MANILIIUS
ASTRONOMICA
EDITED AND TRANSLATED BY
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PREFACE

In preparing an edition of the *Astronomica* for the Loeb Classical Library I have felt compelled in the interests of simplicity and clarity to add rather more by way of commentary than is ordinarily desirable in the series. But Manilius is a difficult author. His text is unusually corrupt, his subject-matter highly specialized, and his Latin style so bizarre and bewildering that, as Garrod dolefully put it, “the helpfulness of a translation is not unlikely to be in inverse proportion to its readableness.” Moreover, he frequently embarks on an audacious plan of rendering diagrams, tables, and maps in hexameter form; and in these places even the best of translations would need visual aids to be readily comprehensible.

Perhaps then it is not surprising that only once before—as long ago as 1697—has the whole work been turned into English; Creech’s rhymed couplets are excellent in themselves, but all too often they leave the Latin far behind and are consequently of small value as an elucidation of it. My indebtedness to Garrod’s translation of Book 2 and to other published selections will be obvious; I have also made use of a model version of 1. 876-897 composed for his students by A. S. F. Gow. But in the matter of assistance I owe most to Percival Vaughan Davies, vii
the translator of Macrobius, who after translating about two-thirds of the text of Manilius heard of my undertaking and at once generously presented me with all he had done and invited me to use it as I thought fit: I have gratefully revised my own version after diligent comparison with his, adopting from him many an apt word and felicitous turn of phrase; and often enough, where not moved to incorporate his words, I have recast my own or modified an earlier interpretation in the light of his.

Whilst the text and the interpretation given in this edition represent my own judgement of what the poet wrote and meant (and supersede any opinions to the contrary I may previously have expressed), my obligation to former editors and scholars in this field is practically total. But to none is it greater than to Housman. There cannot be a page of this book untouched by his influence. I differ from him more than I should have once thought reasonable, but if time has opened my eyes to his fallibility, it has also brought me a fuller awareness of his scholarship, for which my respect has grown and not diminished. Where I have asserted independence I have not done so lightly. On the other hand, hoping that many who study his great edition will find in this a convenient cicerone, as I hope also that many who use this will be stimulated to go on to his, I often shelter under his protection amid some blind uncertainty (as at 2. 935 ff.) sooner than embark in my frailer craft on some desperate argosy, and I regularly employ his example of a general principle (as at 3. 160 ff.) in preference to making up an alternative simply in order to differ from him. Housman’s authority as a Latinist, like his distinction as a poet, the world has long since recognized; but not everyone knows what a consummate astrological scholar he was. Indeed, his exposition of Manilius’s astrology, largely free from the ill temper which obtrudes so much into his textual criticism, constitutes the most admirable feature of his work and merits special notice in these times, when exciting new vistas are being opened up by the editing, notably by Professor David Pingree, both of extant Greek texts and of oriental versions of others now lost.

I should like to express my warmest thanks to David and Pamela Packard for furnishing me with a computer-concordance to Housman’s editio minor; to Professor E. H. Warmington for carefully scrutinizing the translation; and to Kevin Goold, my brother, for designing and executing the frontispiece, figures, and star-charts.

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PREFACE TO SECOND PRINTING

THANKS chiefly to major contributions by D. R. Shackleton Bailey and Michael Reeve, the Teubner edition of Manilius which I produced in 1985 contained many improvements in detail over my 1977 Loeb. Now that the time has come for a reprint of the latter, I am delighted to have the opportunity of incorporating these as well as amendments of typographical and other errors.

The design of the work remains the same, but since I can now refer the reader to the Teubner edition for a full
account of the manuscripts and sources of conjectures, the need for the Appendix formerly occupying page 365 has disappeared. New, on the other hand, is a bibliographical addendum. In this I should like to single out for special mention the items furnished by Wolfgang Hübner, who (with David Pingree) has enormously widened our knowledge of ancient astrological doctrine and opened up paths to hitherto inaccessible sources: if in the matter of the textual and literary criticism of Manilius I remain a convinced follower of Housman's, this does not blind me, as it should not blind my readers, to the importance of Hübner's work, and I applaud particularly his neat conjecture at 5.441.

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INTRODUCTION

ABOUT THE POET

[Housman, ed. 1 a lxix ff., 90 ff.; Goold 8; Fletcher; Sikes]

HAD the archetype of the Astronomica not survived long enough to provide us with copies of the poem, we should have had no reason to suspect its existence or that of its author. Pliny, it is true, refers (N.H. 35. 199) to a Manilius of Antioch who was brought to Rome about 90 B.C. as a slave and became an astrological writer, but the date is incompatible with that of the poem. Several scholars have therefore toyed with the possibility that our Manilius was a son of the Antiochene, a possibility imaginatively embellished by Léon Herrmann; but the most that can be said is that the odds are against it.

The name to be elicited from the manuscripts is certainly Marcus Manilius; and hardly less certainly the Boetius attached to one occurrence of it in the chief manuscript is to be ascribed to confusion with the great Boethius. We need likewise entertain no doubt about the title of the poem, Astronomica: the poet obviously desired his didactic poem to stand

a For items in square brackets see the Select Bibliography, pp. cxiii ff.
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comparison with Virgil's and named it "Astronomies" after "Georgics."

The following considerations determine the date of composition.

Book 1: The disaster of the Saltus Teutoburgiensiis (A.D. 9) has recently taken place (898 ff.); Augustus, to whom the poem is dedicated, is alive (7 ff.; 385; 922 ff.).

Book 2: Lines 507 ff., extolling the greatness of Capricorn as Augustus's natal sign (when it was occupied by the Moon), guarantee that Augustus is still on the throne.

Book 3, like Book 5, provides no clue to its date.

Book 4: Capricorn has fallen from grace, and it is now Libra who is described (548 ff.) as enjoying the primacy of heaven and (773 ff.) as presiding over the birth of the reigning emperor (to whose erstwhile domicile in Rhodes lines 763 ff. refer): evidently Tiberius (whose natal sign was indeed Libra) has succeeded Augustus, who died in A.D. 14.

The inferences to be drawn are plain: Books 1 and 2 were written while Augustus was still alive, 4 and 5 when he was dead.

Our ignorance of the personal circumstances of the poet is not much instructed by the contents of the poem. Since he hopes (1. 115) to live to old age so that he may complete his work, he cannot be an old man already, but the formulation of his wish would be distinctly odd if he were young. More debatable is his origin: for Scaliger he is a Roman, for Bentley (who thought some features of his language peculiar) an Asiatic. True, he identifies himself as Roman in speaking of the Latin language and in referring to Hannibal, but this need not exclude the possibility that he was of foreign descent. On the other hand, the singularity of his Latin consists not in incorrect or gauche or even unidiomatic language, but rather in his excessive striving after sententious utterance concentrated in lapidary brevity. He displays a thorough familiarity with Lucretius, whose philosophy he repeatedly seeks to rebut, and also with Virgil, from whom he repeatedly takes a word or phrase or idea. The early books of Livy he seems to have read, as also Cicero's Somnium Scipionis, and the great orator's Verrines have also inspired a curious borrowing at 5. 620. But against this we receive the impression that Manilius is much more steeped in Greek literature, not only astrological works or the great masters like Homer and the dramatists, but even minor authors as well. In particular his text seems to disclose several striking parallels (apparently borrowings) with phrases in the text of the De Sublimitate, which I therefore incline to date before A.D. 14 (2. 8 ff. < De S. 13. 3; 2. 58 < 13. 4; 3. 22 f. < 4. 2; 4. 158 f. < 35. 3; 5. 222 < 19. 1). Whether or no the author of the De Sublimitate is (as I have elsewhere urged) Gnaeus Pompeius, the friend of Dionysius of Halicarnassus, we seem to have a possible connection between Manilius and a Greek professorial circle at Rome.

It teases the imagination to ponder the precarious route followed by the text of our poet from his times to those of our oldest manuscript. Faint echoes for about a century, especially in Stoic circles, suggest that it enjoyed some sort of circulation; it may have
influenced Germanicus (184 < Man. 5. 23), Lucan (8. 365 < Man. 1. 655), Seneca (Phoen. 14 ff. < Man. 5. 184), the author of the Aetna (591 < Man. 2. 3), Valerius Flaccus (3. 710 ff. < Man. 4. 570), and Juvenal (10. 175 < Man. 1. 776). One memorable line (4. 16) even appears in a verse inscription. Just once, at the end of the fourth century, the text comes into full view, for Firmicus Maternus quite certainly had Book 5 of Manilius open before him when he composed Book 8 of the Mathesis. Thereafter the Astronomica disappears from sight and next emerges in a tenth-century Bobbio catalogue, which lists as one of its items the Manilian archetype, or, if not that, certainly some ancestor of our extant manuscripts.

We need not doubt that, except for the lacuna in Book 5, we possess the whole poem; nor need we entertain the thought that Manilius broke off his design. Of course Housman is right to insist that a nativity cannot be cast from the poem as it stands. But a didactic poem is seldom an exhaustive treatise, and various features of Manilius's should warn us against expecting a completely logical and systematic account. If (as I believe) the poet gave a perfunctory account of the planets' natures in the great lacuna, he might well have considered his obligations duly discharged.

Even under the most favourable circumstances the composition of a didactic poem is likely to be a hazardous enterprise: when as in the case of astrology the theme involves numbers and tables, procedures and calculations, diagrams and catalogues, rhetorical virtuosity may with difficulty be attainable, but poetic distinction is likely to be beyond reach. At any rate the young Goethe thought so (Ephemerides, 1770): "I began to read Manilius's Astronomicon and soon had to put it down: no matter how much this philosophical poet festoons his work with lofty thoughts, he cannot redeem the barrenness of his subject . . . I consider that one has to debit the poet's account with the ill consequences of a subject. After all, he is the one who chose it."

Yet those who have studied him most have on the whole rendered him generous applause, as Fletcher's collection of tributes shows. For Scaliger he was Ovid's equal in sweetness and his superior in majesty, a judgement endorsed by Bentley. On the other hand, Sikes has some justification for his disappointment with Manilius as a Stoic controversialist, eager as he is to refute the Epicurean views of Lucretius whenever opportunity offers, for in this match the later poet assuredly comes off impar congressus Achilli. Nevertheless here and there Manilius so far abandons his customary rhetorical manner as to give voice to his soul's passion for certain themes: the beauty of the skies, the eternal movement of the great celestial clock, the immanence and supremacy of reason, and heaven's call to man to elevate himself to godhead. And for all his earlier distaste Goethe showed an unerring appreciation of two of the poet's finest lines (2. 115 ff.) when on September 4th, 1784 he climbed the Brocken and, his spirit stirred mightily, inscribed in the visitors' book kept at the summit:

Quis coelum posset nisi coeli munere nosse,  
Et reperire Deum, nisi qui pars ipse Deorum est?
INTRODUCTION

A GUIDE TO THE POEM

The science of astrology forms the principal theme of Manilius's work, but he postpones all treatment of it until he has set forth a descriptive account of the heavens, a "Sphaera," such as Aratus had composed nearly three centuries earlier: thus the first book is entirely astronomical.


Astronomical symbols used in text and figures

ZO DiAC

- Aries ≡ Libra
- Taurus Σ Scorpio
- Gemini Π Sagittarius
- Cancer Ω Capricorn
- Leo Ν Aquarius
- Virgo Ί Pisces

PLANETS

⊙ Sun ♃ Mars
☉ Moon ☉ Venus
☉ Saturn ☉ Mercury
♃ Jupiter ♃ Lot of Fortune

BOOK ONE

1. 1-117: Prooemium

Unlike the composer of epic or drama, who most effectively plunges in medias res, the didactic poet needs to prepare his ground. And in fact Manilius takes some time to get into his stride. We learn that he is the first to sing of astrology (1-24), and that the god Mercury stimulated interest in the sky and paved the way for the ultimate discovery that destiny is written in the stars (25-66). Before that time man led a primitive, if untroubled, existence, and it was the awakening of his intellect which brought about the progress that has led to his amazing knowledge of the heavens (67-112). The formal exordium closes (113-117) with a reiteration of his originality and a prayer for a comfortable old age to enable him to complete his design.

In traversing the early history of man our poet, with subtle allusions to the Golden Age, combats at every step the unromantic account given by his great Epicurean rival. For Lucretius the first men were unconcerned with celestial phenomena: Manilius improbably portrays them as terrified lest day fail to follow night. "In dealing with the next state of society," says Sikes (176), "the Stoic shews to more advantage: while Lucretius is compelled to deny any altruism in social evolution, Manilius rightly sees that society cannot be formed by self-interest alone. Taking the actual words of Lucretius—commune bonum—he insists on the influence of society as a natural and not merely a conventional bond. The wild and selfish cave-man of Epicurean fancy is replaced by the 'noble savage,' who is led upwards to civilization through the providence of God."

His account of the rise of astrology, on the other hand, is both vague and slight: and we are forced to conclude that he has nothing factual to impart. The kings of the orient referred to in verse 42 perhaps include Zoroaster (that is the
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Persian sage Zarathustra, reputed in later tradition to have been a king of Bactria and the founder of astronomy) and Belus (for whom the Chaldeans make the same claim according to Achilles, *Isag.* 1, p. 27). Among the priests mentioned in 47 are presumably included Nechepso (habitually called δ βασιλεύς by Vettius Valens) and Petosiris, legendary names, once perhaps even borne by a Pharaoh and his high-priest, but owing their currency among ancient astrologers to a 2nd-century n.c. manual purporting to be written by them. Manilius seems to give precedence in astronomy to the Babylonians (41-45), in astrology to the Egyptians (46 ff.).

1. 118-254: The origin and nature of the universe

Venturing into the field of cosmological enquiry the poet lists, as more than once elsewhere, a number of competing theories: Diels (229 ff.) sees in this feature a characteristic of Posidonius, Manilius's dependence on whom has been industriously if inconclusively argued by Mueller.

(1) 122-124: Possibly the world has neither beginning nor end (Xenophanes);
(2) 125-127: Or it was given birth by Chaos (Hesiod);
(3) 128-131: Or it is composed of atoms (Leucippus);
(4) 132-134: Or it is composed of fire (Heraclitus);
(5) 135-136: Or it is composed of water (Thales);
(6) 137-144: Or it is composed of four elements (Empedocles).

The poet professes to have an open mind on these matters and at once proceeds to expound (149-170) the Stoic view of the creation of the universe from the four elements (Chrysippus: Diels 465 ff.).

The Earth's suspension in space (173 ff.) is to be argued from the apparent path of Sun and Moon and Venus and fixed stars beneath it. All these bodies are suspended; they are spherical, too. And so is the Earth. This explains why we cannot see all the constellations in all parts of the world: the star Canopus is invisible north of Rhodes (so most authorities, e.g. Hipparchus, Geminus, Pliny, Cleomedes), and people who see Canopus above them

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*Fig. 1. The Invisibility of Certain Stars, 1. 215-220*

-e.g. the inhabitants of the Falkland Islands—cannot see the Great Bear. Figure 1 is here introduced to clarify the reasoning. Lunar eclipses afford another proof of the Earth's sphericity: in
different longitudes the eclipse occurs at different hours. Herein the poet may have misunderstood his source, for the relevance of lunar eclipses to this enquiry consists not in what he says at all, but rather in the striking fact that during them the shadow of the Earth's outline is cast on the Moon and is then seen to be irrefutably round (Aristotle, *De Caelo* 2. 297 b). Then (236 ff.) the poet speculates about the inhabited parts of the Earth's surface.

Unfortunately he has fallen into the error of confusing the western with the southern hemisphere, thus leaving us uncertain how exactly he envisaged the inhabited world whose geography he describes at 4. 585-817. In a fascinating chapter (*Comm. Somn. Scip.* 2. 9) Macrobius sets forth the theory (which may go back to Crates of Mallus in the 2nd century B.C.) that the land surfaces of the Earth are divided into four by two intersecting zones of Ocean, one encircling the equator (this presumably the *pontus* of 1. 246), the other circling the Earth longitudinally (as would the Atlantic and Pacific Oceans if connected at the poles). There are thus four land-masses cut off from each other: in the northern hemisphere our own (inhabited by *avvotKo<to*—to use the terminology of Geminus 16. 1—and comprising Libya, Asia, and Europe) and one 180 degrees of longitude away: that on our side of the world (*avTo<KO<* : the location of southern Africa) and that diametrically opposite to us (*avT{.,ooeis*).

The climax (247-254) of the second section is signalled by a brief statement of the Stoic doctrine that a divine spirit governs the harmony of the four elements which make up the universe.

1. 255-531: The stars of the sky

Manilius has now reached the central and most important part of his *Sphaera*, a description of the constellations. This he sets forth in the following order.

(1) 256-274: the signs of the zodiac (put first by Geminus 1. 1 f.; Vitruvius also gives the order zodiacal, northern, southern; Aratus begins with the circumpolars and does not deal with the zodiac as a group at all).

(2) 275-370: the northern signs are introduced by a paragraph on the polar axis, which leads naturally to the circumpolar stars and then to the rest of the constellations north of the ecliptic.

(3) 373-455: finally the southern signs. The celestial antarctic lay beyond the observation of Manilius and his sources, but he infers by analogy the existence of stars in this region of the sky.

(4) 456-473: we may wonder why the creator did not endow the constellations with fuller shapes of the figures he wished them to represent: the sky, we are told, could not have withstood such an extra quantity of fire.

(5) 474-531: a poetical cadenza follows, in which Manilius marvels at the orderliness and immutability of celestial motions, a passage singled out by Jebb as exhibiting the author at his best.

History. The earliest Greek star-gazers first noted individual luminaries like Arcturus and then grouped neighbouring stars together in constellations like the Great Bear. They named their constellations, says Webb simply and dogmatically, after their supposed shapes. Of course, once the Great Bear was named, the consequent naming of a single star Arcturus with relation to it was a natural development.
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In like manner, after Orion was identified, the bright star which ever follows at his heels was called his dog (Homer, *Il. 22. 29*). However, it is clear that many of the constellations in the Greek Sphaera are imports from abroad: this is particularly true of the zodiacal signs, for there is no evidence that the twelve signs as a group existed before the 4th century; indeed, what appear to be older appellations and figures have been incorporated in them, the Pleiades in Taurus and the Manger in Cancer, for example. It is significant that the only obviously Greek myth in the sky, that of Perseus and Andromeda and her parents (both Sophocles and Euripides wrote plays involving catasterisms of the principals, and perhaps this group-catasterism took place in the 5th century; certainly it was natural for Manilius to narrate this of all myths at length in Book 5), must antedate the zodiac, for the celestial tableau with Cetus is awkwardly broken by the dim stars of Aries and Pisces. Nor is this the only clue to the probability that the inventors of the zodiac were forced to make adjustments: the Scorpion once occupied so much more than thirty degrees that to get a duodecimal zodiac it had to be made into two signs; and the two legs of Ophiuchus protruded, and still do, right into the zodiac and even south of the ecliptic. Nowhere do we see more clearly the lateness of Greek preoccupation with the stars than in the mythology of the constellations. For the most part the stories are manifestly contrived, and conflicting versions are common. Manilius's general agreement with the astronomical mythographers (most conveniently presented in Robert's edition of Eratosthenes) makes it likely that he used a related source.

*Pictorial representation.* There is not and there cannot be a definitive Greek Sphaera. Eudoxus in the 4th century and Aratus in the 3rd laid the basis of a celestial picture-atlas, but Hipparchus was the first to define the outlines of constellations systematically in terms of stars identified by coordinates. His star-catalogue has not survived, though it seems pretty certain that we have it subsumed in the extant catalogue of Ptolemy, the value of which for a reconstruction of Manilius's globe will at once emerge from the first three entries of Ursa Minor (*Synt. 7. 5 pp. 38 f.)*:

1. The star at the end of the tail:
   Gemini 0° 10' North 66°; 3rd magnitude.

2. The next along the tail:
   Gemini 2° 30' North 70°; 4th magnitude.

3. The next, in front of the tail's issuance:
   Gemini 16° North 74° 20'; 4th magnitude.

The coordinates (given in respect of the ecliptic: modern astronomers use the celestial equator) readily enable the stars to be identified as αε UMi. Ptolemy is no slave to imagined figures: if a star comes outside the perimeter of a constellation (even a bright star like Arcturus), he lists it separately as extra-territorial. What pictorial representations have survived directly or indirectly (or can be reconstructed from textual statements such as Vitruvius's descriptions in 9. 3-5) have been collected and handsomely edited by Thiele. Foremost among them stands the 2nd-century Farnese globe (carried by Atlas on his shoulders), which exhibits the figures of the constellations, the five parallels, the ecliptic (and the northern and southern limits of the zodiac), and the two colures; no stars are marked, nor the Milky Way. Most Manilian scholars hold that the poet had the use of just such a globe, Moeller (31) even going so far as to argue from such phrases as 1. 609 *ab excelso decurrens limes Olympos* and 1. 687 *inde per obliquum descendens* that it must have been a movable one.

The constellations today. The Greek Sphaera (to which no addition was made until the 17th century) has proved astonishingly long-lived. Only a few extra asterisms (and these all minor) have gained a place in the northern heavens, the chief innovations naturally being made in the antarctic region, which was soon apportioned among new groups. The last constellation was created in the 18th century. Today (as the result of an agreement made by the International Astronomical Union in 1930) the whole sky is distributed among these constellations, the boundaries between them being drawn along arcs of Right Ascension and Declination; three-letter abbreviations denote the constellations, and Bayer's system of Greek letters (devised in 1603) is for the brighter stars still universally used and will be used below.

Manilius's constellations. For the reader's reference I append a list of the constellations mentioned by the poet, giving (1) name (and the verse-number of its first occurrence in Manilius), IAU abbreviation, and alternative names.
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occurring in the Latin text, (2) mythological and other information given in or relevant to the poem, and (3) data indicating the poet’s pictorial conception. Sometimes Manilius describes different representations (as in the case of Libra); and to illustrate some of his errors (as with Draco) would involve a distortion of star positions. But for the most part the poet’s views can be and have been incorporated in star-charts: these will be found at the end of the volume.

(a) Zodiacal

1 ARIES 263 (Ari: Corniger, Laniger): The ram which swam to Colchis with Phrixus on its back after losing Helle and its left horn; then stripped of its golden fleece and sacrificed to Jupiter: 2. 34, 532; 3. 304; 4. 515 ff., 746 ff.; 5. 32. Looks back 1. 264; 2. 212; runs 2. 246.

2 TAURUS 264 (Tau): The bull (Jupiter in disguise) which carried Europa over the sea to Crete: 2. 489 ff.; 4. 681 ff. Rises backwards 1. 264; limps and has one leg doubled under it 2. 259.

PLEIADES [371]: A cluster in Taurus, regarded as a separate group representing seven sisters: 5. 142, 710.

HYADES [372]: aγδεθ Tau, regarded as an independent constellation: 5. 119 ff.; the name means “Rainers,” mistranslated into Latin as Suculae “Piglets,” and so interpreted by Manilius: 5. 125 ff.

3 GEMINI 265 (Gem): Brothers, not named by Manilius, though Eratosthenes and others identify them with the Dioscuri, Castor and Pollux: 2. 568; 4. 756. Naked 2. 163, 184; arms about each other 2. 164.

4 CANCER 266 (Cnc): The crab sent by Juno to assail Hercules in combat with the Hydra; it bit the hero, but was killed: rewarded with a centaur: 2. 33. At 4. 530 Manilius refers to the cluster Prassaepe “the Manger.” Has no eyes 2. 259 ff.

5 LEO 266 (Leo: Nemeaeus, -eaeus): The Nemean lion, whose skin Hercules wore as spoil: 2. 32, 531. Runs 2. 246.

6 VIRGO 266 (Vir: Erigone): Erigone (the name occurs frequently), who on finding her father Icarius dead hanged herself in grief and was raised to heaven for her piety. An alternative story (cf. Aratus, Phaen. 98 ff.) identified her as Astraea (or Justitia), daughter of Jupiter (or Astraus), who at the advent of the Bronze Age fled to heaven: Manilius has inconsistently introduced her at 4. 542 ff. Has wings on her shoulders (by implication: cf. Ptolemy, Synt. 7. 5 pp. 102 ff. and Farnese globe) 2. 176, 662; carries wheatsheaf 2. 442.

7 LIBRA 267 (Lib: Chelae and so always named by Hipparchus): Originally the claws of the Scorpion, which were conceived as the pans of a balance: Zvýs (first in Geminus) and Libra are not found before 1st cent. B.C. Manilius’s picture of the sign varies: the claws holding a balance 1. 611, 4. 547 ff.; the scales collapsed 2. 251; the scales held by a male figure 2. 528.

8 SCORPION 268 (Sco: Népá): The scorpion which killed Orion at the behest of Diana (cf. Aratus, Phaen. 636 ff.: note that Orion sets at the rising of Scorpio): 2. 32. Has lost its claws to Libra 2. 258.

9 SAGITTARIUS 270 (Sgr: Arcitenens, Centaurus, Sagittifer): Originally the Archer seems to have been a satyr (Crotus son of Eupheme, according to Eratosthenes); and often he is pictured (e.g. on the Farnese globe) as having two legs only. For others, however, including Hipparchus, he is a four-footed centaur, and Manilius’s frequent use of the name Centaurus shows that he also takes this view. Aims arrow 1. 269 f.; runs 2. 246; has one eye only (=profile) 2. 260; wears cloak 4. 560.

10 CAPRICORNUS 271 (Cap: Caper): An import from abroad. Here and elsewhere (2. 252, 445) termed a cramped constellation, because it does not fill up thirty degrees. A goat-fish 2. 231, 4. 795.

11 AQUARIUS 272 (Aqr: Iuvenis, Urna): Ganymede, carried off by the Eagle for Jupiter: 5. 487. The water poured out from his urn is considered by Manilius as joining Eridanus to form a composite sign, see 44 Flumina. Naked 2. 511.
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12 PISCES 273 (Psc): On the banks of the Euphrates Venus and Cupid (Manilius, however, does not mention Cupid), suddenly confronted by the giant Typhon, dived into the river and eluded pursuit by changing themselves into two fishes (Hyginus, Poet. Astr., 2. 30): 2. 33; 4. 579 ff., 800 f. Evidently of Babylonian origin. The fishes face different directions 2. 165.

(b) Northern

13 HELICE 296 (UMa = Ursa Major: Arctos, Ursa): Helice (so Aratus) is doubtless an old appellation, given because of the sign's winding revolution round the pole. Callisto, daughter of Lycaon, ravished by Jupiter and turned into a bear by Diana; Jupiter, to save her when she was pursued by Arcadians, set her among the stars: 2. 29; 3. 359. The Bears follow each other 1. 303 f.


15 DRACO 306 (Dra: Anguis, Serpens): Usually said to be the snake set by Juno to guard the golden apples of the Hesperides, with which Manilius (5. 16) has identified Hydra, perhaps confusing the two. Separates and surrounds the Bears 1. 305 ff.; this, however, is an error (not confined to Manilius) arising out of a misinterpretation of Aratus, Phaen. 45 f. (Malchin 49).

16 ENGONASIN 315 (Her = Hercules): A man on his knees, not identified by Manilius, who emphasizes the mysterious nature of this sign (generally taken by the mythographers to be Hercules exhausted after his labours).

17 BOOTES 316 (Boo: Arctophylax): A drover, likewise not identified (others make him Areas, son of Callisto, or Lycaon, Callisto's father). Presses forward like a drover 1. 317 (but this need be no more than an etymology).

18 CORONA 319 (CrB = Corona Borealis): The crown worn by Ariadne (the mythographers represent it as golden, but Manilius may have thought of it as a wreath, cf. 5. 263).
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28 Cassiopea 354 (Cas = Cassiopeia : Cassiope): See on 27. Ancient authors consistently give her name as Cassiopéa (Kassiopeia), and this form I have used in preference to the modern astronomical Cassiopéa. This is a hybrid influenced by the variant Cassiope (see note on 5. 504). *Upside down* (cf. Aratus, *Phaen.*. 654 ff.) 1. 686.

29 Andromeda 356 (And : Cepheis): See on 27.

30 Perseus 358 (Per): See on 27, but catastrophized for his victory over Medusa: 5. 22. I have wondered, reflecting that the story of Perseus and Andromeda is not known to Greek literature before Herodotus 7. 150, whether the hero's association with the heroine may not even have been created to explain their contiguity in the skies (cf. *Proc. Afr. Class. Ass.* 2 [1959] 10-15 and also above p. xxii). *Sickle in hand*: 5. 22.

31 Heniochus 362 (Aur = Auriga): Eriochthonius, first to drive a four-horse chariot. Manilius presents an inconsistent picture: *steps on ground* 1. 361; *continues to drive his chariot in heaven* 5. 20, 68 ff.

32 Hydæa 365 ([? Aur: see also 45 Haedus]): These, though stars in Auriga, undoubtedly belong to a previous independent conception; twin kids of Capella according to Hyginus. *On the Charioteer's left wrist* (Ptolemy, *Synt.* 7. 5 pp. 66 f.).

33 Canicula 396 (CMa = Canis Major : Canis): Originally Orion's dog (and probably only the star Sirius): known to Homer (II. 22. 29). Manilius attempts no explanation. *With flashing face* (i.e. Sirius = a CMa, the brightest star in the sky) 1. 407; *tries to seize the Hare* 5. 233.

34 Procyon 412 (CMi = Canis Minor): The precursor of the dog Canicula: no further information given by Manilius.

35 Lepus 412 (Lep): A hare placed in heaven, says Eratosthenes, on account of its swiftness; which Manilius seems to have in mind at 5. 159 ff. *Perpetually chased by Canicula*: 5. 233.

36 Argo 412 (today divided into four constellations: Car = Carina : Pup = Puppis : Pyx = Pycis : Vel = Vela : Ratis): The first ship, given apotheosis for protecting gods (i.e. the heroes who sailed in quest of the Golden Fleece): 1. 413 ff. *Rudder and stern-top located* 1. 623, 694; *sails among the stars* 5. 13, 36; *drawn by Aries to its side* (but this is an error) 5. 36. Ancient authorities concur in figuring only the sternward part of the ship.

37 Hydra 415 (Hyà : Anguis): The wakeful warder of the Hesperides (though others make this Draco, and in this Manilius may have erred): 5. 16. The mythographers generally link Hydra, Corvus, and Crater together, evolving a droll story to account for their juxtaposition (cf. *Ovid, Fasti* 2. 243 ff.).

38 Corvus 417 (Crv): The raven sacred to Apollo, who adopted its shape to elude Typhon: 1. 417, 783. See also on 37.

39 Crater 418 (Crt): A bowl, not further described. See also on 37.

40 Centaurus 418 (Cen): The identification with Chiron made by Eratosthenes and others is reflected in the endowments the sign bestows at 5. 348 ff. Many authorities depict the Centaur as holding up a beast: on this see 50 Bestia.

41 Ara 421 (Ara): The altar set up by Jupiter before the battle with the Giants (rather the Titans): 5. 341 ff.
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43 PISCIS NOTIUS 438 (Ps. A = Piscis Austrinus): Manilius knows nothing about this sign save its place and name.

44 FLUMINA 440 (Eri = Eridanus): This constellation (here and at 5. 14) is peculiar to Manilius. The chief member is the star-group generally called Eridanus (no doubt originally just a river), which flows from Orion's left foot into Cetus. For other authorities it then flows out again, almost reversing its direction before turning south. Manilius, however, seems to have imagined it flowing right through Cetus and on to the mouth of the Southern Fish, before reaching which it had necessarily to be joined by the waters from Aquarius's stream (sometimes reckoned as a separate constellation). The two streams constitute the poet's Flumina.

Ghost constellations

45 HAENUS 5. 311: a mistaken duplication of Haedi (part of 31 Heniochus): see below pp. xciv ff.

46 FIDES 5. 409: a mistaken duplication of 19 Lyra: see below p. xcvi.

Omitted constellations

47 EQUULEUS (Equ): Putorii. Πυθών Geminus 3. 8; Ptolemy, Synt. 7. 5 pp. 76 f.; Allen 212 ff.

48 COMA BERENICES (Com): Geminus 3. 8; Allen 168 ff.


50 BESTIA (Lup = Lupus, a mistranslation from the Arabic, cf. Allen 278): The beast held by Centaurus (and perhaps for Manilius contained within that constellation), in Greek Θηριον: Aratus, Phaen. 442; Vitruvius 9. 5; Ptolemy, Synt. 8. 1 pp. 162 ff. The asterism is of interest as explaining the error at 1. 433, where next to Ara the poet places Cetus (which is on the other side of the sky): G. R. Mair (Loeb Aratus, Phaen. 442 n.) has seen that...

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Manilius, noting that a beast was catastrophically next to Ara, has in his haste announced it to his readers as Cetus; then (as I think, comparing his mistakes over Lyra and Orion in Book 5: see below p. xcvi) he decided to let his error stand when he discovered it, as he was bound to do on reaching the true Cetus. I formerly accepted the transposition of 1. 433-437 after 442, independently suggested by Garrod and Naiden-Householder (the latter make the further necessary change of quam to quae), but now recognize that this corrects the poet rather than his scribes.

1. 532-538, 805-808: The planets

Now that Housman has definitively transposed verses 805-808 to their proper place here, one can appreciate that this little paragraph neatly serves to conclude, with a mention of the planets, Manilius's account of the heavenly bodies before he moves on to describe the measurements and boundaries of heaven. Indeed, Aratus had followed just this order (Phaen. 19-453 constellations; 454-461 planets; 462-558 circles).

The curt treatment accorded the planets may to some seem strange in an astrological writer. It needs to be remembered, however, that it is difficult to give simple instructions for discriminating between them or to describe for the layman their celestial vagaries: "when it comes to them my daring fails," says Aratus, Phaen. 460. Nevertheless, we may perhaps infer that Manilius, who is always ready to turn numbers into verse, is following some commentator on Aratus similar to the source of Achilles (Isag. 16 p. 42, 25 f.) who simply lists the planets, rather than the source of Geminus (1. 24-30), which would have provided him with the periods of their zodiacal orbits. These are (with their sidereal periods in parentheses): Saturn: about 30 years (29.46); Jupiter 12 years (11.86); Mars: 2½ years (1.88); Sun: 1 year; Venus: about the same (.62); Mercury: about the same (.24); Moon: 1 month. The poet...
similarly arranges the planets at 5.6 f., and for the first of those verses repeats 1.807 verbatim.

1. 539-804: The circles of the sky

Preparatory to an exposition of the celestial circles Manilius treats us to a little geometry of the circle itself (Euclid, Elem. 4.15: the radius of a circle is equal to the side of an inscribed regular hexagon). He cannot resist the temptation to put $\pi$ into Latin verse, although it hardly advances his purpose. But at 561 he gets down to the business in hand. A lacuna of some six verses has robbed us of the beginning of the parallel circles, in particular of the Eudoxean division of a circle into 60 degrees (a scale adopted by Geminus 5.46 in the same context). Since Manilius in his astrological books uses the $360^\circ$ circle, it would seem that, when he uses different sources, he does not trouble to harmonize them. Figure 2 represents diagrammatically the fixed circles of the sky (1.561-630).

(1) 563A-602: He deals first with the five parallels. Originally the celestial arctic circle was defined as bounding that part of the heavens which never sets, the antarctic that which is never visible (Diels 340b 15 ff.). But it would then follow that the circle would vary for different latitudes: Posidonius seems to have been the first to fix an immovable arctic circle by redefining it as the most southerly latitude in which at the summer solstice the Sun remains above the horizon all day. Manilius’s location does not, however, conform to this definition, being rather the original variable arctic as determined for the latitude of Rhodes ($6^\circ$ Eud. from pole = 54$^\circ$ lat. N). The celestial tropic of Cancer (given as 24$^\circ$ N), equator, and tropic of Capricorn are then briefly defined and located, followed by the antarctic circle.

(2) 603-630: The colures are two in number, (a) the meridian (or hour-circle) which passes through the equinoctial points and the poles, and (b) the meridian which passes through the solstitial points and the poles. Both are marked on the star-charts at the end of this volume, where Manilius’s description may conveniently be traced. Like Aratus and XXXIII
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Hipparchus, Manilius places the equinoxes and solstices at the beginnings of the tropic signs (but see further p. lxxxi).

(3) 631-662: There are two circles, however, which, unlike the previous ones, have no fixed abode: they move with the observer. The first is the meridian: it runs down from the north pole (to both southern and northern horizons); it cuts the sky in two, and marks midday when the Sun crosses it. The other is the horizon, i.e. the observer's horizon projected on to the celestial sphere; this also cuts the sky in two—that hemisphere which we can see, and that which the earth beneath us blocks from our vision.

(4) 666-680: We proceed to the zodiac, the first of two great circles which are specially remarkable as being real and visible and possessing thickness. It may be simply defined as the ecliptic given width (properly the width within which the planets move). Manilius's omission of detail has prompted some versifying editor, whose technique can more clearly be seen at 2. 732-734 and 2. 968-970, to interpolate (681-683) the conventional measurement of 12 degrees (cf. Geminus 5. 53), which he has been careful to point out are non-Eudoxean ones.

(5) 684-804: The second of the visible circles is the Milky Way. This, we learn from an anonymous commentator on Aratus (p. 95, 30 f. Maass), was marked on some ancient star-globes (though not on the Farnese), and it is very likely that our poet was using one such.

Manilius (as also Manetho 2. 118 ff.) starts from its northern intersection with the equinoctial colure and traces the following circuit: Cassiepia, Cynus, summer tropic, Aquila, equator, Scorpio, Sagittarius, Southern Centaur, Argo, equator, Gemini, Heliocbus, Perseus, and back to Cassiepia.

We can hardly wonder at the failure of the ancients to discover that the Milky Way is a huge disc of stars, of which the solar system is an undistinguished component. Manilius assembles various theories about its origin, with which may be compared Achilles (55, 7 ff. Maass), Macrobius, Comm. Somn. Scip. 1. 15. 3 ff., and Diels 229 ff.

1. 809-926: Comets

Having now reached the end of the astronomical portion of his poem, Manilius subjoins a chapter on comets (and meteors, which, except for the special mention of the latter in 847-851, he seems not to have distinguished) to enable him to introduce and develop his peroration.
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He advances three explanations.

(1) 817-866: Inflammable earth-vapours ignited by dry air (Aristotle, Meteor. 1. 341 b);
(2) 867-873: Stars attracted to and then released by the Sun (Diogenes Apolloniates: Diels 366);
(3) 874 ff.: God's means of warning mankind against impending calamity.

Says Breiter perceptively: "As in his account of the Milky Way, the poet closes with the view that is scientifically least plausible; but it leads into the splendid digression which concludes the book."

Manilius's types of comet (835-851) are readily identifiable with the classifications we meet with elsewhere (e.g. [Aristotle], De Mundo 4; Seneca, N.Q. 7 passim and 1.15.4; Pliny, N.H. 2.89 ff.; also among the astrologers, cf. Ptolemy, Tetr. 2.9; Hephæston 1.24).

(1) 835-839: Hairy: crinitae, κομήται, long-haired; pogoniae, πογονίαι, beards;
(2) 840 ff.: Geometrical: trabes, δοκιδές, beams; columnae, κολονές, columns;
(3) 842-846: Various: pithēi, φίθω, casks; hirci, ἄλεις, goats; faces, φάταντες, torches;
(4) 847-851: Shooting-stars: faces (or bolides), διάφταντες, meteors.

These by no means exhaust comet-types, over thirty kinds of which Isidore (Orig. 3.71.17) tells us the Stoics recognized.

For his peroration the poet has clearly taken as a model the ending of the first book of the Georgics.

BOOK TWO

With this book Manilius embarks upon astrology proper, so that this is perhaps the most suitable place to assemble a select bibliography of the subject.

In his introductions to Books 2 to 5 Housman admirably elucidates, with copious quotation from ancient sources, the technical passages in the text, and in his review of van Wageningen (ed. 2 p. xxviii) expresses the opinion that Sextus Empiricus's polemical treatise is the best introduction to Greek astrology.

[General: Bouché-Leclercq; Cramer; Lindsay. Ancient sources: (survey) W. and H. G. Gundel; (authors) Geminus; Dorotheus; Ptolemy, Tetrabiblos; Vettius Valens; Sextus Empiricus; Porphyry; Firmicus Maternus; Manetho; Paulus Alexandrinus; Hephæstio Thebanus; Heliodorus; C.C.A.G. Barbaric sphere: Boll. Horoscopes: Neugebauer and Van Hoesen]

2. 1-149 : Prooemium

In a studied exordium, a feature of all his books, the poet surveys the genres of hexameter poetry from Homer, who is acknowledged to be the fountainhead of all, down to his own time. By making special mention of the various themes of didactic poets he stakes his own claim to a place on the roll of innovators. Naturally, the poets named or alluded to are Greek, but it is surprising that Manilius refrains from commenting on the fact and from seeking applause as a Latin poet. He proceeds to treat generally of Stoic beliefs and the lonely majesty of Stoicism; and here and there succeeds, as rarely in his work, in striking a note of sublimity.
2. 150-269 : The signs of the zodiac

For our first lesson in astrology we are to learn the characteristics of the signs of the zodiac: these the poet expounds under ten heads.

(1) 150-154: Masculine (Aries, Gemini, Leo, Libra, Sagittarius, Aquarius) and feminine (Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces). The criterion is not so much sex as the Pythagorean notion that odd numbers are male, even female. Of the male signs Libra is occasionally conceived (so apparently at 2. 528) as a male figure holding the balance. Taurus seems strange in a group of females, though the absence of its hind quarters and its backward rising make the oddest speculations possible; and Capricorn’s great beard is yet a further challenge to one’s credulity.

(2) 155-157: Gemini, Virgo, and Aquarius (to which Libra is possibly to be added: see 2. 528) are human; Aries, Taurus, Cancer, Leo, Scorpio, Capricorn, and Pisces are bestial (the first two cattle, the rest ferine). Sagittarius combines both natures.

(3) 157-196: Aries, Taurus, Cancer, Leo, Libra, Scorpio, and Aquarius are single. The remainder are double. Of these Gemini and Pisces are pairs, Sagittarius and Capricorn are composites, man-horse and goat-fish respectively, while Virgo (who has a pair of wings) demands classification as a double by belonging to the square ΠΠיפף, each of whose members effects a juncture of two seasons.

(4) 197-202: Unlike the other signs, which rise in upright posture, Taurus, Gemini, and Cancer do so upside down. In Gemini the Sun is (or was during the Hellenistic age) in apogee, that is to say at its farthest from the Earth (for in fact its distance varies during the year), and its motion is consequently slowest in this and the adjacent signs Taurus and Cancer; and this tardiness Manilius fancifully ascribes to the reverse position of these signs. It is improbable that he understood the eccentricity of the Sun’s orbit, which was discovered by Hipparchus. Geminus, not quite agreeing with Manilius, gives the length of the Sun’s passage between tropic points as follows: in Aries, Taurus, and Gemini 94½ days; in Cancer, Leo, and Virgo 92½ days; in Libra, Scorpio, and Sagittarius 88½ days; and in Capricorn, Aquarius, and Pisces 90½ days (cf. Isag. 1. 13 ff. and Manilius’s note p. 253).

(5) 203-222: Diurnal and nocturnal: the poet expounds three classifications, of which he evidently prefers the first (211-217). This separates the signs into alternate pairs: Pisces and Aries, Cancer and Leo, and Scorpio and Sagittarius are diurnal (i.e. the trigons of Aries and Cancer, the signs in which respectively the day becomes longer than the night and the day attains its greatest length); the remainder are nocturnal (the trigons of Libra and Capricorn, the signs in which respectively the night becomes longer than the day and the night attains its greatest length).

Some (218-220) hold that the signs from Aries to Virgo (i.e. in which the day is longer than the night) are diurnal, and the remainder nocturnal (by the same principle).

The third classification (221 f.) repeats the one we learnt in 150-154: masculine signs are diurnal, feminine nocturnal. Here too the basis for it is Pythagorean and numerical, light being odd and
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darkness being even (Aristotle, *Metaph.* 1. 5 986a).

(6) 223-233: Cancer and Pisces are aquatic; Aries, Taurus, Leo, and Scorpio terrene; Capricorn and Aquarius amphibious. Manilius has omitted Gemini, Virgo, Libra, and Sagittarius, which are nothing if not terrene: possibly their human nature excluded them from classification, Aquarius being exceptionally mentioned on account of his association with water, which provided too good an opportunity to miss.

