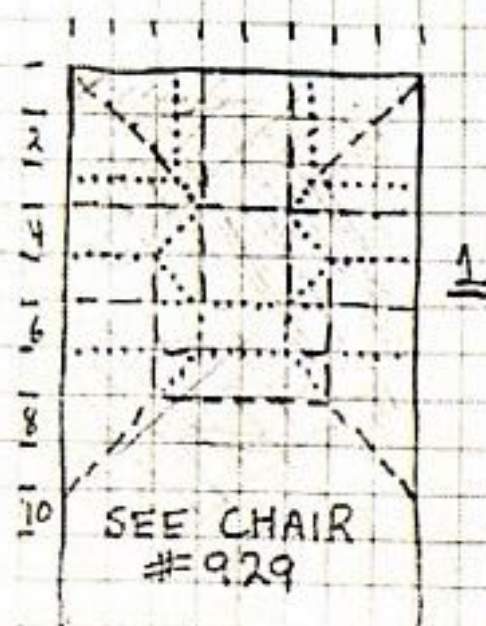




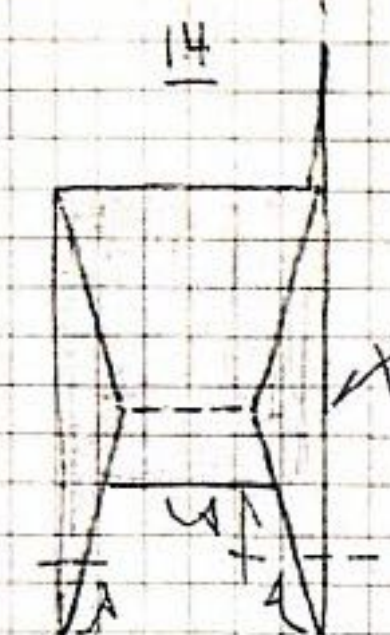
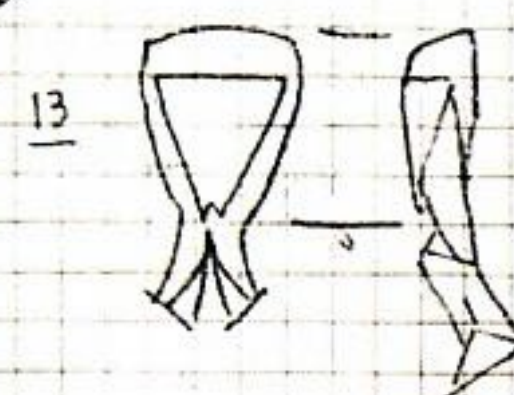
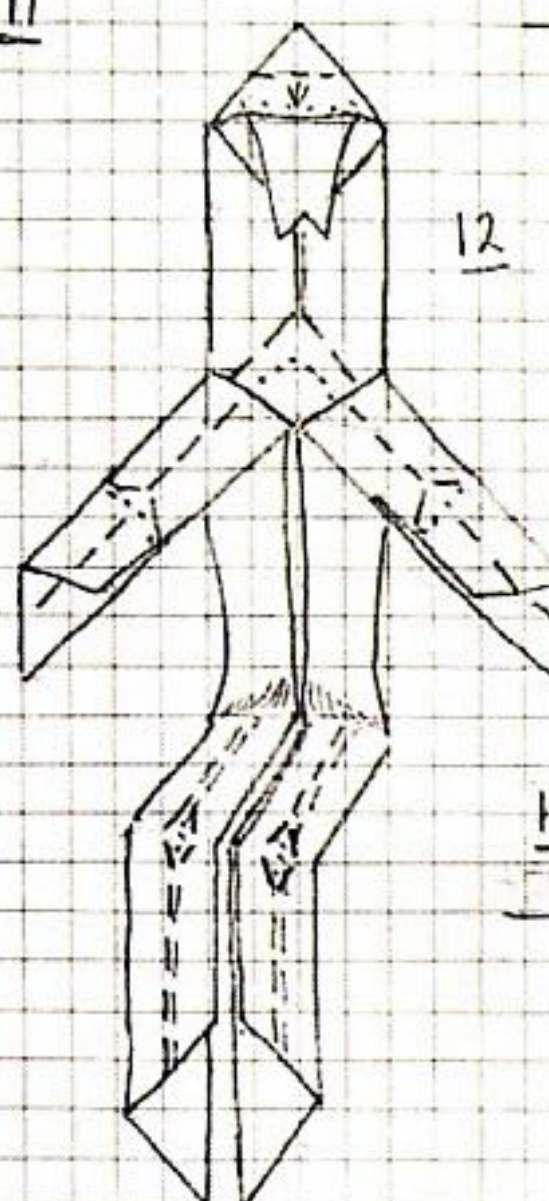
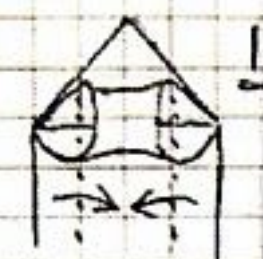
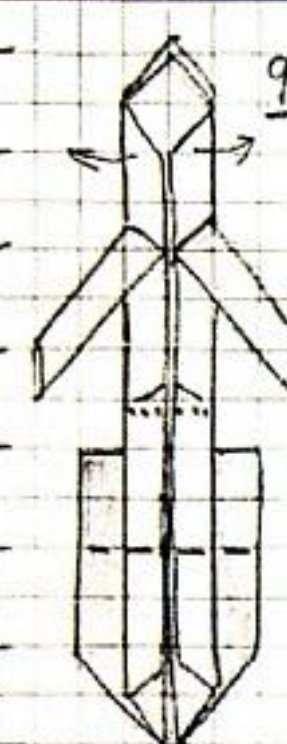
MAN ON ARMCHAIR N.E. 8/68

SEE 1076

2 COLOR 8 X 24 FOIL



SR-



HOLLOW MAN'S BACK  
INFLATE BACK AND ARMS  
OF CHAIR FROM UNDERNEATH  
WITH A PENCIL.

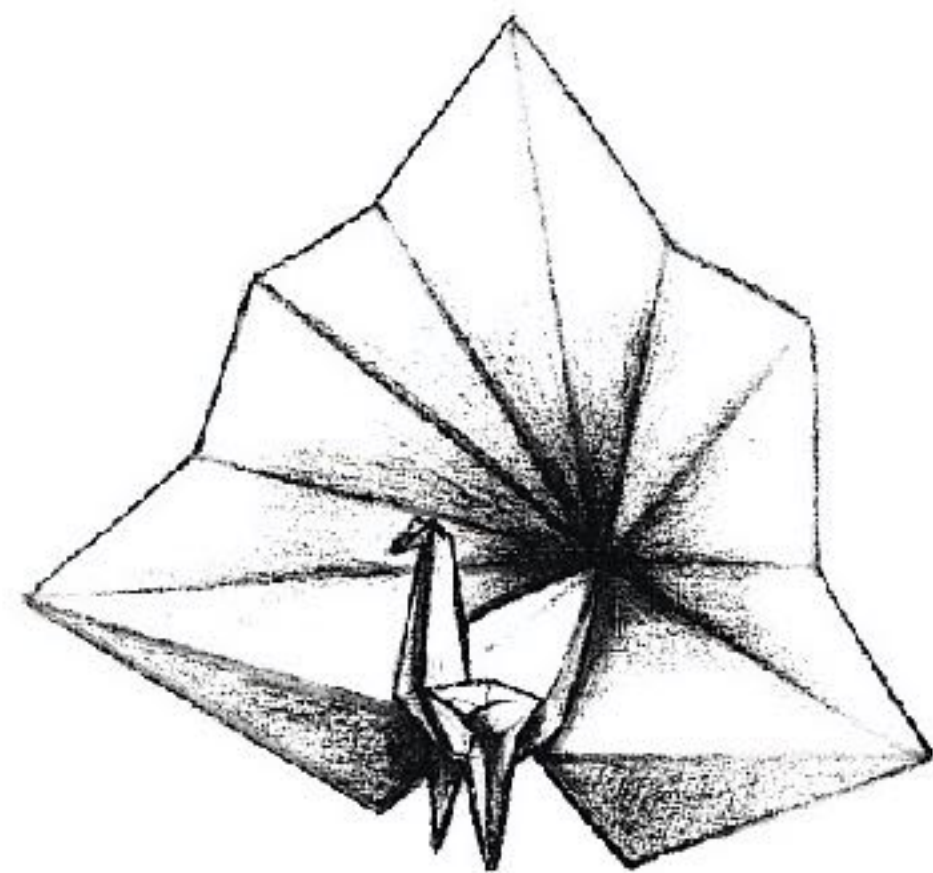


**NEAL ELIAS**

**USA**







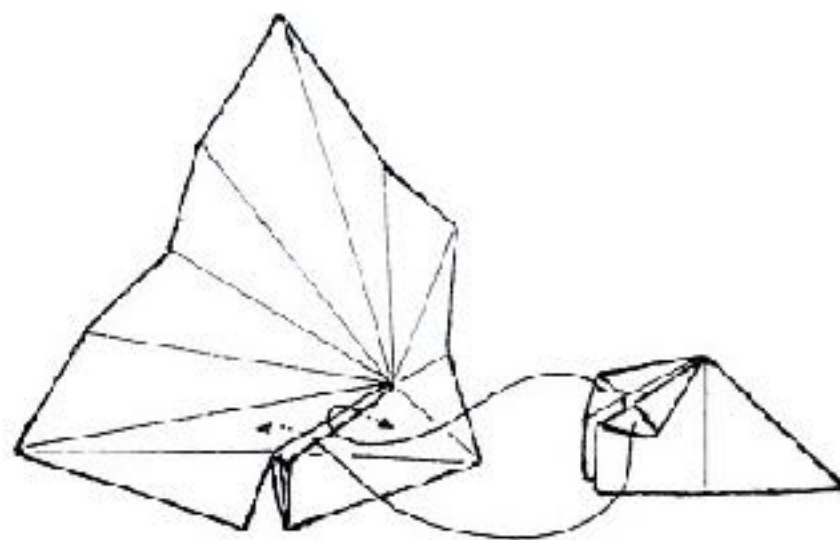
わずかの〈切り〉が、作品をしっかりと立たせるとともに、造形も大らかとなって、切り技法の良さを示してくれます。

かくの如き実際を見るにつけ、不切信奉はつまらない幻想だと思います。……あっ、そりやちよっと言いすぎかな？

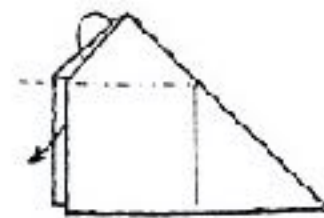
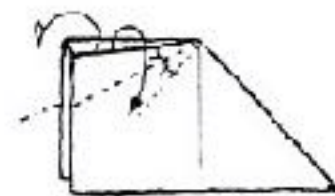
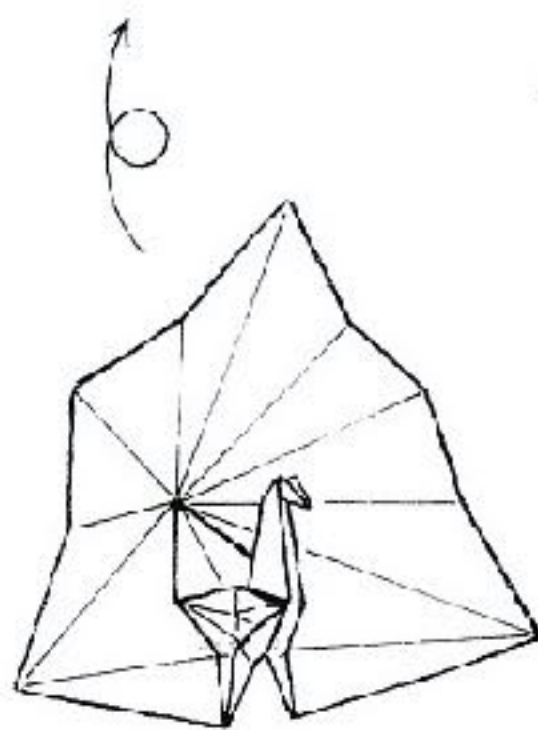
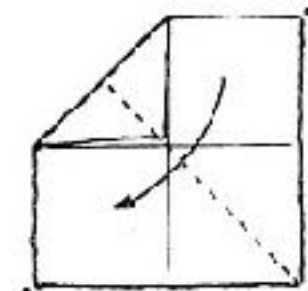
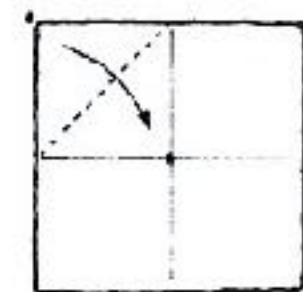
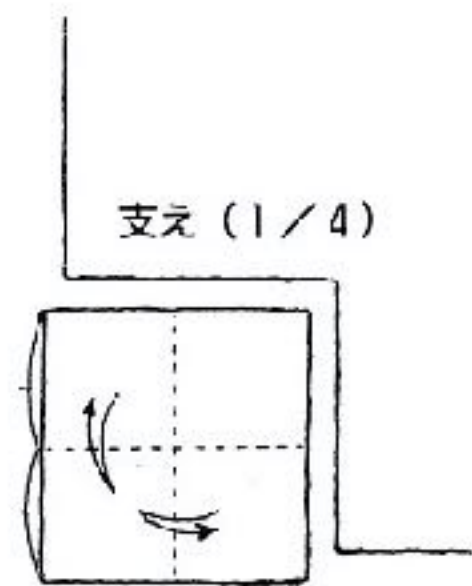


①

〇形ができれば、  
うまは仕上げるだけ。



支え (1/4)





