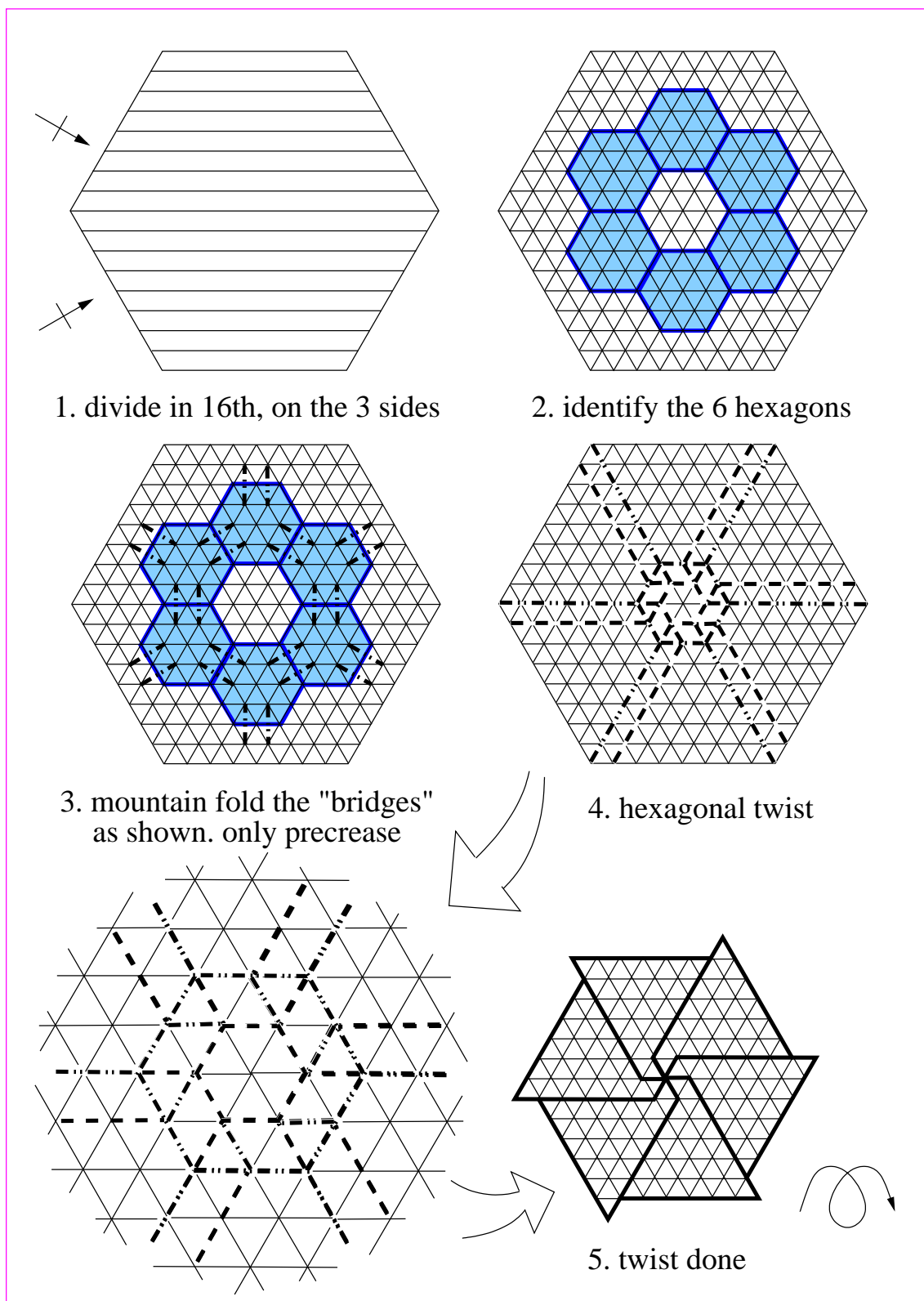
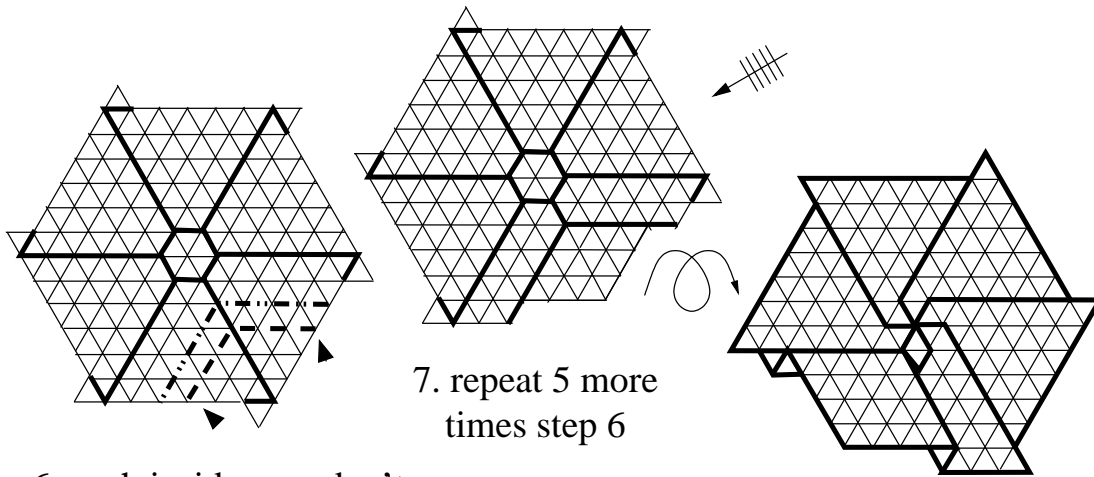


