

# Impossible Triangle

## More Details

In 1934, Swedish graphic artist Oscar Reutersvärd drew his Opus 1, consisting of 9 cubes which appeared strangely three-dimensional and caused confusion when looked at. He also drew our impossible triangle.

### The impossible Penrose

In 1954, Dutch graphic artist Maurits Cornelis Escher showed graphics of impossible figures at an exhibition during a mathematics congress. To this day, M.C. Escher is the most famous representative of this graphic art. He created, for example, the picture of the impossible waterfall. Inspired by Escher, the English mathematician Roger Penrose dealt intensively with impossible figures. He reinvented the impossible triangle, because he was not familiar with Reutersvärd's picture. His merit lies mainly in the interpretation of impossible figures and their effect on our visual system:

"Each individual part (of a figure) is acceptable as a representation of an object normally situated in three-dimensional space and yet, owing to false connexions of the parts, acceptance of the whole figure on this basis leads to the illusory effect of an impossible structure."

### And once again our brain is to blame

For the explanation of impossible figures, the insight of Gestalt psychology plays an important role that seeing is not a passive process: The brain always interprets what it sees immediately. The

whole of perception is different than the sum of its parts and so we cannot escape the illusion, even if it represents the impossible.

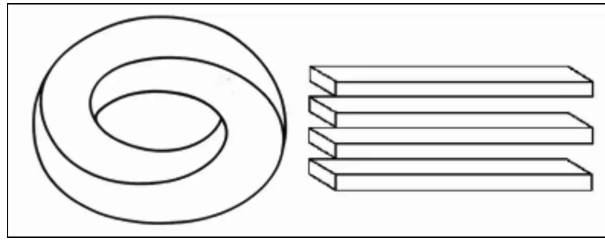


Fig. 1: More examples of impossible figures.