

Catania

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Ms 87 (Arm. 3 Univers. 87)

Sufi latinus

German-speaking area (possibly Vienna?)

Second quarter 15th century

An astronomical/astrological compendium of texts, with a separate set of illustrations of the constellations following the *Sufi latinus* tradition, but containing several variant iconographies for some of the constellations. Iconographically, it is closest to Vienna ÖNB Vindob 5318, but with several reversals in the individual figures.

contents

fol. 1r	blank
fol. 1v-4v:	<i>Summarium Astrologiae</i> (THORNDIKE/KIBRE 1963, col. 588, no. 5). Extract from an abbreviated treatise (c.f.: <i>Alia capitula non videbantur scribenda quia dumtaxat sunt de novilunio et de flebothomia et de farmaciis recipiendis et de crisibus etc.</i>). The text includes several detailed accounts of contemporary events dating from 1454-1458, which suggests it was written during the 1450s. fol. 2v mentions Emperor Frederick III. The discussion of the effects of astrological influences on current events first deals in detail with Poland, Prussia, Bohemia and Hungary (in that order) and then briefly turns to the rest of Europe. Its origin in eastern Central Europe therefore seems likely.
ff. 5r-6v	blank
ff. 7r-19v	<i>Delineationes signorum et imaginum coeli</i> . The images mostly follow the illustrations of the <i>Sufi latinus</i> , but also include variants for some of the constellations. There are blocks of text taken from Michael Scot's text assigning various characters to people born under specific constellations, i.e.: <i>Natus sub hoc signo...</i> (see ed. ACKERMANN 2009). The numbering of the constellations, on the other hand, follows the subsequent text of the <i>Sufi latinus</i> .
ff. 21r-35r	<i>Sufi latinus</i> (cf. KUNITZSCH 1986 and KUNITZSCH 1990).
fol. 35v	blank

- fol. 36ra *De diebus periculosus*. Concerning the unfortunate days in the tradition of *Dies aegyptiaci*.
- ff. 36vb-37rb *De domibus planetarum*. A short note on the houses of the planets.
- ff. 38r-71v Johannes Hispalensis, *Isagoge in astrologiam et epitome totius astrologie* (THORNDIKE/KIBRE 1963, col. 1714, No. 5; Col. 1066, No. 6). See also Vienna, ÖNB, Cod. 2436, fol. 206r-228v and Rome, BAV, Vat. lat. 4087, fol. 38v-62r.
- ff. 72r-88r Johannes de Eschenden, *Signa pluvie*.
- ff. 89r-101v ps.-Ptolemy, *De iudiciis ad Aristonem* (cf. THORNDIKE/KIBRE 1963, col. 1504, nos. 3-5 and CARMODY 1956, p. 17, no. 7a).
- ff. 102r-138r Johannes Hispalensis, *De astrologia* (THORNDIKE/KIBRE 1963, col. 3, no. 11 and col. 1044, no. 4).
- ff. 139r-141v *De significatione planetarum* (cf. THORNDIKE/KIBRE 1963, col. 1381, no. 8).
- ff. 141v-143r Petrus Peregrinus de Maricourt, *Tractatus de magnete* (THORNDIKE/KIBRE 1963, col. 794, no. 2 and col. 91, no. 1; ed. SCHLUND 1911-12).
- ff. 144r-153v Johannes de Lineriis, *Canones primi mobilis* (THORNDIKE/KIBRE 1963, col. 276, no. 8; ed. CURTZE 1900, pp. 390-413; THORNDIKE 1934, vol. 3, p. 255).
- ff. 154r-173r Johannes de Lineriis, *Canons de anno domini 1322*, Bk. III (THORNDIKE/KIBRE 1963, col. 1127, no. 6)
- ff. 173r-175v *Tabule radicum octave spere*.
- ff. 175v-184r Albertus Magnus, *Speculum astronomie (excerptum)*, ed. BORNET, X, 1891, pp. 629-656).
- ff. 184v-187v Profatius Judaeus, *Compositio novi quadrantis* (THORNDIKE/KIBRE 1963, col. 241, no. 8).
- ff. 187v-191v Johannes Eligerus de Gondersleven, *Practica novi quadrantis* (THORNDIKE/KIBRE 1963, col. 1627, no. 9).
- ff. 192r-201v Tabulae Johannis de Lineriis (see the Canons on ff. 144r-173r above).
- ff. 202r-v: *Modus faciendi horologium* (THORNDIKE/KIBRE 1963, col. 799, no. 5). Instructions for making a sundial (cf. Vienna, ÖNB, Cod. 5296, fol. 140r-v). Ends with instructions for determining the true pole height of the place in question
- fol. 202v *Latitudines signorum et planetarum. Latitudo 51 gradus*. (Metzger2016 suggests that this could be understood as meaning that the information refers to the 51st parallel, *i.e.*: the geographical latitude of Cologne, Erfurt and Warsaw, for example. The information is presented in a tabular form with the degrees in the zodiac and the position of the planets in the zodiac

