

London

British Library

Harley Ms 647

Cicero *Aratea* with Hyginus *scholia*

French (Lorraine?)

820-50

text

- ff: 2v-1v Cicero, *Aratea*, with Hyginus *scholia* (on the illustrated pages, the *scholia* is written within the contours of the figures of the constellations with the text of the poem at the bottom of the page).
- ff. 1r-1v: (in black) Octavam nominaverunt scorpinonem. quia scorpionis arcuatam habet caudam & variatam. – Ortu enim suo aestatem primeque navigationis tempus ostendunt occasu hiemen. (with half page left blank at the end) when then leads to:
- fol. 2r (different hand from that of ff. 1r-1v) IT claras stellas post orionem sub signo geminorum – sed christus dominus salvator mundi evertit. (cf. Vogel, *scholia*, pp. 9-13)
- DOMINE deus omnipotens sancta trinitas – In unitate euisdem spritus sancti per omnis secula seculorum. AMEN.
- SANCTA scriptura nobis a deo per beatum moysen tradita – & luminare minus. ut preeset nocti.
- fol. 2v On each page, the the *scholia* is set within the body of the constellation and written in majuscule, in red and sepia ink. The verse in centred at the bottom of the page and, below this, the name of the constellation in capitals appears at the bottom of the page.

The *scholia* begins:

ARIES HIC EXISTI MATUR ESSE QUI PHRYXUM ET HELLEN
TRANSTULISSE ... (= Hyginus, *Astronomica*, II; cf. Kaufmann 1888, p. iii)

The verse begins:

CICERONIS DE
E quibus hinc subter possis cognoscere fultum
Ima caeli mediam partem serit ut prius illae...
(= Cicero, *Aratea*, vv. 1-2, cf. Soubiran 1972, p. 166)

And then the label:

ARIES

fol. 13r

The *scholia* on the constellations ends:

... quae sunt visdens nocturno tempore signa. (= Hyginus, *Astronomica*, II;
cf. Kaufmann 1888, p. xxxi)

The verse on the constellations elides into that on the planets:

Ante canem graio procyon qui nomine fertur.
Haec sunt que visens nocturno tempore signa
Aeternumque voles mundi pernoscere motum
Namquae perbis sex signorum labier orbem –
(= Cicero, *Aratea*, vv. 222-225 , cf. Soubiran 1972, p. 179)

And then the label:

ANTICANIS

fol. 13v

The *scholia* on the planets continues:

PRIMAE EST IOVIS NOMINE PHAETHON – QUAE STELLE PLANETAE SUNT
DICTAE. (= Hyginus, *De astronomia*, cf. Kauffmann 1888, p. xxiii)

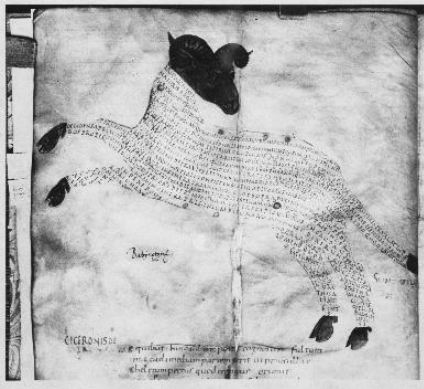
fol. 14r-17v

The verse continues in longlines, alternating red and blue and red and sepia:

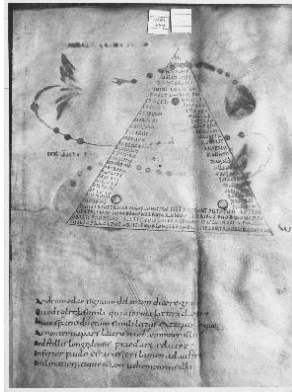
Quinque solent stellae simil ratione notari—
Hanc autem totam properant depellere pisces.
(= Cicero, *Aratea*, vv. 227-481, cf. Soubiran, 1972, pp. 179-.185)
(with bottom half of the page blank on fol. 15v, detailed commentary
added in the larger margins on ff. 16r-v (The commentary reads: ...

splendidum. Articuli temporum quos proposuimus – diras tempestates praenuntiant. (= Pliny, *NH*, XVIII, 35) and a single column of verse on ff. 17r-v)

