Biographical Encyclopedia of Astronomers

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Peurbach [Peuerbach, Purbach], Georg von

Born in Peurbach near Linz, (Austria), possibly 30 May 1423

Died in Vienna, (Austria), 8 April 1461

Georg von Peurbach continued a strong tradition in which the University of Vienna was considered to have the best astronomy scholars in Europe during the 15th and early 16th centuries

Peurbach was born sometime after 1421, the date of 30 May 1423 coming from a horoscope published as late as 1550. Peurbach received a bachelor's degree in 1448 and his master's degree five years later, both at the University of Vienna. As a lecturer at the university there, he was one of the leaders in reviving classical Greek and Roman literature in the arts and sciences. After observing an occultation of Jupiter by the Moon in 1451, Peurbach spent the last decade of his life making observing instruments, lecturing on astronomy and the classics, collaborating with men such as Johann Müller (Regiomontanus) on astronomical observation and theory, and serving as imperial astrologer to the king of Hungary. Peurbach died of unknown causes

Peurbach evidently made many astronomical observations during the last 10 years of his life with his famous student Regiomontanus, including taking measurements of lunar eclipses during 1457–1460. The two astronomers carefully noted the location and times, altitudes of the Moon and various stars, and the degree to which the Moon was seen inside the Earth's umbral shadow. Such observational detail was not only highly unusual for medieval observations, but it also helped to set a precedent for 16th-century observers who tried to emulate the work of the Viennese astronomers. Peurbach observed Halley's Comet (IP/Halley) in 1456, using instruments to record the ecliptic positions of the comet's head and tail on two nights and to make some assessment of the comet's distance from parallax measurements That a comet's position would be measured as seriously as a planet's indicated the beginning of moving away from Aristotle's claim that comets were merely atmospheric phenomena; this was also apparently the first attempt to seriously determine a comet's distance from parallax, a procedure elaborated upon by Regiomontanus and widely discussed and refined in the 16th and 17th centuries by others.

Led by Peurbach and Regiomontanus, the Vienna group actively sought to reform astronomy by improving on theory through the beginning of systematic observation of the planets, Sun, Moon, and stars. Peurbach's *Nouae theoricae planetarum* (New theories of the planets), which involved revised theories of the Ptolemaic system (evidently augmented by the ideas of Arabic astronomers), was published posthumously in numerous editions from 1472 to 1596, edited by such notable scholars as Regiomontanus, Peter Apian, Erasmus Reinhold, and Philip Melanchthon. No less than 56 printings of this Latin text appear to have been made up to 1653, with additional printings in other languages. (While still working toward his master's degree, Regiomontanus apparently heard Peurbach's lectures on this text in 1454 at Vienna.)

Peurbach also prepared and issued tables predicting eclipses of the Sun and Moon (a practice continued by Regiomontanus), and Peurbach also seems to have supervised the collecting and copying of astronomical manuscripts, leading evidently to the establishment of the scientific printing press by Regiomontanus to publish astronomical treatises (including Peurbach's *Nouae theoricae planetarum* and the ancient poet Manilius's *Astronomicon*).

At the request of Cardinal Bessarion, Peurbach began in 1460 a translation, with commentary, of Ptolemy's *Almagest*; this was cut short by Peurbach's death, but was continued to completion by Regiomontanus and eventually published under the title *Epitome of the Almagest* in 1496. The *Epitome* was an important reference in the following decades for Nicolaus Copernicus during his preparation of *De Revolutionibus*. Peurbach also influenced Regiomontanus for the development of advanced trigonometric relationships that would be used by astronomers in the century to come

Peurbach's *Theoricae novae planetarum* was published by Regiomontanus from his printing press in Nuremberg. Though many Peurbach manuscripts seem to have circulated (particularly on astronomical theory and practice, including instrumentation), other work by Peurbach was even more delayed in terms of printing; his observations were not being fully published until nearly a century after his death by Johann Schöner.

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