



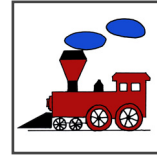
1 „Two heads“ – Water colour
Source: Maruschka Kuhn



9 "Mona Lisa"



2 “Cardinal” – Pantomime in Avignon in front of the "Palais des Papes"
Source: Jürgen Becker



10 “Locomotive” – Draft to colour anamorphosis
Source: Jürgen Becker



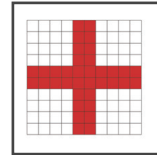
3 “Star” – Painting used for training of the perspective
Source: Francois Niceron, 1638. La perspective curieuse. Paris



11 “Witch”- Draft to colour anamorphosis
Source: www.Bilderkiste.de



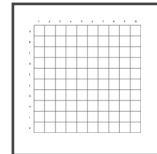
4 “Ball throwing”
Source: Spear’s Games Archive, Ware, England



12 “Red cross”
Source: Jürgen Becker



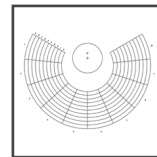
5 “Tumbler”
Source: Spear’s Games Archive, Ware, England



13 “Squared pattern” – Master to create own anamorphosis



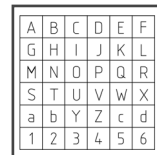
6 “Old woman with stick and rosary”
Source: Toy museum Nuremberg



14 “Anamorphosis pattern” – Master to create own anamorphosis.



7 “Puss in boots”
Source: Toy museum Nuremberg



15 "Alphabet"



8 “Ten hearts”
Source: Toy museum Nuremberg



Not suitable for children under 3 as small components could be swallowed.

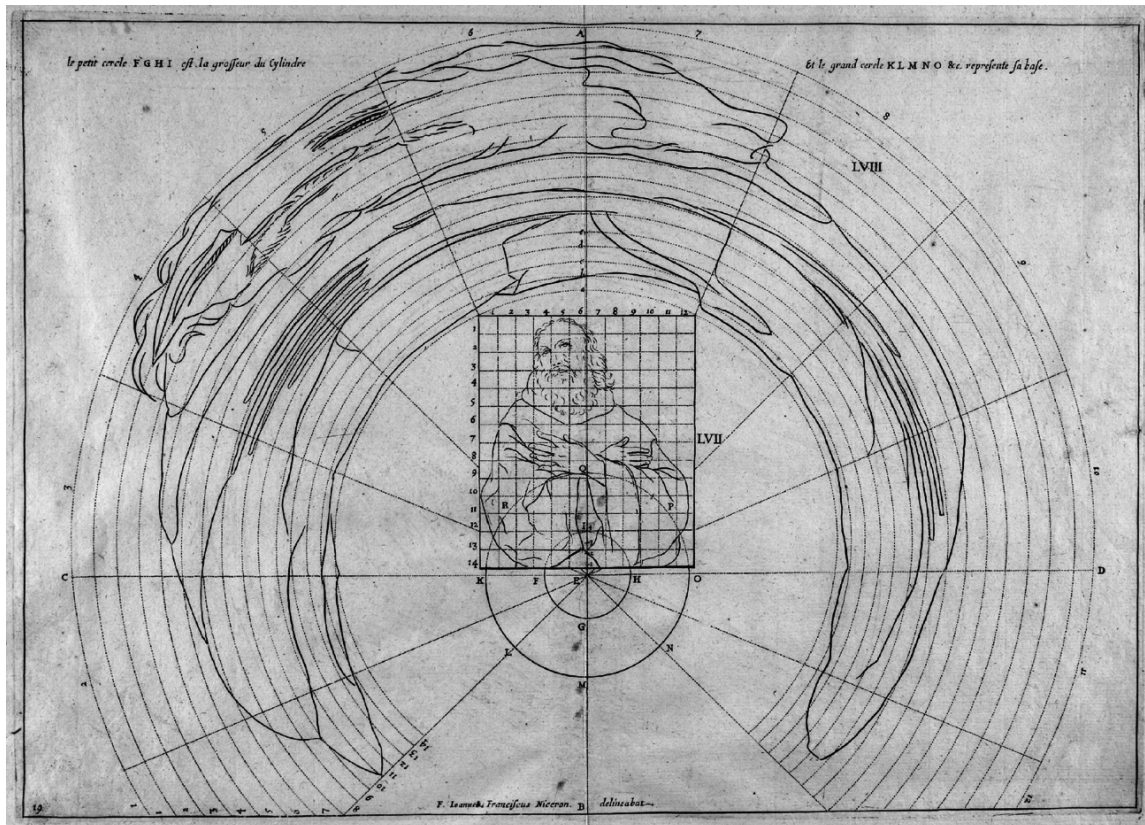
webec - physical toys
www.webec.de
Layout of cover:
Daniela Schmalfeld
Software: Dipl. Inf. Max Schneider, Uni. Erlangen-Nürnberg