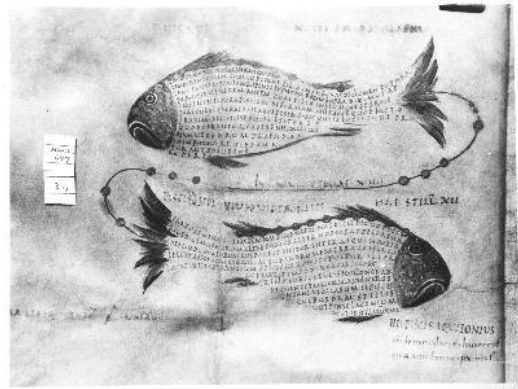
- ff. 17v- 18r AMBROSII MACROBII THEODOSII DE MENSURA ET MAGNITUDE TERRAE ET CIRCULI PER QUEM SOLIS ITER EST. In omni orbe vel sphaera medietas centrum vocatur – solem octies terra esse maiorem. (= Macrobius, *In somn. Scip.*, I, 20, 14-32)
- fol. 18r FELICIS CAPELLAE DE MENSURA LUNAE. Luna item circuli seu sexcentiesimam optinet portione – circulum centies maiorem esse tellure. (= Macrobius, *In somn. Scip.*, VIII, 860)
- ff. 18r-18v EIUSDEM ARGUMENTUM QUO MAGNITUDO TERRAE PRAEHENSA EST. Erathostenes philosophus idemque geometra subtilissimus – humanę coniecturae dimensionem admittit. (= Macrobius, *In somn. Scip.*, VI, 598)
- ff. 18v-20r DE POSITIONE ET URSU SEPTEM PLANETARUM. Inter caelum et terram certis discreta spatiis septem sidera pendent – id est miliaria. CVIII et CCCLXXV. (= Pliny, *NH*, I, 2)
- fol. 20r DE MUNDANO ANNO QUI QUINDECIM MILIBUS SOLARUM CONFICITUR ANNORUM TULII CICERONIS SOMNIUM SCIPIONIS DISTANTIS ET MACROBII IDEM EXPONENTIS AC SENECAE PHILOSOPHORUM AUCTORITAS. Annus non is solus quem nunc communis omnium usus appellat – septusginta tres. quisquis indigitos mittit inveniet. (= Macrobius, *In somn. Scip.*, II, xi, 5-17)
- ff. 20v-21r blank
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fol. 2v



