

bibliography needs completing

**Munich
Staatsbibliothek**

Ms clm 210

De ordine ac positione stellarum in signis (in a complete version of the Salzburg
Compilation of 810-818 / *Liber calculationis*) in 3 books)

Salzburg
818

text

fol. 113r blank

ff. 114r-115r (IN RED) EXCERPTUM DE ASTROLOGIA.
(in sepia) Duo sunt &xtremi vertices mundi quos appellant polos
septentrionis & austri. — effusionem urnę acquarii qui[a] adipsum usque
decurrit accipiens. (*Excerptum de Astrologia Arati*, cf. Maass 1898, pp. 309-
12 and dell'Era 1974, pp. 43-46)

ff. 115r-115v (IN RED) DE. ORDINE. AC. POSITIONE. STELLARUM. IN. SIGNIS. .II.
(in sepia) Est quidem hic ordo & positio siderum — eo quo ab ipso est
ordine digesta descriptio proferatur. (cf. Maass 1898, p. 312 and dell'Era,
1974, p. 49)

ff. 115v-121r Helice arcturus maior hab& stellas in capite vii, in singulis umeris singulas,
in armo i, in p&ctore i, in pede priori claras duas, in summa cauda claram
unam — Anticanis hab& stellas . iii (cf. Maass 1898, p. 312 and dell'Era
1974, pp. 49-70)

The compilation also includes:

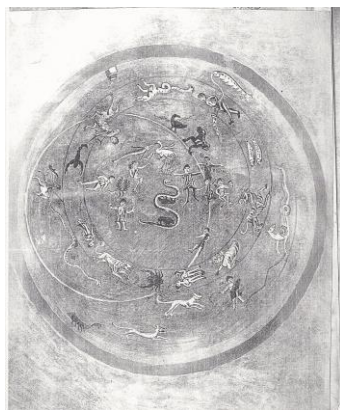
ff. 121r-122r (in red) DE POSITIONE. ET CURSU. SEPTEM. PLANETARUM. III

(in sepia) Inter caelum & terram certis discretis spatiis septem sidera — luce ad easdem vices &xit . (= Pliny, *HN*, II, 12, 32, 34, 35-36, 38- 44)

- ff. 122r DE INTERVALLIS EARUM (IIII) Inter valla eorum a terre multi — diapason armoniam vocant. (Pliny, *HN*, II, 83-84)
- ff. 122r-122v DE ABSIDIBUS EARUM (V) Tres sunt autem — figura demonstrant. (= Pliny, *HN*, xii, 59-61, 69-70, 63-64).
- fol. 124r DE CAELESTIBUS SPATIIS SECUNDUM QUOSDAM (VI) (= Pliny, *NH*, XVIII, 340-365)
- ff. 124r-124v DE TEMPORUM MUTATIONE (VII) Cardines temporum —circulum accedat. (= Pliny, *HN*, XVIII, 220-23, 225, 275-77)
- ff. 124v-127r DE PRESAGIIS TEMPESTATUM (VIII)
- ff. 129v- 145r Bede, *De natura rerum* (first 51 chapters)

For a detailed description of the non-astronomical contents, see RÜCK, 1888, esp. pp. 5-10, including a note on the dedication (fol. 7r): Et inde domnus carlus solus regnum suscepit. et deo protegente gubernat usque in presentem annum feliciter. qui est annus regni eius XLII. imperii autem VIII. Sunt autem totius summe ab origine mundi anni usque in praesentem annum DCCC^{VIII}, incarnationis domini, III DCCLVI.

