Ceva, Tomasso | Encyclopedia.com

(*b*. Milan, Italy, 20 December 1648; *d*. Milan, 3 February 1737),

mathematics.

Tomasso Ceva came from a rich and famous Italian family; he was the brother of Giovanni Ceva. In 1663 he entered the Society of Jesus and at an early age became professor of mathematics at Brera College in Milan.

Ceva's first scientific work, *De natura gravium* (1669), deals with physical subjects—such as gravity, the attraction of masses for each other, free fall, and the pendulum—in a philosophical and even theological way. (For example, several pages are devoted to the concept of the *spatium imaginarum*.) Ceva wrote the treatise in two months of steady work; in his "Conclusion," he asks his readers for emendations.

Ceva's only truly mathematical work is the *Opuscula mathematica* (1699; parts were published separately in the same year as *De ratione aequilibri, De sectione geometrico-hormonia et arithmetica*, and *De cycloide; de lineis phantasticis; de flexibilibus)*. The book is discussed in *Acta eruditorum* (1707); its particular importance is that it is the summation of all of Ceva's mathematical work. It is concerned with gravity, arithmetic, geometric-harmonic means, the cycloid, division of angles, and higher-order conic sections and curves. It also contains a report on an instrument designed to divide a right angle into a specified number of equal parts; this same instrument was described in 1704 by L'Hospital—who makes no mention, however, of Ceva.

Higher-order curves are also the primary subject of an extensive correspondence between Ceva and Guido Grandi. Ceva proposed the problem; Grandi reported that such curves had well-defined properties. Grandi replied to Ceva's questions not only in letters, but also in a work on the logarithmic curve published in 1701 with an appended letter by Ceva.

Ceva's contribution to mathematics was modest; he is perhaps better remembered as a poet. Although some of his verse is mathematical and philosophical, he is best known for his religious poem *Jesus Puer*, which went through many printings and was translated into several languages. The German poet Lessing called Ceva a great mathematician as well as a great poet, while Schubart, writing in 1781, considered him the greatest Jesuit poet-genius.

BIBLIOGRAPHY

Ceva's mathematical and scientific works are *De natura gravium libri duo Thomae Cevae* (Milan, 1669); *Instrumentum pro sectione cujuscunque anguli rectilinei in partes quotcunque aequales* (Milan, 1695; repr. in *Acta eruditorum* [16951, p. 290); and *Opuscula mathematica Thomae Cevae e Soc. Jesu* (Milan, 1699), discussed in *Acta eruditorum* (1707), pp. 149–153.

Other works are *Jesus Puer, Poema* (Milan, 1690, 1699, 1704, 1718, 1732, 1733), translated into German (Augsburg, 1844), French, and Italian; *Sylvae. Carmina Thomae Cevae* (Milan, 1699, 1704, 1733); and *Carmina videlicet philosophia novo-antiqua* (Milan, 1704; Venice, 1732).

Ceva's correspondence with Grandi is in the Braidense Library (eight letters) and the Domus Galilaeana, Pisa (485 letters).

An important secondary source is Guido Grandi, *Geometrica demonstratio theorematum Hugenianorum circa logisticam, seu logarithmicam lineam, addita epistola geometrica ad P. Thomam Cevam* (Florence, 1701).

Herbert Oettel