## Città del Vaticano

## Biblioteca Apostolica

## Reg. Lat 123

Hyginus Excerpta with commentaries

Sta Maria in Ripoll
before 1056

## text

ff. 154v-182v
fol. 154v
fol. $155 r$
ff. $157 r-158 r$
HYGINUS VISUS. In definitione mundi circuli sunt parallelo e quinque in quibus
*** CHECK explicit (= Hyginus, De astronomia, I, 7; cf. Viré 1992, pp. 6-7)
ff. 161r-161v Necesse est enim solis - de luna ac sole dicere videamur. (= Hyginus, De astronomia, IV 13-14; cf. Viré 1992, pp. 145, l. 1 - 149, l. 497)

| ff. $164 \mathrm{v}-165 \mathrm{r}$ | HYGINI UT SUPER. Lunam per alios exortus et occasus necesse esse - luna proxime siderę apparent. (= Hyginus, De astronomia, IV, 14; cf. Viré 1992, pp. 149, l. 499-152, l. 549) |
| :---: | :---: |
| ff. 169v-170r | Stella Martis est quam alii Herculis dixerunt - stellam phyriona apellavit. (=Hyginus, De astronomia, II, 42; cf. Viré 1992, p. 92.) |
| fol. 170r | ITEM EIUSDEM. Nec autem phyrois stella non magno est corpore - non lingius biennio. (= Hyginus, De astronomia, IV, 19; cf. Viré 1992, pp. 156-57.) |
| fol. 170r | ITEM. UTS. Item Mars non tantae magnitudinis est - magna colore similes aquilae. *** CHECK, this is not Hyginus |
| fol. 170r | ARGUMENTUM IN QUO SIG. VERSETUR MARS. Annis ab initio mundi per - cui sex tribuendi desuerint. *** CHECK, is this Hyginus? Seems not to be, so delete. |
| fol. 170r | HYGINI DE STELLA MERCURII. LXVIII. Secunda stellis est Mercurii nomine Stilbon quam quidem quintam numerant - deformationem dicere instituimus. (= Hyginus, De astronomia, II, 42-43; cf. Viré 1992, pp. 93-94.) |
| ff. 170r-170v | Hęc stella Mercurii nominee Stelbon - est tertiam partem signi. . (= Hyginus, De astronomia, IV, 16; cf. Viré 1992, pp. 155-56.) |
| fol. 171v | lovem autem quam Phoeton nominant quem eraclides ponticus - eum inter astra collocatum. (= Hyginus, De astronomia, II, 42; cf. Viré 1992, p. 91 ) |
| fol. 171v | ITEM EUISDEM. lovis autem stella nomine phoeton - apparet antequam sol. (= Hyginus, De astronomia, IV, 17; cf. Viré 1992, p. 156.) |
| ff. 174r-174v | LXXII. HYG DE TONIS VII ERRANTIUM. Nonulli enim VII stellas erraticas fincxerunt - videntur apparere. (= Hyginus, De astronomia, IV, 14; cf. Viré 1992, pp. 152155.) |
| ff. 175-182r | HYGINI FABULA. Aries hic existimatur esse transtulisse - (Pisces) sed etiam celestium nodum verum appellaverunt. (extracts in the zodiacal signs taken from Hyginus, De astronomia, II, 20-30; IV, 12 and III, 19-20). |

ff. $182 v-183 r$
fol. 183 I INCIPIT EPITOME PHENOMENOM VERSIBUS XII. LXXXVI.
Ad borae parties arctoe vertuntur $\&$ anguis
Post hac arctophilax partimque corona genuque -
Hinc sequitur pistrix simul erinanique flienta. (=Anthologia latina/Ausonius dubia, 79; cf. Baehrens )
ff. 183v-204v HYGINI FABULA UT SUPRA. Igitur inicium est nobis Arctos maxima hanc autem hesiodus ait esse - exoritur cum leone sed omnino est stellarum III. (extracts from Hyginus, De astronomia, Bks II and III; cf. Viré 1992, pp. 15-120, alternating with extracts taken from Isidore)
ff. 158r-218v Followed by excerpts from Macrobius, Commentarius in Somnium Scipionis and Calcidius, Timaeus Platonis.




fol. 192r
fol. 193r

fol. $193 v$

fol. $196 r$
fol. $196 v$
fol. 197v

fol. 198r
fol. 199r
fol. 199v
fol.200v


## illustrations

fol. 164r A coloured drawing of Sol-Apollo set within a circular frame in his quadriga, with a golden halo emitting red rays around his head. He is dressed in blue with a red cape and the orb he holds in his left hand is blue. He raises his right hand. The horses are split into 2 pairs and are red, blue and grey with red bridles and his cart is green and red.
fol. 167r A coloured drawing of Luna set within a circular frame in her red and yellow biga drawn by pink and grey oxen to the left. She carries a red and grey whip in her right hand and a red and green cornucopia in her left. She is dressed in red dress with a green mantle and has a yellow halo and a grey crescent Moon on her head.