- (signs and degrees, two pieces of information each, also for the sun and moon), as well as the Cauda and Caput Draconis and a *rota fortune*.
- ff. 203r–208r Johannes Simon de Zelandia, *Speculum planetarum* (THORNDIKE/KIBRE 1963, col. 753, no. 4). Instructions for determining the location of the planets as well as caput and cauda draconis (cf. Vienna, ÖNB, Cod. 5296, ff. 146r–148v).
- ff. 209ra–210rb *Ratio semi-diametrum horologii constituendi* (THORNDIKE/KIBRE 1963, col. 504, no. 1). Information on the manufacture of vertical, horizontal and inclined sundials (cf. Vienna, ÖNB, Cod. 5296, ff. 141r–142v)
- ff. 211r–223r *Tractatus de spera solida* (THORNDIKE/KIBRE 1963, col. 1576, no. 2; printed in Venice 1518). Ends on fol. 222v. Fol. 223r shows only a simple globe mounting with almost horizontal polar axis (the drawing is inverted). All the other associated drawings are missing.
- fol. 223v blank
- ff. 224r–252r Johannes de Gamundia, *De compositione et utilitatibus astrolabii* (THORNDIKE/KIBRE 1963, col. 1294, no. 2). On the production of an astrolabe. The examples for Measurements for astrological purposes mostly refer to the year 1444 (*Vera conceptio ... in utero anno domini 1444, quinta die Januarii, hora...*). With drawings of square schemes of the celestial houses and concrete details of some astrologically relevant data.
- ff. 253v–258r *De aspectibus planetarum*.
- ff. 253v–254v and 255v–256r Graphic representations of the aspects (*sextilis, quartus, tertius, oppositus...*).
- fol. 255r Mnemonic verses (THORNDIKE/KIBRE 1963, col. 1589, no. 4), on the aspects and calculation examples. At the end, there is a section on the importance of astrology for the doctor (THORNDIKE/KIBRE 1963, col. 454, no. 1).
- ff. 258v–261v *De decubitu* (THORNDIKE/KIBRE 1963, col. 309, no. 5). Astrological prognosis of illness based on the date of the onset of the illness and the position of the Moon in the zodiac.
- ff. 261v–264v *Capitulum 12 domorum vel signorum*. On the significance of the twelve heavenly houses of the horoscope, probably an excerpt from a more extensive text.
- ff. 265r–268v *De calculatione horae conceptionis*. On the determination of the time of conception from the time of delivery.
- fol. 269r blank
- ff. 269v–270v *De introitu solis in Arietem anno 1449*. On the entry of the Sun into the sign of Aries in the year 1449.
- ff. 271r–273v *Nota de coniunctionibus planetarum*. On the planetary conjunctions.