(7) 234-243: The signs are now assessed in terms of fertility: Cancer, Scorpio, and Pisces are prolific, like the creatures their names designate; Virgo is naturally unfruitful, and thus too are reckoned Leo (the lioness was thought to bear cubs once only) and Aquarius (who, if not rendered sterile by being Ganymede, is likely to suffer from his urn's incapacity to hold what it has received); the remainder are intermediate.

(8) 244-255: Posture (a criterion peculiar to Manilius) determines the next grouping. Three are running signs, Aries, Leo, and Sagittarius; three standing, Gemini, Virgo, and Aquarius; three sitting, Taurus, Libra (*i.e.* with its scales collapsed), and Capricorn; three lying, Cancer, Scorpio, and Pisces.

(9) 256-264: Disfigurement (another criterion peculiar to Manilius) specially characterizes four signs: the Scorpion's claws have been appropriated by Libra, Taurus limps with a leg doubled under it, Cancer has no eyes, and Sagittarius (who is figured in profile) only one.

(10) 265-269: The four seasons are each allotted three signs. Spring gets Pisces, Aries, and Taurus; summer Gemini, Cancer, and Leo; autumn Virgo, Libra, and Scorpio; and winter Sagittarius, Capricorn, and Aquarius. What Manilius has said at 2. 176-196 confirms this division, although other astrologers begin the seasons with the tropic signs.

2. 270-432: The conjunctions of the signs

We proceed to the relationships of the signs with each other: geometrical figures inscribed within the circle of the zodiac indicate trine, quartile, and sextile aspects, and diameters indicate opposition.

(1) 273-286: The construction of four equilateral triangles produces the following scheme of trigons (figure 3):

1. Aries, Leo, Sagittarius.
2. Taurus, Virgo, Capricorn.

(2) 287-357: The construction of three squares produces the following scheme of tetragons (figure 4):

1. Aries, Cancer, Libra, Capricorn.
2. Taurus, Leo, Scorpio, Aquarius.

But we must be careful to calculate aright: we may not connect any degree of a sign we please with any degree of its trigonal or quadrate neighbours; the side of a trigon requires exactly 120, that of a square exactly 90 degrees. Such kindergarten instruction takes the poet many lines, but, as Housman with unwonted geniality happily puts it: "The inordinate
length of Manilius's exposition is perhaps after all less due to a low estimate of his reader's knowledge of ciphering than to the pleasure he takes in exercising that eminent aptitude for doing sums in verse which is the brightest facet of his genius.” In 352-357 we are told that the trigon's power is far greater than the square's, though this is not orthodox doctrine: for most astrologers the trigon's power is for good, the square's for ill.

(3) 358-384: The construction of two hexagons produces the alliance of masculine and feminine signs (figure 5):
1. Aries, Gemini, Leo, Libra, Sagittarius, Aquarius.
2. Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces.

(4) 385-432: Before enumerating the diametric
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signs Manilius considers the relationship between neighbouring signs as members of an inscribed dodecagon, but judges this aspect to be powerless, as he does that between signs separated from each other by four intervening signs; in the latter case the line of relationship does not form the side of an equilateral figure. The aspect of direct opposition, which is strong though for the most part discordant, produces the following scheme (figure 6):


Fig. 5. HEXAGONA, 2. 358-384

Fig. 6. DIAMETRA, 2. 395-432

2. 433-452: The guardians of the signs

Here Manilius digresses. Mention of the diametric signs has reminded him that the gods and goddesses in pairs have been allotted the guardian-
ship of the diametric signs in pairs, and he now sets forth the following scheme:

2. Taurus → Venus : Mars ← Scorpio.
3. Gemini → Apollo : Diana ← Sagittarius.
5. Leo → Jupiter : Juno ← Aquarius.

This arrangement has nothing to do with the plan by which the signs of the zodiac become planetary houses (for which see below p. xcix).

2. 453-465: The parts of the body allotted to the signs

The digression affords our teacher an opportunity to tell us of the dominion exercised over the several parts of the body by the individual signs. The allotment is as follows:

1. Aries: head.
2. Taurus: neck.
5. Leo: sides.
7. Libra: loins.

Herein for once astrologers find themselves in complete agreement. Manilius, remarkably, repeats the list at 4. 701-709.

2. 466-692: More relationships of the signs

(1) 485-519: The poet now propounds a further set of relationships determined by parallel lines drawn within the circle. (a) The diameter connecting Aries and Libra and two parallels on either side connecting the other signs (save Cancer and Capricorn, which are thus excluded from the scheme) identify those which see each other (videntia, βλέπωντα: see figure 7).

Some authorities, however, connect the videntia by points (0°γρ with 0°κ) and not signs as a whole; and as a consequence all the signs are paired (i.e. Gemini and Cancer; Taurus and...
Leo; Aries and Virgo, etc.). (b) The diameter connecting Cancer and Capricorn and two parallels on either side connecting the other signs (save Aries and Libra, which are thus excluded from the scheme).

The diameter drawn from the point dividing the first masculine sign Aries and the first feminine sign Taurus acts as a wall at which each masculine sign pays court to the feminine sign equidistant with himself from it; and she, if a northern sign, responds treacherously, if a southern, apparently not at all. The *amantia* and *insiantia* (figure 9) are exclusive to Manilius.

(2) 520-607: We proceed to enmities. To begin

*Fig. 8. Audientia, 2. 466 ff.*

*Fig. 9. Amantia and Insiantia, 2. 466 ff.*
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with, the first and third trigons (\(\gamma, \Omega, \tau\) and \(\Pi, \Theta, \Xi\) respectively) are at daggers drawn: not only is trigon opposite to trigon, but the signs of the former are all bestial, of the latter all human (Libra, as was indicated above, being here at any rate conceived as a male balance-holder). Then each individual sign has to suffer various assaults which Manilius arranges in three classes: (a: 572-578) from opposite signs and members of that opposite sign's trigon; (b: 536-538) from bestial signs (if a human) and from human signs (if a beast); and (c: 539 f.) from signs motivated by sheer caprice. After enunciating the principles the poet works out their application (541-569), specifying each sign's individual assailants thus:

**ARIES:** \(ab\ Libra, Gemini, Aquarius; b\ Virgo.
**TAURUS:** \(a\ Scorpio, Cancer, Pisces; b\ Libra.
**GEMINI:** \(ab\ Sagittarius, Aries, Leo.
**CANCER:** \(ab\ Virgo; a\ Capricorn, Taurus; b\ Libra.
**LEO:** \(ab\ Aquarius, Libra, Gemini; b\ Virgo.
**VIRGO:** \(ab\ Pisces, Cancer, Scorpio; b\ Capricorn.
**LIBRA:** \(ab\ Aries, Leo, Sagittarius; b\ Taurus, Cancer, Scorpio, Capricorn.
**SCORPIO:** \(ab\ Virgo; a\ Taurus; b\ Gemini, Libra, Aquarius; c\ Leo, Sagittarius.
**SAGITTARIUS:** \(ab\ Gemini, Libra, Aquarius; b\ Virgo.
**CAPRICORN:** \(b\ Gemini, Libra, Aquarius, Virgo.
**AQUARIUS:** \(ab\ Leo, Aries, Sagittarius.
**PISCES:** \(ab\ Virgo; b\ Gemini, Aquarius; c\ Sagittarius.

(3) 608-641: Heaven's friendships are restricted to signs enjoying trigonal association, and even this is no guarantee of good fellowship: in fact only Gemini's trigon leads a peaceful life. In his trigon Aries has to keep a sharp eye on his unpleasant partners; Taurus finds Capricorn incompatible and Virgo, though attractive, infuriating; and Cancer has in Scorpio a false, in Pisces a fickle friend.

(4) 643-692: The innate relationships of the signs which the poet has expounded undergo modification as a result of the perpetual revolution of the zodiac. If a line is rising, its effects will be enhanced; if setting, diminished. One modification is especially stressed: when quadrate signs pass through the framework of cardinal points (to be described in 2. 788 ff.), the cardinal takes precedence over the quadrate association and significantly affects marriage, children, and the near degrees of kinship. Similarly, the powers of trigons, hexagons, and even dodecagons will be intensified or depressed (though not altered) by passage through the cardinal points. Finally (687 ff.), there are modifications sustained not by the whole of a sign but only by part, and this brings us to a completely novel subject.

2. 693-737: Zodiacal dodecatemories

Each zodiacal sign is divided into twelve equal parts or dodecatemories; these are allotted to the signs in order, the first to the sign in which it is situated, the second to the next, and so on. Take for instance the first two signs: Aries gives its first dodecatemory (i.e. the first two and a half of its thirty degrees) to itself, the next to Taurus, and so on till the last, which it gives to Pisces; Taurus gives its first dodecatemory to itself, its second to Gemini, and its twelfth to Aries (cf. figure 10). The signifi-
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The significance of the dodecatemories is this: not only is a planet's influence affected by the sign in which it stands, but it is further modified by the sign of the particular dodecatemory which it occupies.

No more than this need the poet have said. But operating with multiples of $2\frac{1}{2}$ in Latin calls for mental dexterity, and our teacher cannot resist helping with our arithmetical calculations. We should therefore note the degree of a sign that the Moon (given as the most obvious example of a planet) occupies at the moment of a nativity (let us suppose it to be the 9th degree of Aries) : it is desired to ascertain in what sign's dodecatemory that degree falls. Multiply the number by twelve ($9 \times 12 = 108$) ; dole out thirty apiece to the signs in order beginning with itself (30 to Aries, 30 to Taurus, 30 to Gemini), and note the sign in which the multiples of thirty give out (here Cancer, for 108 - 90 = 18) : that will be the sign of the Moon's dodecatemory. This is merely a variation, of course, on what the poet has previously told us, and the whole point of multiplying by twelve is that we may operate with the easier number 30 instead of $2\frac{1}{2}$.

So much is easy. But the explanation of the lines 2. 732-734 is complicated: "When the number fails, then let the remainder be divided into portions of two and a half, so that these may be distributed in order among the remaining signs."

The term "dodecatemory," which is simply the Greek for "a twelfth," is frequently used as a synonym for "a sign of the zodiac," but occasionally we encounter it in a special conception, the dodecatemory of the Moon. This significant place in the zodiac (somewhat like the Lot of Fortune, to which we shall come at 3. 160-202) one found by a procedure described by Porphyry, Isag. 194 Wolf (= CCAG V. 4. 211) and repeated in essentially the same form at CCAG VIII. 2. 50 : "Count the number of degrees from the Sun to the Moon, and from these take away all multiples of thirty; as for the remainder, divide it into portions of two and a half, and distribute them in order from the zodiacal sign in which the Moon is situated."

Let the Sun be situated in the 15th degree of Gemini, the Moon in the 23rd of Scorpio: the distance is 158 degrees. Take away 5 $\times$ 30 : that leaves 8. Divide this into portions of 2½ : one will go to Scorpio, one to Sagittarius, one to Capricorn, and the remainder comes to an end in Aquarius. The dodecatemory of the Moon is thus Aquarius.

Now this has nothing to do with Manilius, whose rule when the Moon stood in the 23rd degree of Scorpio would lead to the following computation: (726-728) $23 \times 12 = 276$; (729 f.) of this 30 go to Scorpio, leaving 246; (731) 8 $\times$ 30 go to Sagittarius, Capricorn, Aquarius, Pisces, Aries, Taurus, Gemini, and Cancer, with 6 left over; (735 f.) so the thirties give out in Leo, and therefore when the Moon (or any other planet) occupies the 23rd degree of Scorpio it stands in the dodecatemory of Leo.

We can now see what has happened. At the point in Manilius's procedure where the casting out of thirties left a remainder, some astrological interpolator, believing this casting out of thirties to be part of the Porphyrian procedure, has fabricated three verses to express the rest of the operation (italicized above). His composition, which shrewdly included several echoes of Manilian language, was good enough to deceive Housman, though it is exposed as a fake.

\[ \text{INTRODUCTION} \]

\[ \text{FIG. 10. ZODIACAL DODECATEMORIES, 2. 693-721} \]
by the anapaest *reliquis*, cf. Lachmann on Lucretius 5. 679. The interpolator assuredly meant to delete the lines 735-737, which he intended his own to supplant; and it is fortunate that his purpose was frustrated, for the survival of these lines confirms that Manilius did not (as Housman unaccountably supposes) write those, namely 732-734.

We have further evidence of this interpolator's existence and activity at the end of this book, where we encounter precisely the same phenomenon: holding again a different view from Manilius, he has composed three lines of his own (968-970) to take the place of three of the original (965-967); and by some kindly providence the latter have once more survived. Indeed, it is tempting to ascribe to the same individual much other of the interpolation detected in our author.

2. 738-748: Planetary dodecatemories

There are other subdivisions, also called dodecatemories, allotted not to the signs but to the planets. In size they each occupy half a degree, and there are five of them to every zodiacal dodecatemory. Manilius has inconsiderately forgotten to tell us the order in which the planets claim these planetary dodecatemories, but Housman refers us to 1. 807 and 5. 6 and suggests Saturn, Jupiter, Mars, Venus, and Mercury: this is illustrated in figure 11.

![Fig. 11. Planetary Dodecatemories, 2. 738-748](image)

2. 749-787: Intermezzo

No paragraph actually begins at this point, but in broaching the subject of the dodecatemories and treading, as it were, on planetary ground, Manilius seems to have gone as far as his resources for the moment permitted; and he draws back, excusing himself with the plea that students must not proceed to the advanced stages of a course before they have mastered the elementary. Suddenly, after a number of trite remarks, he launches upon an extended simile (praised by Scaliger and anthologized by Garrod) in which is portrayed the building of a city.

2. 788-967: The fixed circle of the observer

It is no use taking bearings of the zodiac and planets, however accurate, until we know what to do with the information. We first need to be able to construct the fixed frame upon which every horoscope is cast. This subject will occupy Manilius for the rest of Book 2.

The casting of a horoscope is based on the belief that the zodiac and planets, as they ceaselessly revolve about the earth, exert different influences according to their different positions relative to the native. The astrologer, whom let us call the observer, regards the heavens as presenting the same frame to everyone. And we can draw this frame quite easily, because it is simply a circle, quartered where the horizontal and vertical diameters cut it (i.e. at the points corresponding to 9 and 3 and 12 and 6 on a clockface). What these points represent Manilius proceeds at once to tell us.

(1) 788-840: They are the four cardinals, the
INTRODUCTION

points at which the zodiac intersects (a) the eastern horizon (horoscopos or Hor.), (b) the western horizon (occasus or Occ.), (c) the meridian overhead (medium caelum or MC), and (d) the meridian underfoot (imum caelum or IMC)—see figure 12. The points, like the quadrants and the temples to which we shall presently come, possess no power themselves but direct the power of the zodiacal degrees occupying them towards certain areas of human experience. Manilius arranges the cardinals in this order: (c) the MC, affecting distinction, honours, and success generally; (d) the IMC, affecting wealth and its sources; (a) the Horoscope, affecting life generally, character, and station; and (b) the Occident, affecting the consummation of things (including marriages and the banquet which comes at the end of the day).

(2) 841-855: The quadrants of the circle linking the cardinal points also impart special direction to the forces of the zodiac whilst revolving through them: they hold dominion over the quarter-periods of human life, as follows: from the Ascendant to the MC over infancy; thence to the Occident over youth; thence to the IMC over adulthood; and thence back to the Ascendant over old age: this is illustrated in figure 12. Housman accuses Manilius of inconsistency in here attributing infancy to the first quadrant when at 833 he had given the early years to the Horoscope; and less easily resolved are the conflicting claims on old age of the Occident (839) and now the fourth quadrant (854 f.). Paul of Alexandria alone retails a like doctrine, and is no less the object of Housman’s castigation.

(3) 856-967: We now come to the commonest method of dividing the observer’s fixed circle: the dodecatropos or division into twelve equal parts or temples (modern astrologers call the divisions houses, a term best avoided here since it means something else in Greek astrology, see p. xcix). Four of these temples embrace the cardinal points, and the intervening segments of the circle are bisected to provide a further eight. In fact the numbers denoting the twelve temples could be placed in the same places
as the numbers on a clockface, the difference being that astrologers conventionally assign first place to the temple at 9 o'clock, second to that at 8 o'clock, and so on round the circle. Manilius himself gives no numbers, an omission which leads to complications; nor does he begin with the quarter temples, which indeed he leaves till last. His order is 12, 6, 8, 2; 11, 5, 9, 3; 10, 4, 1, 7: in the case of each temple Manilius gives its name, the planet (if any) which has special honour in it, and the area of human experience over which it presides. It will be convenient to arrange this information in tabular form as well as in a diagram (see figure 13): items on which Manilius agrees with other astrologers are given in capitals, items on which they agree against him, in italics (cf. Sextus Empiricus 12 ff.; Paulus 14 pp. 53 ff.; Firmicus 2. 15 ff.).

1 (939-947) name = Stilbon
   abode = MERCURY
   area = children (life and character)

2 (866-870) name = abode of Typhon (portal of Pluto)
   area = (estate and fortune)

3 (910-917) name = DEA
   abode = MOON
   area = BROTHERS

4 (929-938) name = Daemonium
   abode = Saturn
   area = PARENTS

5 (891-904) name = Daemonic (Bona Fortuna)
   abode = (Venus)
   area = health (children)

6 (877-879) name = portal of toil (Mala Fortuna)

7 (948-958) name = portal of Pluto
   area = kind of death (marriage)

8 (871-879) name = abode of Typhon
   area = (kind of death)

9 (905-909) name = DEUS
   abode = SUN
   area = bodily vicissitudes (travels)
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10 (918-927) name = Fortuna
abode = Venus
area = marriage (honours and preferences)

11 (881-890) name = Felix Fortuna (Bonus Daemon)
abode = Jupiter
area = (friendships)

12 (864-866) name = portal of toil (Malus Daemon)
abode = Saturn
area = (enemies and misfortunes)

Housman sternly observes that the areas governed by the cardinal temples are very different from those governed by the cardinal points contained in them (808-840). But more serious awkwardnesses lie concealed beneath the foregoing account.

For one thing the zodiacal wheel never outside the tropics revolves so as to pass through the zenith overhead or the nadir underneath. A more unsettling discrepancy occurs as a result of the obliquity of the ecliptic. If it were the rotating circle of the celestial equator we were minded to superimpose on the circle of the twelve temples, all would be well: the celestial equator always rises due east and sets due west, and its arc is always bisected by the meridian into two halves of 90 degrees. But the ecliptic is a great circle tilted 23½ degrees to the celestial equator: when in northern latitudes the equinoctial point of Aries crosses the meridian, the degree of the ecliptic rising above the eastern horizon is not the solstitial point of Cancer 90 degrees away, but a point more distant (in the latitude of Reykjavik, to take an extreme case, over 120 degrees of the ecliptic will be contained in the quadrant Hor. to MC); and conversely less than 90 (at Reykjavik less than 60) degrees will at that time be contained in the quadrant MC to Occ. To make computation more difficult, the proportions vary throughout the day, for when the equinoctial points coincide with the horizon, then a solstitial point will in fact be crossing the meridian, and the ecliptic will be exactly quartered. Manilius shows no awareness of these awkward facts, but some ancient authorities (e.g. Porphyry, Isag. 197 f. Wolf [= CCCAG V. 4. 215 f.]) do face up to the difficulty and with varying success attempt to rectify it. Modern astrologers (who like Firmicus 2. 19. 2 locate the initial point of the first temple precisely at the cardinal, so that its domain extends 30 degrees downward from the quarter-point, and so on round the circle) generally adjust the zodiacal arcs to fit the twelve equal temples (using tables drawn up by the 17th-century astronomer Placidus), but Regiomontanus has persuaded some to retain the signs of the zodiac evenly segmented and manipulate the dodecatures. House-division has generated violent schisms among professional star-prophets, and F. Wiesel discusses no less than fourteen different systems in Das astrologische Häuserproblem (Munich 1930).

[2. 968-970: The octotropos]

Manilius's omission to specify the number of temples in the fixed circle of the observer has led to the following complication. Some astrological interpolator, either believing (like Bouché-Leclercq 276 ff.) or wishing it believed that the poet divided the circle into eight temples only (864-917) and in 918 ff. referred merely to the cardinal points, has attempted to enforce this belief on readers by composing three lines labelling this chapter octotropos. Fortunately the nature of his interpolation is perfectly clear: 968-970 were intended to supplant 965-967, as is proved by the otherwise inexplicable duplication of the promise to deal with the planets later. This interpolator we have already encountered at 2. 732-734 (q.v.).

Salmasius (187) and Bentley between them perfect the metre and Latinity of 2. 969 by reading octotropon; per quam stellae in diversa volantes, but Housman is probably right in leaving the verse as we find it in the MSS. The terms δωδεκάτροπος and ὀκτάτροπος (feminine adjectives with an understood ἀνώτατη or τοποθεσία according to Salmasius 189) occur too rarely (see Housman ad loc.) for us to be sure that the interpolator spelled the latter correctly.
Moreover, the octatropos is not, as the interpolator would have it, a division of the circle into eight. It is simply the first eight temples of the dodecatropos, considered as a sequence from birth to death: 1 life; 2 estate; 3 brothers; 4 parents; 5 children; 6 health; 7 marriage; 8 death (so Antiochus, *CCAG* VIII. 3. 117; Firmicus, *Math.* 2. 14). Manifestly this system is irreconcilable with that of Manilius, in which death occurs in the seventh temple.

### BOOK THREE

3. 1-42: Prooemium

The poet again asserts his originality. He enumerates themes of others which he will not pursue and, with an eye to the technical nature of the book, warns readers not to expect a glamorous composition. The list of works alluded to is remarkable as containing in a reference (3. 23 ff.) to the *Annals* of Ennius Manilius's one solitary notice of Latin literature.

3. 43-159: The circle of the twelve athla

It seems that here, as at the beginning of his fourth and fifth books, our instructor has turned to a new source, for certainly his initial chapter, in which he describes the circle of the twelve athla (or lots), conflicts in principle as well as in detail with the doctrine of the dodecatropos or twelve temples so recently propounded (at the end of Book 2). These two circles, for all their differences, have precisely the same function, which is to provide a spectrum of human experience against which the zodiac with its ever-varying planetary pattern can form a kaleidoscope reflecting the infinite variety of man. Figure 14 compendiously illustrates the circle of the twelve athla, which, together with a reminder of the activities already assigned in Book 2, may be tabulated as follows.
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1 Home, household, and property
2 Warfare and foreign travel
3 Civil life and business relationships
4 Law: litigation and oratory
5 Marriage; friendships (Temple 10: 2. 295)
6 Means and prosperity
7 Dangers
8 Class: social rank and repute
9 Children (Temple 1: 2. 946)
10 Way of life; character (Horoscope: 2. 831)
11 Health and sickness (Temple 5: 2. 901)
12 Success in attaining aims

The exact astrological doctrine which lies buried beneath the confusion of Manilius's exposition in 3. 43-159 is probably no longer recoverable, but two clues survive to suggest that it was not simply an alternative to the dodecatropos.

For one thing the Lot of Fortune, as Manilius calls his first athlum or lot, is in Greek astrology a term (καταρχαί) so frequent and so important that it has the privilege of being denoted by a special symbol (Θ), like a planet. Indeed, like a planet it truly is, for Ptolemy (Tetr. 3. 10) attributes to it an authority commensurate with that of the Sun, the Moon, and the Horoscope. And the system of lots, of which Fortune is one, usually comprises seven, one for each of the planets; they are not segments which together make up a complete circle, but are rather specially endowed points in the chart of a nativity.

But even more significant are two phrases which Manilius has let escape his lips in expatiating on the 11th and 12th lots: (142) "no other seat is there which claims ... the moment for administering (the medicine)" and (154) "this is the portion in which day and hour for decision shall be given." This is language quite alien to genethliacal astrology, that is the determination of a person's future from the posture of the heavens at his birth. A strict determinist, such as in several of his utterances (like the proem to Book 4) Manilius reveals himself as being, would argue that everything was predestined at the moment of nativity and that the complete record of a native's predestination could be read in his horoscope, when properly cast. Many astrologers, however, took a less doctrinaire view, holding that the outcome of actions is settled or at any rate affected by the celestial disposition obtaining at the time they are performed. This led to a different application of astrology, whereby a more enlightened Oedipus might confidently expect to evade disaster written in the stars by engaging in (or refraining from) activity at times of favourable (or unfavourable) conjunction; and ancient documents frequently tell us of astrologers being consulted about the prospect of embarking on a journey or a marriage or initiating some other kind of enterprise. The Greeks called this branch of astrology καταρχαί or "initiatives." Maximus wrote a poem (still extant) so titled, and Dorotheus's fifth book (on which Hephaestion largely drew for his third) was exclusively devoted to the business. This then is the type of astrological source which Manilius may have been following.

3. 160-202: The Lot of Fortune

Unlike the dodecatropos, which is fixed in relation to the observer's framework of cardinal points (Hor., MC, Occ., IMC), the circle of the twelve athla constantly varies its position as the Sun and the Moon constantly vary their positions. To discover how it should be adjusted to the observer's framework, we calculate the position of the Lot of Fortune (the first athlum), which will as a consequence determine the position of the circle as a whole. The calculation differs, however, according as the nativity occurs by day or by night.

If it occurred by day, count the degrees from the Sun to the Moon, and then measure off this amount along the zodiac from the first cardinal point or Horoscope: where the measurement stops, there will be found the Lot of Fortune. For example (and reckoning for simplicity's sake by whole signs), let the Sun be in Cancer, the Moon in Virgo, the Horoscope...
in Libra: from the Sun to the Moon is two signs: measure off two signs from the Horoscope and, as will be seen from figure 15, the Lot of Fortune will be found in Sagittarius; the second lot (of war) will be found in Capricorn, and so on. Actually this is the procedure which Ptolemy (loc. cit. above) would have us follow at all hours, day or night.

For Manilius, however, there is a big difference. If the nativity occurred by night, reverse the procedure. This time count the degrees, not from the Sun to the Moon, but from the Moon to the Sun, and then proceed as before, measuring off the amount from the Horoscope to find the Lot of Fortune. For example, let the Sun and Moon be, as before, in Cancer and Virgo respectively, and let the Horoscope be in Aries (we cannot keep Libra for our illustration, since this is a nocturnal geniture and the Sun must ex hypothesi stand below the horizon: see figure 16):
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from the Moon to the Sun is ten signs; measure off ten signs from the Horoscope, and the Lot of Fortune will be found in Aquarius; the second lot (of war) will be found in Pisces, and so on.

3. 203-509: How to find the Horoscope

Before we can perform the operations just described, we need some means of accurately determining the Horoscope, that degree of the ecliptic rising above the horizon at the moment of a nativity. If we get this wrong, we shall get everything else wrong.

218-246: We must first beware of a common method of calculation. This attributes two hours and thirty degrees of the ecliptic to the rising of each sign: having noted (by the sundial) that at the moment of nativity the Sun was risen (let us say) six hours, and having noted (from our ephemerides) that the Sun is (let us say) at the first point of Aries, we find that this calculation gives us a distance of three signs or 90 degrees of the ecliptic to the Horoscope, which would thus be at the first point of Cancer. But this is not likely to be the case (at Reykjavik—see above p. lx—the Horoscope would be at least a further thirty degrees away, in Leo).

To begin with, the signs of the zodiac make different angles with the horizon and take different times to rise. Furthermore the length of a day varies throughout the year, and so also must vary the length of an hour, a natural hour, that is, which by definition is a twelfth of the natural day; and even if a sign takes two hours to rise one day, it will take a different period of time to rise on another.

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247-274: We must therefore establish a standard hour. And such an hour we have at the equinoxes, when day and night are equal and may conveniently be each divided into twelve equal hours: let the astrologer work with these standard hours the whole year round. If he does so, he will find that at Rhodes (an error: the poet should have said Rhodes [Ptolemy, Synt. 2. 6 p. 108 f.]) the ratio of day and night at the solstices is 14½ to 9½. Figure 17
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illustrates the different durations of day and night for the observer at Rhodes when the Sun is at (a) the first point of Cancer (day 14½ hours, night 9½ hours), (b) the equinoctial points (day and night 12 hours each), and (c) the first point of Capricorn (day 9½ hours, night 14½ hours).

275-300 : We are now given a complete table of risings for this latitude; and not only risings, but also settings (though this is of no practical value to the astrologer); and not only measurements in hours, but also in stades (half-degrees of the celestial equator). Indeed what Manilius does now is to put into hexameters table 1.

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Table 1. RISINGS AND SETTINGS OF ZODIAC (1), 3. 275-300

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301-384 : This table of ascensions, however, is only valid in one latitude. But days and nights (like the inclination of the ecliptic to the horizon) are not the same the whole world over. At the terrestrial equator each sign of the zodiac takes two hours to rise...

Here we may pause to notice a slight inaccuracy, as may be seen from figure 18 (wherein the straight line SN represents not only the celestial axis but the eastern horizon, the
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The first curved line SN above it the first hour-circle, and so on: the ecliptic does not rise at right angles to the horizon, and as a consequence the signs closest to the equator (Virgo, Libra, Pisces, Aries) rise in less than two hours (for clarity the proportions in the figure are exaggerated), whilst those farthest from it (Gemini, Cancer, Sagittarius, Capricorn) take longer.

... and all the year round night is equal to day, as may be seen from figure 19, in which the shaded area represents the plane of the observer's horizon: obviously, no matter how far towards the south or north the Sun rises on the eastern horizon, it will always describe exactly a semi-circle above the horizon and a semi-circle below. But (323) as you move north towards the pole, the zodiac is tilted more and more to the south until the southern signs gradually cease to appear at all above the horizon and eventually disappear completely beneath it;

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Fig. 19. The Observer at the Equator, 3. 301-322

Fig. 20. The Observer at the North Pole, 3. 356-384
INTRODUCTION

and if nature were to permit one to stand at the
north pole, one would see six signs only. Figure 20
depicts the observer at the north pole: it is clear
that since the celestial sphere spins round his zenith,
he can never see more than that half of it which is
above his horizon; every day (from the vernal
equinox on) the Sun makes one complete revolution,
gradually rising to the tropic and then at the end of
six months setting into the ever-invisible southern
hemisphere.

385-442: Under these circumstances we need
something more than a fixed table for one particular
latitude. Manilius therefore gives us a general rule
which we can apply in any latitude. Determine the
hours of the longest day and divide the number by
6: the quotient will be the rising-time of Leo.
Divide by 6 the hours of the shortest night: the
quotient will be the rising-time of Taurus. Add a
third of the difference between these two quotients
to the rising-time of Taurus: you will then have the
rising-time of Gemini. This differential is constant,
from Aries and Pisces (whose identical rising-times
are least) to Virgo and Libra (whose identical rising-
times are greatest). Reverse the figures, and you
have their setting-times. Manilius now repeats the
rule so as to give the rising-times in terms of stades
(i.e. in numbers 30 times greater): from 720 subtract
a number which is to it as the hours of the shortest
night are to 24: divide the remainder by 6, and the
quotient will be the rising-time of Leo: divide the
subtrahend by 6, and the quotient will be the rising-
time of Taurus. Add a third of the difference
between these two quotients to the rising-time of
Taurus, and you will have Gemini's. Similarly with

TABLE 2. RISINGS AND SETTINGS OF ZODIAC (2), 3. 385-442

443-482: Here Manilius digresses to tell us at what
rate daylight in any latitude increases between
midwinter and midsummer. Take a sixth of the
difference between the shortest day and the longest
night (here as elsewhere the solstice is assumed to
occur at the beginning of the sign), and give it to

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Aquarius; a half of this amount is given to Capricorn; and one and a half times the amount is given to Pisces. These increments, however, must be compounded, so that Aquarius's growth progresses from Capricorn's final amount, and Pisces' growth from Aquarius's final amount. Although an increase in the number of hours continues to occur from Aries to Gemini inclusive, it does so at a reverse rate, Aries' increment being the large one of Pisces, Gemini's the small one of Capricorn. From the first point of Cancer a corresponding diminution occurs until the last of Sagittarius. The poet takes as an example the latitude of Rome, where the shortest day has 9 hours, and this illustration is fully worked out in table 3.

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<td>1½</td>
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<tr>
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**Table 3. Variation of Days at Rome, 3. 443-482**

**483-509:** Our instructor resumes his task of teaching us how to find the Horoscope by setting forth another method. If the nativity occurs by day, note the natural hour and multiply it by 15; add the number of degrees the Sun has completed in his sign: from the total thus obtained distribute 30 to each sign (beginning with the Sun's) and in the degree where the number gives out will be found the Horoscope. If the nativity occurs by night, reckon the hour from sunset and multiply it by 15; add the number of degrees the Sun has completed in his sign, and add 180: from the total thus obtained distribute 30 to each sign and, once again, in the degree where the number gives out will be found the Horoscope.

"Alas, alas! This alternative method of yours, my poor Marcus, is none other than the vulgar method which in 218-24 you said you knew, and which in 225-46 you exposed as false. The wolf, to whom in his proper shape you denied admittance, has come back disguised as your mother the goose, and her gosling has opened the door to him" (Housman). Of course, to assume that 15 degrees of the zodiac rise in any hour of the day (488 f.) is the same as assuming that each sign (or 30 degrees) of the zodiac rises in two natural hours.

**3. 510-559: Chronocrators**

The poet abruptly introduces us to Chronocrators, those celestial influences that govern the various divisions of a man's life. He expounds two systems, which, since they are different, cannot both be true.

According to the one (514-536) the first year of a
person's life is governed by the sign the Sun occupied at his birth (Aries, let us say); the second by the next (Taurus); and so on until the thirteenth year, when we begin all over again (with Aries). The governors of the months are determined by the sign the Moon occupied at the nativity. Suppose it was Taurus: then the first month (like the 13th, 25th, etc.) of the native's life goes to Taurus, the second to Gemini, and so on. The first day of his life is governed by the sign of the Horoscope, the second by the next, and so on. The hours, like the days, also have the Horoscope as their "determination" or starter.

This tendency towards simplification may have led to the other system (537-559), which has standardized the principle of beginning with the sign of the Horoscope: years, months, days, and hours all begin their cycle therefrom, and the 13th in the series starts the cycle again.

Manilius is alone in making the signs of the zodiac his chronocrators; the other astrologers regard the planets as performing this function. Notice that, if one takes the first hour of the first day, assigning that to Saturn, and continues to assign an hour to each planet in the supposed order of distance from the Earth (i.e. Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon: Bouché-Leclercq 107 ff.), the first hour of the second and subsequent days will fall respectively to the Sun (Sunday), the Moon (Monday), Mars (mardi, Tuesday), Mercury (mercredi, Wednesday), Jupiter (jeudi, Thursday), and Venus (vendredi, Friday); on the eighth day the cycle will repeat itself, the first hour falling to Saturn (Saturday). Such is the origin of our week (Bouché-Leclercq 478 ff.; Colson).

3. 560-617: Length of life

The stars also foretell how long we have to live. The first part of the chapter reveals the years awarded us by the signs of the zodiac (the effective sign presumably being that of the Horoscope). Figure 21 sets forth the amounts, which are based on a gradation from 10 at the vernal equinox to 20 at the autumnal, and then in each case augmented by two-thirds of a year. That this prediction of age (endorsed by no other astrologer) is not unconditionally guaranteed is shown by the fact that not every-
INTRODUCTION

body reaches the age of ten as well as by a second paragraph, which records (again without confirmation from other authorities) the grant made by that temple of the dodecatropos which the Moon occupied at the nativity. How these forecasts (evidently the most favourable) are affected by an untoward location of the planets Manilius does not disclose.

But the amounts bestowed by the twelve temples are interesting in that they form a mathematical progression which diminishes by successive triangular numbers: \( a, a-1, a-3, a-6, a-10, \) and so on until the 12th term (which is 12, i.e. \( a = 78 \)). The order of precedence is: the Horoscope and the other three signs of its square; the other two signs of its trigon; the two nearest signs of its hexagon; the two nearest signs of its dodecagon together with their respective opposites. But the fact of the matter is that what Manilius is putting into hexameters is figure 22.

3. 618-682: Tropic signs

Housman aptly describes as “terminal ornament” this closing chapter, which contains a poetical description of the changes occurring at the midpoints of the four seasons but has no connection with any theme of Book 3, which it brings to a graceful close.

For all its irrelevance, however, the chapter raises a question of some moment. Whereas Manilius mostly locates the actual tropic degree at the beginning of a tropic sign (1. 622; 2. 178; 3. 278-293; 395-436; and 443-482), here he places it within the sign (3. 625-628; 637-640) and specifically in the eighth (as at 3. 257) or tenth degree. Indeed, his last line, referring to the authority who assigned the tropic to the first degree, even suggests eccentricity on that person’s part. Manilius’s inconsistent position reflects his use of different sources and need not specially exercise us.

But Achilles too (Iliad, 23, p. 54, 17 ff.) knows of several alternatives: \( 1^\circ \) and \( 8^\circ \) and \( 12^\circ \) and \( 15^\circ \). No Greek or Roman seems to share Manilius’s knowledge of the 10th as the tropic degree, but there is some reason to suppose that this identification enjoyed Babylonian support. The variety of opinion over such a factual matter as the nodes of ecliptic...
and equator clamours for explanation, and of course this lies ready to hand: the precession of the equinoxes.

Hitherto it has been implied that the positions of both the celestial equator and the ecliptic, those imaginary lines determined by the Earth's axis and the plane of its orbit respectively, are fixed. In fact this is not so: the plane of the Earth's orbit (and hence the ecliptic) does not change, but the Earth's axis does. Maintaining its angle of inclination to the ecliptic (23\(\frac{1}{2}\)°), it very slightly wobbles, like a fast spinning top, completing one wobble in 26,000 years. The consequence is that, whereas against the background of the fixed stars the ecliptic remains fixed, the great circle of the equator—maintaining its angle of inclination—is gradually sliding backwards round it. The vernal equinox, that is the point of the spring intersection of ecliptic and equator, as well of course as every other point on the equator, retreats along the line of the ecliptic at a rate of 50°.29 a year.

It is the great glory of Hipparchus to have discovered the precessional shift (apparently by comparing his observations of Spica with those of Timocharis, cf. Ptolemy, Synt. 7. 3 pp. 28-32), and it detracts little from his feat that he somewhat underestimated the amount (though the error will have led to greater inaccuracy in Ptolemy's star-catalogue, if, as Dreyer [202] assumes, the latter was simply Hipparchus's updated to take account of precession). We are now in a position, reversing the precession, to calculate when the equinoctial point coincided exactly with the beginning or the middle of the zodiacal sign, in the hope that this might give us the date of establishment of the Greek zodiac. Unhappily we are frustrated. It is certain that constellations along the ecliptic had been evolved before the conception of the duodecimal zodiac: when, then, this momentous stage was achieved; it was too late to introduce a new schematization based on tropic points. Eudoxus, we are told (Hipparchus 2. 1. 18), placed the vernal point at Aries 15°, Aratus at the beginning of the sign. Now since their chronological difference corresponds to a precessional shift of not much more than a degree, it is obvious that both are struggling to preserve conventions that do not fit the phenomena. Occasional references to the 8th degree may be related, as Neugebauer (188) suggests, to the vernal point of System B of the Babylonian lunar theory; and the 8th degree or thereabouts may well have marked the equinox when the zodiac as we know it was devised (the Romans—Caesar, Vitruvius, Columella, Pliny—generally adopted the 8th degree tropic).

Thus, if the retrospective search for the location of the vernal point at \(\gamma 0^\circ\) focuses on the time of Hipparchus, one can hardly resist the suspicion that Hipparchus himself has taken a hand in modifying the constellation outlines to bring this about. For there is some evidence. Inspection of the zodiacal figurations within their thirty-degree compartments (most conveniently depicted in Bouche-Leclercq 181 ff.) reveals that some displacement of the zodiacal figures has taken place. For example: Cancer's territory once obviously extended into Gemini, just as on the other side Leo's head and front paws protrude ten degrees or more into Cancer: the sign's boundary has been adjusted to secure \(\alpha 0^\circ\) as the solstitial point. Exactly the same has happened in respect of Capricorn: no wonder Maimius calls it a cramped constellation, for whilst it has plenty of room to stretch in Sagittarius, it is outrageously elbowed aside by Aquarius: but an explanation lies to hand if its boundaries have been redrawn to secure \(\gamma 1^\circ\) as the autumnal point.

Awkward as precession is for the astronomer, for the astrologer it is fatal. Or so one would have supposed. If in the time of Hipparchus the vernal equinox occurred at the first point of Aries (\(\gamma 0^\circ\)), then in the time of Ptolemy it must have occurred at about \(\times 26^\circ\); and today it must occur at about \(\times 1^\circ\). Today in fact the effect of precession has been to move every zodiacal sign twenty-nine degrees away from where, according to astrological doctrine, it ought to be. Oddly enough it is Ptolemy who has saved the day for the astrologer: in Tetrabiblos 1. 22 the astronomer, for he was that first and prophet second, virtually says that for astronomical purposes he will define the first point of Aries as the vernal equinox: if that moves, then the whole zodiac will just have to move with it; for astronomical purposes men had better look to this movable, artificial zodiac. And so it has come to pass. When today's readers of almanacs are informed that the Sun travels through Aries from March 21st to April 20th, the name Aries denotes not the group of stars so identified and marked in our star-atlases, but thirty degrees of the ecliptic measured off from the vernal equinox,
a length of line constantly moving and today almost entirely contained in the astronomical constellation of Pisces. And after another half century, when the nodes have precessed still further, we shall, during the Sun’s course in Pisces, start getting Taurus babies.

BOOK FOUR

Consideration of this book may suggest that in it Manilius is following an Egyptian source (much as Firmicus, *Math.* 8.5-17 follows Manilius, Book 5): the system of decans derives from Egypt, and with Egypt the *partes damnandae* may have a connection (Bouche-Leclercq 235 and note 2); then the doctrine of zodiacal geography which forms the main section (and in our poet’s source probably led on to ecliptic signs) has been argued by Bartalucci as reflecting a Ptolemaic source.

4. 1-118: Prooemium

This, the most successful of the exordiums, asserts the futility of hopes and fears in the face of immutable destiny, the existence of which is inferred from the constant occurrence of the unexpected and improbable—we are regaled with a surfeit of evidence—and also from the constant fulfilment of predictions—this we are evidently required to take on trust. Although the future is determined, insists the poet, neither the wickedness of sin nor the excellence of virtue is on that account diminished.

4. 122-293: Zodiacal influences on the native

Opening the astrological portion of the book is a simple and non-technical account of the qualities and skills imparted to those born under each sign of the zodiac. One might think it reasonable to assume (Manilius has omitted to clarify the matter) that these effects are produced by the horoscoping sign, since, when in the fifth book we come upon the identical treatment of extra-zodiacal constellations, we are repeatedly informed that the influences are precipitated at the moment of rising. Nevertheless, it is odd that he has nowhere let slip a confirmation of this view, especially as in a chapter shortly to come (4.502-585), when dealing with the influences of special degrees, he specifies their position in the ascendant eleven times out of twelve. We should therefore accept Housman’s considered opinion (add. [1930]) that, if the poet has chosen his words carefully, he must mean us to understand that the influences ascribed in this chapter to signs, in the next to decans, and in that following to degrees all depend on the Moon’s presence therein at the natal hour.

4. 294-407: Decans

Each sign is equally divided into three units or decans; and these 36 decans are allotted to the signs in regular order, the first (i.e. of Aries: we always begin with Aries) to Aries himself, the second to Taurus, and so on until we reach the thirteenth (= the first of Leo), when the sequence is repeated, as it is again at the twenty-fifth (= the first of Sagittarius). Human frailty, however, has asserted itself at 4.359 f., where the poet has mistakenly given the first and second decans of Pisces to Aries and Taurus instead of Capricorn and Aquarius, a slip corrected in figure 23.
In origin the decans are 36 segments of the celestial circle, which from early times provided the Egyptians with convenient 10-day sequences of star-risings. Later, when the zodiac competed with decanal divisions as a method of calibrating the Sun's annual orbit, it was natural that the two systems, arithmetically compatible, should be amalgamated for astrological ends. And it is possible that this amalgamation was first accomplished in the popular handbook (c. 150 n.c.) which claimed the authorship of the legendary Nechepso and Petosiris (cf. Firmicus, Math. 4.22.2). Only Manilius allots the decans to the signs of the zodiac; elsewhere they are given to the planets in descending order (i.e. Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon), starting however with Mars, who by getting the first decan of Aries thereby receives one decan more than his fellow-planets when the last of Pisces' falls to his lot.