| fol. 170r | A coloured picture of Mars set within a starry frame, standing to the right, with a shield in his left arm and a sword held vertically in his right. He has red and gold hair, a violet tunic, red socks and a red shield. |
| :---: | :---: |
| fol. 171r | A coloured picture of Mercury set within a starry frame, walking to the right, with wings on his head and feet and holding a curved staff vertically in his right hand. |
| fol. 171v | A coloured picture of Jove standing within a starry frame looking like a peasant in a short tunic, with his hands out to either side. His tunic is red and his socks are green. |
| fol. 173r | A coloured picture of Venus set within a starry frame, facing to the right and looking upwards. She wears a grey hooded dress and stands against a violet background. |
| fol. 174r | A coloured picture of Saturn set within a starry frame, standing with his arms outstretched, holding a sword or scythe in his right hand and nothing in his left. His head is covered with a veil. |
| ff. $175 \mathrm{v}-182 \mathrm{r}$ | Coloured pictures of the 12 signs of the zodiac, with stars marked by red dots that appear to be differentiated (some have rays coming out of them, others are circled by smaller dots or by large flower-shaped stars). There are indications in some of the pictures that the very large stars can be associated with descriptions of 'clarus' or 'clarior' in the text. But, predominantly, these descriptors have been cut from the text, suggesting that this feature must have come most immediately from a pre-existing pictorial tradition, rather than a textual one. |
| ff. 184v-204v | Coloured pictures of the non-zodiacal constellations. The style in which Ursa Maior (fol. 184 v ) is drawn seems to tie it more closely with the zodiacal illustrations, but the rest of the series (Ursa Minor to Canis Minor) is very different Some of these pictures have been set within frames and against a yellow-green background. Others do not have frames. But all of this second set of drawings are done in light blue wash with extra colours added as highlights. Here, some of the stars are outlined in black and some have yellow in them. |
| fol. 205 r | A planisphere (for more information, see the section on planispheres). |


| fol. 175v | ARIES leaps to the left and looks back over his shoulder to the right. He body is decorated with blue and grey vertical striped and he also has stripes in his horn. He has 2 stars in his head, 2 in the horns, 2 in the neck, 4 on the top of the body, 3 in the body, 1 on his chest, 3 in the belly, 1 in the hind foot and 1 in the tail, or 19 stars in all. |
| :---: | :---: |
| fol. 176 | TAURUS is depicted as half a bull with a green and yellow body. He faces to the right and has his right foot tucked under him and his left foot extended. He has 2 stars in his horns, 3 in his head, 2 in his face, 3 in his neck, 3 in his hump, 1 in his chest, 2 on his knees, 1 on his foot and 1 on his belly, or 18 stars in all. |
| fol. 177r | The GEMINI are depicted as two soldiers wearing short tunics and capes that fall to their calves. They each hold spears in their outer hands and rest their inner hands on their inner hips. They both wear red capes, green tunics, blue leggings and sandals. The star in the head of the Left Twin is highlighted with white. The left Twin has the 1 star in is head, 1 in each shoulder, 1 on his right elbow, 1 on each knee and 1 on each foot, or 8 stars in all. The right Twin has 1 on his head, 1 on each shoulder, 1 on each nipple, 1 on his right knee, 1 on each foot and 1 below the foot (Propus), or 9 stars in all. |
| fol. 178r | CANCER is green and grey, looks like a crayfish with 10 legs and faces to the left. He has one big star on his snout, 7 on his body with dark centres, 5 on his right legs and 6 on his left legs, or 19 stars in all. |
| fol. 178 v | LEO is brown and grey and prances to the left with his mouth open and his tail held high. He has red eyes. He has 3 stars in his head, 2 in his neck, 1 in his chest, 1 large star on his back, 2 more smaller ones in his back, 3 big stars on his haunch, 2 in his chest, 1 big star in his right foot, 1 big star on his back foot, 1 in the left hind knee and 2 stars in his tail, or 19 stars in all. |
| fol. 179r | VIRGO flies to the left. She is dressed in a long grey robe with red and green striped sleeves and a blue-grey bottom, with a green mantle and has grey wings. He holds a green ear of corn in her right hand and the Scales with yellow pans in her left. She has 1 star in her head, 2 in each wing, 1 large one on each shoulder, 2 in her chest, 1 on each elbow, 1 big one on the right hand, 1 in her left hand, 6 in her hem and 2 in her feet, or 21 stars in all. |
| fol. 179v | [blank] |
| fol. 180r | SCORPIO faces to the left and has a green and yellow, paisley-shaped body with the long arms. He has 4 dotted stars in his claws, 3 in his neck, 5 in his body, 5 in |

his tail and 2 dotted ones at the tip of his tail (presumably the sting), or 19 stars in all.

