# **Florence**

## **Biblioteca Nazionale Centrale**

Magliabecchiana XI. 114 (I and II)

Hyginus, De astronomia

Italian (Tuscany or Florence?), late 14th/early 15th century

## [VOLUME I]

#### <u>text</u>

**n.b.:** There are numerous sets of paginations on the pages of the two volumes of this ms. The two most important are 1) those in pencil at the bottom left of each folio recto, which indicate the pages according to the current binding/s and 2) those in pen in the upper right margin of each folio recto shows how these volumes were paginated when they were bound together (see the comments below). The following descriptions uses the pencil pagination of the current 2-volume binding.

ff. 1r-8v

Andalò da Negro, *Theorica distantiarum omnium sperarum* Incipit theorica distantiarum omnium sperarum, circulorum et planetarum.... composita a domino Andalo de Nigro de Janua.

Punctus, centrum, cuspis sunt sinonima, id est, idem significantia... . Manifestum est enim terram esse spericam, id est, rotundam et centrum eius secundum oppiniones philosophorum... - ... quae sunt secunda 47. — Explicit de distantiis deo gratias amen.

(cited BONCOMPAGNI 1874, p. 362 and THORNDIKE/KIBRE1963, col. 1151). (old foliation = ff. 57r-64v)

ff. 9r-17r

Hyginus, *De astronomia*, Books III and IV (illustrations to Book III) (old foliation = ff. 65r-70r)

fol. 9r [I]Gitur incipiemus apolo boreo protinus dicere... (Hyginus, *De astronomia*, III, 1; cf. VIRÉ 1992, p. 95)

note: There is a folio missing between the current 9v and 10r, which contained the texts for CEPHEUS, CASSIOPEIA, ANDROMEDA, PERSEUS and AURIGA. Fol. 9v ends with the description of LYRA: ... supra cauda unam. omnino habet stellarum .13. (= Hyginus, *De astronomia*, III, 7; cf. VIRÉ 1992, p. 100). Fol. 10r begins: ... [O]Phiulchus inclinatus acapite ut qui resupinare... (= Hyginus, *De astronomia*, III, 13; cf. VIRÉ 1992, p. 104).

- fol. 13r ... cum piscibus secundum est stellarum omnino 12. (Hyginus, *De astronomia*, III, 40; cf. VIRÉ 1992, pp. 124.)
- ff. 13v -17r (in red) De circulis celi. (in sepia) QUe pertinent ad figurationem siderum reliqua protinus dicemus. Quoniam initio spere circuli .5. quomodo efficerentur sol ab estivo circulo descendens redit ad eundem. (Hyginus, *De astronomia*, III, 40 IV, 9; cf. VIRÉ 1992, pp. 124-36)
- fol. 17r (in red) De differentia temporum ortus signorum. (in sepia) Temporum quoque ipsorum signorum quibus oriuntur aut occidunt habenda est distantia secundum Marchianum isti habent in occasum (= variant of Martianus Capella, *De Nuptiis...*, VIII, 844-45). BLUME/HAFFNER/METZGER 2016, II, 2, p. 560 note that this fragment was often considered to be an integral part of *De astronomia* at the time.
- ff. 17r-18v (in red) Iginij grammatici Astro[lo]gia. (in sepia) IGinus fabio suo salutem. Et si te studio grammatice artis posse constitui suspicamur. (= Hyginus, *De astronomia*, I, preface 9; cf. VIRÉ 1992, pp. 1-13).
- ff. 18v- 19v Sed quoniam que nobis de terre positione ad delectationem afferent lectori. Prima ergo ursa .i. arctos calisto filia licaonis dicitur presisset mammam deformavit circulum. ( = preface and abbreviated paraphrase of Hyginus, *De astronomia*, II; compare VIRÉ 1992, pp.15 -94; cf. Florence, Laur. 89 sup 43; Vat lat 3110 and Pavia 490)
- fol. 19v (in red) De circulis planetarum. (in sepia) Terra centron est spere celestis (end imperfectly) certe regrediens. Oritur a a ortu vel ... (= Martianus Capella, *De nuptiis...*, VIII, 855-84). Again, this section is not set apart from the Hyginian text.)

fol. 20r-v blank

ff. 21r-36v TABULA STELLARUM (Ptolemaic, Gerard of Cremona transl). Ex portio canonica descrictionis stellarum secundum boreale emisperio — obscure 9. nubi similis 5.7 crinis.