4. 408-501: Partes damnandae

The 360 degrees of the zodiac are now considered individually: some are too cold, others too hot, some are too wet, others too dry. Actually Manilius never gives chapter and verse about such matters, but launches into a *tour de force* specifying by number each of the degrees deemed to be insalubrious. Scaliger, Bentley, and Housman all applaud the poet's virtuosity in contriving to maintain an elegant variation in this versification of numbers, the list of which is set forth in table 4.

That some pattern lies behind this tally is suggested by the gradually increasing frequency which marks their recurrence the nearer one approaches the end of each sign. Possibly there is some connection with an Egyptian calendar; possibly variation in the number of days each month accounts for the displacement, for instance, of the 24th degree on four occasions from the otherwise standard malignity of the 25th. Again, one would expect the total of injurious degrees to amount to a round number like 100 rather than the 102 specified by the text. But even allowing some margin for error, whether on the poet's part or in the course of the tradition, I have been no more successful than Housman in attempting to detect an underlying principle.

Like his doctrine of decans, what Manilius has to say about the *partes damnandae* finds no precise parallel elsewhere.

4. 502-584: Influences of certain zodiacal degrees

This short chapter, dealing, like the preceding, with individual degrees of the ecliptic, forms a colourful contrast to it and seems to foreshadow a
second time the descriptive treatment the poet will lavish on his final book. Astrologically considered, the information is unsatisfying, for nothing like a systematic schedule is attempted. In fact we only hear of the initial degrees of Aries, Taurus, Leo, Virgo, Libra, Aquarius, and Pisces; the middle degrees of Gemini, Cancer, and Sagittarius; and the last degrees of Scorpio and Capricorn.

4. 585-710: A description of the world

Before expounding the partition of the world among the signs of the zodiac Manilius sets himself the task of constructing a mappemonde in verse, thus reminding us that it is not only arithmetical tables and geometrical figures that he loves transmuting into hexameters but diagrams as well.

In the frontispiece I have ventured to reverse the procedure, believing that such a schematic illustration will prove the most useful commentary upon the text. Considerations of clarity have prompted me to take some liberties with scale and latitude (the frontispiece of the Loeb Strabo, volume I, may in some respects better represent the poet's proportions), and after some hesitation I have rejected the idea of a circular frame in spite of Manilius's compass, which seems to require it: instead I have made the poet consistent with himself at 1.246 and restricted his mappemonde to the northern hemisphere (indeed, just conceivably it should be restricted to half of that: see above p. xx).

Whether, as many have thought, Posidonius's περὶ ὁκεανοῦ served as Manilius's source cannot be determined with certainty. It is enough that the closeness of [Aristotle], De Mundo 3 and Strabo 2, 121 ff. attests the orthodoxy of his geography. The chapter begins with Manilius's compass, the details of which serve to warn us against leaning too heavily upon a poet's verbal precision. He adopts the

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Table 4. Partes Damnandae, 4. 408-501
twelve-point compass of Timosthenes, naming the cardinal but not the intermediate points (thereby avoiding metrical problems). Let it be said on Manilius’s behalf that both Boreas (= N) and Eurus (= E)—which enjoy Homeric warrant—are permissible generic names for North and East (cf. [Aristotle], De Mundo 4). But in the twelve-point compass due North and due East are denoted by Septentrio (Aparctias) and Subsolanus (Apeliotes) respectively (e.g. Seneca, Nat. Quaest. 5. 16), whilst Boreas is the Greek counterpart of Aquilo as is Eurus of Voltur­nus. In the frontispiece Manilius’s cardinals are re­tained in large letters, Pliny’s intermediates (N.H. 2. 119 f.) being added for the sake of completeness.

The world is described as follows. First, the sea, which encircles the earth but bursts into the continent on the west: (a) the southern shore of the Mediterranean as far as the Nile; (b) the northern shore as far as the Nile; (c) the Mediterranean islands; (d) the other inroads of Ocean. Second, the continent, which is divided into three: (a) Libya; (b) Asia; (c) Europe. All this, says Manilius, is dispensed among the signs of the zodiac just as are the parts of the body, the scheme of which, already presented to us at 2.456 ff., he for sheer love of versifying repeats in an elegantly abbreviated form.

4. 711-743 : National differences

A transitional paragraph impresses upon us that individual nations possess distinctive characteristics, Germans, for example, being fair, Ethiopians dark. Not only do peoples vary physically: they speak different languages, cultivate different crops, and breed different animals. There are climatic reasons for this; but these in turn depend upon the signs of the zodiac, each of which exercises paramount dominion over special areas.

4. 744-817 : Zodiacal geography

Teaching on this article of astrological doctrine ranges from an early scheme preserved by Paul of Alexandria, devised when the world was young and small, and allotting one country to one sign, to the complicated systems of Odapsus and Valens, who in a later age subdivided the signs of the zodiac so as to create extra accommodation for the more numerous regions then clamouring for attention. The Greek astrologers contradict one another to a degree one would have thought positively embarrassing. Manilius’s arrangement is as follows, agreements with Dorotheus of Sidon (the only rival with whom he has much in common) being indicated by asterisks.

| ARIES       | Hellespont (which it swam); Propontis; Syria; Persia; Egypt. |
| TAURUS      | Scythia; Asia (because of Mount Taurus); Arabia. |
| GEMINI      | Euxine; Thrace; India. |
| CANCER      | Ethiopia.* |
| LEO         | Phrygia* (because of Cybele’s lions); Cappadocia; Armenia; Bithynia*; Macedonia.* |
| VIRGO       | Rhodes*; Ionia*; Greece*; Caria. |
| LIBRA       | Italy.* |
| SCORPIUS    | Carthage*; Libya* (land of reptiles, 4. 662 ff.); Hammonia*; Cyrene; Sardinia and other islands. |
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SAGITTARIUS: Crete*; Sicily; Magna Graecia.
CAPRICORN: Spain; Gaul; Germany.
AQUARIUS: Phoenicia; Tyre; Cilicia; Lycia.
PISCES: Euphrates (cf. story told at 4.579 ff.); Tigris; Red Ocean*; Parthia; Bactria; Asiatic Ethiopia; Babylon; Susa; Nineveh.

4. 818-865: Ecliptic signs

In Ptolemy's Tetrabiblos 2.4 mention of eclipses as affecting countries and cities follows naturally upon his zodiacal geography, a sequence doubtless shared by other astrological handbooks, including our author's source. Manilius, however, gives no indication of a logical connection, embarking upon what is to all appearances a totally different subject.

At an eclipse of the Moon the sign which it then occupies suffers an eclipse of its influences, and so does the sign diametrically opposed to it. This crippling of their powers has effect not just for the duration of the eclipse but continues for varying periods, which sometimes exceed a year (we are not apprised of the details); and even thereafter the debility is not terminated, but passes on to the preceding signs, i.e. from Aries (and Libra) to Pisces (and Virgo), and so on.

4. 866-935: Peroration

The book closes with an affirmation of Stoic belief: man has the power to discover the secrets of destiny, for God dwells in him and by granting him a share of the divine intellect, which governs all things, elevates him to godhead.

INTRODUCTION

BOOK FIVE

5. 1-29: Prooemium

This is not as studied an introduction-piece as those of the other books. Another poet, says Manilius, would have stopped here, but before returning to Earth via the seven planets he will make a tour of the extra-zodiacal constellations, specifying their influences when rising (paranatellonta) and when setting and the degree of the ecliptic which rises simultaneously with them.

5. 32-709 . . .: Paranatellonta

These undertakings are not diligently performed: we miss the setting influences entirely and in no less than eight instances numeration of the degree of the ecliptic. Again, the promised accounts of Perseus, Hydra, and Flumina are not forthcoming, and we look in vain for the influences of Deltoton and Corvus.

The degree of the ecliptic rising with a given extra-zodiacal star varies, of course, with the latitude of the observer; and it makes a difference whether one is retailing this information to Romans, Rhodians, or Alexandrians. Manilius's readers may at once abandon any hope of getting sound instruction on this score. The astronomical detail given by him is for the most part either impossible or significantly inaccurate, and in so few cases are his statements acceptable that to accord him credit even for these is misplaced scruple. The fact is that this book provides not so much a manual for the technical astrologer as for the literati a bouquet of character and vocational sketches such as were suggested by the natures of the extra-zodiacal constellations. It is clear that
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In this section appear two constellations unknown
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charity to hold him guilty of a grievous confusion here, notwithstanding his mention of the Kids in 5. 102 (rising there, as they should, with Aries). A similar lapse has occurred with Fides, an appellation sometimes applied (e.g. by Cicero and Varro) to the constellation of the Lyre : Lyra (as the constellation is regularly termed) has, however, been dealt with earlier, at 5. 324-338; moreover, our author seems to have been aware of this awkward circumstance and taken pains to conceal his repetition by using the different word fides and interpreting it (or rather its synonym fidicula) as an instrument of torture, just as at 5. 175 he calls Orion Jugulae to avoid exposure of his mistake at 5. 57-66.

Firmicus, it may be said, adopts from the poet (whose existence, let alone his name, he totally suppresses) the rising of Haedus and its concomitant influences upon the native, conjures up a rising degree (the 15th of Libra), and in accordance with his practice paints a horrific picture of its effects at the occident (Math. 8. 12. 3 f.). He also adopts the poet’s Fides, specifying its rising in the 10th degree of Capricorn and its occidental effects; but, evidently dissatisfied with Manilius’s double treatment of the constellation, he calls it Lyra (Math. 8. 15. 3) and passes over what the poet had expounded at 5. 324 ff.

After 709 the text is interrupted by a lacuna of substantial dimensions, and Firmicus, who has been following Manilius throughout this book, becomes our only source for the poet’s conclusion to his treatment of paranatellonta. We cannot, however, have lost much of the influences of Helice (= Ursa Major), to judge from Math. 8. 17. 6:

Those born at the rising of this constellation will be tamers of wild beasts, that is men to teach bears, bulls, and lions to lay aside their fierceness and to share in human ways.

In the next section (8. 17. 7) Firmicus proceeds to deal with Draco, and the colourful language exemplified in Marsi (tribesmen noted for their wizardry, cf. Aulus Gellius, N.A. 16. 11. 2) and the antithesis of venenis and salutaria suggest that Manilius is his source here, too:

Without much doubt Draco marked the end of our poet’s chapter on paranatellonta, for whilst Firmicus goes on to speak of a constellation Lychnus, “the Lamp,” this is not a part of the Greek Sphaera nor anything he could have found in Manilius, since its influences are transferred from Cassiepia’s (5. 522-536, which he had ignored under that constellation).

**Planetary influences**

After the section on paranatellonta (of which only about ten lines have been lost) a passage of some 140 lines seems to have dealt with planetary influences.
INTRODUCTION

This we may infer from its final two lines, omitted at their proper place and wrongly inserted after line 29. Housman's transposition of them after 3.155 (cf. his addenda [1930]) involves altering ab to the improbable nam without securing any special point: if the lines are genuine, Scaliger's has and removal to some place after 709 seem certain. It is true that the space of a mere hundred or so lines is ridiculously insufficient to treat of planetary influences in astrology. But a perfunctory teacher might make the attempt, and it must be remembered that unlike other astrologers Manilius makes the zodiac, not the planets, paramount in his system. He obviously avoids coming to grips with them: in his Sphaera, Book 1, he almost slightingly dismisses them in four lines (805-808), a similar condescension marks his reference to them at the beginning of Book 5 (5-7), and his admissions that he must sometime deal with them (2.965 and 3.156 ff.) read suspiciously like the postponement of an irksome labour.

Although the contents of Manilius's presumed chapter are now lost to us and no clues survive on which to base a reconstruction, a summary of basic planetary lore deserves mention.

[Ptolemy, Tetr. 1.4 f., 17-19; Sextus Empiricus 29-40; Firmicus Maternus 2.2 f., 20; Bouché-Leclercq, chapter IV; Neugebauer-Van Hoesen 1-13]

The influences of the planets vary according to their position. In the dodecatropos they exert special potency at the cardinal temples (i.e. 1, 4, 7, 10) and, situated in any temple, exercise special influence over its particular sphere of activity: Manilius has in fact spoken of these matters in 2.856-967 (see also figure 13).

The zodiacal location of a planet involves many considerations. Here it is enough to mention Houses and Exaltations, wherein the planets intensify their effects. Except the Sun and the Moon, which are lords (or rulers) over the same House both day and night, each planet has a diurnal and a nocturnal House, the scheme being as follows:

<table>
<thead>
<tr>
<th>Planet</th>
<th>Diurnal House</th>
<th>Nocturnal House</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturn</td>
<td>Capricorn</td>
<td>Aquarius</td>
</tr>
<tr>
<td>Jupiter</td>
<td>Sagittarius</td>
<td>Pisces</td>
</tr>
<tr>
<td>Mars</td>
<td>Scorpio</td>
<td>Aries</td>
</tr>
<tr>
<td>Venus</td>
<td>Libra</td>
<td>Taurus</td>
</tr>
<tr>
<td>Mercury</td>
<td>Virgo</td>
<td>Gemini</td>
</tr>
<tr>
<td>Moon</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td>Sun</td>
<td>Leo</td>
<td>Leo</td>
</tr>
</tbody>
</table>

The Exaltations are signs or more usually particular degrees of signs (the position diametrically opposite being the planet's Depression, wherein its influence was reduced to a minimum), thus:

<table>
<thead>
<tr>
<th>Planet</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturn</td>
<td>+21° Libra; -21° Aries</td>
</tr>
<tr>
<td>Jupiter</td>
<td>+15° Cancer; -15° Capricorn</td>
</tr>
<tr>
<td>Mars</td>
<td>+28° Capricorn; -28° Cancer</td>
</tr>
<tr>
<td>Venus</td>
<td>+27° Pisces; -27° Virgo</td>
</tr>
<tr>
<td>Mercury</td>
<td>+15° Virgo; -15° Pisces</td>
</tr>
<tr>
<td>Moon</td>
<td>+3° Taurus; -3° Scorpio</td>
</tr>
<tr>
<td>Sun</td>
<td>+19° Aries; -19° Libra</td>
</tr>
</tbody>
</table>

Just as the signs of the zodiac form special groupings according to their geometrical relationships (cf. Manilius 2.270-432), so the planets, when similarly positioned, are said to be in trine, quartile, or sextile aspect, or in opposition or in conjunction. In particular, one planet dominates another if it precedes it (i.e. rises before it) in quartile aspect.

Such is the general framework of principles (which Manilius could have given in a moderately brief compass). Of course, elaborating these principles for each of the possible combinations of planets leads at once to a very large...
number of separate prognostications; the *Apotelesmatica* of Manetho is largely composed of them; so too are sizable parts of Firmicus. In *Math.* 3. 5. 1-11, for example, over twenty predictions are made for the Sun at the Horoscope (i.e. ascendant or first temple), according to whether it is aspecting this planet or that or some combination of them. The rest of the chapter similarly treats of the Sun in other temples. Other chapters deal with the other planets, and yet others with special combinations in the several temples successively (e.g. *Math.* 3.10 Mercury and Jupiter). Manifestly Manilius never embarked or intended to embark upon this amount of detail.

The discovery in recent centuries of three planets invisible to the unaided eye (Uranus, Neptune, and Pluto) has not noticeably discommoded modern astrologers, who have incorp­orated them into their systems with varying degrees of enthusiasm.

... 5. 710-745: Stellar magnitudes

To introduce his peroration, the theme of which is the celestial sphere considered as a heavenly commonwealth, Manilius described how the stars are arranged in six orders of magnitude. But only the end of this account now remains: 710-715 deal with constellations comprising stars of the 3rd magnitude, and 716-717 merely state the existence of the 4th, 5th, and 6th magnitudes without particular identifi­cations.

The passage proves that stellar classification in six magnitudes is over a century older than Ptolemy, whose splendid star-catalogue (*Synt.* 7. 5—8. 1, vol. 2, pp. 38-163) is certain to be in this respect, too, dependent on Hipparchus. It is evident that the lost portion (perhaps of some 30 lines) dealt with constellations possessing stars of the first two magnitudes. We shall see that Manilius executed his plan in a cavalier and careless manner. It seems that, having dealt with a constellation under the 1st or 2nd magnitude, he did not mention it again: this will explain why, for instance,
INTRODUCTION

CANICULA (= Canis Major) 1st: a (Sirius) = face (1.408);
3rd: βοδηγ.

PROCYON (= Canis Minor) 1st: a (Procyon).

ARGO (now subdivided into four constellations: Carina, Puppis, Pyxis, Vela) 1st: a Car = Canopus (1.216);
2nd: ζ Pup; γψ Vel;
3rd: αβ Pyx (Ptolemy, though probably not Manilius, knew of 18 stars of the first three magnitudes).

PISCIS NOTIUS (= Piscis Austrinus) 1st: a (Fomalhaut).

Second magnitude constellations

(a) GEMINI 2nd: a (Castor), β (Pollux);
3rd: γδεξλ;
4th: η.

LIBRA 2nd: αβ.

SCORPIUS 2nd: a (Antares);
3rd: βδηθκλμνρστ;
4th: ζ.

SAGITTARIUS 2nd: aβ (these perhaps not known to Manilius);
3rd: γδελα (and four others according to Ptolemy).

(b) HELICE (= Ursa Major) 2nd: a (Dubhe), β (Merak), γ (Phceda), ε (Alith), ζ (Mizar), η (Alkaid);
3rd: δ (Megrez). These are the "seven stars" (1.297, 620). Ptolemy gives also θκλμνξ.

CORONA (= Corona Borealis) 2nd: a (Alphecca: 1.320 ff.).

CYGNUS (= Cygnus) 2nd: a (Deneb);
3rd: βυδεξ.

EQUUS (= Pegasus) 2nd: αβ (Scheat: 1.349 γ);
3rd: εηθδ.

ANDROMEDA 2nd: a;
3rd: βυδο.

PERSEUS 2nd: a (Mirfak), β (Algol "The Ghoul");
3rd: γδεξζ.

Third magnitude constellations specified

(a) PLEIADES (in Taurus): actually no member of this cluster attains the 3rd magnitude: η Tau (Alcyone), the brightest, is classified by Ptolemy as 6th. Though they are popularly supposed to be seven in number, only six can be clearly distinguished (cf. Aratus, Phaen. 258 f.). See figure 24.

(b) CYNOSURA (= Ursa Minor) 3rd: a (Polaris), βγ (Ptolemy classifies these two as 2nd, and I have so shown them in star-chart 1).

DELTOTON (= Triangulum) 3rd: αβγ. So Aratus, Phaen. 317 f. (though ε, in the tail, is also 3rd).

DELPHINUS 3rd: αβγδ. So Aratus, Phaen. 317 f. (though ε, in the tail, is also 3rd).

AQUILA 3rd: βυζο (Manilius thus seems to have omitted a, Altair, which is a very bright 2nd).

Fig. 24. The Pleiades, 5. 710
INTRODUCTION

**DRACO** 3rd: $\alpha\beta\gamma\delta\epsilon$.

4th: $\epsilon$.

**Ophiuchus** (now subdivided into Ophiuchus and Serpens) 3rd: $\alpha\beta\gamma\delta$ Oph and $\alpha\beta\gamma\delta$ Ser.

(c) **HYDRA** 3rd: $\beta\mu\nu$ (if Manilius, like Servius, Georg. 1.205, did include this constellation in 5.715, he took no account of $\alpha$, Alphard, which is 2nd magnitude).

**Third magnitude constellations unspecified**

Some of these constellations (e.g. Pisces, Cepheus) might more aptly be classified as 4th magnitude, but perhaps the poet had tired of cataloguing and simply cut his list short.

(a) **ARIES** 3rd: $\alpha\beta\gamma$ (4th: 5).

**CAPRICORNUS** 3rd: $\alpha\beta\gamma\delta$ (4th: 9).

**AQUARIUS** 3rd: $\alpha\beta\gamma\delta\epsilon\zeta\pi$ and two others (4th: 18).

But Ptolemy lists $\alpha$ PsA ($\text{Pomalhaut}$) also under Aquarius.

**PISCES** 3rd: $\alpha\eta$ (4th: 22).

(b) **ENGONASIN** (= Hercules) 3rd: $\alpha\beta\gamma\delta\zeta\pi$ (4th: $\eta\pi$ and 15 others; 5th: $\epsilon$).

**CEPHUS** 3rd: $\alpha$ (4th: 7).

**CASSIEPIA** (= Cassiopeia) 3rd: $\alpha\beta\gamma\delta$ (4th: $\epsilon$ and 5 others).

(c) **LEPUS** 3rd: $\alpha\beta$ (4th: 6).

**CORVUS** 3rd: $\alpha\beta\gamma\delta\epsilon$ (4th: 1).

**CENTAURUS** 3rd: $\gamma\zeta\eta\theta\kappa$ (4th: at least 10). Ptolemy, but hardly Manilius, knew the Antarctic brilliants (all 1st) $\alpha$ Cen ($\text{Rigil Kent}$), $\beta$ Cen ($\text{Agena}$), $\alpha$ Cru ($\text{Acrux}$, forming with $\beta\gamma\delta$ Cru the Southern Cross).

**CETUS** 3rd: $\alpha\beta\gamma\delta\zeta\eta\theta\kappa\pi$ (4th: 8).

**FLUMINA** (= Eridanus and the stars forming the water of Aquarius) 3rd: $\gamma\delta\epsilon\rho$ Eri (4th: $\beta$ and at least 20 others). Ptolemy, but hardly Manilius, knew the Antarctic brilliant $\theta$ Eri ($\text{Achernar}$: 1st).

**Constellations of lower than third magnitude**

These constellations are subsumed under the general statement made in 5.716 f.
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THE MANUSCRIPTS

[Housman, ed. 1 2 vii ff., 83 ff., 5 2 v ff.; Garrod, ed. 2
xv ff.; Goold 1 ; Goold 2 96 ff.; Gain 4 ; Reeve 1 ; Reeve 2 ; Goold 4 ;
Goold, Teub. ed., praef.]

There are extant about thirty manuscripts of Manilius, but of these only three are of paramount
importance. G, codex Gemblacensis (Bruxellensis 10012), and L, codex Lipsiensis 1465, are
both of the 11th century and descend from a common parent, α. Though not written till the year
1417, and badly written at that, M, codex Matritensis 3678 (formerly M31), is perhaps the most
valuable ms. of Manilius: it was a direct copy of the archetype, and a more faithful copy than α, which
seems to have been another.

The archetype (like that of Lucretius) carried not only the verses of the poet but also chapter-headings
inserted at intervals through the text, not of course stemming from the poet but seemingly attesting
some ancient edition. Guided by certain significant errors, notably the loss or displacement of
sheets (again there is a curious resemblance to the Lucretian tradition), we are able to detect traces of
the pagination of an ancestral ms. (let us call it A) containing 22 lines to the page. The most striking
example affords an explanation of the ms. order of 1. 355-611: two double-leaves in the second quire
were mistakenly placed in the reverse order, as may be seen from table 7 (which also shows the basis for
the computation of the lacuna at 5. 709). For the sake of clarity chapter-headings (e.g. one line after
1. 482) and subsequent interpolations (e.g. 5. 686-688) involved in the reconstruction are not specified
in the table. These may most conveniently be found on pages xv ff. of my Teubner edition. In my first publication
(Goold 1 ) I erred over the pages of Book 2, an error fortunately corrected by Gain 4 and not affecting the rest
of the reconstruction.

This is the place to mention a more important issue affecting our conception of Manilius's poem, one
which deserves a bibliographical docket of its own.

[Ellis 217-233; Housman, ed. 1 2 lxi, lxii; Garrod, ed. 2
lix ff.; Thielischer; Ullman; Gain 4]
The savant Gerbert, who became Pope Sylvester II, twice refers in his letters to the text of our author. Writing in 983 (Letter 8: Migne, PL 139 col. 203) from Bobbio to the Archbishop of Rheims he mentions that he has recently lighted on \textit{viii volumina Boetii de astrologia}. Five years later he writes (Letter 130: Migne, PL 139 col. 233) from Rome to a confidant at Bobbio requesting the copying of a list of books: \textit{M. Manlius de astrologia; Victorius de rethorica; Demosthenis optalmicus}. Now from the order of titles in the list the first can be identified with entry 387 in a 10th-century Bobbio catalogue, which with its preceding entry forms a single item as follows: \textit{(384-386) libros Boetii iii de aritmetica et (387) alterum de astronomia}—for there follow \textit{(388) librum Marii Victoris de rethorica} and shortly after \textit{(399) librum i Demosthenis}.

In view of the fact that the chief ms. of Manlius bears as title of the poem (before Book 3) \textit{M. Manllii Boeiii (sic: manifestly for Boetii) astronomica}, there can hardly be any doubt that Gerbert refers in Letter 130 to our Manlius. And there should be no doubt that, in speaking of \textit{viii volumina Boetii}, he is, exactly like the Bobbio catalogue, compendiously referring to a single manuscript containing three books of Boethius's \textit{Arithmetica} and five books of Marcus Manlius's \textit{Astronomica}.

Unfortunately, if understandably, the reference has misled others into speculating that the poem once consisted of eight books. Thielscher's belief that three books of the \textit{Astronomica} have been lost after Book 5 is simply refuted by the first line of that book, sufficient warning that we have reached the end of the undertaking. For Gain the loss of three books has occurred before the beginning of Book 5, where the scribe of M has written, without mention of either author or work, \textit{explicit liber ii incipit liber iii}. But sooner than amend these numerals to \textit{vii} and \textit{viii} we should accept Thielscher's explanation, namely that Poggio's scribe (\textit{ignorantissimus omnium viventium}, the humanist calls him) was "at the end of Book 4 so tired and weary that he no longer remembered the names [of author and work: to judge from LM they did not recur in the tradition after the first book] and even forgot what book he had ended and what book he was about to begin."

The possibility that better ms. somewhere exist and await discovery must be accounted remote in the extreme; our present evidence for the tradition is not likely to be augmented. Its corruptions, says Housman, are multitudinous but not profound. There is justice in the remark, for a great many obviously true emendations restore through the slightest of changes perfect sense from utter nonsense; and few passages can be cited: "here the general purport is in doubt. Moreover, dislocations are few, and interpolations, although more numerous, are also easier to detect and discount.

Whilst it must be admitted that the \textit{ipsissima verba} of the poet have not everywhere been recovered with certainty, we can today recognize throughout the work his distinctive and unmistakable voice, and if here and there it momentarily fades or is drowned by an alien sound, coherence is seldom threatened and continuity is broken only at the great lacuna.
EDITORIAL PRINCIPLES

After his death Housman's photographs of the mss. were presented to the Cambridge University Library: I have collated his reports against them, later examining M in Madrid. His accuracy was truly phenomenal. The Latin text I have thence constructed is presented according to the following principles.

All significant departures from the Ms. tradition are noted beneath the text. Thus, even where a possibly incorrect conjecture has been adopted, both that and the transmitted reading are clearly specified. The sources of conjectures, however, are not given: these will all be found in the Teubner edition, and most of them in Housman's. For example, at 1.12 the Latin text gives "census", a conjecture of Scaliger's for "sensus", the reading of the mss.: this is signified by the note "12 sensus."

The reader should particularly bear in mind that where the text has Ms. authority, variant readings in the tradition are almost always ignored: thus no note is given at 1.756 "densa" (the reading of G), for which LM have "densat". Since the three independent mss. are intimately related and the reading of the archetype is generally recoverable with certainty, it is seldom necessary to record more than one reading; moreover, it has been judged preferable to indicate the extent of conjecture adopted rather than the range of corruption in the mss.: so at 1.843 f. "partosque capellas / mentitur parvas signis", where the ms. readings are: "partosque capellas m. parvos signis" (M), "partosque capillos m. parvis signis" (L), and "partosque capillos m. parvis signis" (G), the words lacking ms. authority are indicated by the notes "843 partosque" and "844 parvis signis," whether or no these words (rather than "partosque" and "parvos signis") stood in the archetype.

Two types of departure from the mss., however, are not noticed: (1) minute and obviously correct conjectures, made not later than the 16th century and universally accepted, are ignored (e.g. 1.105 "sontum"—so the cod. Flor.—where the archetype had "solitum"); (2) orthography is standardized, regardless of what the mss. give, so that the form "sequuntur" (cf. 2.208) is consistently printed at 3.278, 3.516, and 4.269 (where Housman gave "secuntur, secuntur, and sequuntur" respectively). Assimilated forms and Greek spellings (such as the nominative "horoscopos") have generally been preferred. Even so, standardization has not been indiscriminately applied: the reader will encounter 1.122 "ex nullis but 5.717 "e numero"; 1.509 "quotiens" but 3.487 "decies." The mss. seem to point to a principle of spelling the accusative plural of i-stems in "-es" for nouns and "-is" for adjectives and participles: Breiter's standardization of this practice has been followed, though it may not go back to the poet.

Apart from a few special places (like 1.38 ff., where the contrary is explicitly indicated) line-numbers mark the order of the verses as they appear in the mss.: where, as for example in the case of 1.30-33, the numerical sequence is disturbed, this is to be imputed to conjecture. Verses italicized in the text (as they also are in the translation) have no mss. authority; they are editorial supplements which attempt to restore the sense of a conjectured lacuna.

Square brackets in the text enclose those verses
which, though exhibited by the mss., are judged to be interpolated: they are not translated in the body of the text but in footnotes. Square brackets in the critical notes, on the other hand, draw attention to words not attested by the mss.: thus, at 1. 156 aequoraque effudit, the note "[que] perfudit" signifies that the mss. read aequora perfudit.

For the most part Housman's punctuation is adopted (the main difference being that, as at 3. 5, commas are employed to signal postponed conjunctions); his paragraphing and line numeration are accepted as definitive.

Editions of Manilius

* Regiomontanus (about 1472): the editio princeps.
* Bonincontri (1484): with the first commentary.
Scaliger (1579 1, 1600 2, 1655 3): a vastly improved text with a commentary which was until this century "the only avenue to a study of the poem" (Housman).
Bentley (1739): the text marks a great advance even on Scaliger; exegesis (wonderfully lucid) is given only where a change of text is proposed; includes a projection of the Farnese globe.
Pingené (1786): with an elegant (French prose) translation; "in no edition of Manilius is there so little that calls for censure" (Housman).
Jacob (1846): the standard text until superseded by Housman's.
Bechert (1900): contributed to Postgate's Corpus
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Breiter (1907) : text with apparatus; (1908) (German) commentary.

Garrod (1911) : Book 2—introduction, text, apparatus, (English prose) translation, commentary.

Van Wageningen (1915) : the Teubner edition; (1914) (Dutch prose) translation; (1921) copious (Latin) commentary.

The work of A. E. Housman on Manilius eclipsed everything that had gone before and deserves special mention :

"Emendations of Book 1," JP 26 (1898) 60-63; "Emendations of Book 5," JP 27 (1900) 162-165 (Housman’s other Manilian articles are subsumed in his Editio Maior, and are therefore not recorded here);

Book 1 (1903) : general introduction, text, (Latin) commentary, emendations of Books 2, 3, and 4, index;

Book 2 (1912) : astrological introduction, text, (Latin) commentary, index;

Book 3 (1916) : as for Book 2;

Book 4 (1920) : as for Book 2;

Book 5 (1930) : survey, introduction, text, (Latin) commentary, addenda to Books 1-4, capitula, orthographical appendix, index to all five volumes;

Editio Minor (1932) : text and apparatus, index nominum.

In 1937 (after Housman’s death) a second edition of the individual books was produced under the direction of A. S. F. Gow : in this only minor additions and corrections were made, the chief change being the incorporation of the 1930 addenda in the volumes to which they refer.

English translations

Sherburne, Edward (1674) : Book 1 only, in verse.

Creech, Thomas (1697) : in verse.

Ancient astrological and astronomical sources

(all unspecified dates are A.D.)

Greek

Achilles (3rd cent.) : Isagoge to the Phaenomena of Aratus ; fragments collected in Commentariorum in Aratum Reliquiae pp. 26-85 Maass.

Albumasar (Abu Ma’shar of Baghdad = Greek Apomasar : 9th cent.) : De Revolutionibus Nativitatum (= a late 10th-cent. Greek translation of the Arabic original, this dependent on Greek sources and perhaps ultimately on Dorotheus, Pentateuch, Book 4), ed. D. Pingree (Teubner 1968).

Ammon : see Maximus.

Antiochus Atheniensis (c. 200 ; was excerpted by Rhetorius and other late writers, and very extensively in Arabic texts, cf. Pingree, Gnomon 40 [1968] 278) : fragments of his Treasury, ed. Boll, CCAG I.

Anubion (1st cent. : author of an astrological poem in elegiacs, a source of Manetho, Book 1) : see Koechly’s Manetho, and CCAG VIII. 1 and VIII. 2.
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ARATUS (3rd cent. B.C.): Phaenomena, ed. E. Maass (1893); ed. with trans. G. R. Mair (Loeb 1921); ed. with commentary and (French) translation, Jean Martin (1956); Commentariorum in Aratum Reliquiae (contains Scholia), ed. E. Maass (1898).

CCAG (= Catalogus Codicum Astrologorum Graecorum): 12 volumes (Brussels 1898-1953), begun under direction of Franz Cumont; catalogues by libraries all Greek mss. containing astrological material, with new or important texts edited in appendices, which consequently form the bulk of the volumes.

I (mss. in Florence) ed. Olivieri, 1898
II (Venice) Kroll, Olivieri, 1900
III (Milan) Martini, Bassi, 1901
IV (other Italian) Bassi, etc., 1903
V.1 (Rome) Cumont, Boll, 1904
V.2 (Vatican) Kroll, 1906
V.3 (Vatican) Heeg, 1910
V.4 (Rome) Weinstock, 1940
VI (Vienna) Kroll, 1903
VII (Germany) Boll, 1908
VIII.1 (Paris) Cumont, 1929
VIII.2 (Paris) Ruclle, 1911
VIII.3 (Paris) Boudreaux, 1912
VIII.4 (Paris) Boudreaux, 1921
IX.1 (Oxford) Weinstock, 1951
IX.2 (other British) Weinstock, 1953
X (Athens) Delatte, 1924
XI.1 (Escorial) Zuretti, 1932
XI.2 (other Spanish) Zuretti, 1934
XII (Russia) Sangin, 1936

CLEOMENES (2nd cent.): De Motu Circulari Corporum Caelestium, ed. H. Ziegler (Teubner 1891); with Latin translation.

DOROTHEUS SIDONIUS (c. 50): Fragments, ed. V. Stegemann (Heft 1—all published—1943: for a conspectus of the contents of the Pentateuch, see Hephaestio I p. XXV); Carmen Astrologicum, ed. D. Pingree (Teubner 1976); contains Arabic version (with English translation) of a 3rd-century Pahlavi version of the whole Pentateuch, followed by Greek and Latin fragments.

DOXOGRAPHI GRAECI: see Diels.

ERATOSTHENES (3rd cent. B.C.): Catasterismorum Reliquiae (what we have is a late epitome), ed. C. Robert (1878; repr. 1963): with parallel passages from the Aratus scholia, the Germanicus scholia (BP and G versions), and the so-called Hyginus; ed. A. Olivieri (Teubner 1897).

GEMINUS (mid-1st century): Elementa Astronomiae (= Isagoge), ed. C. Manitius (Teubner 1898; repr. 1974); with German translation.


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THE ASTRONOMICA OF MARCUS MANILIUS
BOOK ONE

The Astronomica opens with a proud assertion of its author’s originality and continues with the early history of the study of the heavens; this leads to a sketch of primitive man and a cosmology which alike embrace the beliefs of Stoicism. The central and most substantial part of the first book is the poet’s Sphaera, a versified atlas of the sky. He gives pride of place to the signs of the zodiac, and proceeds to catalogue first the northern and then the southern constellations, following this with a fine declamation on the eternal and immutable nature of the stars. After a brief mention of the planets he passes on to an account of the various celestial circles. The last of these, the Milky Way, has inspired the poet to embark upon a long and ambitious digression culminating in a catalogue of heroes who have received apotheosis. Comets and meteors occupy the final pages of the book, though the astrological relevance of this section is slight, its real function being to pave the way for the theme of the peroration, heavenly portents of disaster. Here Manilius handles with some felicity the plague at Athens and Rome’s civil wars brought to an end by the battle of Actium and the triumph of Augustus.
By the magic of song to draw down from heaven god-given skills and fate's confidants, the stars, which by the operation of divine reason diversify the chequered fortunes of mankind; and to be the first to stir with these new strains the nodding leaf-capped woods of Helicon, as I bring novel offerings untold by any before me: this is my aim. You, Caesar, First Citizen and Father of your Country, who rule a world obedient to your august laws and merit the heaven granted to your sire, yourself a god, are the one who inspires this purpose and gives me strength for such lofty themes. Now is heaven the readier to favour those who search out its secrets, eager to display through a poet's song the riches of the sky. Only in time of peace is there leisure for this task. It is my delight to traverse the very air and spend my life touring the boundless skies, learning of the constel-

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a Astrological poetry.
b Augustus. As Octavian he had assumed the style princeps; the title pater patriae was formally conferred on him by the Senate in 2 B.C., but pater had long since been anticipated (e.g. Horace, Carm. 1. 2. 50).
quod solum novisse parum est. impensius ipsa
scire iuvat magni penitus praeordia mundi,
quaque regat generetque suis animalia signis
cernere et in numerum Phoebo modulante referre.
bina mihi positis lucent altaria flammis,
ad duo templo precor duplici circumdatus aestu
carininis et rerum : certa cum lege canentem
mundus et immenso vatem circumstrepit orbe
vixque soluta suis immittit verba figuris.

Quem primum interius licuit cognoscere terris
munere caelestum. quis enim condentibus illis
clepsisset furto mundum, quo cuncta reguntur ?
quis foret humano conatus pectore tantum,
invitis ut dis cuperet deus ipse videri,
sublimis aperire vias imumque sub orbem,
et per inane suis parentia finibus astra ?
tu princeps auctorque sacri, Cyllenie, tanti ;
per te iam caelum interius, iam sidera nota
nominaque et cursus signorum, pondera, vires,
maior uti facies mundi foret, et veneranda
non species tantum sed et ipsa potentia rerum,
sentirentque deum gentes qua maximus esset.

20 quaeque
38 f.: not in the mss.

ASTRONOMICA, 1. 16-37

lations and the contrary motions of the planets.\textsuperscript{a}
But this knowledge alone is not enough. A more
fervent delight is it to know thoroughly the very
heart of the mighty sky, to mark how it controls
the birth of all living beings through its signs, and to tell
thereof in verse with Apollo tuning my song. Two
altars with flame kindled upon them shine before
me; at two shrines I make my prayer, beset with a
twofold passion, for my song and for its theme. The
poet must sing to a fixed measure, and the vast
celestial sphere rings in his ears besides, scarce
allowing even words of prose to be fitted to their
proper phrasing.

25 Deeper knowledge of heaven was first granted to
earth by the gift of the gods. For who, if the gods
wished to conceal it, would have guilefully stolen
the secret of the skies, by which all things are ruled?
Who of but human understanding would have essayed
so great a task as to wish against heaven's wish to
appear a god himself; to reveal paths on high and
paths beneath the bottom of the earth and stars
obedient to appointed orbits through the void?
You, God of Cyllene,\textsuperscript{b} are the first founder of this
great and holy science; through you has man gained
a deeper knowledge of the sky—the constellations,
the names and courses of the signs, their importance
and influences—that the aspect of the firmament
might be enhanced, that awe might be roused not
only by the appearance but by the power of things,
and that mankind might learn wherein lay God's
greatest power.\textsuperscript{c} Moreover, nature proffered her

\begin{itemize}
\item \textsuperscript{a} The fixed stars of the sky revolve from east to west, and
so do the planets (seven, including the Sun and Moon); but
the speed of the latter is somewhat slower, so that their
movement appears to be contrary to that of the stars.
\item \textsuperscript{b} Mercury.
\item \textsuperscript{c} Here Bonincontrius inserted two verses (38 f.) of his own
composition (\textit{qui sua dispositi per tempora, cognita ut
omnibus et mundi facies caelumque supernum: "who
arranged heaven's face and the sky above in special cycles of
time that these be known to all")
et natura dedit vires seque ipsa reclusit regalis animos primum dignata movere proxima tangentis rerum fastigia caelo, qui domuere feras gentes oriente sub ipso, [quas secat Euphrates, in quas et Nilus abundat] qua mundus redit et nigras super evolat urbes. tum qui templaque sacerdotum publica in omnem per aevum delectique sacerdotes officio vixere decus et insignia deum ; quibus ipsa potentis numinis castam praesentia mentem, inque deum deus ipse tulit patuitque ministris. hi tantum movere decus primique per artem sideribus videre vagis fata.
singula nam proprio signarunt tempora casu, longa per assiduas complexi saecula curas : nascendi quae cuique dies, quae vita fuisset, in quas fortuna leges quaeque hora valeret, quantaque quam parvi facerent discrimina motus. postquam omnis caeli species, redeuntibus astris, percepta, in proprias sedes, et reddita certis fatorum ordinibus sua cuique potentia formae, per varios usus artem experientia fecit exemplo monstrante viam, speculataque longe deprehendit tacitis dominantia legibus astra et totum aeterna mundum ratione moveri fatorumque vices certis discernere signis.

Nam rudis ante illos nullo discrimine vita in speciem conversa operum ratione carebat

44 alterna

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ASTRONOMICA, 1. 40–67

aid and of her own accord opened up herself, deigning first to inspire those kings a whose minds reached out to heights bordering on heaven, kings who civilized savage peoples beneath the eastern sky, b where the stars return to view and soar above the cities of dusky nations. Then priests c who all their lives offered sacrifice in temples and were chosen to voice the people's prayer secured by their devotion the sympathy of God; their pure minds were kindled by the very presence of the powerful deity, and the God of heaven brought his servants to a knowledge of heaven and disclosed its secrets to them. These were the men who founded our noble science and were the first by their art to discern the destinies dependent on the wandering stars. Embracing long ages in unremitting toil, they assigned to each period of time its particular events, noting an individual's nativity and the subsequent pattern of his life, the influence of each hour on the laws of fate, and the great differences effected by small moments. After every aspect of the sky had been observed, as the stars returned to their original positions, and each figuration had assigned to it its powers of influence in accordance with the sure cycles of destiny, by repeated practice and with examples pointing the way experience built up the science; and from wide observation discovered that by hidden laws the stars wield sovereign power and that all heaven moves to the eternal spirit of reason and by sure tokens distinguishes the vicissitudes of fate.

Before their times man lived in ignorance: he looked without comprehension at the outward appearance and saw not the design of nature's
c Necheepso and Petosiris may be alluded to.
et stupefacta novo pendebat lumine mundi, tum velut amissum amores, tum laeta renato, surgentem neque enim totiens Titanas fugatis sideribus, various dies incertaque noctis tempora nec similes umbrae, iam sole regresso iam propiore, suis poterat discernere causis. necdum etiam doctas sollertia fecerat artes, terraque sub rudibus cessabat vasta colonis; tumque in desertis habitabat montibus aurum, immotusque novos pontus subduxerat orbes, nec vitam pelago nec ventis credere vota audebat; se quisque satis novisse putabant. sed cum longa dies acuit mortalia corda et labor ingenium miseris dedit et sua quemque advigilare sibi iussit fortuna prenendo, seducta in varias certarunt pectora curas et, quaequeque sagax temptando repeterit usus, in commune bonum commentum laeta dederunt. tunc et lingua suas accepit barbara leges, et fera diversis exercita frugibus arva, et vagus in caecum penetravit navita pontum, fecit et ignotis iter in commercia terris. tum belli pacisque artes commenta vetustas; semper enim ex aliis alias prosemant usus. ne vulgata canam, linguas didicere volucrum, consultare fibras et rumpere vocibus angues, sollicitare umbrae imumque Acheronta movere, in noctemque dies, in lucem vertere noctes.  

works; he gazed in bewilderment at the strange new light of heaven, now sorrowing at its loss, now joyful at its rebirth; nor why the Sun so often rose, putting to flight the stars, why days varied in duration and the period of darkness fluctuated, and why the lengths of shadows differed according as the Sun retreated or drew nearer, could he understand from the true causes. Nor as yet had ingenuity taught man arts and crafts: the earth lay waste and idled under ignorant husbandmen; gold then had its abode in unvisited mountains, and the sea disturbed by none concealed the existence of unsuspected worlds, for man dared not to entrust his life to the deep or his hopes to the winds, and deemed his little knowledge adequate. But long ages sharpened human wits, the struggle for survival endowed those wretched folk with ingenuity, and the burden of each man's lot forced him to look to himself to better it: then they took thought to divide their tasks and vied with each other in performing them, and whatever discovery shrewd experience had found by trial, they joyfully surrendered to the common weal. Their barbarous speech, too, then subjected itself to laws of its own; rough soils were tilled for a variety of crops; and the roving sailor made his way into the uncharted sea and established trade-routes between lands unknown to each other. Then the passage of time led to the arts of war and peace, for practice ever breeds one art from another. Not to tell the commonplace, men learnt to understand the utterance of birds; to divine from the entrails of animals; to burst snakes asunder by incantations; to summon up the dead and rouse the depths of Acheron; to turn day into night and night into the
OMNIA CONANDO DOCILIS SOLLENTIA VICTIT.