- ff. 274r–276r Johannes de Gamundia, *Regula de tabulis proportionum* (THORNDIKE/KIBRE 1963, col. 48, no. 4)
- ff. 276v–280r Johannes de Gamundia, *Algorismus de minutiis* (THORNDIKE /KIBRE 1963, col. 1163, no. 5).
- fol. 280v blank
- ff. 281r–291r Johannes de Sacrobosco, *Tractatus De sphaera* (ed. THORNDIKE 1949; THORNDIKE/KIBRE 1963, col. 1602, no. 12).
- ff. 291v–292v *De mensura terre* (THORNDIKE/KIBRE 1963, col. 932, no. 7). On the length measurements and the measurements given by Ptolemy and Alfraganus.
- ff. 293r–299v *Theorica planetarum Gerhardi* (ed. CARMODY 1942; THORNDIKE/KIBRE 1963, col. 223, no. 10)
- ff. 300r–301v *De compositione equatorii* (THORNDIKE/KIBRE 1963, col. 352, no. 4). Instructions on how to construct and Equatorium.
- ff. 301v–302v *De utilitatibus equatorii. (Si volueris scire vera loca planetarum...)*. On the use of the equatorium, for determining the true positions of the planets, etc.
- ff. 303r–303v *De compositione almanach* (THORNDIKE/KIBRE 1963, col. 29, no. 12). On the creation of tables of the positions of the planets for a specific period of time.
- ff. 304r–305v *Modus de conficiendi Almanach* (THORNDIKE/KIBRE 1963, col. 1050, no. 9). A second treatise on the creation of tables of the positions of the planets for a specific period of time.
- fol. 306r blank
- ff. 306v–307r *Tabula longitudinum et latitudinum civitatum et regionum*. Geographical coordinates of cities and regions, starting with paradise and places in the Islamic area, ending with capitals and cathedral cities in Germany
- fol. 307v *Loca stellarum fixarum*. 34 astrolabe stars with coordinates, updated for the year 1465. No exact match with any of the types examined by Kunitzsch, but there are clear parallels to the astrolabe star tables of the Toledan tables (cf. KUNITZSCH 1966, pp. 78f., type XII and pp. 90f., type XIII).
- fol. 308r *Tabula Stellarum fixarum*. 17 astrolabe stars, arranged by zodiac sign (cf. KUNITZSCH 1966, p. 65, type Xa2).
- fol. 308v *Tabula distantiarum*. Distance of the deferents of the planetary orbits from the centre of the earth. Below, there are short instructions for determining the polar height of a place based on the shadow cast.
- ff. 309r–316r Drawings of astrolabe discs, a rete (fol. 313v) and other diagrams.

- ff. 316v–318v *Tabulae*. Various tables, including those on the lunar stations and the different effects of the planets in the signs of the zodiac (cf. THORNDIKE/KIBRE 1963, col. 253, no. 5).
- fol. 318v A rota.
- ff. 319r–326r *De locis planetarum*. Explanation of the location of planets with regard to equant, deferent and epicycle. With numerous schematic drawings of the planetary orbits and eclipses. See Johannes de Sacrobosco, *Sphaera*, chap. IV.
- fol. 326v blank
- ff. 327r–328v Leopoldus Austriae, *De mutatione aeris*. Short text on astrometeorology, which is an excerpt from *De Astrorum scientia* (cap. VI); THORNDIKE/KIBRE 1963, col. 999, no. 8)
- ff. 329r–333v Zael, *De signis et virtutibus eorum* (THORNDIKE/KIBRE 1963, col. 557, no. 14; col. 1505, no. 10). On the astrological and medical significance of the signs of the zodiac and the planets in the signs.

illustrations

52 images of the 48 Ptolemaic constellations with additional variants from al-Sufi and, possibly, Michael Scot. There are 2 versions of LYRA; 2 of CYGNUS; 2 of Perseus/Hercules; 2 of OPHIUCHUS; 4 of ANDROMEDA; plus the extra EQUUS SECUNDUS. The figures are mostly clothed and have extraordinarily large bare feet. The drawing is simple, but clear, with the stars mostly added in red, but sometimes also in the same colour ink as the text. Most of the figures were rotated 90 degrees to the right: The similarity to the images in Vienna 5318 is striking, though it is odd that some of the individual figures have been reversed.

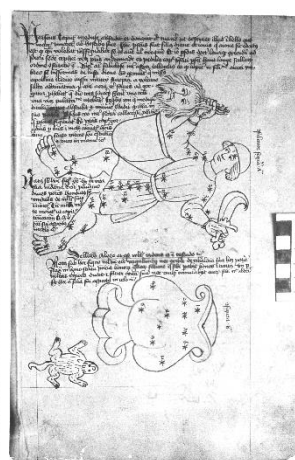
There are also depictions of sundials, astrolabes and a number of horoscopic diagrams in the later sections of the ms.