honeycomb

Roberto Gretter, november 2000

tridimensional tassellation, derived from Romain Chevrier's turtle

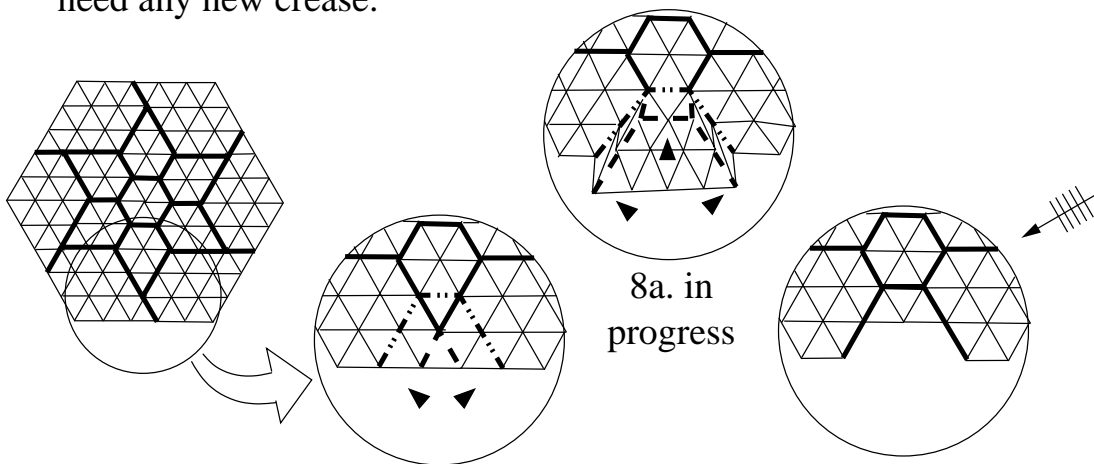




6. push inside. you don't need any new crease.