NEC PRIUS IMPOSUIT REBUS FINEMQUE MODUMQUE
QUAM CAELUM ASCENDIT RATIO CEPTIQUE PROFUNDAM
NATURAM RERUM CAUSIS VIDITQUE QUOD USQUAM EST.

NUBULA EUR TANTO QUATERENTUR PULSA FRAGORE,
HIBERNAM AESTIVA NIX GRANDINE MOLLIOR ESSET,
ARDERENT TERRAE SOLIDUSQUE TREMESCERET ORBIS;
EUR IMBRES RUERENT, VENTOS QUAE CAUSA MOVERET
PERVIDIT, SOLVITQUE ANIMIS MIRACULA RERUM
ERIPUITQUE IOVI FULMEN VIRESQUE TONANDI
ET SONITUM VENTIS CONCESSIT, NUBIBUS IGNEM.

QUAE POSTQUAM IN PROPRIAS DEDUXIT SINGULA CAUSAS,
VICINAM EX ALTO MUNDI COGNOSCERE MOLEM
INTENDIT TOTUMQUE ANIMO COMPRENDERE CAELUM,
ATTRIBUITQUE SUAS FORMAS, SUA NOMINA SIGNIS,
QUASQUE VICES AGERENT CERTA SUB SORTE NOTAVIT
OMNIAQUE AD NUMEN MUNDI FACIEMQUE MOVERI,
SIDERIBUS VARIO MUTANTIBUS ORDINE FATA.

HOC MIHI SURGIT OPUS NON ULLIS ANTE SACRATUM
CARMINIBUS. FAVEAT MAGNO FORTUNA LABORI,
ANNOSA ET MOLLI CONTINGAT VITA SENECTA,
UT POSSIM RERUM TANTAS EMERGERE MOLES
MAGNAQUE CUM PARVIS SIMILI PERCURRERE CURA.

ET QUONIAM CAELO DESCENDIT CARMEN AB ALTO
ET VENIT IN TERRAS FATORUM CONDITUS ORDO,
IPSA MIHI PRIMUM NATURAE FORMA CANEDA EST
PONENDUSQUE SUA TOTUS SUB IMAGINE MUNDUS.

**MANILIUS**

**ASTRONOMICA, 1. 95-121**

brightness of day. Thus, ever ready to learn, ingenuity by its endeavours overcame all obstacles. Nor did man's reason set bound or limit to its activities until it scaled the skies, grasped the innermost secrets of the world by its understanding of their causes, and beheld all that anywhere exists. It perceived why clouds were shaken and shattered by so loud a crash; why winter's snowflakes were softer than summer's hail; why volcanoes blazed with fire and the solid earth quaked; why rain poured down and what cause set the winds in motion. It freed men's minds from wondering at portents by wresting from Jupiter his bolts and power of thunder and ascribing to the winds the noise and to the clouds the flame. After reason had referred these several happenings to their true causes, it ventured beyond the atmosphere to seek knowledge of the neighbouring vastness of heaven and comprehend the sky as a whole; it determined the shapes and names of the signs, and discovered what cycles they experienced according to fixed law, and that all things moved to the will and disposition of heaven, as the constellations by their varied array assign different destinies.

113 This is the theme that rises before me, a theme hitherto unhallowed in verse. May fortune favour my grand emprise, and may a life of many years crowned with a serene old age be mine, enabling me to surmount the great vastness of the subject and pursue my course with equal care through mighty things and small.

118 And since from the heights of heaven my song descends and thence comes down the established rule of fate, first must I sing of nature's true appearance and describe the whole universe after its own
MANILIUS

quem sive ex nullis repetentem semina rebus
natali quoque egere placet, semperque fuisse
et fore, principio pariter fatoque carentem ;
seu permixta chaos rerum primordia quondam
discravit partu, mundumque enixa nitentem
fugit in infernas caligo pulsa tenebras ;
sive individuis, in idem reditura soluta,
principiis natura manet post saecula mille,
et paene ex nihil summa est nihilumque futurum,
caecaque materies caelum perfect et orbem ;
sive ignis fabricavit opus flammaeque micantes,
qua mundi fecere oculos habitantque per omne
corpus et in caelo vibrantia fulmina fingunt ;
seu neque terra patrem novit nee flamma nee aer
aut umor, faciuntque deum per quattuor artus
et mundi struxere globum prohibentque requeri
ultra se quicquam, cum per se cuncta crearint,
frigida nec calidis desint aut umida siccis,
spiritus aut solidis, sitque haec discordia concors
quae nexus habilis et opus generabile fingit
atque omnis partus elementa capacia reddit :
semper erit pugna ingeniis, dubiumque manebit
quod latet et tantum supra est hominemque deumque.
sed facies quacumque tamen sub origine rerum

ASTRONOMICA, 1. 122–147

likeness. Some hold that the universe does not
derive its elements from any source but is devoid of
origin, that it ever was and ever shall be, without
beginning as it is without end a ; it may be that ages
ago chaos in travail separated the mingled elements
of matter and that, having given birth to the shining
universe, the darkness fled, banished to infernal
gloom b ; perhaps nature after a thousand ages
remains an aggregate of indivisible atoms, though
doomed to dissolve and return to the same form, and
the total sum is made up of practically nothing and
will become nothing, and it is lifeless matter which
has produced heaven and earth c ; possibly the
universe was constructed out of fire and flickering
flames, d which have formed the eyes of heaven and
dwell throughout the whole system and shape the
lightning which flashes in the skies ; the skies,
perchance, were born of water, e without which
matter is parched and hardened and which quenches
the very fire by which it is destroyed ; else it may
be that neither earth nor fire nor air nor water
acknowledges a begetter, but themselves constitute
a godhead of four elements, f which have formed the
sphere of the universe and ban all search for a source
beyond them, having created all things from them-
selves, so that cold combines with hot, wet with dry,
and airy with solid, and the discord is one of harmony,
allowing apt unions and generative activity and
enabling the elements to produce all things. These
questions will always cause dispute among men of
genius, and uncertainty is bound to attend that which
is hidden from us and is so far above the ken of man
and god. But, however obscure its origin, all are

a So Xenophanes.
b So Hesiod.
c The doctrine of Leucippus, elaborated by his more
famous pupil Democritus and by Epicurus.
d So Heraclitus.
e So Thales.
f So Empedocles.
Manilius agreed about the outward appearance of the universe, and the orderly arrangement of its structure is fixed. Winged fire soared aloft to ethereal reaches and, compassing the rooftops of the starry sky, fashioned the walls of the world with ramparts of flame. Air next sank down to become the tenuous breezes and spread out the atmosphere midway through the empty spaces of the sky. The third place was allotted to the expanse of the waters and floating billows, as the level sea at its birth was poured abroad to form the whole of ocean, to the end that water might breathe out and expel the subtle vapours and so feed air which draws the seeds of its being from water, whilst, set beneath the neighbouring stars, the breath of air might nourish the fire. Lastly to the bottom sank earth, moulded into a ball by its weight, and mud, mixed with shifting sand, collected as the light liquid gradually made its way to the top; more and more the moisture withdrew to form clear waters, the filtering of the liquid built up land, and the fluid plains came to rest in hollow valleys; so by degrees mountains emerged from the deep, and the round world sprang forth from the waves, but closed in on every side by the vast ocean. And it remains stable for the reason that every part of the firmament is equally distant from it, and, by falling from every direction, has made it impossible for its central and lowest part to fall. 

*And did not the Earth's weight hang poised, the Sun would not drive his car past his setting, as the stars of heaven appeared, and would never return to


\[171\text{f.}\] "For bodies struck by inward blows all round remain stationary, and equal pressure to the centre prevents them from moving."

\[169\text{f.}\] The Stoic view of the creation of the universe from the four elements.
lunave summersos regeret per inania cursus,  
nec matutinis fulgeret Lucifer horis,  
Hesperos emenso dederat qui lumen Olympos.  
nunc, quia non imo tellus delecta profundo  
sed medio suspensa manet, sunt pervia cuncta,  
qua cadat et subeat caelum rursusque resurgat.  
nam neque fortuitos ortus surgentibus astris  
nec totiens possum nascentem credere mundum  
solisve assiduos partus et fata diurna,  
cum facies eadem signis per saecula constet,  
idem Phoebus eat caeli de partibus isdem  
lunaque per totidem luces mutetur et orbes  
et natura vias servet, quas fecerat ipsa,  
semper et ulterior vadentibus ortus ad ortum  
occasumve obitus, caelum et cum sole perennet.

Nec vero admiranda tibi natura videri  
pendentis terrae debet. cum pendeat ipse  
mundus et in nullo ponat vestigia fundo,  
quod patet ex ipso motu cursuque volantis,  
cum suspensus eat Phoebus currusque reflectat  
hue illuc agilis, et servet in aethere metas,  
terra quoque aerias leges imitata pependit.

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*a* Venus is not seen as both morning-star and evening-star within the same day, though this fanciful notion was popular with the ancient poets (see Ellis on Catullus 62. 34).
Earth has been allotted a hollow space in mid-air, equidistant from every quarter of heaven's depths, not spread into flat plains but fashioned into a sphere which rises and falls equally at every point. This is the shape of nature: so even the universe, itself in circular movement, gives round shapes to the stars; round, we see, is the orb of the Sun, and round is the orb of the Moon, which looks in vain for light for its rotund body inasmuch as the sun's oblique rays do not fall on the whole of its globe. This is the shape that continues for ever and most resembles that of the gods: nowhere in it is there beginning or end, but it is like unto itself over all its surface, identical at every point. So too the Earth is rounded and reflects the shape of the heavens, and being the lowest of all heavenly bodies occupies a completely central location.

That is why it is impossible to behold all the constellations in every part of the world. You will never find Canopus shining until you have crossed the seas and come to the shores of Rhodes; but those who dwell beneath that brilliant star will look in vain for the Bear, because they inhabit regions on the Earth's lower flanks and because lands which bulge in between rob them of this part of heaven and block their view of it. The Earth makes you, O Moon, a witness to its roundness: when at night your star is plunged into utter darkness and suffers eclipse, it does not bewilder all nations at the same time; but first the lands of the orient miss your light,

Latin, reflects a Greek counterpart which normally means "of the Sun" but could legitimately signify "Rhodian," since the Heliadai (οἱ Ἡλείαδαι) were an old Rhodian family: see Introduction p. xix and figure 1.
post medio subiecta polo quaecumque coluntur,
[ultima ad hesperios infectis volveris alis]
seraque in hesperiis quatiuntur gentibus aera.
quod si plana foret tellus, semel orta per omnem
defices pariter toti miserabilis orbi.
sed quia per teretem deducta est terra tumorem,
his modo, post illis apparat Delia terris
exoriens simul atque cadens, quia fertur in orbem
ventris et acclivis pariter declivia iungit
atque alios superat gyrois aliosque relinquit.
[ex quo colligitur terrarum forma rotunda]  

Hanc circum variae gentes hominum atque ferarum
aeriaeque colunt volucres. pars eis ad arctos
eminet, austrinis pars est habitabilis oris
sub pedibusque iacet nostris supraque videtur
ipsa sibi fallente solo declivia longa
et pariter surgente via pariterque cadente.
hanc ubi ad occasus nostros sol aspicit actus,
illic orta dies sopitas excitat urbes
et cum luce refert operum vadimonia terris;
nos in nocte sumus somnosque in membra vocamus.
pontus utrosque suis distinguit et alligat undis.

Hoc opus immensi constructum corpore mundi
membraque naturae diversa condita forma

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ASTRONOMICA, 1. 225–248

then the places situated beneath the middle sky,\(^a\) and late is the brass clashed among the peoples of the west.\(^b\) If the Earth were flat, you would rise for the whole world only once and the failure of your light would be lamented by every land at the same time. But since the shape of the Earth follows a smooth curve, the Moon appears to these lands first, and then to those, rising and setting simultaneously, because it is carried along a bellying orbit and equally combines a downward with an upward slope, as it rises above some horizons, leaving others behind.\(^c\)

\(^{236}\) All over the Earth dwell the countless tribes of man and beast and fowl of the air. One region which they inhabit reaches towards the northern bears, another is situated in southern climes: the latter lies beneath our feet, but believes itself on top, because the ground conceals its gradual curvature and one's path may equally well be said to rise as to fall. When the Sun reaches our occident and looks upon this lower world,\(^d\) there the dawn of day is rousing cities from slumber and is bringing to those lands with daylight the appointed round of work; we here are wrapped in night and summon sleep to our limbs. Both worlds are at once separated and connected by ocean's waves.\(^e\)

\(^{247}\) This fabric which forms the body of the boundless universe, together with its members composed of brass objects to prevent the Moon hearing the incantations and thus nullify the magic.

\(^a\) [226] "... last to western nations you wheel with blackened wings . . ."

\(^b\) Some people believed that lunar eclipses were caused by magicians whose incantations charmed down the moon from heaven; so they raised a tremendous din by clashing together

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nature's diverse elements, air and fire, earth and level sea, is ruled by the force of a divine spirit; by sacred dispensation the deity brings harmony and governs with hidden purpose, arranging mutual bonds between all parts, so that each may furnish and receive another's strength and that the whole may stand fast in kinship despite its variety of forms.\textsuperscript{a}

\textsuperscript{255} Now shall I tell you in their fixed ranks of the fiery signs which gleam in every part of heaven. And first my song will be of those\textsuperscript{b} that with their slanting array girdle the heavens in the midst thereof and bear in succession through the seasons the Sun and the other planets which struggle against the movement of the celestial sphere, signs all of which you will be able to count in a cloudless sky and from which the whole scheme of destiny is derived: thus shall that part of heaven be first which holds the vaults of heaven together.

\textsuperscript{263} Resplendent in his golden fleece the Ram leads the way and looks back with wonder at the backward rising of the Bull, who with lowered face and brow summons the Twins; these the Crab follows, the Lion the Crab, and the Virgin the Lion. Then the Balance, having matched daylight with the length of night, draws on the Scorpion, ablaze with his glittering constellation,\textsuperscript{c} at whose tail the man with body of a horse aims with taut bow a winged shaft, ever in act to shoot. Next comes Capricorn, curled up within his cramped\textsuperscript{d} asterism, and after him from urn upturned the Waterman pours forth

\textsuperscript{a} Cf. 2. 60-83, 3. 48-55, 4. 888-890.
\textsuperscript{b} The signs of the zodiac, which of course an astrologer needs to be sure of accurately observing, though they are not all well-defined or conspicuous groups. For the interpretation of this paragraph, see Schwarz.
\textsuperscript{24}
\textsuperscript{c} Astro refers to the whole constellation, a particularly conspicuous one, and not just to the brilliant $\alpha$ Sco ($=$ Antares).
\textsuperscript{d} Capricorn does not completely fill up thirty degrees.
Piscibus assuetas avide subeuntibus undas, 
quos Aries tangit claudentis ultima signa.

At qua fulgentis caelum consurgit ad Arctos, 
ommo quae summo despectant sidera mundo 
nec norunt obitus unoque in vertice mutant 
in diversa situm caelumque et sidera torquent,
aera per gelidum tenuis deductur axis 
libratumque regit diverso cardine mundum; 
sidereus circa medium quem volvit orbis 
aetheriosque rotat cursus, immotus at ille 
in binas Arctos magni per inania mundi 
perque ipsum terrae derectus constitit orbem.

nec vero solidus stat robore corporis axis 
nec grave pondus habet, quod onus ferae aetheris alti, 
secum aer omnis semper volvatur in orbem 
quoque semel coepit totus volet undique in ipsum, 
quodcumque in medio est, circa quod euncta moventur, 
usque adeo tenue ut verti non possit in ipsum 
nec iam inclinari nec se convertere in orbem, 
hoc dixeret axem, quia motum non habet illum ipsum.

Summa tenent eius miseris notissima nautis 
signa per immensum cupidos ducentia pontum.
maiorque Helice maior decircinat arcum 
(septem illam stellae certantes lumine signant), 

a Malchin suggests that the poet is rendering some 
contrived Greek etymology such as Achilles gives, *Isag.* 28 
p. 61, 23 ff.: ὀνόμασαι δ' ἀξίων διὰ τὸ περὶ αὐτὸν ἄγεσθαι καὶ 
perιδινεῖον τὸν οὐρανόν "and it is called axiS since the sky is 
carried and spins about it."

b Ursa Major.
in radiance: under its guidance the ships of Greece
set sail to cross the seas. Cynosura is small and
wheels round in a narrow circle, less in brightness
as it is in size, but in the judgement of the Tyrians
it excels the larger bear. Carthaginians count it the
surer guide when at sea they make for unseen shores.
They are not set face to face: each with its muzzle
points at the other's tail and follows one that follows
it. Sprawling between them and embracing each
the Dragon separates and surrounds them with its
glowing stars lest they ever meet or leave their
stations.

Between this northern and the middle zone,
wherein the seven planets fly through the twelve
signs that resist their passage, there rise constella-
tions which have part in opposite qualities, here close
to heaven's cold and here to its flames. Since these
constellations are tempered by an atmosphere which
is intermediate owing to the conflict within it of
both extremes, they render fertile for mortals the
lands beneath them. Next to the chill Bears and
the frozen north comes a figure on bended knee,
the reason for whose posture is known to none but
him. In his rear shines the Bearward, called also
Bootes; true is the name men have widely given him,
threatening-like since he presses forward as one does
over a team of bullocks; and he pulls along with him
the star Arcturus beneath the middle of his breast.
But on the other side of Bootes floats the Crown's
lustrous ring, which twinkles with varying lumi-
nosity; for the circle is dominated by a single star, which
with passing splendour sparkles in the mid
forehead and enhances with its blazing flame the
bright lights of the constellation. They shine as the

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[a] Ursa Minor.
[b] Cf. 1. 15, note.
[c] Engonasin (commonly known as Hercules).
[d] $\alpha$ CrB = Alphecca.
et Lyra diductis per caelum cornibus inter sidera conspicitur, qua quondam ceperat Orpheus omne quod attigerat cantu, manesque per ipsos fecit iter domuitque infernas carmine leges. hinc caelestis honos similisque potentia causae: tunc silvas et saxa trahens nunc sidera ducit et rapit immensum mundi revolubilis orbem. serpentem magnis Ophiuchus nomine gyris dividit et torto cingentem corpore corpus, explicet ut nodos sinuataque terga per orbes. respicit ille tamen molli cervice reflexus et redit effusis per laxa volumina palmis. semper erit, paribus helium quia viribus aequant. proxima sors Cycni, quem caelo Iuppiter ipse imposuit, formae pretium, qua cepit amantem, cum deus in niveum descendit versus olorem tergaque fidenti subiecit plumea Ledae. nunc quoque diductas volitat stellatus in alas. hinc imitata nitent cursumque habitumque sagittae sidera. tum magni Iovis ales fertur in altum, assepto volitans gestet ceu fulmina nisu, digna love et caelo, quod sacris instruit armis. tum quoque de ponto surgit Delphinus ad astra, oceani caelique decus, per utrumque sacratus. quem rapido conatus Equus comprehendere cursu festinat pectus fulgenti sidere clarus.

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a The eagle (= Aquila).
b See Introduction p. xxvii.
c Peg = Scheat.
et finitur in Andromeda. [quam Perseus armis eripit et sociat sibi. cui] succedit iniquo divisis spatio, quod terna lampade crispans conspicitur, paribus Deltoton nomine sidus ex simili dictum, Cepheusque et Cassiepia in poenas resupina suas iuxtaque relictam Andromedan, vastos metuentem Pristis hiatus, [expositam ponto deflet scopulisque revinctam] ni veterem Perseus caelo quoque servet amorem auxilioque iuvet fugiendaque Gorgonis ora sustineat spoliumque sibi pestemque videnti. tum vicina feren s nixo vestigia Tauro Heniochus, studio mundumque et nomen adeptus, quem primum curru volitantem Juppiter alto quadrigis conspexit equis caeloque sacravit. hunc subeunt Haedi claudentes sidere pontum, nobilis et mundi nutrito rege Capella, cuius ab uberibus magnum ille ascendit Olympum lacte fero crescens ad fulmina vimque tonandi. hanc ergo aeternis merito sacravit in astris Iuppiter et caeli caelum mercede rependit. [Pleiadesque Hyadesque, feri pars utraque Tauri, in borean scandunt. haec sunt aquilonia signa]

\[350\]

\[355\] resupina] signata
\[356\] piscis
\[360\] testemque

\[355-398\] after 399-442

\(a\) [350b, 351a] interpolated to secure mention of Perseus: "Whom by force of arms Perseus rescues and unites to himself. After whom . . . ."
\(b\) I.e. called after its deltoid shape.
\(c\) For the spelling of the queen’s name, see Introduction p. xxviii.

\(d\) [357] “. . . weeps for her left to the mercy of the sea and shackled to the rocks, . . . .”
\(e\) Haedi (the Kids) and Capella (the Goat) are not properly constellations but simply individual stars in Auriga. See Introduction p. xxviii.
\(f\) Referring to the matutinal setting of the Kids in mid-November, from when until early March navigation was for the most part suspended.

\(g\) [371 f.], possibly interpolated to ensure inclusion of the two star-groups referred to in 5. 118 ff. and 128 ff.: “And the Pleiades and the Hyades, each a part of the wild Bull, mount towards the north. These are the northern signs.”
Look now at the constellations which rise to the south of the Sun’s path and glide above torrid lands; look, too, at the lights whose orbits wheel between the chill sign of Capricorn and the sky which rests on the bottom pole. Beneath these stars lies the other part of Earth we may not tread and unknown nations of mankind. Inaccessible to us, their realms draw from the same Sun light that we share and shadows which fall contrary to ours; in an inverted sky they behold signs which set on the left and rise on the right. Their heaven is neither smaller nor inferior in brightness, and no fewer are the stars which rise upon their world. All else yield they not: yet they admit defeat over a single luminary, Augustus, who like a star has fallen to the fortune of our world: greatest lawgiver is he now on earth, in heaven will be hereafter. Near neighbour to the Twins, Orion may be seen stretching his arms over a vast expanse of sky and rising to the stars with no less huge a stride. A single light marks each of his shining shoulders, and three aslant trace the downward line of his sword; but three mark Orion’s head, which is imbedded in high heaven with his countenance remote.

In ancient times the Dogstar’s evening rising occurred in early January, its evening setting in early May (for an explanation of these terms see the Loeb Aratus, Introduction E, or Dicks 12 f.).
sic in utrumque movet mundum et contraria reddit. 400
hanc qui surgentem, primo cum redditur ortu,
montis ab excelso speculantur vertice Tauri,
eventus frugum varios et tempora discunt,
quaeque valetudo veniat, concordia quanta.
bella facit pacemque refert, varieque revertens 405
sic movet, ut vidit, mundum vultuque gubernat.
magna fides hoc posse color cursusque micantis
ignis ad os. vix sole minor, nisi quod procul haerens
frigida caeruleo contorquet lumina vultu.
cetera vincuntur specie, nec clarius astrum 410
tinguitur oceano caelumque revisit ab undis.
tum Procyon veloxque Lepus ; tum nobilis Argo
in caelum subducta mari, quod prima cucurrit,
emeritum magnis mundum tenet ante periclis,
servando dea facta deos. cui proximus Anguis 415
squamea dispositis imitatur tegmina flammis ;
et Phoebus sacer ales et una gratus Iaccho
Crater et duplici Centaurus imagine fulget,
pars hominis, tergo pectus commissus equino.
ipsius hinc mundo templum est, victrixque solutis 420
Ara nitet sacris, vastos cum Terra Gigantas
in caelum furebunda tulit. tum di quoque magnos
quaesivere deos ; eguit Iove Iuppiter ipse,

403 dieunt LM : ducunt G 416 tegmina] lumina
408 ignis ad os] in radios 422 tumidi
414 acta 423 esurcione M : dubitavit GL

extreme and brings opposite effects. Those who
from Mount Taurus’ lofty peak observe it ascending
when it returns at its first rising learn of the various
outcomes of harvests and seasons, what state of health
lies in store, and what measure of harmony. It stirs
up war and restores peace, and returning in different
guise affects the world with the glance it gives it and
governs with its mien. Sure proof that the star has
this power are its colour and the quivering of the fire
that sparkles in its face. Hardly is it inferior to the
Sun, save that its abode is far away and the beams it
launches from its sea-blue face are cold. In splen­
dour it surpasses all other constellations, and no
brighter star is bathed in ocean or returns to heaven
from the waves. Then come Procyon and the swift
Hare. Then famed Argo, raised to the skies from
the sea which it was the first to cross, occupies the
heaven it earned through grievous perils in a bygone
age, made a god for having given safety to gods.
Next to it is the Water-snake, whose stars are so
arranged as to represent its scaly skin. Then
shines the bird that is sacred to Phoebus and with it
the Bowl beloved of Bacchus and the Centaur of
twofold form ; he is half man, joined at the waist to
the body of a horse. Next has heaven a temple of
its own, where, its rites now paid, the Altar gleams
after victory gained when Earth in rage bore forth
the monstrous Giants against the skies. Then even
the gods sought aid of mighty gods, and Jupiter
himself felt the need of another Jupiter, fearing lest

a Scaliger observes that the mention of Mount Taurus is
a compliment to Aratus, who was a Cilician.
b The raven (= Corvus) : Phoebus adopted its shape to
elude Typhon (Apollodorus, Bibl. 1. 6. 3 ; Ovid, Met. 5. 329).
quod poterat non posse timens, cum surgere terram
cerne ret, ut verti naturam crederet omnem, 425
montibus atque altis aggestos crescere montes,
et iam vicinos fugientia sidera colles
arma importantis et rupta matre creatos,
discordis vultum permixtaque corpora partus.

nec di mortiferum sibi quemquam aut numina norant 430
siqua forent maiora sui. tum Iuppiter Arae
sidera constituit, quae nunc quoque maxima fulget.
quam propter Cetos convolvens squamea terga
orbibus insurgit tortis et fluctuat alvo,
[intentans similem morsum iam iamque tenenti] 435
qualis ad expositae fatum Cepheidos undis
expulit adveniens ultra sua litora pontum.
tum Notius Piscis venti de nomine dictus
exsurgit de parte Noti. cui iuncta feruntur
flexa per ingentis stellarum Flumina gyros :
alterius capiti coniungit Aquarius undas,
alter  ab eaeerto pede profuit Orionis
amnis; et in medium coeunt et sidera miscent.

His inter solisque vias Arctosque latentis,
axem quae mundi stridentem pondere torquent,
orbe peregrino caelum depingitur astris, 440
quae notia antiqui dixerunt sidera vates.
ultima, quae mundo semper volvuntur in imo,
quis innixa manent caeli fulgentia tempula,

425 et 429 vultu
428 alis 430 necdum hostiferum
427 tam   [aut]

* An error of the poet’s, for Cetus lies on the other side of
  the sky: see Introduction pp. xxx f.

* [435] an interpolation based on Virgil, Aen. 12. 754 f.: “threatening to
  bite like one in the very act of seizing its prey.”

* Manilius thinks of the stream from Aquarius’s urn and
  the River Eridanus as forming a composite constellation.
nusquam in conspectum redeuntia cardine verso, 
sublimis speciem mundi similisque figuras 
astroreum referunt. aversas frontibus Arctos 
uno distinguiri medias claudique Dracone 
credimus exemplo, quia mens fugientia visus 
hunc orbem caeli vertentis sidera cursu 
tam signo simil i fultum quam vertice fingit. 

Hace igitur magnó divisás aethere sedes 
signa tenent mundi totum deducta per orbem. 
tu modo corporeis similis ne quaere figuras, 
onnia ut aequali fulgentia membra colore 
deficiat nihil aut vacuum qua lumine cesset. 
non poterit mundus sufferre incendia tanta, 
onnia si plenis ardebunt sidera membris. 
quidquid subduxit flamnis, natura peperet 
succubitura oneri, formas distinguere tantum 
contenta et stellis ostendere sidera certis. 
linea designat species, atque ignibus ignes 
respondent; media extremis atque ultima summis 
creduntur: satis est si non omnia celant. 
praecipue, medio cum luna implebitur orbe, 
certa nitent mundo tum lumina: conditur omne 
stellarum vulgus; fugiunt sine nomine turba. 
pura licet vacuo tum cernere sidera caelo, 
nec fallunt numero, parvis nec mixta feruntur. 

Et, quo clara magis possis cognoscere signa, 
non varios obitus norunt variosque recursus,
certa sed in proprias oriuntur singula luces
natalesque suos occasumque ordine servant.
nec quicquam in tanta magis est mirabile mole
quam ratio et certis quod legibus omnia parent.
nusquam turba nocet, nihil ullis partibus errans
laxius aut brevius mutatove ordine fertur.
quid tam confusum specie, quid tam vice certum est?
Ac mihi tam praesens ratio non ulla videtur,
qua pateat mundum divino numine verti
atque ipsum esse deum, nec forte coisse magistra,
ut voluit credi, qui primus moenia mundi
seminibus struxit minimis inque illa resolvit;
e quibus et maria et terras et sidera caeli
aetheraque immensis fabricantem finibus orbes
solventemque alios constare, et cuncta reverti
in sua principia et rerum mutare figuras.
quis credat tantas operum sine numine moles
ex minimis caecoque creatum foedere mundum?
si fors ista dedit nobis, fors ipsa gubernet.
at cur dispositis vicibus consurgere signa
et velut imperio praescriptos reddere cursus
cernimus ac nullis properantibus ulla relinquui?
cur eadem aestivas exornant sidera noctes
semper et hibernas eadem, certamque figuram
quisque dies reddit mundo certamque relinquit?
iam tum, cum Graiae verterunt Pergama gentes,

476 sidera
480 errant
481 et levius
489 immensos

483 For my part I find no argument so compelling
as this to show that the universe moves in obedience
to a divine power and is indeed the manifestation
of God, and did not come together at the dictation
of chance. Yet this is what he would have us believe
who first built the walls of the heavens from minute
atoms and into these resolved them again; he held
that from these atoms are formed the seas, the lands,
and the stars in the sky, and the air by which in its
vast space worlds are created and dissolved; and that
all matter returns to its first origins and changes the
shapes of things. Who could believe that such
massive structures have been created from tiny atoms
without the operation of a divine will, and that the
universe is the creature of a blind compact? If
chance gave such a world to us, chance itself would
govern it. Then why do we see the stars arise in
regular succession and duly perform as at the word
of command their appointed courses, none hurrying
ahead, none left behind? Why are the summer
nights and the nights of winter ever made beautiful
with the selfsame stars? Why does each day of the
year bring back to the sky a fixed pattern and a fixed
pattern leave at its departure? Already when the

42

a Epicurus.
Arctos et Orion adversis frontibus ibant,  
haec contenta suos in vertice flectere gyros,  
ille ex diverso vertentem surgere contra  
obvius et toto semper decurrere mundo.  
temporaque obscurae noctis deprendere signis  
iam poterant, caelumque suas distinxerat horas.  
quot post excidium Troiae sunt eruta regna !  
quot capti populi ! quotiens fortuna per orbem  
servitium imperiumque tuit varieque revertit !  
Troianos cineres in quantum obrita refovit  
imperium ! fatis Asiae iam Graecia pressa est.  
saeacula dinumerare piget, quotiensque recurrens  
lustrarit mundum vario sol igneus orbe.  
omnia mortali mutatur lege creata,  
nec se cognoscunt terrae vertentibus annis  
exutas variam faciem per saecula ferre.  
at manet incolumis mundus suaque omnia servat,  
quam neque longa dies auget minuitque senectus  
nec motus puncto curvat cursusque fatigat ;  
idem semper erit quoniam semper fuit idem.  
non alium videre patres aliumve nepotes  
aspicient. deus est, qui non mutatur in aevo.  
umquam transversas solem decurrere ad Arctos  
nec mutare vias et in ortum vertere cursus  
auroramque novis nascentem ostendere terris,  
nec lunam certos excedere luminis orbes  
sed servare modum, quo crescat quove recedat,
nec cadere in terram pendentia sidera caelo
sed dimensa suis consumere tempora gyris,
non casus opus est, magni sed numinis ordo.

Haec igitur texunt aequali sidera tractu
ignibus in varias caelum laqueantia formas.
altius his nihil est ; haec sunt fastigia mundi ;
publica naturae domus his contenta tenetur
finibus, amplectens pontum terrasque iacentis.
omnia concordi tractu veniuntque caduntque,
qua semel incubuit caelum versumque resurgit.
sunt alia adverso pugnantia sidera mundo,
quae terram caelumque inter volitantia pendent,
Saturni, Iovis et Martis Solisque, sub illis
Mercurius Venerem inter agit Lunamque volatus.

Ipse autem quantum convexo mundus
Olympo
obtineat spatium et quantis bis sena ferantur
finibus astra, docet ratio, cui nulla resistunt
clastra nec immensae moles caecive recessus ;
omnia succumbunt, ipsum est penetrabile caelum.

nam quantum terris atque aequore signa recedunt,
tantum bina patent. quacumque inciditur orbis
per medium, pars efficitur tum tertia gyri
exiguo dirimens solidam discrimine summam.
sumnum igitur caelum bis bina refugit ab imo
astra, bis e senis ut sit pars tertia signis.

530-567 after 568-611
530 gyris] signis
548 [e]
568 locatus

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532 These then are the constellations which decorate
the sky with even spread, their fires panelling
the ceiling of heaven with various designs. Higher
than these is there nothing, for they are the roof of
the universe ; they are the limits within which the
common abode of nature is content to be held, embracing
the sea and lands that lie beneath. They all move on
a consistent course, coming into view and setting
where heaven ever sinks and, turning, reappears.
There exist other stars, which strive against the
contrary movement of the sky and in their swift
orbits are poised between heaven and earth : Saturn,
Jupiter, Mars, and the Sun, and beneath them
Mercury performing its flight between Venus and
the Moon.

539 How great is the space occupied by the vault of
the heavens and how great the territory within which
the twelve signs of the zodiac move, we learn from
reason, reason that no barriers or huge masses or
dark recesses withstand ; all things yield to reason,
and it can penetrate the sky itself. Now the distance
of the signs from land and sea is equal to the extent
of two signs : for, where a circle is cut through the
middle, the line formed amounts to a third of the
circumference, a line so dividing the whole as to
leave a small difference. Therefore the highest
point of heaven is twice two signs distant from the
lowest, a distance, that is, of one third of the twelve
radius of a circle and of each side of a hexagon inscribed
therein (Euclid, Elem. 4. 15).
sed quia per medium est tellus suspensa profundum, binis a summo signis discedit et imo.
hinc igitur quocumque supra te suspicis ipse, qua per inane meanmt oculi quaque ire recusant, binis aequandum est signis; sex tanta rotundae efficient orbem zonae, qua signa feruntur
bis sex aequali spatio texentia caelum,
ne mirere vagos partus eadem esse per astra et mixtum ingenti generis discrimine fatum, singula cum tantum teneant tantoque ferantur tempore, sex tota surgentia sidera luce
nec spatio noctis linquentia plura profundum.

Restat ut aetherios fines tibi reddere coner filaque dispositis vicibus comitantia caelum, per quae derigitur signorum flammeus ordo.

* * * * *

primus et aetheria succedens proximus arce
circulus ad borean fulgentem sustinet Arcton
sexque fugit solidas a caeli vertice partes.
alter ad extremi decurrens sidera Cancri,

556

nec 564 f.: see after 611

a I.e. below the horizon.
b In the following passage (to verse 602) Manilius adopts Eudoxus's system of degrees, which apportioned 60 degrees to one complete revolution of a circle. Thereafter, at 2. 307 for example, he employs the ordinary system of 360 degrees.

c The Arctic Circle (all these terms apply to the sphere of heaven, i.e. are celestial), 6° Eud. (= 36°) south of the North Pole (54° from the Equator).
d The Summer Tropic or Tropic of Cancer, 5° Eud. (= 30°) south of the Arctic Circle (24° from the Equator).
in quo consummat Phoebus lucemque moramque
tardaque per longos circumfert lumina flexus,
aestivum medio nomen sibi sumit ab aestu,
temporis et titulo potitur, metamque volantis
solis et extremos designat fervidus actus,
et quinque in partes aquilonis distat ab orbe.
tertius in media mundi regione locatus
ingenti spira totum praecingit Olympum
parte ab utraque videns axem, qua lumine Phoebus
componit paribus numeris noctemque diemque
veris et autumni current per tempora mixta,
cum medium aequali distinguat limite caelum ;
quattuor et gradibus sua fila reducit ab aestu.
proximus hunc ultra brumalis nomine limes
ultraque radiorum munera flamma
dat per iter minimum nobis, sed finibus illis,
quos super incubuit, longa stant tempora luce
vixque dies transit candentem extenta per aestum ;
his iaecet binis summotus partibus orbis.
unus ab his superest extremo proximi axi
circulus, austrinas qui stringit et obsidet Arctos.
hic quoque brumalem per partes quinque relinquit,
et, quantum a nostro sublimis cardine gyrus,
distat ab adverso tantundem proximus illi.

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the Crab's extreme sign, wherein Phoebus completes
the lingering of his light and slowly swings his rays
through long curves, adopts from the heat of mid-
summer the name of summer tropic, acquiring the
title of the season; with its warmth it marks out
the turning-point and northerly limit of the Sun's
winged career, and is five degrees distant from the
northern circle. A third circle, set in the midmost
region of the sky, girds with a huge ring the full
circuit of heaven and sees a pole on either side; here
with his light the Sun matches night and day in
hours of equal number as he passes through the
tempered seasons of spring and autumn and divides
the middle of heaven with impartial boundary;
this circle withdraws its track four degrees away from
that of the summer solstice. Next after this a
boundary named the winter tropic marks the
furthest station of the retreating Sun, when, as he
describes his briefest arc, he gives us scant bounty
with the slanting fires of his rays, although in the
lands over which he hangs time halts, light tarries
long, and, prolonged by the glowing heat, the day
scarce comes to an end; this boundary is removed
from the last by twice two degrees of the cir-

cumference. After these one circle remains: it is the
nearest to the distant pole and confines and be-
leaguers the southern Bears. Likewise it leaves the
winter circle five degrees behind, and is as distant
from the opposite pole, which it adjoins, as is the

a The Equator, 4° Eud. (= 24°) south of the Summer
Tropic (90° from the North Pole).
b The Winter Tropic or Tropic of Capricorn, 4° Eud.
(= 24°) south of the Equator.
c The Antarctic Circle, 5° Eud. (= 30°) south of the Winter
Tropic.
MANILIUS

[sic per tricenas vertex a vertice partes
divisus duplici summa circumdat Olympum
et per quinque notat signantis tempora fines]
his eadem est via quae mundo, pariterque rotantur
incline, sociosque ortus occasibus aequant,
quandoquidem flexi, quo totus volvit orbis,
fila trahunt alti curso comitantia cæli,
intervalla pari servantes limite semper
divisosque semel fines sortemque dicatam.
Sunt duo, quos recipit ductos a vertice vertex,
inter se adversi, qui cunctos ante relatos
seque secant gemino coeuntes cardine mundi
transversoque polo rectum ducentur in axem,
tempora signantes anni caelumque per astra
quattuor in partes divisum mensibus acquis.
alter ab excelso decurrens limes
Serpentis caudam siccas et dividit Arctos
et iuga Chelarum medio volitantia gyro,
[circulus a sommo nasecentem vertice mundum
permeat Arctophylaca petens per terga Draconis,
tangit et Erigonen, Chelarum summam recidit]
extremamque secans Hydram mediumque sub
Centaurum adverso concurrît rursus in axe,
et redit in caelum, squamosaque tergora Ceti
Lanigerique notat fines clarumque Trigonum

594 sic tibi per binas
599 sexti

595
600
605
610
615

ASTRONOMICA, 1. 594–615

northern circle from our pole. The path of these
circles is the same as the sky’s, and they wheel along
the same orbit; they match their risings and settings
uniformly, since, curved along the spin of the whole
sphere, they trace lines which follow the rotation of
high heaven, ever preserving equidistant intervals
from each other, the boundaries for all time assigned
them, and their appointed stations.

603 There are two circles, placed crosswise to each
other, which are drawn from one pole and received
by the other: they cut all the circles mentioned
above and cut each other, converging at the two
poles of heaven; thence they traverse the sky and
are drawn straight to the pole. They mark the
seasons of the year and the division of heaven along
the zodiac into four portions of equal months. One
line, descending from the summit of the sky, passes
through the Dragon’s tail and the Bears that shun
ocean, and the yoke of the Balance which revolves
in the midmost circle. It cleaves the extremity of
the Water-snake and the middle of the southern
Centaur, and again converges upon the opposing
circle at the pole; returning thence heavenward, it
marks the scaly back of the Whale, the boundary of
the Ram, the bright Triangle, the lowest folds of

52

b The Colures.
c The Equinoctial Colure.
da Literally “the yoke of the Claws”: see Introduction
p. xxv.

564-565A, interpolated to restore the substance of
609–611, when these verses had been displaced by the great
transposition (see table 7, p. cvii): “The circle traverses that
part of the sky which begins at the northern pole; seeking
the Bearward, it passes through the back of the Dragon,
touches the Virgin, and cuts off the tip of the Balance.”
MANILUS

Andromedaeque sinus imos, vestigia matris, principiumque suum repetito cardine claudit. alter in hunc medium summumque incumbit in axem perque pedes primos cervicem transit et Ursae, quam septem stellae primam iam sole remoto producunt nigrae praebentem lumina nocti, et Geminis Cancrum dirimit stringitque flagrantem ore Canem clavumque Ratis, quae vicerat aquor, inde axem occultum per gyri signa prioris transversa atque illo rursus de limite tangit, te, Capricorne, tuisque Aquilam designat ab astris, perque Lyram inversam spirasque Draconis posteriora pedum Cynosurae praeterit astra transversamque secat vicino cardine caudam: hic iterum coit ipse sibi, memor uncle profectus.

Atque hos aeterna fixerunt tempora sede, immotis per signa modis, statione perenni: hos volucris fecere duos, namque alter ab ipsa consurgens Helice medium praecidit Olympum discernitque diem sextamque examinat horam et paribus spatius occasus cernit et ortus. hic mutat per signa vices; et seu quis eoos seu petit hesperios, supra se circinat orbem verticibus super astantem mediumque secantem caelum et diviso signantem culmine mundum, quando aliis aliiu medium est. volat hora per orbem, atque, ubi se primis extollit Phoebus ab undis, 630

631 hoc 637 [et] seu si

ASTRONOMICA, 1. 616-643

Andromeda's robe, and her mother's feet, and, the pole regained, ends with its beginning. The other circle rests upon the middle of this one at the upper pole, whence it passes through the forefeet and neck of that Bear which with the setting of the Sun seven stars bring first to view as it offers its lights to the blackness of night; it parts the Crab from the Twins and grazes the Dog with the blazing face and the rudder of the Ship which conquered ocean; thence it touches the hidden pole, cutting at right angles the path of the former circle. On its way back from this line it touches Capricorn and, leaving Capricorn's stars, marks the Eagle; it runs through the inverted Lyre and the coils of the Dragon, and passes by the stars of Cynosure's hind feet, whose tail it cuts at right angles close to the pole. Here it meets itself again, mindful whence it came.