illustrations



fol. 113v



fol. 115v



fol. 116r



fol. 116v



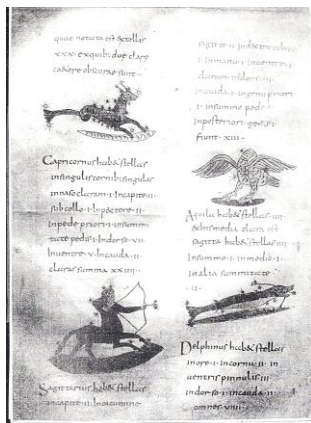
fol. 117r



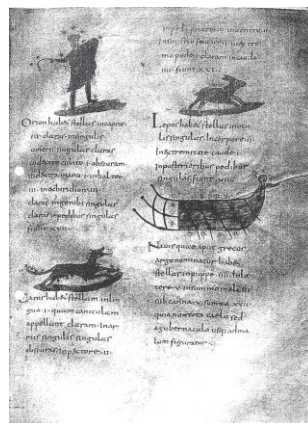
fol. 117v



fol. 118r



fol. 118v



fol. 119r



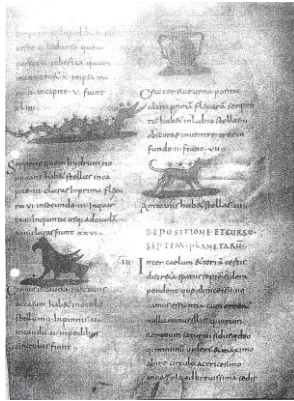
fol. 119v

fol. 120r

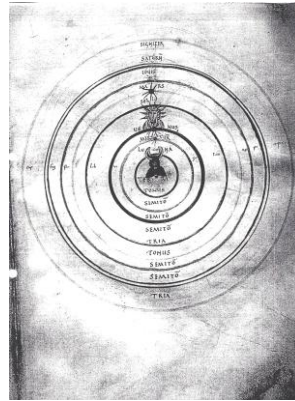
fol. 120v



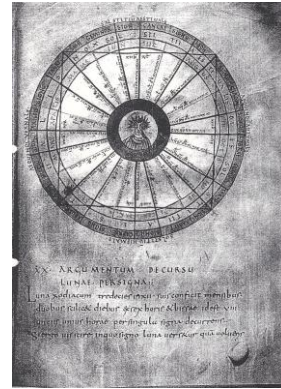
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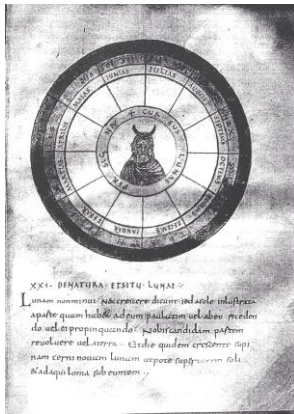
fol. 121r



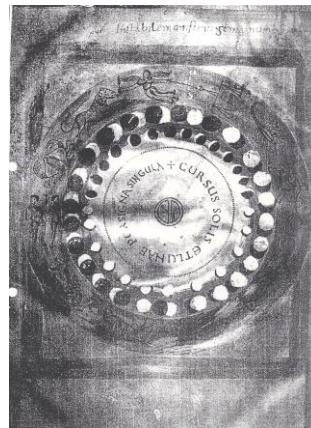
fol. 123r



fol. 136r



fol. 137r



fol. 163v

fol. 91v depiction of the 12 months

fol. 113v planisphere (for additional information, see the notes by ELLY DEKKER in the section on planispheres).

ff. 115v- 121r coloured drawings of 41 constellations set into 2 columns of text; the stars are marked with circles surrounded by rays are painted in three different colours (red-orange, brown and yellow); the centres of some of the circles are filled-in and some are not; most of the constellations are depicted on a ground-line

fol. 115v the 2 bears are depicted individually.



URSA MAIOR is blue-black, without a significant hump, but a very long snout and a bright red eye and is standing to the left. It has 3 filled red stars around the nose, four open red star above the head, 1 open red star on the back, 3 open red stars lined up in front of the foremost leg, 1 open red star on the left shoulder, 1 open red star on the belly, 1 filled red star on each hind foot and 3 open red stars behind the back leg, or 18 stars in all.

URSA MINOR faces to the right and has a large hump on his back and a bright red eye. It has 4 filled red stars on the on rump and 4 open yellow stars above back, or 7 stars in all.

DRACO is a green snake with orange markings and ‘stands’ vertically on the last of 4 bends in his body. He faces to the right and has no comb or beard. He has 5 open red stars above his above head and 10 filled brown ones along his body, or 15 stars in all.