7. repeat 5 more times step 6

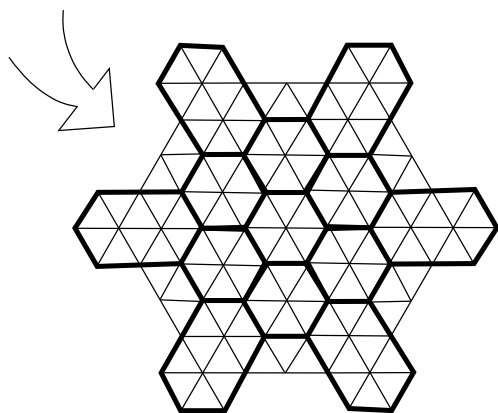
7a. back view



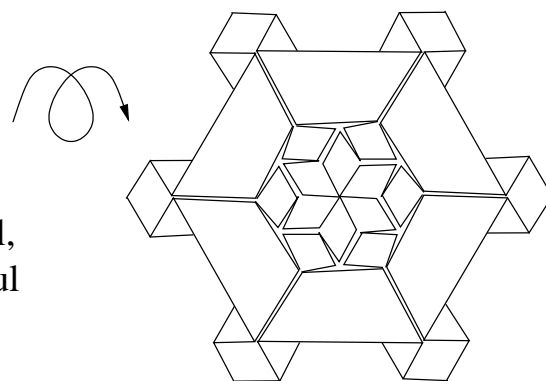
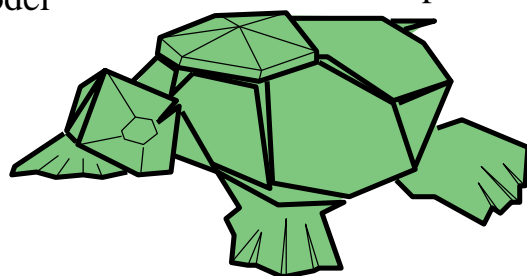
8. push inside one more time. to do it, you should partly reopen the model

8a. in progress

9. repeat 5 more times step 8

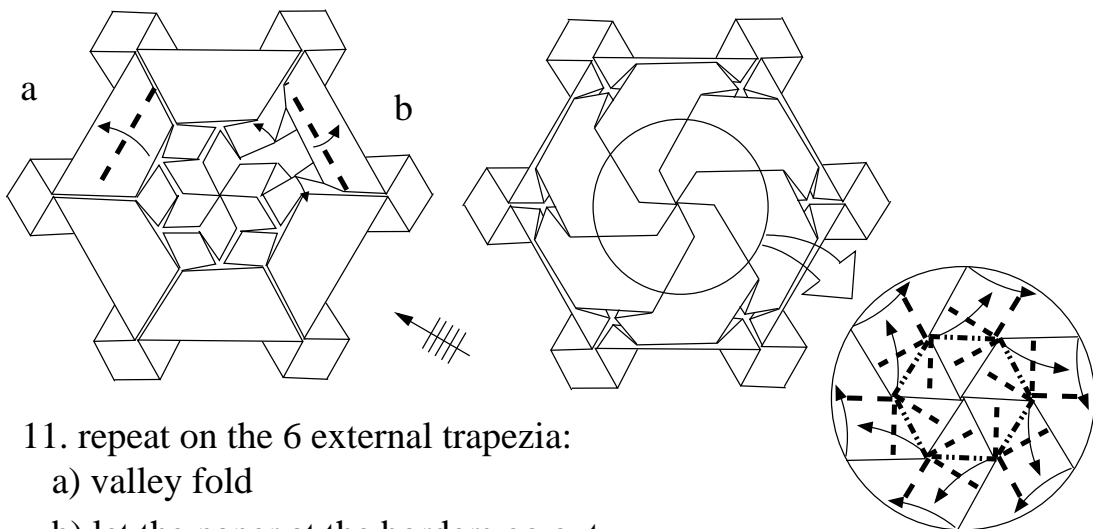


10. so far the model is equal, except step 3, to the beautiful Romain Chevrier's turtle. note the 7 small hexagons.