# KUNIHICO KASAHARA

JAPAN





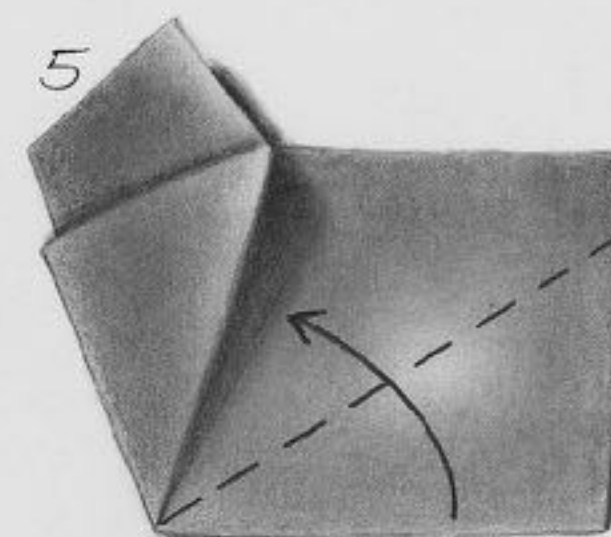
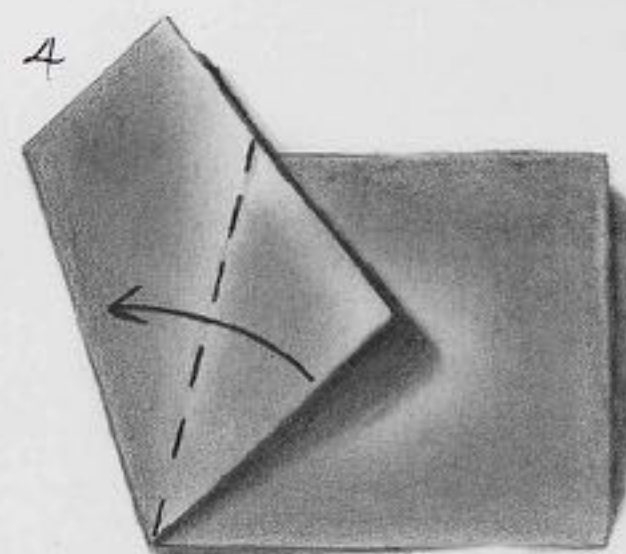
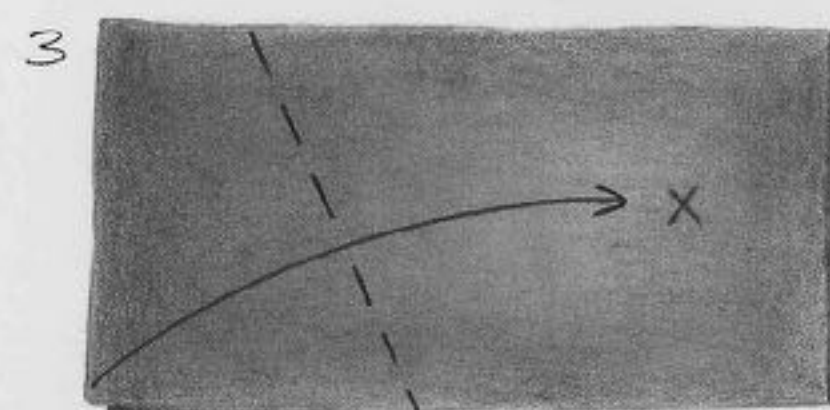
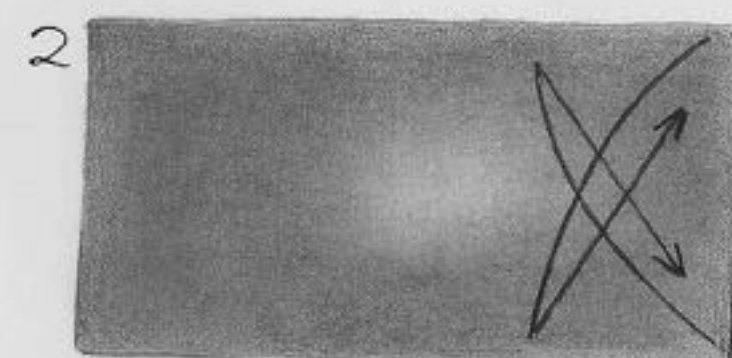
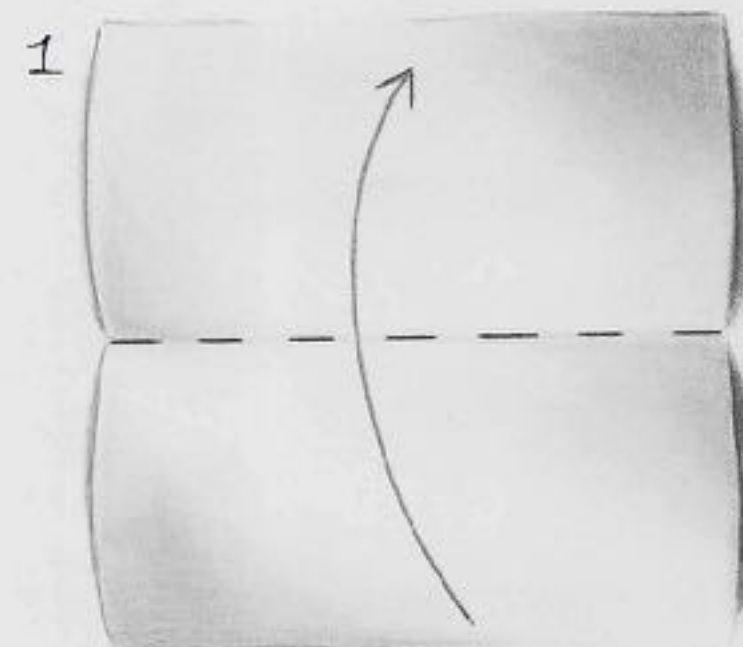
12

# LILAC

A variation on the traditional lily



by  
xxxxxxxxxx





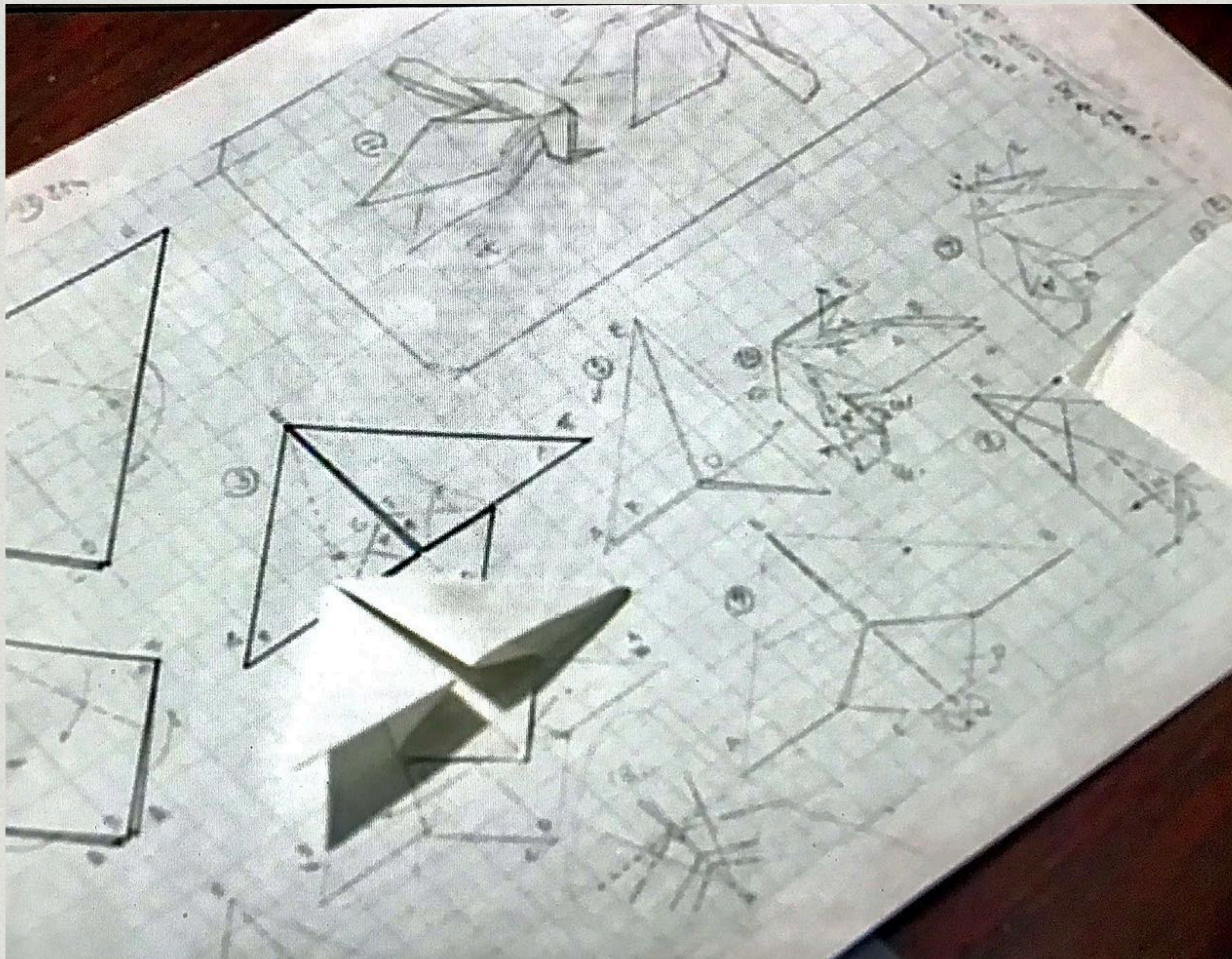
**YARA YAGI**

**BRAZIL**





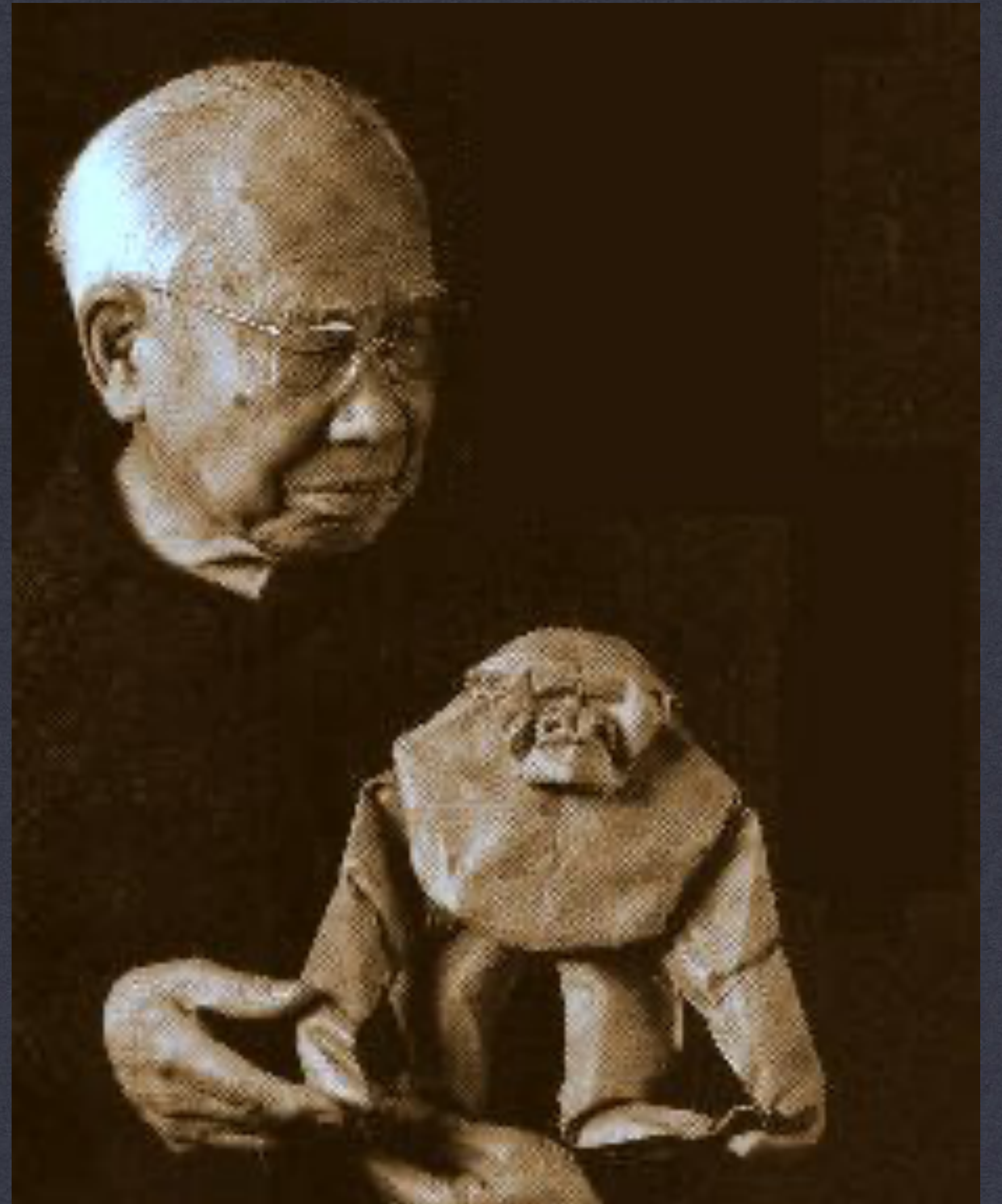
13



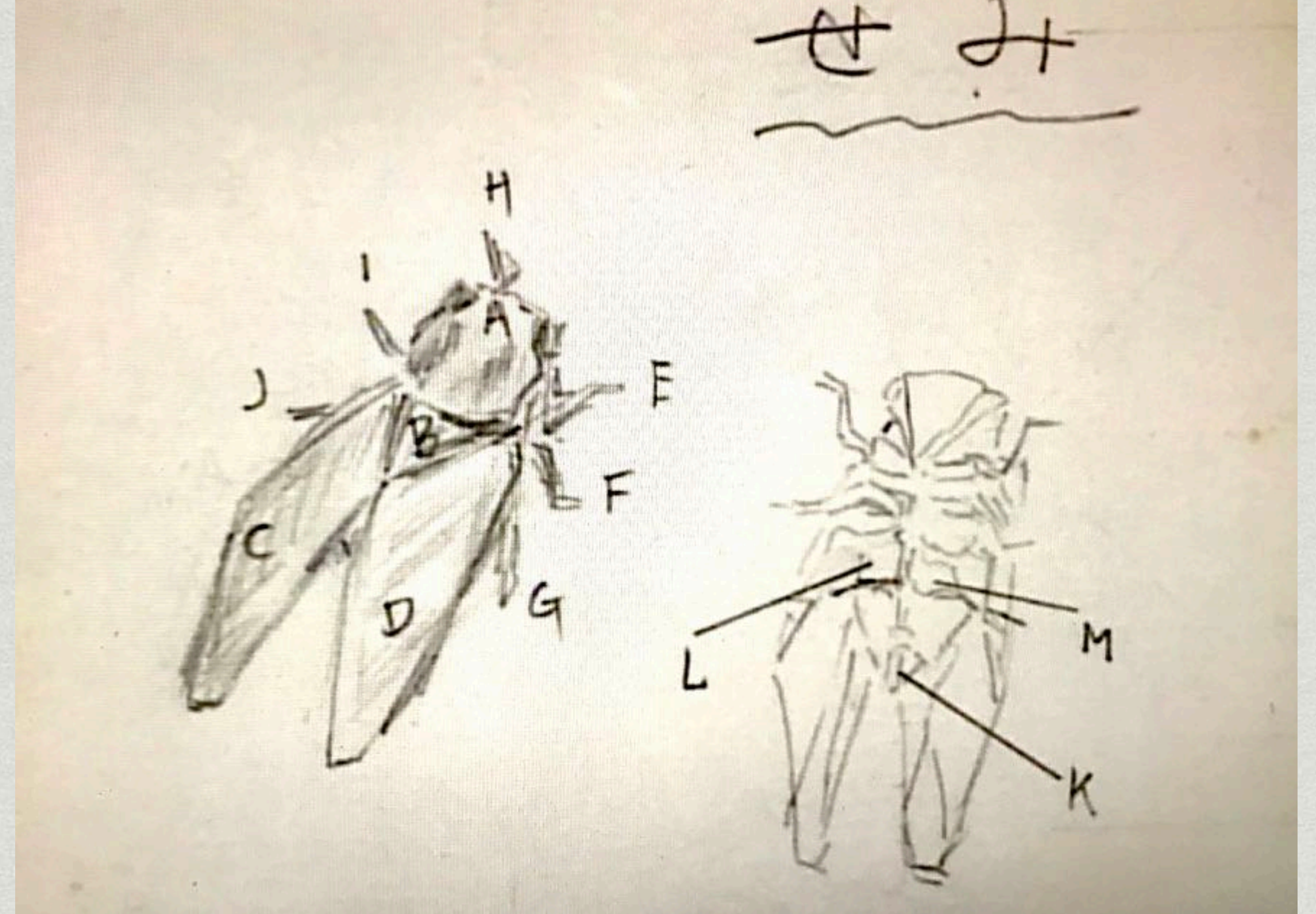
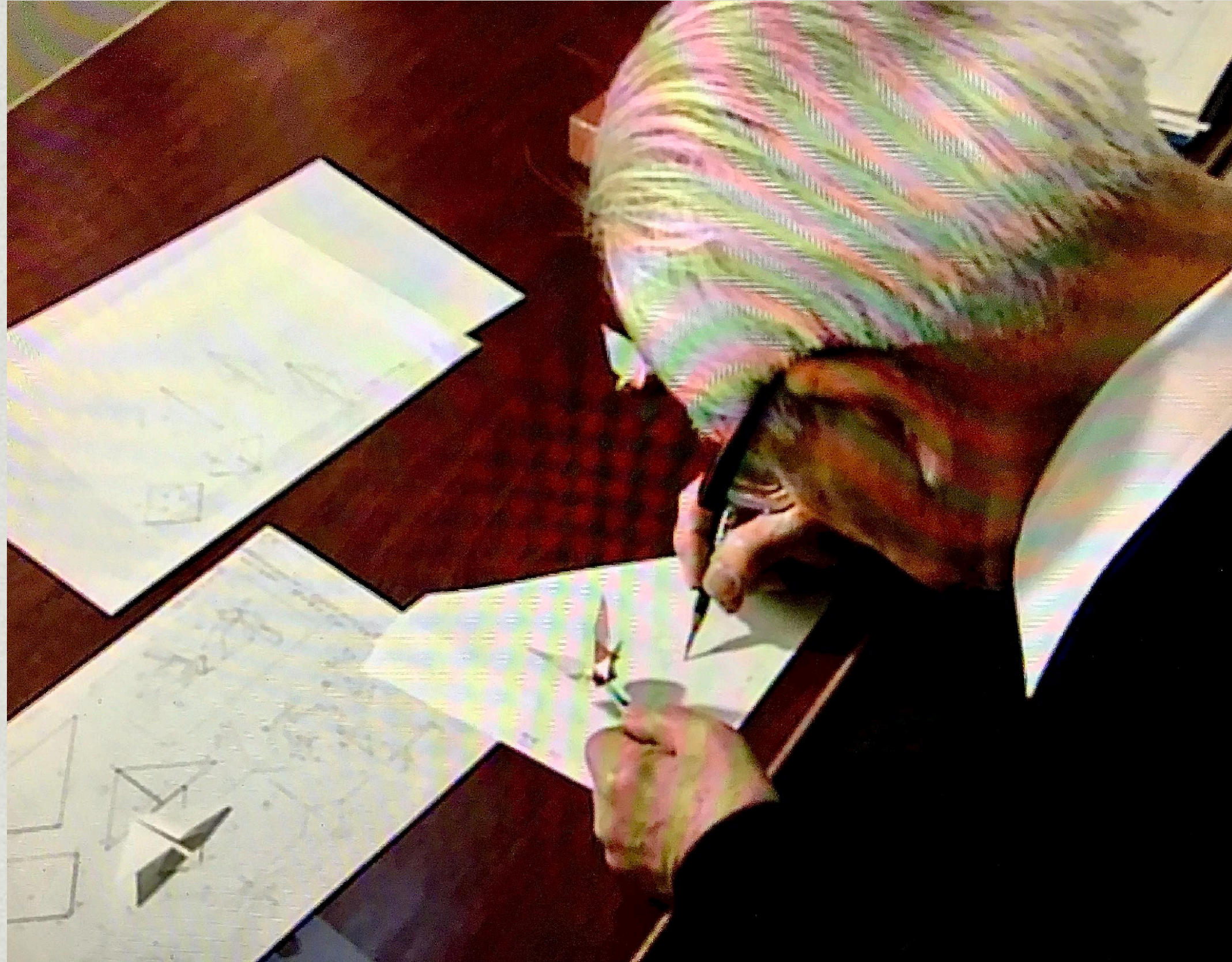