HERCULES is dressed in an orange all-in-one outfit that is like a long-sleeved body-stocking. He has yellow hair and is depicted running to right with his left hand out in front of him. In his right hand, he holds a palm frond that rests on his right shoulder. He appears to be ‘chased’ by a headless, yellow and brown tiger’s skin that seems to fly at him at shoulder level. He has 1 open red star above head, 1 filled red star above each shoulder, 1 open brown star above the left upper arm, 1 open brown star above the left hand, 3 filled brown stars along right hip, 1 open brown star above the left thigh, 1 open brown star on the right heel, 1 open brown star above the tip of palm frond and 4 open brown stars surrounding the skin, or 15 stars in all.

fol. 116r

CORONA BOREALIS is a dark brown oval shield with red lines flowing inwards towards the centre of the oval and brown and red and yellow lines flowing outwards from the edge. It has 5 filled brown stars and 3 filled yellow stars.

OPHIUCHUS stands facing the viewer to the right on top of a small yellow hill. He is dressed in a brown 'all-in-one' with red lines over it holds the **SERPENS** held in front of him at his hips. The Snake's body runs horizontally through the man's hands and then curves upwards in a right angle with his head to the right and its mouth open. He has 1 filled red star on the on head, 1 filled red star on each shoulder, 1 filled red star on each thigh, 1 filled red star on the right shin, 1 filled red star on each foot (with the left one a bit darker), 3 filled brown stars around the right hand and 4 filled yellow around left hand, or 15 stars in all. There is some brown smudging on his forehead - possibly remnants of a brown star or the colour has been used to indicate that he is a 'wild-man'. There are 6 filled brown stars around the Snake's head and 7 filled brown stars around snake's neck, or 13 stars in all.

SCORPIO has a brown body and faces to the right. He has two long antennae, two arm-like front claws and a segmented tail. There are 2 filled yellow stars on the tops of the antennae, 2 on mouth, 2 on the eyes, 1 filled red star on the shell, followed by 2 filled dark grey stars and 2 filled yellow stars running down spine. There is 1 filled yellow star on each side of shell, 5 filled yellow stars along tail and 2 filled yellow stars at end of tail, or 20 stars in all.



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fol. 116v

Bootes faces the viewer and is standing on clouds. He is dressed in a green tunic with brown stockings with tan lines on them. He has green hair and holds a green frond raised in his right hand. He holds his left arm straight in front of him. He has 1 filled yellow in his head, 1 filled brown star over each shoulder, 1 filled brown star in the left breast, 1 filled yellow stars on the right breast, 1 filled brown star in belt, 1 filled yellow star on each knee, 1 filled brown stars on each foot, 1 filled yellow stars on right elbow and 4 filled red stars on the palm, or 15 stars in all.

VIRGO stands facing the viewer on a cloud. Her dress is brown with black and red lines and she has green wings and green hair. She holds a green frond (Spica) in her right hand and Scales with a yellow handle and pans in her left. She has 1 filled brown star on the head, 1 above each wing, 1 above each shoulder, 1 on each elbow, 1 filled brown star on the right hand and 1 filled yellow star on the left hand, (there was 1 on left hip that has been erased) and 3 filled brown stars running down her flanks on either side and 1 filled brown star on each foot, or 17 stars in all.

GEMINI are dressed in red tunics with darker red lines and green cloaks with red lines. Their hair is green with brown lines. They face the viewer with brown spears held in their inner hands and their outer hands are held outstretched to the side. The left Twin has 1 open red star on the head, 1 open red star above each shoulder, 1 open brown star above right elbow, 2 open brown star at the hem of his tunic and 2 open brown stars at his feet, or 8 stars in all. The right Twin has 1 open red star on the head, 2 open brown stars on the left arm, 1 open brown star on the left hand, 1 open brown star on the hem, 1 open brown star on each foot with 1 open brown star between the feet, or 8 stars in all.



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fol. 114r **CANCER** has a dark brown oval body and faces to the left, with 2 antennae, 2 big claws held in a circle, 6 little legs, 2 dorsal protrusions and a small tail. It has 3 filled brown stars in the left antenna, 2 filled brown stars in right antenna, 4 filled brown stars in the right claw, 2 filled yellow stars on the right claw, 1 filled brown star on each leg, 1 large filled brown star on the shell, or 18 stars in all. I seem to recall asses on this one? CK

LEO stands to the right with his orange tongue sticking out. His body is green with orange stripes. He has 5 green-yellow filled stars on the head, 3 filled yellow stars on the back, 1 filled yellow star on the chest, 1 filled yellow star on the right front elbow, 1 filled yellow star on the right front foot, 1 filled red star on left front foot, 2 filled red stars on belly, 1 filled red star on the left hind leg, 1 filled yellow star on the right hind foot, 1 filled yellow star in the tail and 1 filled red star at the tip of that tail, or 18 stars in all.