#### [VOLUME II]

#### <u>text</u>

**n.b.:** The page numbers used here refer to those in pencil on the lower left margin of each folio recto.

- ff. 1r-22v Hyginus, *De astronomia*, Books I-IV (not illustrated)
- ff. 1r -1v (in red) Higinius Marco Fabio plurimum salutem. A (in sepia) ET si studio grammatice artis inductum te non solum et initium rerum demonstrabimus. (= Hyginus, *De astronomia*, I, preface; cf. VIRÉ 1992, pp. 1-4)
- ff. 1v-2v (in red) De mundo spera centro et axe. (in sepia) MUndus appellatur is qui constat ex sole et luna in simili causa posse constitui suspicamur. (= Hyginus, *De astronomia*, I, 1-9; cf. VIRÉ 1992, pp. 5-13)
- ff. 2v-13v (in red) Ordo dicendorum. (in sepia). SEd quoniam que nobis de terre positione dicenda fuerunt corporum deformationem dicere instituimus. (= Hyginus, *De astronomia*, II, preface-43; cf. VIRÉ, 1992, pp. 14-94)

**note**: fol. 5v has lengthy marginalia at the bottom of the page:

Regrediente Nilo ad suos meatur — in feros commovisse putetur. (= *scholia Sangermanensia* describing the mythological origins of LYRA; cf. BREYSIG 1867, pp. 150-51.) This also appears in Vat lat 3109 and Vat lat 3110.

ff. 13v- 17v (in red) De Arctho. (in sepia) IGitur incipiemus a polo boreo protinus dicere — autum cum piscibus stellarum omnino. 12. (= Hyginus, *De astronomia*, III, 1-40;

cf. VIRÉ 1992, pp. 95-124)

ff. 17v-22v

(in red) De circulis celi. (in sepia) QUe ad figurationem siderum pertinent — reliqua protinus dicemus. Quoniam initio spere circuli .5. quomodo efficerentur — sol ab estivo circulo redit. Amen. (= Hyginus, *De astronomia*, III, 40 - IV, 9; cf. VIRÉ 1992, pp.124 - 36)

After the explicit, in another hand, has: Hic deficit una columna que est infra. 74. distantia temporum ortus signorum. For the significance of this note, see comments below concerning how the two volumes today were originally bound together, but there were originally more pages, some of which are now missing (e.g. the pages between fol. 24 and the old fol. 57].

ff. 23r-24v blank

# <u>illustrations</u>







fol. 9r fol. 10r





fol. 10v fol. 11r

## VOLUME I, ff. 9r-11r

An incomplete set of pen drawings in sepia pen with wash for the shadows of 13 constellations with stars marked with red X's and star-shapes. There are two sorts of lacunae. First, the folio containing the pictures of CEPHEUS, CASSIOPEIA, ANDROMEDA and PERSEUS is missing. Second, the drawings have not been completed for CYGNUS, DELPHINUS, PEGASUS, TRIANGULUM and ARIES, though spaces have been left. There is a drawing for the constellation of TAURUS, but all the subsequent illustrations have not been completed; so the set is also missing GEMINI, CANCER, LEO, VIRGO, LIBRA, SCORPIO, SAGITTARIUS, CAPRICORN, AQUARIUS, PISCES, CETUS, ERIDANUS, LEPUS, ORION, CANIS MAIOR, CANIS MINOR, ARGO, CENTAURUS, LUPUS, ARA, HYDRA, CRATER, CORVUS and PISCIS AUSTRINUS (but spaces have been left until the end of Book III). This shows that the text was written before the illustrations were added.

I, fol. 9r

**DRACO INTER ARCTOS** is depicted as a dragon-headed snake with 3 big bends in his body and his head placed towards the bottom of the page. His head faces to the left and has a pointed snout, a tongue with three parts and pointed ears. The bears are set back-to-back and face into the curves. Both have short tails and their mouths are open, with URSA MAIOR being marginally larger.

**URSA MINOR** is set within the second curve and has 4 stars in its feet and 3 on its tail, or 7 stars in all.

URSA MAIOR is in the third bend and Draco's tail ends in front of its right forefoot. It has 9 stars on its head and 2 on its nose, 2 on its shoulder, 2 in the right forefoot, 1 on the right hind leg and 2 on the left hind foot and 3 on the tail, or 21 stars in all. Draco has 1 star on its chin, 4 on its head and 10 along the body, or 15 stars in all.

**BOOTES** faces the viewer and stands to the right wearing a short, tight tunic that has bands on his chest and hips. He is bare footed. He holds a thin, branched stick behind his head with his right hand and has a teardrop-shaped shield in his left hand that is held out in front of him and covers his whole arm. He has 1 star in his head, 1 on each shoulder, 1 in his right elbow, 3 in his chest (1 on each nipple and 1 below the right nipple), 1 on his belt, 1 in each foot and 4 in the shield, or 14 stars in all.

