

Schickard, Wilhelm | Encyclopedia.com

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(*b.* Herrenberg, Germany, 22 April 1592; *d.* Tübingen, Germany, 23 October 1635)

astronomy, mathematics, natural philosophy.

Schickard, a brilliant student, received the B.A. in 1609 and the M.A. in 1611 from the University of Tübingen, where he continued with the study of theology and oriental languages until 1613. He then served as deacon or pastor in several nearby towns. In 1617 he befriended Kepler, who reawakened in him an interest in mathematics and astronomy and with whom he maintained an active correspondence for several years. In 1619 he was named professor of Hebrew at the University of Tübingen. Upon the death in 1631 of his former teacher, Michael Müstlin, Schickard succeeded to the chair of astronomy but continued to lecture on Hebrew.

Schickard was a polymath who knew several Near Eastern languages, some of which he taught himself. He was a skilled mechanic, cartographer, and engraver in wood and copperplate; and he wrote treatises on Semitic studies, mathematics, astronomy, optics, meteorology, and cartography. He invented and built a working model of the first Kepler the development of a mechanical means of calculating ephemerides. Schickard's works on astronomy include a lunar ephemeris, observations of the comets of 1618, and descriptions of unusual solar phenomena (meteors and the transit of Mercury in 1631). He also constructed and described a teaching device consisting of a hollow sphere in three segments with the heavens represented on the inside.

Schickard was an early supporter of Kepler's theories; his treatise on the 1631 transit of Mercury called attention to some of Kepler's ideas and works and to the superiority of the *Rudolphine Tables*, Schickard also mentioned Kepler's first two laws of planetary motion; the second law, however, was given only in the inverse-distance, rather than in the correct, equal-areas formulation.

BIBLIOGRAPHY

I. Original Works. Schickard's unpublished MSS are in the österreichische Nationalbibliothek of Vienna and in the Württembergische Landesbibliothek in Stuttgart. His chief works (all published in Tübingen) are *Astroscopium pro facillima stellarum cognitione noviter excogitatum* (1623); *Ignis versicolor e coelo sereno delapsus et Tubingae spectatus* (1623); *Weiterer Bericht von der Fliegenden Liecht-Kugel* (1624); *Anemographia, seu discursus philosophicus de ventis* (1631); *Contemplatio physica de origine animae rationalis* (1631); and *Pars responsi ad epistolas P. Gassendi ... de mercurio sub sole viso et alijs novitatibus urancis* (1632). Useful collections of his correspondence are in *Epistolae W. Schickarti et M. Berneggeri mutuae* (Strasbourg, 1673); *Johannes Kepler Gesammelte Werke*, **17–18**, Max Caspar, ed. (Munich, 1955, 1959); and the appendix to Schnurrer's biography (see below), pp. 249–274.

II. Secondary Literature. The standard biographies remain Johann C. Speidel, in his ed. of Schickard's *Nova et plenior grammatica Hebraica* (Tübingen, 1731) and Christian F. Schnurrer, in *Biographische und litterarische Nachrichten von ehemaligen Lehrern der hebräischen Lteratur in Tübingen* (Ulm, 1792), 160–225. Recent accounts of Schickard's invention of the calculating machine are Franz Hammer, "Nicht Pascal, sondern der Tübinger Professor Withelm Schickard erfand die Rechenmaschine", in *Büromarkt' Bibliothek*, **13** (1958), 1023–1025; and René Taton, "Sur l'invention de la machine arithmétique", in *Revue d'histoire des sciences et de leurs applications*, **16** (1963), 139–160.

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