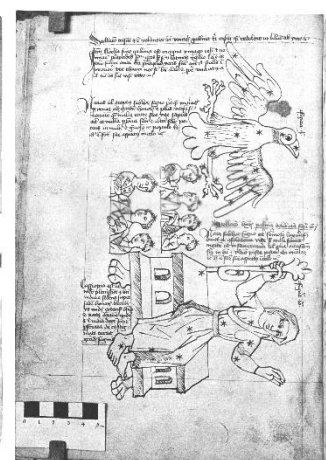
fol. 7r



fol. 7v



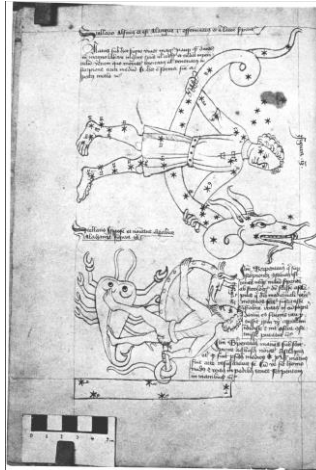
fol. 8r



fol. 8v



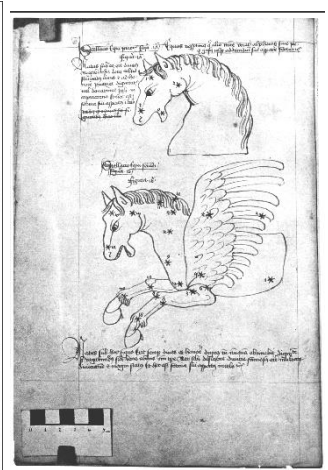
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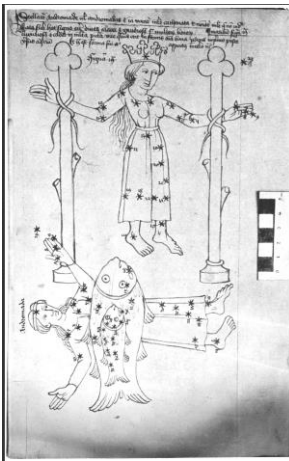
fol. 9v