# AKIRA YOSHIZAWA

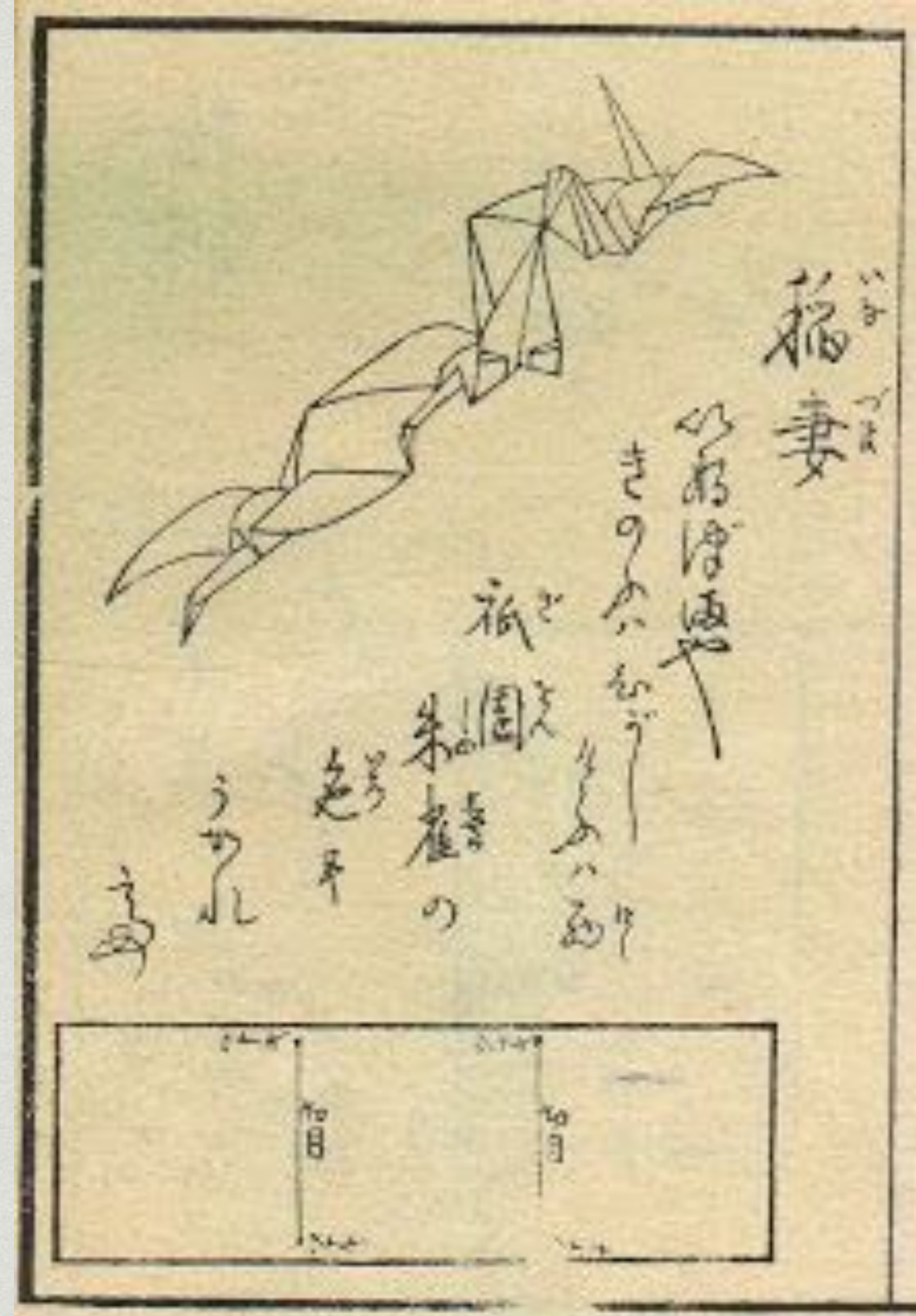
JAPAN











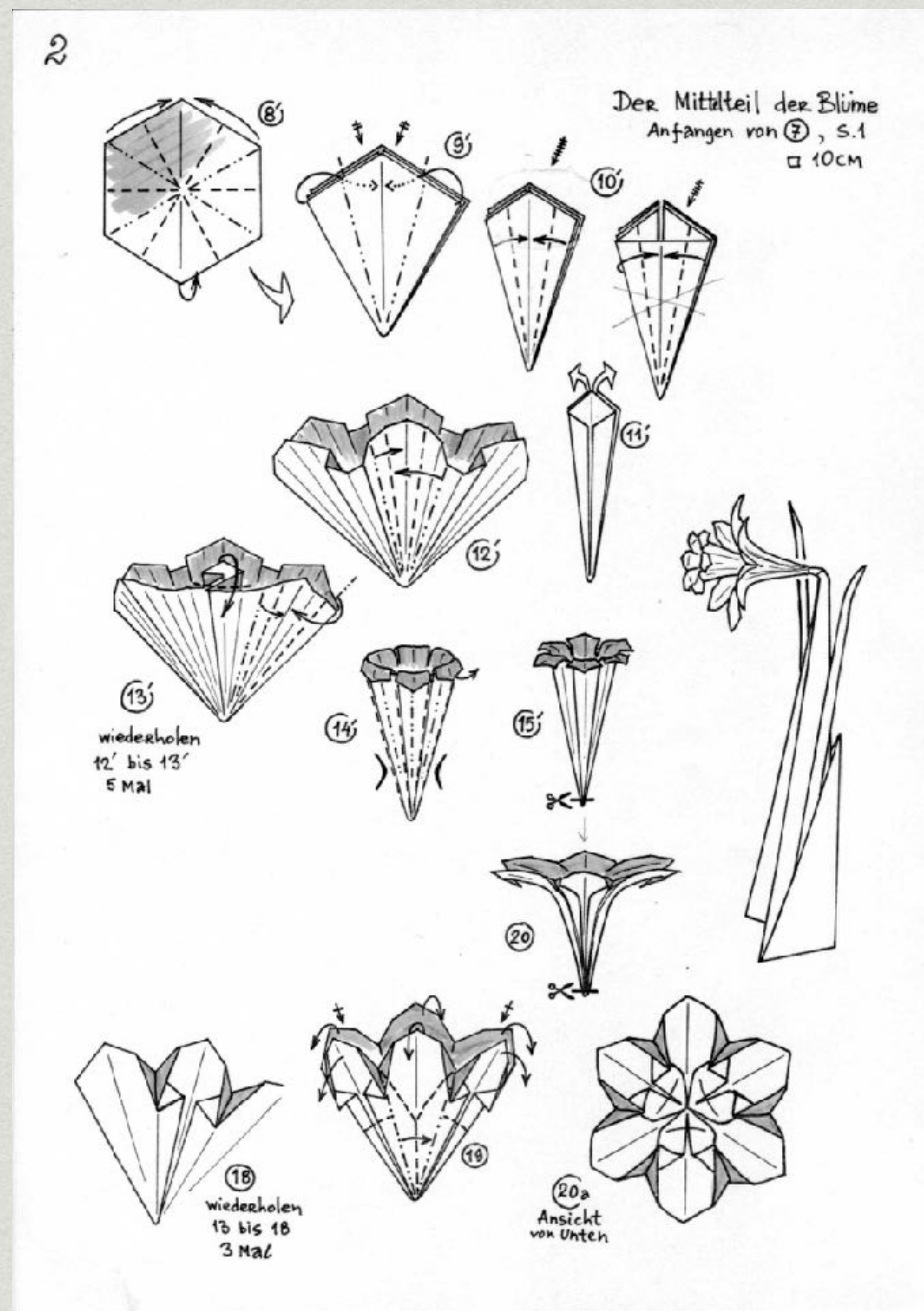


# SENBAZURU ORIKATA

JAPAN (1797)