10a. back view



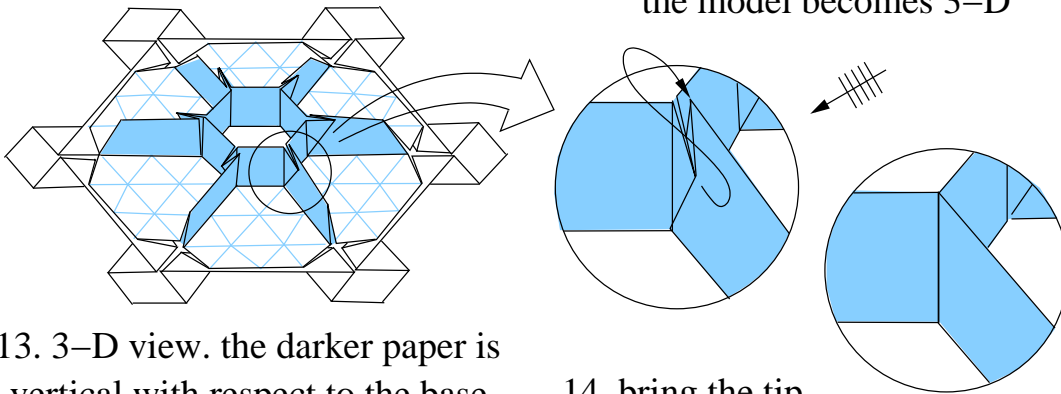


11. repeat on the 6 external trapezia:

a) valley fold

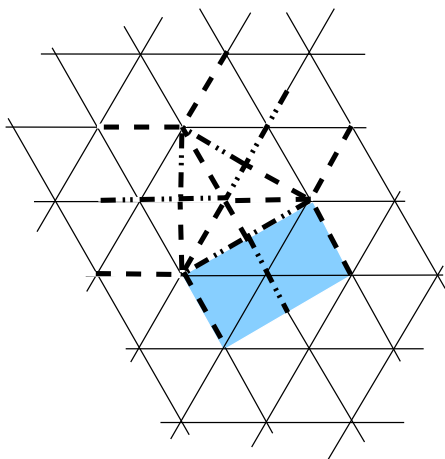
b) let the paper at the borders go out

12. clear the central hexagon;
the model becomes 3-D

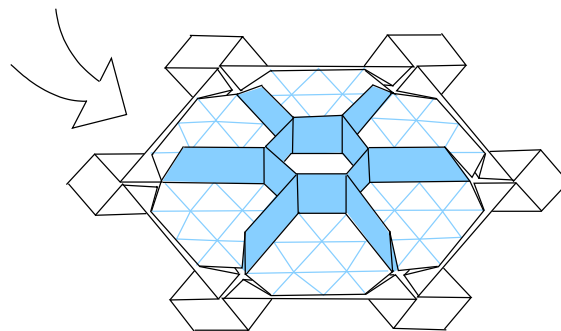


13. 3-D view. the darker paper is
vertical with respect to the base

14. bring the tip
inside; to do it you should
partly reopen the model;
repeat 5 more times

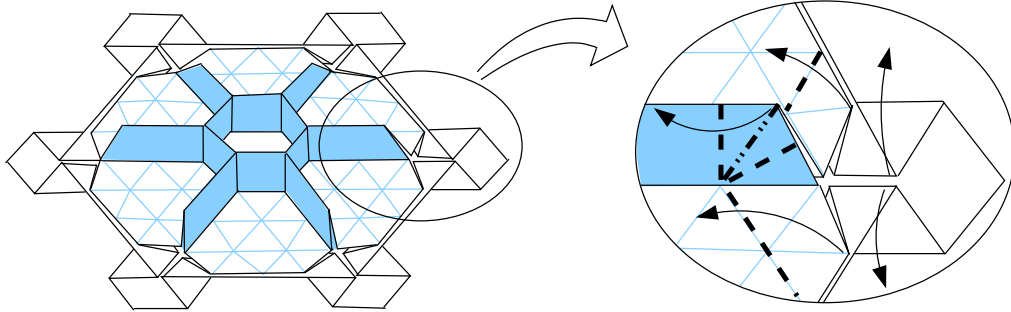


15. crease pattern of step 14 if
reopened; the dark rectangle
highlights one of the "bridges"
of step 3

