Artists of the Renaissance as Mathematicians

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Abstract

Artists of the Renaissance were often very much interested in mathematics, some of them like the painter Piero della Francesca (1410?-1492) even wrote mathematical textbooks. Leonardo da Vinci (1452-1519) made the illustrations for the book "Divina proportione" of Luca Pacioli (ca 1445-ca 1517), one of the best known mathematicians of the end of the 15th century whose books had been very influential and popular. For a long time it was less known that Luca Pacioli when writing his books had actually copied some major parts of the works "Trattato d’abaco" and "Libellus de quinque corporibus regularibus" of Piero della Francesca. This will be demonstrated by some examples. We shall describe some of the mathematical work of Piero della Francesca and discuss the reasons for the mathematical interests of the artists like della Francesca, Leonardo da Vinci, Jacopo de Barbari and Albrecht Durer.