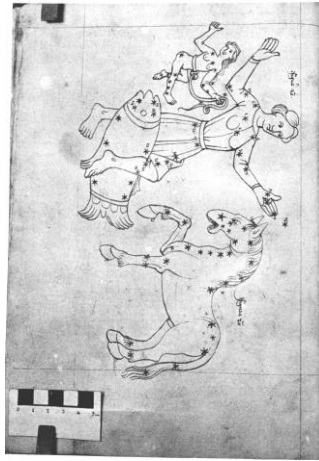
fol. 10r



fol. 10v



fol. 11r



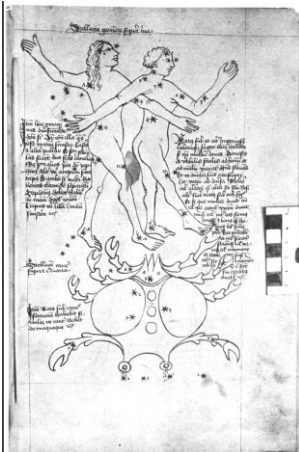
fol. 11v



fol. 12r



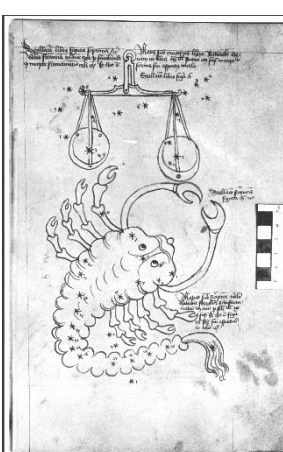
fol. 12v



fol. 13r



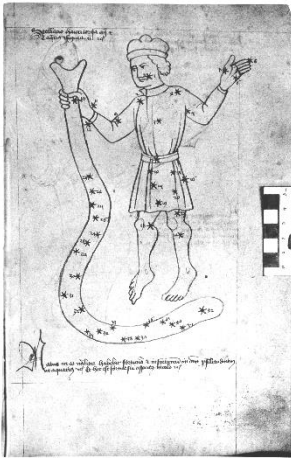
fol. 13v



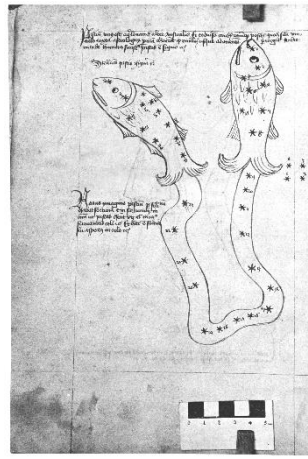
fol. 14r



fol. 14v



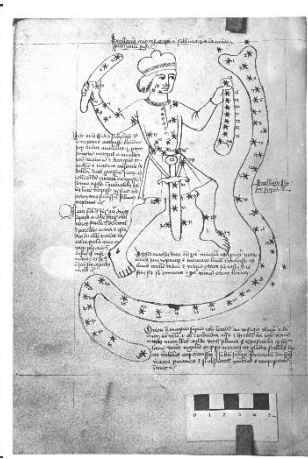
fol. 15r



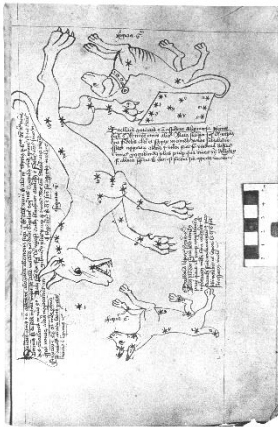
fol. 15v



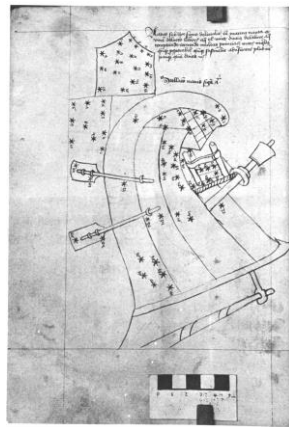
fol. 16r



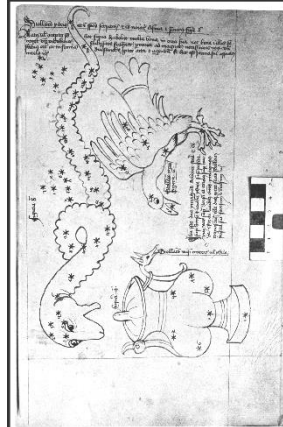
fol. 16v



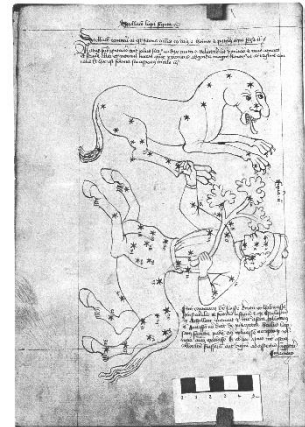
fol. 17r



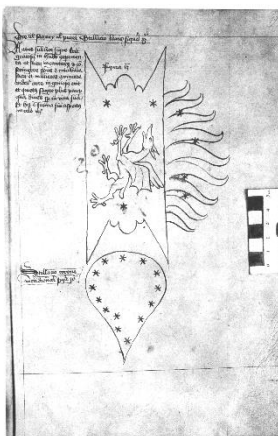
fol. 17v



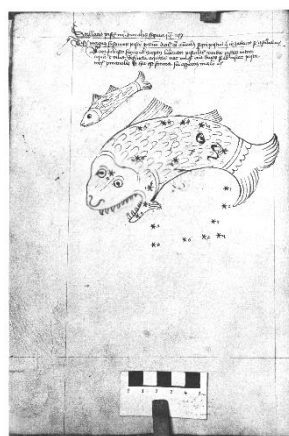
fol. 18r



fol. 18v



fol. 19r



fol. 19v

fol. 7r URSA MINOR is a bear that walks to the right. Its head is slightly dipped, and it has a long tail. 7 stars are numbered.