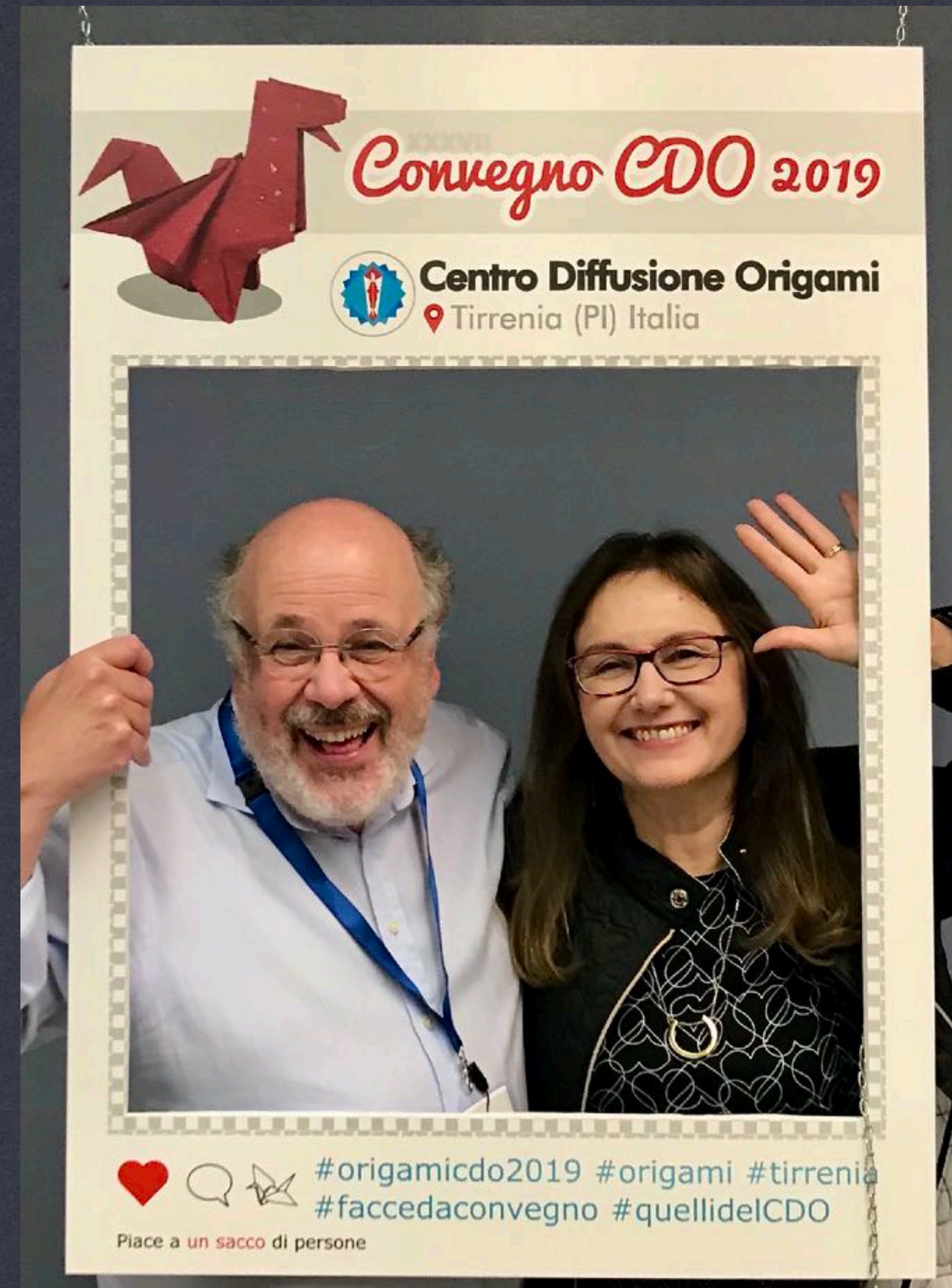




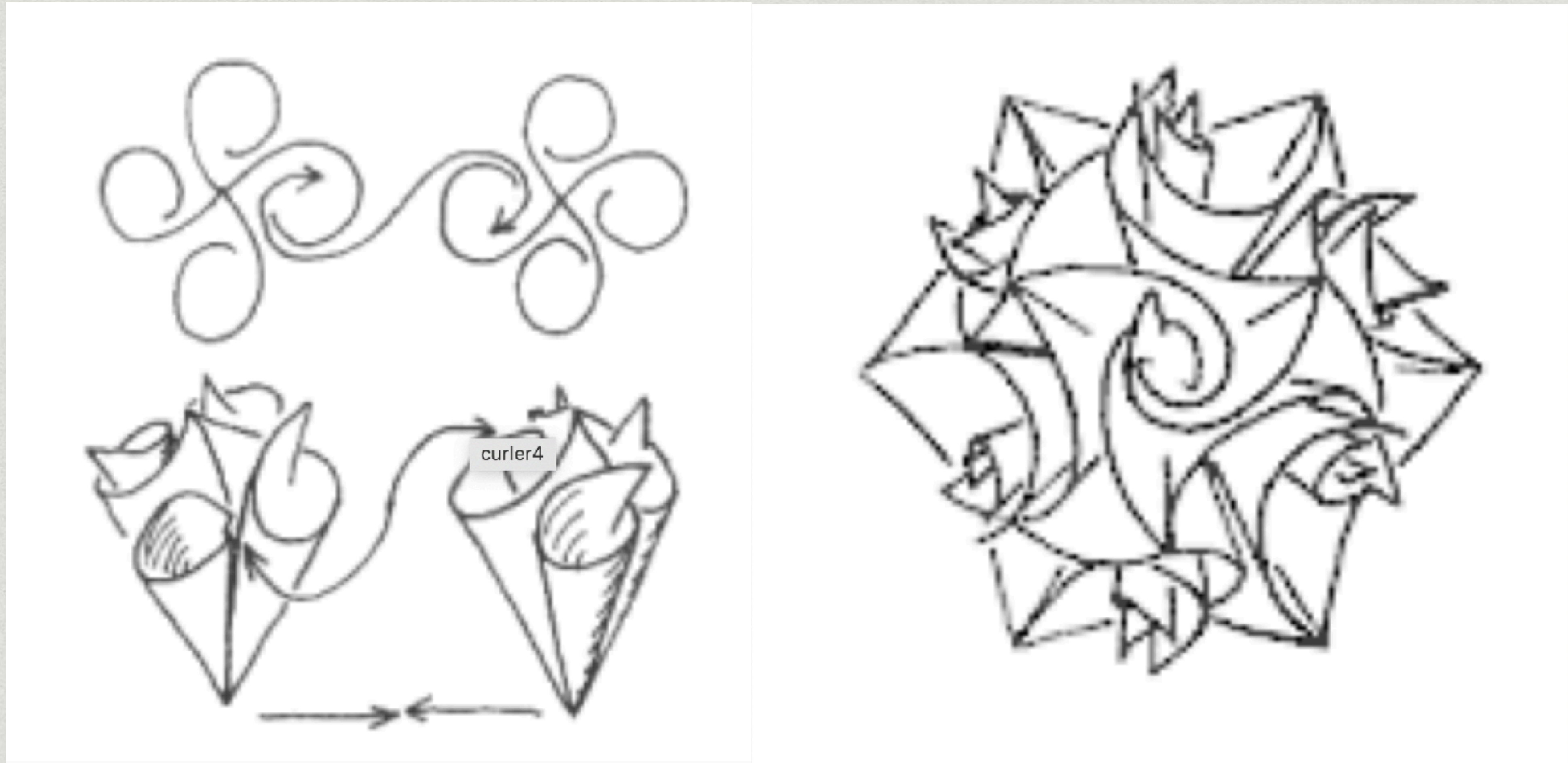


# ASSIA BRILL

RUSSIA, UK









# HERMAN VAN GOUBERGEN

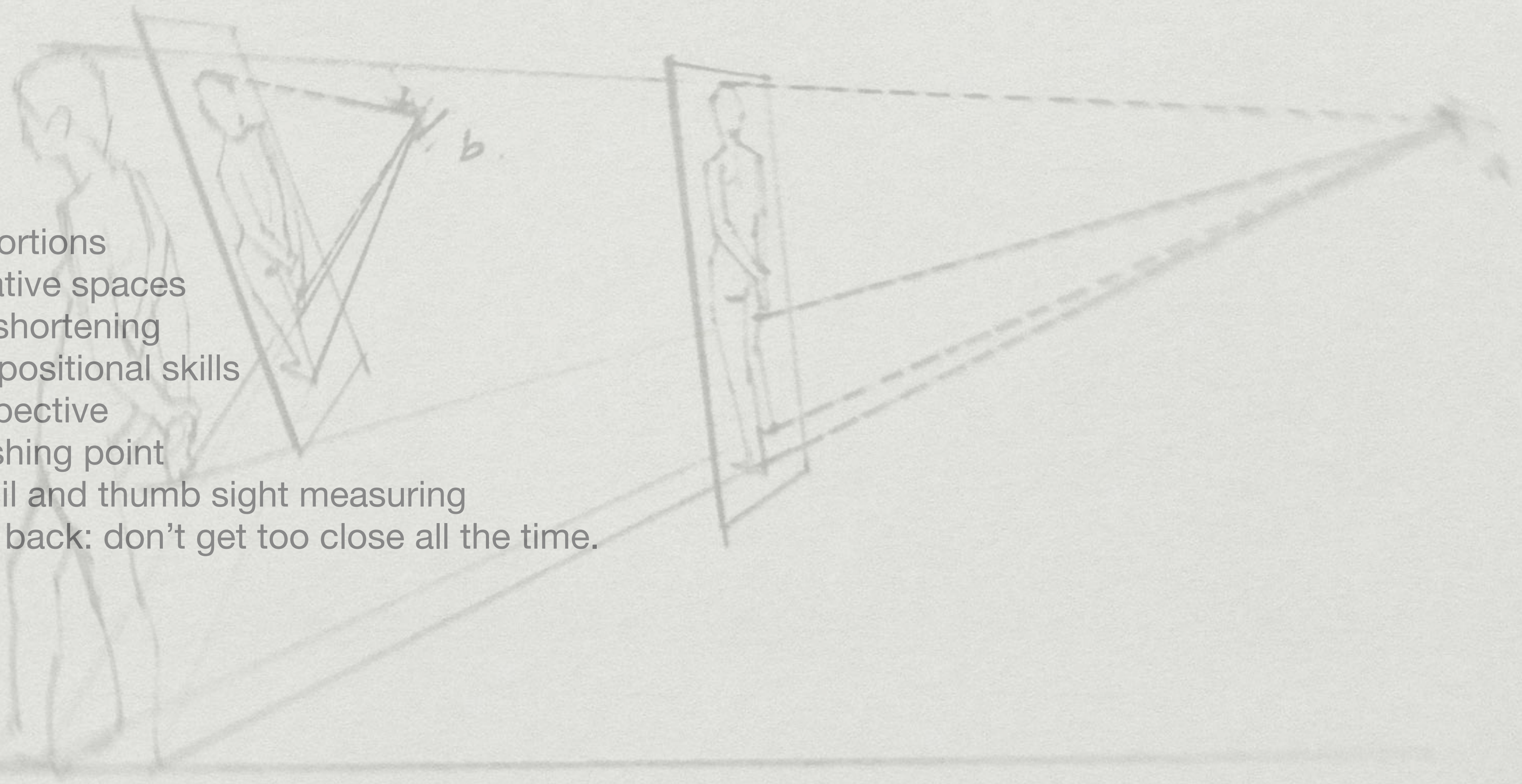
BELGIUM





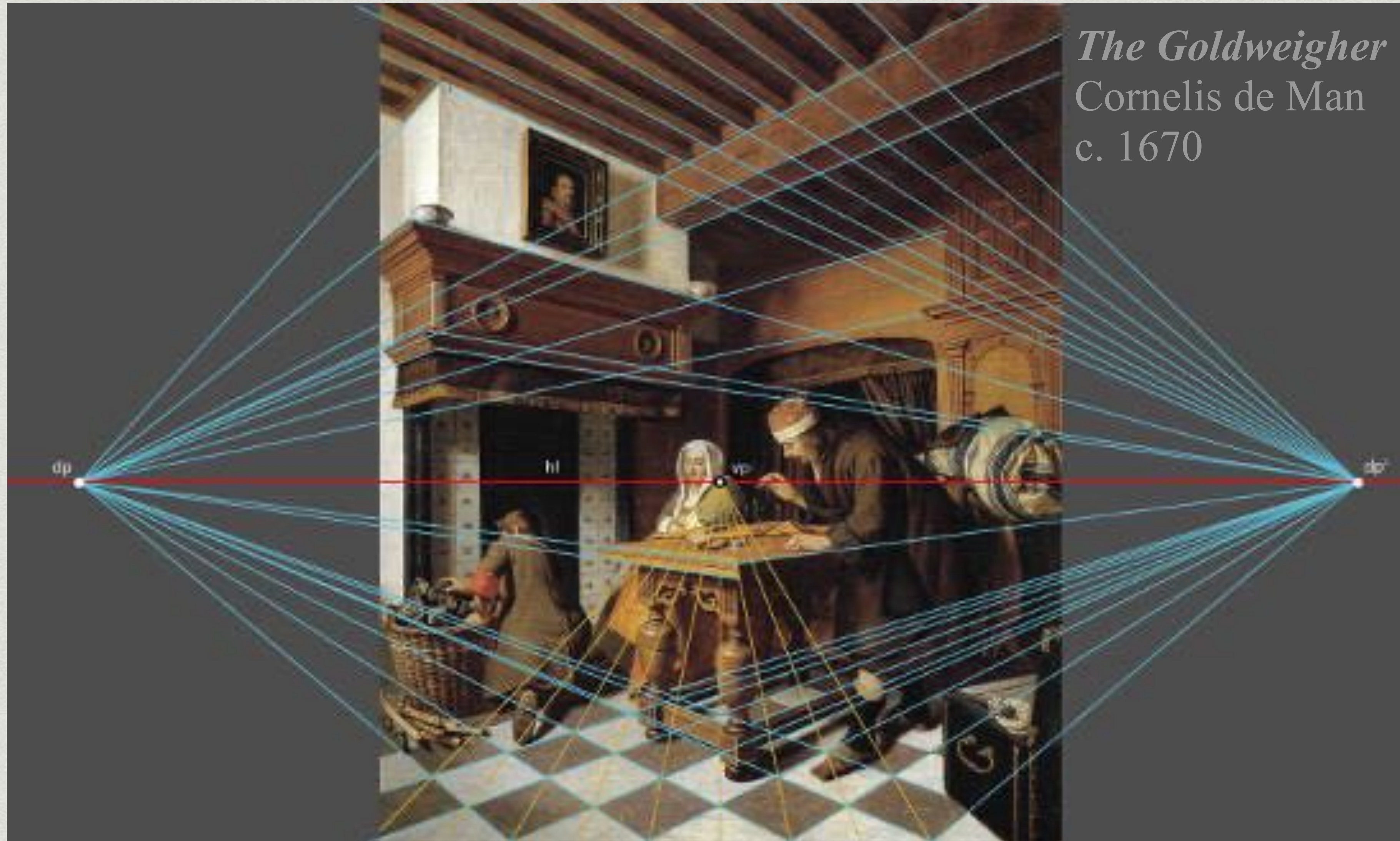
# Some drawing principles

- \* Proportions
- \* Negative spaces
- \* Foreshortening
- \* Compositional skills
- \* Perspective
- \* Vanishing point
- \* Pencil and thumb sight measuring
- \* Step back: don't get too close all the time.



