

Vatican

Biblioteca Apostolica

 Vat lat 3110
Hyginus, *De astronomia*

Florentine

before 1449

text

ff. 63r-83v Hyginus, *De astronomia*, Book III-IV, with Book III illustrated (preceeded by Hyginus, *De astronomia*, Books I-IV; Germanicus, *Aratea* (vv. 1- 439) without *scholia*)

(**note:** The manuscript has been rebound and repaginated since it was examined by Saxl I, 1915, pp. 88- 90. The new numbers are stamped in the lower outside corners on the recto of each folio.)

ff. 3r-46v Hyginus, *De astronomia*, Books I-IV:

ff. 3r-4r higinus Marco Fabio plurimum salutem. Atsi studio grammaticae artis inductum — et initium rerum demonstrabimus. (= Hyginus, *De astronomia*, I, preface; cf. ed. Viré 1992, pp. 1-4)

ff. 4r-7r De mundo spero centro et axe. Mundus appellatur is qui constat ex sole — simili causa posse constitui suspicamur. (= Hyginus, *De astronomia*, I, 1-9; cf. ed. Viré 1992, pp. 5-13)

ff. 7r-27v Orde dicendorum. Sed quoniam quae nobis de terra de terrae positione dicenda fuerunt — corporum de formationem dicere instituimus. (= Hyginus, *De astronomia*, II, preface - 43; cf. ed. Viré, 1992, pp. 14- 94)

note: on the bottom of fol. 12v, below Lyra, there is a marginal passage

exemplo Regrediente Nilo ad suos meatus unde exierat inter certa [cetera ?] animalia relicta est testudo et quae cum putrefacta fuisset et nervi eius extensi intra corvum [corium?] remanisset percussa a Mercurio sonitum dedit. In cuius similitudine Mercurius lyra fecit et Orpheo tradidit eo quod esset unim ex musis .i. Callopej filius fecit autem cordis novem iuxta numerum musarum Tante namque dulcedinis dicitur in modulando fuisse ut arbores saxa bestias atque inferos commouisse putetur.

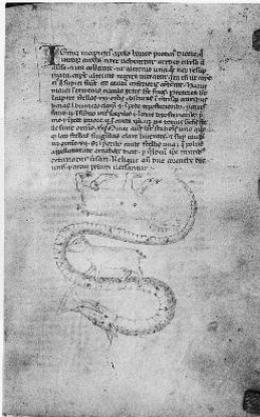
This is the same passage from the *scholia Sangermanensia* (cf. Breysig 1867, pp. 150-51) that appears in the text of Vat lat 3109, fol. 10r-v between Lyra and Cygnus.

- ff.27v-36r De Aratho. Igitur incipiemus a polo boreo protinus diditur – erunt dicta. Reliqua protinus dicemus. (= Hyginus, *De astronomia*, III, 1-40; cf. ed. Viré 1992, pp. 95-124)
- ff. 36r-46v De circulis celi. Quoniam intio spere circuli .v. quomodo efficerentur ostendimus – annum vero cum sol abestivo circulo redit. Amen. . (= Hyginus, *De astronomia*, IV, 1-19; cf. ed. Viré, 1992, pp. 125-57)
- ff. 47r-54r Flavij plancia fulgentij de intellectu librorum virgilij ad Catum incipit. Expectebat quidem levitarum sanctissime – id iest temporis volubili litatem. Amen. (= Fulgentius, _____, ed. _____, pp. _____)
- ff. 54v-60v [A]b iove principium magno deduxit aratus – loco et vestigia mutant. (= Germanicus, *Aratea*, vv. 1- 439; cf. ed. Breysig, 1867, pp. 1-26)
- ff. 61r-62v blank
- ff. 63r-83v Hyginus, *De astronomia*, Books, III - IV.
- iff. 63r-76r Igitur incipiemus a polo borreo protinus dicere quo utreque arcthi nixe vehuntur – sed est stellarum omnino .12. (= Hyginus, *De astronomia*, III, 1-40 ; cf. ed. Viré 1992, pp. 95-124)