114v: **AURIGA** stands facing the viewer in a short, yellow tunic with brown stripes with red tights with brown stripes and a green cape with red stripes. He has green hair with brown stripes and stand in a *biga* with a red harness attached to a brown horse and a white horse with red and brown flecks. He holds a green flail with three things raised in his left hand and holds the reins in his right. Below the wheels of the cart, there is a grey Capra with black curls that faces to the right and looks back and upwards at the Charioteer. Above Auriga's right shoulder, there are two full, blue Kids facing each other. He has 1 filled brown star on the head, 1 filled brown on the right shoulder, 1 filled red star in the left shoulder, 1 filled brown star on each knee, 1 filled red star on the nose of Capra, 1 filled yellow star on nose of each Haedus and 2 filled brown stars on the right hand, or 10 stars in all.

TAURUS is a full green bull with brown curls, lying down to the right with his right leg tucked under and his left extended. He has 1 filled brown star in each horn, 3 in the face, 2 in the neck, 1 in the chest, 1 filled red star on the right front knee, 1 filled red star on the left front hoof, 1 filled red star on the back and 1 filled brown star on the belly, or 12 stars in all.

Fol. 118r **CEPHEUS** stands facing the viewer with his arms to the sides, wearing a short, tan tunic with red and brown stripes, orange stockings and green hair. He has no attributes. He has 1 filled yellow star on the left shoulder, 1 filled yellow star on the right elbow, 3 yellow stars at the waist, 1 on the right hip, 1 on the right thigh, 2 on the left thigh, 2 on the left shin, 2 on the left foot and 1 faded filled yellow star on each hand, or 15 stars in all.

CASSIOPEIA is seated on a green and brown stick-like throne with a red and brown cushion and with her arms outstretched at shoulder height with her palms turned upwards. She has a green dress with red and brown stripes and brown sleeves, green hair with brown stripes and she rests her feet on a brown and green footstool. She has 1 filled yellow star on her head, 1 filled yellow star on each shoulder 1 filled red star on the right breast (cut out), 3 filled red stars in the lap (1 extra one erased?), 1 filled red right knee and 1 open brown star on each foot, or 10 stars in all.

ANDROMEDA stands facing the viewer dressed in a long red dress with brown and black stripes on the skirt and a green headdress and brown boots. Her arms are outstretched and she is chained by yellow chains to two piles of green and red rocks. She has 1 filled yellow star on her head, 1 filled yellow star on each shoulder, 1 on the right elbow, 1 filled yellow star



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on the right hand, 3 above the belt, 3 below the belt, 1 on each knee and 1 on each foot, or 15 stars in all.

fol. 118v **PEGASUS** is a full yellow horse, without wings, standing to the left. It has 5 filled yellow stars in the face, 4 in the neck, 1 filled red star in the chest, 1 filled red star in each front knee, 1 filled red star on each front foot, 1 filled red star in the belly and 1 on the haunch, or 16 stars in all.

ARIES bounds to the right, but looks over his shoulder to the left. He has a very long tail and is brown and yellow stripes. He has 4 yellow filled star in the head, 1 yellow filled star in the neck, 2 filled red stars in the neck, 1 open red star on the right front foot, 1 filled yellow star on the left front foot, 3 filled yellow stars on the back and 1 filled yellow stars on the rump, or 13 stars in all.

TRIANGULUM is upside-down with a brown centre with green edge and has 3 filled red stars.

PISCES are 2 green fish swimming in the same direction, one on top of the other, Their mouths are joined by a grey stream shaped like the number 3. The fish are marked with alternating filled red and brown stars and there are 12 in the top fish and 15 in the bottom fish.

fol. 119r **PERSEUS** faces the viewer and crouches to the right. He is dressed in a red-orange all-in-one with red stripe and has a green cloak over his left shoulder. He has green hair He holds the decapitated medusa's head so that it 'stands' on its hair in his left hand in front of him. He holds a red palm frond in his right hand that rests on his right shoulder. He has 1 filled red star on each shoulder, 1 on the right elbow, 1 on the belly, 1 on the left

thigh, 1 on the right knee, 1 on the right shin, 1 on each foot and 2 filled yellow stars beneath Medusa's head, or 10 stars in all.