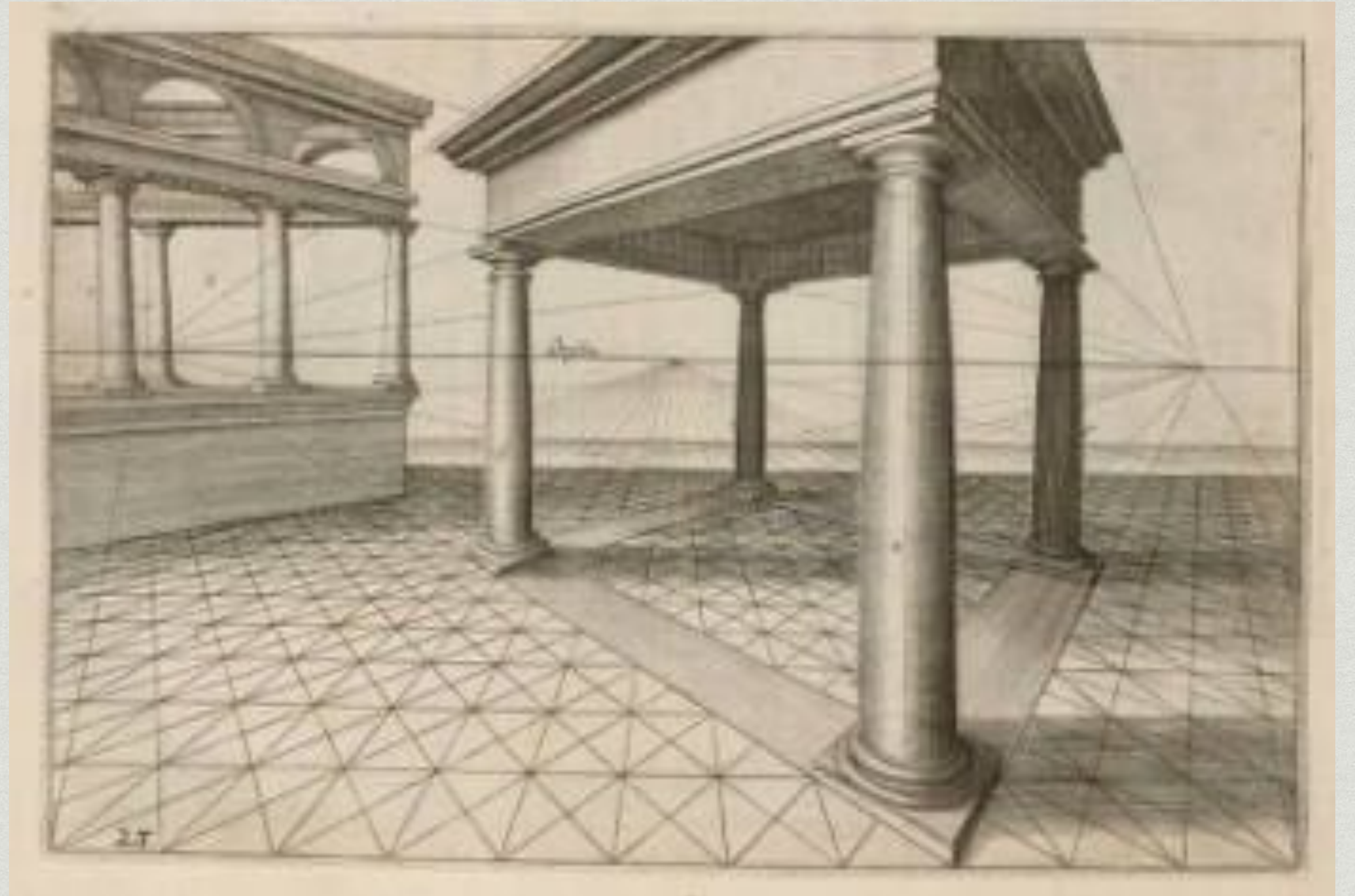


# Perspective



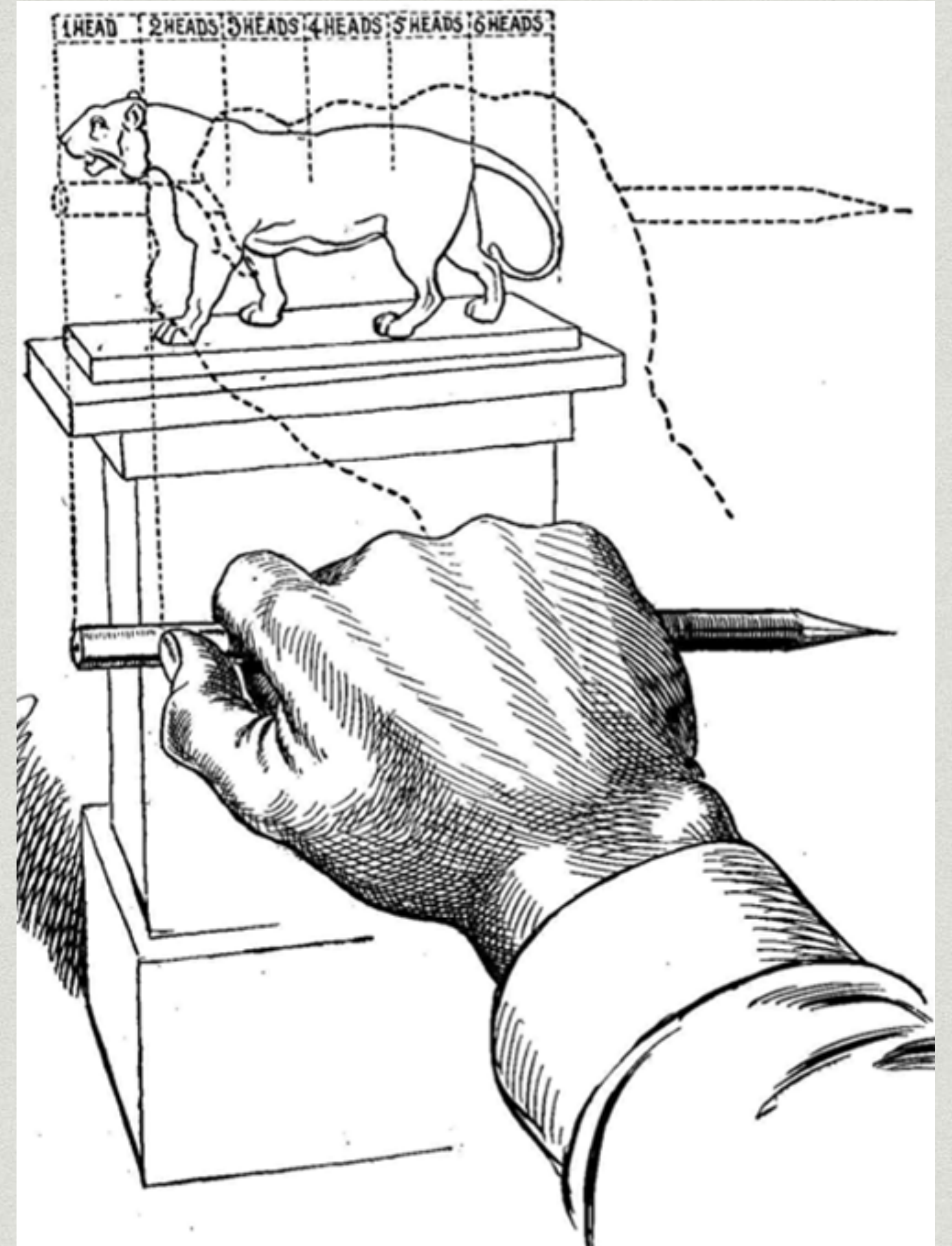


# Foreshortening





# Measuring proportions



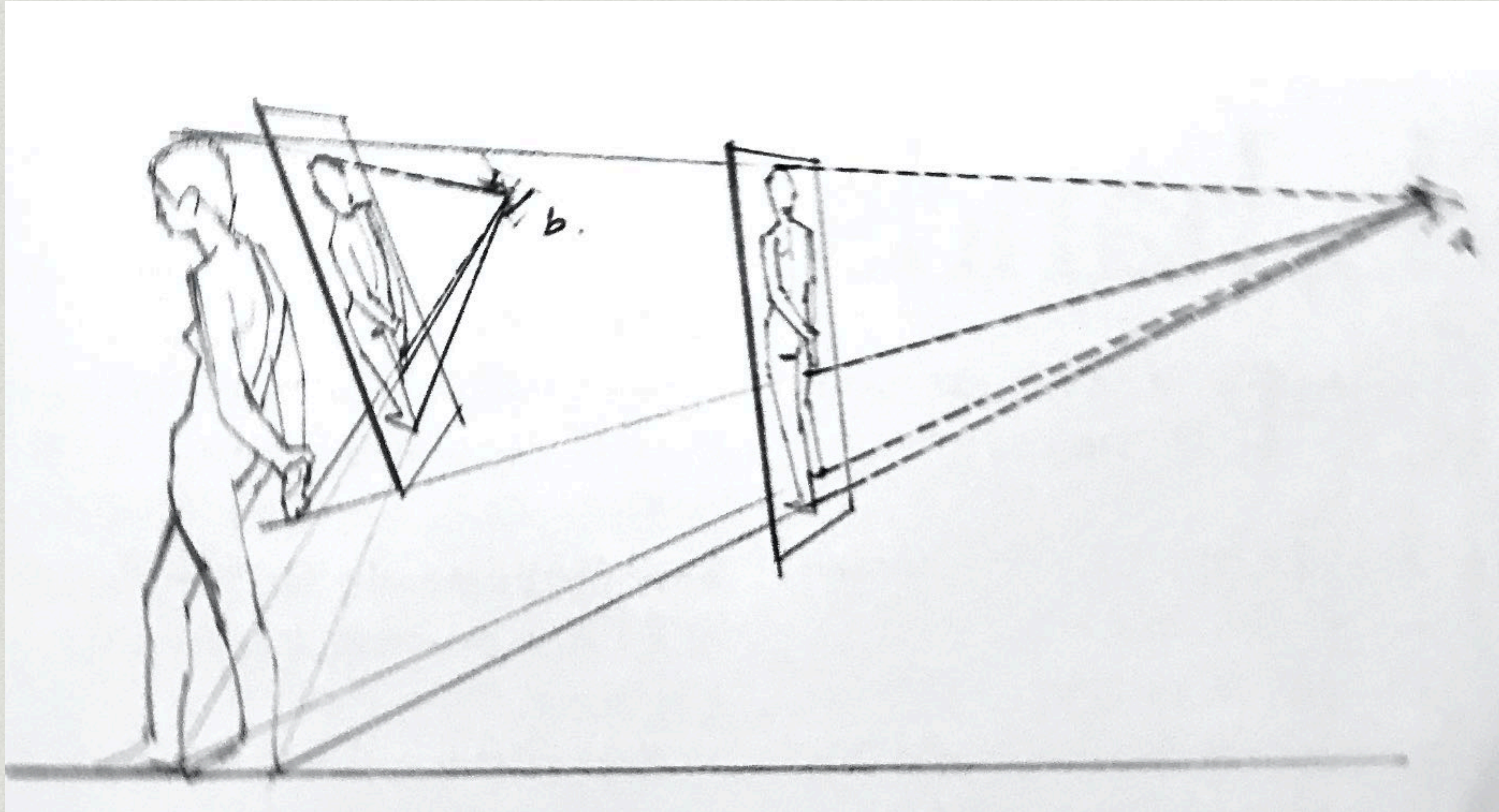


# Negative space

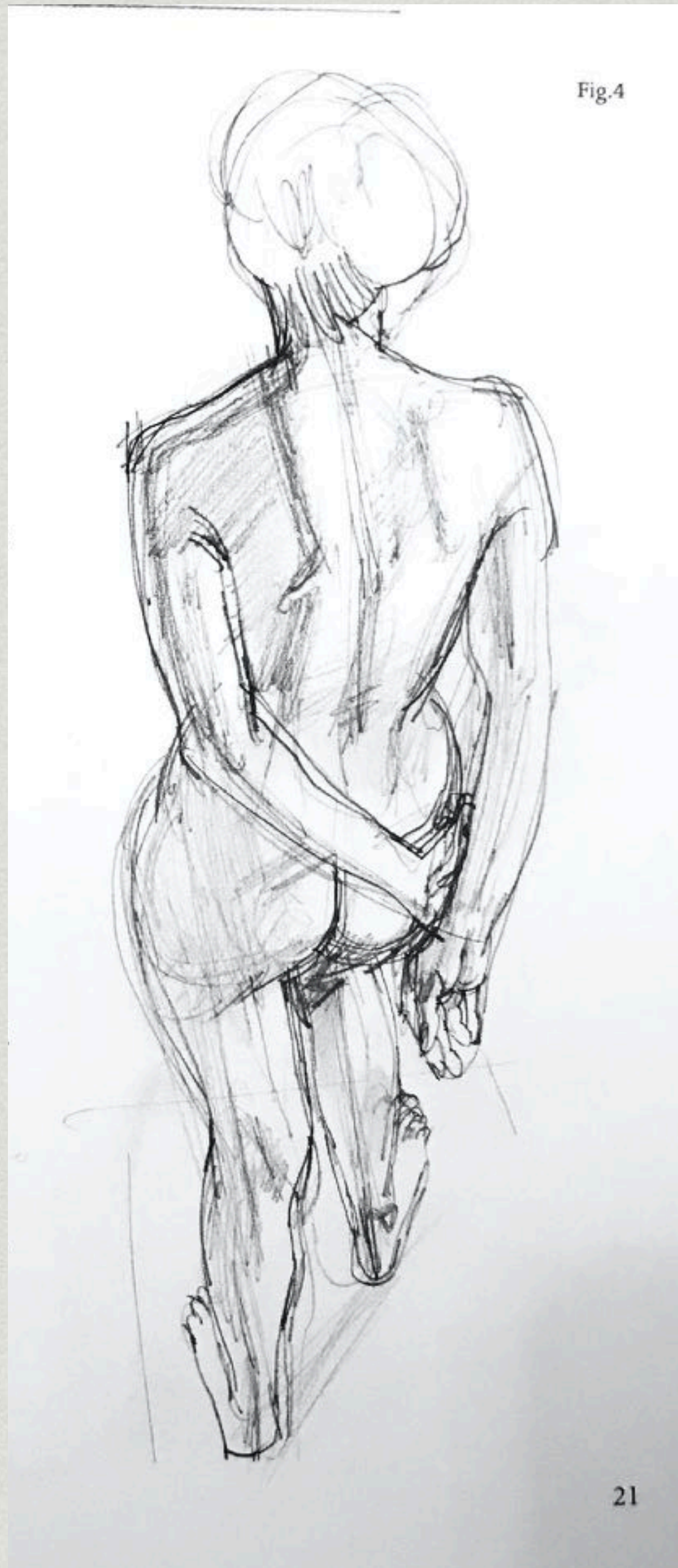




# Drawing board position







# Draw what you see, not what you know

*Objective observation tells us that the hands appear to be very close to the right foot. There is considerable spatial distance between them. It is because we know this that **we tend to modify what we see to fall in with what we know.***

(from FIGURE DRAWING by John Raynes)



# Before

- \* Refine method before starting
- \* Good constant indirect light for optimum shadows
- \* Find support for model to fix position/aspect
- \* Plan diagram flow on current and neighbouring pages before starting.
- \* Use good A4 paper
- \* Avoid rigid grid of steps
- \* No ruler
- \* Dislike to use photos to aid 3d steps