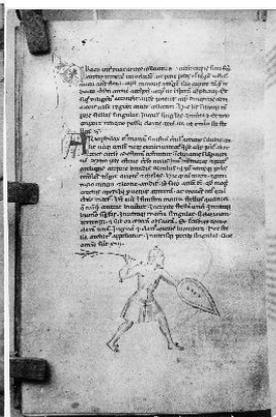
ff. 76v-83v

de circulis celi. Quae ad figurationem siderum – reliqua protinus dicemus.
 Quoniam initio spera circuli .5. – Annum volverunt esse cum sol ab estivo circulo
 descendens redit ad eundem. (= Hyginus, *De astronomia*, III, 40 - IV, 19; cf. ed.
 Viré 1992, pp. 124-57)

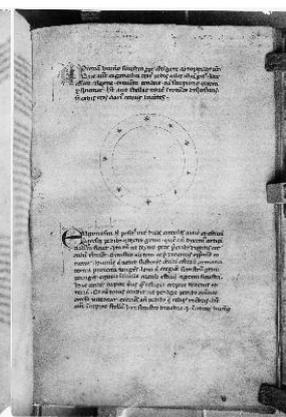
illustrations



fol. 63r



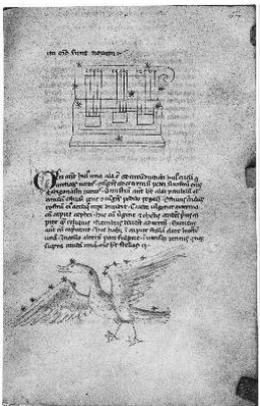
fol. 63v



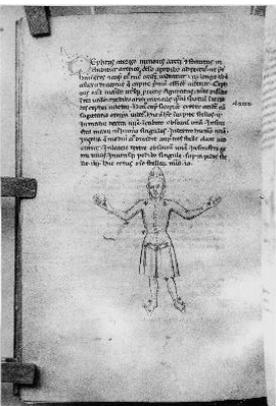
fol. 64r



fol. 64v



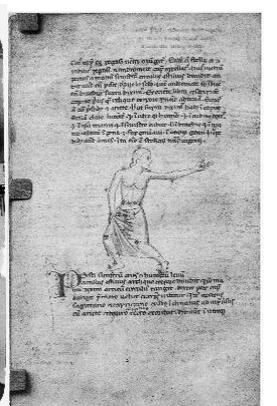
fol. 65r



fol. 65v



fol. 66r



fol. 66v



fol. 67r



fol. 67v



fol. 68r



fol. 68v



fol. 69r



fol. 69v



fol. 72r



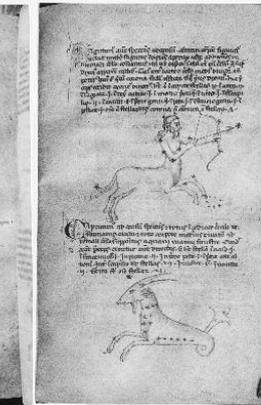
fol. 70v



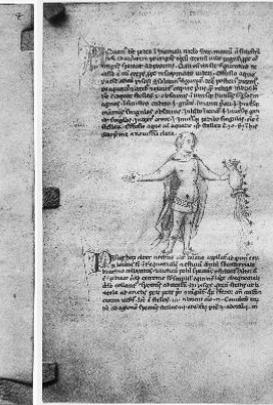
fol. 71r



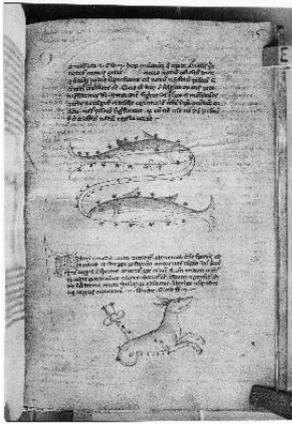
fol. 71v



fol. 72r



fol. 72v



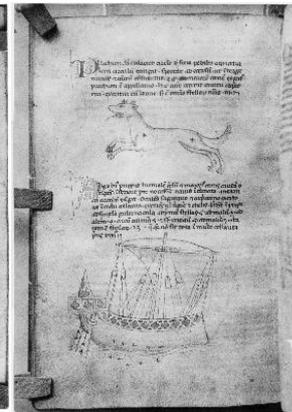
fol. 73r



fol. 73v



fol. 74r



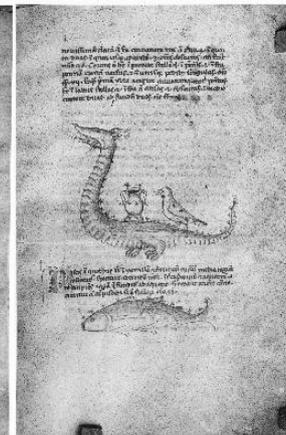
fol. 74v



fol. 75r



fol. 75v



fol. 76r

ff. 63r-76r Fine grey-brown pen drawings of 38 constellation groupings with a light tan wash in the shadows. Marked with red star-shaped stars.