631 These circles the seasons have fixed in a permanent abode; their paths through the signs do not change, and their position remains the same for ever: but there are two circles to which they have given wings. One, starting from the northern pole, cuts the sky in the middle and divides the day into two, determines the sixth hour and beholds at equal distances sunrise and sunset. It changes position among the constellations; and, whether one moves towards east or west, he finds above him a circle passing directly overhead so as to part the sky in the middle and mark a bisection of heaven's vault; with his position on the Earth a man changes both his view of the sky and the time of day, because different peoples have different skies and times along their meridians. The mid-hour revolves about the world: when Phoebus rises from the surface of the ocean, it

54

a The Solstitial Colure.  b The Meridian.  c In this passage an hour denotes one twelfth of the period between sunrise and sunset: by the sixth hour we are to understand of course the end of the sixth hour.
illis sexta manet, quos tum premit aureus orbis, 
rursus ad hesperios sexta est, ubi cedit in umbras :  645
nos primam ac summam sextam numeramus utramque 
et gelidum extremo lumen sentimus ab igni.
alterius fines si vis cognoscere gyri,  650
circumfer facilis oculos vultumque per orbem.

MANILIUS

ASTRONOMICA, 1. 644–669

is the sixth hour for those who dwell immediately 
beneath the golden orb; and again, it is the sixth 
hour for the people of the west, when the Sun retire 
to the shadows: these two sixth hours we reckon 
as first and last of day respectively, and at such times 
we receive but chill rays from the Sun's distant fires. 
Should you wish to learn the bounds of the other 
circle, let your eyes and gaze freely rotate in a 
circle about yourself: where heaven's lowest edge 
and Earth's uppermost rim meet, where the universe 
comes together without an intervening space and 
restores to the sea or receives therefrom the shining 
stars, there you have the fine boundary-line which 
runs like a girdle across the universe. This line, too, 
can fly all over the sky, now moving to heaven's 
central region and torrid zone, now to the Bear's 
seven twinklers and the stars that never disappear 
from view; and, wherever a man's wandering feet 
have trodden, as he travels now to these lands and 
now to those, he will always be finding a new circle, 
which will change with his position on the Earth. In 
fact, this circle will show you one part of heaven 
and leave hidden the other; it will mark heaven with 
a variable boundary, on which moves its position 
precisely as moves the observer's eye.  

666 To these you must add two circles which lie 
athwart and trace lines that cross each other. One 
contains the shining signs through which the Sun 
plies his reins, followed by the wandering Moon in 
the Earth, since it embraces the Earth; the circle girdles the 
sky with a level boundary-line and, taking its name from the 
fact that it limits our sight, is called horizon” (the word 
σταθημός means “limiting”).

a The Horizon.
b [663-665] “This circle must be regarded as belonging to
c The Zodiac.
et quinque adverso luctantia sidera mundo
exercent varias naturae lege choreas.
hunc tenet a summo Cancer, Capricornus ab imo,
bis recipit, lucem qui circulus aequat et umbras,
linigeri et Librae signo sua fila secantem.
sic per tres gyros inflexus ducitur orbis
rectaque devexo fallit vestigia clivo.
nec visus aciemque fugit tantumque notari
mente potest, sicut cernuntur mente priores,
sec nitet ingenti stellatus orbe
insignemque facit lato caelamine mundum.
[et ter vicenas partes patet atque trecentas
in longum, bis sex latescit fascia partes
quae cohibet vario labentia sidera cursu]

Alter in adversum positus succedit ad Arctos
et paulum a boreae gyro sua fila reducit
transitque inversae per sidera Cassiepiae,
inde per obliquum descendens tangit Olorem
aestivosque scat fines Aquilam que supinam
temporaque aequantem gyrum zonamque ferentem
solis equos inter caudam, qua Scorpios ardet,
extremamque Sagittari laevam atque sagittam,
inde suos sinuat flexus per crura pedesque
Centauri alterius rursusque ascendere caelum

caelato lumine

---

670 et quinque adverso luctantia sidera mundo
675 exercent varias naturae lege choreas.
680 hunc tenet a summo Cancer, Capricornus ab imo,
685 bis recipit, lucem qui circulus aequat et umbras,
Linigeri et Librae signo sua fila secantem.
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mente potest, sicut cernuntur mente priores,
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inde suos sinuat flexus per crura pedesque
Centauri alterius rursusque ascendere caelum

caelato lumine

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680 caelato lumine

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ASTRONOMICA, 1. 670–693

her chariot, and wherein the five planets which struggle against the opposite movement of the sky a perform the dances of their orbits that nature's law diversifies. This circle is held by the Crab at the top, at the bottom by Capricorn, and is twice crossed by the circle which balances day and night, b whose line it cuts in the signs of the Ram and the Balance. Thus the curve of the circle is drawn through three circles c and conceals by its downward slope the straightness of its path. Nor does it elude the sight of the eye, as if it were a circle to be comprehended by the mind alone, even as the previous circles are perceived by the mind: nay, throughout its mighty circuit it shines like a baldric studded with stars and gives brilliance to heaven with its broad outline standing out in sharp relief. d

684 The other circle e is placed crosswise to it. It approaches the Bears but bends back its outline a little way from the circle of the north; passing through the constellation of the inverted f Cassiepia it thence descends by a slanting path to reach the Swan; it cuts the summer boundary, the supine Eagle, the circle of equal day and night, and the zone which carries the horses of the Sun, passing between the blazing tail of the Scorpion and the tip of the Archer's left hand and arrow; from there it winds its tortuous trail through the legs and hoofs of the southern Centaur, and begins once more to climb their diverse orbits.” Numeration by the 360-degree circle, though given us at 2. 307 ff., is out of place here: the interpolator was doubtless led by 679 f. to specify the breadth of the zodiac.

cf. 1. 15, note.
b The Equator.
c The Equator and the two Tropics.
d [681-683] “And in length it covers three hundred and three score degrees, whilst in width it forms a band of twice six degrees which contains within it the planets that glide in

e The Milky Way.
f Cassiepia hangs upside down in heaven as further punishment for her impiety (cf. Aratus, Phaen. 664 ff.).
MANILIUS

incipit Argivumque ratem per aplustria summa
et medium mundi gyrum Geminosque per ima
signa secat, subit Heniochum, teque, unde profectus,
Cassiepia, petens super ipsum Persea transit
orbemque ex illa coeptum concludit in ipsa;
trisque secat medios gyros et signa ferentem
partibus e binis, quotiens praeceditur ipse.
nec quaerendus erit: visus incurrit in ipsos
sponte sua seque ipse docet cogitque notari.
namque in caeruleo candens nitet orbita mundo
ceu missura diem subito caelumque recludens,
ac veluti viridis discernit semita campos
quam terit assiduo renovans iter orbita tractu.
[inter divisas aequabilis est via partes]
ut freta canescunt sulcato ducente carina,
accipiantque viam fluctus spumantibus undis
quam tortus verso movit de gurgite vertex,
candidus in nigro lucet sic limes
caeruleum findens ingenti lumine mundum.
Utque suos arcus per nubila circinat Iris,
sic super incumbit signato culmine limes
et resupina facit mortalibus ora,
dum nova per caecam mirantur lumina noctem
inquiruntque sacras humano pectore causas:
num se diductis conetur solvere moles
segminibus, raraque labent compacta rimae
admittantque novum laxato tegmine lumen;

695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720

ASTRONOMICA, I. 694-720

the sky; it cuts the ship of the Greeks through the
top of the stern-post, heaven's middle circle, and the
Twins through the bottom of their sign; then it
enters the Charioteer and, making for Cassiepia,
whence it set out, passes over the figure of Perseus;
and it completes in Cassiepia the circuit which it
began with her. At two points it cuts the three
middle circles and the circle which carries the signs
and is as often cleft itself. One need not search to
find it: of its own accord it strikes the eyes; it tells
of itself unasked, and compels attention. It shines
like a glowing path in the dark-blue of the heavens,
as though it would suddenly open up the sky and let
forth the light of day, or like a track running through
green fields, a track worn by the constant passage
of cart-wheels repeating the same journey. As
the sea whitens where a vessel draws the furrow of its
wake and, whilst the waters foam, the surge forms
a road which churned eddies have roused from the
upturned depths, so the track shines bright in the
blackness of heaven, cleaving with a huge band of
light the dark-blue sky. And just as the rainbow
describes its arc through the clouds, even thus the
white track marking the vault of heaven lies
overhead; and it draws the gaze of mortals upwards, as
they marvel at the strange glow through night's
darkness and search, with mind of man, the cause of
the divine. Perchance, they wonder, the firmament
is seeking to split into separate segments; with the
slackening of the framework cracks are opening and
admit new light through a split in the ceiling; what

a Argo.

b [707], interpolated by one who missed an apodosis to the
veluti clause: "... so is the road between the sundered parts
uniform."

c The poet here presents a list of different theories about
the Milky Way. See Introduction p. xxxv.
quid sibi non timeant, magni cum vulnera caeli
conspicant feriatque oculos injuria mundi?
an coeat mundus, duplicisque extrema cavernae
convenient caelique oras et segmina iungant,
perque ipsos fiat nexus manifesta cicatrix
suturam faciens mundi, stipatus et orbis
aeriam in nebula densa compagine versus
in cuneos alti cogat fundamina caeli.
an melius manet illa fides, per saecula prisca
illae solis equos diversis cursibus isse
atque aliam trivisse viam, longumque per aevum
exustas sedes incoctaque sidera mutasse
caeruleam versus speciem mutasse colore,
influsumque loco cinerem mundumque sepultum?
fama etiam antiquis ad nos descendit ab annis
Phaethontem patrio curru per signa volantem,
dum nova miratur propius spectacula mundi
et puer in caelo ludit curruque superbus
luxuriant nitido, cupit et maiora parente,
deflexum solito cursu, curvisque quadrigis
monstratas liquisse vias orbemque recentem
imposuisse polo, nec signa insueta tulisse
errantis meta flammas currumque solutum.
quid querimur flammas totum saevisse per orbem
terrarumque rogum cunctas arsisse per urbes?
cum vaga dispersi fluitarunt fragmina currus,
et caelum exustum est: luit ipse incendia mundus,
et vicina novis flagrarunt sidera flammas

would men not fear might befall them, when they
behold the great firmament damaged, and hurt done
to heaven strikes their eyes? Possibly the skies are
coming together and the bases of two vaults meet
and fasten the rims of celestial segments; out of the
connection is formed a conspicuous scar marking a
suture of the skies, and transformed by its dense
structure into ethereal mist the compressed seam
causes the foundations of high heaven to harden into
a solid joint. Perhaps that belief is more justly
held which asserts that here in ages past the horses
of the Sun pursued a different course and wore
another path; over long centuries the track was
burnt up and the constellations scorched by the
flames, losing their sky-dark appearance beneath an
altered hue: ash spread over the region and buried
heaven beneath it. A story also comes down to us
from ancient times that Phaethon sped through the
stars in his father’s chariot; whilst looking more
intently at the unfamiliar spectacle of heaven and
boyishly sporting in the sky as he proudly revelled
in the glittering chariot, longing to surpass his father,
he veered from the accustomed course and with a
swerving team left the appointed track and branded
a fresh circuit upon the heavens: the inexperienced
signs could not withstand the fires which wandered
from their guide-post and a chariot out of control.
Why complain that flames raged the whole world over
and that the earth became a funeral pyre which
burned in every city? When the débris of the
shattered chariot was scattered far and wide, even
the sky caught fire: heaven itself paid dear for that
conflagration, and the nearby stars blazed with
unwonted flames and even now display the marks of past calamity. Nor must I conceal an ancient legend less tragic than the well-known one, that from the snow-white breast of heaven’s queen there flowed a stream of milk which left its colour upon the skies; wherefore is it called the Milky Way, and the name derives from its actual origin. Or is it that a greater host of stars has woven its fires in a dense cirlet and glows with concentrated light, and that the ring shines the more radiantly for the massing of its brightness? Perhaps the souls of heroes, outstanding men deemed worthy of heaven, freed from the body and released from the globe of Earth, pass hither and, dwelling in a heaven that is their own, live the infinite years of paradise and enjoy celestial bliss. If so, here we honour the line of Aeacus, here the sons of Atreus, and warlike Diomed; the man of Ithaca, too, who by his triumphs on land and sea was nature’s conqueror; the Pylian, renowned for a long life of triple span, and the other Greek chiefs who fought at Troy; Hector, bulwark and glory of the Ilian race, together with Aurora’s dusky son and him of the Thunderer’s stock who ruled Lycia; nor let me pass you by, Amazonian maid, and the other kings sent by Thrace, the nations of Asia, and Pella, whose greatest glory lies in him called Great. Nor must I fail to mention the sages, strong of mind, men of exact and weighty judgement, who in their own selves possessed every endowment: the upright Solon and resolute Lycurgus; the inspired

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**ASTRONOMICA, 1. 749-773**

**MANILIUS**

nunc quoque praeteriti faciem referentia casus. 750
nec mihi celanda est vulgata fama vetusta mollior, e niveo lactis fluxisse liquorem
pectore reginae divum caelumque colore infecisse suo; quapropter lacteus orbis
dicitur, et nomen causa descendit ab ipsa.
an maior densa stellarum turba corona
contextit flamas et crasso lumine candet,
et fulgere nitet collato clarior
an fortes animae dignataque nomina caelo
corporibus resoluta suis terraeque remissa
hue migrant ex orbe suumque habitantia caelum
aetherios vivunt annos mundoque fruantur?
atque hic Aeacidas, hic et veneramur Atridas,
Tydidenque serum, terraeque marisque triumphis
naturae victorem Ithacum, Pyliumque senecta
insegnem triplici, Danaumque ad Pergama reges,
Hectoraque Iliaceae gentis columnenque decusque,
Auroraque nigrum partum, stirpemque Tonantis
rectorem Lyciae. nec te, Mavortia virgo,
praeteream, regesque alios, quos Thracia misit
atque Asiae gentes et Magno maxima
Pella;
quique animi vires et strictae pondera mentis
prudentes habuere viri, quibus omnis in ipsis
census erat, iustusque

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**NOTES**

[766] = 2.3

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a Whose sons were Peleus and Telamon, fathers respectively of Achilles and Ajax.
b Agamemnon and Menelaus.
c Ulysses.  
d Nestor.  
e Memnon.  
f Sarpedon.  
g Penthesilea.

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Housman considers that by kings sent to Troy from Pella are meant the leaders of the Paeones: Pyraechmes (Homer, II. 2. 848) and Asteropaeus (ib. 21. 152 ff.).

Alexander.
MANILIUS

aetheriusque Platon, et qui fabricaverat illum
damnatusque suas melius damnavit Athenas,
Persidos et victor, strarat quae classibus aequor;
Romanique viri, quorum iam maxima turba est,
Tarquinioque minus reges et Horatia proles,
tota acies partus, nec non et Scaevola trunco
nobilior, maiorque viris et Cloelia virgo,
et Romana ferens, quae texit, moenia Cocles,
et commilitio volucris Corvinus adeptus
et spolia et nomen, qui gestat in alite Phoebum,
et Iove qui meruit caelum Romamque Camillus
servando posuit, Brutusque a rege receptae
conditor, et furti per bella Papirius ultor,
Fabricius Curiusque pares, et tertia palma
Marcellus Cossusque prior de rege necato,
certantes Decii votis similesque triumphis,

786 furti] phirri 789 -que decii

ASTRONOMICA, 1. 774-789

Plato and the man a who had fashioned him, whose
condemnation served rather to condemn his native
Athens; and the conqueror b of Persia, the land
whose fleet covered the sea. There follow the
warriors of Rome, whose host is now the largest;
here are the kings save only Tarquin, here the
Horatian brothers, a whole battle-line produced at a
single birth, c here also Scaevola, ennobled by his
mutilated arm d; Cloelia, a maid of more than
manly courage, e and Cocles, bearing as blazon f the
walls of Rome which he defended; Corvinus, winner
of spoils and a name, aided in combat by a bird which
hides beneath a bird's exterior the godhead of
Phoebus g; Camillus, who by saving Jove's Capitol h
won a place in heaven and in saving founded Rome;
Brutus, the establisher of a city rescued from a king;
Papirius, who avenged a treacherous defeat in open
battle i; Fabricius and Curius, a well-matched
pair j; Marcellus, third to win the palm of honour, k
and Cossus, who before him had stripped the spoil
from a king he killed; and the Decii, rivals in their
self-sacrifice and equals in their glory. l Here is

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a Socrates.
b Themistocles.
c The Horatii (like the Curiatii) were triplets (cf. Livy
1. 24 f.).
d Gaius Mucius Scaevola (cf. Livy 2. 12).
e Cf. Livy 2. 13.
f Upon his shield, suggests Housman (for Horatius
Cocles, cf. Livy 2. 10).
g Marcus Valerius Corvinus: a raven (cf. 1. 417, note)
perched on his helmet before his combat with a gigantic Gaul,
and after his victory he assumed his cognomen from it
(Aulus Gellius, N.A. 9. 11: Livy 7. 26 gives the name as
Corvus).
h From the Gauls (cf. Livy 5. 47 to the end).
i Lucius Papirius Cursor, who avenged the disaster of the
Caudine Forks (cf. Livy 9. 15).
j In their incorruptibility (cf. Cicero, Par. Stoic. 12, which
contains a remarkably similar catalogue of Roman heroes).
k Referring to spolia opima, spoil personally taken in
battle by the victors from the vanquished general: first
won by Romulus from Acron (cf. Livy 1. 10; Propertius
4. 10), secondly by Cossus from Tolumnius (cf. Livy 4. 19),
and thirdly by Marcus Claudius Marcellus from Virdomarus
(cf. Livy, Perioch. 20).
l Father, son, and grandson all named Publius Decius
Mus and said to have devoted (i.e. ritually sacrificed) them-
} selves in battle for the Roman cause (cf. Cicero, Tusc. Disp.
1. 89; only father and son are mentioned in Par. Stoic. 12).
MANILIUS

invictusque mora Fabius, victorque nefandi
Livius Hasdrubalis socio per bella Nerone,
Scipiaeaque duces, fatum Carthaginis unum,
Pompeiusque orbis domitor per trisque triumphos
ante diem princeps, et censu Tullius oris
ermeritus fasces, et Claudi magna propago,
Aemiliaeque domus proceres, clarique Metelli,
et Cato fortunae victor, fictorque sub armis
miles Agrippa suae, Venerisque ab origine proles
Iulia. descendit caelo caelumque replebit,
quod reget, Augustus, socio per signa Tonante,
cernet et in coetu divum magnumque Quirinum
quemque novum superis numen pius addidit ipse,
altius aetherii quam candet circulus orbis.
illa deis sedes : haec illis, proxima divum
qui virtute sua similes fastigia tangunt.

Nunc prius incipiam stellis quam reddere vires
signorumque canam fatalia carmine iura,
implenda est mundi facies, corpusque per omne

Fabius, whom delay made invincible, and here
Livius, with his comrade-in-arms Nero, the van-
quisher of ruthless Hasdrubal; the Scipionic
generals, a single agent of Carthage's doom \(a\); world-
conquering Pompey, whom three triumphs \(b\) made
first citizen before the appointed time; and Cicero,
who won the consulship by the wealth of his oratory.
Here is the great line of Claudius \(c\); the leading
members of the Aemilian house; and the famed
Metelli. Here are Cato and Agrippa, who proved in
arms the one the master, the other the maker of his
destiny; and the Julian \(d\) who boasted descent from
Venus. Augustus has come down from heaven and
heaven one day will occupy, guiding its passage
through the zodiac with the Thunderer \(e\) at his side;
in the assembly of the gods he will behold mighty
Quirinus and him whom he himself has dutifully added
as a new deity to the powers above, on a higher plane
than shines the belt of the Milky Way. There is the
gods' abode, and here is theirs, who, peers of the gods
in excellence, attain to the nearest heights.

Now before I proceed to ascribe to the stars \(f\)
their powers and tell in my song of the fateful laws
of the signs, I must complete the picture of heaven
and note whatever in the whole system shines with

\(a\) Publius Cornelius Scipio Africanus, who defeated
Hannibal at Zama in 202 B.C., and his grandson by adoption
Aemilianus, who destroyed Carthage in 146 B.C.: an imitation of
Virgil, Aen. 6. 842f.

\(b\) In 79 B.C. over the Marians in Sicily and Africa, in 71
over Sertorius in Spain, and in 61 over the pirates and
Mithridates. The poet's chronology is not quite accurate,
since Pompey became consul before the legal age in 70 (i.e.
before his third triumph).

\(c\) Julius Caesar.

\(e\) Jupiter.

\(f\) "Planets" says Housman, addendum to 1. 805-808, but
this is too specific. Since the poet does not proceed to deal
with the planets, it seems best to interpret the word generally:
he means, of course, no more than "before I proceed to the
astrological part of my work."
quidquid ubique nitens vigeat quandoque notandum est.
sunt etenim raris ortis natalibus ignes,
protinus et rapti. subitas candescere flammam
sive, quod ingenitum terra spirante vaporem
umidior sicca superatur spiritus aura,
nubila cum longo cessant depulsa sereno
et solis radiis arescit torridus aer,
apta alimenta sibi demissus corripit ignis
materiamque sui deprendit flamma capacem,
et, quia non solidum est corpus, sed rara vagantur
principia aurarum volucrique simillima fumo,
in breve vivit opus coeptique incendia fine
subsistunt pariterque cadunt fulgentque cometae.
quod nisi vicinos agerent occasibus ortus
et tam parva forent accensis tempora flammis,
alter nocte dies esset, Phoebusque rediret,
immersum et somno totum deprenderet orbem.
tum, quia non una specie dispergitur omnis
aridior terrae vapor et comprehenditur igni,
diversas quoque per facies accensa feruntur
lumina, quae ruptis exsistunt nata tenebris.
num modo, ceu longi fluient de vertice crines,
flamma comas imitata volat, tenuisque capillos
diffusos radiis ardentibus explicat ignis;
nunc prior haec facies dispersis crinibus exit,
et glomus ardentis sequitur sub imagine barbae;
interdum aequali laterum compagine ductus

especial brightness at any place or time. For there
are fires born at infrequent intervals and forthwith
swept away. In times of great upheaval rare ages
have seen the sudden glow of flame through the
clear air and comets blaze into life and perish.
Maybe the earth breathes forth an inborn vapour,
and this damper breath is overpowered by an arid
air; when clouds are banished for long periods
of clear weather so that air grows hot and dry under
the rays of the sun, fire then descends and seizes its
apt sustenance and a flame takes hold of the matter
that suits its nature; and since there is no solid body,
but only the wandering elements of the breezes,
tenuous and most like to drifting smoke, the action
is short-lived and the fires last no longer than the
moment of their beginning: the comets perish as
they blaze. Were their risings not near neighbour
to their sinkings and the duration of the kindled
flames not so short, a second daytime would exist
by night, and the Sun would return to find the whole
world fast asleep. Moreover, since all the drier
exhalation from the earth is spread abroad and
catches fire in no uniform manner, it is also in
different shapes that we see those kindled lights
which spring to life and shatter the darkness. For
sometimes, as though long tresses were flowing down
from a person's head, the flame flies in the guise of
hair, and the slender fire lets loose its streaming
locks in brilliant rays; and now the tresses are
scattered and this former appearance ends, succeeded
by a tuft in the likeness of a fiery beard. Occa-
sonally the outline of a comet's sides fashions with
MANILIUS

quadratamve trabem fingit teretemve columnam,
quin etiam tumidis exaequat dolia flammis
procere distenta uteros, artosque capellas
mentitur parvas ignis glomeratus in orbes
hirta figurantis tremulo sub lumine menta,
lampadas et fissas ramosos fundit in ignes.
et tenuem longis iaculantur tractibus ignem
praecipites stellae passimque volare videntur,
cum vaga per liquidum scintillant lumina mundum
exsiliuntque procul volucris imitata sagittas,
ardua cum gracili tenuatur semita filo.
sunt autem cunctis permixti partibus ignes,
qui gravidas habitant fabricantes fulmina nubes
et penetrant terras Aetnamque minantur Olympo
et calidas reddunt ipsis in fontibus undas
ac silice in dura viridique in cortice sedem
inveniunt, cum silva sibi collisa crematur ;
ignibus usque adeo natura est omnis abundans :
ne mirere faces subitas erumpere caelo
aeraque accensum flammis lucere coruscis
arida complexum spirantis semina terrae,
que volucer pascens ignis sequiturque fugitque,
fulgura cum videas tremulum vibrantia lumen
imbribus e mediis et caelum fulmine ruptum.
sive igitur ratio praebentis semina terrae
in volucris ignes potuit generare cometas ;
sive illas natura faces obscura creavit
sidera per tenuis caelo lucentia flammis,
sed trahit ad semet rapido Titaniu aestu
involvitque suo flammantis igne cometas
ac modo dimittit, sicut Cyllenius orbis

ASTRONOMICA, 1. 841–871

even dimensions a rectangular beam or a rounded column. Then again, the fire of comets may match
with swollen flames casks with greatly distended
paunches; or, massed in compact circles the flicker-
ing light of which resembles their shaggy chins, it
may feign the appearance of small goats; or it may
produce torches which are split into several branches
of flame. There are also shooting stars, which hurl
long trails of slender fire and are seen flying every-
where, when wandering lights flash through the
clear sky, and dart afar like winged arrows, tracing
the slender line of a path on high. Indeed, fire is
found mingled with every part of the universe; it
dwells in the laden clouds and forges lightning, it
makes its way into the earth and threatens heaven
with the flames of Etna, it causes waters to boil at
their very sources, and finds a habitation in hard
flint and in verdant bark, when trees dashed against
trees are set afame; to such an extent does all
nature abound with fire. So wonder not that torches
suddenly burst forth from the skies; and that the
air is kindled and shines with flickering flames
after embracing the dry seeds exhaled by the earth,
seeds which the swift fire, as it feeds, both pursues
and shuns, for you see the lightning hurl its quivering
flash from the midst of a rainstorm and the heavens
rent with the thunderbolt. Possibly it is the principle
of earth supplying seed for fleet fire which has given
birth to comets; or perhaps in those torches nature
has created dim stars that shine in heaven with
meagre flames, but the Sun with its consuming heat
attracts the blazing comets to itself, absorbs them
in its own fire, and then releases them: just so do

843 partasque
844 parvis signis
846 menses
849 crinibus
850 nitidum
860 exurunteque
867 ob cuncta
et Venus, accenso cum ducit vespere noctem, saepe latent falluntque oculos rursusque revisunt; seu deus instantis fati miseratus in orbem signa per affectus caelique incendia mittit; numquam futtilibus excanduit ignibus aether, squalidaque elusi deplorant arva coloni, et steriliis inter sulcos defessus arator ad iuga maerentis cogit frustrata iuvencos. aut gravibus morbis et lenta corpora tabe corripit exustis letalis flamma medullis labentisque rapit populos, totasque per urbes publica succensis peraguntur iusta sepulcris. qualis Erectheos pestis populata colonos extulit antiquas per funera pacis Athenas, alter in alterius labens cum fata ruebant, nec locus artis erat medicae nec vota valebant; cesserat officium morbis, et funera derant mortibus et lacrimae; lassus defecerat ignis et coacervatis ardebant corpora membris, ac tanto quondam populo vix contigit heres. talia significant lucentes saepe cometae: funera cum facibus veniunt, terrisque minantur ardentis sine fine rogos, cum mundus et ipsa aegrotet natura hominum sortita sepulcrum. quin et bella canunt ignes subitosque tumultus et clandestinis surgentia fraudibus arma.
externe modo per gentes ut, foedere rupto
cum fera ductorem rapuit Germania Varus
infecitque trium legionum sanguine campos,
ererunt toto passim minitantia mundo
lumina, et ipsa tuit bellum natura per ignes
opposuitque suas vires finemque minata est.
ne mirere gravis rerumque hominumque ruinas,
saepe domi culpa est : nescimus credere caelo.
civilis etiam motus cognataque bella
significant. nec plura alias incendia mundus
sustinuit, quam cum ducibus iurata cruentis
arma Philippeos implerunt agmine campos,
vixque etiam sicca miles Romanus harena
ossa virum lacerosque prius super astitit artus,
perque patris pater Augustus vestigia vicit.
necedum finis erat : restabant Actia bella
dotali commissa acie, repetitaque rerum
alea et in ponto quaequis rector Olympi,
femineum sortita iugum cum Roma pependit
atque ipsa Isiaco certarunt fulmina sistro ;
restabant profugo servilia milite bella,

pompa rependit

ASTRONOMICA, 1. 898-919
uplifted in stealthy treachery; so of late, a when
in foreign parts, its oaths forsworn, barbarous
Germany made away with our commander Varus
and stained the fields with three legions' blood, did
menacing lights burn in every quarter of the skies;
nature herself waged war with fire, marshalling her
forces against us and threatening our destruction.b
Wonder not at the grievous disasters which betide
man and man's affairs, for the fault oft lies within
us: we have not sense to trust heaven's message.
Comets also presage civil discord and strife between
kin. At no other time did heaven experience more
conflagrations than when the sworn forces of the
blood-stained conspirators c filled with their ranks
the plains of Philippi, and on sand scarcely yet dry of
blood d the Roman legionary took his stand on the
bones of warriors and limbs mangled in former fighting;
the empire's armed might engaged in conflict
with itself, and Augustus, father of his country,
marching in his father's steps, prevailed. Nor was
this all: war at Actium was still to come, waged by
an army pledged in dowry, when the destiny of
the world was again at stake and the ruler of heaven
was determined on the sea; the fate of Rome,
threatened with a female yoke, hung in the balance,
and the very thunderbolt clashed with the sistrum of
Isis.c Still to come f were battles against slaves

a The disaster of the Saltus Teutoburgiensis, inflicted on
the Romans by Arminius, occurred in A.D. 9. Housman
interprets modo (898) ... etiam (906) ... as "now ... now
...," understanding 898-903 and 904 ff. as two examples of
the insurgency referred to in 896 f. Bühler (490 f.), however,
convincingly identifies the architecture of the passage as
896-903 (treachery of arms) followed by 904 ff. (civil war).
b Housman's interpretation "... against herself and
threatening her own destruction" seems less logical than
Bühler's (491), adopted in the translation.
c Brutus and Cassius.
d That the battles of Pharsalus and Philippi (160 miles
apart) were fought on the same spot is a poetic fancy for
which Virgil, Georg. 1. 489 ff., is responsible.
ce That is, the Roman gods, whose weapon was the thunder-
bolt, clashed with the Egyptian deities armed with the sistrum.
f Hardly: the resistance of Sextus Pompeius was broken
by the year 36 and he himself executed in 35, whereas the
battle of Actium did not take place until 31.
cum patrios armis imitatus filius hostes
aequora Pompeius cepit defensa parenti.
sed satis hoc fatis fuerit: iam bella quiescant
atque adamanteis discordia vincta catenis
aeternos habeat frenos in carcere clausa;
sit pater invictus patriae, sit Roma sub illo,
cumque deum caelo dederit non quaerat in orbe.

a May Rome not miss the deified Julius, seeing that she
has Augustus, still alive, to take care of her.

joined by runaway soldiers, when a son took up arms
after the example of his father's foes and a Pompey
infested the seas which his parent had swept clean.
Let fate content itself with this! May wars now
cease and, fettered with bonds of adamant, may
discord, prisoned fast, be curbed for evermore!
Unconquered be the father of our fatherland; may
Rome serve none but him; and for all that she has
given a god to heaven, may she miss him not on
earth! a
BOOK TWO

Considering its technical nature the second book is very elegantly written: it deals with the two circles involved in every horoscope—the movable circle of the twelve zodiacal signs and the immovable circle of the twelve temples. First, however, we are regaled with an extended proem celebrating those poets who have inaugurated different genres of hexameter poetry; this naturally leads to Manilius himself, who renews his claim of originality and his confession of the Stoic creed. He thereupon embarks on an exhaustive description of the signs of the zodiac: their groupings, their characteristics, their aspects, their tutelary deities, the parts of the body subject to them, and their tangled relationships. We learn of those portions of the zodiacal signs called dodecatemories, though the poet soon leaves this difficult subject, emphasizing that astrological like any other teaching must be imparted in a progressive and logical order. The last part of the book sets forth the special significance of the four cardinal points and the quadrants between them; and enumerates the twelve segments of this circle together with the aspects of human existence over which they preside.
LIBER SECUNDUS

Maximus Iliaece gentis certamina vates
et quinquaginta regum regemque patremque
Hectoraue Acacidae victamque sub Hectore Troiam,
erremque ducis totidem, quot vicerat, annis
infestum experti dominum maris atque renato
instantem bello geminataque Pergama ponto
ultimaque in patria captisque penatibus arma
ore sacro cecinit ; patriam cui turba petentem,
dum dabat, eripuit, cuiusque ex ore profusos
omnis posteritas latices in carmina duxit
unius fecunda bonis. sed proximus illi
Hesiodus memorat divos divumque parentes
et chaos enixum terras orbemque sub illo
infantem et primos titubantia sidera cursus
Titanasque senes, Iovis et cunabula magni

BOOK 2

The greatest of bards\(^a\) with utterance inspired sang
the struggle of Ilus' race, a king and father of fifty
kings,\(^b\) and Hector by Achilles and Troy with Hector
vanquished; and the roaming of that hero who for
as many years as his conquest had taken encountered
Neptune's anger, and in a renewal of war his assault,
and Pergamum resurrected on the sea and the final
combat in native land and home held by intruders.
The host of claimants\(^c\) for his birthplace, in giving
him many, has left him with none. And all posterity
has for its verse drawn on the rich stream issuing
from his lips and, daring to channel his river into their
slender rills, has become fertile by the wealth of one.
But Hesiod\(^d\) is next to him and tells of the gods and
parents of the gods, Chaos in travail with Earth, and
after Chaos the childhood of the world, the stars
faltering as they first embarked on their courses, the
ancient Titans, the cradling of mighty Jove, Jove
inhabitants claims him as her son." Bentley, who with the
arresting conjecture patriam cui Graecia, septem ("Greece
robbed him of his birthplace by giving him seven") first
restored the meaning of these lines, quotes the hexameter
tag Smyrna, Rhodos, Colophon, Salamin, Ios, Argos,
Athenae.

\(^a\) Homer: 1-3 describe the Iliad, 4-6 the Odyssey.
\(^b\) Priam (son of Laomedon, son of Ilus).
\(^c\) Cf. Cert. Hom. et Hes. (Loeb Hesiod p. 566): "But, as
for Homer, you might almost say that every city with its

\(^d\) 12-23 (= 18) Theogony; 19-24 Works and Days. The
summary given by Manilius, however, is inaccurate and
misleading.
et sub fratre viri nomen, sine matre parentis,
atque iterum patrio nascentem corpore Bacchum,
silverumque deos secretaque numina Nymphas. 23
quin etiam ruris cultus legesque notavit 19
militiamque soli, quod colles Bacchus amaret,
quod fecunda Ceres campos, quod Pallas utrumque,
atque arbusta vagis essent quod adultera pomis;
omniaque immenso volitantia lumina mundo, 18
pacis opus, magnos naturae condit in usus. 24
astrorum quidam varias dixere figuras,
signaque diffuso passim labentia caelo
in proprium cuiusque genus causaque tulere;
Perseus et Andromedan poena matremque dolentem
Erigonen ictuque Nepam spolioque Leonem
et morsu Cancrum, Pisces Cythereide versa,
Lanigerum victo ducentem sidera ponto,
ceteraque ex variis pendentia astra
aethera per summum voluerunt fixa revolvi.
quorum carminibus nihil est nisi fabula caelum
terraque composuit mundum quae pendet ab illo.

a He was both brother and husband of Juno.
b Minerva.
c Through a ruse of Juno Semele, six months pregnant,
was frightened to death by the thunderbolts of her lover,
Jupiter; however he rescued her unborn child, Bacchus, and
sewed him in his thigh, whence he was "born again" at full
time (cf. Apollodorus, Bibl. 3. 4. 3).
d The vine.
e Wheat.
f The olive.
g Including Aratus.
h Callisto.
i For these and other catasterisms see Introduction
pp. xxiv ff.
MANILIUS

quin etiam ritus pastorum et Pana sonantem in calamos Sicula memorat tellure creatus, nec silvis silvestre canit perque horrida motus rura serit dulcis Musamque inducit in aulas. ecce alius pictas volucretes ac bella ferarum, ille venenatos angues aconitaque et herbas fata reftert vitamque sua radice ferentis. quin etiam tenebris immersum Tartaron atra in lucem de nocte vocant orbemque revolvunt interius versum naturae foedere rupto. omne genus rerum doctae cecinere sorores, omnis ad accessus Heliconos semita trita est, et iam confusi manant de fontibus arnnes nec capiunt haustum turbamque ad nota ruentem. integra quaeramis rorantis prata per herbas undamque occultis meditam murmur in antris, quam neque durato gustarint ore volucretes, ipse nec aetherio Phoebus libaverit igni. nostra loquar, nulli vatum debebimus orsa, nec furtm sed opus veniet, soloque volamus in caelum curru, propria rate pellimus undas. namque canam tacita naturae mente potentem infusumque deum caelo terrisque fretoque ingentem aequali moderantem foedere molem, totumque alterno consensu vivere mundum et rationis agi motu, cum spiritus unus

39 pecorum 40 hic nata per
42 auras 67 ora

a Theocritus.
b Possibly a Greek source of Macer's Ornithogonia and Grattius's Cynegistica.
c Nicander in his Theriaca and Alexipharmaca respectively.

shepherds and Pan piping upon his reeds are told by a son a of Sicily's isle: to the woods he sings a more than woodland strain, sows tender emotions over the rugged countryside, and brings the Muse to the steading. See, another b tells of brightly coloured birds and warfare against beasts, and one c of envenomed snakes and again of aconite and herbs which carry life and death in their roots. Next there are those d who summon gloom-shrouded Tartarus from the blackness of night into the light of day and, breaking nature's covenant, turn the world inside out and bring forth what lies within. Every kind of theme the learned sisters have hymned, and worn is every path which leads to Helicon; turbid are the waters which now trickle from those springs, and insufficient are the draughts therefrom for the crowds that flock to the well-known haunts. Fresh meadows let us seek over the dewy grass and streams that rehearse their murmurings in hidden caves, streams neither tasted by beak of bird nor sipped by celestial fire of Phoebus himself. Mine own theme shall I sing, my words shall I owe to none amongst bards, and there shall emerge no stolen thing, but work of my own contriving; in a lone car I soar to the heavens, in a ship of my own I sweep the seas. For I shall sing of God, silent-minded monarch of nature, e who, permeating sky and land and sea, controls with uniform compact the mighty structure; how the entire universe is alive in the mutual concord of its elements and is driven by the pulse of reason,

d Perhaps referring to the Greek source of Lucan's Catachtonion.

c Cf. 1. 247-254, 3. 48-55, 4. 888-890.
per cunctas habitet partes atque irriget orbem
omnia pervolitans corpusque animale figuret.
quod nisi cognatis membris contexta maneret
machina et imposito pareret tota magistro
ac tantum mundi regeret prudentia censum,
non esset statio terris, non ambitus astra,
eraretque vagus mundus standove rigeret,
nec sua dispositos servarent sidera cursus
noxque alterna diem fugeret rursumque fugaret,
non imbres alerent terras, non aethera venti
nee pelagus fontes, nec staret summa per omnis
par semper partes aequo digesta parente,
ut neque deficerent undae nec sideret orbis
nee pelagus fontes, nec staret summa per omnis
par semper partes aequo digesta parente,
necestacio terris, non ambitus astra,
eraretque vagus mundus standove rigeret,
nec sua dispositos servarent sidera cursus
noxque alterna diem fugeret rursumque fugaret,
non imbres alerent terras, non aethera venti
nee pelagus fontes, nec staret summa per omnis
par semper partes aequo digesta parente,
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eraretque vagus mundus standove rigeret,
nec sua dispositos servarent sidera cursus
noxque alterna diem fugeret rursumque fugaret,
non imbres alerent terras, non aethera venti
nee pelagus fontes, nec staret summa per omnis
par semper partes aequo digesta parente,
MANILIUS

mota tenet, nunc diverso stimulata recessu,
nunc anni spatio Phoebum comitata volantem;
sic summersa fretis, concharum et carcere clausa,
ad lunae motum variant animalia corpus
et tua damna, tuas imitantur, Delia, vires;
tu quoque fraternis sic reddis curribus ora
atque iterum ex isdem repetis, quantumque reliquit
aut dedit ille, refers et sidus sidere constas;
denique sic pecudes et muta animalia terris,
cum maneant ignara sui legisque per aevum,
natura tamen ad mundum revocante parentem
attollunt animos caelumque et sidera servent
corporaque ad lunae nascentis cornua lustrant
venturasque vident hiemis, reditum serena.

quis dubitet post haec hominem coniungere caelo,
cui, cupiens terras ad sidera surgere, munus
eximium natura dedit linguamque capaxque
ingenium volucremque animum, quem denique in unum
descendit deus atque habitat seque ipse requirit?
mitte alias artes, quarum est permissa facultas
invidiosa adeo, nec nostri munera census:
[mitto quod aequali nihil est sub lege tributum,
quo patet auctoris summam, non corporis, esse;
mitto quod certum est et inevitabile fatum
materiaeque datum est cogi sed cogere mundus] 
quis caelum posset nisi caeli munere nosse,
et reperire deum, nisi qui pars ipse deorum est?

95 et tum
115 munera nosset

110 infidos

ASTRONOMICA, 2. 91-116

Moon, now provoked by her retreat to the other side of the sky, and now attendant upon the Sun’s yearly revolution; thus that, submerged beneath the waves and in prison-shell confined, animals adapt their forms to the motions of the Moon and copy your waning, Delia, and your growth; thus you too return your features to your brother’s car and a second time from it reseek them, and as much as he has grudged or lavished on you do you reflect, your star dependent on his. Thus lastly with the herds and dumb animals on earth: though they remain for ever ignorant of themselves and of law, nevertheless when nature summons them to the parent heaven, they lift up their minds and watch the sky and stars: they cleanse their bodies on beholding the horns of the nascent Moon, and note the storms about to come, the fine weather about to return. Who after this can doubt that a link exists between heaven and man, to whom, in its desire for earth to rise to the stars, gifts outstanding did nature give and the power of speech and breadth of understanding and a wing-swift mind, and into whom alone indeed has God come down and dwells, and seeks himself in man’s seeking of him? Pass over other arts in which man is granted such enviable competence, gifts above our estate. Who could know heaven save by heaven’s gift and discover God save one who

e I.e. other than astrology.

f [111-114] interrupting the context (of man’s affinity with heaven) with irrelevant doctrines: “I pass over the fact that nothing is given with impartial distribution, from which it is clear that the whole is the work of the creator, not of matter itself. I pass over the fact that fate is sure and inevitable and that it is given to matter to suffer, to heaven to exercise, compulsion.”

91
quisve hanc convexi molem sine fine patentis
signorumque choros ac mundi flammae tecta,
aeternum et stellis adversus sidera bellum
[ac terras caeloque fretum subiectaque utrisque] 120
cernere et angusto sub pectorc claudere posset,
i sanctos animis oculos natura dedisset
cognatanque sibi mentem vertisset ad ipsam
et tantum dictasset opus, caeloque veniret
quod vocat in caelum sacra ad commercia rerum ?
quis neget esse nefas invitum prendere mundum
et velut in semet captum deducere in orbem ?
sed, ne circitum longo manifesta probentur,
ipsa fides operi faciet pondusque fidemque ;
nam neque decipitur ratio nee decipit umquam.
rite sequenda via est ac veris credita causis,
eventusque datur qualis praedicitur ante.
quod Fortuna ratum faciat, quis dicere falsum
audeat et tantae suffragia vincere sortis ?

Haec ego divino cupiam cum ad sidera flatu
ferre, nec in turba nec turbae carmina condam;
sed solus, vacuo veluti vectatus in orbe
liber agam currus non occursantibus ullis
nec per iter socios commune regentibus actus,
sed caelo noscenda canam, mirantibus astris
et gaudente sui mundo per carmina vatis,
vell quibus illa sacros non invidere meatus
notitiamque sui, minima est quae turba per orbem.

shares himself in the divine? a Who could discern
and compass in his narrow mind the vastness of this
vaulted infinite, the dances of the stars, the blazing
dome of heaven, and the planets’ everlasting war
against the signs, b had not nature endowed our
minds with divine vision, had turned to herself a
kindred intelligence, and had prescribed so great a
science? Who, unless there came from heaven a
power which calls us heavenward to the sacred
fellowship of nature? Who could deny the sacrilege
of grasping an unwilling heaven, enslaving it, as it
were, in its own domain, and fetching it to earth?
ct But, lest it take a long digression to vouch for what is
plain to see, the faith it keeps c will create for our
science authority and faith in it; for neither does
our system deceive nor ever is deceived. Rightly
and for true reasons trusted is the path that one
must take, and the outcome follows even as before
foretold. What Fortune has confirmed, what man
would dare call false, gainsaying the casting of so
great a vote?