LYRA is a U-shaped brown lyre with 3 black strings. It has 2 open red stars at the tips of the curved 'horns', 3 filled yellow stars above the strings, 4 open yellow stars in the body and 1 open yellow stars below the base, or 10 stars in all.

CYGNUS is set within a frame against a green background. It stands to the left and has its wings outstretched to either side. It has 1 open red star in the head, 5 filled right wing, 3 filled and 1 open red stars on the right wing, 1 open red star on the body and 1 open red star on the tail, or 12 stars in all.

AQUARIUS is dressed in short green tunic with red lines and green and red leggings with long cloak that flows out behind him. He stands to the right holding a tan urn with both hands in front of him, pouring a pale blue stream. He has 2 open yellow stars in the head, 1 open red star in each shoulder, 1 filled yellow stars in each nipple, 1 open red star on the left elbow, 1 filled yellow star between the legs and 1 open red stars on each foot, or 10 stars in all. There are 14 open red stars to the left of the stream and 13 open brown ones above it, or 27 in all.

fol. 119v

CAPRICORN faces to the right and has short, straight horns and a twist in the tail. He has a green body and brown horns. There is 1 filled yellow star in each horn, 2 filled brown stars in the head, 1 open red star on the nose, 2 filled brown stars on the neck, 3 filled brown stars on the back, 1 filled red star above the back, 1 filled brown star on the left front hoof, 1 open



red star on the right front hoof, 4 filled brown stars and 1 filled red star on the belly and 2 open red stars on the tail, or 20 stars in all.

SAGITTARIUS is a centaur that leaps to the right. He holds the bow with his left hand and pulls the string with his right. His whole body is brown and his hair is green. He has 2 filled brown stars on the head, 1 filled red star in the right hand, 1 filled brown star on the right elbow, 1 filled brown star on the armpit, 2 filled brown stars on the arrow tip, 1 filled brown star on the rump, 1 filled brown star on the tail, 1 filled red star on the front right knee, 1 filled brown star on the left front hoof and 1 filled yellow star on the equine breast, or 12 stars in all.

AQUILA stands to the left with its wings outstretched, but turns its head to the right and bites its wing. It has 1 filled yellow star on the head, 2 surrounding the body and 1 open red star in the chest, or 4 stars in all.

DELPHINUS is a long, thin fish that swims at a slight upward angle to the right. He has a long horn on its head and on its chin. There are 9 filled red stars that surround his body.

fol. 120r

ORION stands facing the viewer in a knee-length green tunic with red stripes and orange tartan leggings. He has green hair and holds a curved stick out to the side in his right hand and his left side is entirely covered by a cloak. He has 3 yellow stars with red centres on head, 1 filled yellow star on the left shoulder, 1 filled brown star on each elbow, 3 filled yellow stars on the waist, 1 filled yellow star on each knee, 1 filled yellow star on each foot and 3 filled yellow stars on his stick, or 16 stars in all.



CANIS MAIOR leaps to the right and sticks its red tongue out. It has a yellow body with red fur markings. It has 1 open red star on the tongue, 1 open brown star on the neck, 1 open and 1 filled brown star on the right shoulder, 3 filled brown stars on the left front leg, 1 filled brown star on the right front foot, 2 filled brown star on the belly, 2 filled brown star on the hind knees, 1 filled red star on the left hind foot, 2 open and 2 filled brown star on the tail, or 17 stars in all.

LEPUS is a grey hare that runs to the right. It has 5 yellow filled stars: 2 on the back, 1 on the tail and 2 on the back feet.

NAVIS looks like a yellow and brown sledge with a peculiar tri-partite structure on the left side reminiscent of other 3-prong bows and there are 5 cross-hatchings that appear to be rowing oars. There is 1 open yellow and 2 open red stars around the knob at the curved end of the boat, 5 alternating red and yellow open stars along the deck, 4 alternating open red and yellow stars down the stern, 5 alternating open red and yellow below the keel, or 17 stars in all.

fol. 120v **CETUS** faces to the left, but looks over his shoulder to the right. He wears a collar and has a single twist in his tail. He is green with red scales and has 4 filled yellow stars above the body, 5 in front of the chest, 1 below the tail and 2 filled red stars at the tip of the tail, or 11 yellow and 2 red stars in all.