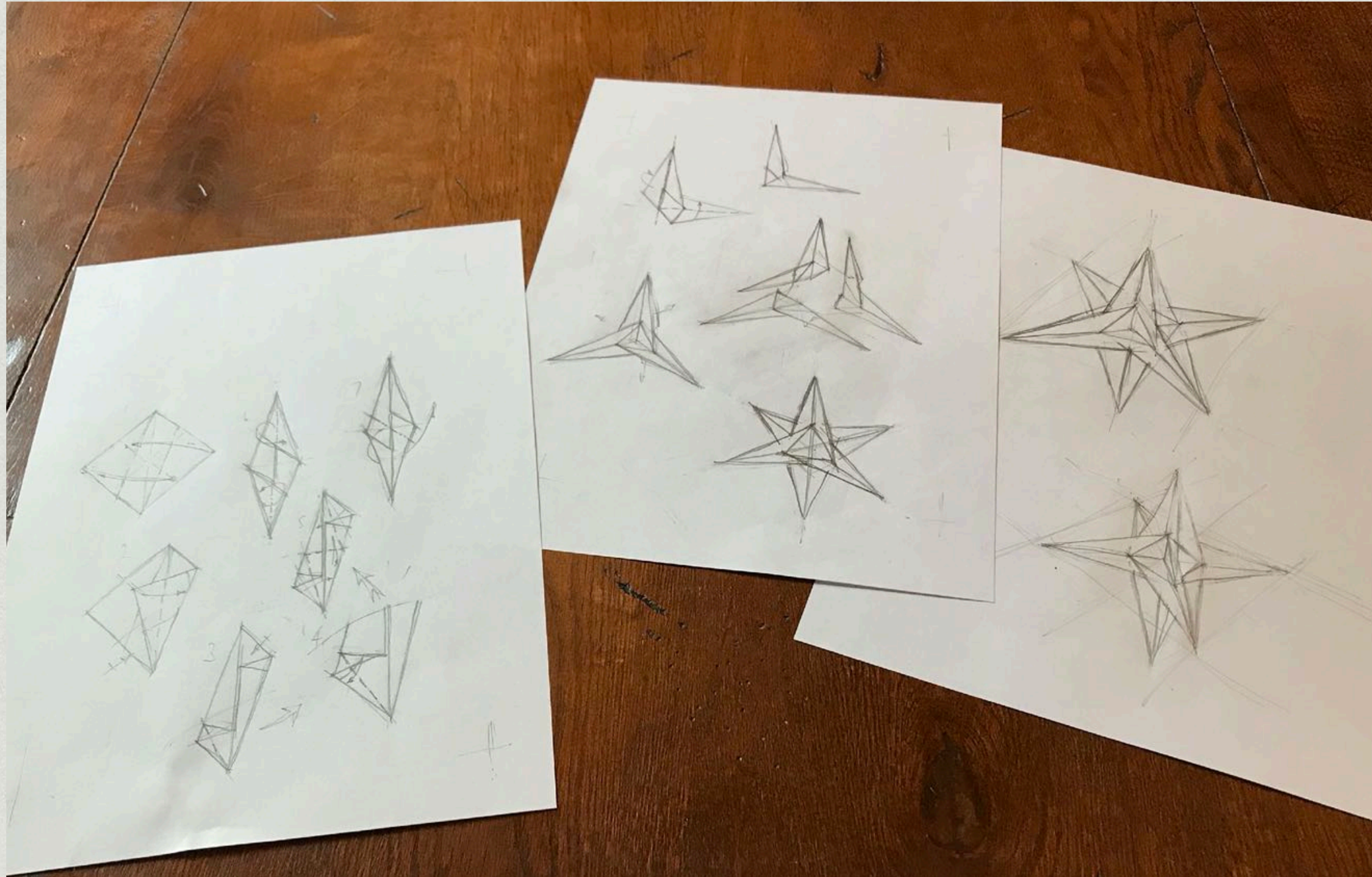


# Drawing board and model support





# Plan sequence and diagram flow



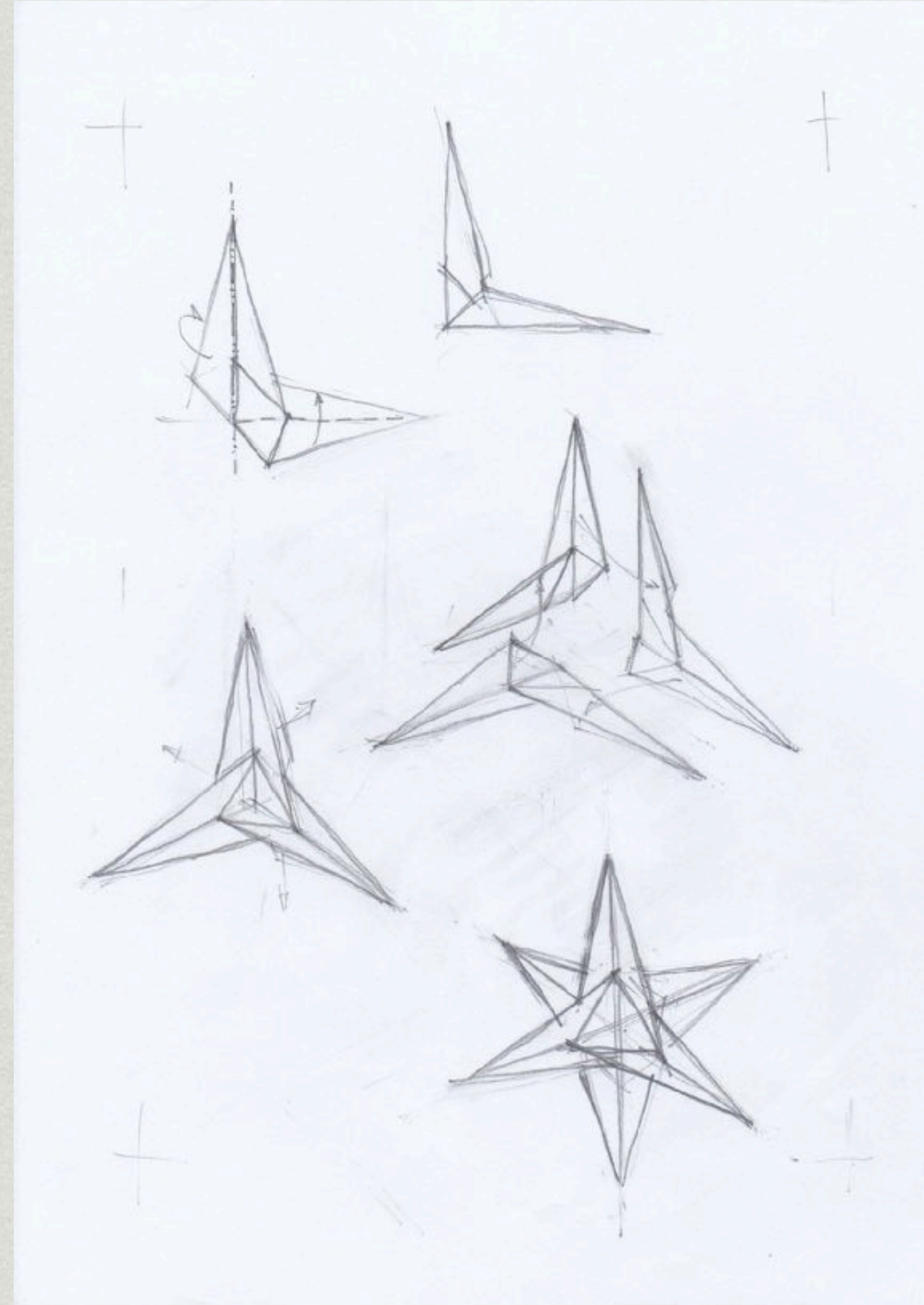
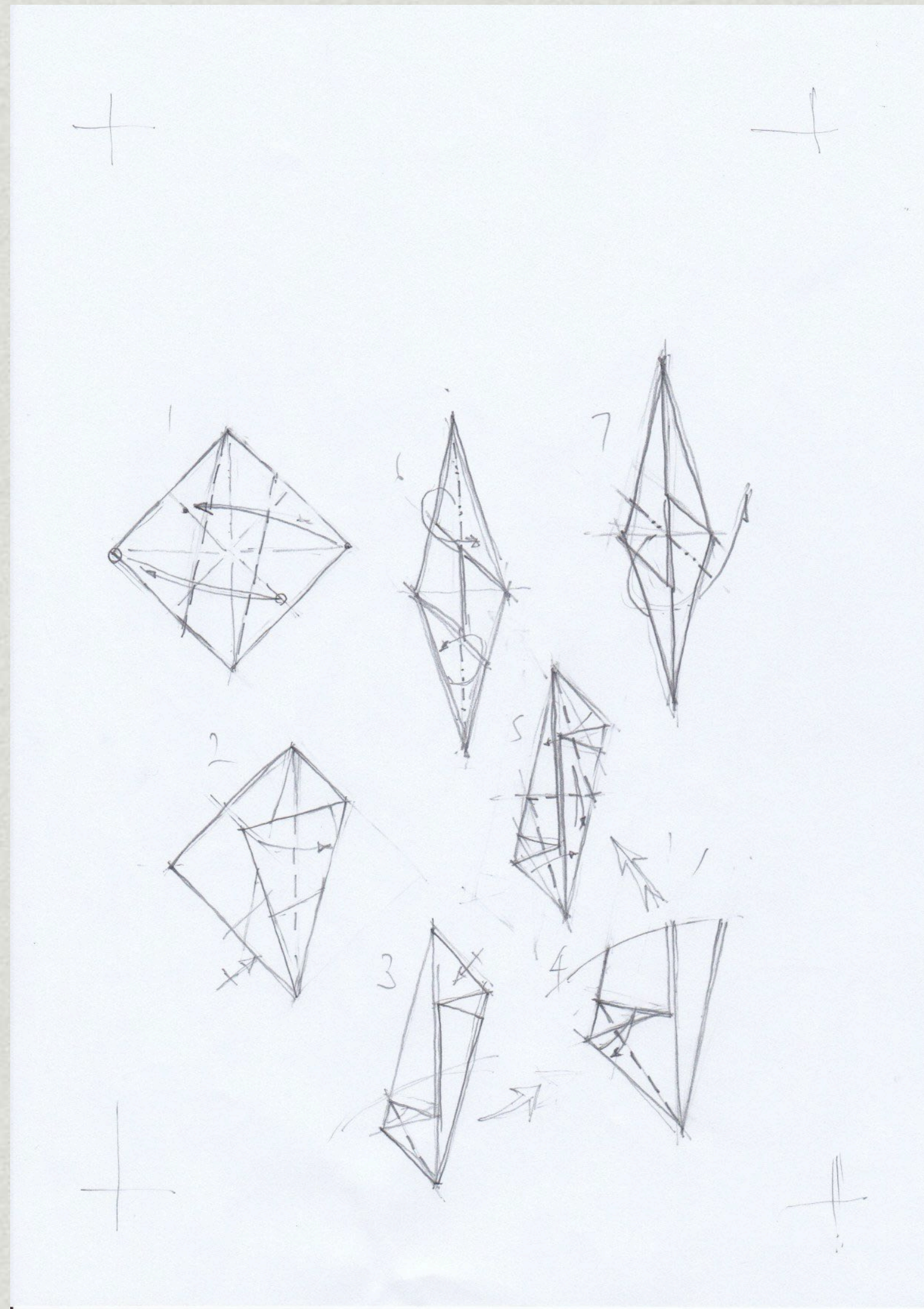


# During

- \* Draw steps in HB-2B pencil
- \* Make corrections with rubber
- \* Keep head and subject positions constant
- \* Ensure drawing surface perpendicular to line of sight
- \* Keep whole object in view at all times
- \* Ignore details until fundamental shape/aspect decided
- \* Spend a lot of time on final drawing: make several attempts.
- \* Use cross hatching to suggest depth/layers
- \* Shadow/toilet mat
- \* I dislike ribbons of tone: step numbers are enough to show flow, as is page composition.



# First pencil drawings





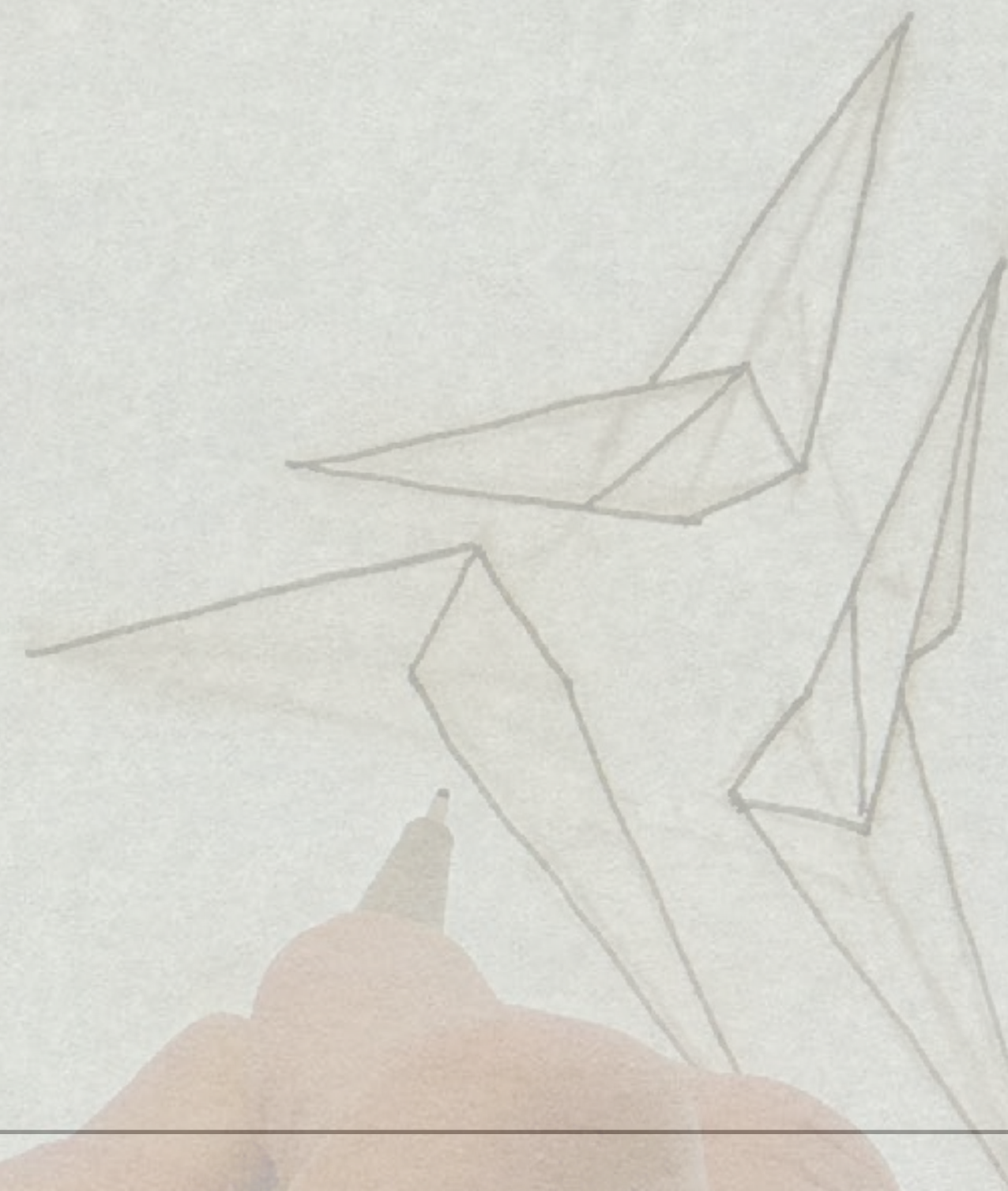
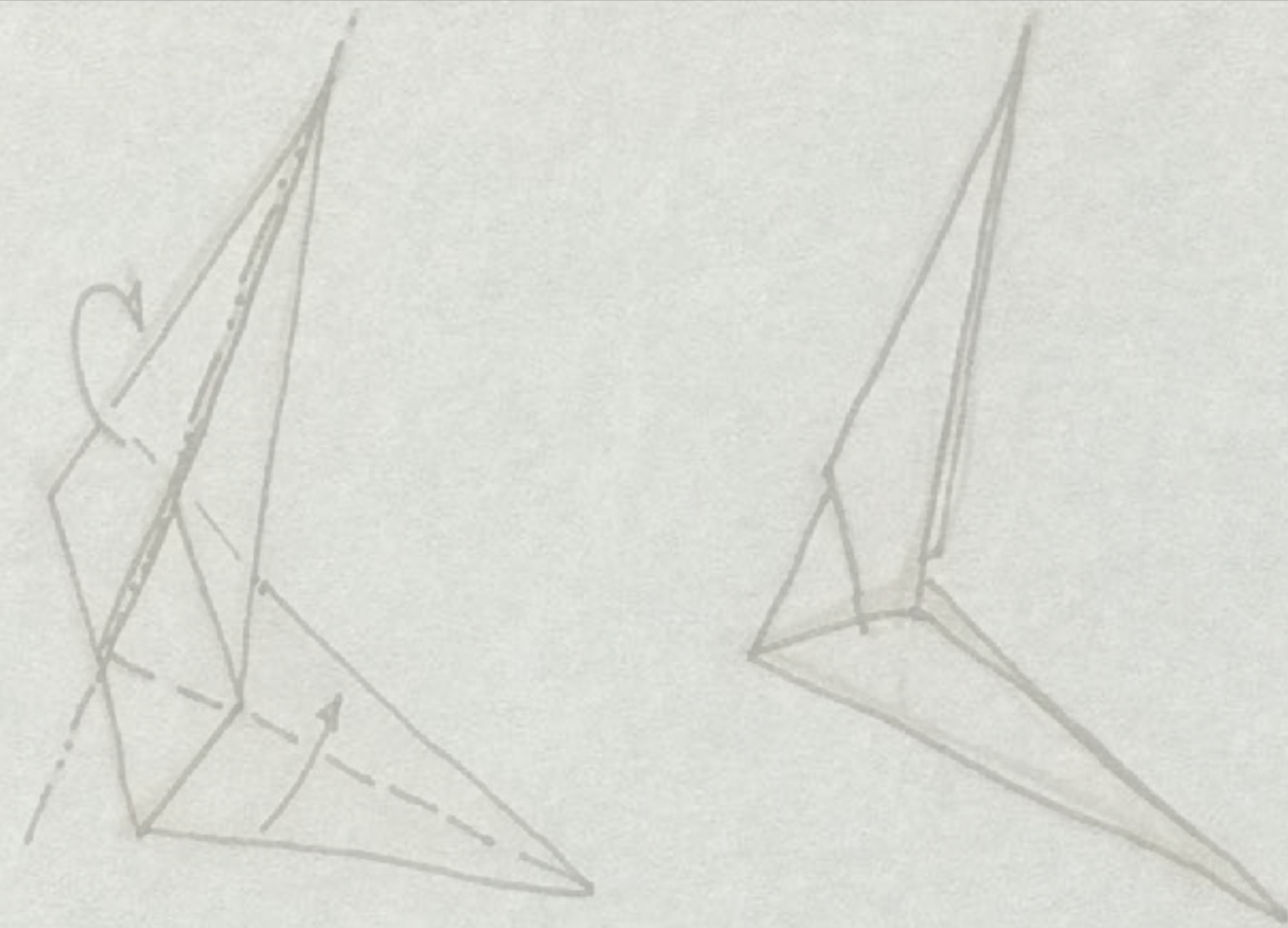
# Cross-hatching and toilet mat





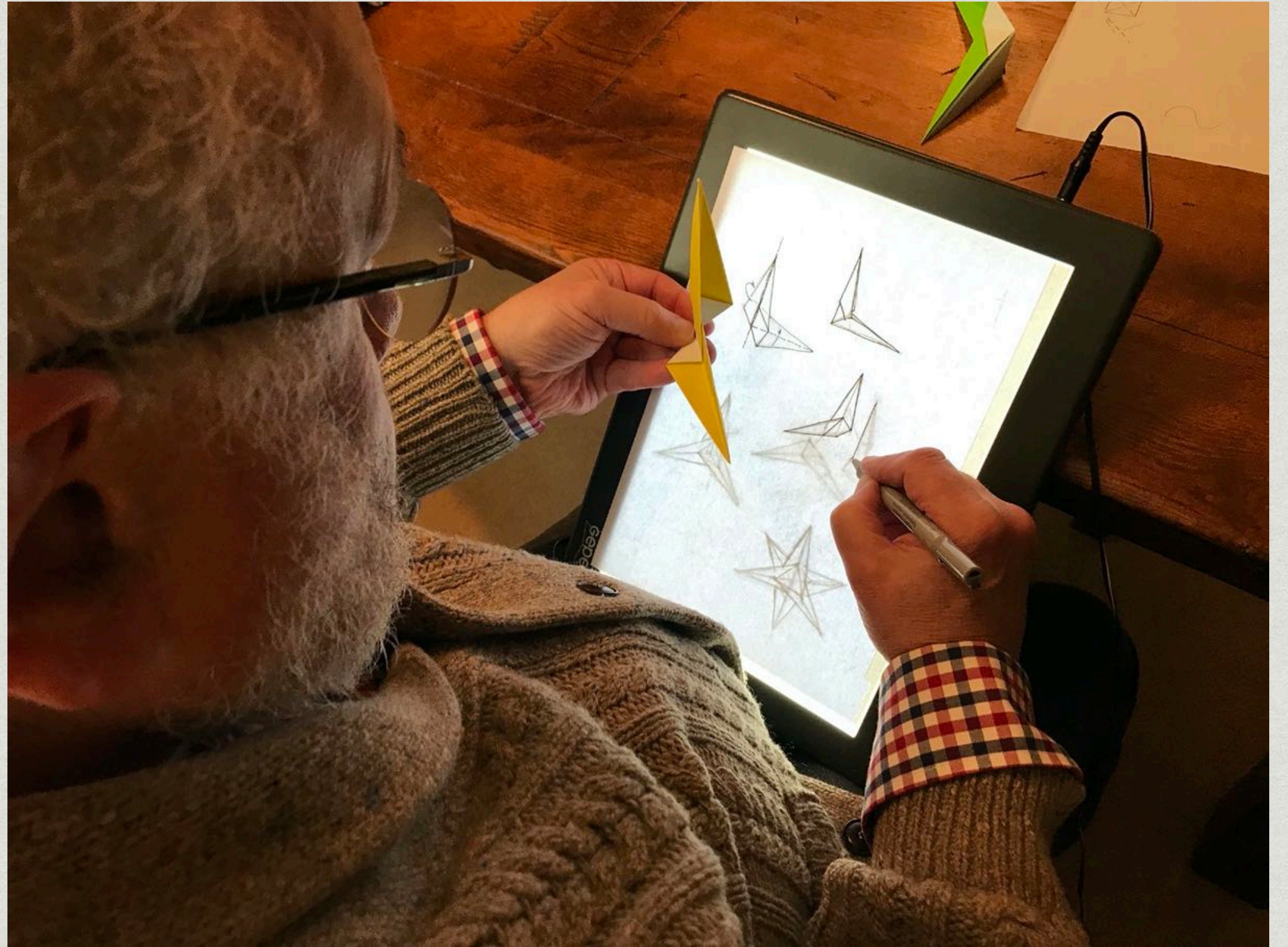
# After

- Ink in using lightbox
- Photoshop (!!)
- Add tone and colour
- Add numbers
- Add text
- Final refinements