URSA MAIOR is a similar-sized bear that walks to the left. His front legs are set close together and his hind legs splayed. He has a long tail that rises upwards. 27 stars are numbered.

DRACO is a large snake with a large, dragon's head and lumpy body and tail, looking to the left. He is set between the two Bears, with Ursa Minor in the first section and Ursa Major standing on the tail. There are three curls in the body, and one at the end of the tail. and a figure 8 in the tail. 31 stars are numbered.

fol. 7v CEPHEUS walks to the right. He raises his left hand. He wears a tall, rimmed conical hat with a feather in it, is bearded, and is dressed in a belted, knee-length robe with a scalloped hem. 9 stars are numbered.

CORONA BOREALIS is 4 concentric, circular rings with the face of a female in the centre. Her head is covered by a wimple. 9 stars are numbered.

BOOTES walks to the right left, with his right leg leading. He raises his right hand in front of him and holds a long sword in his left hand above his head. He is young and wears a short tunic, which has a band around the hips. 22 stars are marked.

fol.8r PERSEUS walks to the right left, with his right leg leading. He holds the head of a bearded man (not a demon) his right hand in front of him and raises a curved sword above his head with his left hand. He is beardless and wears a short, belted tunic. There is a shield-like shape in front of him (attached to his belt), which may be his bag. The label names him as *Saltator* (a name usually used for Hercules).

LYRA has two images. The first is an urn with three round lobes in its belly, the foot is similarly sculpted. The rim curves outwards. There are 10 numbered stars.

A second version depicts the constellation as a long-tailed rodent.

fol. 8v CYGNUS has two images. The first is as a flying, heraldic bird. The stars are not numbered.

The second version is of 7 half-figures of woman, with 4 on the top row and 3 on the bottom.

CASSIOPEIA sits on a wooden bench facing towards the right with her arms extended. In her right hand she holds the 'back' of the bench, which is a vertical pole with a loop in it and a palmate top. Her head is covered, but her pendulous breasts are evident. Her stars are not numbered.

fol. 9r CEPHEUS is depicted twice. The larger image shows him as if he were PERSEUS, walking to the right and holding a bearded man's head in his right hand. He raises a straight sword above his head. 26 stars are numbered.

The second version is in the form usually associated with HERCULES and shows a nude male figure, kneeling to the left, with the flayed figure of a man draped over his extended right arm, and he holds a straight sword vertically in his left hand. He is bearded and there are no stars included.

AURIGA stands to the right. In his left hand he holds a loop of material (the reins ?) in front of his crotch. He raises a whip with flails in his right hand. He is beardless, has a soft, rounded cap and is dressed in a belted tunic. There are 13 numbered stars.

fol. 9v There are two depictions of OPHIUCHUS and SERPENS. The first shows a young man standing towards the right, holding a long, dragon-headed snake behind him. The head and tail of the Snake are raised and pass behind the man's hips. The stars of the two figures are combined and 24 are numbered.

The second version shows a nude OPHIUCHUS walking to the left, with his back towards the viewer. SERPENS is long and lean and is wrapped once around the man's waist. It turns its dragon-like head to face the man; the head is on the left. There is a knot in the tail. The man is bearded and holds the neck and the tail of the Snake. There is a depiction of SCORPIO beneath the man's feet, with its head to the left. It has a paisley-shaped body, and two long antennae, two claws and 6 legs.

SAGITTA is depicted as a long rectangle. There are 5 stars numbered.

fol. 10r AQUILA is a bird that stands to the right with outstretched wings. There are 9 numbered stars in the figure, and 6 numbered stars outside the figure.

DELPHINUS is the *protome* of a lion - its fish part being subsumed by a curly mane. It has pointed ears, prominent eyebrow and opens its mouth, having a long pointed tongue. There are 10 stars marked.

fol. 10v EQUULEUS is a horse's head and neck, facing to the left. Its mouth is open. 4 stars are numbered.

