

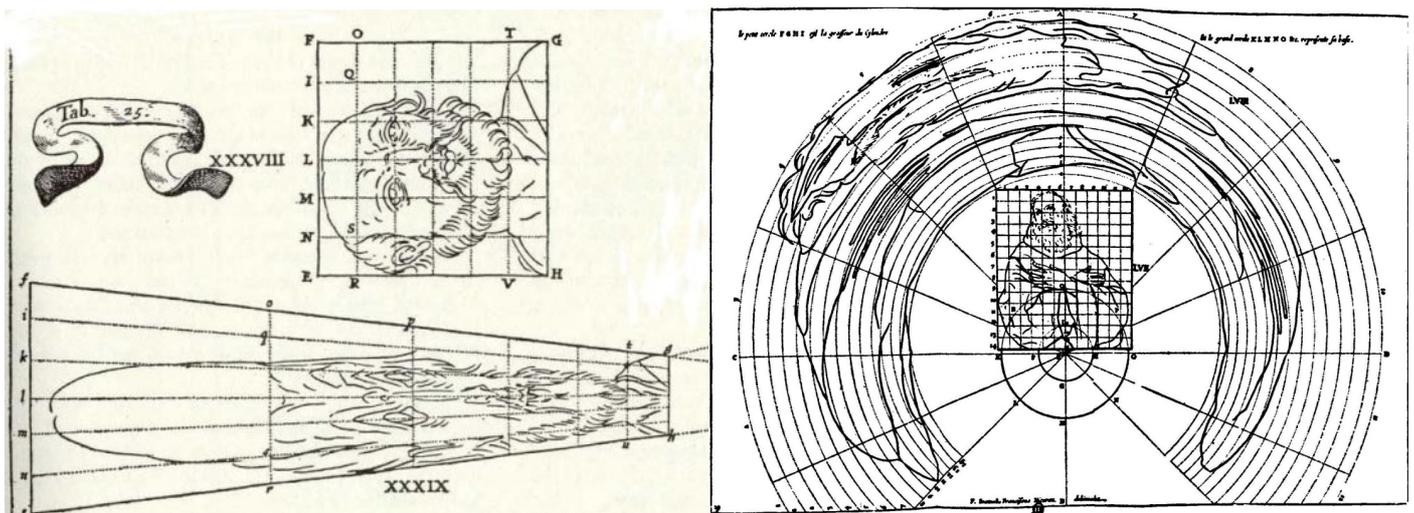
THE 17TH AND 18TH CENTURIES

During this period, the art of anamorphosis evolved both theoretically and practically, especially in France and Italy. It is interesting to note that most of the leading investigators were Jesuits, that is, priests of an order within the Roman Catholic church that has had a tradition for many centuries of scientific and mathematical scholarship. One anamorphosis showing a saint has been described thus: “Through God’s natural laws, man is able to create visions. With his normal earthly powers of observation, he can detect nothing but chaos; but from a point determined by natural law, the vision of a saint emerges” (Leeman, *Hidden Images*).

The geometrical rules for anamorphosis became better understood, making techniques more precise and efficient, and making it easier to construct large anamorphic designs for the walls and ceilings of buildings.

New types of anamorphosis were developed. Perspective ones where the picture is no longer a flat plane, but a more complex surface such as a cone or pyramid (as in Du Breuil’s “Cabinet” in Panel 1). Also, anamorphoses using reflections from curved mirrors shaped into cylinders, cones and pyramids (an idea that originated in China).

The first textbooks describing the techniques of anamorphosis were published in the 1600s. Jean-Francoise Nicéron’s book *Thaumaturgus Opticus* (or, “Performer of optical miracles”) which appeared in 1646 was the most important of these; here are his diagrams for the construction of perspective and cylindrical mirror anamorphoses:



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.