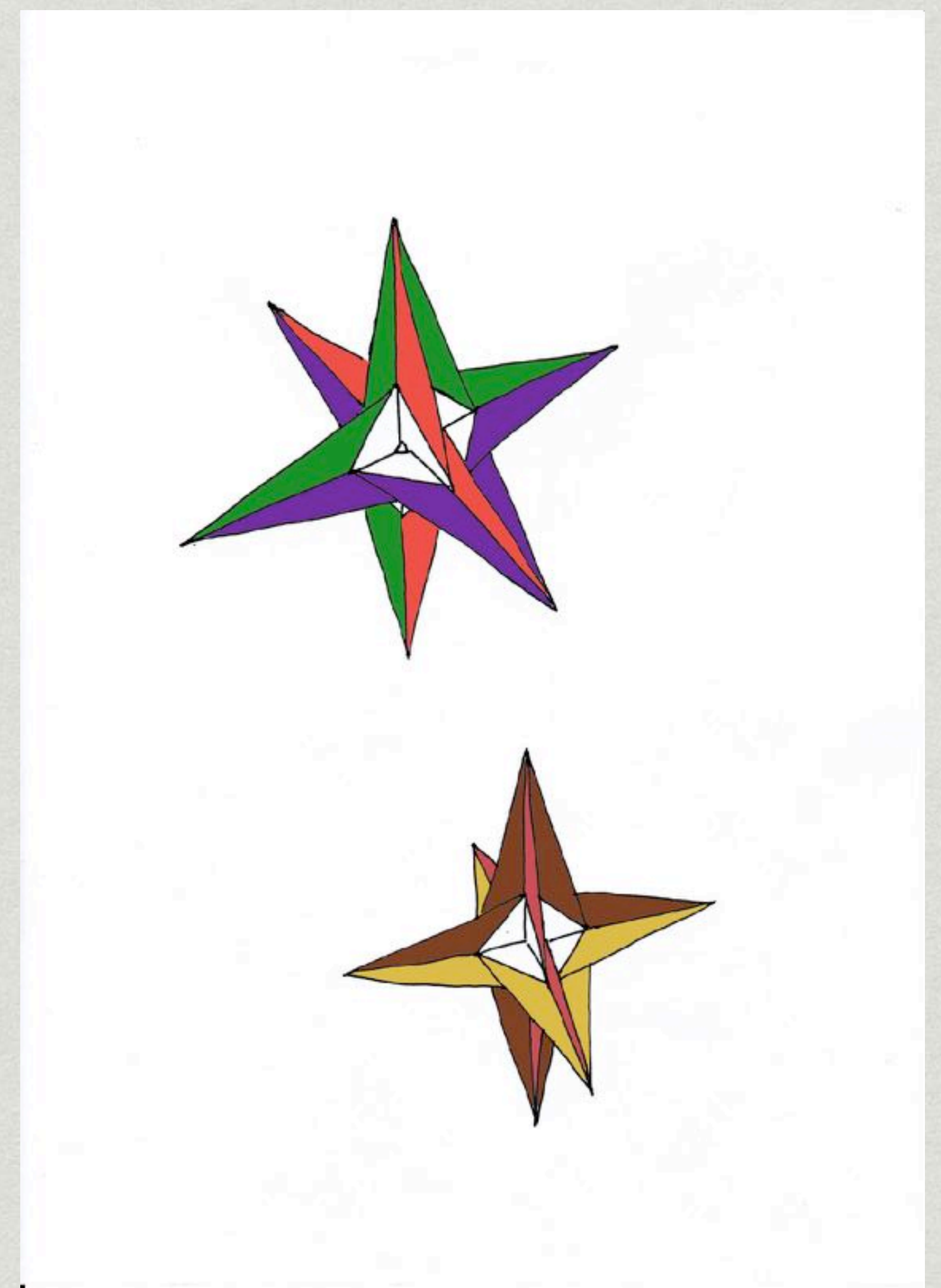
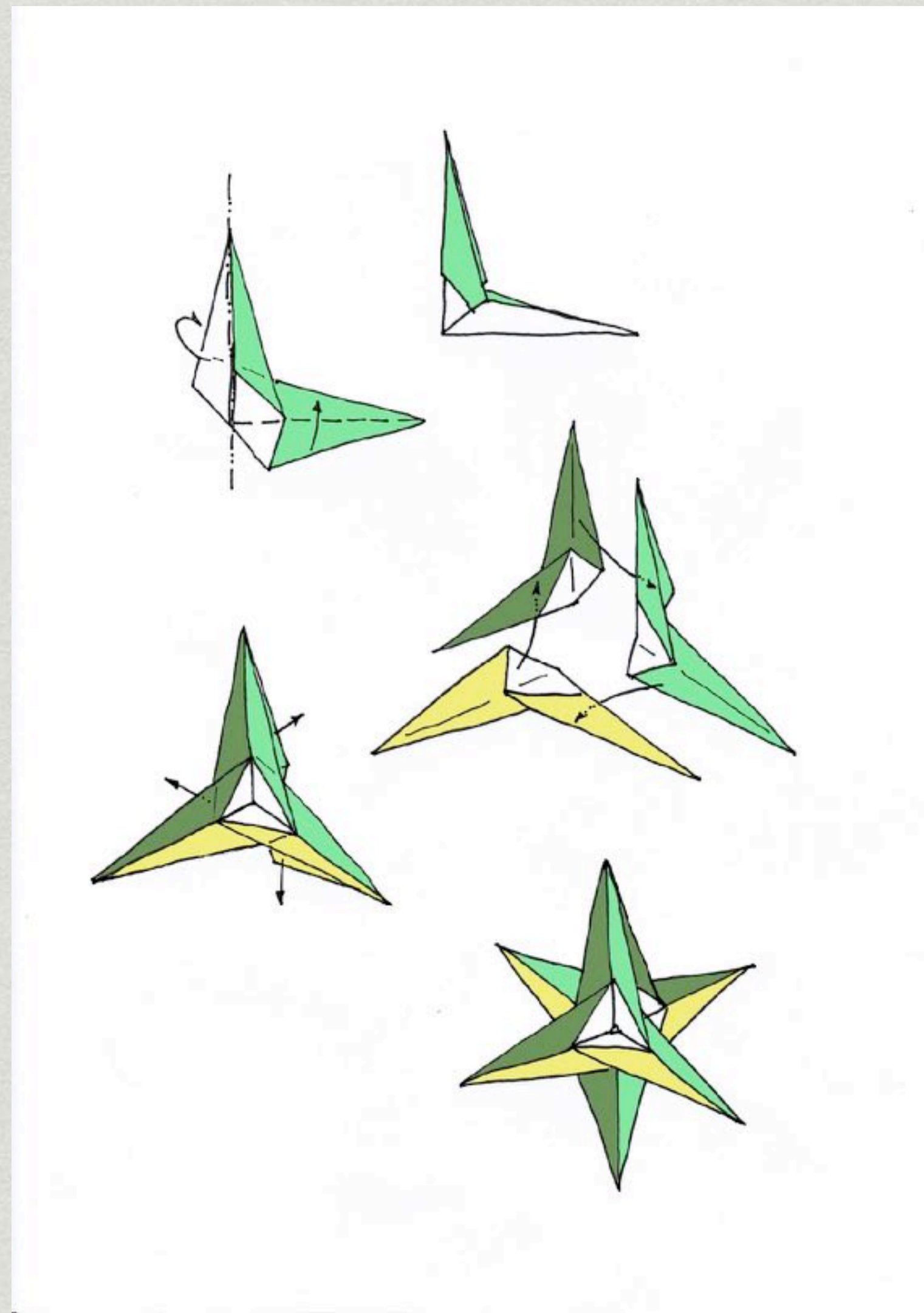
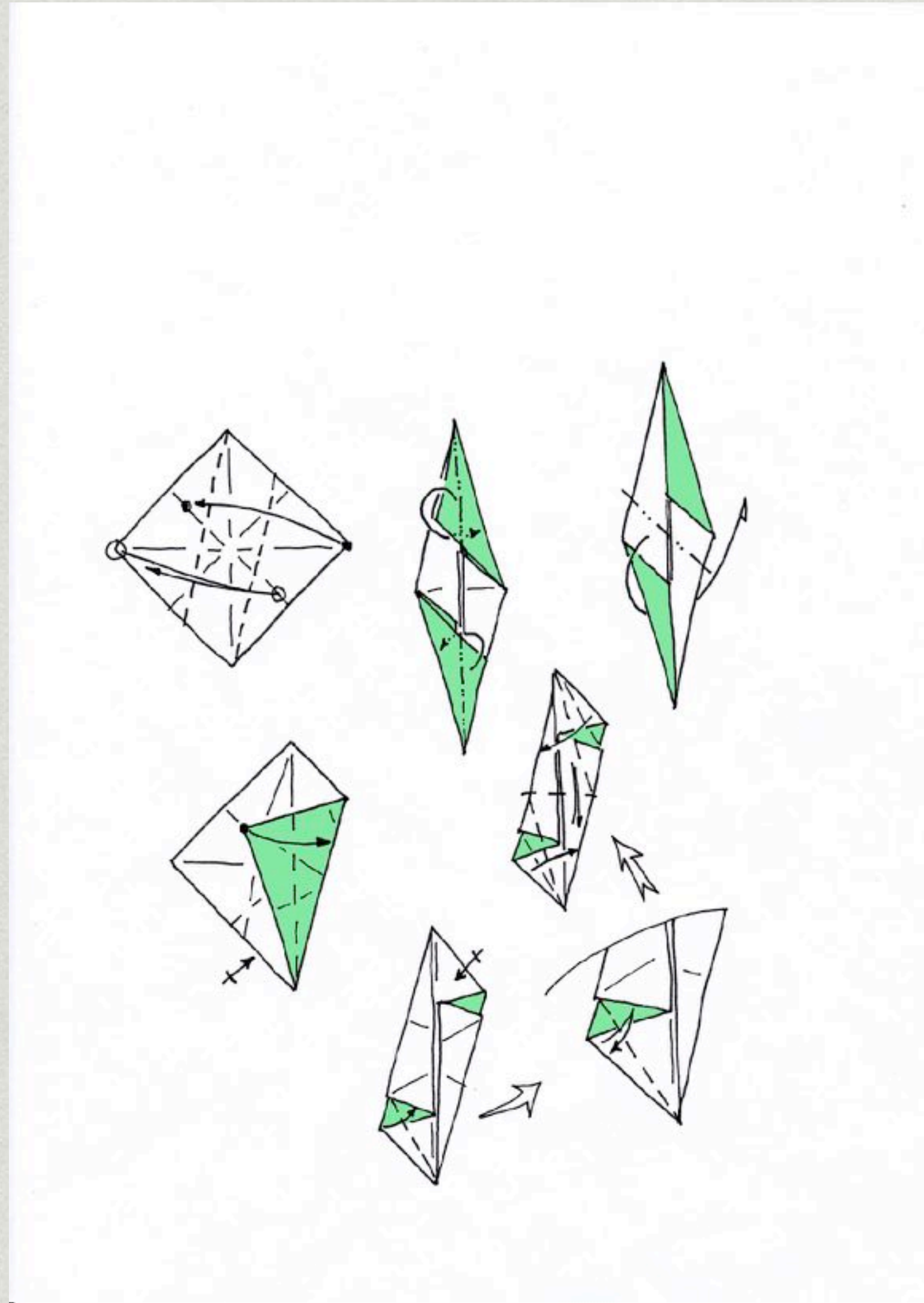


# Inking in with lightbox





# Inked and coloured drawings

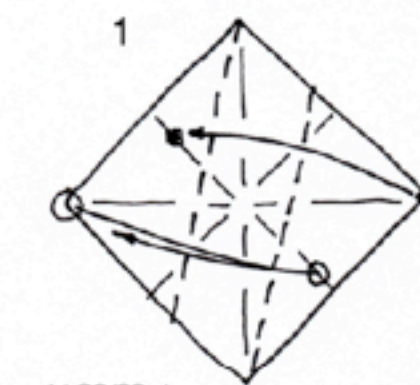




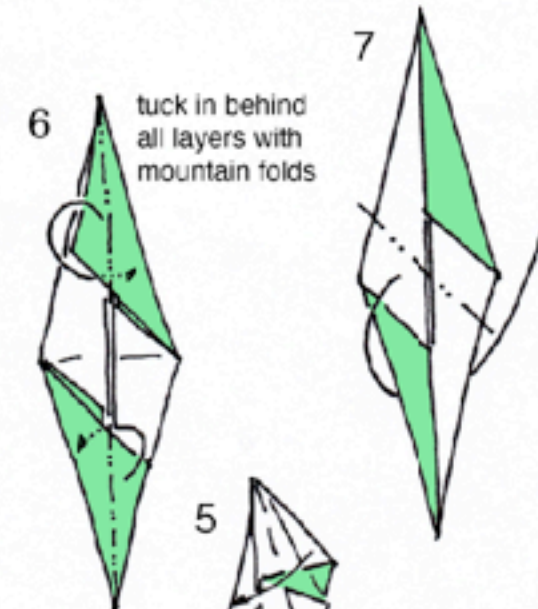
# Final drawings complete

## 15 Degree Star by Dave Brill

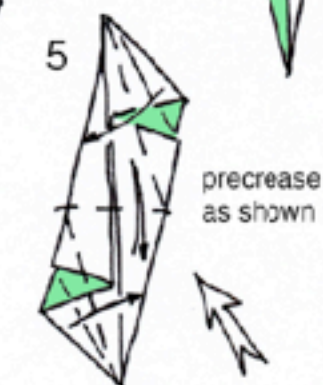
Use 12 x10cm squares.  
Precrease diagonals,  
horizontal and vertical.