fol. 63r **DRACO INTER ARCTOS** shows **DRACO** with his head towards the bottom of the page. He has a dragon's head with a curved beak and his tongue is sticking out. His body has 3 main curves with a little curl at the end of the tail. He has 5 stars in his head and 10 in his body, or 15 stars in all. The bears are placed back-to-back facing into the body of the snake.

URSA MINOR is closer to the head of the serpent and has 3 stars in the tail and 1 star in each foot, or 7 stars in all.

URSA MAIOR is slightly larger and has some stars above the head, 2 stars in its chest, 2 on the feet, 3 on the tail and 3 in the hind legs, or 10 stars in all.

- fol. 63v **BOOTES** (Arctophilax) faces to the right and is dressed in a short, tight tunic, with a band across the chest and one across the hips. He holds his teardrop-shaped shield out in front of him with his left hand so that everything from his forearm to his hand is obscured by it. He holds a slender, branched stick behind his head with his right hand. He has 1 star in his head, 1 on each shoulder, 3 in his chest, 1 in his right elbow, 1 on his belt, 4 on his shield and 1 on each foot, or 14 stars in all.
- fol. 64r **CORONA BOREALIS** consist of 2 concentric circles with 9 stars.
- fol. 64v **HERCULES** walks to the left, but faces the viewer. He is dressed in a short, loose tunic with leggings and bands around his ankles. He holds a thin, branched stick upraised above his head in his right hand and has a lion's skin (with face, three legs and tail visible) draped over his outstretched left arm. He has 1 star in his head, 1 in each shoulder, 1 on each elbow, 2 in his chest, 2 in his skirt, 2 in his right knee, 2 on his right shin and 1 on his right foot, and 5 on the lion's skin, or 19 stars in all.
- fol. 65r **LYRA** is as a two-stepped zither with 3 sets of 5 strings and a curl on the right side. It has 8 stars.
- CYGNUS** is standing to the left with his wings raised and his beak open. He has a grey body and yellow feet and beak. It has 5 stars in right wing, 5 in the left wing, 1 in the head, 1 in the neck and 1 in its tail, or 13 stars in all.
- fol. 65v **CEPHEUS** stands facing the viewer, wearing a long-sleeved, tight tunic with buttons down the front and a belt at his hips. He wears a mitre on his head. He holds his arms out to his side with his elbows bent, so they form a 'W'. He has 2 stars in his head, 1 on each shoulder, 1 in each hand, 1 in his right elbow, 1 at his waist at his right side, 3 in his belt, 2 in his left knee and 3 in each foot, or 19 stars in all.
- fol. 66r **CASSIOPEIA** is seated on a low, boxy throne, facing the viewer with her hands out to her sides, but bent at the elbows, so her arms form a 'W'. She wears a long gown and a mantle. Her hair is exposed. She has 1 star in her head, 1 on each shoulder, 1 in her right breast, 1 in her navel, 2 on her skirt, 5 on her throne and 1 on her right foot, or 13 stars in all.