The Magic Mirror– cylindrical mirror anamorphosis for amazement and do-it-yourself

Anamorphic images are images of objects which have been distorted so that they are only recognizable if viewed from some particular direction or through reflection in a curved mirror. Artists have been fascinated with these images since the 16th century. During the 17th and 18th centuries the art of anamorphosis was very popular and evolved both theoretically and practically, especially in France and Italy. It is interesting to note that most of the leading investigators were members of orders within the Roman Catholic church. The first comprehensive textbook describing the techniques of anamorphosis was published 1638 in Paris by friar Jean Francois Niceron: "La perspective curieuse, ou magie artificielle des effets merveilleux" (Curious perspective, or artificial magic of marvelous effects).

In our set we use cylindrical mirror anamorphotic images which are best seen under a viewing angle of 45 degrees. But change your viewing point and you will be astonished what you will discover.

In all these constructions, one starts by making the anamorphic transformation of an empty square grid, according to certain choices about the position of the viewpoint, the sizes and angles of the mirrors, etc. Then, the square grid is put on top of the original picture, and the contents of each small grid element are copied across to the corresponding element of the distorted grid.



Nicéron, Jean François, 1638: La perspective curieuse ou magie artificielle des effets merveilleux; de l'optique, par la vision directe, de la catoptrique, par la reflexion des miroirs plats, cylindriques & coniques, de la dioptrique, par la refraction des cristaux ...

The Magic Mirror – cylindrical mirror anamorphosis for amazement and do-it-yourself

What can you do with an anamorphosis?

Anamorphosis bring joy to children and adults. You can look at them and even try to create one yourself.

Enjoy the cover-up of the motive and the decryption due to the cylindrical mirror. For this purpose, place the mirror on the circle of one of the masters. Then you look through the mirror and change the position of your eyes (the so-called eye point) and the position of the mirror until an unbiased picture appears. Master 1 is best suited for testing this. The boundaries on the left and the right of the picture should be parallel to each other. Strictly speaking, the anamorphosis is only valid for exactly one eye point and one perspective and should be looked at with only one eye. However, for most of the anamorphosis this is not very problematic.

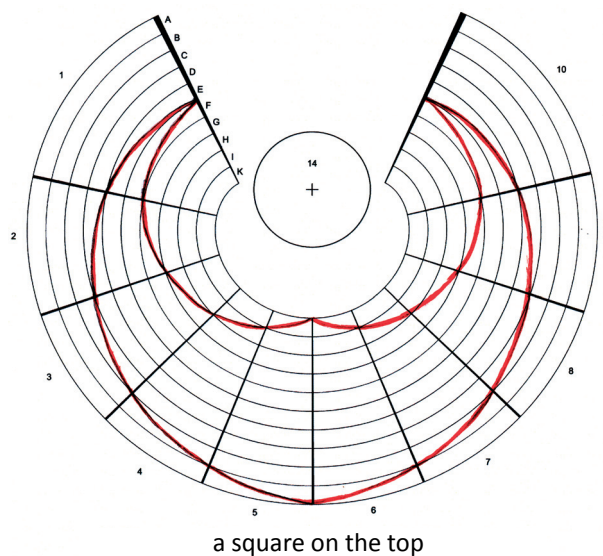
Why do not place the cylindrical mirror on your desk, on your dining table, in the waiting room or anywhere else, where you can easily look at it. Change the motive and choose for example each week a different anamorphosis.

Did your conversation during an invitation come to a halt? Then show the anamorphosis to your guests and let them figure out, what this thing could be. This will easily cheer up the situation.

Sheets 10 and 11 serve as masters for younger and older children and of course for all those who are young in spirit to colour their own anamorphosis. Copy these masters beforehand and let them get coloured.

Whoever wants to create his own anamorphosis, should start designing with simple geometric forms and writings. A good example to start with is anamorphosis 12. Having tried these forms, you can continue with more complex forms. You can for example draw a square standing on his apex on a copy of master 13. Then you transfer one cell after another on the biased pattern of master 14, which you have also copied beforehand. Be careful! The taller a figure appears on the master, the closer it has to be put to the mirror in the anamorphosis. Try out a diagonal in the squared pattern and check out your result in the mirror. It takes patience and practice!

For younger children, simple writings such as their own names are better suited. Master 15, which shows the alphabet as an anamorphosis can be used as a helpful assistance. Place the mirror on this anamorphosis. You will be able to see the alphabet and you can transfer single characters such as your name to a copy of master 14.



This set was created in cooperation with the workshop for handicapped in Nuremberg and TIP Workshops Ebersberg. It has been produced exclusively in Germany.