| fol. 180v | SAGITTARIUS is depicted as a centaur and rushes to the left. He has green hair and his red cloak flies back from his body. His horse's body is grey-blue and his arrow is blue. He has 2 big stars in his head, 2 in his chest, 1 on his left elbow, 1 very large one on his belly, 2 in his knees, 1 in his foot, 3 on his bow, 1 in his hand, 1 in the arrow and 1 on the tail, or 15 stars in all (Here, there are no descriptions about magnitude in the text.) |
| :---: | :---: |
| fol. 181r | CAPRICORN has curved grey and blue horns and a large tail with a curl in it and hairy 'fins'. He faces to the left and his body is coloured red and yellow-green in the foreparts and green-black in the fish parts. He has 2 dots and 2 big stars on his horn, 1 on his nose, 1 in his neck, 7 on his back, 2 in his chest, 3 on his feet, 5 in his belly and 2 on his tail, or 27 stars in all. (Again, no descriptions about magnitude in the text. The accompanying text mentions 26 stars in all because the description lists only 2 stars in the feet, instead of 3.) |
| fol. 181v | AQUARIUS floats to the left and wears a green and black Phrygian cap and a blue-grey long cloak. He appears to be nude and holds both hands on the foot of an upturned green urn, from which a stream of blue water is pouring so that it almost returns to touch his right foot. He has 2 stars in his hat, 1 on each shoulder, 2 in his chest, 1 on his left elbow, 1 on his left wrist, 3 in his belly, 1 in each knee, 1 on his shin and 1 on each foot, or 14 stars in all. In addition, there are 6 stars in the water and 1 on the urn, or 21 stars in all. |
| fol. 182r | PISCES swim in opposite directions, are placed back-to-back and are connected at their mouths by a wide band. Their backs are green, their bellies are blueviolet and the stream is blue. The top fish has 15 stars, the stream has 12 and the bottom one has 13 stars. |

fol. 184v URSA MAIOR rushes to the left and has no tail. His body is green and red with red lines to indicate fur. It has 3 stars in the ears, 7 in the face, 2 in the back, 2 in the right front foot, 3 in the rump (where one would expect the tail), 1 on the back left foot and 2 on the right back foot, or 18 stars in all.
fol. $185 \mathrm{r} \quad$ URSA MINOR rushes to the left, has a long curled tail and looks more like a dog than a bear. It is merely outlined in light blue and has 4 stars in the chest and 3 on the tail, or 7 stars in all.

| fol. 186r | DRACO INTER ARCTOS are set within a red and blue frame with a yellow background. DRACO is drawn in light blue and has 3 bends in his body and has a comb and a beard. He faces towards the right. He has 6 stars in his head and 10 in his body, or 16 stars in all. The two Bears are placed back-to-back and both rush into the curves of Draco's body with their mouths open. |
| :---: | :---: |
|  | URSA MINOR has a short tail and URSA MAIOR a long tail. Ursa Maior is slightly larger. The stars in Ursa Minor are the same as above, but Ursa Maior has 4 stars in its head, 2 in the shoulder, 1 on the back, 3 in the foreleg and 3 on its bottom, or 13 stars in all. |
| fol. 186v | HERCULES stands facing the left and the Serpent in the 'Garden of Hesperides', whose tail touches his left foot. He faces away from the viewer and his buttocks are visible. He carries a club upraised behind his head in his right hand and has the severed head of a bearded man covering his left arm. He is set within a black and red frame and is drawn in light blue. He has 1 star in his head, 1 in his club, 1 in his right hand, 1 in his right elbow, 1 in his left shoulder, 2 in his waist, 2 stars seem to have been erased from his left leg and moved to his right thigh. He has 1 in his left knee, 1 in his right knee, 1 in his right calf and 1 in his right foot, or 13 stars in all. |
| fol. 187v | CORONA BOREALIS is drawn in blue as a wreath with a gold centre and gold ribbons. It has 9 stars set within segments. |
| fol. 188v | OPHIUCHUS is drawn in light blue and set within a red, white and violet frame against a yellow-green background. He walks to the left with his back towards the viewer, though his head seems to be facing the viewer. The SERPENS is wrapped once around his waist and turns to face the man. Ophiuchus stands on SCORPIO, which faces to the left and has a very anxious expression and 6 legs. He has a long newt-like body with a curved tail. Ophiuchus has 1 star in his head, 1 in each shoulder, 2 in his back, 1 on his left knee, 1 on each foot, 2 on his right hand and 1 on his left wrist, or 11 stars in all. Serpens has 2 stars on its head and 2 on its body, or 4 stars in all. Scorpio has 4 stars in its claws, 5 in the body, 5 in the tail and 2 on the tip of the tail, or 16 stars in all. |
| fol. 189 v | BOOTES is drawn in light blue and set within a red, white and violet frame against a yellow-green background. He stands with his legs splayed, lunging to the right, but it is not clear is he is facing towards or away from the viewer. His hands would suggest away, but his head and knees would suggest towards. He holds some pieces of fabric over his outstretched trailing arm and a curved stick (harpe?) in his leading hand. He is marked by 1 star in his head, 1 in each |

