

Timeline on the Golden Mean

The Bible and Phi- The Golden Mean is found to date as far back as the times of the Old Testament as well as the New Testament. The Ark of the Covenant is a golden rectangle as well as is Noah's ark. The number 666 is also related to Phi. This relation is found by starting at Revelation 13:18. If you read this verse you will find that it is speaking of the Anti-Christ and that his number that identifies him is 666. If you take the sin of 666 degrees, you get .80901699, which is one half of negative Phi. Or perhaps you could call it the "Anti-Phi".

The Rhind Papyrus- The Rhind Papyrus, dating back to 1650 BC, tells about methods and problems used by the Egyptians. They used phi in the design of their pyramids.

The Greeks- The Greeks also seem to have used Phi in the building of the Parthenon, which took place between 477-438 B.C.

Phidias- Phidias was a Greek sculptor as well as a mathematician who applied Phi to the design of the sculpture found in the Parthenon. He began to do this from 500-432 B.C.

Plato- Between 428-347 B.C. Plato, in his "Timaeus," said the golden section, or the golden mean, is the most binding of all mathematical relationships. He also said that it was the key to the physics of the cosmos.

Euclid- In Euclid's most famous work the "Elements", between 365-300 B.C., he made reference to dividing a line at the 0.6180399 point as dividing a line in the extreme and mean ratio. This statement gave rise to the words mean and golden mean. Euclid also connected this number to the construction of a pentagram. Euclid gave the first clear definition to Phi.

Leonardo Fibonacci- Around 1200 A.D. Fibonacci discovered the numerical series which is now named after him. This series is known as the Fibonacci sequence. The Fibonacci sequence holds a great connection with the Golden Mean.

Da Vinci- Da Vinci was probably the first to call the Golden Mean the divine proportion. Da Vinci wrote a book entitled "De Divina Proportione" which means divine proportion. This book was written around 1509.

Johannes Kepler- Living from 1571-1630, Kepler stated that "the division of a line into extreme and mean ratio is a precious jewel."

Robert Simson- In 1753 Robert proved that the golden ratio satisfies the recurrence relation

$$\phi^n = \phi^{n-1} + \phi^{n-2}.$$

Martin Ohm- Martin Ohm was a Greek Mathematician who is believed, by many, to have first used the words The Golden Ratio. He used this in 1835 in his book entitled Die Reine Elementar-Mathematik (The pure elementary mathematics).

Mark Barr- In the 1900's Barr first designated the Golden Mean by the Greek letter phi.

Current findings with Phi- Phi continues to pop up in current discoveries. In the 1970's phi was found in Roger Penrose's discovery of "Penrose Tiles." It also made its appearance in the 1980's in quasi-crystals.

References:

<http://mathworld.wolfram.com/GoldenRatio.html>

<http://goldennumber.net/index.html>

<http://www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci/phi.html>