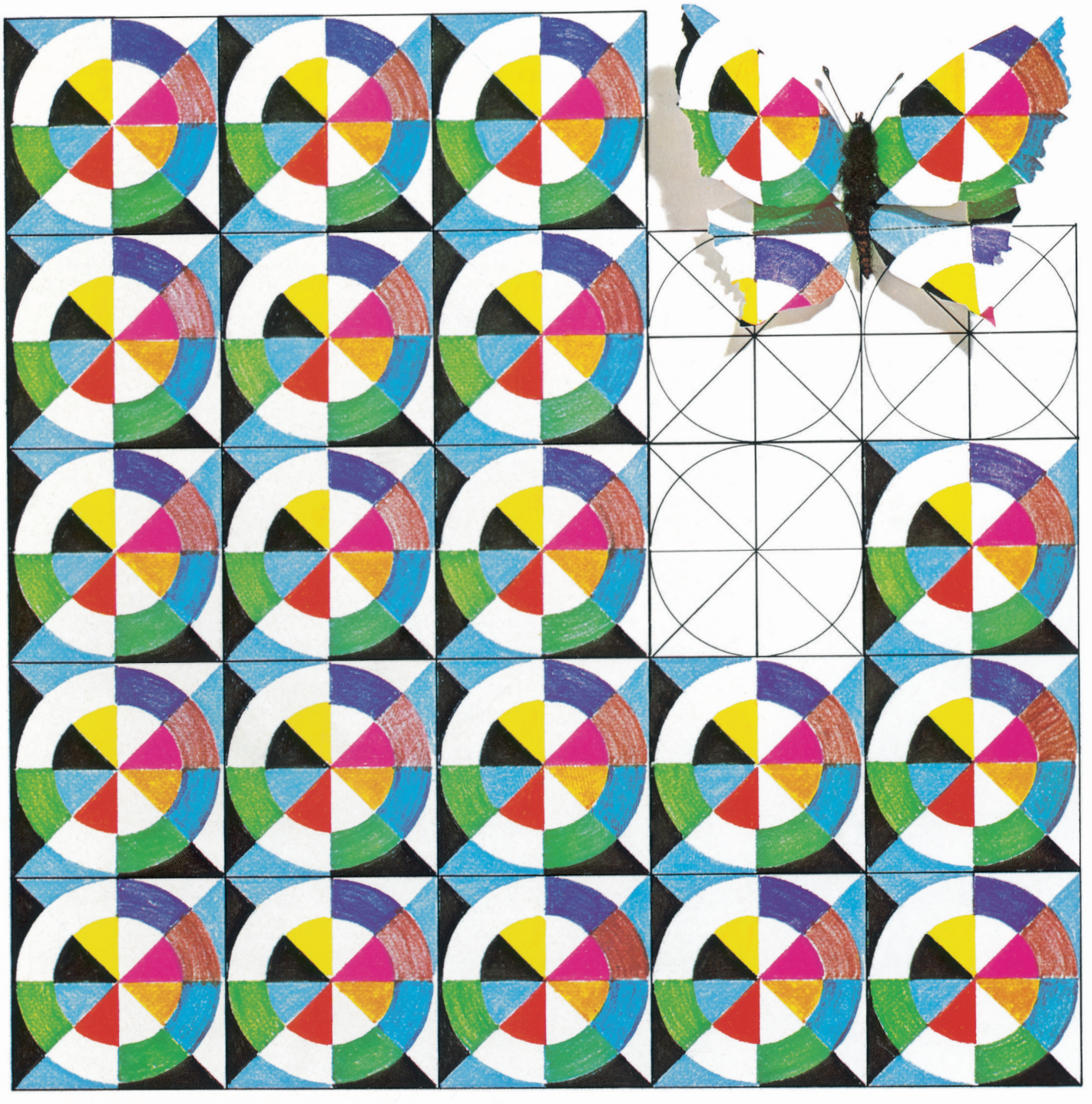
polysymetrics

the art of making geometric patterns



June Oliver

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polysymmetrics

Creating beautiful patterns even if they look complicated is not difficult if you know the secret.