fol. 3r



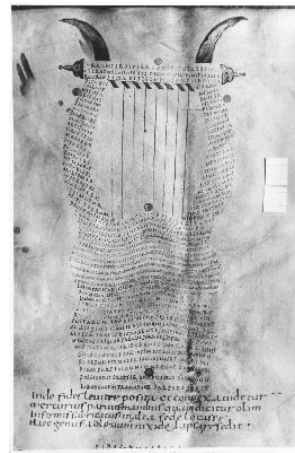
fol. 3v



fol. 4r



fol. 4v



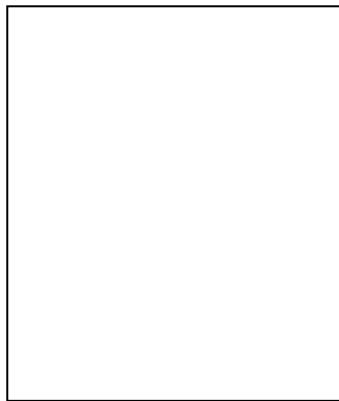
fol. 5r



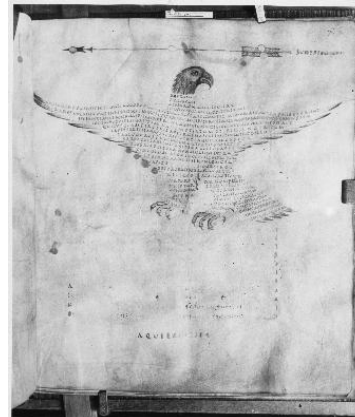
fol. 5v



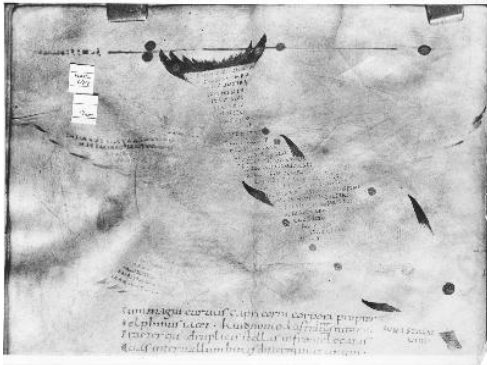
fol. 6r



fol. 6v



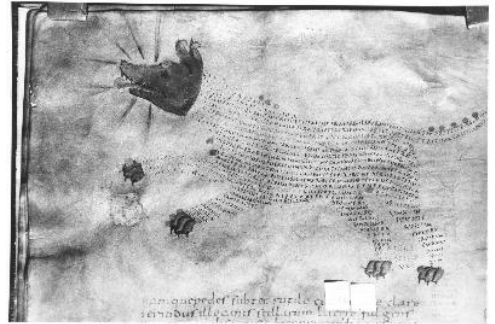
fol. 7r



fol. 7v



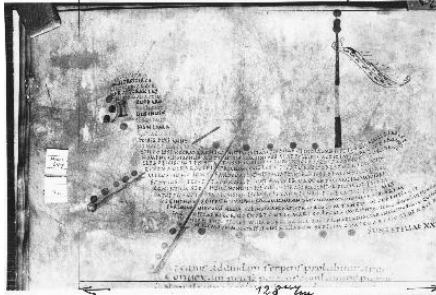
fol. 8r



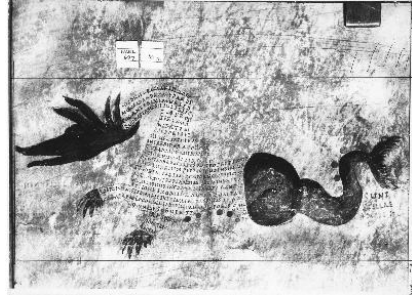
fol. 8v



fol. 9r



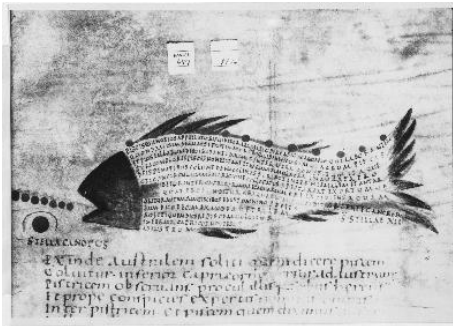
fol. 9v



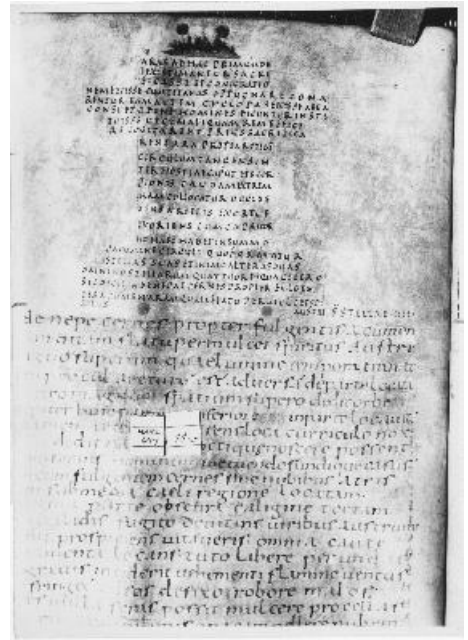
fol. 10r



fol. 10v



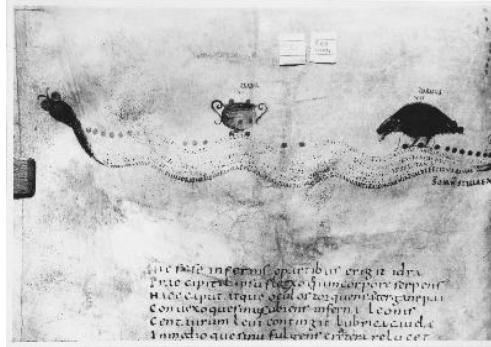
fol. 11r



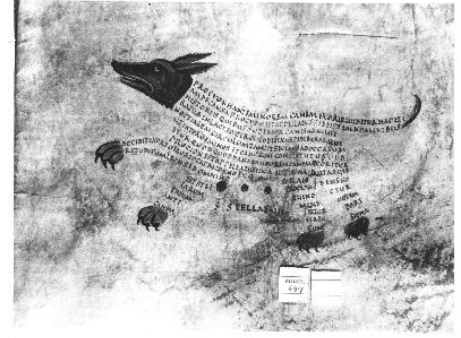
fol. 11v



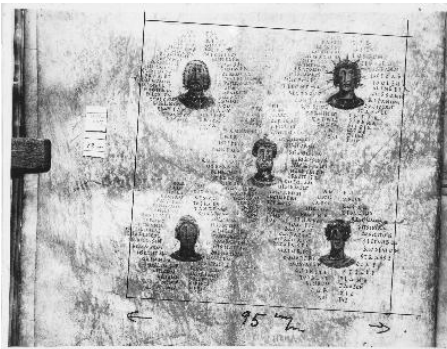
fol. 12r



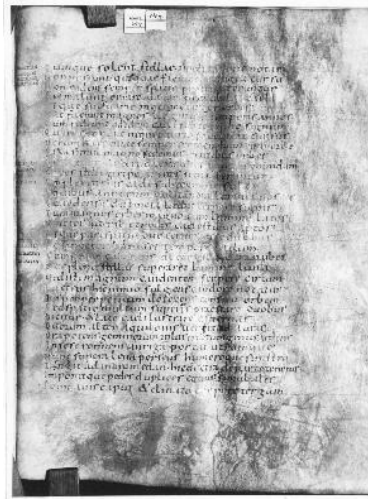
fol. 12v



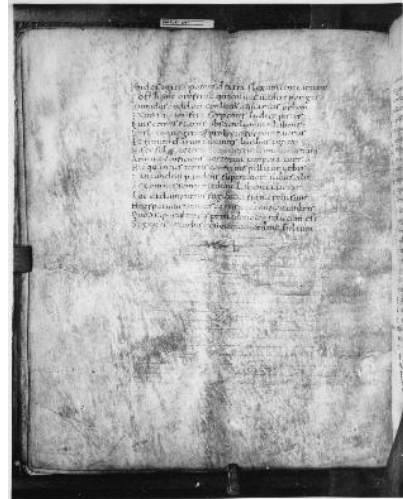
fol. 13r



fol. 13v



fol. 14r



fol. 15v



fol. 21v

illustrations

- ff. 2v-13r Illustrations of 24 constellations including two of Sagitta, plus the Pleiades. The main parts of the bodies are outlined in sepia ink with the bodies filled with the sepia and red-orange text of the *scholia*. The peripheries of the figures (head, hands, feet, attributes, etc.) are depicted illusionistically in full colour, with the colours brown and grey predominating. Stars are marked by orange-brown dots.
- As the series begins incompletely, the following are not included: Ursa Maior and Minor, Draco, Hercules, Corona Borealis, Ophiuchus and Serpens, Scorpio, Libra, Boötes, Virgo, Gemini, Cancer, Leo, Auriga, Taurus, Cepheus, Cassiopeia, Andromeda, Pegasus, Aquarius, Capricornus. In addition, Equuleus and Corona Austrinus are absent.
- fol. 13v Depiction of the 5 planets as busts set within diamonds of *scholia* text. (Apollo has yellow rays coming from his head, Venus is blonde and Mercury has small grey wings on his head).
- fol. 21v Planisphere. For full description, see section on maps and globes.
- fol. 2v **ARIES** (labelled: ARIES and the tail is labelled: SUNT STELLAE XVII) leaps to the left and faces backwards to the right. His head and four feet are painted grey and his horns are lightly striped to represent a ribbed texture. He has 1 star in his head, 3 on his nose, 2 in his neck, 4 along his back, 1 in his groin, 3 along his belly, 1 on the tip of his tail, 1 in his right front hoof and 1 in his left hind hoof, or 17 stars in all.
- fol. 3r **TRIANGULUM** (labelled: DELTOTON and SUNT STELLAE III) is a triangle with the upright sides slightly longer than the base and has 1 star in each corner, or 3 stars in all.
- fol. 3v **PISCES** (There seems to have been a label above the top fish - possibly the original label for Piscis Aquilonius, but it is now largely illegible). The cord is labelled: IN VINCULIS STELLAE VIII. Beneath the cord, there is the label: PISCIS QUI ^AQUILONIUS QUI ET BOREUS HABET STELLAE XII. The bottom fish is labelled: HIC PISCIS AQUILONIUS andromedae est humerus quia aquiloni est proximus. (note that the text in the lower fish lists the number of stars: STELLARUM XVII).