- fol. 66v **ANDROMEDA** is depicted walking to the left, but looking back over her shoulder to the right. She is dressed in a long skirt, but her torso is nude. She holds her skirt in her right hand, bunched at her right thigh, and raises her left hand behind her with its palm facing upwards. Her hair is exposed and she has no attributes. She has 1 in star in her head, 1 in each shoulder, 1 on each elbow, 1 in each hand, 4 in her waist, 3 in her lap, 1 in each knee and 2 on each foot, or 20 stars in all.
- fol. 67r **PERSEUS** is standing to the left with his back to the viewer. He is dressed in a short tunic and has a band around his hips. His head is bare. He holds the Medusa's head out in front of him with his left hand and holds a straight sword with his upraised right hand so that the sword runs horizontally behind his head. He has 1 star on each shoulder, 1 on each hand, 2 at his waist and 2 on his skirt, 1 on his left knee, 2 on his left shin, 1 on his right shin and 1 on his right foot, and 4 in the Medusa's head, or 17 stars in all.
- fol. 67v **AURIGA** is dressed in a blue tunic with a band around the hips and a three-quarter-length cape. He has tights and small boots. He stands facing the viewer with a 3-thonged, beaded flail in his right hand, a goat's head with curved horns coming out of the left side of his head. He has a second goat sitting on his outstretched left hand. He has 1 star in his head, 1 on each shoulder, 1 on each elbow and 2 in his left hand, or 7 stars in all.
- fol. 68r **OPHIUCHUS** is a nude youth, who walks to the left, with **SERPENS** wrapped around his hips and its head facing towards the man. In the man's body there is 1 star on his head, 1 on each shoulder, 2 in the waist, 3 in his left hand and 4 in his right hand, 1 on each knee, 1 on the right shin and 1 on each foot, or 17 stars in all. The **SERPENS** has 5 in its head, 8 in the upper body and 10 along its tail, or 23 stars in all.
- fol. 68v **SAGITTA** points to the right and has 4 stars.
- AQUILA** stands to the right with his wings outstretched to either side. It is marked by 1 star in its beak, 2 in its wings, and 1 in its tail, or 4 stars in all.
- DELPHINUS** is upside-down, with its dorsal fin towards the bottom of the page, lying with its head to the right. It has a pointed beak, sharp teeth and a waddle under its chin. It has 2 stars in its head, 2 in its head, 2 above its head, 3 in the body, 1 on the back and 2 on its tail, or 10 stars in all.

- fol. 69r **PEGASUS** is depicted as half a winged horse, flying to the right and wearing a bridle. Its body emerges from the clouds and both feet are curled in front of him. It has 1 star on each ear, 2 on its nose, 1 in the chin, 4 in its neck, 2 above the four in its neck, 2 above the four in its neck, 1 in the chest and 2 on each of its front legs, or 17 stars in all.
- fol. 69v **ARIES** is depicted *intra Triangulum* ('... et exoriens caput infra triangulum'). He walks to the left and looks backwards over his shoulder to the right. He has a long tail and raises his right forefoot. He has 3 stars in the right horn, 1 in the left horn, 4 in the neck, 3 in the flank, 1 in the belly, 1 in the tail, 1 on the front right foot and 1 on the right back hoof, or 15 stars in all. **TRIANGULUM** has 1 star in each corner, or 3 stars.
- fol. 70r **TAURUS** is depicted as half a bull facing to the left, with his body cut off by three slightly curved lines. He holds both his hooves out in front of him. He has 1 star in each horn, 3 in its head, 1 in each eye, a circle of 7 stars in front of his muzzle, 4 on his body, 1 on each knee and 1 on his left hoof, or 14 stars in all. In addition, there is a circlet of stars in front of his muzzle, which represents the **PLEIADES**.
- fol. 70v **GEMINI** are depicted as two young men dressed in short tunics with $\frac{3}{4}$ -length capes. They face each other and grasp each other's right hands. The left Twin raises his left hand in salutation and the right Twin holds the edge of his cape with his left hand and looks down towards the left Twin's feet. The left Twin has 1 star in the head, 1 in the right shoulder, 1 in the left hand, 1 in the waist, 1 in the right knee and 1 on each foot, or 7 stars in all. The right Twin has 1 star in the head, 1 on each shoulder, 1 in the right elbow, 1 on the left hand, 1 on each knee and 1 on each foot, or 10 stars in all.
- fol. 70v **CANCER** faces to the left, has a round body, segmented claws and 4 legs on either side. It has 2 stars in its body, 6 in front of its face between the claws, 4 on the upper legs and 6 in the bottom legs, or 16 stars in all.
- fol. 71r **LEO** walks to the right, but turns his head to face the viewer and holds his tail up in a backwards 'S'. He has 3 stars in his head, 2 in his neck, 1 in the chest, 2 below the chest, 3 on the right shoulder, 1 in the middle of his belly, 1 below the belly, 1 on his left front paw, 1 on his haunch, 1 between his back legs, 1 on

his right hind foot and 1 in the middle of his tail and 1 at the end of it, or 19 stars in all.

fol. 71v **VIRGO** stands facing the viewer with wings that are raised to either side. She holds four stems of wheat in her right hand and lifts her left hand in a gesture of salutation. She is dressed in a long robe with a long cloak and her head is covered. She has 1 star in her head, 3 in each wing, 1 in each hand, 2 in her chest, 5 on her dress and 1 on her right foot and 1 on her hem, or 18 stars in all.