136This is the theme I should wish with breath
inspired to carry to the stars. Not in the crowd nor
for the crowd shall I compose my song, but alone, as
though borne round an empty circuit I were freely
driving my car with none to cross my path or steer a
course beside me over a common route, I shall sing
it for the skies to hear, while the stars marvel and the
firmament rejoices in the song of its bard, and for
those to whom the stars have not grudged knowledge
of themselves and their sacred motions, the smallest
“... and land and sea beneath the sky, and what there is
beneath each,...”

c I.e. by its true predictions (cf. 131-133).
illa frequens, quae divitias, quae diligit aurum, 145
imperia et fasces mollemque per otia luxum
et blandis diversa sonis dulcemque per aures
affectum, ut modico noscenda ad fata labore.
hoc quoque fatorum est, legem perdiscere fati.

Et primum astrorum varia est natura notanda 150
carminibus per utrumque genus. nam mascula sex sunt,
diversi totidem generis sub principe Tauro :
cernis ut aversos redeundo surgat in artus.
alternant genus et vicibus variantur in orbem.

Humanas etiam species in parte videbis, 155
nec mores distant : pecudum pars atque ferarum
ingenium facient. quaedam signanda sagaci
singula sunt animo, propria quae sorte feruntur :
nunc binis insiste ; dabunt geminata potentis
per socium effectus. multum comes addit et aufert,
ambiguisque valent, quis sunt collegia, fatis
ad meruit noxamque. duos per sidera Pisces
et totidem Geminos nudatis aspice membris.
his coniuncta manent alterno bracchia nexus,
dissimile est illis iter in contraria versis. 160
par numerus, sed enim dispar natura notanda est.

atque haec ex paribus toto gaudentia censu
145 frequens] fluit
153 adversus ... arcum
146 adversa
147 quae iam

a Rendering fasces, the bundle of rods and axe carried by
the lictors before the chief officers of state.
b Cf. 4. 118.
c Henceforth throughout the Astronomica "signs" will
usually mean the signs of the zodiac.
d Thus masculine are \( \pi \Pi \Omega \equiv \uparrow \equiv \); feminine \( \& \varpi \Pi \Omega \equiv \uparrow \equiv \).
e Human : \( \Pi \varpi \equiv \); bestial : \( \& \varpi \Omega \equiv \uparrow \equiv \). Of the

society on earth. Vast is the crowd which worships
wealth and gold, power and the trappings of office,\( a \)
soft luxury amid ease, diversions of seductive music,
and a happy feeling stealing through the ears,
objects of slight labour compared with the under­
standing of fate. Yet this too is the gift of fate, the
will to learn fate’s laws.\( b \)

150 My song must first mark the differing nature of
the signs \( c \) according to sex. For six are masculine,
whilst as many, led by the Bull, are of the opposite
sex : you see how he rises by his hind limbs when he
reappears. They alternate their sex, changing one
after another round the circle.\( d \)
155 You will also behold the human form in some,
and the dispositions they bestow are not out of
keeping ; some will produce the nature of cattle and
beasts.\( e \) Certain signs must with careful mind be
noted as single, and these keep to an unshared
estate.\( f \) Now turn to the double signs ; being
doubled they will exert influences the power of which
is tempered by a partner. Much does a companion
add and take away, and the signs that are accom­
panied are powerful for good or ill, dispensing
doubtful destinies. Look among the constellations
for the two Fishes and Twins of like number with
limbs unclad. The arms of the Twins are for ever linked
in mutual embrace; but the Fishes face opposite
ways and have different courses. Mark well that, though
the two signs are alike in their duality, they are
unlike in their nature. These are they that of
the double signs go rejoicing in a full estate and
others \( \equiv \) is implied at 2. 528 to be human, while \( \uparrow \) plainly
combines both natures.

94
signa meant, nihil exterius mirantur in ipsis
amissumve dolent, quaedam quod, parte recisa
atque ex diverso commissis corpore membris,
ut Capricornus et intentum qui derigit arcum
iunctus equo : pars huic hominis, sed nulla priori.

[hoc quoque servandum est alta discrimen in arte,
distat enim gemini duo sint duplane figura]
quid etiam Erigone binis numeratur in aquis,
nec facies ratio duplex ; nam desinit aestas,
incipit autumnus media sub Virgine utrimque.

idcirco tropicis praecedunt omnibus astra
bina, ut Lanigero, Chelis Cancroque Caproque,
quod duplicis retinent conexo tempore vires.

ut, quos subsequitur Cancer per sidera fratres,
e geminis alter florentia tempora veris
sufficit, aestatem sitientem provehit alter ;
nudus uterque tamen, sentit quia uterque calorem,
ille senescentis veris, subeuntis at ille
aestatis : par est primae sors ultima parti.
quid etiam Arcitenens, qui te, Capricorne, sub ipso
promittit, duplici formatus imagine fertur :
mitor autumnus mollis sibi vindicat artus
materiamque hominis, fera tergo membra rigentem
excipiunt hiemem mutantque in tempora signum.
quosque Aries prae se mittit, duo tempora Pisces
bina dicant : hiemem hie claudit, ver incohat alter.
cum sol aequoreis revolans decurrit in aquis,

et nunciamque [hic]

Thus the double signs are IT U.

The argument developed by the poet presupposes that
the turning point of the seasons occurs in the first degree
of the tropic signs (see Introduction p. lxxxi). Notice that the
term is applied to Aries and Libra (equinoctial signs) as well
as Cancer and Capricorn, the signs properly tropic.

The Sun's annual orbit beginning in Aries.
hiberni coeunt cum vernis roribus imbris.
utraque sors umoris habet fluitantia signa.
Quin tria signa novem signis coniuncta repugnant
et quasi seditio caelum tenet. aspice Taurum
clunibus et Geminos pedibus, testudine Cancrum
surgere, cum rectis oriantur cetera membris;
ne mirere moras, cum sol aversa per astra
aestivum tardis attollat mensibus annum.
Nec te praetereat nocturna diurnaque signa
quae sint perspicere et propria deducere lege,
non tenebris aut luce suam peragentia sortem
(nam commune foret nullo discrimine nomen,
omnia quod certis vicibus per tempora fulgent
et nunc illa dies, nunc noctes illa sequuntur),
sed quibus illa parens mundi natura sacratas
temporis attribuit partes statione perenni.

Nec te praetereat nocturna diurnaque signa
quae sint perspicere et propria deducere lege,
non tenebris aut luce suam peragentia sortem
(nam commune foret nullo discrimine nomen,
omnia quod certis vicibus per tempora fulgent
et nunc illa dies, nunc noctes illa sequuntur),
sed quibus illa parens mundi natura sacratas
temporis attribuit partes statione perenni.

nullaque Sagittari signum rabidique Leonis
et sua respiciens aurato vellere terga,
tum Pisces et Cancer et acri Scorpios ictu,
aut vicina loco, divisa aut partibus aequis,
omnia dicuntur similis sub sorte diurna.
cetera, vel numero consortia vel vice sedis,
interiecta locis totidem, nocturna feruntur.
quidam etiam sex continuis dixere diurnas
esse vices astris, quae sunt a principe signo
Lanigeri, sex a Libra nocturna videri.

Further, three adjacent signs are at variance
with the other nine and a kind of dissension takes
hold of heaven. Observe that the Bull rises by his
hind quarters, the Twins by their feet, the Crab by
his shell, whereas all the others rise in upright
posture; so wonder not at the delay when in tardy
months the Sun carries summer aloft through
signs which rise hind-first.

Fail not to perceive and from true rule deduce
what signs are nocturnal, and what diurnal: they
are not those that perform their function in darkness
or daylight (the name would apply to all alike, since
at regular intervals they shine at every hour, and
now the nocturnal ones accompany the day, now the
diurnal ones the night), but those on which nature,
mighty parent of the universe, bestowed sacred
portions of time in a permanent location. The signs
of the Archer and the fierce Lion, he who looks round
on the golden fleece of his back, then the Fishes and
Crab and the Scorpion of stinging lash, signs either
adjacent or spaced at equal intervals, are all under
like estate termed diurnal. The others, identical in
number and in the pattern of their spacing, for they
are inserted into as many places, are called nocturnal.
Some have also asserted that the diurnal stations
belong to the six consecutive stars which begin with
the Ram and that the six from the Balance count as

\[ \text{Aloft to the tropic of Cancer.} \]
\[ \text{Aries.} \]
\[ \text{See Introduction pp. xxxviii f.} \]
sunt quibus esse diurna placet quae mascula surgunt, 
femineam sortem tutis gaudere tenebris.

Quin non nulla tibi nullo monstrante loquuntur 
Neptuno debere genus, scopulosus in undis 
Cancer et effuso gaudentes aequore Pisces.

at, quae terrena censentur sidera sorte, 
princeps aramenti Taurus regnoque superbus 
lanigeri gregis est Aries pestisque duorum 
praedatorque Leo et dumosis 
Scorpios arvis.

sunt etiam mediae legis communia signa, 
ambiguus tergo Capricornus, Aquarius undis, 
umida terrenis aequali foedere mixta.

Non licet a minimis animum deflectere curis, 
nec quiequam rationis eget frustrave creatum. 
secundum est proprius Cancri genus, acer et ictu 
Scorpios, et partu compleentes aequora Pisces.
sed sterilis Virgo est, simili coniuncta Leoni, 
nec capit, aut captos effundit, Aquarius ortus. 
inter utrumque manet Capricornus corpore mixto 
et qui Cretaeo fulget Centaurus in arcu, 
communisque Aries aequantem tempora Libram 
et Geminos Taurumque pari sub sorte recenset.

Nec tu nulla putes in eo commenta locasse 
noctem ut positique

Second classification: diurnal: \( \gamma \odot \Pi \odot \Omega \odot \Pi \); nocturnal: \( \equiv \Pi \odot \gamma \odot \odot \).

Third classification (cf. 2. 151-154): diurnal: \( \gamma \odot \Omega \equiv \odot \); nocturnal: \( \odot \odot \Pi \odot \Omega \equiv \).

The lion preys on herds and flocks, the scorpion is dangerous to them.
naturam rerum, quod sunt currentia quaedam,
  ut Leo et Arcitenens Ariesque in cornua tortus ;
  aut quae recta suis librantur stantia membris,
  ut Virgo et Gemini, fundens et Aquarius undas ;
  vel quae fessa sedent pigras referentia mentes ;
  Taurus depositis collo sopitus aratris,
  Libra sub emerito considens orbe laborum,
  tuque tuos, Capricorne, gelu contractus in artus ;
  quaeve iacent, Cancer patulam distentus in alvum,
  Scorpios incumbens plano sub pectore terrae,
  in latus obliqui Pisces semperque iacentes.

Quod si sollerti circumspicis omnia cura,
  fraudata invenies amissis sidera membris.
  Scorpios in Libra consumit bracchia, Taurus
  succidit incurvo claudus pede, lumina Cancro
  desunt, Centauro superest et quaeritur unum.

sic nostros casus solatur mundus in astris
  exemploque docet patienter damna subire,
  omnis cum caelo fortunae pendeat ordo
  ipsaque debilibus formentur sidera membris.

Temporibus quoque sunt propriis pollentia signa :
  aestas a Geminis, autumnus Virgine surgit,
  bruma Sagittifero, ver Piscibus incipit esse.
  quattuor in partes scribuntur sidera terna ;
  hiberna aestivis, autumni verna repugnant.

a design of no purpose in that certain signs are
  running, as are the Lion, the Archer, and the Ram
  that ends in twisted horns ; or that some stand erect
  with their limbs perfectly poised, as the Virgin and
  Twins and Waterman pouring forth his stream ;
or that some sit fatigued and reflect their weariness
  of mind, the Bull slumberous now the plough has
  left his shoulder, the Balance that sinks down after
  discharging its round of tasks, and you, Capricorn,
  whose limbs are shrivelled by the frost ; or that some
  lie flat, the Crab sprawling with distended belly, the
  Scorpion reposing on the ground beneath its smooth
  breast, the Fishes swimming sideways, for ever
  horizontal.\textsuperscript{a}

\textsuperscript{256} Now if you examine all the signs with keen
  attention, you will find some bereft of limbs which are
  lost. The Scorpion expends its arms on the Scales,
  the Bull sinks lame with leg doubled under it, the
  Crab lacks eyes,\textsuperscript{b} whilst of the Centaur's one survives
  and one is missing.\textsuperscript{c} Thus the sky assuages our
  misfortunes in its stars, and by example teaches us
  to undergo loss with fortitude, since the whole scheme
  of fortune depends upon heaven, and even constella-
  tions are fashioned with limbs deformed.\textsuperscript{d}

\textsuperscript{265} The signs also enjoy power in their special
  seasons : summer comes with the Twins, autumn with
  the Virgin ; winter begins with the Archer, spring
  with the Fishes. The four divisions of the year are
  each allotted three signs ; winter's are at war with
  summer's, the vernal with those of autumn.\textsuperscript{e}

\textsuperscript{a} Running : \( \gamma \Omega \uparrow \); standing : \( \Pi \Xi \Xi \); sitting : \( \Xi \Xi \); lying : \( \Xi \Xi \).
\textsuperscript{b} Because it lacks bright stars (cf. 4. 530-534) ; there is an
elegant pun here, since \textit{lumina} can mean "bright stars" as
well as "eyes."
\textsuperscript{c} Sagittarius is figured in profile.
\textsuperscript{d} Deformed : \( \Xi \Xi \Xi \uparrow \).
\textsuperscript{e} Spring: \( \Xi \Gamma \uparrow \); summer: \( \Pi \Xi \Xi \); autumn: \( \Pi \Xi \Xi \Xi \); \( \Xi \Xi \Xi \).

102
Nor is it enough to know the special shapes of the signs and the individual ordinances which the stars impose on men at their birth; they also affect our destinies through their agreements with each other, for they rejoice in alliances and cooperate with one another according to their natures and locations. Where the circle of the zodiac’s rightward wheel is bounded, a line runs out into three equal lengths and joins itself at limits which are mutually extreme; the signs which the line strikes are called trigonal, because an angle is thrice formed and is assigned to three signs separated from each other by three intervening signs. The Ram beholds at equal distance the two signs of the Lion and the Archer rising on opposite sides of him; the signs of the Virgin and the Bull are in harmony with Capricorn; by the same principle the other trigonal signs which still remain are framed in the heavens in a like number of configurations: this is example enough. But the signs which are separated by quarters of the circle and are situated upon a figure with equal sides, the positions of which a square rule draws, these signs are called quadrate. Capricorn views Libra, whilst the Ram sees Capricorn ahead and is in turn beheld at an equal distance by the Crab; and the Crab is perceived by Libra’s stars as it follows on the left: for preceding signs are reckoned as right signs. Even thus may one divide all the signs into groups of as many parts, and out of the twelve signs

\[\text{Laeniger ex paribus spatis duo signa, Leonis atque Sagittari, diverso conspicit ortu; Virginis et Tauri Capricorno consonat astrum; cetera sunt similis ratione triangula signa per totidem sortes, desunt quae, condita mundo: [sed discrimen erit dextris laevisque: sinistra quae subeunt, quae praecedent dextra esse feruntur; dexter erit Tauro Capricornus, Virgo sinistra]. hoc satis exemplo est. at, quae divisa quaternis partibus aequali laterum sunt condita ductu quorum designat normalis virgula sedes, haec quadrata ferunt. Libram Capricornus et illum conspicit ante Aries atque ipsum a partibus aequis Cancer et hunc laeva subeuntis sidera Librae. semper enim in dextris censentur signa priora. sic licet in totidem partes diducere cuncta.\]
MANILIUS

ternaque bis senis quadrata effingere signis, 295
quorum proposito reddentur in ordine vires.

Sed si quis contentus erit numerasse quadrata, 300
divisum ut signis mundum putet esse quaternis,
aut tribus ac binis signis ornare trigonum,
ut socias vires et amicos exigat ortus
foederaque inveniat mundi cognata per astra,
falsus erit. nam, quia licet sint undique signa,
qui tamen et trinis, quae quinto quoque feruntur
asta loco, fuerint nati, sentire trigoni
non poterunt vires: licet illud nomine servent,
amiser loco dotes numerisque repugnant.
nam, cum sint partes orbis per signa trecentae
et ter vicenae, quas Phoebi circuit ardor,
tertia pars eius numeri latus efficit unum
in tris perducti partes per signa trigoni.
hanc autem numeri non reddit linea summam,
si signum signo, non pars a parte notetur,
quod, quamvis duo sunt ternis dirimentibus astra,
si tamen extremam laevi primaeque prioris
inter se conferre voles numerumque notare,
iter quinquagenas implebunt ordine partes;
transibit numerus formam finesque sequentis
consumet ductus. licet ergo signa trigona

ASTRONOMICA, 2. 295–318

create three squares, the powers of which shall be
described in the order I have set before me.a

But if anyone is content with reckoning squares
in the belief that the sky is divided into arcs of four
signs or with constructing a trigon with arcs of five
signs, hoping thus to determine the signs' powers in
alliance and the bonds of friendship between those
born under them and discover the federations of
heaven in kindred stars, that man will be deceived.
For, even supposing that there were sets of five signs
on every side, men who are born under such trine
signs as are positioned at every fifth place will
nevertheless be unable to feel the influences of the
trigon; though the signs keep the name of trigon,
they have forfeited its dowry by their position and
are in revolt against the true numbers. For since in
the zodiac there are three hundred and three score
degrees traversed by the fiery Sun, a third of that
number makes up one side of a trigon inscribed in the
zodiac to divide it into three equal parts. However,
the line does not give this numerical total, if sign is
measured from sign and not degree from degree;
for although you have two star-groups with three
between, b yet if you care to join to each other the
last point of the left sign and the first of the preceding
and mark the total, they will duly measure thrice
fifty degrees c; the number will be too great for the
form of a trigon and will trespass upon the territory
of the following line.d Thus, though such signs be

Aries, you will then have constructed an arc of 150 degrees,

a Squares: (1) \( \varphi \cong \gamma \); (2) \( \Omega \cong \Pi \); (3) \( \Pi \cong \chi \); see Introduction p. xli and figure 4.
b For example, take the trine signs Aries and Leo (which
are separated by the three signs Taurus, Gemini, and Cancer)
c and join the 30th degree of Leo to the 1st degree of

d ... which will trespass (30 degrees) upon the territory of
the following side of the trigon, which should have joined the
1st degree of Leo to the 1st of Sagittarius.

106
dicantur, partes non servant illa trigonas.
haec eadem species fallet per signa quadrata
(quod, cum totius numeri, qui construit orbem,
ter denae quadrum partes per sidera reddant,
evenit ut, prima signi de parte prioris
si partem ad summam ducatur virga sequentis,
bis sexagenas faciat; sin summa prioris
et pars confertur subeuntis prima, duorum
signorum in medio numerum transique referque,
triginta duplicat partes, pars tertia derit);
et, quamvis quartum a quarto quis computet astrum,
naufragium facient partes unius in ipsis.
non igitur satis est signis numerasse trigona
quadrative fidem quaeri per signa quaterna.
quadrati si forte voleis effingere formam,
aut trinis paribus facies cum membra trigoni,
hie poscit quintam partem centesima summa,
illic amittit decimam. sic convenit ordo.
et, quiscumque quater iunctis favet angulus usque,
quaeque loca in triplici signarit linea ductu
cum sinuata viae linquet dispendia recta,
his natura dedit communi foedera lege
inque vicem affectus et mutua iura favoris.
quocirca non omnis habet genitura trigonis
320
325
dena] triginta
subiunctis
transitique refertque
cae
cunctis
signata
343 f. = 318 f.
320
326
327
330
335
340
totum trigona
signum
signata

a For example, if from the 1st degree of Aries a line is
drawn to the 30th of Cancer (these being quadrate signs), it
makes 120 degrees; ...

b ... if the 30th degree of Aries and the 1st of Cancer are
connected, the intervening degrees (those of Taurus and
108
109

ASTRONOMICA, 2. 319–342
called trigonal, they do not preserve the correct
degrees of a trigon. The same fallacy will cause
deception in the case of quadrate signs: since,
of the circle's total number, thrice ten degrees for
every sign go to make up a square, it therefore
follows that, if from the first point of a preceding sign
a line is drawn to the last point of the quadrate sign
behind, it makes twice sixty degrees^; but if the
last point of the former and the first of that following
are connected, should you go over and count the
number shared by the two intervening signs, it will
double thirty degrees, and a third part of the requisite
total will be missing. And though a man compute a
fourth sign from a fourth, the degrees in themselves
will cause the wreck of a whole sign. It is therefore
not enough to count trigons by signs or to expect a
true square from signs at intervals of four. If per-
chance you wish to construct the figure of a square,
or when you are about to draw the sides of an
equilateral triangle, the sum of a hundred degrees
needs in the latter case increase of a fifth, in the
former suffers loss of a tenth. Thus does the count
tally. And whatever points joined in a series of four
the angle favours, and whatever points the straight
line marks in its threefold track when it leaves the
winding detour of the circumference, upon these has
nature bestowed federation and common law, mutual
goodwill and rights of friendship with each other.
Therefore not every geniture enjoys the common

Gemini) will amount to 60; and of the required 90 degrees
to be subtended by the side of a square, a third (30 degrees)
will be missing.

c The side of a trigon subtends 100 plus \frac{1}{3} of 100 = 120
degrees, of a square 100 minus \frac{1}{5} of 100 = 90 degrees.
MANILIUS

consensum signis, nec, cum sunt forte quadrata, 345
continuo inter se servant commercia rerum.
distat enim, partes consumat linea iustas
detrectetne modum numeri, quem circulus ambit,
nunc tris efficiens, nunc quattuor undique ductus,
quos in plura iubet ratio procedere signa
interdum, quam sunt numeris memorata per orbem.

Sed longe maior vis est per signa trigoni
quam quibus est titulus sub quarto quoque quadratis.
altior est horum summoto linea templo,
illa magis vicina meat caeloque recedit
et propius terras accedit visus eorum
aeraque infectum nostras demittit ad auras.

Debilia alternis data sunt commercia signis,
mutua nec magno consensu foedera servant,
invita angusto quod linea flectitur orbe.

nam, cum praeteriens formatur singula limes
sidera et alterno devertitur angulus astro
sexque per anfractus curvatur virgula in orbem,
a Tauro venit in Cancrum, tum Virgine tacta
Scorpion ingreditur, tum te, Capricorne, rigentem
et geminos a te Pisces aversaque Tauri
sidera contingens finit, qua coeperat, orbem.
alterius ductus locus est per transita signa,
uteque ea praeteraeas quae sunt mihi singula dicta,
flexibus et totidem similis sit circulus illi.

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feeling of its trigonal signs, nor do signs which happen
to be quadrate necessarily preserve community of
interests with each other. For it makes a difference
whether the line uses up the exact toll of its degrees
or rejects the limit to the circumference's total by
constructing on each side, in the one case three lines,
and in the other four, which the law of numbers some-
times forces to proceed into more signs than are
specified by the number of degrees in the zodiac.

But in the zodiac the trigon's power is far greater
than that of those signs to which, reckoned as fourth
from each other, is ascribed the title of quadrate.
The side of the quadrate signs is higher, and their
perimeter farther removed from us, whilst the side
of trigons travels closer and draws away from heaven:
their vision draws nearer to Earth and sends down
to our atmosphere an air tempered by their in-
fluences.

Weak is the connection between alternate signs,
and do they maintain with unfailing constancy the
federation between each other, because the line is
reluctant to bend in its circuit of short chords. A
track is formed which passes by one constellation at
a time, whilst the angle lodges at the alternate signs,
the line making six changes of direction in its curve
in the circle: it therefore leaves the Bull for the
Crab, then after touching the Virgin enters Scorpion,
thence reaches you, chill Capricorn, from you the
two Fishes and the stars of the Bull averse, and
finishes the circle where it began. The path of a
second line lies through the signs that the first
missed and is drawn in such a way that you pass by
each of the signs I mentioned, so that its circle
resembles the former in having as many chords.

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a It is implied that the quadrate relationship exists only in
quadrate degrees, e.g. 1°, 1°, 1°, 1°, 1°, and so on.
b Hexagons: (1) $\gamma \Pi \Omega \equiv \tau \equiv$; (2) $\delta \omega \pi \pi \pi \pi \pi \pi \pi$; see
Introduction p. xliii and figure 5.
tertia convexo conduntur signa recessu;
transversos igitur fugiunt subeuntia visus,
quod nimis inclinata iacent limisque videntur
vicinoque latent: ex recto certior ictus.
et, quia succedit convexo linea caelo,
singula circuitu quae tantum transeat astra,
visus eis procul est altoque vagatur Olympo
et tenuis vires ex longo mittit in orbem.
sed tamen est illis foedus sub lege propinqua,
quod non diversum genus est coeuntibus astris,
mascula sed maribus respondent, cetera sexus
feminei secum iungunt commercia mundi.
sic, quamquam alternis, par est natura figuris,
et cognata iacent generis sub legibus astra.
Iam vero nulla est haerentibus addita signis
gratia; nam consensus hebet, quia visus ademptus.
in seducta ferunt animos, quae cernere possunt.
sunt etiam adversi generis conexa per orbem
mascula femineis semperque obsessa vicissim.
[disparibus non ulla datur concordia signis]
Sexta quoque in nullas numerantur commoda vires,
virgula per totum quod par non ducitur orbem

Signs separated by one intervening sign are concealed in a curved recess; and so, though they follow the one in front, they escape its slanting gaze, since, lying at an angle too obtuse, they are only to be seen with sidelong glance and are hidden from their neighbour: sight strikes more surely straight ahead. And because their line comes close to the celestial vault, since in its circuit it only passes over one sign at a time, their sight of each other takes place at a great distance from us, ranging over the heights of heaven, and the influences it radiates from afar are faint when they reach the earth. However federation exists among them by virtue of their affinity, for the signs that are connected are not of unlike sex, but masculine respond to male, whilst the remainder are of female sex and form among themselves a heavenly fellowship. Thus is it that, though the signs of hexagons are alternate, their nature is similar, and as kindred stars they acknowledge the ties of sex.

But no friendliness towards one another has been granted to adjacent signs: sympathy between them is blunted because the sight of each other is denied them. Their attentions are bestowed on distant signs which they can see. Again they are signs of opposite sex, linked male to female right round the circle, and each in turn is for ever beset by its neighbours.\(^a\)

Sixth signs,\(^b\) as well, are not reckoned as capable of any influence, because their line is not traced through the whole circle in equal lengths, but strikes

\(^a\) [390]: “To signs unlike no concord of any kind is given.”
\(^b\) I.e. signs separated by four signs.
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sed duo signa ferit mediis summota quaternis, tertius absumpit ductus non sufficit orbe.

At, quae diversis et partibus astra refugent per medium adverso mundum pendentia vultu et toto divisa manent contraria caelo septima quaeque, loco quamvis summota feruntur, ex longo tamen illa valent viresque ministrant vel bello vel pace suas, ut tempora poscunt, nunc foedus stellis, nunc et dictantibus iras. quod si forte libet, quae sunt contraria, signa per titulos celebrare suas sedesque, memento solstitium brumae, Capricornum opponere Cancro, Lanigerum Librae (par nox in utroque diesque est), Piscibus Erigone, iuvenique urnaque Leonem; Scorpios e summo cum fulget, Taurus in imo est, et eadit Arcitenens Geminis orientibus orbis. [hos servant inter sese contraria cursus] sed, quamquam adversis fulgent contraria signis, natura tamen interdum sociata feruntur, et genere amplexis concordia mutua surgit: mascula se paribus vel sic, diversa suorum respondent generi. Pisces et Virginis artus adversi volitant, sed amant communia iura, et vincit natura locum; sed vincitur ipsa temporibus; Cancerque tibi, Capricorne, repugnat femina femineo, quia brumae dissidet aestas.

ASTRONOMICA, 2. 393-418
two signs with four intervening, whilst a third side does not fit in since the circle is exhausted.

But the signs which shine from opposite quarters, poised with faces confronting each other across mid-sky, and remain at two extremes with all heaven between are seventh signs: though remote from each other by position, they nevertheless exercise influence from afar and furnish their powers in war and peace, at the bidding of the times, for now the planets proclaim alliance and now strife. Wherefore if perchance you wish to recount the names and abodes of the opposite signs, be sure to match mid-summer against winter, Capricorn against Cancer, the Ram against the Balance (night and day in each are equal), Erigone against the Fishes, the Lion against the youth with his urn; when Scorpion shines overhead, the Bull is in the depths, and the Archer sets as the Twins rise above the earth. But though sign facing sign they shine opposed, yet because of their nature they are oft borne in alliance and a mutual sympathy springs up between them, linked as they are by the tie of sex: even in these circumstances male calls to male at one with him, and the other signs to their own sex. The Fishes and the the limbs of the Virgin fly in opposition but cherish the bonds they share, and the tie of sex prevails over location; but over this tie in turn the seasons prevail: Cancer resists Capricorn, though females both, since summer conflicts with winter. The one

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a For example, such a line drawn from Aries will strike first Virgo and then Aquarius, but it cannot then rejoin Aries, since between Aquarius and Aries lies only one sign (Pisces).

b Opposite signs: (1) ☉; (2) ☈; (3) ☊; (4) ☑; (5) ☙; (6) ☒: see Introduction p. xlv and figure 6. Here follows the interpolated [409]: "These are the courses kept by signs opposed to each other."

c I.e. in spite of being opposite signs.
hinc rigor et glacies nivibusque albentia rura,
hinc sitis et sudor nudusque in collibus orbis,
aestivosque dies aequat nox frigida brumae.
sic bellum natura gerit, discordat et annus,
ne mirere in ea pugnantia sidera parte.
at non Lanigeri signum Libraeque repugnant
in totum, quia ver autumno tempore differt
(fructibus hoc implet maturis, floribus illud)
se d ratione pari est, aequatis nocte diebus,
temporaque efficiunt simili concordia textu
permixtosque dies mediis hiemem inter et aestum
articulis uno servantia utrimque tenore
quo minus infesto decertent sidera bello.
talis erit ratio diversis addita signis.

His animadversis rebus quae proxima cura?
noscere tutelas adiectaque numina signis
et quae cuique deo rerum natura dicavit,
cum divina dedit magnis virtutibus ora,
condidit et varias sacro sub nomine vires,
pondus uti rebus persona imponere posset.
Lanigerum Pallas, Taurum Cytherea tuetur,
formosos Phoebus Geminos ; Cylenie, Cancerum,
Iupiter, et cum matre deum regis ipse Leonem ;
spicifera est Virgo Ceres fabricataque Libra
Vulcani ; pugnax Mavorti Scorpios haeret ;
venerantem Diana virum, sed partis equinae,
atque angusta fovet Capricorni sidera Vesta ;

424 repugnat 428 possit
430 tempore utrumque

-- Cybele, the great mother-goddess, who is regularly
attended by lions; she is mentioned only for rhetorical
ornament, and the poet does not mean that she shares Jupiter's
guardianship of Leo.

-- Of 1. 271, note.
e Iovis adverso Iunonis Aquarius astrum est
agnoscitque suos Neptunus in aethere Pisces.
hinc quoque magna tibi venient momenta futuri,
cum ratio tua per stellas et sidera curret
argumenta petens omni de parte viasque
artis, ut ingenio divina potentia surgat
exaequentque fidem caelo mortalia corda.

Accipe divisas hominis per sidera partes
singulaque imperiis propriis parentia membra,
in quas praecipias toto de corpore vires
exercent. Aries caput est ante omnia princeps
sortitus censusque sui pulcherrima colla
Taurus, et in Geminis aequali bracchia sorte
scribuntur conexa umeris, pectusque locatum
sub Cancro est, laterum regnum scapulaeque Leonis,
Virginis in propriam descendunt ilia sortem,
Libra regit clunes, et Scorpios inguine gaudet,
Centaur femina accedunt, Capricornus utrisque
imperiat genibus, crurum fundentis Aquari arbitrium est, Piscesque pedum sibi iura reposcunt.

Quin etiam propriis inter se legibus astra
conveniunt, ut certa gerant commercia rerum,
inque vicem praestant visus atque auribus haerent
aut odium foedusve gerunt, conversaque quaedam
in semet proprio ducuntur prona favore.

idcirco adversis non numquam est gratia signis,

\[450\] Jupiter \(a\) Juno has the sign of Aquarius, and Neptune acknowledges the Fishes as his own for all that they are in heaven. This scheme too will provide you with important means of determining the future when, seeking from every quarter proofs and methods of our art, your mind speeds among the planets and stars so that a divine power may arise in your spirit and mortal hearts \(b\) no less than heaven may win belief.

\[453\] Now learn how the parts of the human frame are distributed among the constellations, and how the limbs are subject each to a particular authority; over these limbs, out of all the parts of the body, the signs exercise special influence. The Ram \(c\) as chieftain of them all is allotted the head, and the Bull receives as of his estate the handsome neck; evenly bestowed,\(d\) the arms to shoulders joined are accounted to the Twins; the breast is put down to the Crab, the realm of the sides and the shoulder-blades are the Lion's, the belly comes down to the Maid as her rightful lot; the Balance governs the loins, and Scorpion takes pleasure in the groin; the thighs hie to the Centaur, Capricorn is tyrant of both knees, whilst the pouring Waterman has the lordship of the shanks, and over the feet the Fishes claim jurisdiction.

\[466\] Moreover, the stars have agreements among themselves according to special laws, and so enjoy fixed associations: upon each other they direct their gaze and to each other give ear; else they bear hatred or friendship; some are introverted and in yielding to their self-esteem are drawn into themselves. And so sometimes goodwill exists between stars that are opposed and war is waged between
et bellum sociata gerunt; alienaque sede
inter se generant coniunctos omne per aevum,
a triquetrisque orti pugnant fugiuntque vicissim;
quid deus, in leges mundum cum conderet omnem,
affectus quoque divisit variantibus astris,
atque aliorum oculos, aliorum contulit aures,
unxit amicitias horum sub foedere certo,
illis perpetuas statuit discordibus iras,
cernere ut inter se possent audireque quaedam,
diligerent alia et noxas bellumque moverent,
his etiam propriae foret indulgentia sortis,
se diligerent semper sibique ipsa placerent;
sicut naturas hominum plerasque videmus
qui genus ex signis ducunt formantibus ortus.

Consilium ipse suum est Aries, ut principe dignum est,
se Libramque videt, frustratur amando
Taurum; Lanigero qui fraudem nectit et ultra
fulgentis geminos audit per sidera Pisces,
Virgine mens capitur visa. sic vixerat ante
Europam dorso retinentem cornua laeva
indutusque Iovi. Geminorum ducitur auris
ad iuvenem aeternas fundentem Piscibus undas
inque ipsos animus Pisces ocultique Leonem.
Cancer et adverso Capricornus conditus astro
in semet vertunt oculos, in mutua tendunt
auribus, et Cancri captatur Aquarius astu.
at Leo cum Geminis aciem coniungit et aurem
Centauro ferus et Capricorni diligit astrum.
Erigone Taurum spectat sed Scorpion audit

As befits a leader, the Ram is his own counsel; he listens to himself and beholds the Balance, and his love for the Bull is thwarted. Against him the Bull weaves a net of deceit and hears the twin Fishes which shine beyond the Ram, whilst his heart is entranced at the sight of the Maid. Thus thrilled once long ago and serving as Jove’s disguise, he had borne Europa on his back as with her left hand she clutched his horn. The hearing of the Twins is drawn to the youth who pours for the Fishes a never-ending stream, their hearts to the Fishes themselves, and their eyes to the Lion. The Crab and the Sea-goat’s sign placed opposite turn their eyes upon themselves, at one another strain with their ears, whilst the Waterman is taken in by the wiles of the Crab. But the Lion joins his gaze to that of the Twins and his hearing—for he too is a fierce star—to that of the Centaur and loves the sign of Capricorn. Erigone looks at the Bull but hearkens to the
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atque Sagittifero conatur nectere fraudem.
Libra suos sequitur sensus solumque videndo
Lanigerum atque animo complexa est Scorpion infra.
ille videt Pisces, audit quae proxima Librae.
nec non Arcitenens magno parere Leoni
auribus atque oculis sinum fundentis Aquari
conspicere assuevit solamque ex omnibus astris
diliget Erigonen. contra Capricornus in ipsum
convertit visus (quid enim mirabitur ille
maius, in Augusti felix cum fulserit ortum ?)
auribus et summi captat fastigia Cancri.
at nudus Geminis intendit Aquarius aurem
sublimemque colit Cancerum spectatque reducta
tela Sagittiferi. Pisces ad Scorpion acrem
derexere aciem cupiuntque attendere Taurum.
has natura vices tribuit, cum sidera fixit.
his orti similis referunt per mutua sensus,
audire ut cupiant alios aliosque videre,
[horum odio nunc horum idem ducentur amore]
illis insidias tendant, captentur ab illis.
Quin adversa meant alterna trigona trigonis,
alteraque in bellum diverso limite ducit
linea. sic veri per totum consonat ordo.
namque Aries, Leo et Arcitenens, sociata trigona
signa, negant Chelis foedus totique trigono
503 -que per omnia libram  520 alterna] etiam
516 census

Scorpion and endeavours to plot deceit against the
Archer. The Balance heeds his own counsel and has
embraced with his gaze none but the Ram and with
his heart the Scorpion beneath. The latter beholds
the Fishes and listens to her who is Libra’s neigh-
bour. The Archer moreover has grown used to
waiting on the mighty Lion with his ears and be-
holding with his eyes the pot that the Waterman
empties; he adores Erigone alone of all the stars.
Capricorn on the other hand turns his gaze upon
himself (what greater sign can he ever marvel at,
since it was he that shone propitiously upon
Augustus’ birth ?) and catches with his ears the
height of topmost Cancer. And now to the Twins
does the Waterman incline his ear, he naked too;
he worships the Crab on high and contemplates
the drawn bow of the Archer. The Fishes have fixed
their glance upon the fierce Scorpion and crave to
listen to the Bull. These are the reciprocal connec-
tions which Nature gave to the signs when she put
them in their positions. Men born of these signs
display the corresponding feelings towards each
other: some they love to hear and others they love
to behold, they set traps for these and are ensnared
by those.

520 Now there are trigons a alternate to trigons
which move in hostility to each other, and one e of
the two diameters leads them to war along opposed
paths. Thus the design of truth is consistent in
every part. For indeed, the Ram, the Lion, and the
Archer, allied trigonal signs, reject federation with

a Virgo.
b [518]: "... the same people are one moment moved by
hatred of these, the next by love of those,..."
c For a summary of these relationships see Introduction
pp. xlvi ff. and figures 7, 8, and 9.

122
quod Gemini excipiant fundens et Aquarius undas. 525
idque duplex ratio cogit verum esse fateri,
quod tria signa tribus signis contraria fulgent,
quodque aeterna manent hominum bella atque ferarum.
[humana est facies Librae, diversa Leonis]
idecirco et cedunt pecudes, quod viribus amplis 530
consilium est maius. victus Leo fulget in astris,
aurea Lanigerus concessit sidera pellis,
ipse suae parti Centaurus teriore cedit,
usque adeo est hominis virtus. quid mirer ab illis
nascentis Librae superari posse trigono ?

Nec sola est ratio quae dat nascentibus arma 535
inque odium generat partus et mutua bella;
sed plerumque manent inimica tertia quaeque
lege, in transversum vultu defixa maligno,
quodque, manent quaecumque loco contraria signa
adversosque gerunt inter se septima visus,
tertia quaeque illis utriusque trigona feruntur ;
ne sit mirandum si foedus non datur astris
quae sunt adversis signis cognata trigona. 536

quin etiam brevior ratio est per signa sequenda ;
nam, quaecumque nitent humana condita forma
astra, manent illis inimica et victa ferarum.

534 victus quod 534 quoque
571 velle 577 phoebus

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a The logic of 2. 528 requires Chelae ("Claws") to be here interpreted as a human Balance-holder, and so Libra is sometimes figured (e.g. Boll, Sphaera figure V).
b [529] interpolated to remind the reader that the Balance (see previous note) is male: "The form of the Balance is human, of other kind the Lion’s.”
c The twofold reason mentioned in 2. 526.

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the Balance-holder and all his a trigon, a trigon completed by the Twins and the Waterman pouring his stream. And a twofold reason compels us to admit the truth of this: because the signs shine in diametric opposition, three against three, and because of the eternal state of war between man and beast. b And the beasts give way because intelligence prevails over brute strength. As one vanquished shines the Lion among the stars; it was the theft of his golden fleece that gave the Ram his place in heaven; to part of himself the Centaur gives way on account of his rear, to such an extent is manliness restricted to man. Why should I wonder then that men born under these signs are no match for Libra’s trigon?

570 Nor is it c the only reason which imparts enmities to men at birth and begets a race for mutual hatred and hostility; but alternate signs mostly abide in a state of antagonism, being rooted with evil sidelong stares and because signs d alternate to whatever signs are diametrically opposed and, separated by five, exchange confronting looks belong to the trigons of each; so one must not wonder if signs deny peace to those stars which possess trigonal relationship with their confronting signs. e A simpler reason is also to be traced in the zodiac; for to all the shining signs endowed with human form those of the beasts are ever hostile and ever by them vanquished. Nevertheless, there are individual signs

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d ... because (for example) Aries denies peace to Gemini and Aquarius, signs of the trigon of Libra, the confronting sign of Aries.
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sed tamen in proprias secedunt singula mentes et privata gerunt secretis hostibus arma.

Lanigero genitis bellum est cum Virgine natis et Libra Geminisque et eis quos protulit Urna. in partus Tauri sub Cancro nata feruntur pectora et in Chelis et quae dant Scorpios acer et Pisces. at, quos Geminorum sidera formant, his cum Lanigero bellum est eiusque trigono. in Cancro genitos Capricorni semina laedunt et Librae partus et quos dat Virginis astrum quae sub aversi numerantur sidere Tauri. Lanigeri communis erit rabidique Leonis hostis, et a totidem bellum subscribitur astra. Erigone Cancrumque timet geminique sub arcu Centauri et Pisces et te, Capricorne, rigentem. maxima turba petit Libram, Capricornus et illi adversus Cancer, Iuvenis quod utrimque quadratum est, quaeque in Lanigeri numerantur signa trigonum. Scorpios in totidem fecundus creditur hostes; aequoreum iuvenem, Geminos, Taurum atque Leonem, Erigonen Libramque fugit metuendus et ipse, quique Sagittari veniunt de sidere partus. hos Geminis nati Libraque et Virgine et Urna depressisse volent. naturae lege iubente haec eadem, Capricorne, tuis inimica feruntur. at quos aeternis perfundit Aquarius undis, in pugnam Nemeaeus agit totumque trigonum, turba sub unius fugiens virtute ferarum.

ASTRONOMICA, 2. 539–566

which follow their own caprice and, having private foes, wage wars of their own.

541 The Ram's children are at war with the offspring of the Virgin, the Balance, and the Twins, and with those whom the Urn has brought forth. Against the progeny of the Bull there advance men born under the Crab and under the Scales, and those produced by the fierce Scorpion and by the Fishes. But those created by the Twins' stars have war with the Ram and his trigon. The seed of Capricorn vexes those begotten under the Crab, and so do the children of the Balance, those produced by the Virgin's sign, and those that are mustered under the constellation of the Bull averse. The Ram shares his foes with the savage Lion; and the same signs levy war on both. Erigone fears the Crab, him that lurks under the bow of the two-formed Centaur, the Fishes, and you, chill Capricorn. The Balance is assailed by the largest host—Capricorn, and Cancer opposite him, the quadrate signs on either side of the Youth, and those signs reckoned as of the Ram's trigon. The Scorpion is presumed prolific of as many foes; it flees before the lad with his waters, the Twins, the Bull, the Lion, and (to whom it is itself an object of fear) the Maid and the Balance, and also the offspring that issues from the Archer's sign. And this offspring the children of the Twins, the Balance, Virgin, and the Urn will crave to vanquish. Bidden by the rule of their own nature, the selfsame signs are borne in hostility against your sons, Capricorn. But those poured forth by the Waterman with his ever-flowing stream are provoked to battle by the Nemean and all his trigon, a host of beasts that flees before the manhood of one. The progeny of the

126

Gemini pisces pertulit unda geminumque centaurum 555 iuvenis] chelis utrumque fugiens] iuvenis

542 a Scorpio.
544 b Taurus and Scorpio.
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Piscibus exortos vicinus Aquarius urget
et gemini fratres et quos dat Virginis astrum
quique Sagittari descendunt sidere nati.