At the bottom of the page: PISCES) swim in opposite directions with both their backs upwards and their tail connected by a cord. Their faces, fins and tails are blue and orange. The top fish has 15 stars and a bright orange eye. The cord has 9 stars. The bottom fish has 12 stars and a bright orange eye. There are 36 stars in all.

- fol. 4r **PERSEUS** (labelled: PERSEUS; between his legs, there is a label: SUNT STELLAE XVIII) walks to the left and faces the viewer. He wears a blue cloak that flows behind him to the right. His right arm is raised in front of him and he holds a thin *harpe* in it. In his left hand he holds a blue-haired Medusa head from which blood spills into a puddle. The manner in which the blood forms beneath her chin could easily have been misconstrued as a beard. He has blue wings on his head and on his bare feet. He has 1 star in his head, 1 on each shoulder, 1 in each hand, 1 in the harpe, 1 in his right elbow, 1 at his waist, 2 in his right thigh, 1 in his right knee, 1 in his left thigh, 2 in his left shin, 1 on his right foot and 3 in the head of Medusa, or 18 stars in all.
- fol. 4v **PLEIADES** (labelled: VII. PLIADES VEL ATHLANTIDES and (in red) MEROPE, ALCYONE, CELAENO, ELECTRA, TAYGETE, MAIA and MEROPE) consists of 7 female heads set within lyre-shaped frames. They each have brown hair.
- fol. 5r **LYRA** (labelled: FIDES QUAE LIRA) is depicted as a *bucranium* with grey horns coming from the top. It has 8 strings and two silver caps at the end of the crossbar. The *scholia* is written in wavy lines that alternate between brown and orange. There are 2 stars at each tip of the horns, 2 at the sides of the horns below the crossbar, 2 at the ends of the cross bar, 1 in the middle of the cross bar, 1 in the middle of the strings and 1 in the middle of the base, or 9 stars in all
- fol. 5v **CYGNUS** (labelled: CIGNUS ^{gr} QUI ET OLOR ET ORNIN (note that the text in Cygnus's left leg lists the number of stars: HABET XIII)): stands to the left with its head lowered and staring menacingly forward. Its head, wings and feet are grey. It has 1 star on the head, 1 on the neck, 5 on each wing, 1 in the body and 2 on the tail, or 15 stars in all.
- fol. 6r **SAGITTARIUS** (labelled: SAGITTARIUS; beneath his tail there is a label: SUNT STELLAE XVI) walks to the left with his right forefoot raised. He is bearded and wears a blue cloak that flutters from his shoulder. He holds his bow in front of him with his right hand and holds his left hand down by his side. The *scholia* written in his human part is in orange and in his equine part it is in grey. He has 2 stars in his head, 1 in his cloak on his left shoulder, 1 in his right elbow, 2 on his back on his left side, 1 in the horse's chest on his right side, 2 in his bow, 1 in

his arrow, 1 on his front right knee, 2 on his right front hoof, 2 on his tail, and possibly 1 in the left hand, or 16 stars in all.