SCORPIO faces to the left and has two large claws and 4 legs on either side. It has a smooth, tapered tail. It holds the Scales in its right claw in front of its face. It is marked by 2 stars in each claw, 8 in the body, 5 in the tail and 2 at the tip of the tail, or 19 stars in all. The **SCALES** have no stars.

fol. 72r **SAGITTARIUS** leaps to the right and holds a bow and arrow in front of him, pulling the string with his right hand. His human half is nude and he has long hair and a beard. He has 2 stars in the head, 1 in the chest, 1 on the right shoulder, 2 on the right arm, 2 in his left arm, 2 on the bow, 1 on the tip of the arrow, 1 on each of the knees of his front legs, 1 on the left front hoof and 1 in the tail, or 15 stars in all. In addition, there is a circlet of 7 stars in front of his forehooves, which represent **CORONA AUSTRINUS**.

CAPRICORN faces to the left with a beard, a curl in its tail and slightly curved horns. It has 1 star on the nose, 1 on its ear, 9 on the body, 2 on the right foot, 6 on the belly and 2 in the tail, or 21 stars in all.

fol. 72v **AQUARIUS** is dressed in a short, tight tunic and has a long cape flowing from his shoulders. His low-slung belt is decorated with 6 squares. He stands facing the viewer and holds both of his arms straight out to the sides. In his left hand, he grasps the foot of an upturned urn, from which water pours. His right hand is empty. He has 2 stars in his head, 1 in each shoulder, 2 on his chest, 1 on his left elbow, 1 on his right hand, 1 on his belly, 1 on each thigh, 1 in his right shin and 1 on each foot, or 14 stars in his body with 16 stars along the back of the urn and in the water.

fol. 73r **PISCES** are two fish swimming in opposite directions with both their backs facing upwards. They are connected at the mouth by a cord. There are 17 stars in the top fish, 13 in the cord and 12 on the bottom fish, or 42 stars in all.

CETUS is a dog-faced creature with dog's paws, and a curled tail that ends in a trefoil. It has 6 stars below its belly and 5 in the tail and 2 at the end of its tail, or 13 or 15 stars. In addition, there are 2 dots on its body, but it is not clear if whether these represent stars.

fol. 73v **ERIDANUS** is a nude youthful male figure with two donkey's ears on his head. He stands with his weight on his left leg, lunging slightly to the right, but with his head turned back to the left. He holds the bottom of his urn with his left hand and the neck with his right, so that it is horizontal, but water still gushes forth from it. He has 3 stars in his urn and 10 in the water, or 13 stars in all.

LEPUS runs to the left. It has 2 stars in its ears, 2 in body and 2 on its feet, or 6 stars in all.

fol. 74r **ORION** stands facing the viewer wearing a cuirass, with decorative patterns on the chest and belly, and with a skirt that has a band along the hem. He also has a long mantle. He is bearded and holds a long straight sword raised above his head with his right hand and rests the thumb of his left hand in his belt. He has 3 stars in his head, 1 in his right hand, 1 in his right elbow, 1 in each shoulder, 3 in the sword, 3 at his waist, 1 in each knee and 1 in each foot, or 17 stars in all.

CANIS MAIOR is a sleek greyhound that runs to the left. It has 1 star on its tongue, 1 star in each ear, 1 in its head, 5 in the body, 3 in the right foreleg, 1 in the haunch, 4 in the tail and 2 on its rear feet, or 19 stars in all.

fol. 74v **CANIS MINOR** runs to the left. It has 1 star on his head, 1 in the shoulder and 1 in the haunch, or 3 stars in all.