June Oliver shows how patterns are built from 'titles' which can be squares, triangles or hexagons and how they fit together to make the finished pattern.

There are also twelve full pages of patterns she has created herself which are ready to colour.

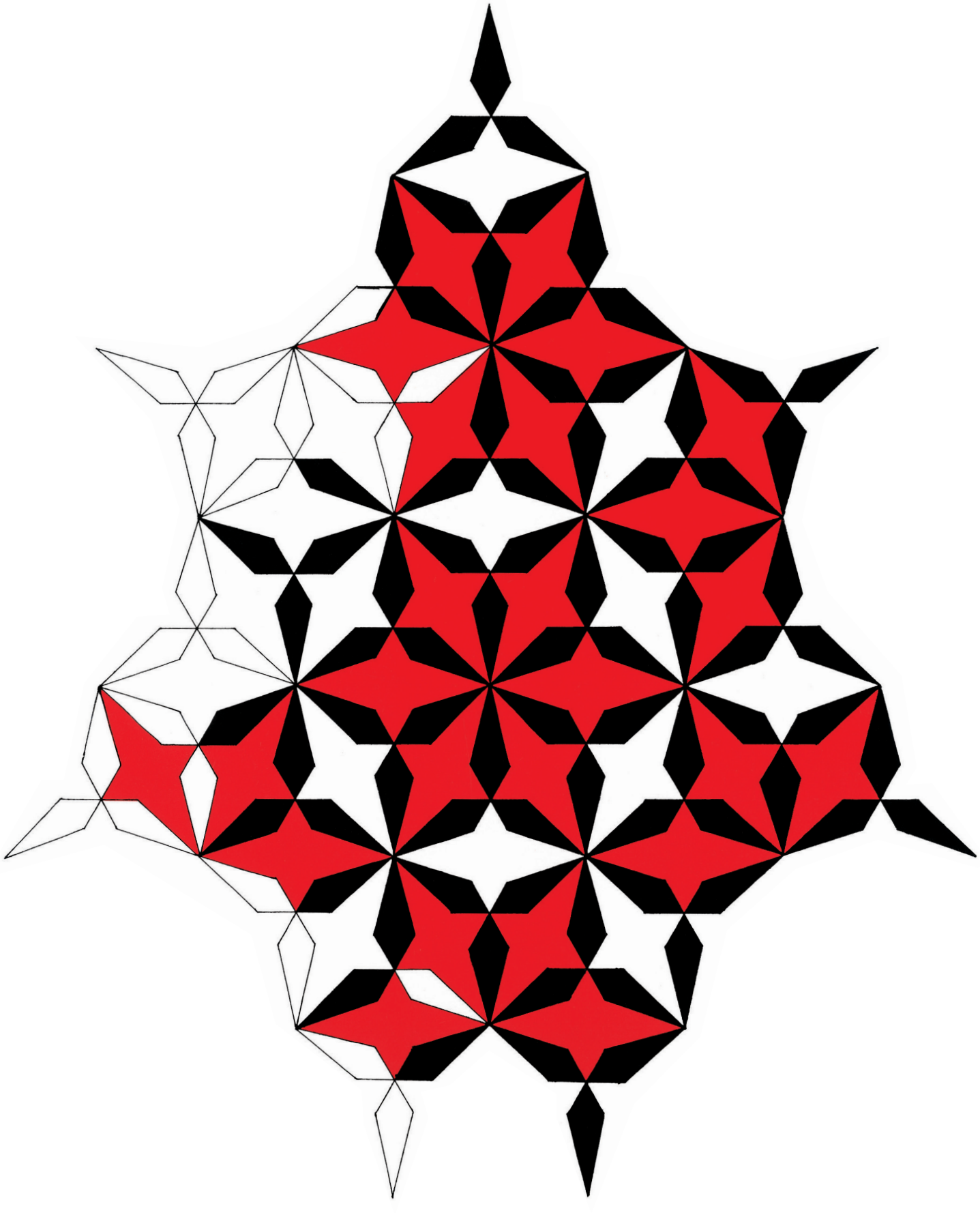
In all, an unusual and creative book which will provide hours of enjoyment.

