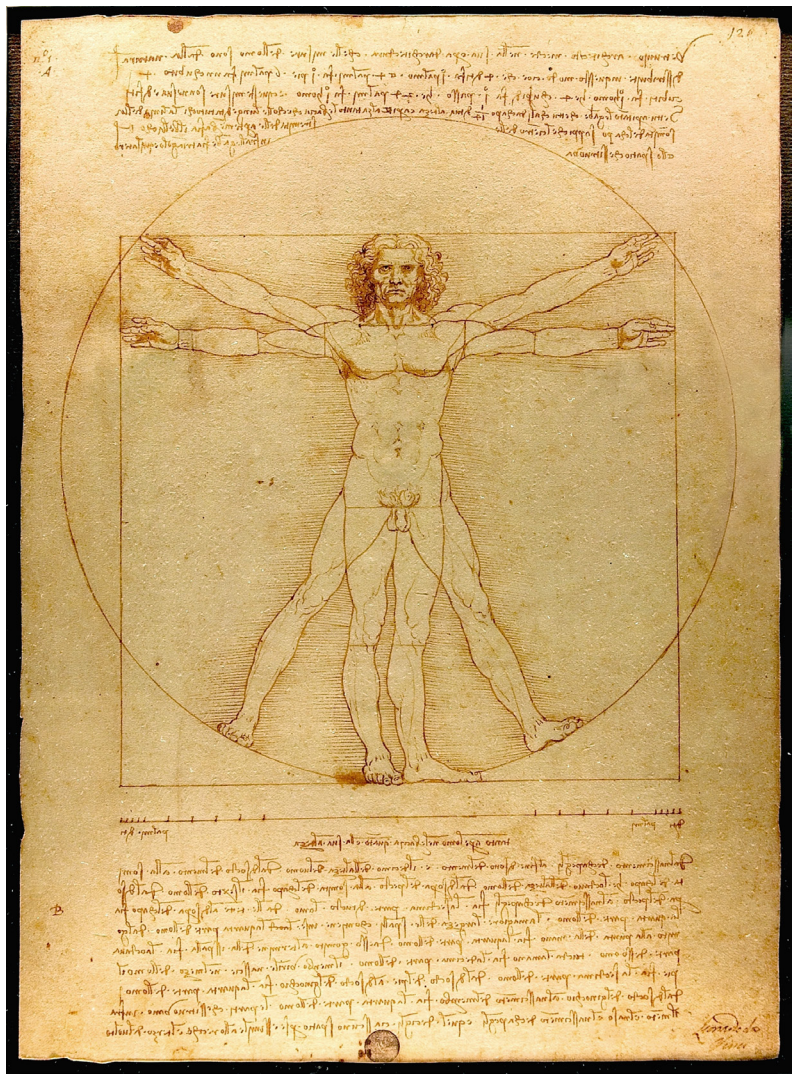
Vitruvian Man and Divine Proportion



Leonardo da Vinci's *Vitruvian Man* was originally an illustration for a book on the works of the Roman architect Marcus Vitruvius Pollio (first century BCE), who designed many of the most beautiful temples in Rome. In his ten-volume work, *De Architectura*, Vitruvius established the guidelines for classic Roman architecture. Describing how a temple should be planned and built, Vitruvius wrote: "The planning of temples depends upon symmetry: and the method of this architects must diligently apprehend. It arises from proportion (which in Greek is called *analogia*). Proportion consists of taking a fixed module, in each case, both for the parts of a building and for the whole, by which the method of symmetry is put to practice. For without symmetry and proportion no temple can have a regular plan; that is, it must have an exact proportion worked out after the fashion of the members of a finely shaped human body."

In this passage is found the key to the composition of ancient architecture, which was firmly revived in the Renaissance. Echoing the ancient Greeks, the human body was seen as symbolic of all Nature, the microcosm reflecting the macrocosm.

Thus Nature, in the form of the human body, was to be the architect's (or the artist's) guide. In this form of architecture (or art, engineering, or planning, etc.) the science of geometry is employed by means of small whole numbers to build the composition. In this manner, Vitruvius delineated the proportion of a male human body that Leonardo so faithfully reproduced in his Vitruvian Man.

Obviously this drawing contains many layers of geometry and symbolism. The idea of reason governing form was a fundamental theme of the Renaissance and is apparent in the most evocative architecture and art throughout the period. As in Michael Maier's twenty first emblem and epigram from *Atalanta Fugiens*, the circle, square, and an invisible triangle – all three fundamental elements of composition – figure prominently in *Vitruvian Man*. While the circle and square are readily apparent, the triangle is concealed in this drawing, although it outlines important parts. To find the triangle, use your imagination to draw a circle within the square. Then draw an upwardpointing triangle within the imaginary circle – the top of the triangle touching the square at the top of the man's head – the crown chakra. Now, Leonardo's intriguing sketch takes on even more mystical and Rosicrucian elements, and clearly speaks to us down through the centuries of the laws of Divine Proportion.

Text accompanying da Vinci's *Vitruvian Man*

Following is the complete translation of the text accompanying Leonardo da Vinci's *Vitruvian Man*. It is actually a translation of Vitruvius, as Leonardo's drawing was originally an illustration for a book on the works of Vitruvius.

"Vitruvius, the architect, says in his work on architecture that the measurements of the human body are distributed by Nature as follows: that is that 4 fingers make 1 palm, and 4 palms make 1 foot, 6 palms make 1 cubit; 4 cubits make a man's height. And 4 cubits make one pace and 24 palms make a man; and these measures he used in his buildings. If you open your legs so much as to decrease your height 1-1/4 and spread and raise your arm still your middle fingers touch the level of the top of your head, you must know that the center of the outspread limbs will be in the navel and the space between the legs will be an equilateral triangle.

"The length of a man's outspread arms is equal to his height. From the roots of the hair to the botrom of the chin is the tenth of a man's height; from the bottom of the chin to the top of his head is one eighth of his height; from the top of the breast to the top of his head will be one sixth of a man. From the top of the breast to the roots of the hair will be the seventh part of the whole man. From the nipples to the top of the head will be the fourth part of a man. The greatest width of the shoulders contains in itself the fourth part of the man. From the elbow to the tip of the hand will be the fifth part of a man; and from the elbow to the angle of the armpit will be the eighth part of the man. The whole hand will be the tenth part of the man; the beginning of the genitals marks the middle of the man. The foot is the seventh part of the man. From the sole of the foot to below the knee will be the fourth part of the man. From below the knee to the beginning of the genitals will be the fourth part of the man. The distance from the bottom of the chin to the nose and from the roots of the hair to the eyebrows is, in each case the same, and like the ear, a third of the face."

Translation quoted from *The Notebooks of Leonardo da Vinci Vol. 1* (Dover, ISBN 0-486-22572-0), pp. 182-183.