shoulder, 1 in his back (or breast), 2 in his following hand and 4 in the leading one, 1 in his following elbow and 4 in the leading one and 1 on each knee, or 17 stars in all (there are 2 marks on the hand of the trailing arm, but these are not stars).
fol. 190v AURIGA is framed as above. He is shown on his knees facing to the right with both arms outstretched. He has a mitre with a fleur-de-lis on the top on his head and a long robe with bands at the shoulder, waist and upper arms. He holds a stick with a single flail that wraps around the stick in his right hand and has 3 goats on his left hand. He has 1 star in his head, 1 on each shoulder, 1 on each elbow, 1 on the right hand, 2 on the left hand and 1 in each Kid, or 10 stars in all.
fol. 191r CEPHEUS has a gold frame around him, but the background is not painted. He stands with his arms upraised to either side. He wears a short tunic and a longer mantle and a mitre-like hat with two tassels falling from the edge. He is drawn in blue and has a yellow brooch and yellow at the ends of his tassels. He has 2 stars in his head, 1 on each shoulder, 3 in his chest, 7 on his right side, 2 in his left knee and 4 in his foot, or 20 stars in all.
fol. 191v
fol. 192v

CASSIOPEIA has no frame. She is seated on a pillow on a throne with a convex top, with her arms outstretched to either side with palms upwards. She wears a cap and a long-sleeved dress with four buttons on the chest. She also has her hips swathed in an extra piece of material. There is a violet edge to her pillow, which also has a yellow stripe running through its middle. The body of her throne is yellow and the semi-circular top is framed in green. She has 1 star in her head, 1 on each shoulder, 1 on her right breast, 1 on her navel, 1 in each elbow, 1 in each hand and 3 in her lap, or 12 stars in all.

ANDROMEDA has no frame, but the background behind her has been coloured green. The rest of her figure is drawn in light blue. She stands frontally, wearing a long robe with long sleeves and a scarf draped around her back and over her arms at the elbow, with its ends hanging down like tubes. She wears a headband. Her arms are held out to either side, resting on two trees, the side branches of which have been cut off, but the tops are almost like capitals. These trees are covered with toilet articles. There is a snaky dragon with no feet, but a dog-like face with long pointed ears at her feet. She has 1 big star in her head, 1 big star in each shoulder, 1 in her right hand, 1 in her right elbow, 1 in her left elbow, 1 on her left wrist, 1 in her left hand, 4 above the girdle and 3 on the girdle, 1 in each knee and 2 in each foot, 1 in each tree, or 23 stars in all.

| fol. 193r | PEGASUS has a green frame and an olive green background. He is depicted as $1 / 2$ a winged horse, facing the right and eating out of a bowl. His forefeet are stretched in front of him and he has a decorative flourish where his wing meets his shoulder. He has 1 star in each ear, 2 in his face, 2 in his nose, 4 in his neck, 3 in his wings, 1 in his chest, 1 in his knee, 2 in his feet (difficult to tell due to damage) and 1 in his belly, which is also marked by a red line. He has 16 or 18 stars. |
| :---: | :---: |
| fol. 193v | TRIANGULUM is red with blue lacy designs set within a yellow border. It has 3 stars, 1 in each corner. |
| fol. 193 | PERSEUS is set within a red and blue frame with a yellow-green background. He flies to the left with very large wings on his feet. He is nude except for a pointed cap and a scarf the hangs from his right shoulder and flutters behind him. He faces the viewer. He holds a bearded head of a man in his right hand in front of him and something that looks like a bunch of bananas in his left hand behind him. He has 1 star in each shoulder, 1 in his left elbow and 2 in his left hand, 1 in his right hand, 2 in his belly, 1 on his right thigh, 1 on each knee, 2 on the lower right leg and 4 in Medusa's head, or 17 stars in all. |
| fol. 195r | The 7 PLEIADES are female heads set within circles that have green centres and red borders. No stars are marked. |
| fol. 196r | LYRA is without a frame. It looks like a flat loom, with an upper bridge that curls at the left side. It has 15 strings. It is coloured yellow and has a thin red line running along its bridge and in the toggles at the bottom of the strings it has 8 stars. |
| fol. 196v | CYGNUS is set in front of a frame with a green-yellow background. It stand to the right and bends its head towards its chest and raises it eight foot. Its right wing is raised. It has 5 stars in its right wing, 1 in its neck, 1 in its head, 5 in its left wing and 1 in the tail, or 13 stars in all. |
| fol. 197v | SAGITTA is a light blue arrow with green feathers, with its tip towards the right and has 4 stars. |
| fol. 198r | AQUILA is set within a green and black frame with a green and black background. He stands facing to the right, but looks backwards over his shoulder to the left. His wings are outstretched and he stands on SAGITTA, which points to the right. He is marked by 1 star in his head, 3 in his chest and 1 in his foot, or 5 stars in all. SAGITTA does not have stars. |