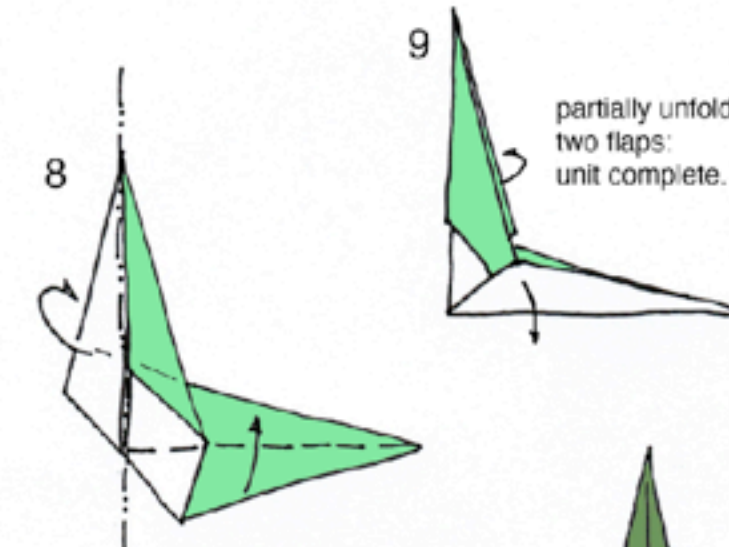
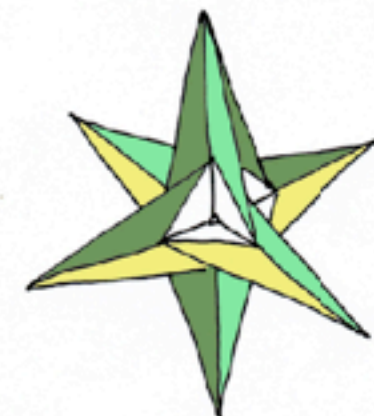
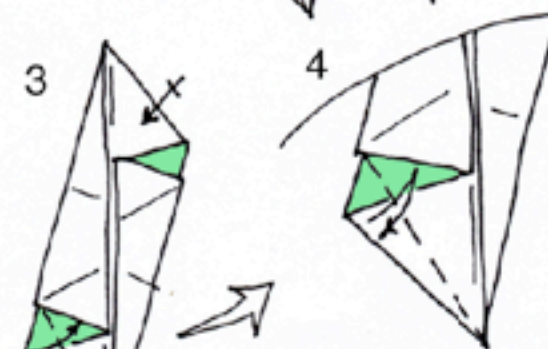
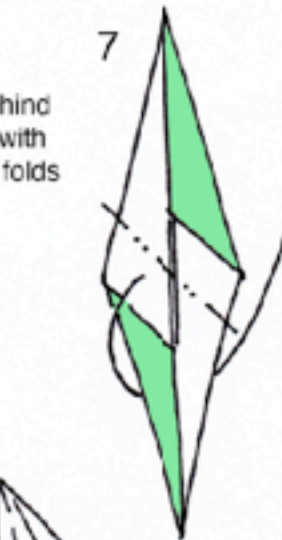
add 30/60 degree  
crease as shown



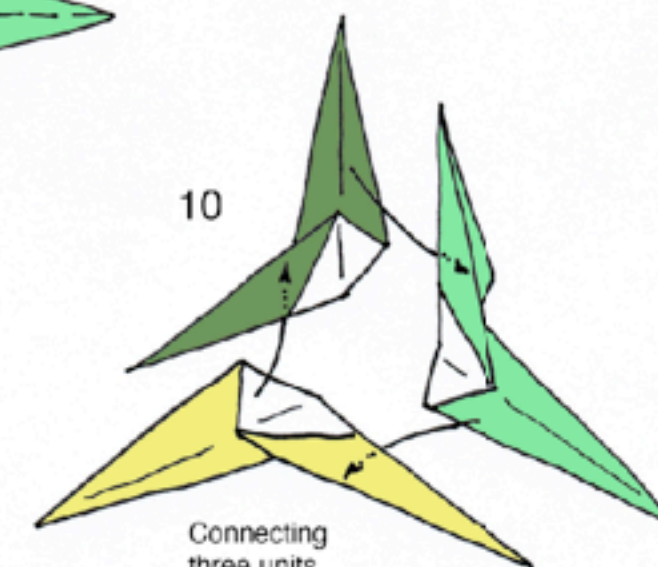
tuck in behind  
all layers with  
mountain folds



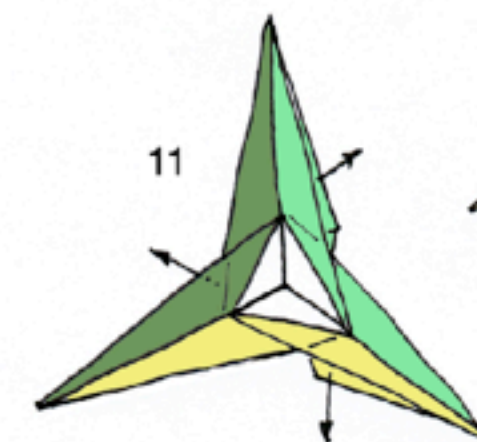
precrease  
as shown



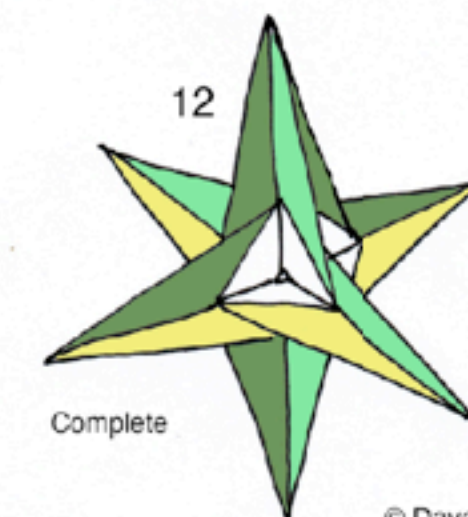
partially unfold  
two flaps:  
unit complete.



Connecting  
three units



Continue adding  
remaining units  
in the same way

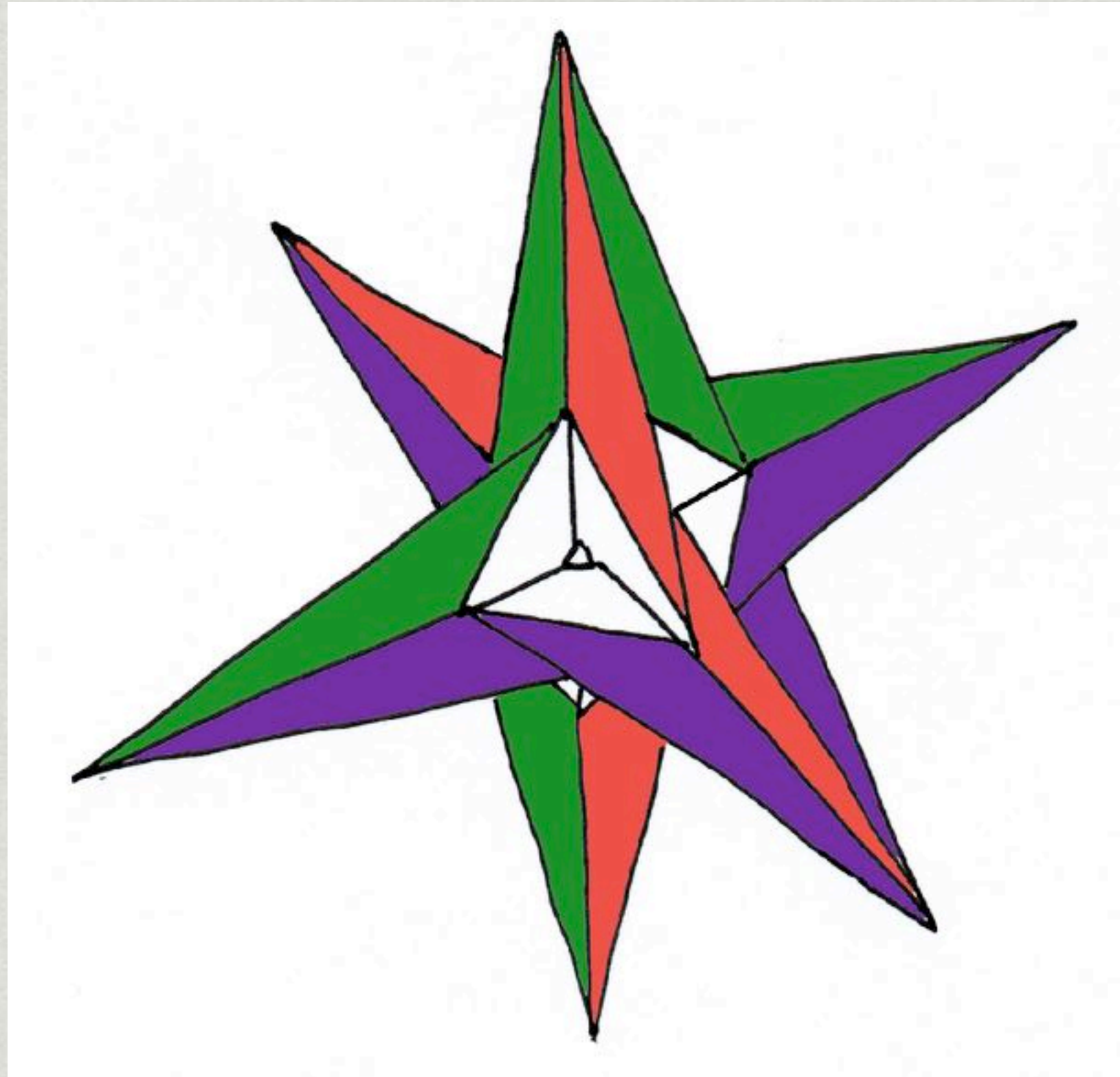


Complete

© Dave Brill 1996/2020



# 15 degree star



<https://vallebird.files.wordpress.com/2020/02/15-degree-star.pdf>



What's  
this?







Do you know how to get there...?

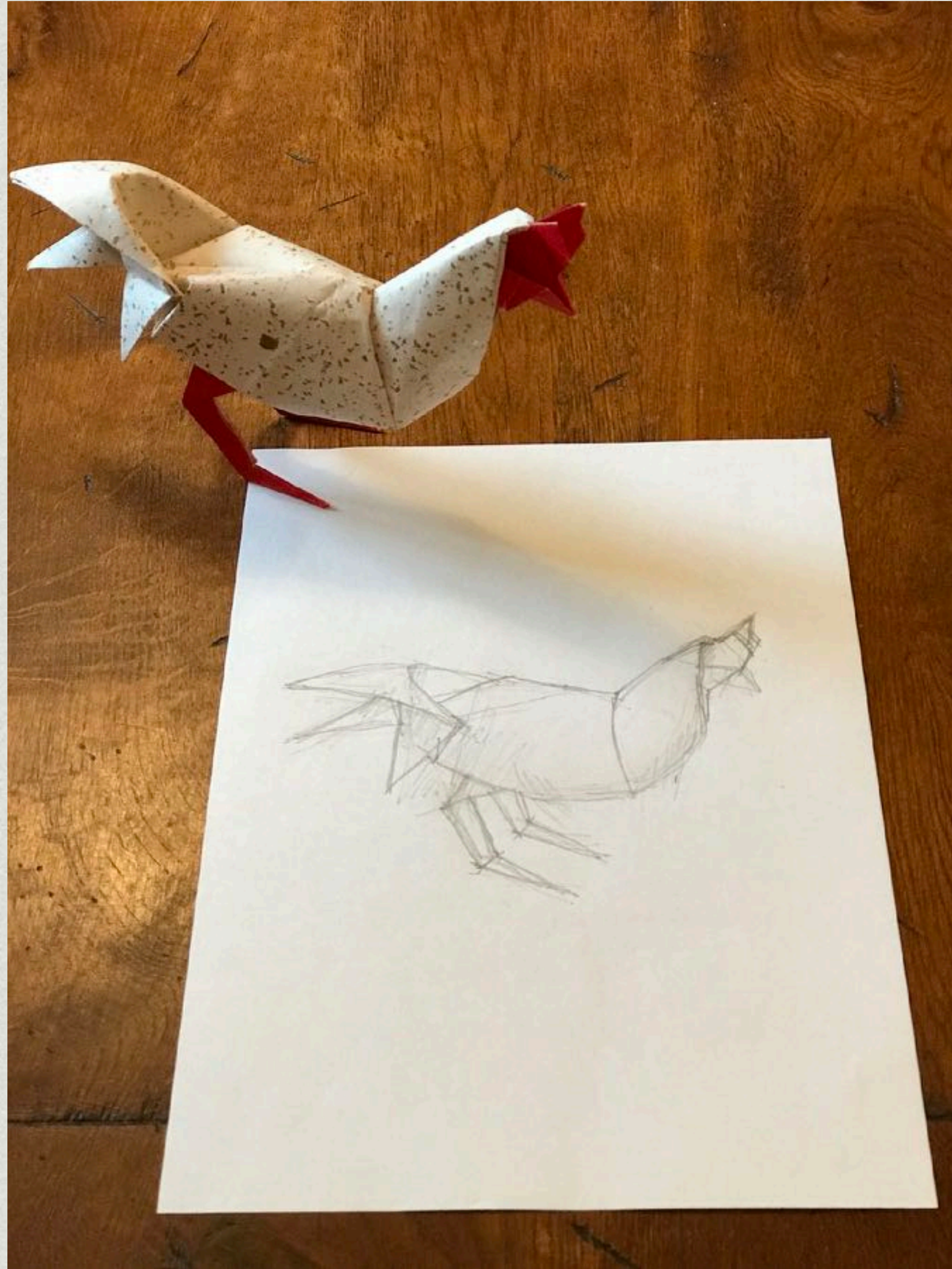


# Practice



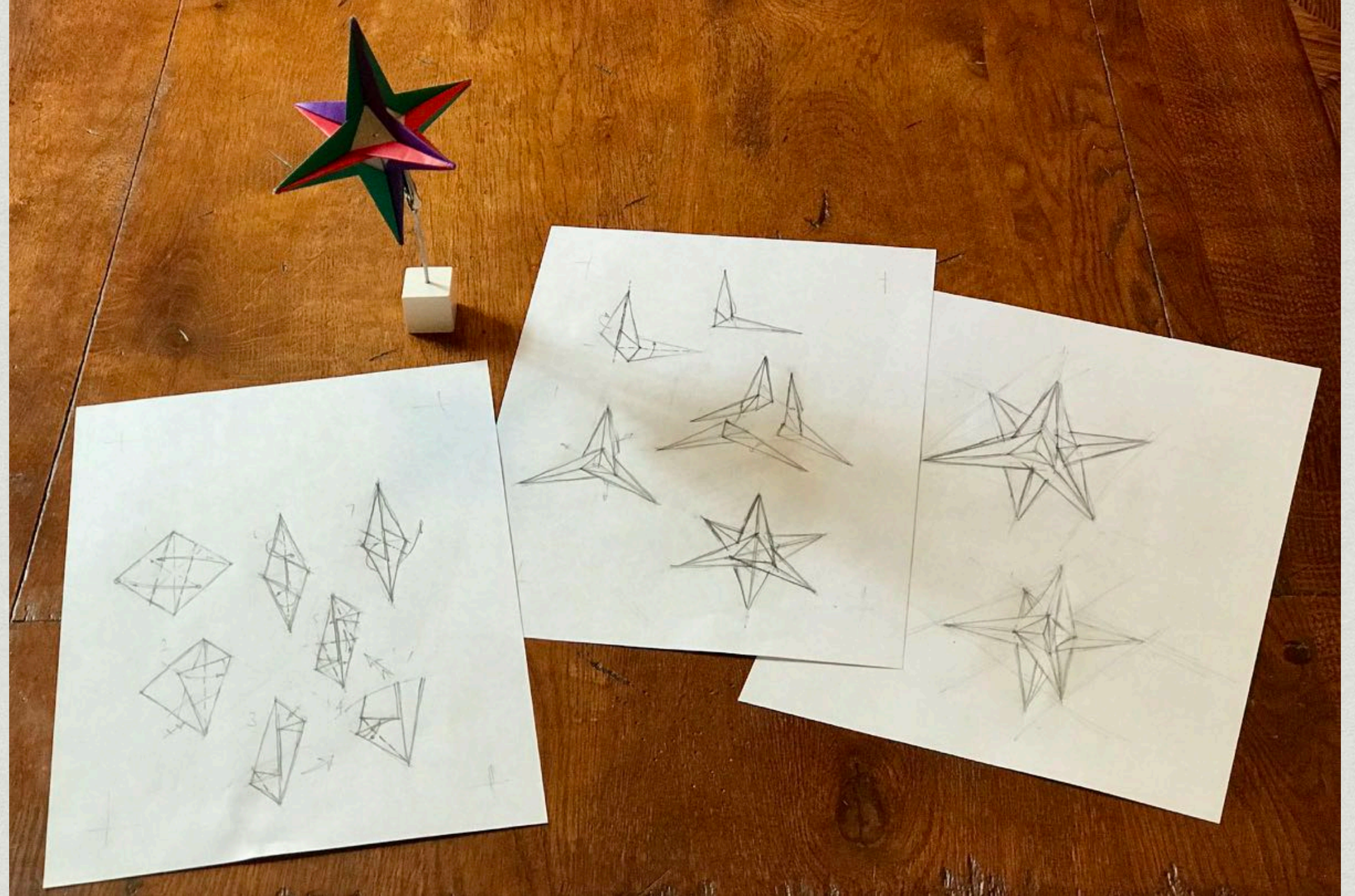


practice....





...practice!





The background of the image is a photograph of a hand-drawn diagram on a piece of paper. A hand is visible on the left side, holding a yellow ruler. The diagram consists of several geometric shapes, including triangles and polygons, drawn with black lines. Some shapes are more complex, with internal lines and arrows indicating relationships or flow. The overall style is that of a hand-drawn sketch or diagram.

# BRILLUSTRATOR

**The case for hand-drawn diagrams**