How does this connect with anamorphosis? Let's look again at Dürer's artist drawing a woman. I've added just a few of the light rays that make up the cone of vision. Looked at this way, we can see that the picture "window" is a plane slicing through the cone of vision.

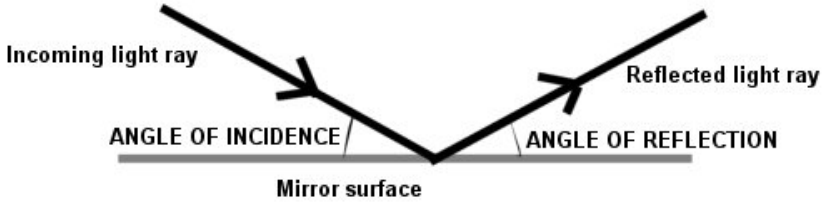
Now the fundamental fact is that *any* slicing plane will produce the same impression for the eye as the original object, and, as Leonardo discovered, this slice does not have to be perpendicular to the "central line" between the artist's viewpoint and the window.

But there is more: the slice does not have to be a plane. Indeed, *any* shape can produce the same impression. In this exhibition you will find examples of slices in the form of cones and pyramids, which are fairly easy shapes to do the mathematical calculations for.

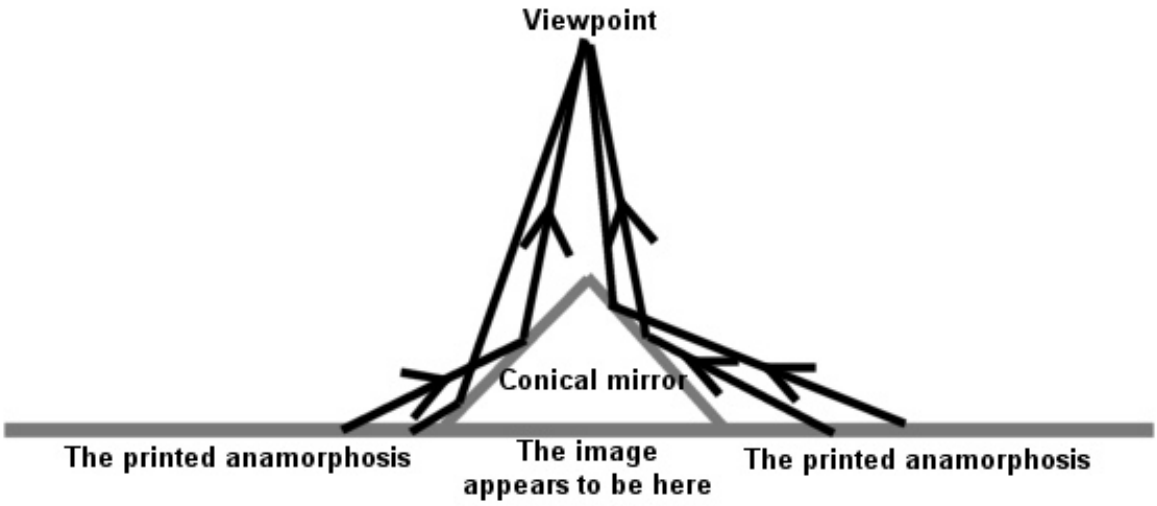
ANAMORPHOSIS USING MIRRORS

This works according to the same principles as for perspective anamorphoses. But there is an additional factor, the *bending* of light rays by the mirror, which has the effect of making the anamorphosis more scrambled and more difficult to decipher.

There is a simple rule for the bending: when a light ray is reflected by a mirror surface, the *angle of incidence* is equal to the *angle of reflection*:



So, let's look at how the light rays travel in an anamorphosis that uses a conical mirror; here is the view from the side:



Conical anamorphoses look especially scrambled, because the conical mirror has the effect of "inverting" the original image — the centre of the original becomes the outside edge of the anamorphosis, and vice versa.