fol. 199r
DELPHINUS has no frame and is drawn in light blue. He swims to the left and has
a curled beak and a beard. He has 1 star in his mouth, 2 in his head, 1 on his
back, 3 in his beard and 2 on his tail, or 9 stars in all.
fol. 199v
ORION is set within a green frame against a green background. He strides to the
left, but it is unclear if he faces the viewer or not. His hands suggest a back
view, but his face and his knees and the way his sword is carried suggests a front
view. He is dressed in a short tunic and a cape that is held by a pin on his left
shoulder and covers most of his right arm (held out straight in front of him) so
that only his hand is visible. His left hand holds a sword and is held out straight
behind him. He has a belt and a strap running diagonally across his body that
hangs from his right (following) shoulder and carries a long scabbard at his groin.
He has 3 stars in his head, 1 on each shoulder, 1 in his left elbow and 1 in his left
hand, 3 in his sword, 3 at his waist, 1 on each knee and 1 in each foot, or 17
stars in all. There are 3 erased stars in his right arm.
CANIS MAIOR, without a frame, is a greyhound running to the right, with a halo
fol. 200v
around his head and red flames coming from his mouth, but there is no
indication of a star. He also wears a collar and is marked by 3 stars in his head, 2
in his chest, 3 in his feet, 3 on his back, 1 in his groin, 4 on his tail and 2 on his
feet, or 18 stars in all. Below him, there is a picture of a face within a stars that
accompanies a section from Isidore, De cometis stella.


#### Abstract

fol. 202v PISCIS AUSTRINUS swims upside-down with his beaky mouth facing to the right. He is marked by 12 stars.

ARA is a cylindrical object with trefoil flames coming from the top. It has 4 stars, 2 at the top of the flames and two at the base of the altar. fol. 203v CENTAURUS is set within a red and black frame against a green background. He walks to the right with his front legs crossed. It appears that his back is towards the viewer. He is bearded and holds LUPUS (a dog) by its heels in his right hand in front of him and holds a rabbit in his left hand behind him. In his left hand, he also holds a straight sword. He has a band demarcating his human and animal parts and has another band around his horse-waist. He has 3 stars in his head, 1 on each shoulder, 1 in his left elbow, 1 in his right hand, 1 in each front leg, 1 in each front hoof, 2 in each back leg and 3 in his tail, or 18 stars in all. Lupus (the dog) has 1 star on each ear, 2 on the tail, 1 on the back, 2 in the front feet and 2 in the hind feet, or 9 stars in all. fol. 204v HYDRA has no frame. It is depicted as a climbing snake with pointed ears and a decorated body. It has 4 stars.

CRATER is a 2 -handled vase on a raised foot, and CORVUS stands facing towards the snake's head and pecking at its body. Crater has 3 stars and Corvus has 4 stars (the one on the Beak of Corvus seems to be shared with one in the body of Hydra, so there are 10 stars in all).

CANIS MAIOR (Procyon) has a hound's snout and runs to the left. It wears a collar and has 3 stars in its belly.


## notes

For a discussion of the manuscript, see the pertinent sections of the Commentary.

Stylistically, the illustrations in this manuscript seem to have a close connection to a classical prototype. The text, however, is compiled of a series of excerpts taken from both classical and medieval sources. The latter fact suggests that the author of this piece (and possibly the illuminator) had access to a wide range of source material from which to create his own compilation. For this reason, it is interesting to examine the relationship between positions of the stars listed in the accompanying texts with those found in the pictures.