- fol. 6v **SAGITTA** (labelled: SAGITTA) is very faint, but seems to be a bow set horizontally. There is a fold in the page above this bow, but this does not seem to be an arrow.
- fol. 7r **AQUILA** (labelled; AQUILA; and to the left in orange: SUNT STELLAE IIII) stands with its wings spread to the sides and its head turned to the left. Its head, feet and tips of its wings are brown-grey. There are 4 stars in its right wing.
- SAGITTA**² (labelled at the right side: SUNT STELLAE IIII) is depicted horizontally above the head of Aquila with the tip towards the left. There is 1 star at the tip of the arrow, 1 in the middle and 2 at the notch, or 4 stars in all.
- fol. 7v **DELPHINUS** (near the beak, it is labelled: SUNT STELLAE VIII) swims at an angle to the lower right. Its eye, beak/beard, fins and tail are grey. It has 1 star in the beak, 3 in the belly, 1 in the back, 2 behind the dorsal fin and 2 on the tail, or 9 stars in all.
- fol. 8r **ORION** (labelled: ORION; beneath his feet, he is labelled: SUNT STELLAE XVIII.) stands within a tent-shaped structure defined by the shape of the brown, blue and orange *scholia* (there are no outlines defining the structure itself). He stands facing the viewer in a short brown tunic with a white mantle hanging from his shoulders. His arms are held out to either side. In his right hand, he holds a brown sword vertically. He wears a brown scabbard on his left hip that is hung from a orange cord that crosses his chest. He has brown open-work sandals. There is 1 star above his head, 3 on his head, 1 on each shoulder, 1 on the right elbow, 1 in the right hand, 3 at his waist, 3 down his right thigh, 1 in each knee and 1 on each foot, or 18 stars in all.
- fol. 8v **CANIS MAIOR** (labelled: SYRIUS; between his hind feet, there is a label: SUNT STELLAE XX.) leaps to the left with his tongue sticking out and 7 rays of light coming from his head. His head, paws and the tip of his tail are grey. He has 1 silvered star on his tongue, 1 on the head, 1 on each ear, 3 orange stars on his back, 2 on his chest, 1 on his right forefoot, 3 on his left forefoot, 1 on his groin, 1 on his left hind foot and 5 on his tail, or 20 stars in all.
- fol. 9r **LEPUS** (labelled: LEPUS; the hind feet have the label: SUNT STELLAE VII.) leaps to the left. Its face, feet and tip of its tail are white. It has 1 star in each ear, 2 in its body, 1 in its tail and 1 on each hind foot, or 7 stars in all.
- fol. 9v **ARGO** (labelled: ARGO; the keel has a label: SUNT STELLAE XXVI.) seems to be a full ship with a mast and a piece of fur (?) hanging from it which may be by a

later hand. The stern is curved and there are two steering oars at the back. The mast is white and grey and the oars and tip of the stern are brown. The *scholia* is multi-coloured. There are 3 stars at the tip of the mast, 5 on the deck of the ship, 4 in the stern, 4 in one oar and 5 in the other, and 5 along the keel, or 26 stars in all.

- fol. 10r **CETUS** (labelled: COETUS; the tail is labelled: SUNT STELLAE XIII.) is a classical sea monster that faces to the left with long ears and a pointed snout. It has a curl in its tail and its head, flippers and tail are grey. It has 6 stars beneath its body, 5 on the tail and 2 at the end of the tail, or 13 stars in all.
- fol. 10v **ERIDANUS** (labelled: ERIDANUS; there is a label to the right: S STELLAE XIII.) is a seated river god facing to the left leaning on his flowing urn with his left elbow. He is bearded and wears a grey wrap around his legs. He holds a grey palm frond in his right hand, which rests on his knee. The stream flowing out of the grey and brown urn is grey. He has no stars on his body, but there are 2 groups of 3 stars, placed below the stream, which passes to the mouth of Piscis on the facing page. There are 7 stars on the remnant of the stream leading to its mouth depicted on fol. 11r. In all, there are 13 stars in the stream.
- fol. 11r **PISCIS AUSTRINUS** (labelled: PISCIS; there is a label under the tail: S STELLAE XII.) swims to the right with its mouth open and the end of Eridanus's steam flowing across the gutter of the book into it. Its face and fins are grey and orange. There is a row 12 stars along the back bone. There is also a very large orange star in front of the fish labelled: STELLA CANOPUS. On this folio, there are in addition 7 stars in the water which belong to Eridanus (see above).
- fol. 11v **ARA** (labelled: ARA and S STELLAE IIII) is shaped like a classical column and has a brown fire at the top. There are 2 stars above the flames and 2 at the base, or 4 stars in all.
- 12r **CENTAURUS** (labelled: CENTAUR^S; there is a label under his tail: S STELLAE XLIIII.) walks to the left with his right front foot raised. He has a blue cloak coming from his shoulder that flutters behind him. The cloak is an animal skin and is decorated with black dots and an animal's face. He holds a spear with a ribbon vertically in his left hand and in his right hand he holds **Lupus** (a rabbit) by its heels. He has 7 stars in his head, 1 in each shoulder, 1 on each elbow, 2 in his right hand, 2 in the 'arms' of the animal that forms his cloak, 2 on his chest, 1 on the horse's chest, 1 on each fore-knee, 2 in the right front hoof, 1 in the left front hoof, 1 in the belly, 1 on the back, 3 in the tail and 1 on the left hind foot, or 29 stars in all. **Lupus** has 5 stars in its face, 5 along its back, and 5 along its hind feet, or 15 stars in all.