Per tot signorum species contraria surgunt
corpora totque modis totiens inimica creantur.
perque tot aetates hominum, tot tempora et annos,
tot bella et varios etiam sub pace labores,
cum Fortuna fidem quaerat, vix invent usquam.

unus erat Pylades, unus qui mallet
ipse mori ; lis una fuit per saecula mortis,
alter quod raperet fatum, non cederet alter.

[et duo, qui potuere sequi : vix noxia poenis,
optavitque reum sponsor non posse reverti,
sponsoremque reus timuit, ne solveret ipsum]
at quanta est scelerum moles per saecula cuncta,
quarumque unus invidiae non excusabile terris !

venales ad fata patres matrumque sepulcrum
non posuerit modum sceleri, sed fraude nefanda
ipse deus Caesar cecidit, qua territus orbi
imposuit Phoebus noctem terrasque reliquit.

quid loquar eversas urbes et prodita templa
et varias pacis clades et mixta venena
insidiasque fori, caedes in moenibus ipsis

570-578: see after 535

583 pectore quotiens

For a summary of these enmities see Introduction p. l.

In the Dulorestes of Pacuvius King Thoas does not know which of his two captives is Orestes (who must die): Pylades nobly insists that it is he, but is hotly contradicted by Orestes (cf. Cicero, Lael. 24). At this point the mss. give [586-588], interpolated to bring in mention of Damon and Phintias

Fishes is attacked by the Waterman next door, by the twin brothers, by those brought forth of the Virgin’s sign, and by those derived from the Archer’s constellation.a

From so many configurations of signs come beings opposed to each other, and thus variously and thus often is enmity created. For this reason nature has never created from herself anything more precious or less common than the bond of true friendship. And throughout the long history of mankind, ages and centuries so many, amid so many wars and the motley strife even of peace, when misfortune calls for loyal support, it scarce finds it anywhere. There was but one Pylades, but one Orestes, eager to die for his friend. Once only throughout the ages have men disputed for the prize of death, in that one snatched at a doom the other refused to yield. Yet how great is the sum of villainy in every age! How impossible to relieve the earth of its burden of hate! Fathers sold to death and mothers murdered have not marked the limit of wickedness: even the god Caesar fell victim to deceit unspeakable, whereat in horror on the world Phoebus brought darkness and forsook the earth. Why tell of the sack of cities, the betrayal of temples, the many disasters suffered in time of peace, the mixing of poisons, treachery in the market-place, slaughter within the

i.e. sold and murdered by their children. The reference is probably to the proscriptions (cf. Plutarch, Sulla 31. 6).

cf. Virgil, Georg. 1. 467 f.
et sub amicitiae grassantem nomine turbam?
in populo seclus est et abundant cuncta furoris.
et fas atque nefas mixtum, legesque per ipsas
saevit nequitias; poenas iam noxia vincit.
scilicet, in multis quoniam discordia signis
corpora nascentur, pax est sublata per orbem,
et fidei rarum foedus paucisque tributum,
utque sibi caelum sic tellus dissidet ipsa
atque hominum gentes inimica sorte feruntur.
Si tamen et cognata cupis dinoscere signa,
quae iungant animos et amica sorte ferantur,
Lanigeri partus cum toto iunge trigono.
simplicior tamen est Aries, meliusque Leone
prosequitur genitos et te, Centaure, creatos
quam colitur. namque est natura mitius astrum
expositumque suae noxae, nec fraudibus ullis,
nec minus ingenio molli quam corpore constans:
illis est feritas signis praedaeque cupidus,
venalisque animus non numquam excedere cogit
commoditate fidem, nec longa est gratia facti;
plus tamen in duplici numerandum est roboris esse,
cui commixtus homo est, quam te, Nemeaeae, sub uno.
at, cum Lanigeri partus sub utroque laborant
vique urgente dolent amborum astuque, trigono
non parcit; sed rara gerit pro tempore bella,
quaeferitas utriusque magis prorumpere cogit.
Idcirco et pax est signis et mixta querella.

615 constant 651 quod... pro tempore

a These lines seem to allude to violence at Rome in the last
days of the Republic.
MANILIUS

quin etiam Tauri Capricorni iungitur astrum,
nece magis illorum coeunt ad foedera mentes;
Virgineos etiam partus, quicumque creantur
Tauro, complecti cupiunt, sed saepe queruntur.
quos Geminique dabunt Chelaeque et Aquarius ortus
unum pectus habent fideique immobile vinclum,
magnus et in multos veniet successus amicos.
Scorpios et Cancer fraterna in nomina ducunt
ex semet genitos, nec non et Piscibus orti
concordant illis. saepe est et subdolu actus:
Scorpios aspergit noxas sub nomine amici;
at, quibus in lucem Piscis
cvrientibus adsunt,
his non una manet semper sententia cordi,
commutant animos interdum et foedera rumpunt
ac repetunt, tectaeque lues sub fronte vagantur.
sic erit ex signis odium tibi paxque notanda.

Nec satis hoc, tantum solis insistere signis:
contemplare locum caeli sedemque vagarum.
parte genus variant et vires linea mutat.
nam sua quadratis veniunt, sua iura trigonis
et quae per senos decurrit virgula tractus
quaecum secat medium transverso limite caelum;
distat enim surgatne eadem subeatne cadatne.
hinc modo dat mundus vires, modo deterit idem,
quaecum illic sumunt iras, hue acta reponunt.
crebrius adversis odium est, cognata quadratis
et quosque dabunt chelae
et quos dat aquarius

629 quosque dabunt chelae 631: not in the xss.
et quos dat aquarius 642: see after 706

ARISTOTELIAN, 2. 625-652

wherewith is mingled wrangling. Next, the sign of
the Bull is joined to Capricorn, but their tempera­
ments do not blend in fellowship any better; those
begotten of the Bull are eager to embrace the
Virgin's children too, but often they quarrel. The
issue of the Twins, the Scales, and the Waterman
are of one heart and share a bond of loyalty which
naught can sunder; and they will achieve con­
spicuous success in winning many friends. The
Scorpion and the Crab endow their sons with the
name of brother, and the progeny of the Fishes is also
united with them. But there are frequently sly
dealings as well. The Scorpion sows trouble in the
guise of friend. And those whom the Fishes father
at birth never keep in their hearts for long a constant
affection; ever and anon they change their symp­
thies and now forswear their ties and now renew
them, and beneath a mask of blandness unseen
hatreds come and go. As thus foretold by the signs
must you mark war and peace.

Nor is it enough merely to consider the signs in
isolation: you must observe their place in heaven
and the position of the planets. The signs vary their
nature according to their quarter of the sky, and a
line which joins them likewise suffers change of its
strength. For special properties accrue to squares,
to trigons, to the line which traverses six chords,
and to that which cuts the midspace of the sky with
diametric track; for it makes a difference whether
the same line is rising, or is beneath the earth, or is
setting. Hence the sky now adds strength and now
takes it away, and the stars which conceive anger
there discard it when driven here. Betwwen opposite
signs exists mostly hatred; and to quadrat signs
MANILIUS

corpora censentur signis et amica trigonis.
nec ratio obscura est; nam quartum quodque locavit
 eiusdem generis signum natura per orbem.
quattuor aequali caelum discrimine signant
in quibus articulos anni deus ipse creavit,
ver Aries, Cererem Cancer Bacchumque ministrans
Libra, caper brumam genitusque ad frigora piscis.
nec non et duplici quae sunt conexa figura
quartum quemque locum retinet; duo cernere Pisces
et geminos iuvenes duplicemque in Virgine formam
duo Centauri licet uno corpora textu.
sic et simplicibus signis stat forma quadrata;
nam neque Taurus habet comitem, nec iungitur ulli
horrendus Leo, nec metuit sine compare quemquam
Scorpios, atque uno censetur Aquarius astro.
sic quaequecumque manent quadrato condita templ
signa parem referunt numeris aut tempore sortem
ac veluti cognata manent sub foedere tali.

idcirco affines signant gradibusque propinquis
accedunt unaque tenent sub imagine natos,
quodquot cardinibus, prona vertigine mundi
naturae vires propriae variante, moventur;
quae, quamquam in partes divisi quattuor orbis
sidera quadrata efficiunt, non lege quadrati
censentur: minor est numeri quam cardinis usus.
longior in spatium porrecta est linea maius
quaememisensisignis facit astra trigona.
haec ad amicitias imitantis iura gradumque

653 textum 660 corpore

ASTRONOMICA, 2. 658–675

are mostly ascribed ties of kinship, ties of friendship
to trigonal signs. And the reason is plain; for in
every third place a right round the zodiac nature has
set a sign of similar character. Four at equal intervals
mark out the heavens, and in them God himself has
created joining-points of the year: the Ram brings
spring, the Crab the summer's corn, the Balance the
vintage, and the Goat-fish, born to endure the cold,
brings winter. Moreover those signs which possess
a combination of two figures occupy every third
place: thus may you see the Fishes twain, the two
young men, the Maid of twofold aspect, and the
Centaur's two bodies wrought in a single woof.
Likewise the single signs also enjoy the figure of a
square; for the Bull has no partner, nor has the fierce
Lion another at his side; the mateless Scorpion has
no one to fear, and the Waterman is counted as of
single sign. Consequently the signs situate in quad­
rate positions display a like condition of number or
season and remain bound by such federation as
though by ties of blood. For this reason the quadrate
signs indicate connections by marriage, assist the
near degrees of kinship, and stamp their children with
identical features, when they move through the
cardinal points, incurring the while variation of their
natural powers owing to the sky's forward rotation;
although they divide the circle into four parts and
form quadrat signs, they are not considered as
falling under the law of the square: the numerical
association counts for less than that of cardinal point.
The line which passes by three signs and creates
trigonal constellations is longer and covers a greater
distance. These constellations conduct us to friend­ships that rival the connections and ties of blood and

6a Literally "every fourth sign," the Romans counting at
both ends, for example τ ἢς, as specified in 658 f.
b Literally "the goat and fish," Capricorn being com­
pounded of the two.
c Cf. 2. 176.
sanguinis atque animis haerentia foedera ducent,
utque ipsa ex longo coeunt summota recessu,
sic nos coniungunt maioribus intervallis.
haec meliora putant, mentes quae iungere possunt,
quam quae non numquam foedus sub sanguine fallunt. proxima vicinis subscribunt, tertia quaeque hospitibus. sic astrorum servabitur ordo.
adde suas partes signis, sua partibus astra;
nam nihil in totum servit sibi: mixta feruntur,
ipsis dant in se partes capiuntque vicissim.
quae mihi mox certo digesta sub ordine surgent.
omibus ex istis ratio est repetenda per artem,
pacata infestis signa ut discernere possis.
Perspice nunc tenuem visu rem, pondere magnam
et tantum Graio signari nomine passam,
dodecatemoria, in titulo signantia causas.
nam, cum tricenas per partes sidera constent,
rursus bis senis numerus diducitur omnis;
ipsa igitur ratio binas in partibus esse dimidiasque docet partes. his finibus ecce dodecatemorium constans, bis senaque tanta omnibus in signis; quae mundi conditor ille attribuit totidem numero fulgentibus astris, ut sociata forent alterna sidera sorte,

676-703

ASTRONOMICA, 2. 676–703
to alliances knit together by feelings of the heart; and just as the stars themselves come together across the vast space between, so they unite us over distances greater than those which separate kin. These signs, which have power to join heart to heart, are considered superior to those which not uncommonly forswear their ties of blood. Adjacent signs aid neighbours, alternate signs aid guests. Thus the principle of the signs will be preserved.

You must apportion to the signs the divisions of other signs which belong to them, and to these divisions their proper signs; for no sign ministers exclusively to itself; they intermingle as they revolve: they cede to each other parts in themselves and are ceded parts in turn. These matters will be treated by me next and follow in due order. It is from all such details that a true account is to be drawn in our science, if one is to distinguish peaceful from aggressive signs.

Pray examine now a matter trivial in appearance, yet one of great moment, which does not permit description of itself save by a Greek word. I speak of the dodecatemories, of which the name proclaims the principle. The signs each consist of thirty degrees, and every total is further divided by twice six; the calculation therefore shows that in each division there are two and a half degrees. Here, then, is the dodecatemory, consisting of this territory; a dozen such divisions occur in all the signs. The great builder of heaven bestowed these divisions upon the equal number of shining signs, that the constellations might be associated in a system of giving and

\( ^a \) I.e. the distinctive powers of squares, trigons, and hexagons will be intensified or depressed, but not altered, by their passage through the cardinal points.

\( ^b \) Cf. 4. 294.

\( ^c \) 2. 693 ff.

\( ^d \) Such as are mentioned in 645–651, 687–690.
et similis sibi mundus, et omnia in omnibus astra, quorum mixturus regeret concordia corpus et tutela foret communi mutua causa. in terris geniti tali sub lege creantur; ideoque, quamquam signis nascentur eisdem, diversos referunt mores inimique voto; et saeppe in peius derrat natura, maremque femina subseuitur: miscentur sidere partus, singula divis variat quod partibus astra, dodecatemoriis propriae mutantia vires.

Nunc, quod sit cuiusque, canam, quove ordine constent, ne vagus ignotis signorum partibus erres.

ipsa suo retinent primas in corpore partes sidera, vicinae subeuntibus attribuuntur, cetera pro numero ducunt ex ordine partes, ultima et extremis ratio conceditur astra.

singula sic retinent binas in sidere quoque dimidiasque eius partes, et summa repletur sortibus exactis triginta sidere in omni.

Nec genus est unum, ratio nec prodita simplex, pluribus inque modis verum natura locavit diduxitque vias voluitque per omnia quaer. haeque quoque comperta est ratio sub nomine eodem. quacumque in parti nascentum tempore Luna

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a I.e. by displaying in each sign the twelvefold division which marks itself.

b See Introduction p. li and figure 10.

c I.e. of that constellation's degrees.

d In fact what Manilius says in 725-737 is merely a roundabout way of expounding the doctrine of 715-721.

receiving, that heaven might everywhere display a likeness to itself, a and that all the signs might have place in each other: thus by this interchange would harmony prevail through the zodiac and its signs would protect one another in a common interest. Men born on earth are created under this law; and so, although their nativities occur in the same signs, they exhibit different traits and conflicting desires; and oft does nature stray from good to bad, and birth of female follows that of male: the genitures differ in a single constellation, because the individual signs vary on account of the distribution of their divisions and modulate their respective powers in the dodecatemories.

Now shall I recount what dodecatemory belongs to each sign and in what order they are to be found, b lest you go astray and err because you know not the divisions of the signs. Within their own domain the constellations keep the first division for themselves, the next is bestowed upon the sign following, and the remaining signs according to their place in the sequence are allotted successive divisions, and the last assignment is made to the farthest sign away. Thus each sign occupies in every constellation two and a half of its degrees, c making a total of thirty degrees exacted from the whole zodiac.

But there is more than one system of calculating dodecatemories, and the procedure handed down admits an alternative. Nature has placed the truth in more methods than one and has separated the paths which lead to herself, wishing the quest for her to be made along every path. The following procedure also d has been devised for these same dodecatemories. Multiply thrice four times what-
constiterit, numeris hanc ter dispone quaternis, 
inde suas illi signo, quo Luna refulsit, 
quaeque hinc defuerant partes numerare memento. 730
proxima tricenas pariterque sequentia ducunt. 
[hic ubi deficiet numerus, tunc summa relicta 
in binas sortes adiecta parte locetur 
dimidia, reliquis tribuantur ut ordine signis]
in quo destiuent, eius tum Luna tenebit 735
dodecatemorium signi ; post cetera duceit 
ordine quodque suo, sicut stant astra locata.

Haec quoque te ratio ne fallat, percipe paucis 
(maior in effectu minor est) de partibus ipsis 
dodecatemoriai quota sit quod dicitur esse 
dodecatemorum. namque id per quinque notatur partes ; nam totidem praefulgent sidera caelo 
qua vaga dicuntur, ducunt et singula sortes 
dimidas, viresque in eis et iura capessunt. 
in quo quaeque igitur stellae quandoque locatae 
dodecatemorio fuerint spectare decebit ;
cuius enim stella in fines in sidere quoque

735 qua 737 quoque 738 perspice 739 de]
740 quota] quod 745 quocumque 747 stellae fine sint

a An ornate way of saying “allocate 30 degrees to the sign in which the Moon is situated, no matter how few or how many degrees of that sign the Moon has actually traversed.”

b [732-734] (see Introduction p. liii): “When this number fails, then let the remainder be divided into portions of two
ever degree the Moon occupies at the moment of nativity, since so many are the constellations which shine in high heaven. Of this number be sure to allot to that sign in which the Moon shone both the degrees that she has traversed and those that were lacking to the count of thirty. The next sign is allotted thirty and so are succeeding signs. Whatever the sign in which the count gives out, that sign’s dodecatemory shall the Moon be then occupying; subsequently she will occupy the remaining dodecatemories, each one in its turn, according to the established order of the signs.

738 Now lest the following scheme too elude you, learn from a few words (for its importance is greater than its compass) what size portion of the dodecatemory is that which carries the name of dodecatemory.

Now the dodecatemory is divided into five parts; for so many are the stars called wanderers which with passing brightness shine in heaven: they are each allotted half a degree wherein they assume power and authority. And so it will be right to observe in which dodecatemory each of the planets is at any moment positioned: for a planet will exert its influence and a half, so that these may be distributed in order among the remaining signs.”

c Let the Moon be in $9^\circ$ Aries: $9 \times 12 = 108$; of this number 30 are allotted to Aries, 30 to Taurus, 30 to Gemini, leaving 18, so that the count gives out in Cancer: thus $9^\circ$ Aries occupies the dodecatemory of Cancer.

d This means no more than that, once the Moon’s dodecatemory is fixed, the following dodecatemories are given to the following signs in regular order.

e Planetary dodecatemories: see Introduction p. liv and figure 11.

f Saturn, Jupiter, Mars, Venus, and Mercury (i.e. not including Sun or Moon).
inciderit, dabíbit effectus in viribus eius.
undique miscenda est ratio per quæm omnia constant.
verum haec posterius proprio cuncta ordine reddam; 750
nunc satis est docuisse suos ignota per usus,
út, cum perceptis steterit fiducia membris,
sic totum corpus facili ratione notetur
et bene de summa veniat post singula carmen.
út rudibus pueris monstratur littera primum
per faciem nomenque suum, tum ponitur usus,
tum coniuncta suis formatur syllaba nodis,
hinc verbi structura venit per membra legendi,
tune rerum vires atque artis traditur usus
perque pedes proprios nascentia carmina surgunt,
singulatae in summam prodest didicisse priora
(quae nisi constiterint primis fundata elementis,
effluat in vanum rerum praeposterus ordo
versaе quaе propere dederint praeeptam magistri),
sic mihi per totum volitandi carmine mundum
erutaque abstrusa penitus caligine fata,
Pieridum numeris etiam modulata, canenti
quoque deus regnat revocantim nomen in artem,
per partes ducendafides et singula rerum
sunt gradibus tradenda suis, ut, cum omnia certa
notitia steterint, proprios revocentur ad usus.
ac, velut, in nudis cum surgunt montibus urbes,
condítor et vacuos murs circumdare colles

ASTRONOMICA, 2. 748-773

crances as modified by the powers of that dodecatemy into whose territory in any given sign it has come. a From all quarters must be pieced together the design by which all things are ordered. However, all this in due order shall I explain hereafter b; now it is enough to teach the facts though their uses be not known, so that, when you have acquired confidence in your grasp of the elements, you will be thus able by simple reasoning to mark the complete pattern, and my poem can fittingly pass on from details and deal with the whole. Children who have not yet begun their lessons are first shown the shape and name of a letter, and then its value is explained; then a syllable is formed by the linking of letters; next comes the building up of a word by reading its component syllables; afterwards the meaning of expressions and the rules of grammar are taught, and then verses come into being and rise up on feet of their own. To reach the final goal it is important to have mastered each of the earlier steps, for unless these are firmly based upon underlying principles, instruction, as teachers too hurriedly expound their precepts out of order, will be ill-arranged and prove labour vainly spent. Thus as I wing my way in song throughout the whole universe and, entuning them to the Muses' rhythm, sing of fates drawn from deep-seated darkness and summon to my art the power by which God rules, I too must by degrees win credence and assign each matter to its correct step, so that, when all the parts are grasped with sure understanding, they may be applied to their proper uses. And as, when a city is being built on a bare mountainside and its founder plans to encompass the empty

a For example, suppose Saturn (a malefic planet) happens to occupy a dodecatemy of Jupiter (a benefic), then its bad influences will be modified for the better.

b A promise not fulfilled in the extant work of Manilius.
destinat, ante manus quam temptet scindere fossas,  
ervit opus (ruit ecce nemus, saltusque vetusti  
procumbunt solemque novum, nova sidera cernunt,  
pellitum omne loco volucrum genus atque ferarum,  
antiquasque domos et nota cubilia linquunt,  
ast alii silicem in muros et marmora templis  
rimantur, ferrique rigor per pignora nota  
quaritur, hinc artes, hinc omnis convenit usus),  
tum demum consurgit opus, cum cuncta supersunt,  
ne medios rumpat cursus praepostera cura,  
sic mihi conanti tantae succedere moli  
materies primum rerum, ratione remota,  
tradenda est, ratio sit ne post irrita neve  
argumenta novis stupeant nascentia rebus.

Ergo age noscendis animum compone sagacem  
cardinibus, qui per mundum sunt quattuor omnes  
 dispositi semper mutantque volantia signa:
unus ab exortu caeli nascentis in orbem,  
qua primum terras aequali limite cernit,  
alter ab adversa respondens aetheris ora,  
unde fugit mundus praecepsque in Tartara tendit;  
tertius excelsi signat fastigia caeli,  
quo defessus equis Phoebus subsistit anhelis  
reclinatque diem mediasque examinat umbras;  
imae tenet quartus fundato nobilis orbe,  
in quo principium est reditus finisque cadendi  
sideribus, pariterque cecasus cernit et ortus.

775 vertit
779 templi
780 tempora
788 cunctanti
797 declinatque
799 hill with walls, before his team attempt to cut trenches, doth work proceed apace; and lo, a forest tumbles and ancient woodlands fall, beholding sun and stars unseen before; all tribes of bird and beast are banished from the spot, leaving the immemorial homes and lairs they knew so well; others, meanwhile, seek stone for walls and marble for temples and by means of sure clues search for sources of unbending iron; from their different sides skill and experience of every kind combine to help; and only when all materials are available in plenty does construction proceed, lest premature effort cause the project to break down in mid-course: so, as I strive to perform a mighty undertaking, must I first supply the matter of my theme, withholding explanation, lest hereafter explanation prove ineffectual and my arguments be silenced at the outset before some unanticipated fact.

788 Come now, prepare an attentive mind for learning the cardinal points: four in all, they have positions in the firmament permanently fixed and receive in succession the speeding signs. One looks out from the rising of the heavens as they are born into the world and has the first view of the Earth from the level horizon; the second faces it from the opposite edge of the sky, the point from which the starry sphere retires and hurtles headlong into Tartarus; a third marks the zenith of high heaven, where wearied Phoebus halts with panting steeds and rests the day and determines the mid-point of shadows; the fourth occupies the nadir, and has the glory of forming the foundation of the sphere; in it the stars complete their descent and commence their return, and at equal distances it beholds their risings

a The cardines: see Introduction pp. lv f. and figure 12.
MANILIUS

haec loca praecipuas vires summosque per artem
fatorum effectus referunt, quod totus in illis
nittitur aeternis velutì compagibus orbis;
quae nisi perpetuis alterna sorte volantem
cursibus excipiunt nectantque in vincula, bina
per latera atque imum templi summumque cacumen,
dissociata fluat resoluto machina mundo.

Sed diversa tamen vis est in cardine quoque,
et pro sorte loci variant atque ordine distant.
primus erit, summi qui regnat culmine caeli
et medium tenui partitur limite mundum;
quem capit excelsa sublimem Gloria sede
(scilicet haec tutela decet fastigia summa),
quidquid ut emineat sibi vindicet et decus omne
asserat et varios tribuendo regnet honores.

proximus, est ima quamquam statione locatus,
sustinet aeternis nixum radicibus orbem
foederibusque suis externas iungere gentes
et pro sorte sua cuiusque extollere nomen.

fundamenta tenet rerum censusque gubernat,
quam rata sint fossis, scrutatur, vota metallis
atque ex occulto quantum contingere possit.
tertius, aequali terris in parte nitentem
qui tenet exortum, qua primum sidera surgunt,
unde dies redit et tempus describit in horas,

803 aetheris
814 deus omni
826 atque illi tollens

ASTRONOMICA, 2. 801–828

and settings. These points are charged with exce­
tional powers, and the influence they exert on fate is
the greatest known to our science, because the
celestial circle is totally held in position by them as by
eternal supports; did they not receive the circle,
sign after sign in succession, flying in its perpetual
revolution, and clamp it with fetters at the two sides
and highest extremities of its compass, heaven would
fly apart and its fabric disintegrate and

808 Each cardinal, however, enjoys a different
influence; they vary according to their position, and
they differ in rank. First place goes to the cardinal
which holds sway at the summit of the sky and divides
heaven in two with imperceptible meridian; en­
throned on high this post is occupied by Glory
(truly a fit warden for heaven’s supreme station), so
that she may claim all that is pre-eminent, arrogate
all distinction, and reign by awarding honours of
every kind. Hence comes applause, splendour, and
every form of popular favour; hence the power to
dispense justice in the courts, to bring the world
under the rule of law, to make alliances with foreign
nations on one’s own terms, and to win fame relative
to one’s station. The next point, though situate in
the lowest position, bears the world poised on its
eternal base; in outward aspect its influence is less,
but is greater in utility. It controls the foundations
of things and governs wealth; it examines to what
extent desires are accomplished by the mining of
metal and what gain can issue from a hidden source.
The third cardinal, which on the same level as the
Earth holds in position the shining dawn, where the
stars first rise, where day returns and divides time
hinc inter Graias horoscopos editur urbes,  
nec capitis externum, propio quia nomine gaudet.  
hunc penes arbitrium vitae est, hic regula morum,  
fortunamque dabit rebus, ducetque per artes,  
qualiaque excipiant nascentis tempora prima,  
quos capiant cultus, quali sint sede creati,  
utecumque admixtis subscribent viribus astra.  
ultimus, emenso qui condit sidera mundo  
occasumque tenens summersum despicit orbem,  
pertinet ad rerum summas finemque laborum,  
coniugia atque epulas extremaque tempora vitae  
otiaque et coetus hominum cultusque deorum.  

Nec contentus eris percepto cardine quoque :  
intervalla etiam memori sunt mente notanda  
per maius dimensa suas reddentia vires.  
quidquid ab exortu summum curvatur in orbem,  
aetatem primam nascentisque asserit annos.  
quad summo premitur de vexum culmine mundi  
donec ad occasus veniat, puerilibus annis  
succedit teneramque regit sub sede iuventam.  
qua pars occasus aufert imumque sub orbem  
descendit, regit haec maturae tempora vitae  
perpetua serie varioque exercita cursu.  
at, qua perficitur cursus redeunte sub ortum,  
tarda supinatum lassatis viribus arcum  
ascendens, seros demum complectitur annos  
labentemque diem vitae tremulamque senectam.  

931 hunc tenet  
[est] ... morum est  
949 aufert] inter  
950 perpetua] et propria  
952 ortum] imo

a Occident.

into hours, is for this reason in the Greek world called 
the Horoscope, and it declines a foreign name, taking 
pleasure in its own. Within its domain lies the 
abitrament of life and the formation of character; 
it will grant success to enterprises, open up the 
professions, and decide the early years that await 
men from their birth, the education they receive, and 
the station to which they are born, according as the 
planets approve and mingle their influences. The 
last point, which puts the stars to rest after travers­
ing heaven and, occupying the occident, looks down 
upon the submerged half of the sky, is concerned 
with the consummation of affairs and the conclusion 
of toil, marriages and banquets and the closing 
years of life, leisure and social intercourse and wor­
ship of the gods.

841 Nor must you rest content with observing each 
cardinal point; you must note with a retentive mind 
the spaces between them, which extend over a 
larger range and possess special powers. The curve 
which stretches from the orient to the topmost point 
of the circle claims the earliest age and infant years. 
The slope which sinks down from the summit of the 
sky till it reaches the occident succeeds to the years 
of childhood and includes in its province control of 
tender youth. The portion which appropriates the 
setting heaven and descends to the bottom of the 
circle rules the period of adult life, a period tested by 
incessant change and chequered fortunes. But the 
part by whose return to the orient heaven's course is 
done and which with enfeebled strength slowly 
ascends the backbent arc, this part embraces the 
final years, life's fading twilight, and pallsied age.

b The quadrants: see Introduction p. lvi and figure 12.
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Omne quidem signum sub qualicumque figura partibus inficitur mundi; locus imperat astra
et dotes noxamque facit; vertuntur in orbem
singula et accipunt vire caeloque remittunt.
vincit enim natura loci legesque ministrat
finibus in propriis et praetereuntia cogit
esse sui moris, vario nunc ditia honore,
nunc sterilis poenam referentia sidera sedis.
quae super exortum est a summo tertia caelo,
infelix regio rebusque inimica futuris
et vitio fecunda nimis; nee sola, sed illi
par erit, adverso quae fulget sidere sedes
iuncta sub occasu. neu praestet, cardine mundi
utraque praetenta fertur deiecta ruina.
porta laboris erit: scandendum est et cadendum.
nec melior super occasus contraque sub ortu
sors agitur mundi: praeceps haec, illa supina
pendens aut metuit vicino cardine finem
aut fraudata cadet. merito Typhonis habentur
horrendae sedes, quem Tellus saeva profudit,
cum bellum caelo peperit nee matre minores
exstiterunt partus. sed fulmine rursus in alvum
compulsi, montesque super rediere cadentes,

860 loci] genus 860 orta
862 dives 867 altum
863 -que [re]

856 In any geniture every sign is affected by the sky’s division into temples a; position governs the stars, and endows them with power to benefit or harm; each of the signs, as it revolves, receives the influences of heaven and to heaven imparts its own. The nature of the position prevails, exercises jurisdiction within its province, and subjects to its own character the signs as they pass by, which now are enriched with distinction of every kind and now bear the penalty of a barren abode. The temple b that is immediately above the Horoscope and is the next but one to heaven’s zenith is a temple of ill omen, hostile to future activity and all too fruitful of bane; nor that alone, but like unto it will prove the abode c which with confronting star shines below the occident and adjacent to it. And so that this temple should not outdo the former, each alike moves dejected from a cardinal point with the spectacle of ruin before its eyes. Each shall be a portal of toil: in one you are doomed to climb, in the other to fall. Not more fortunate is the portion d of heaven above the occident or that opposite e it below the orient; suspended, the former face downward, the latter on its back, they either fear destruction at the hands of the neighbouring cardinal or will fall if cheated of its support. f With justice are they held to be the dread abodes of Typhon, whom savage Earth brought forth when she gave birth to war against heaven and sons as massive as their mother appeared. g Even so, the thunderbolt hurled them back to the womb, the collapsing mountains recoiled upon them, and

a Here follows the poet’s doctrine of the dodecatropos or twelve temples: see Introduction p. lvii and figure 13.
b Temple 12 (in Greek κακὸς δαίμων “Evil Spirit”).
c Temple 6 (in Greek κακὴ τύχη “Evil Fortune”).
d Temple 8.
e Temple 2.
f Temple 8 fears to fall into the hands of 7, temple 2 to be dropped by 1.
g Typhon (or Typhoeus) is here (as in Horace) represented as being one of the Giants, though he was not born until after their defeat: his story is told by Apollodorus, Bibl. 1. 6. 3.
Typhoeus was sent to the grave of his warfare and his life alike. Even his mother quakes as he blazes beneath Etna's mount. The temple immediately behind the summit of bright heaven, and (not to be outdone by its neighbour) of braver hope, surges ever higher, being ambitious for the prize and triumphant over the earlier temples: consummation attends the topmost abode, and no movement save for the worse can it make, nor is aught left for it to aspire to. There is thus small cause for wonder, if the station nearest the zenith, and more secure than it, is blessed with the lot of Happy Fortune. So most closely does our language approach the richness of Greek and render name for name. In this temple dwells Jupiter: let its ruler convince you that it is to be reverenced. Like this temple, but with an inverse likeness, is that which is thrust below the world and adjoins the nadir of the submerged heaven, and which shines in the opposite region: wearied after completion of active service it is again marked out for a further term of toil, as it waits to shoulder the yoke of the cardinal temple and its role of power: not as yet does it feel the weight of the world, but already aspires to that honour. This seat the Greeks call Daemonic: a rendering of the name in Roman speech is wanting. Lay carefully in your mind the abode and the divinity and appellation of the puissant abode, so that hereafter the knowledge may be put to great use. Here largely abide the changes in our health and the warfare waged by the unseen weapons.

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\(\text{.manilius}\)
viribus ambiguam geminis casusque deique
nunc hue nunc illuc sortem mutantis utraque.
sed medium post astra diem curvata primum culmina nutantis summo de vertice mundi aethra Phoebus alit; sub quo quae corpora nostra concipiunt vitia et fortunam, ex viribus eius decernunt. Deus ille locus sub nomine Graio dicitur. huic adversa nitens, quae prima resurgit sedibus ex imis iterumque reducit Olympum, pars mundi fratrumque vices mortesque gubernat; et dominam agnoscit Phoeben, fraterna videntem regna per adversas caeli fulgentia partes fatique damnosis imitantem finibus oris. huic parti Dea nomen erit Romana per ora, Graecia voce sua titulum designat eundem. arce sed in caeli, qua summa acclivia finem inveniunt, qua principium declivia sumunt, culminaque insurgunt occasus inter et ortus suspenduntque suo libratum examine mundum, asserit hanc Cytherea sibi per sidera sedem et velut in facie mundi sua collocat ora, per quae humana regit. propria est haec redditam parti vis, ut conubia et thalamos taedasque gubernet: haec tutela docet Venerem, sua tela movere. nomen erit Fortuna loco, quod percipe mente, ut brevia in longo compendia carmine praestem.

**MANILIUS**

**ASTRONOMICA, 2. 903–928**

of disease, wherein are engaged the two powers of chance and godhead affecting this region of uncertainty on either side, now for better, now for worse. The stars that follow midday, where the height of heaven first slopes downward and bows from the summit, these \(^a\) Phoebus nourishes with his splendour; and it is by Phoebus's influence that they decree what ill or hap our bodies take beneath his rays. This region is called by the Greek word signifying God.\(^b\) Shining face to face with it is that part \(^c\) of heaven which rises first from the bottommost regions and brings back the sky once more: it controls the fortunes and fate of brothers; and it acknowledges the Moon for its mistress, who beholds her brother's realms shining on her from the other side of heaven and who reflects human mortality in the dying edges of her face. Goddess is the name in Roman speech to be given to this region, whilst the Greeks call it by the same word in their language.\(^d\) But in the citadel of the sky, where the rising curve attains its consummation, and the downward slope makes its beginning, and the summit towers midway between orient and occident and holds the universe poised in its balance, here does the Cytherean claim her abode \(^e\) among the stars, placing in the very face of heaven, as it were, her beauteous features, wherewith she rules the affairs of men. To the abode is fittingly given the power to govern wedlock, the bridal chamber, and the marriage torch; and this charge suits Venus, the charge of plying her own weapons. Fortune shall be this temple's name \(^f\); and mark it well, that I may take a short route in my

\(^a\) Temple 9.
\(^b\) Θεός (the regular term).
\(^c\) Temple 10.
\(^d\) Θεός (the regular term).
\(^e\) Temple 3.
\(^f\) The term is not found elsewhere.
at, qua subsidit converso cardine mundus
fundamenta tenens, aversum et suspicit orbem
ac media sub nocte iacet, Saturnus in illa
parte suas agitat vires, delectus et ipse
imperio quondam mundi solioque deorum,
et pater in patrios exercet numina casus
fortunamque senum. | titulus, quem Graecia fecit,
Daemonium signat dignas pro nomine vires.
nunc age surgentem primo de cardine mundum
respice, qua solitos nascentia signa recursus
incipiunt, viridis gelidis et Phoebus ab undis
enatat et fulvo paulatin acceditur igni
asperum iter temptans, | Aries qua ducit Olympum.
haec tua templo ferunt, Maia Cyllenie nate,
pro facie signata nota, quod nomen et ipsi
auctores tibi dant. | una est tutela duorum:
in qua fortunam natorum condidit omnem
natura, ex illa suspendit vota parentum.
unus in occasu locus est super. ille ruentem
praecipit mundum terris et sidera mergit,
tergaque prospectat Phoebi, qui viderat ora;
ne mirere, nigri si Ditis ianua fertur
et finem vitae retinetque repagula mortis.
hic etiam ipse dies moritur, tellusque per orbem
lengthy song. Where at the opposite pole the universe subsides, occupying the foundations, and from the depths of midnight gloom gazes up at the back of the Earth, in that region a Saturn exercises the powers that are his own: cast down himself in ages past from empire in the skies and the throne of heaven, he wields as a father power over the fortunes of fathers and the plight of the old. Daemonium is the name the Greeks have given it, b denoting influences fitting the name. Turn now your gaze upon heaven as it climbs up from the first cardinal point, where c the rising signs commence afresh their wonted courses, and a pale Sun swims upward from the icy waves and begins by slow degrees to blaze with golden flame as it attempts the rugged path where the Ram heads the procession of the skies.

This temple, Mercury, son of Maia, men say is yours, marked for its bright aspect with a designation which writers also give you for name. d The one wardship is commissioned with two charges e; for in it nature has placed all fortunes of children and has made dependent on it the prayers of parents. There remains one region, that in the setting heaven. f It speeds the falling sky beneath the Earth and buries the stars. Now it looks forth on the back of the departing Sun, yet it once beheld his face; so wonder not if it is called the portal of sombre Pluto and keeps control over the end of life and death's firm-bolted door. Here dies even the very light of day, which the ground beneath steals away from the world and locks

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a Temple 4.
b Another term not found elsewhere.
c Temple 1.
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surripit et noctis captum sub carcere claudit.
nec non et fidei tutelam vindicat Ipsi
pectoris et pondus. tanta est in sede potestas
quae vocat et condit Phoebum recipitque refertque,
consummatque diem. tali sub sorte notandae
templorum tibi sunt vires : quae pervolat omnis
astrorum series ducitque et commodat illis
ipsa suas leges, stellaeque ex ordine certo,
ut natura sinit, lustrant, variasque locorum
efficient vires, utcumque aliena capessunt
regna et in externis subsidunt hospita castris.
haec mihi sub certa stellarum parte canentur ;
nunc satis est caeli partes titulosque notasse
effectusque loci per se cuiusque deosque.
[cui parti nomen posuit, qui condidit artem,
octotropos ; per quod stellae diversa volantes
quos reddant motus, proprio venit ordine rerum]

ipsam

quas

sorte] nocte GL²; lege LM

A promise not fulfilled in the poet’s extant work.

ASTRONOMICA, 2. 954–970

up captive in the dungeon of night. This temple
also claims for itself the guardianship of good faith
and constancy of heart. Such is the power that dwells
in the abode which summons to itself and buries the
Sun, thus surrendering that which it has received,
and brings the day to its close. This is the system
by which you must mark the powers of the temples:
through them revolves the entire procession of the
zodiac, which draws from them their laws and lends to
them its own; the planets, too, according as nature
allows, traverse them in fixed order and modify
the various influences of the temples whenever they
occupy realms not their own and sojourn in an alien
camp. Of these matters I shall treat at the place in
my song appointed for the planets; it is enough
for now to have recorded the temples of heaven and
their names, the innate influences of each place, and
the deities that dwell therein.

b [968-970]: “The founder of astrology gave to this sec-
tion the title Octotropos; the motions of the planets, which
fly through it in the opposite direction, shall follow at the
proper place.” For the implications of this passage, see Intro-
duction pp. lxi f.
BOOK THREE

Although not without fascination for virtuoso versifiers, for it is something of a tour de force, the third book is the least poetical of the five, exemplifying for the most part Manilius's skill in rendering numbers and arithmetical calculations in hexameters. The introduction takes the form of a priamel enumerating the themes of other poets and concluding with the problems of the astrological bard. Manilius resumes his task with an exposition of the twelve athla, which in turn leads to the main subject of the book: the determination of the degree of the ecliptic which is rising above the horizon at the moment of a nativity. This, the most important operation in the casting of a horoscope, causes today's astrologer no trouble, but before the advent of clocks, atlases, and standard time account had to be taken of the varying lengths of daylight and darkness in different latitudes and different times of the year. Having equipped us with the necessary rules for dealing with the problem, our instructor continues to render mathematical tables in verse-form by introducing us to chronocrators and to the length of life ordained for each of us by the stars. A final chapter, on tropic signs, if lacking in astrological significance, provides a more poetic note on which to close.
As I rise to fresh heights and venture a task beyond my strength, fearlessly entering untrodden glades, O Muses, be my guides. To widen your domains I strive, and to bring new treasure into song. I shall not tell of war conceived for heaven's destruction and offspring buried by the flames of the thunderbolt in its mother's womb; or of the oath-bound kings and how, in Troy's last hour, Hector's body was ransomed for his obsequies and fetched by Priam; or of the woman of Colchis sacrificing to her guilty love father's realm and brother's mangled corpse, the crop of warriors, the bulls that breathed fierce flames, the unsleeping dragon, the restoration of the years of youth, the fires kindled by a gift of gold, and the children born in wickedness and yet more wickedly slain. I shall not sing of the agelong warfare for which Messene was to blame; or of the chieftains seven, the walls of Thebes saved by a thunderbolt from the threatened flames, and the city

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\( a \) The war of the Giants, told by Hesiod, *Theog.* 664-735 (cf. 1. 421 ff., 5. 341 ff.).
\( b \) The Greek expedition against Troy, told by Homer in the *Iliad*, line 8 referring specially to Book 24 (cf. 2. 1 ff.).
\( c \) The story of Medea, told by Apollonius Rhodius in the *Argonautica*; he alludes to the hexameter poet rather than Euripides, although he gives a comprehensive survey (as at 5. 465 ff., where he certainly alludes to tragedy): Medea's passion for Jason, betrayal of Aeetes, murder of Absyrtus; the feats of Jason; the rejuvenation of Aeson; Medea's gifts which killed Glaucce and Creon, and her murder of her children.
\( d \) The Second Messenian War, which lasted for twenty years and was instigated by the Messenians, told by Rhianus in his epic poem *Messeniaca.*
germanosve patris referam matrisque nepotes, 
natorumve epulas conversaque sidera retro 
eruptumque diem, nec Persica bella profundo 
indicta et magna pontum sub classe latentem
immissumque fretum terris, iter aequoris undis; 
non regis magni spatio maiore canenda 
quam sunt acta loquar. Romanae gentis origo, 
quotque duces urbis tot bella atque otia, et omnis 
in populi unius leges ut cesserit orbis, 
differtur. facile est ventis dare vela secundis 
 fecundumque solum varias agitare per artes 
auroque atque ebori decus addere, cum rudis ipsa 
materies niteat. speciosis condere rebus 
carmina vulgarum est, opus et componere simplex. 
at mihi per numeros ignotaque nomina rerum 
temporaque et varios casus momentaque mundi 
signorumque partesque in partibus ipsis 
luctandum est. quae nosse nimis, quid, dicere quantum
est?