ERIDANUS is dressed in brown top with red lines and a long blue skirt. He reclines by a stream, with his head to the left, leaning his right elbow on the tan urn from which a tan and blue stream flows out to the right. He holds his left hand out in front of him. There is a long green tree-like object



above him. He has 1 filled yellow star in the head, 1 filled yellow star in the right shoulder, 5 running down the top of his legs and 7 filled yellow stars in the stream, or 14 stars in all.

PISCIS AUSTRINUS is a tan fish with orange scales swimming to the right. It has 12 filled yellow stars along the top line.

CENTAURUS is a green centaur with brown dots that walks to the left, holding a green **LUPUS** (a rabbit) by its heels in his right hand in front of him. In his left hand, which is outstretched behind him, he has a tan animal skin with 2 legs that flies out behind him like a cloak and a baton. He has 5 filled yellow star on his head, 1 on each shoulder, 3 across the chest, 1 in the belly, 1 each equine breast, 1 on the equine back, 1 on the haunch, 1 on each elbow, 3 on the right hand, 2 in the baton, 2 in the skin. There are red filled stars as follows: 1 in the skin, 1 in the equine chest, 1 in the equine belly, 1 on the groin, 1 on the haunch, 1 on the right front hoof and 1 on the right back hoof, or 31 stars in all.

Lupus has 2 filled red stars in the feet and 6 filled yellow stars in the body.

ARA is a badly-rendered brown and white box shape, with 2 blue stars and 2 filled red stars above the box and 2 blue stars on the body, or 6 stars in all.

fol. 121r

HYDRA is a tan and red snake that crawls to the right and sticks its tongue out. It has 3 red open stars on the head and alternating filled and open red, brown and yellow stars down its body, making a total of 23 stars in all.

There are individual representations of **CORVUS** and **CRATER**.

CORVUS² stand to the left with its wings closed and has 1 filled yellow star on the head, 1 filled yellow star on the back, 1 filled yellow stars on the



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tail, 1 filled red star on the tail, 1 filled red star on the right foot and 1 filled yellow star on the left foot, or 6 stars in all.

CRATER² is a two-handled vase that is brown and white with green mouth and brown handles. It has 2 filled red stars at the top and 2 yellow, 1 brown and 1 red star on the body, and 2 filled brown stars on the feet, or 8 stars in all.

CANIS MINOR stands to the right. He has a grey body with 2 filled yellow, and 1 filled red stars above the back, or 3 stars in all.

- fol. 123r diagram of planetary orbs; Luna and Sol depicted as planet-busts and the rest by stars (wit Mars in red); Luna has horns on her head and Sol has rays coming from his
- fol. 123v unfinished circular schema divided into 7
- fol. 132r schema of the climes done as a $\frac{1}{2}$ circle with 'mundus' at the middle surrounded by 4 circles
- fol. 132v a schematic world map with the 4 elements and directions
- fol. 135v an unfinished circular diagram (drawn but not filled in)
- fol. 136r Sol, depicted as a classical bust portrait with rays coming from his head, set within zodiacal rota; the schema contains information about the relative lengths of day and night for each month and marks the equinoxes and solstices (follows Bede, chapter XIX)

- fol. 137r Luna, depicted as a classical bust with a crescent Moon on her head, set within 12-month rota, listing the days of the months (follows Bede, chapter XX: Argumentum de cursu lunae per signa)
- fol. 139r diagram of the winds with busts and labels
- fol. 163v zodiacal rota showing eclipses of the Sun and Moon (labelled: CURSUS SOLIS ET LUNAE PER SIGNA SINGULA); Aries with a band around his waist, Virgo is winged and holds Libra, Cancer with a diamond-shaped body and the Gemini seem to be exhibiting a rude posture with the right Twin grabbing his own crotch

notes

A very early copy of the *De ordine ac positione stellarum in signis* (in a complete version of the Salzburg Compilation of 809-818 / *Liber calculationis*, a.k.a. the ‘Compilation of 810 in 3 blocks’). With numerous computistical table and the first 51 chapters of Bede’s *De natura rerum*.