## [The following section was researched with Dr ELLY DEKKER.]

1. In some cases, the positions of the stars placed inside the constellations follow the descriptions found in the excerpts from Book III of the De Astronomia. Examples are ARIES, LEO, URSA MAIOR, CYGNUS, ORION, CANIS MAIOR and LEPUS.
2. A second iconographic tradition appears to have influenced the image of BOÖTES, however. The text describing the positions of 14 stars of Bootes from De astronomia (Book III, 3) appears on fol. 185r, immediately following the picture of Ursa Minor. Clearly, this order has been drawn from Hyginus, since he discusses Boötes immediately after the description of Draco. But, in Vat Reg lat 123, the image of Bootes actually appears several folii later (on fol. $189 \mathrm{v})$. The order of the pictures, then, follows that used in the De signis caeli catalogue, where Boötes is described after the constellation of Ophiuchus with Serpens and Scorpio. Alongside the Bootes of Vat Reg lat 123, one does find a Hygininan excerpt - but one taken from the catasteristic myths from Book II of the De astronomia (Book II, 3). This myth is accompanied by another description of the stars, taken from the De signis caeli catalogue, which described the positions of 16 stars. There are two significant differences between the positions of the stars of Boötes in the De signis caeli catalogue: first, is the mention of 4 stars in the elbow, which are lacking in Hyginus's description; and, second, the De signis caeli catalogue does not mention the bright star Arcturus. Tellingly, the illustration in Vat Reg lat 123 includes the 4 stars in the arm and excludes Arcturus. In the picture, however, there is only 1 star on the breast instead of 1 on each nipple (as stipulated by the De signis caeli catalogue). This may explain why the scribe has entered a sum of 15 stars for the figure, in spite of the fact that 16 stars are described in the catalogue entry.
3. Sections from the De signis caeli catalogue also appear following the excerpts from the De astronomia (Book III, 39) describing the constellations of HYDRA, CORVUS and CRATER. This helps to explain why the illustrations do not follow the Hyginian prescriptions of 27, 7 and 8 stars in the three figures. In the De signis caeli catalogue, the number of stars is listed as 3, 4 and 3. The scribe of Vat Reg lat 123 has not really been tremendously accurate here, as he lists 4 stars in Hydra, 3 in Corvus and 3 stars in Crater, or a total of 11 stars. This may have been caused by his twice having counted the star in the beak of Corvus (once as being part of Corvus and once as part of Hydra).
4. A number of other constellations also show the influence of the De signis caeli descriptions, but the accompanying texts in the present manuscript have not been changed to fit the picture. For example, AURIGA, CASSIOPEIA and DELPHINUS are extremely close to the De signis caeli entries, whereas some of the other -- such as TAURUS, VIRGO, OPHIUCHUS (with

SERPENS and SCORPIO), CEPHEUS and PERSEUS -- are not an exact fit, but are generally closer to the De signis caeli descriptions that to those found in the De astronomia.
5. For a number of constellations Hyginus's description of the stars is identical to those found on the De signis caeli' catalogue. The stars in the following constellation agree with both traditions: SCORPIO, URSA MINOR, CORONA BOREALIS, SAGITTA, TRIANGULUM, ORION, PISCIS AUSTRINUS, ARA and CANIS MINOR.
6. The constellation of CAPRICORN also provides an interesting case. In the Hyginus manuscripts, the total number of stars is usually listed as 26 (Le BOEUFFLE 1983, p. 197), but the actual number of stars described is equal to 20. In Vat Reg lat 123, the scribe has added an extra 6 stars to Hyginus's description of the horns of the constellation (in cornibus vi), thereby ensuring that the total number of stars adds up to the right number of 26 stars. There is no known source for this number of stars in the horns, however. Hyginus, for example, does not list any stars in the horns of Capricorn; and the text of De signis caeli mentions 2 stars in each horn and 2 in the head. Interestingly, the picture in Vat Reg lat 123 does not illustrate 6 stars in the horn, but follows the De signis caeli prescription of 2 stars in each horn and 2 in the head (which, one might note, does equate to 6 stars in the head of the beast, so may have been the ultimate source for the transposition). Also note that the total number of 27 stars in the present illustration results from an extra star in the feet, because the description lists only 2 stars in the feet instead of 3 .)
7. The illustrations of HERCULES and ARGO are more complex. The positions of the stars in these constellations are not consistent with either Hyginus, nor with the De signis caeli catalogue. For example, Hyginus says that there are 4 stars on the lion's skin of Hercules. These are not shown in the manuscript. The De signis caeli catalogue mentions 1 star on each shin, but in Vat Reg lat 123, these stars appear only on both knees, on the right calf and on the right foot. Both star catalogues include 1 star in each shoulder, but the Vat reg lat 123 Hercules has a star only on one shoulder. It seems that the stars in this figure are closer to the De signis caeli catalogue, but one cannot explain the presence of all stars using only this source. A similar conclusion holds for Navis. The De signis caeli catalogue describes 5 stars in each oar. This detail does appear in the Vat Reg lat 123 illustration, but positions of the other stars are too vague to ensure that a De signis caeli text is the source of the image. The text is derived from the De astronomia (Book III, 36), except there is an error in the total number of stars (16 instead of 26).
8. Both PEGASUS and AQUILA have particularly odd features. For Pegasus, the Hyginus text (Book III, 17) is identical with the one found in the De signis caeli catalogue. In the illustration, however, the places of the stars deviate from these descriptions. The text stipulates 1 star on the shoulder (there are none in the picture), 1 on the back (the illustration has 3 in the wings) and 1 in each knee (the illustration has 1 in the left knee, but the right knee has been damaged, so there may have originally been a star there). For Aquila, both descriptions mention 4 stars (Hyginus places 1 star in the head, 1 in the tail and 1 in each wing; while the De signis caeli catalogue there are 1 in the foot, 1 in the body , 1 in the beck and 1 below it); but the picture in Vat Reg lat 123 shows 5 stars: 1 star in his head, 3 in his chest, 1 in his foot.
9. In addition to all these small oddities, there are a number of straightforward errors in Vat Reg lat 123. For example, in the picture of CETUS, there are 5 stars in his belly and 6 in his tail whereas, according to Hyginus (Book III, 30), there should be 6 in the belly and 5 in his tail. The text on fol. 202v is attributed to Hyginus (HYGINI FABULA DE CETU CXIII), but actually is to De signis caeli, as bot place 6 stars in the belly and 6 in the tail.

