



Two woodcuts, with fine original hand-colour, Northern hemisphere: first state, without monogram (according to Meder); southern hemisphere: second state, with some corrections to the numbers, the rabbit's feet crossed and Orion's belt with three stars (Munich holds one, uncoloured, example of the first, proof, state of the charts).

THE FIRST PRINTED STAR CHARTS

Imagines coeli Septentrionales cum duodecim imaginibus zodiaci [and] Imagines coeli Meridionales.

Author

DURER, Albrecht

Publication date

1515

Publisher

Publication place

Nuremberg,

Physical description

Two woodcuts, with fine original hand-colour, Northern hemisphere: first state, without monogram (according to Meder); southern hemisphere: second state, with some corrections to the numbers, the rabbit's feet crossed and Orion's belt with three stars (Munich holds one, uncoloured, example of the first, proof, state of the charts).

Dimensions

445 by 610mm (17.5 by 24 inches).

Notes

Albrecht Dürer (1471-1528) produced these two celestial maps under the patronage of the Holy Roman Emperor Maximilian I, in cooperation with Johannes Stabius and Conrad Heinfogel. 'Imagines Coeli Meridionales', the southern hemisphere, and 'Imagines Coeli Septentrionales', the northern hemisphere, are the first ever printed scientifically rigorous star charts. They were novel for the sixteenth century, combining accuracy of star-placement with classical constellation figures. "These two celestial planispheres can be seen as a representation of over two thousand years of intellectual thought. The constellation and celestial iconography inherited from Antiquity, Greek geometrical studies, and the Islamic scholarship focusing on spatial accuracy for charting the heavens all culminated in this work, aided by the aesthetic mastery of Dürer" (Wörz, p. 156).

The earliest printed depictions of the constellations were not true maps of the sky. Constellation figures were produced as woodcut diagrams with stars positioned to adorn the figures, but these stars were not positioned to portray the heavens. Only Dürer's planispheres included a coordinate system and attempted to accurately position the stars of the 48 constellations based on the star catalogue contained in Ptolemy's 2nd century *Almagest*.

The map of the southern hemisphere includes some cartouches and coats-of-arms providing information about the collaborators and patrons. In the upper corners is a dedication to Cardinal Mattheus Lang von Wellenberg and his arms. The lower right corner shows Stabius's privilege for publication, granted by Maximilian I. In the lower left are the coats of arms of the three authors and a printed badge noting their names and tasks: 'Johann Stabius ordered (and edited), Conradus Heinfogel positioned the stars, Albertus Durer drew the images'.

Johannes Stabius (after 1460-1522) was professor of mathematics in Vienna. Since 1503, he served as court historian and academic adviser to Maximilian I. In this function he forwarded several imperial commissions to Dürer, for example the famous "Ehrenpforte" (Meder 251). Stabius and Dürer also collaborated on a woodcut world map in 1515.

Conrad Heinfogel (born 1517), astronomer and mathematician from Nuremberg, is well known for his translation of Sacrobosco's *De Sphaera* into German. He was also co-author of the two star charts of 1502/03 (ink drawings on vellum; Nuremberg, Germanisches Nationalmuseum), Dürer's maps are based on. However, for the prints he updated the positions of the stars, reflecting the year 1499 or 1500.

The earliest known western maps of the skies of the northern and southern hemispheres with both stars and constellation figures are datable to c. 1440, bound in a manuscript preserved in Vienna (cod. Vind. 5415). They may have been based on two now-lost charts from 1425 once owned by Regiomontanus. The Vienna maps form the pattern for Heinfogel's manuscript charts and through these for Dürer's woodcuts. His planispheres were then printed several times and disseminated throughout Europe, and they influenced the star maps of subsequent Renaissance cartographers like Petrus Apian (1495-1552) and Johannes Houter (1498-1549).

According to Ptolemaic tradition the twelve signs of the Zodiac are displayed on the northern hemisphere and are to be read counter-clockwise. That is, as seen from space, or as they would appear on a celestial globe. The constellation figures are therefore shown from their back view. "Dürer depicts the constellation figures as moving in a dynamic, three-dimensional space. The representation of Libra especially exemplifies this depiction. Instead of ropes connecting the weights to the trays represented as straight lines, Dürer's figure seems to be floating in weightlessness" (Wörz, p. 174). Dürer decorated the four corners of the northern chart by portraits of four ancient authorities, dressed in their assumed national dress, each holding a celestial globe: Aratus representing the Greek, Ptolemy the Egyptian, Al-Sufi the Islamic, and Marcus Manilius the Roman

tradition of astronomy.

The southern hemisphere is projected by using the same system, but it shows distinctly fewer stars and constellations as the companion piece. Large areas of this map are vacant of constellations because they were not visible from the Mediterranean or Middle East, the area where the sources of Ptolemy's *Almagest* came from. Although the discoveries of the new world produced new observations of the southern firmament, these were not incorporated.

Dürer's interest and participation is certainly not limited to the lifelike drawings of the constellations and the decorative form of the map; rather, his mathematical-scientific interests also apply to the projection methods (see Schoch, p. 434).

Bibliography

Meder 259-260. - Panofsky II, 365-366. - 1471 Albrecht Dürer 1971, exh. cat. Nuremberg 1971, no. 309-310. - Schneider, Erich, Dürer, Die Kunst aus der Natur zu "reysen", Sammlung-Otto-Schäfer-II, exh. cat. Schweinfurt 1997/98, no. 78-79. - Schoch/Mende/Scherbaum, Albrecht Dürer, Das druckgraphische Werk II, 2002, no. 243-244. - Wörz, Adèle Lorraine, The Visualization of Perspective Systems and Iconology in Dürer's Cartographic Works, Oregon 2007 (Electronic dissertation: Permanent citation URL: <http://hdl.handle.net/1957/3785>).

Provenance

Price:

Inventory reference: 1277