- fol. 12v **HYDRA** (labelled: HYDRA and HYDRA XXII) is a snake that flows to the left. His head is brown and he has 3 stars in his head and 6 in the first coil (from the head), 3 on the second coil, 2 on the coil between Crater and Corvus and 8 on the end of the tail, or 22 stars in all.
- CRATER** (labelled above it: (in orange) CRATER and VII is a small green bowl with handles and has 2 stars on the rim, 3 in the centre of the bowl and 2 on the base, or 7 stars in all.
- CORVUS** (labelled in orange: CORVUS VII) is brown and stands on Hydra's tail facing to the left. He has 1 star on the head, 2 on its wings, 2 below the wings towards the tail, 1 on each foot, or 7 stars in all. The whole is labelled at the end of Hydra's tail: S OMN STELLAE XXXVI.
- fol. 13r **CANIS MINOR** labelled: ANTICANIS and beneath it: S STELLAE III) leaps to the left. Its head, paws and tail are grey. It has 3 stars on it belly.

notes

See below

bibliography

A CATALOGUE OF THE HARLEIAN MANUSCRIPTS 1808-12, I, no. 647.

OTTLEY 1836, pp. 47-214.

de GRAY BIRCH and JENNER 1879, p. 3.

MAUNDE THOMPSON 1884, part II. Latin, pp. 69-71 and pl. 61.

THE PALAEOGRAPHIC SOCIETY: FACSIMILES 1884-1894, II, pl. 91 [bound as no. 8].

THIELE 1898, pp.152 ff.

KAUFFMANN 1888.

KÖHLE 1912, pp. 101-07.

KENNARD RAND 1929, I, 203.

SAXL and PANOFKY 1933, pp. 236-37.

Harley 647 (236) 'impress us as being closer in spirit to the Pompeian frescoes than anything else made in the West in medieval times'; (pp. 236-37, n. 9), 'the miniatures of which strike us as being the most classical elaboration of medieval Western painting, in our opinion executed in a continental, not an English, scriptorium about the middle of the ninth century'.

VAN DE VYVER 1935, pp. 142-443

ULLMAN 1937, p. 670.

BUESCU 1941 (repr. 1966), pl. III.

WEITZMANN 1947, pp. 72, 84, 85, 105 and 112.

says copy of 4th century original

SAXL and WITTKOWER 1948.

SAXL III 1953, I, pp. 149-151.

mid- 9th century, French (fol. 1 = English around 1000; fol. 21v= beginning of 11th century); manuscript from St Augustine's Abby, Canterbury.

DODWELL 1954, pp. .

Astronomical texts and the most popular source for mythological illustrations; and says Cicero *Aratea* is one of key transmitters;

MARTIN 1956, p. 50.

9th century, the verse of Cicero (like those of Germanicus in the Leiden Vossianus) serve only as captions to the illustrations.

GRABAR and NORDENFALK 1957(repr. 1995), pl. 9.

SAXL 1957, p. 99:

'**Harley 647** is a ms purely classical character which was brought over from France' it was copied into **Cotton Tib BV**; **Cotton Tib C I**, **Harley 2506**, **Bodley 614** and **Digby 83**; '**Harley 647** is a remarkable product of an over-refined civilization'; (p. 101) 'The manuscript owes its existence to the same 'Renaissance tendencies as the famous Vossianus manuscript, published by Thiele'. When one enlarges the head of one of the Harley figures it 'comes nearer to classicism than do the Vossianus illustrations, and we have the impression that

Harley 647 is the most purely classical manuscript which has survived from Carolingian times'; feels it is not impossible that can be connected to 'the first humanist of the 9th c' Abbot Lupus of Ferrieres, pupil of Einrad and Rbanus Maurus; there exists a letter written about 848 to his friend Ansbald von Prüm, asking if he can borrow his Cicero ms (*Tullius in Aratum*), so he can fill in the lacunae from the copy I hope to borrow of which our Egil has told us (reprod., ed. L. Levillain, Paris 1935, II, pp. 45 ff); Harley 647 is the oldest and moreover is the only one with the final verses, and paleographically can be dated to Lupus's period; 'it is permissible to relate it to the Cicero manuscripts mentioned in Lupus's letter' also it has corrections in almost every line; Whether Harley 647 is the Prum copy that Lupus never sent back or I (more likely) is the copy that Lupus hoped to borrow; (p. 105) when was it brought to and English library? Was in Canterbury in the 14th century; but strong indications in was in England as early as the 2nd half of the 10th century; the first page (apparently lost) was replaced by another in an English hand from this period; the page copied by a continental monk called Gerwegius in the beg of the 11th c is never copied into the other mss so probably was a late insertion; probably not brought over when it was written (mid-9th century), but probably second half 10th century by one of the promoters of the new Benedictine reform.