ARGO is depicted as half ship, sailing to the right, with its decorated poop deck at the left. It has fully-filled sails and rigging with 6 pulleys. It has two steering oars at the back. It is marked by 5 stars on the first and 4 stars on the second steering oar, 3 stars on the ship, 5 on the keel and 5 in the water, or 22 stars in all.

fol. 75r **CENTAURUS** is a centaur whose human part is nude and he rushes to the left. It has no attributes other than **LUPUS** (a hare) being held in the centaur's outstretched right hand in front of him. His left hand rests by his side and he has long light-coloured hair. He has 3 stars in his head, 1 on each shoulder, 4 in his chest, 2 on his belly, 1 on each knee of its forelegs, 1 on his left elbow, 1 on his

left hand, 1 on his haunch, 2 in each rear leg and 3 in the tail, or 23 stars in all. LUPUS has 3 on its head, 3 on its forepaws, 1 in its shoulder, 1 on the haunch, 1 on the tail and 1 on the hind feet, or 10 stars in all.

fol. 75v **ARA** is two-tiered cylindrical structure with three arches on the bottom storey and flames coming out of the top. It has 4 stars.

fol. 76r **HYDRA** is a 2-legged dragon, standing to the left with its wings folded close to its body. It has a beaky face, long ears (with flames coming out of them) and a tripartite tongue sticking out. **HYDRA** has 27 stars,

CRATER has 2 handles and is perched on the middle of Hydra's back. **CRATER** has 6

CORVUS stands, facing forward, near the beginning of the dragon's tail. **CORVUS** has 5 stars.

PISCIS AUSTRINUS is a fish with a circular mouth, swimming to the left. It has 12 stars.

notes

drawings are extremely close to those found in Siena L. VI. 25

bibliography

SABBADINI 1899, pp. 115-18 (*Opere minori* I, p. 308)

showed that it predates 1449 because Tortelli consulted a ms like this; Aberystwyth also has same title

ULLMANN 1963, p. 168 and II, pp. 188-89.

McGURK IV 1966, p. xix.

moreover, the Sicilian mss, Urb lat 1358 and Florence, Plut 89, sup 43 also share another nucleus of texts with three non-Sicilian mss (Vat lat 3110; Pavia 490 and Florence, BNC, XI. 114, vol. 1):

Hyginus III-IV (book IV illustrated)

De differentia temporum ortus signorum (Mart Capell, VIII, 844-5)

Hyginus I-II (Book II paraphrased)

De circulis planetarum (Mart Capell, VIII, 316-31)

De polis.

n. 20 belonged to Coluccio Salutati

DE LA MARE 1973, I, i, p. 41.

DOLBEAU 1978, p. 33

REEVE 1980, pp. 511-13, n. 18.

Salutati owned Strozzi 46 (V) and himself wrote **Vat. lat 3110***, probably in the 1380s (see Ullmann and de la Mare)

p. 512, n. 28. Coluccio on 54r : Inveni librum metricum et prosaicum cuius titulus erat 'T Claudii Cesaris Arati phenomenia de celi positione et quinque circulis mundi' Ex hoc libello excerpsi solummodo carmina, sed in alio volumine tam versus quam prosae scripta sunt.

VIRÉ 1981, p. 176.

14th century; Italian; ff. 3-46; 63-83; 84-88; a complete copy of the work (ff. 3-46) and a partial copy Book I, preface; Book II preface and a resume of the 43 chapters; Books III and IV (ff. 84-88 and 63- 83)

BROWN 1987, p. 86.

KERSCHER 1988, p. 60.

MANFREDI 1989, p. 657.

FIELD 1996, p. 217.

HAFFNER 1997, p. 26.

text related to Madrid 19 and series of Italian mss whose archetype was created in Montecassino; none of these are illustrated, save Vat 3110, which she calls a Germanicus ms and says is 14th century and says most of this family comes from southern Italy and Sicily

VEDERE *I CLASSICI* 1997, pp. and figs. 171- 175 (65r, 70v, 71v, 72r, 74v)

ROSSI 1999, pp. 79 and 80-81.

ZAMPONI 2008, pp. 334-336 with illustrations of f. 3r (p. 335), 15r (p. 336), 25r (p. 336).

CABY 2008, p. 102.

CABY 2009, p. 525.

From Vatican website (2012)

1376-1425

membr

fol. 83v

Title: De differentia temporum ortis signorum

Inc. Temporum quoque ipsorum signorum