I, fol. 9v **CORONA BOREALIS** is two concentric circles with 9 stars.

> **HERCULES** faces the viewer and is dressed in a loose tunic. He lunges to the left, but looks to the right. He holds a thin, branched stick over his head with his right hand and holds a lion's body draped over his left arm (with its face, forepaws and tail visible). He has 1 star in his head, 1 on each shoulder, 1 on each elbow, 2 at his waist, 3 vertically in his skirt, 1 in his right knee, 2 on his right shin, 1 on his right foot and 5 in the lion's skin, or 19 stars in all.

LYRA like a zither with a curl at the right side with 3 sets of strings and 8 red stars and 1 black one star, or 9 stars in all.

[There is a blank space for CYGNUS.]

The folio with illustrations of CEPHEUS, CASSIOPEIA, ANDROMEDA and **PERSEUS** is missing.]

I, fol. 10r AURIGA stands facing the viewer in a short, tight garment. He wears a cloak that falls from his shoulder to his thighs. His head is bare. He holds a 3-thong flail upright his extended right arm and there is a small goat seated in the palm of his outstretched left hand. A goat's head peeks out from the side of AURIGA's head above his left shoulder. He has 1 star on his head, 1 on each shoulder, 1 on each elbow, 1 on his left wrist and 1 on his left hand, or 7 stars in all.

OPHIUCHUS is nude male, who stands facing the viewer. He holds the SERPENS

so that it wraps once around his hips, and it turns to face him, sticking its tongue out. The head of the Snake is on the right side. Te man has 1 star on his head, 1 star in each shoulder, 2 at his waist, 4 in his right hand, 3 on his left hand, 1 on each knee, 1 on his left foot, 1 on the right shin and 1 on his right foot, or 17 stars in all. The SERPENS has 5 stars in its head, and 18 along its body, or 23 stars in all. The total number of stars in both is 40.

SAGITTA points to the right and has 4 stars.

I, fol. 10v AQUILA stands to the right and has both his wings outstretched on either side.

His beak is open. He has 1 star in his head, 1 on each wing and 1 in his tail, or 4 stars in all.

[There are blank spaces for **DELPHINUS** and **PEGASUS** on the page]

I, fol. 11r [There is blank space for ARIES].

**TAURUS** is depicted as half a bull facing to the left. His body is cut off by a curved line. He has 4 stars in his horns, 1 on his forehead, 1 in each eye, 3 on his shoulder, 1 on his chest, 1 on each knee and 1 on his left foot, or 14 stars in all. In addition, there are 7 stars in a circlet in front of his nose, representing the **PLEIADES**.

[There is a blank space for **GEMINI** and **CANCER**.]

- I, fol. 11v [blank spaces for LEO, VIRGO, SCORPIO and SAGITTARIUS]
- I, fol. 12r [blank spaces for CAPRICORN, AQUARIUS, PISCES and CETUS (pistrix)]
- I, fol. 12v [blank spaces for ERIDANUS, LEPUS, ORION, CANIS MAIOR, CANIS MINOR

(Prochion), ARGO and CENTAURUS/LUPUS]

I, fol. 13r: [blank spaces for ARA, HYDRA/CRATER/CORVUS and PISCIS AUSTRINUS]

# notes

foliation for each section in modern pencil at the bottom left, older foliation in ink at the top right;

fol. 176: domini Andalo de Nigro de Ianua Theorica Planetarum et tractatus sphere. 6 Del Serte Carlo de Tommaso Strozzi 1670

Vol II = 294 x 221 mm, 24 folia, paper, bastarda cursiva by one hand that is not the same as those in Vol I; title: 'Higini Grammatici Astrologia, Theorica Planetarum et tractatus spere; Domini Andalo de Nigro de Janua Theorica Planetarum et Tractatus spere'

Volumes I and II have both been included in this description in order to make two points. First, there are no illustrations in volume II (contrary to the notations in VIRÉ 1981, p. 166). Second, Leonardi suggested that the Hyginus and Martianus Capella text on ff. 9r-19v text of volume I originally formed a part of the same manuscript as the Hyginus sections in volume 2 (Books I-IV). As McGurk pointed out (IV, p. 35), the Andalo da Negro chapter (ff. 1r-8v) and the *tabula stellarum* (ff. 21r-36v) in volume I are not by the same hand as the Hyginus sections, but the Hyginus sections of volume I do form a discrete group of 14 folii and they have been numbered twice previously as 1-14 and 65-78.