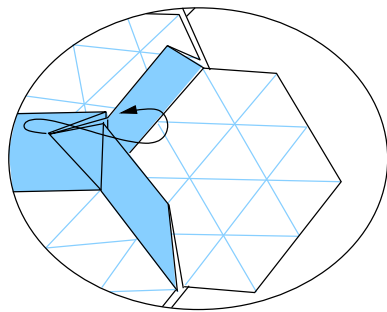


16. 3-D view: the innermost
hexagon, as well as six half
"bridges", have been completed

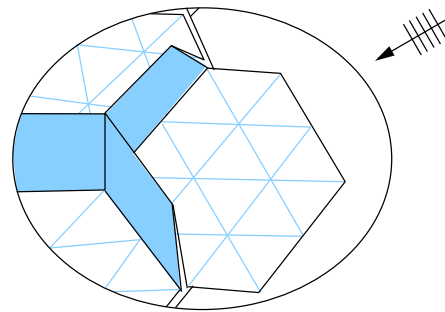




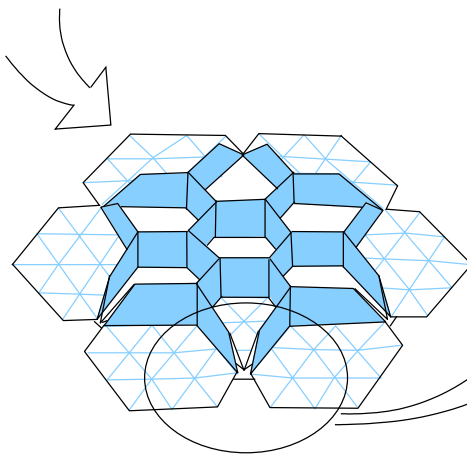
17. and now... the external hexagons: raise the two flaps



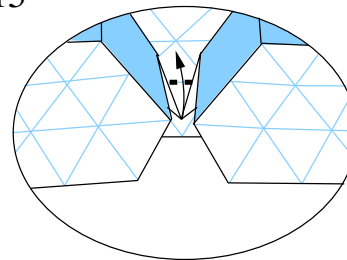
18. vertical sides are darker; bring the tip inside like already done at steps 14–15



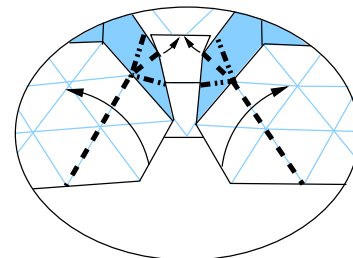
19. ... this way; repeat 5 more times steps 17–18