The conclusion to be drawn from these observations seems clear. The scribe/illuminator of Vat Reg lat 123 must have had at his disposal an illustrated manuscript of the De signis caeli catalogue with pictures adorned by stars.) Manuscripts such as Paris BN 5239 and BN 5543 are excluded since they lack stars, but it is possible that the model could have been something resembling Klosterneuberg 685, Vat lat 643 or Zwettl 296. In pulling together the different sources for his compilation, the scribe followed the order of the De signis caeli manuscript with the exception of the zodiacal constellations, which he placed at the beginning. For the text describing each constellation, he drew liberally from Books II and III of the De astronomia, but also reverted to the star catalogues found in the De signis caeli from time to time. His accuracy was middling and he rarely verified the number or positions of the stars in the illustrations against the text he included in his compilation. Yet, the significance of this manuscript is that it is not a mere copy, but the result of numerous efforts effort to bring the textual description of the stars into closer accord with the stars actually plotted in the pictures.

Such an effort is, indeed, remarkable.

## bibliography

PIJOÁN 1912.

SAXL I 1915, pp. 45-59.
$36.5 \times 27.9,223 \mathrm{ff}$; fol. 118 r has a 19-year cycle beginning with 1055 with EODEM ANNO FACTUS EST LIBER ISTE; ff. 126 is $12-13$ thcentury; $118 \mathrm{v}-125 \mathrm{v}=11$ th century; $151 \mathrm{r}=12^{\text {th }}$ century; Spanish (St Maria de Ripoll?); with arms of Pius XI and Cardinal Angelo Mai; lists contents page.

SAXL and PANOFSKY, 1933, p. 242.
small size of planet busts 'exactly repeat the figures appearing in the famous "choronograph of the year 354 "', which in turn correspond to usually Greek and Roman deities ; same types appear in Vat Reg lat 123, but slightly degenerated.

WILMART 1937, pp. 289-92.

JONES 1943, pp. $\qquad$

SAXL 1957, pp. 88ff.
earliest of Cicero ms; in 9th century this fragment of text attracted attn of Lupus of Ferrieres, who asks for the loan of a codex from his friend explaining that he intends to copy it against corrections of another one he has found; believes Harley 647 is that one, carefully corrected an illustrated by Lupus himself or one of his pupils, it becomes the fons et origo of a number of mss in the11th and 12centuries; 'For our tastes, this fruit of late antique civilization is a little too fanciful'