The Harley ms is 'a remarkable product of an over-refined civilization'; the myths are not recounted in detail nor the stars enumerated, so an ingenious scribe of the late antiquity found a way of retaining both; at the foot of the page is the Ciceronian text; with most important stars placed (p. 100) 'in more or less correct positions according to the finding of the Greek astronomers'; bodies are filled with writing in the old-fashioned *capitalis rustica*; owes its existence to the same 'renaissance' tendencies at the creator of the Leiden Aratea; when the head of the figure in Harley 647 are enlarged 'comes nearer to classicism than do the Vossianus illustrations'; talks about Pompeian frescoes; (p. 101) 'we have the impression that Harley 647 is the most purely classical manuscript which has survived from Carolingian times'; not impossible that is connected with the first humanist of the 9th c - Lupus of Ferrieres, pupil of Einhard and Rbanus Maurus. Exists a letter written about 848 from Lupus to his friend Ansbald vom Prüm (publ'd ed. L. Levillain, II, Paris 1935, pp. 4ff) talks about please give our courier the manuscript of Tullius in Aratum, so I can fill in from the copy which I hope to receive the lacunae in your copy which Egil has told us about; this ms is the oldest and it fills in the lacunae at the end and paleographically can be dated to around this period, so he thinks 'it is permissible' to relate it to the Cicero letter mentioned in the letter; (102) it may be the corrected copy that was never forwarded or may be the copy that Lupus hoped to borrow

LEONARDI 1960, pp. 466.

MEDIEVAL LIBRARIES OF GREAT BRITAIN 1964, p. 44.

BISCHOFF 1965, pp.303- 07.

CHARLEMAGNE: OEUVRE, RAYONNEMENT ET SURVIVANCES 1965, no. 496 [with additional bibliography].

BISCHOFF 1966-1981, p. 87. (English transl 1994).

McGURK IV 1966, pp. xvi-xix.

Anglo-Saxon illustrated Ciceronian Aratus mss derived from Harley 647 contain an identical cluster of texts, which were clearly taken from the 7-book edition of the Carolingian *Compilation of 810*; these are:

De concordia solaris cursus et lunaris
 de concordia maris et lunae (PL 90, 605-06)
 De mensura et magnitudine terrae (Macrob I, 20, 14-22)
 De mensura lunae (Mart Capell, VIII, 860)
 Quo magnitudo terrae depraehensa est (Mart Capell, VI, 598)
 De positone et cursu 7 planetarum (Pliny, II, 8-9, 32-44)
 De intervallis earum (Pliny, II, 15-16, 83-84)
 De absidis earum (Pliny II, 15-16, 59-64)
 De cursu earum per zodiacum circulum (Pliny II, 16, 66-67)
 Dimensio caelestium spatiorum secundum quosdam
 De mundano anno (Macrob, XI, 2, 5-11)

PHILLIPS 1968, p. 17-18

London BL Harley 647: has portions of Hyginus written within the body of the constellations in rustic capitals when one compares the positions of the stars in the miniature of Perseus with those noted by “Eratosthenes”, and his follows, the scholiasts on Germanicus and Hyginus’, it is clear that the illustrations and the texts follow different traditions, as “Eratosthenes” denies that there are any stars on the head of Perseus or in his *harpe*, while these are mentioned by Hipparchus and Ptolemy; “Eratosthenes” and the scholiasts also give 19 stars as the total and Harley 647 has only 18, with the number written between the legs;

Harley 2506 depends in text and illustration on Harley 647 has 19 dark stars and three light ones. He says’ certain stars have been added but this manuscript may contain stars which have faded from Harley 647’. [??] the right foot on Harley 2506 has a star in exactly the same place that it does on the **Leiden Aratea**, and it is on the corresponding left foot of Harley 647; a slightly darker spot [where?] indicates that a star was originally on that foot also, so perhaps it was not noticed by the later scribe who wrote the total number of stars on the figure in Harley 647, not by the artist of Harley 2506. Hipparchus and Ptolemy mention stars

on both feet; therefore, there has been a conflation of 2 sources and Harley 647 preserves part of the 3 Hellenistic versions of the stars 1) Cicero, 2) Rustic capitals from Hyginus that date back to a model from the 4th c and 3) the stars from the rival catalogue of Hipparchus and Ptolemy (therefore prototype no later than 161-26 BC)

p. 18 style of **Harley 647** miniatures are related to Hellenistic painting (Saxl and Panofsky point out Pompeian parallels); he says that heads of Perseus and Eridanus are related to the style of the paintings in the Mithraeum under Sta Prisca in Rome (MJ Vermaseren and CC Van Essen, *The Excavations in the Mithraeum of the Church of Santa Prisca in Rome*, Leiden 1965, esp. pls 53 ff) dating from the early 3rd century AD; More striking parallel comes from Tomb A IV at Anamur (Turkey) dated to 3rd century AD; (E. Rosenbaum, 'The Necropolis of Anamur', *Bulleten*, 113, 1965, 25ff, esp. 39-40 and figs 12 and 14).

DODWELL 1971, pp. 22-23, fig. 12.

KOEHLER 1971, IV, pp. 77-79; 101-07, pls. 61-74

GUNDEL and BÖKER 1972, no. 229, p. 682.

McGURK 1973, p. 200, v.

KAUFFMANN 1975, p. 76.

TEMPLE 1976, pp. 22, 65, 104.

BACKHOUSE 1979, fig. 4.

PATTIE 1980, p. 22, pl. 10.

REEVE 1980, pp. 508-11.

written in Lorraine, but crossed to England before 1100, where it belonged to St Augustine's in Canterbury; Verses are in minuscule at the foot of each page, and the rest has appropriate illustration; the bodies are painted only at the extremities and the rest is filled in with *scholia* from Hyginus in small capitals

BISCHOFF 1981, p. 181.

McGURK 1981, pp. 318-19.