PEGASUS is half a winged horse, charging to the left with its front legs extended. The body is cut off vertically with a slight curve, and its mouth is open. 20 stars are numbered.

fol. 11r ANDROMEDA (first version) is suspended between two columns with her wrists tied to them. She is dressed in a long robe and her feet are dangling. She has a crown on her head. there are 22 numbered stars.

Andromeda (second version) is set horizontally across the bottom of the page. She walks to the right with her arms extended. She has two superimposed fish on her chest. She wears a long gown and has a circlet in her head. there are 34 stars numbered across the three figures.

fol. 11v ANDROMEDA (third version) is seated and nude. She has a rope around her waist that she holds with the left hand. Her right hand is raised. She is seated towards the right, but looks towards the left. No stars are included.

ANDROMEDA (fourth version) walks to the right with her arms outstretched. She steps over a large fish that faces to the left. She has long hair and wears a belted robe. There are 22 numbered stars between the two figures.

EQUUS SECUNDUS is depicted as a full horse walking to the left, with his front right hoof raised. There are numerous stars that are not numbered.

fol. 12r TRIANGULUM is a simple triangle. It is labelled: *Deltoton* and *triangulus*. There are 4 numbered stars.

ARIES is a ram that runs to the left, while his head is turned back towards the right. It has large, lumpy backwards-curving horns and a long tail. There are 13 numbered stars.

fol. 12v TAURUS is half-a-bull placed vertically on the page with long, lyre-shaped horns and its front legs bent in front of it. It faces to the left and it has the odd notch in its cut-off. There are 32 numbered stars and a few unnumbered ones.

fol. 13r GEMINI walk to the right with the arms interlaced. They are nude. Their hair is different lengths, which may suggest they are male and female. They share 18 numbered stars.

CANCER is a crab viewed from above, with its head facing downwards. Its eyes are on stalks and it has two segmented claws at the front and six towards the base of its shell. Praesepe is represented on its shell as a group of dots. There appear to be raindrops of tears falling from its eyes. There are 8 numbered stars.

fol. 13v LEO stands to the right, with its front half lowered. Its tongue is sticking out and its tail raised. There are 26 numbered stars.

VIRGO stands facing left, with her arms slightly raised at her sides, with her palms upwards. Her hair is uncovered, and she wears a long, belted dress. She has 26 numbered stars.

fol. 14r LIBRA is a beam balance. The stars are numbered as 6 in one pan and 9 on the other.

SCORPIO faces towards the right with a very lumpy body and long, smooth front claws with small pincers. There are 4 segmented side-claws on each side and a long, beaded tail that ends in a tuft. There are 21 numbered stars.

fol. 14v SAGITTARIUS is centaur trotting to the right, drawing a bow (European form) and its human body dressed in a tightly-fitting shirt. He wears a headband with long ends fluttering backwards. He has 31 numbered stars.

CAPRICORN goat-fish facing right with a single curl in its tail. It has long, lumped horns and both front legs are extended. The label offers the alternative name of *alcantarus*. It has 28 numbered stars.

fol. 15r AQUARIUS stands facing slightly to the left. He holds a L-shaped stream in his right hand that then falls to beneath his feet. He raises his left hand. He wears a short, belted tunic and a round soft cap. The label provides the alternate name of *hauritorisa aqua*. There are 42 stars in the figure and the stream.