June Oliver

polysymetrics



how to create beautiful patterns of your own

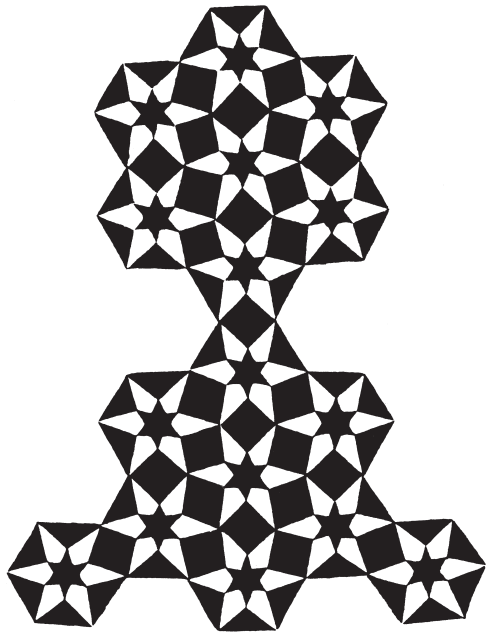


POLYSYMETRICS

Certain shapes—in particular squares, triangles and hexagons fit together to cover all the area of a sheet of paper without leaving any spaces. These are known as 'tessellations'. Each individual shape is known as a 'tile'.

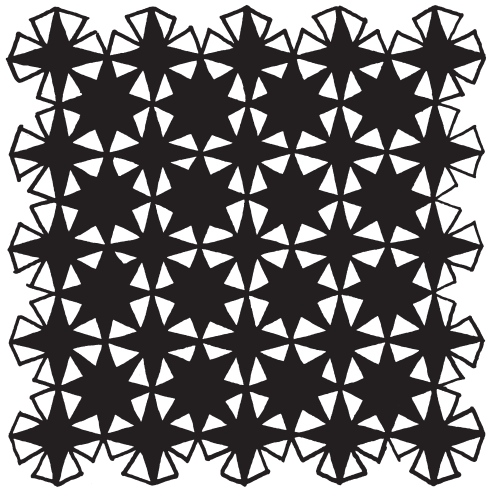
Beautiful geometric patterns can be built up with tiles, in fact this is the best way to make them. Certain types of tiles lead to more attractive patterns and these are usually the ones which have symmetry.

Perhaps you have already realised this from the title. POLY means 'many' and SYMETRICS suggests symmetry. Thus the most attractive geometric patterns are those which show many symmetries.



June Oliver

is an American mathematics teacher with a special interest in the mathematics of design. She has worked in Paris and Scotland as well as in the U.S.A. She has also taught in Iran, where her interest in design was much stimulated by the patterns of Islam.



Patterns on plain paper

Most cartridge papers used for art are transparent enough to trace through the tiles. Networks of squares, triangles and hexagons are given which are suitable for tracing, so you can make a pattern as large as you wish.

Contents

12 patterns to colour created by June Oliver together with the tiles from which they came.

8 polysymetric tiles you can trace or copy to create your own patterns.

8 tiles with their lines of symmetry drawn in.

19 network design sheets for squares, hexagons and triangles.

Suggestions, ideas and hints on how to create your own original polysymetric patterns.

If you have enjoyed this book then there may be other Tarquin books which would interest you, including the 'Altair Design Grids'. Tarquin books are available from Bookshops, Toyshops, Art/Craft Shops and in case of difficulty, directly by post from the publishers.

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