According to BORST (1995²), this manuscript has on is a copy of the *Liber calculationis* (ff. 1r-163v), also known as the compilation in 3 parts, originally created between 810-818 in Salzburg. The manuscript came to the Munich Staatsbibliothek from S Emmerau in Regensburg but according to HERMANN (1923), it was written in Salzburg (BORST confirms this opinion). It probably travelled to Regensburg in the 9th century.

BISCHOFF (1965, II pp. 34, 96) describes clm 210 as a direct copy of Vienna 387, but as the star catalogue is incomplete one may doubt this statement. Borst thinks clm210 the better text of the two.

The cycle of illustrations in this manuscript has all the characteristics of the cycle called **De ordine II**. This cycle is also seen in Vienna Ms 387.

LE BOURDELLÈS (1995, pp. 99ff) calls this manuscript and Munich 210 ‘the twin manuscripts from Salzburg’, which were executed during the period of the Archbishop Arn (785-821). Munich 210 was for a long time was housed in the church of St Emmeran in Ratisbone (*sic*: Bourdellès says Ratisbone, not Regensburg). He also says that all the evidence seems to suggest that they are copies of a French exemplar, as Arn was the



Archbishop of St Ammans since 783 and a familiar of Charlemagne, he would have easily been able to acquire a French manuscript.

WEITZMANN (1970) describes the format of the illustrations as having '*column pictures*', or a picture that interrupts that continuity of the column of writing. '... and is found in the majority of those illustrated codices whose archetype existed back in the period when the roll was the prevailing form'. Some of the most striking examples are preserved among astronomical manuscripts, which go under the common name of 'Aratea' Not certain if the *Phaenomena* of Aratus was actually illustrated, 'but with greater likelihood there were already pictures in the *Katasterismoi* of Eratosthenes of Cyrene (ca. 275-195) BC, which were later taken over into the commentaries and translations of Latin writers such as Germanicus, Cicero, Hyginus and others.

Earliest illustrated Latin Aratus mss belong to Carolingian period, they are without frame or background and the manner of papyrus style, are placed within the writing columns: **Munich 210** (Salzburg dated 818) and **Vienna 387** (Salzburg, same period) 'were copied from the same model and show an identical arrangement of their pictorial decoration'. Short descriptions are in two columns and the drawings 'which in spite of their crudeness are still close to the ancient archetype', inserted before the paragraph they intend to illustrate; '... and if all the pages of these manuscripts were placed side by side, the result would resemble ancient illustrated rolls, not unlike the early Eudoxus Roll from the 2nd C BC.'

bibliography:

KAUFFMANN 1888, lxii-lxxviii

RÜCK 1888, pp. .

uses Munich as primary source for edition; dates it 818; provides contents, but slightly contradictory. fol. refs. should be checked against Meyer catalogue.

SWARZENSKI 1900, pp. 12 and 19, n. 2.

SWARZENSKI 1913, pp. 13-22, pl. IX, fig. 25.

HERMANN 1923, I, pp. 145-54

BETHE 1945, p. 125, n. 15.

CORDOLIANI 1955, p. .

CORDOLIANI 1957, pp. .

CORDOLIANI 1958. P. 251, n. 33.

DESTOMBES 1964, p. 36.

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L'Occidente e l'Islam nell'alto medioevo 1965, pp. [REDACTED].

WEITZMANN 1965, p. 97.

made in 818 in Salzburg, 'papyrus-style' drawings.

BISCHOFF 1966, II pp. 34, 96.

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KING 1969, pp. 3, 23-27.

WEITZMANN 1970, *Roll and Codex*: (p. 72)

WEITZMANN 1971, pp. 335-39

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his ms 'A', 9th C, ff. 113v-122v; first published by Rück in 1888 in his studies on Pliny.

ZIDI-NISSIEN 1975, pp. 217-40

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De MERINDOL, 1987, pp. 87 and 106, b. 42.

BORST 1995, p. 145 note 22 and p. 174, n. 22.

HAFFNER 1997, p. 175: says 'De ordine ac positione'

MAZAL 1997, pp. 44-64.



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Peltzer _____, pp. _____. *Mélanges*

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Contact

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Dr Brigitte Gullath
Bayerische Staatsbibliothek
Abteilung fuer Handschriften und Alte Drucke
D-80328 Muenchen
Tel: 0049-89/28638-2265 / -2916
e-mail:questionpoint@bsb-muenchen.de

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