- fol. 15v PISCES are connected at their tail fins with a green stream that has a kink in the middle, so that it looks like a ω . There are 31 numbered stars between them and the stream.
- fol. 16r CETUS is a sea monster, with a canine head with a long mane, bird's claws on its forelegs and a large hump on its shoulder, where it turns into a fish. It faces towards the left and has its mouth open. It has 22 numbered stars.
- fol. 16v ORION walks to the right with his left leg leading. He holds a stick that looks like a baguette raised in his right hand and an open tube in his left. He wears a short, belted tunic and has a large, straight sword hanging from his belt. He has 26 (misnumbered as 38) numbered stars.
- ERIDANUS is a large looping segment of a river that nearly encloses Orion. The top is bifurcated. It has 34 numbered stars and a few unnumbered ones.
- fol. 17r LEPUS has short, pointed ears. It is placed horizontally on the page and leaps to the right. There are 12 numbered stars.
- CANIS MAIOR is placed with its head towards the bottom of the page. It has short, pointed ears, and bared teeth. Behind its hind legs, there is a rectangular shape with stars. It has 19 numbered stars.
- CANIS MINOR is placed horizontally on the page. It leaps to the right. It is more houndlike and has a thick collar with a ring. It has 2 numbered stars.
- fol. 17v NAVIS is half a wooden ship, placed horizontally on the page so that its cut-off is on the right. It has two rowing oars, but no rudder - unless the vertical pole at the cut-off is intended to be the rudder at the stern of the boat. There are two polygonal shapes below the hull, filled with stars. There are 45 numbered stars.
- fol. 18r HYDRA, CRATER and CORVUS are placed horizontally on the page. HYDRA is a lumpy snake with a curl behind its head. It slides to the left. There are 25 numbered stars. There are also disembodied numbered stars (referring to Crater and Corvus) above its back,
- CRATER is a covered vessel with three large bulbous lobes at the bottom. There is one handle, and a spout with a dragon's head at the end. A label in black names it as: *stellatio vasis craterus vel ydrie*. There are 5 numbered stars.
- CORVUS flies to the left with its wings raised. There are 6 numbered stars.
- fol. 18v CENTAURUS is a centaur, placed horizontally on the page, but facing left. He holds LUPUS (an earless panther) by the hind legs in his right hand in front of him. In his left hand, he holds a branch with leaves. His human body is clothed in a tight-fitting shirt. Centaurus has 34 numbered stars; Lupus has 15 unnumbered stars.
- fol. 19r ARA is placed sideways on the page. It is a brazier decorated with a dragon on the front. Flames come from its top at the right. It has 6 unnumbered stars.
- CORONA MERIDIONALIS shaped like a shield or inverted teardrop. There are 14 unnumbered stars.

fol. 19v PISCIS AUSTRINUS is depicted as two fish. A very large, animal-faced on the bottom, and a slimmer, small fish on the top. Both face to the left. There are 11 numbered stars on the larger fish and 8 numbered stars in the space beneath it.

notes

31.2 x 21.3 cm, 333 folia, paper (the watermark on the constellation text is an ox head with five-leaf flower on a single-contoured rod and with seven-leaf flower on a double-contoured rod), mostly carefully written *book bastarda*, numerous hands, but the inscriptions to the constellations and *Sufi latinus* fol. 7r-35r by one hand.

The compilation has evolved over time, with the different sections in different sizes and seemingly added on to the original section of the *Sufi latinus*. The iconography of the *Sufi latinus* sections is related to the northern Italian mss (Prague DA II 83, Berlin KK 78 D 12; Gotha M II 141), but perhaps closer to the earlier mss of Paris BnF 1036 and Bernkastel-Kues 207. There are also parallels with other similar ‘conflations manuscripts’, such as Brussels, Bibliothèque Royale Albert 1er, Ms. 10117-26, fol. 54r-79r and Munich, BSB, clm 826; and the associated text blocks are mostly arranged on the page in a conventional way (cf.: Florence, BML, Edili 170 and Rome, BAV, Vat. lat. 3121).

Metzger 2016 argues that the ancillary images of the variant constellations come from Michael Scot - but that is not wholly convincing. The similarity with Vienna 5318 places the Catania manuscript in the same orbit of the Vienna-Klosterneuberg group. Moreover, they are so similar that they must have derived ultimately from the same prototype; but it is worth noting that there are several examples in which the Vienna figures are reversed from the Catania ms - suggesting that they are not directly derived from the same model.

bibliography

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LIPPINCOTT 1985, p. 67 and *passim* [under the shelfmark 'Biblioteca Comunale, 87 (int. 87)'] as Italian, 15th c;

inc: Incipit liber de locis stellarum fixarum cum ymaginibus suis verificatis ab Ilbermosophim philosopho annis arabun 325 (fol. 21r)

KUNITZSCH 1986, pp. 68-77.

ŚNIEŻYNSKA-STOLOT 1994, p. 65.

BLUME/HAFFNER/METZGER 2016, II, 1, pp. 49-50.79, and 378-85; II, 3, figs. 4-1-05.