Pursuing this further, the note after the explicit of volume II seems to be in an early, perhaps 15th century, hand. It refers to a column that is missing on p. 74. Unfortunately, the pages of volume 2 have been drastically trimmed and there are no indications of earlier numbering systems for this volume. However, there are traces of earlier numbering systems on the Hyginus pages in volume I, which, as mentioned, were once numbered as ff. 65-78. This would seem to indicate that the current fol. 17r is the old 'p. 74' and, as Leonardi suspected, the two Hyginian pieces that currently are split between volumes I and II, were indeed once together in the same volume. Two further bits of evidence include the fact that, on fol. 1r of volume I, there is another note in this same early hand that refers to '[ ] principium est esse infra [p.] 74' and on the old 74r (the current 17r), there is a note in yet another hand, alongside the end of the Martianus Capella text and the beginning of Book I of the *De astronomia*, that says: 'vacat reperitur in carta prima'.

Having said that, however, it is quite easy to see that Hyginus texts in volumes I and II were not written by the same scribe. If one compares the opening lines of Book III in both (volume 1, fol. 1r and volume 2, fol. 13r), one can see that the scribe of volume 1 has an open loop on his 'l', 'b' and 'd'; the scribe of volume 2 has vertical lines for all these letters. The formation of the letter 'r' is also different and there are different spellings of the same words: 'apolo' vs 'a polo' and 'utreque' vs 'utraque' and 'arctico' vs 'arthico'. The two sections of text, therefore, are not by the same hand, but they are certainly from the same period and could have been produced within the same workshop. This suggests that the two texts not only once formed part of the same manuscript, but that they were created for the same manuscript.

In sum: Similar to Vatican BAV, lat 3110, the ms originally contained the entire four books of Hyginus, *De astronomia*, followed by the Books III and IV, along with some excerpts of Books II and III. The depictions of the constellations are also very close to those found in Vat lat 3110, with the exception of the figure of Ophiuchus.

Mc GURK 1963, IV, p. 34 notes that the scribal hand of vol. I, ff. 9r-19v is written in a hand not evident elsewhere in the two volumes. He notes close similarities between the text of Books III and IV in vol I are identical to Vat lat 3011 and nearly identical to Florence, Laur., Plut 89, sup 43, ff. 72-1211r and Pavia Aldini 490, ff. 77r-130v). He cites Leonardi's argument that these folia from Vol I, along with ff 1r-22v of Vol. II are a direct copy of Vat at 3110, though observes that they are written by different hands.

## **bibliography**

B. BONCOMPAGNI, 'Catalogo dei lavori di Andalò di Negro', in *Bolletino di Bibliografia e di storia delle scienze Matematiche e Fisiche*, VII, 1874, p. 362

GALANTE 1907, p. 140f.

LEONARDI 1959, p. 482, no. 262 and 1960, p. 45.

LEONARDI 1960, p. 52.

also discusses connections with volume 2.

KRISTELLER 1963, p. 125.

McGURK IV 1966, pp. xix, xxvi and 29 and 33-34.

15th c; Italian, paper, I + 36 (once numbered 57-110), 295 x 220. pencil numbers in lower left of each recto; prov. from the Strozzi collection no 176 -- on fly leaf of vol. 1 has 'Domini Andalo di Nigro de Ianua Theorica Planetarum et tractatus spherę. Del Senatore Carlo di Tommaso Strozzi 1670.'

In vol 2 has 'Theorica Planetarum, et Tractatus Spherae'; and in pencil: 'XI. HIGINI 114.6'; and in pen at the bottom: 'Del Sen.'e': Carlo di Tommaso Strozzi. 1670'.

volume 2 has Hyginus Books I-IV of ff 1 - 22v with ff. 23-24 blank. Leonardi says that these ff together with ff 9r-19v of vol 1 are part of the same mss and are a copy of Vat lat 3110. But the script of ff 9r-19v is different from ff 1r-8v and 21r-36v of volume 1

THORNDIKE/KIBRE 1963, col. 1151.

ULLMANN 1963, pp. 89, 209, 232.

VIRE 1981, p. 166.

15th c, Italian; ff. 9-17 and 17r-18; preface, preface to Bk II and resume of 43 chaps of Bk II (on ff. 17r-18); Bk III and IV (ff. 9-17); Viré says that vol 2 has drawings with Hyginus sections of ff. 1-22v, but McGurk does not. She is mistaken.

DE ANGELIS 1984, p. 150.

BLUME/HAFFNER /METZGER 2016, II, 2, pp. 89-90, 559-65 and figs. 609-31.

most recently consulted 23.6.04 and 21.12 2023