Cicero with Hyginus *scholia*; body of each constellation figure filled with *scholia* taken from Hyginus; rustic capitals; 820-850 from area which became middle kingdom; obvious

derivation from antiquity; star positions reflect the description in *Aratus latinus* (not the text, though).

VIRÉ 1981, pp. 801-12

MUNK OLSEN 1982-1989, I, p. 529 no. B. 18.

TEXT and TRANSMISSIONS 1983, p. 22.

assigned by Bischoff to Lotharingia was at St Augustine's in Canterbury by end of 10th century; p. 23: correction in H have been wrongly attributed to Abbo of Fleury; Saxl attributed to a scholar of the previous century, Lupus of Ferrières, but again wrongly (contested by Pellegrin, *BEC*, 17, 1959, pp. 15-16)

MURDOCH 1984, no. 226.

MISE EN PAGE... 1990, pp. 436, 438.

STUCKELBERGER 1990, 77, fig. 6

GUNDEL 1992, pp. 93, 310, 312, nr 391

NOEL 1992.

FORD 1992, p. 154.

DODWELL 1993, p. 48, pl. 34.

DUMVILLE 1994, 133-64 (p. 137).

STUCKELBERGER 1994, 41, fig 20

GARCIA AVILÉS 1995, figure 22.

WHITFIELD 1995, pl. on p. 35.

MOSTERT 1996, pp. 19-40 (p. 33).

THE UTRECHT PSALTER 1996, p. 151.

KÜNZL 2000 [2003], pp. 495-594, esp. pp. 549ff.

GNEUSS 2001, no. 423.

TREASURES OF THE BRITISH LIBRARY 2005, p. 51.

LECLERCQ-MARX 2006, 33-42 (p. 37, pl. 6).

DOLAN 2007, pp. 22-26, 48-51, 222-27, 340-41 and *passim*.

(pp. 222-267) oldest and largest fragment; only 24 miniatures; notes popularity in England (vs continent where Germanicus is more popular and vs. the number of Germanicus mss in England, fewer and later); 'abbreviated picture book with two sets of texts added'; text and images are purely classical; in Flery in early 10th century and then taken to England as early as second half of 10th century; due to monastical reforms associated with Flanders and Cluny? *scholia* derived mainly from Hyginus *De astronomia*; corrections on almost every line, which Mutherich says is not Lupus of Ferrières, but by a northern French hand of second quarter of 9th century; see stemma in Soubiran;

illustrations with illusionistic quality and *technopaignon* writing (see Grabar and Nordenfalk 1957, p.93); says that number of stars in text rarely match pictures; planets are all male; signature of the name 'Geruvigus' on planisphere, but he does not appear to be the scribe of the whole manuscript.

(pp. 340-41) lists partial contents and folii with illustrations

MORRISON 2007, p. 49.

ST AUGUSTINE'S ABBEY, CANTERBURY 2008, BA I.1164.

FLATMAN 2009, pl. 17.

GALILEO: IMAGES OF THE UNIVERSE 2009, no. II.4.1 [exhibition catalogue].

HOLCOMB p. 10, fig. 6 [exhibition catalogue].

From the BL website (2012)

Author Marcus Tullius Cicero

Title	Aratea, with extracts from Hyginus's <i>Astronomica</i> in the constellation figures
Origin	France, N. (diocese of Reims)
Date	9th century
Language	Latin
Script	Caroline minuscule
Decoration	22 full-page representations of the constellations in colours, often with text or scholia within the shapes (ff. 2v-6, 7-13v). Full-page diagram of the constellations in brown ink (f. 21v). Large diagram of the solar system in brown and red (f. 19). Small initials in brown or red. Text in red or blue.
Dimensions in mm	320 x 280 (various)
Official foliation	ff. 21 (+ 2 unfoliated parchment and 1 paper leaves at the beginning and 2 parchment leaves at the end)
Form	Parchment codex
Binding	Post-1600. Green leather with patterned tooling; marbled end-papers.
Provenance	f. 1 is a slightly later addition (c. 1000, England; see Köhler 1971). Inscribed 'Ego indignus sacerdos et monachus nomine Geruvigus repperi ac scripsi.' (f. 21v). The Benedictine abbey of St Augustine, Canterbury in the late 15th century: in its catalogue (see Ker 1964). Francis Babington (d. 1569?), college head: inscription 'Francis Babyngton' (f. 2v). The Harley Collection, formed by Robert Harley (b. 1661, d. 1724), 1st earl of Oxford and Mortimer, politician, and Edward Harley (b. 1689, d. 1741), 2nd earl of Oxford and Mortimer, book collector and patron of the arts. Edward Harley bequeathed the library to his widow, Henrietta, née Cavendish Holles (b. 1694, d. 1755) during her lifetime and thereafter to their daughter, Margaret Cavendish Bentinck (b. 1715, d.1785), duchess of Portland; the manuscripts were sold by the Countess and the Duchess in 1753 to the nation for £10,000 (a fraction of their contemporary value) under the Act of Parliament that also established the British Museum; the Harley manuscripts form one of the foundation collections of the British Library.
Notes	The oldest surviving exemplar of the Latin translation of Aratus's (c. 315-240 B. C.) <i>Phaenomena</i> .