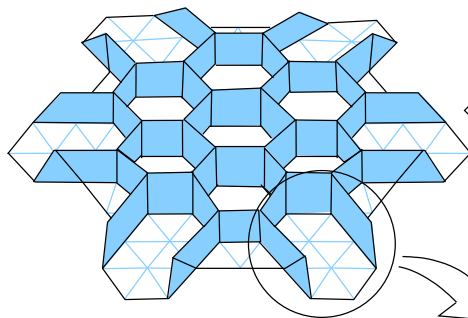
20. the first 6 "bridges" are done



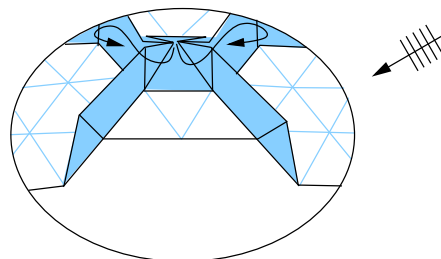
21. raise the internal tip



22. raise the two flaps

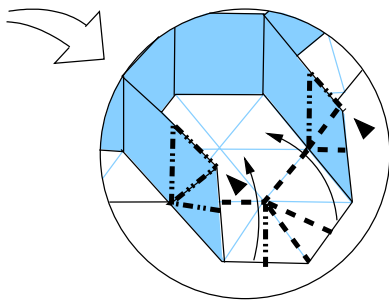


24. 6 more "bridges" are done

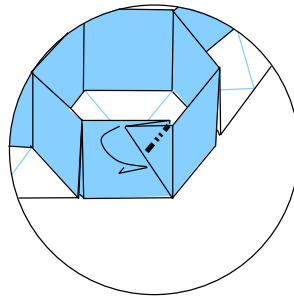


23. insert the two tips; repeat 5 more times steps 21–23

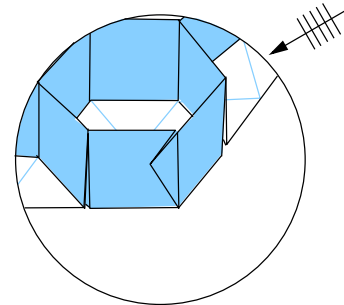




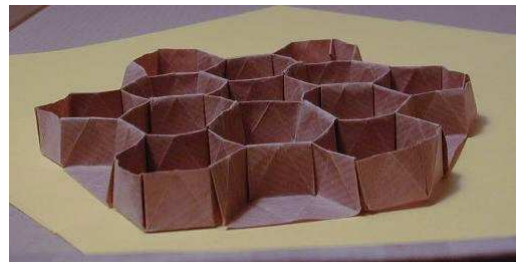
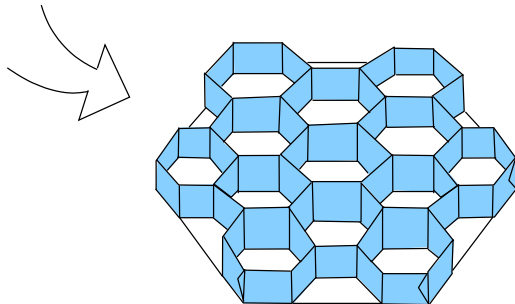
25. raise the paper;
two inside reverse
folds at the sides



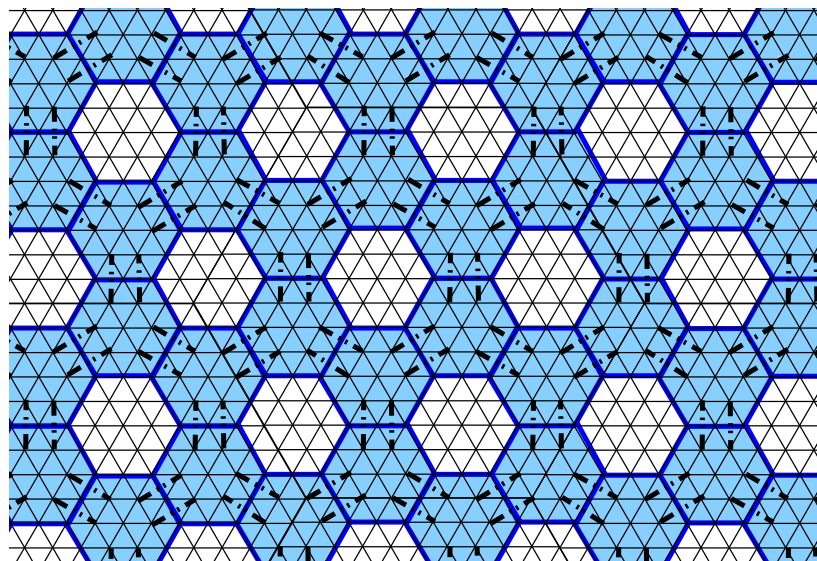
26. mountain fold
to lock the flap



27. repeat 5 more
times steps 25–26



28. honeycomb completed



the tassellation can be generalized in this way