PHILLIPS 1968, pp. 18-22.
p. 18-19: third Andromeda type has Andromeda between two posts with little understood capitals; has grave offerings and crudely cut branches in Vat Reg lat 123, 12thc (a sub-group of this is in Vienna 5318 (p.19), where she is exposed between columns). All of these types preserve an earlier tradition of showing Andromeda between two uprights (stone or posts) which can be seen on Athenian models and most of the southern Italian vases, therefore consciously rejecting the more theatrical pose of Andromeda against a cliff, known at Alexandra through Euanthes's painting
p. 19: fifth Andromeda type shows her chained or spiked between twin rocks on which offerings have been placed Vat gr 1087; All of these types preserve an earlier tradition of
showing Andromeda between two uprights (stone or posts) which can be seen on Athenian models and most of the southern Italian vases, therefore consciously rejecting the more theatrical pose of Andromeda against a cliff, known at Alexandra through Euanthes's painting; Rocks must be the twin rocks at Joppa which are specifically mentioned by Lycophron in his Alexandra, 836-38. so they are Alexandrine in conception, but more conservative.
pp. 19-20: the gifts in Vat Reg lat 123 and Vat grec 1087 are an oenochoe, mirror and pointed covered box; these are not medieval or Byzantine; in Vat Reg lat 123, the left post has a ewer, a trulla and a chalice and the right has a square box, mirror and covered bowl. The ewer has a form specific to the 4th to 6th century; all-in-all the model for these would date between the last quarter of the 2nd C BC to the burning of the Library at Alexandria (272 or 5th C AD? which does he mean?)

McGURK IV 1966, p. xvii.
Aratea illustrations from 11th and 12th C Germany, Spain and France are set in a traditional context, unlike English counterparts, which are often set within mss with contemporary scientific texts.

McGURK 1973, p. 200, vii.

PELLEGRIN, etc. 1975, II, 1, pp. 35-38.
parch, 11th century; (before 1056); De natura rerum (Bede and Isidore); Pliny NH, extracts; ff. 154v ff - Hyginus extracts, some Macrobius and Anthol lat and Calcidius, Plato Comm. perhaps Spanish; was written at the Monastery of St Maria in Ripoll; rubric on fol. 118 has date of 1056

McGURK 1981, p. 214, n. 19.
written 1056, probably in Ripoll, text is not Bedan, but its illustrations do have relationships to two Paris mss (BN 5543 and BN 5239) and the Aberystwyth ms and to Vat lat 643.

BRINCKEN 1981, p. 404 and pl. XIV.

VIRÉ 1981, p. 174.
11th century; Sta Maria de Ripoll; ff 154-204 extracts from Hyginus illustrated (Bk I= chaps 2, $4,5,6$, and 7 up to pervenire, 26 and 27; Book II, Book III (except chapter 30); Book IV (chaps 12-19)

MUNDÓ I MARCET 1982,p. 131.

CASTELLI 1982, p. 232.

EASTWOOD 1983, p. 6.

EASTWOOD 1983, p. 17.

IBARBURU ASURMENDI 1984, pp. 29-37.

OROFINO 1984, pp. 586, 590, 591 and 595.

LIPPINCOTT 1985, p. 49.

PRETE 1985, p. 142.

KERSCHER 1988, pp. 11, 14, 15, 21, 22, 52, 53 and 55, pls 19 and 20.

BRINCKEN 1989, p. 133.

ROURA I GÜIBAS, 1990, pp. 40-41.

VIRE 1992, p. xviii.
membr., for year 1056 except for ff $118 \mathrm{v}-125 \mathrm{v}$ which is a little later and $128 \mathrm{r}-\mathrm{v}$ and $151 \mathrm{r}-\mathrm{v}$ which is 12 th century, from Monastery of St Mary in Ripoll, transcribed by monk Oliva/ monk Arnaldi; 223 folios ( $362 \times 280$ ) and figures in red and cerulean of 55 figures of stars and planets, Pleiades and comets accompany excerpts from Book II of Hyginus and the Book III.

VIRÉ 1992, p. 846.

GÓMEZ PALLARÈS 1992, pp. 104-105, 114.

EASTWOOD 1993, p. 8.
von EUW 1993, pp. 251-269, especially fig. 22.

BORST 1994 (2nd edn) , pp. 118, 137, 173, 220 and 372.

MUNK OLSEN 1994, pp. 224225.

PUIGVERT 1995, pp. 98-99.

OBRIST 1996, pp. 132-133.

PUIGVERT and MARTÍNEZ GÁZQUEZ 1996, pp. 297-306.

CASTIÑEIRAS GONZÁLEZ 1998, pp. $\qquad$ .

PUIGVERT 1998, pp. 285-316.

CASTIÑEIRAS González 1999, pp. $\qquad$ -.

PORTER 1999, p. 89

CHEKIN 1999, p. 21.

MUNK OLSEN 2000, p. 153.

MEYVAERT 2002, pp. 11 and 38.

SOMFAI 2002, pp. 8, 10, 13, 14 and 17.

GRÉGOIRE 2003, p. 60-61.

GAUTIER DALCHÉ 2004, pp. 189 and 193.

CONTESSA 2005-2008, p. 95.

ZURLI 2007, 27.

GARCIA AVILÉS 2001, figure 25.

CHECK:

CONTESSA Miscellanea Bibliothecae Apostolicae Vaticanae, $\qquad$ XII, p. 84.