17,18 -que
23 sint
24 totque
33 quorumque

a The story of the Seven against Thebes: Capaneus, who bore on his shield the words πρήσου πόλιν (“I shall fire the city”), was destroyed by the thunderbolt; the Epigoni, sons of the conquered Seven, ten years later marched against Thebes and took it (Apollodorus, Bibl. 3. 7. 2 ff.). Here and in the following two items Manilius seems to allude to dramatic compositions.

b The children of Oedipus, who married his mother Jocasta (cf. 5. 464).

c Atreus killed the sons of Thyestes, and served up their flesh to him at a banquet (cf. 5. 462).

d The story of Xerxes, who ordered the Hellespont to be conquered because of its conquest; I shall not tell of them that were brethren to their father, grandchildren to their mother, or of sons served up at table, whereat the stars recoiled and took away the light of day. Nor shall I tell of the Persian declaration of war upon the main, when a vast fleet hid the ocean, and a channel was let into the land, and a road laid on the waters of the sea. Of the feats of the monarch styled the Great, taking longer to record than to achieve, I shall not speak. The founding of the Roman nation, the periods of war and peace as numerous as the city’s consuls, and the whole world’s submission to a single people’s rule, this I put off. It is easy to spread sail before a favouring breeze, to work a fertile soil with different skills, and to add lustre to gold or ivory, since the raw material of itself shines bright. It is a hackneyed task to write poems on attractive themes and compose an uncomplicated work. But I must wrestle with numerals and names of things unheard of, with the seasons, the changing fortunes and movements of the sky, with the signs’ variations, and even with the portions of their portions. Ah, how great a task it is to put into words what passes understanding! Ah, lashed and fettered, cut a canal through Athos, and bridged the Hellespont (cf. 5. 49), told by Choerilus of Samos in his epic poem Persica.

e Alexander: [Longinus], De Subl. 4. 2 quotes Timaeus as saying of Alexander that he conquered all Asia in less time than Isocrates took over his Panegyric urging war on Persia. Manilius is probably making a contemptuous allusion to the epic poem of Choerilus of Iasus (cf. Horace, Epist. 2. 1. 232 ff.).

f Presumably alluding to the Annales of Ennius.

g Like “dodecatemories” (2. 695).
maniliius

carmine quid proprio? pedibus quid iungere certis? 35
huc ades, o quicumque meis advertere coeptis
aurem oculosque potes, veras et percipe voces.
impendas animum; nec dulcia carmina quaercas:
onari res ipsa negat contenta doceri.
et, si qua externa referentur nomina lingua,
hoc operis, non vatis erit: non omnia flecti
possunt, et propria melius sub voce notatur.
Nunc age subtilli rem summam perspice cura,
quae tibi praecipuos usus monstrata ministret
et certas det in arte vias ad fata videnda,
si bene constiterit vigilanti condita sensu.
principium rerum et custos natura latentum
(cum tantas strueret moles per moenia mundi
et circum fusis orbem concluderet astris
undique pendentem in medium, diversaque membra
ordinibus certis sociaret corpus in unum,
aeraque et terras flammamque undamque natantem
mutua in alternum praebere alimenta iuberet,
ue tot pugnantis regeret concordia causas
staretque alterno religatus foedere mundus),
exceptum a summa nequid ratione maneret
et quod erat mundi mundo regeretur ab ipso,
fata quoque et vitas hominum suspendit ab astris,
quae summas operum partes, quae lucis honorem,
quae famam assererent, quae numquam fessa volarent.
quae, quasi, per mediam, mundi praecordia, parthem
disposita, obtineant, Phoebum lunamque vagasque

astronomica, 3. 35-62

how great to tell in fitting poetry, and this to yoke
to a fixed metre! Come hither, whoever is able to
devote ear and eye to my emprise, and hearken to the
truths I utter. Apply your mind to understand and
seek not poetry that beguiles: my theme of itself
precludes adornment, content but to be taught.
And if any terms are spoken in a foreign tongue,
blame this on subject, not on bard: some things
defy translation, and are better expressed by the
native word.

Now regard with close attention a matter of
prime importance: when explained, it will render
you immense service and will furnish practitioners of
our art with a sure road to seeing the future, provided
that it is well understood and stored in an alert mind.
First cause and guardian of all things hidden, nature
erected mighty structures along the ramparts of the
universe and so surrounded Earth, poised squarely in
the centre, with a sphere of stars; and by fixed laws
she united separate limbs into a single body, ordaining
that air and earth and fire and flowing water
should each for the other provide mutual sustenance,
in order that harmony might prevail over so many
elements at variance and the universe stand firm in
the bonds of a reciprocal federation. Now in order
that nothing should be excluded from the total
scheme, and that what was born of heaven should
be by heaven's own self controlled, nature also made
men's lives and destinies dependent on the stars,
so that in their unwearied revolution they should
claim charge of the success of human activity, the
boon of life, and fame. And to those stars which,
deployed about the central region, occupy the heart
of the universe, as it were, and which outfly the Sun

\textit{a} Cf. 1. 247-254, 2. 60-83, 4. 888-890.
\textit{b} The signs of the zodiac.
and Moon and planets and are also themselves outflown, to these nature gave dominion: to each sign she devoted individual associations, and fixed in the zodiac for ever the total distribution, so that the influences upon destiny might be drawn from all quarters and concentrated into a single whole. The infinite variety of circumstances that might occur in human affairs, all the possible sufferings, the callings and the skills, and all the vicissitudes imaginable, these nature included in the allotment: she arranged them in as many portions as she had created signs, making a fixed dispensation, each portion having its special benefice; and by an unchanging system she so disposed the full reckoning of man's estate among the stars that any portion would always stand next to the same portion in adjacent signs. The lots of these activities she allocated each to a sign, not in such a way that they should remain in a permanent quarter of the sky and, always looked for in the same place, be drawn to influence all human activities alike, but so that they should receive their proper position according to the moment of birth and change from sign to sign, each lot at a different time moving to a different constellation, so that the nativity then meets with a new pattern in the zodiac, without however disturbing everything with irregular motions. But when the section of the activities which is assigned to the first lot receives its proper place at the moment of a nativity, the rest follow attached to the zodiacal signs in their usual sequence. The procession follows the leader until the circle of lots fills up the circle of signs. Now just as these aspects of human affairs, wherein the whole sum of fortune will be found committed, are when placed in the zodiac
favoured or frowned on by the seven planets in their courses, and just as a divine force rotates the skies through the cardinal points, so an influence, propitious or malign, comes over each allotment, and even likewise must you expect the issue of such and such a business. I must sing of all these lots in their due order, and designate them with their respective titles and spheres of action, that the location and name and nature of the activities may be revealed.\textsuperscript{b}

\textsuperscript{b}The first lot has been assigned to Fortune. This is the name by which it is known in astrology, because it contains in itself the chief essentials of the home and all that attaches to the name of home: the limit accorded to the number of one’s slaves and the amount of one’s land, and the size of buildings it is given one to erect, according to the degree of harmony in the wandering stars of bright heaven. Thereafter follows the abode of warfare, where under a single title is comprised whatever is likely to happen in war or befall those that are busied in foreign cities. The third position is to be assigned to the business of the city (this, too, a kind of warfare, one made up of civil engagements) and contains the ties dependent on trust; it shapes friendships and services oft vainly spent, and reveals the size of the rewards for devotion, when heaven is blessed with a harmonious disposition of the planets. In the fourth abode nature has placed the activity of the law-courts and the fortunes of the bar: the advocate pouring forth his case, and the accused no less hanging on the pleader’s tongue and lips than he is dependent upon them; the judge revealing to laymen the secrets of the law and weighing up disputes which he settles with his usual gravity, when, arbiter of truth, he takes into

\textsuperscript{a} Cf. 2. 788 ff.

\textsuperscript{b} Cf. Introduction pp. lxii ff. and figure 14.
MANILIUS

quidquid propositas inter facundia leges efficit, hoc totum partem concessit in unam atque, utcumque regunt dominantia sidera, paret. quintus coniugio gradus est per signa dicitur et socios tenet, et committens hospita iura iungitur et similis coniungens foedus amicos, in sexta dives numeratur copia sede atque adiuncta salus rerum, quarum altera quanti contingant usus monet, altera quam diuturni, sidera ut inclinant vires et tempula gubernant. septima censetur saevis horrenda periclis, si male subscribunt stellae per signa locatae. nobilitas tenet octavam, qua constat honoris condicio et famae modus et genus et specioso gratia praetexto. nonus locus occupat omnem natorum sortem dubiam patriosque timores omniaque infantum mixta nutricia turba. huic vicinus erit, vitae qui continet actum, in quo sortimur mores, et qualibus omnis formetur domus exemplis, quamque ordine certo ad sua compositi discendant munera servi.

praecipua undecima pars est in sorte locata, quae summae nostri semper viresque gubernat, quaeque valetudo constat, nunc libera morbis, nunc oppressa, movent ut mundum sidera cunque. non alia est sedes, tempusve genusve medendi quaeque sibi deposcat vel cuius tempore praestet auxilium et vitae sucos miscere salubris.

120 committem hospitis una 125 quaeque 130 et
138 quoque

a I.e. no matter what zodiacal sign the fifth station falls to; of course this is true of all the stations, and the poet only employs the words per signa here to fill out the verse.

ASTRONOMICA, 3. 117–144

account nothing but the truth. All that eloquence can achieve in debating proposed legislation is concentrated in a single part, and obeys the dictates of the dominating planets. Throughout the signs a the fifth station is dedicated to wedlock and controls alliances, where to is joined the compact which unites the relationship of host and guest and binds like friend to like. In the sixth seat is reckoned abundance of means and therewith financial soundness: the one indicates the degree, the other the duration of one’s resources, according as the planets modify and the temples b direct the influence of this seat. The seventh is accounted grim with danger dire, if the planets located in the signs ill accord. Social rank occupies the eighth; in it are comprised privileged position, extent of fame, nobility of birth, and popularity with its showy cloak. The ninth position takes possession of all filial problems, parental worries, and the motley collection of all matters connected with the rearing of children. Next will be found the one that embraces the conduct of life; herein our character is determined, likewise with what traditions every family is shaped, and in what appointed fashion servants discharge the tasks to which they have been severally deputed. The portion located in the eleventh lot is paramount: it has permanent control of our whole being and strength; in it abides our health, now immune from and now yielding to sickness, according to the influence of the planets over the heavens. No other seat is there which claims the choice of remedy and the moment for administering it, or in whose hour therapy and the mixing of life-saving potions have

b Of the dodecatropos (2. 856 ff.).
ultimus et totam concludens ordine summam rebus apiscendis labor est, qui continet omnis votorum effectus, et, quae sibi quisque suisque proponit studia atque artes, haec irrita ne sint. seu ferat officium nutus blanditus in omnis, aspera sive foro per litem iurgia temptet, fortunamve petat pelago ventisque sequatur, seu Cererem plena Vincentem credita messe aut repetat Bacchum per pingua musta fluentem, hae in parte dies atque hac momenta dabuntur, si bene convenient stellae per signa sequentes; quarum ego posterius vires in utrumque valentis ordine sub certo reddam, cum pandere earum incipiam effectus. nunc, ne permixta legentem confundant, nudis satis est insistere membris.

Et, quoniam certo digestos orbe labores nominaque in numerum viresque exegimus omnis (athla vocant Grai, quae cuncta negotia rerum in generia et partes bis sex divisa coercent), nunc, quibus accedant signis quandoque, canendum est. perpetuas neque enim sedes eademve per omnis sidera nascentis retinent, sed tempore mutant, nunc hic nunc illuc signorum mota per orbem, incolumis tamen ut maneat qui conditus ordo est.

greater efficacy.\(^a\) Duly closing the total sum, the last activity deals with the attainment of our aims: it embraces all the issues of the vows we make and ensures that the skill and efforts expended for oneself and one’s own fail not of success. Whether one is to offer one’s service and submit to another’s every beck and call, whether to embark on a bitter dispute by litigation in the courts, whether to seek fortune on the sea and pursue it with the winds, whether to put one’s hopes on a crop that with huge harvest will exceed one’s outlay or a vintage that will overflow with the rich must—this is the portion in which day and hour for decision shall be given,\(^a\) if the planets as they move through the zodiac are favourably situated. Of the force they exert for good or ill I shall later \(^b\) tell in due order, when I come to rehearse their influences. Meanwhile it is enough to press on with the bare outlines, lest a complex presentation confuse my reader.

168Since I have expounded the fixed circle of activities arranged in order, with all their names and powers (athla \(^c\) is the Greek name for the sections which contain all the affairs of life arranged in twice six classes and portions), now must my poem tell to which signs they are attached at any given moment. For they do not remain in permanent abodes or stay attached to the same stars for every person born, but they change them \(^d\) according to time, moving now hither, now thither, through the circle of signs, yet in such a way that the fixed order of succession remains intact. Now, lest an incorrect figuration

\(^a\) See Introduction p. lxiv.

\(^b\) A promise not fulfilled in the poet’s extant work.

\(^c\) It is not known whom Manilius is following here. δελα, translated by labores (the Greek is more properly δελαιος), is not a term found in any Greek work; sortes, on the other hand, clearly renders κληροι, special degrees of the zodiac occupied by the planets.

\(^d\) Abodes and stars. Thus the first lot does not always abide at the rising cardinal point (ascendant), nor is it always attached to the sign of Aries.
ergo age, ne falsa variet genitura figura,
si sua quemque voles revocare ad signa laborem,
Fortunae conquire locum per sidera cuncta,
quae primum est aerumnosis pars dicta sub athlis.
qui tibi cum fuerit certa ratione repertus,
cetera praedicto subeuntibus ordine signis
coniunges, teneant proprias ut singula sedes.
et, ne forte vagus Fortunae quaerere sedem
incipias, duplici certam ratione capesse.
cum tibi, nascentis percepto tempore, forma
constiterit caeli, stellis ad signa locatis,
transverso Phoebus si cardine celsior ibit
qui tenet exortum vel qui demergit in undas,
per tempus licet affirmes natum esse diei.
at, si subiectis senis fulgebit in astris
inferior dextra laevaque tenentibus orbem
cardinibus, noctis fuerit per tempora natus.
haec tibi cum fuerint certo discrimine nota,
tum, si forte dies nascentem exceperit alma,
a sole ad lunam numerabis in ordine partes
signorum, ortivo totidem de cardine duces,
quem bene partitis memorant horoscopon astris.
in quodcumque itigitur numerus pervenerit astrum
hoc da Fortunae. iunges tum cetera signis
athla suis, certo subeuntibus ordine cunctis.
at, cum obducta nigris nox orbem texerit alis,
siguis erit qui tum materna exessiter alvo,
verte vias, sicut naturae vertitur ordo.

pars est numerosis

a Above the ascendant or above the occident.

b For an example of the diurnal calculation, see Introduction p. lxxv and figure 15.
the Moon, who ever reflects her brother's radiance and reigns in the hours of night, her own domain; as many degrees and signs as is distant the Sun from her, so many the shining Horoscope bids you number from itself. This place let Fortune hold with the other activities following, all positioned in their natural order.

203 Perhaps you will ask—and the question requires a nimble brain's attention—how at the moment of birth it is possible to determine the native's horoscopying degree as it rises from the submerged bowl of the heavens. Unless this is understood and grasped with a sharp mind, the basis of our science collapses and its design is thrown into confusion, since, if the cardinal points, which control everything, are not true, the skies put on a false appearance, the figuration of the birth is unsound, and the stars are displaced, deflected by the shift of temple. But it is a matter as laborious as important to represent, as it revolves with the zodiac in ceaseless motion, the passage of heaven with its arched quadrants through the whole circle, to depict its exact features, and to determine a minute point of so vast a structure, be it the degree in which the ascendant or that in which the summit of the sky on high is situated, or that by which, sinking into the waters of the deep, the setting is appropriated, or that which rests on the circle's bottom.

218 Nor am I unacquainted with a common method of calculating, which attributes two hours each to the risings of the signs and reckons the stars as identical with equal ascensions; by this calculation, starting from the point where the Sun's orbit begins, the number of the hours is counted, with its total con-
donec perveniat nascentis tempus ad ipsum, atque, ubi substiterit, signum dicatur oriri. sed facet obliquo signorum circulus orbe, atque alia inflexis orientur sidera membris, ast illis magis est rectus surgentibus ordo, ut propius nodis aliqvod vel longius astrum est. vix finit luces Cancer, vix bruma redcut, quam brevis ille facet, tam longus circulus hic est ; Libra Ariesque parem reddunt noctemque diemque. sic media extremis pugnant extremaque summis. nec nocturna minus variant quam tempora lucis, sed tantum adversis idem stat mensibus ordo. in tam dissimili spatio variisque dierum umbrarumque modis quis credere possit in auras omnia signa pari mundi sub lege meare ? adde quod incerta est horae mensura neque ullam altera par sequitur, sed, sicut summa dierum vertitur, et partes surgunt rursusque recedunt ; cum tamen, in quocumque dies deducitur astro, sex habeat supra terras, sex signa sub illis. quo fit ut in binas non possint omnia nasci, cum spatium non sit sibi par pugnantibus horis, si modo bis senae servantur luce sub omni, quem numerum debet ratio sed non capit usus. 

Nec tibi constabunt aliter vestigia veri, ni, lucem noctemque paris dimensus in horas, 

ASTRONOMICA, 3. 223–248

verted into signs, until it reaches the precise time of birth: the sign wherein it halts is said to be the rising sign. But the circle of signs lies in an oblique belt, and some signs rise with slanting limbs, whilst others have on rising a more upright posture, according as a sign is either nearer to the equinoctial points or farther off. Cancer is loth to end the day, winter\(^a\) to renew it; the Sun’s heavenly orbit is as long in the former case as it is brief in the latter; Libra and Aries make equal night and day. Thus the middle signs are at variance with the end ones, and the lowest with the highest.\(^b\) Nor do the hours of night alter any less than those of day but the same variation exists, though in opposite months. Who could believe that, with such uneven periods and such changeable limits of day and darkness, all the signs rise into the sky under a uniform law of heaven? Moreover, the length of an hour is a variable quantity, nor is any hour followed\(^c\) by another of the same length, but just as the duration of days varies, so also their parts increase and again decrease; and yet, under whatever sign a day’s course is run,\(^d\) it has at any moment six signs above the earth and six below. It follows that the signs cannot all rise in a period of two hours, since owing to the discrepancy between the hours their duration is not uniform, if indeed twelve hours are contained between each dawn and dusk, a number which ordinary reckoning demands but strict application does not permit.

\(^a\) That is, the sign of Capricorn.

\(^b\) Aries and Libra are at variance with Cancer and Capricorn; Capricorn with Cancer.

\(^c\) That is, on the next day.

\(^d\) No matter in what sign of the zodiac the Sun is situated.
darkness into uniform hours, you ascertain the duration of daylight and darkness at different seasons of the year, and first create a fixed standard by accurately calculating an hour which with increase here and decrease there holds day and night evenly balanced. Such an hour will be found when the nights are about to prevail over daylight in Libra or yield to it in mid-spring. For then and only then do the two periods of night and day extend alike to twice six hours, since the Sun is revolving at the heavenly equator. And when, moved to the south in chill winter-tide, it shines in the eighth degree of two-formed Capricorn, then the brief day extends to nine and a half equinoctial hours and night, forgetful of day, to hours twice seven, increased, lest the full number go short, by half an hour. Thus the sum of the unequal night and day established by nature breaks evenly into two separate amounts of twelve hours and comes together again to form the full number. From this point the nights diminish and the days increase in length, thrust now on this side of the mean in their course through the zodiac and now on that in fixed gradations (of which a clear account has been drawn up in our science and will follow in my poem at the proper place), until their combat has reached the stars of scorching Cancer; and there the division of day and night changes to the winter one, but with roles reversed: daylight brings back the length of winter’s night, darkness the length of winter’s day, and now it is the other period which has the upper hand. Such at least is the measurement in the latitude of the lands inundated by the Nile.
quas rigat aestivis gravidus torrentibus amnis
Nilus et erumpens imitatur sidera mundi
per septem fauces atque ora fugiantia pontum.

Nunc age, quot stadiis et quanto tempore surgant
sidera, quotque cadant, animo cognosce sagaci,
ne magna in brevibus lateant compendia dictis.
nobile Lanigeri sidus, quod cuncta sequuntur,
dena quater stadia exoriens duplicataque ducit
cum cadit, atque horam surgens eiusque triumtem
occupat, occiduus geminat. tum cetera signa
octonis crescent stadiis orientia in orbem
et totidem amittunt gelidas vergentia in umbras.
hora novo crescit per singula signa quadrante
tertiaque e quinta pars parte inducit eius.
haec sunt ad Librae sidus surgentibus astris
incrementa : pari momento danna trahuntur
cum subeunt orbem. rursusque a sidere Librae
ordine mutato paribus per tempora versa
momentis redeunt. nam, per quot creverat astrum
Lanigeri stadia aut horas, tot Libra recedit ;
occiduusque Aries spatium tempusque cadendi
quod tenet, in tantum Chelae consurgere perstant.
excipiunt vicibus se signa sequentia versis.
haec ubi constiterint vigilanti condita mente

272 gradibus
277 careant
285 in quarta [pars]

275 Now learn with a perceptive mind how many stades \(^a\) and how much time the stars take to rise and set, lest great profit stay hidden in a few words. The Ram's distinguished \(^b\) sign, which leads the rest, appropriates in rising forty stades, and twice as many when it sets; in ascension it occupies an hour and a third and doubles this at its descension. Then do the other signs in rising upon earth increase by eight stades each and as many lose when they sink into the chill darkness. Through each single sign the hour of ascension has an additional increase of a quarter, to which is added the third part of its fifth part.\(^c\) These are the increments of the rising signs as far as the constellation of the Balance: decreases of like amount are subtracted, when the signs pass beneath the earth. And again from the constellation of the Balance the signs return with similar gradations, but backwards and through a reverse order of times. For in as many stades and hours the Ram's sign had risen, in so many does the Balance set; and the space and period of descension occupied by the Ram in setting are preserved by the Balance at its rising. The remaining signs succeed each other in an inverse progression. When this has been understood and stored in an alert mind, it is princes 720 stades and takes 24 hours. For an arithmetical tabulation of this passage, see table 1 p. lxx.

\(^a\) A stade is—Manilius has forgotten to say, but its measurement is revealed by what follows—half a degree of the celestial equator, that portion of the celestial equator which takes two minutes to rise: thus one revolution com-

\(^b\) Distinguished for its Golden Fleece.

\(^c\) Through each single sign the increment is a quarter of an hour (15 minutes) plus the fifteenth of that quarter of an hour (1 minute), i.e. the increment is 16 minutes.
IAM FACILE EST TIBI, QUOD QUANDOQUE HOROSCOPE T ASTRUM, NOSCERE, CUM LICEAT CERTIS SURTENTIA SIGNA DUCERE TEMPORIBUS PROPRIASQUE ASCRIBERE IN HORAS, PARTIBUS UT RATIO SIGNO DUCATUR AB ILLO, IN QUO PHOEBUS ERIT, QUARUM MIHI REDDITA SUMMA EST.

Sed neque per terras omnis mensura dierum umbrarumque eadem est, similis nec tempora summa mutantur : modus est varius ratione sub una. nam, qua Phrixei ducuntur vellera signi Chelarumque fides iustaeque examina Librae, omnia consurgunt binas ibi signa per horas, quod medius recto praeceditur ordine mundus aequalisque super transversum vertitur axem. illic perpetua iunguntur pace diebus obscurae noctes ; aequo stat foedere tempus ; nec manifesta patet falsi fallacia mundi, sed similis simili toto nox redditur aeo ; omnibus autumnus signis, ver omnibus unum, una quod aequali lustratur linea Phoebo.

Nec refert illic quo sol decurrat in astro, litoreumne coquat Cancrum contrane feratur, [sideribus mediis an quae sint quattuor inter] quod, quamquam per tris signorum circulus arcus obliquus iacet, recte tamen ordine zonae

**ASTRONOMICA, 3. 296-319**

easy for you to ascertain what sign is horoscoping at any moment, since it is then possible to compute ascensions of signs with exact periods and record them with the precise number of hours, so that you may make the calculation from the sign in which the Sun is situate in terms of the units whose reckoning I have revealed.

301 But the length of day and night is not the same throughout all lands, nor do the times of ascensions differ by the same increments: the amount of fluctuation varies, though the principle is the same. For in lands beneath the line where b revolve the fleece of the Phrixean sign and the impartial Claws and Libra's just balance, c all signs occupy two hours in rising, d since the sky is cut vertically in the middle and revolves evenly above the horizon. In that latitude the murky nights are matched with the days in everlasting peace; the hours remain the same in a federation of equality; nor does the deceitfulness of the inconstant sky stand out, but throughout all time like night follows night; all the signs enjoy the equinox of autumn, all the equinox of spring, since impartial Phoebus pursues a consistent track. Nor in that latitude does it make any difference in what sign the Sun is coursing along, whether it roasts the shore-haunting Crab or is borne in the opposite sign, e because, although the zodiac lies aslant through the three tropical circles, nevertheless identical, both phrases merely signifying the zodiacal sign Libra.

d This is only roughly true, for the ecliptic does not rise at right angles to the horizon (cf. Introduction pp. lxxi f. and figure 18).

e [317]: "... or in the two intermediate signs or in any between those four, ..."
consurgunt supra caput in terrasque feruntur 320
et paribus spatiis per singula lustra resurgunt,
ae bene divisi mundus latet orbe patetque.
at, simul ex illa terrarum parte recedas,
quidquid ad extremos temet provexerit axes
per convexa gradus gressum fastigia terrae,
quam tereti natura solo decircinat orbem
in tumidum et medium mundo suspendit ab omni,—
erng omni conscendes orbem scandensque rotundum
degrediere simul, fugiet pars altera terrae,
altera reddetur. sed, quantum inflexerit orbem,
tantum inclinabit caeli positura volantis,
et modo quae fuerant surgentia limite recto
sidera curvato ducentur in aethera tractu,
atque erit obliquo signorum balteus orbe
qui transversus erat, statio quando illius una est,
nostra mutantur sedes. ergo ipsa moveri
sub tali regione dies, cum sidera flexo
ordine conficiant cursus obliqua malignos,
longius atque alis alid propiusve recumbat.
pro spatio mora magna datur: quae proxima nobis
consurgunt, longos caeli visuntur in orbes;
ultima quae fulgent, celeris merguntur in umbras.
et, quanto ad gelidas propius quis venerit Arctos,
tarn magis effugiunt oculos brumalia signa,
vixque ortis occasus erit. si longius inde
procedat, totis condentur singula membris
tricenascque trahent conexo tempore noctes

320 -que caput [in]
321 inclinavit
324 praevecteris axe
326 ortus
330 inflexerit orbe

these circles rise overhead vertically and sink vertically into the earth, and their risings through individual arcs take uniform periods, and due to the perfect bisection of the Earth the sky is half hidden and half visible. Now when you move from this part of the world, the farther your footsteps take you towards the pole as you stride over the curved slopes of the Earth, which nature has shaped with even surface into a rounded sphere and suspended right in the middle of the universe—when, then, you climb the Earth's arc and, as you climb, at the same time move down, one part of the Earth will recede and another will take its place. But in proportion as you tilt the Earth, so will the axis of the rotating heavens incline, and the signs which had just now risen in a vertical arc will now be drawn into the air over an inclined track, and the baldric of signs which had just now moved from side to side across heaven will now move in an oblique orbit, since its location remains constant, whilst ours changes. It logically follows that in such a place the times of orbits above the horizon also fluctuate and cause days of variable duration, for in their tilted arrangement slanted star-groups describe niggardly courses, and one sign sets nearer, another farther away than others. The length of visibility is in inverse proportion to distance away: signs that rise nearest to us are seen traversing large arcs of the sky; those that shine farthest away swiftly sink into the darkness. And the nearer one approaches the chill Bears, so much the more do the winter signs b recede from sight, and they have scarcely risen when they set. If one proceed still farther, each one in all of its parts will be hidden and will bring thirty nights of consecutive duration and

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a Cf. Introduction p. lxxii and figure 19.
b Sagittarius and Capricorn.
et totidem luces adiment. sic parva dierum efficitur mora et attritis consumit horis paulatimque perit, spatio fugientibus astra. pluraque, per partes surrepto tempore, signa quaequentur medio terrae celata tumore abducentque simul Phoebum texentque tenebras, mensibus ereptis donec sit debilis annus.

si vero natura sinat sub vertice caeli, quem gelidus rigidis fulcit compagibus axis, aeternas super ire nives orbemque rigentem prona Lycaoniae spectantem membra puellae, stantis erit caeli species, laterumque meatu turbinis in morem recta vertigine curret.

inde tibi obliquo sex tantum signa patebunt circuitu, nullos umquam fugientia visus sed teretem acclini mundum comitantia spira.

hic erit una dies per senos undique menses dimidiumque trahens contextis lucibus annum, numquam erit occiduus quod tanto tempore Phoebus, dum bis terna suis perlustrat cursibus astra, sed circum volitans recto versabitur orbe.

at, simul e medio praeceps descenderit orbe inferiora petens deiecto sidera curru et dabit in pronum laxas effusus habenas, per totidem menses inuentar nox una tenebras vertice sub caeli. nam quisquis spectat ab axe, dimidium et toto mundi videt orbe rotundi, pars latet inferior ; neque enim circumvenit illum recta acies, mediaque tenus distenditur alvo.

350 fulgentibus 351
364 semper 365
369 versetur ab 370

a Callisto, i.e. Ursa Major.

take away as many days. Thus but a brief stay is left for the days, and with the diminution of their hours it is soon spent and gradually disappears altogether, as the stars flee in space. And as by degrees the time is snatched away, more signs will become invisible, concealed by the intervening curve of the Earth: they will abduct the Sun as well and weave a web of unbroken darkness, until the year is weakened by the loss of whole months. But if nature were to let you walk beneath the summit of heaven, which the cold pole sustains with inflexible support, over perpetual snow and a frozen earth which gazes up at the figure of Lycaon's daughter facing down, then the spectacle of an erect heaven will be encountered, which with the revolution of its edges will rotate with upright spin like a top. At that spot six signs only, lying in an oblique semicircle, will you ever be able to see; their inclined curve will never disappear from sight but will rotate with the rounded sky. Everywhere here a single day will last six months, a day which will keep a half year in continuous light, for in all this time, during which his course will take him through six signs, Phoebus will never set but will rotate in circling flight around the erect heavens. But when he plunges beneath the equator, setting his car on a downward course for the southern signs, and speeding on the descent gives free rein to his steed, through as many months shall a single night prolong darkness beneath the summit of heaven. For whoever looks out from the pole sees half of the whole sphere of the rounded heavens, whilst the lower is hidden; for the direct line of vision does not encompass the sky, but extends only as far as the extremity of its bulge.
Thus, while he rides through the six submerged signs, Phoebus shuns the gaze of the observer on top of the Earth and at one and the same time steals daylight from the signs and leaves them darkness, until, as many months spent as before his departure, he comes back and rises towards the two Bears. Such a place twice separates the year into night and day, once in each hemisphere of the divided Earth.

And since I have described the fluctuation with which the times of day and night vary and the reasons for the fluctuation, learn now how many hours the signs take to rise and set in any given place, in order that you can compute the precise moment when each of a sign's degrees is rising. Then the horoscope will not be in error, falsified by inaccurate reckoning. The information is in all cases to be found by using a general principle, since, inasmuch as the individual signs differ with such great fluctuation, they cannot be recorded with every conceivable calculation of their periods and degrees. Let each one take the path laid down by me, and, following it for himself, trace that path with his own footsteps; let him owe the method to me. Whatever be the latitude of the Earth in which anyone desires this information, let him determine to their true number of hours the periods of light and darkness on the longest day which at Cancer's sign is interposed between the least portions of darkness; and let him attribute a sixth of the longest day's hours, whatever be the sum, to the Lion, next neighbour to the temple of the Crab; and the measurement of night's darkness is likewise to be divided into as many parts, so that the time of one portion is to be assigned to the Bull's rising when his hind-foremost constellation is
has inter quasque accipiet Nemeeius horas
quod discrimen erit, per tris id divide partes,
tertia ut accedat Gemini, qua tempora Tauri
vincant, atque eadem Cancro similisque Leoni,
sed certa sub lege, prioris semper ut astri
incollem servent summam crescantque novando.
sic erit ad summam ratio perducta priorem
quam modo divis Nemeaeus duxerit horis.
inde pari Virgo procedat temporis auctu.
his usque ad Chelas horarum partibus aucta
per totidem e Libra decrescent sidera partes.
et, quantis in utrumque moris tollentur ad ortus,
diversam in sortem tantis mergentur ad umbras.
haec erit horarum ratio ducenda per orbem
signorum: nunc in noscenda pone laborem
illa, quot stadiis orientur quaeque cadantque.
quae quater et cum ter centum vicenaque constant,
detrahir summae tota pars, quota demitur usque
omnibus ex horis aestivae nomine noctis,
solstitium summo peragit cum Phoebus Olympo.
quodque his exsuperat demptis id ducito in aequas

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a... and that of Taurus 1½ hours;...
b... one third of 2½ - 1½ is ¾, which will be the differential
between the signs;...
c... thus the risings of Gemini, Cancer, and Leo will take
respectively 1½, 2½, and 2½ hours, ...
d... as was found above (p. 192, note d); ...
e... Virgo will rise in 2½ hours, and so does Libra; ...

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f... Scorpio will rise in 2½ hours, Sagittarius in 2½ hours,
and so on to Pisces (and Aries), who will take 1½ hours; ...
g... thus Virgo will set in 1½ hours, Leo in 1½ hours, and
so on to Aries, who will take 2½ hours.
h... 720.
i... continuing the above example (p. 192, note e): from
720 subtract a number which is to it as 9 is to 24, viz. 270; ...
and hand over a sixth to the blazing Lion.\(^a\) Again, a like fraction of the number of stades which stands to the credit of night is to be accounted to the sign of the Bull.\(^b\) And of the amount left over when the latter portion is subtracted from the former, and which separates the two totals with an intervening difference, a third portion,\(^c\) added on top of the Bull’s toll, shall be handed to the Twins.\(^d\) Then the other signs will go ahead with similar increment, ever preserving the preceding amounts, and will augment their neighbour’s total with a further increase until they arrive at the constellation of the impartial Balance\(^e\): from the Balance they likewise decrease in the same gradation as far as the territory of the Ram\(^f\); and by a reverse principle all signs at their settings receive or lose as many amounts of stades.\(^g\) This method will teach you how to arrive at the totals of stades and to calculate the ascension of each of the signs. As soon as you have firmly grasped this, together with the correct numbers of hours, in no latitude will the Horoscope ever elude you, since you will be able to calculate from accurate times the degree each sign is distant from the one occupied by the Sun.

\(^a\) Now let me explain with what increments the days of the winter months begin to grow; for not with equal gradation in every sign do they increase in their journey to the spotless fleece of the sign which forces day and darkness to shoulder the same stades, and so on to Pisces (and Aries), who will occupy 35 stades; ...
ferre iugum), magna est ratio breviterque docenda. principio capienda tibi est mensura diei quam summam; quotque a iusto superaverit umbris, perdiderint luces, eius pars tertia signo tradenda est medio semper, qua sorte retenta dimidio vincat primum, vincatur et ipsum extremo: totum in partes ita digere tempus. his opibus tria signa valent; sed summa prioris ac medii numeri coniuncta sequentibus astris cesserit, ut, senis fuerit si longior horis brumali nox forte die, Capricornus in horam dimidiam attollat luces, et Aquarius horam ipse suam proprie ducat summaeque priori adiungat, Pisces tantum sibi temporis ipsi constituant, quantum accipiant de sorte prioris, et tribus expletis horis noctemque diemque Lanigero tradant aequandam tempore veris. incipit a sexta tempus procedere parte dividuum; triplicant vires haerentia signa

\[\text{quoque ad...} \]  \[\text{umbras}\]  \[\text{et trepident}\]  \[\text{hora}\]  \[\text{ac medii\] accedit\]

\[a\] The exposition which follows presupposes that the solstice occurs at the very beginning of Capricorn: anticipating the poet’s illustration (457 ff.), let the longest night be 15 hours, the shortest day 9 hours; ... 

\[b\] ... the mean is 12, and one third of 15—12 or 12—9 is 1,...

\[c\] ... which (denoting the hourly increase in the length of days) is to be given to the middle sign of Capricorn, Aquarius and Pisces, viz. to Aquarius; ...

\[d\] ... Aquarius receives 1 hour, which is one half more than Capricorn’s increase (= ¼ hour) and one half less than Pisces’ increase (= 1½ hours); ...

\[e\] ... these are the individual increases, ...

\[f\] ... not the accumulated ones, for the accumulated yoke: the principle is important, yet may be briefly taught. First you must measure in hours the shortest day and the longest night spent by Capricorn \[a\]; and a third of the amount which darkness has secured in excess of the mean and daylight has lost of it \[b\] must in any latitude be surrendered to the middle of the winter signs \[c\]; retaining this portion it surpasses the first sign by a half of the increment it received, and by the same fraction it is itself surpassed by the last sign \[d\]: into these amounts must you apportion the whole time. These are the increases enjoyed by the three signs \[e\]; but you will find that the sum of the first and middle numbers is combined and given to the constellation which follows.\[f\] Thus, if per­chance midwinter night is six hours longer than midwinter day, Capricorn increases his days by half an hour, Aquarius draws his own private increase of an hour, which he joins to the half hour of the preceding sign,\[g\] and the Fishes obtain as much increment of time on their own account as they receive from the allotment of the preceding sign,\[h\] and having accumulated three hours they hand over night and day to the Ram to be levelled at springtide. The increments of time \[i\] begin their advance with a sixth \[j\]; the following constellation trebles this increase of the last constellation, Pisces, is ¼ hour (Capricorn) plus 1 hour (Aquarius) plus its individual increase, 1½ hours, viz. 3 hours; thus the length of day at the beginning of Capricorn was 9 hours, at the end of Pisces (= beginning of Aries) it is 12 hours.

\[g\] Thus the accumulated increase of Aquarius is 1½ hours.

\[h\] The individual increase of Pisces is 1½ hours, which it adds to the 1½ hours it inherits from Aquarius.

\[i\] The accumulated increases.

\[j\] One sixth of the difference between the extreme (15 hours, or whatever it is) and the mean of 12 hours.
ULTIMAQUE ACCEPTAS Duplicant. Ita summa diebus redditur, aequatae solvuntur faenore noctes: rursus et incipient propria de sorte diebus cedere diversa labentia tempora lege. Namque Aries totidem deducit noctibus horas quot prius abstulerant proprio sub nomine Pisces, hora datur Tauro, cumuletque ut damna priora dimidiam adiungunt Gemini. Sic ultima primis respondent, pariterque, illis quae proxima fulgent, et media aequatis censentur viribus astra. [Praecipuosque gerunt varianda ad tempora motus] hac vice descendunt noctes a sidere brumae tollunturque dies, annique invertitur orbi, solstium tardi dum fit sub sidere Cancri; tumque diem brumae nox aequet, tempora noctis longa dies, similique redit, quam creverat, actu. Illa etiam poterit nascens via ducere ad astrum quod quandoque vadis emissum redditur orbi. Nam quota sit lucis, si luce requiritur, hora aspies, atque hunc numerum revocabis in ipsum multiplicans decies, adiectis insuper eidem quinque tamen summis, quia qualicumque sub hora discedunt … ad sidera

478

467-488

Thus the accumulated increases are \( 1/2 \), 1\( \frac{1}{2} \), and 3 hours respectively.

b At the beginning of Aries, where day and night are equal.

c 1\( \frac{1}{2} \).

d The increases to the hours of day are thus from 12 to 13\( \frac{1}{2} \) in Aries, from 13\( \frac{1}{2} \) to 14\( \frac{1}{2} \) in Taurus, and from 14\( \frac{1}{2} \) to 16 in Gemini.

e Gemini corresponds to Capricorn in increasing the length of day by \( 1/4 \) hour.

f Taurus and Aquarius, which both increase the length of day by 1 hour.

g Aries and Pisces, which both increase the length of day by 1\( \frac{1}{2} \) hours. Here has been inserted [477]: “And they provide the greatest increments to produce the inequality of the times.”

h From the beginning of Capricorn.

i Because in Cancer the Sun lingers longest.
ter quinas mundi se tollunt sidera partes. hic ubi constiterit numerus, coniungere et illas, quae superent Phoebus partes per signa, memento. ex hac tricenas summa per sidera partes distribues, primamque vicem, quo Phoebus in astro fulserit, inde alios, solem quae cunctum sequentur. tum quo subsistet numerus consumptus in astro quae in parte suam summam nomenque relinquet haec erit exoriens et pars et forma per ignes.

* * * * *

contineat partes. ubi summam feceris unam, tricenas dabis ex illa per singula signa, donec deficiat numerus; quae ille sub astri parte cadet, credas illum cum corpore natam esse hominis pariterque orbem vidisse per umbras. sic erit ipse tibi rapidis quaerendus in astris natalis mundi certoque horoscopos ortu, 496 numerique relinquit 502 per ignes

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*a* Let the moment of birth be 4 hours after sunrise when the Sun is in the 10th degree of Gemini: 4 times 15 is 60; ... 

*b* ... add the 10 degrees the Sun is left with in Gemini: that makes 70; ... 

*c* ... from 70 give 30 to Gemini, and 30 to Cancer: ... 

d the number is thus used up in Leo, and so the Horoscope will be found in the 10th degree of Leo. At this point in the text several verses have been lost, but their contents clearly dealt with a nocturnal procedure (cf. 485) and are easily reconstructed.

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*b* Let the moment of birth be 4 hours after sunset when the Sun is in the 10th degree of Gemini: 4 times 15 is 60; ... 

*f* ... add the 10 degrees the Sun has completed in Gemini: that makes 70; ... 

*g* ... add 180: that makes 250; ... 

*h* ... give 30 each to Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, and Capricorn: that leaves 10; ... 

*i* ... thus the Horoscope will be found in the 10th degree of Aquarius.
MANILIUS

ut, cum exacta fides steterit sub cardine primo, 505
fallere non possint summi fastigia caeli,
non celeres obitus, stent fundamenta sub imo,
[stent veri stellarum obitus verique subortus]
sideraque in proprias vires sortesque recedant.

Nunc sua reddentur generatim tempora signis, 510
quae divisa etiam proprios ducentur in annos
et menses lucesque suas horasque dierum,
per quae praecipius ostendunt singula vires.
primus erit signi, quo Sol effulserit, annus,
annua quod lustrans consumit tempora mundum ;
proximus atque alii subeuntia signa sequuntur.
Luna dabit menses, peragit quod menstrua cursum,
tutelaeque suae primas horoscopos horas
asserit atque dies, traditque sequentibus astris.
sic annum mensesque suos natura diesque
atque ipsas voluit numerari signa per horas,
onnia ut omne foret divisum tempus in astra
perque alterna suos variaret sidera motus,
ut cuiusque vices ageret redeuntis in orbem.

idcirco tanta est rerum discordia in aevo
et subtexta malis bona sunt lacrimae sequuntur
vota nec inconstans servat fortuna tenorem ;
usque adeo permixta fluit nec permanet usquam,
amisitque fidem variando cuncta per omnis.

sider[a] dena 509 quos 513 annum 515 in cunctos

Horoscope with its fixed ascension, so that, when precise accuracy attaches to the location of the first cardinal point, the zenith of heaven on high will not be able to elude you, nor the swift obitus setting, and the foundations will be correctly fixed at the nadir, and the signs will duly light upon their proper portions and influences.

Now I shall assign their special periods of life in classes to the signs; for the signs are also allotted to their own particular years and months and days and hours of days; and during these periods they each exercise especial influence. The first year of life will belong to that sign in which at birth the Sun has shone, since the Sun takes a year's duration to traverse the firmament; the next and subsequent years are consecutively bestowed upon the signs in their order. The Moon shall denote the months, since in a month it completes its course. The Horoscope brings under its regency the first days and the first hours, and hands the others to the following signs. Thus did nature wish year and months and days and even hours to be duly counted out through the signs, that every period of time might be distributed over every sign of the zodiac and vary its movements through the sequence of signs, according as it made a change to each one as it came round in the circle. This is why such extremes of experience are found in the passage of time, and good is linked to bad, sorrow attends success, and in its inconstancy fortune maintains no steady course: to such an extent is it varied and changing, nowhere remaining the same; and by its commutation of everything in

\[508\]... correctly fixed the true settings and true risings of the planets, ...\]
Manilius appears to be talking about daylight hours and ignoring the hours of night. Certainly he is explicit enough elsewhere, at 3.245, for example. But it is conceivable that he is here following a source in which the day (\(\omega\gamma\eta\theta\mu\varepsilon\rho\omicron\nu\)) was divided into, not twenty-four hours, but twelve; these “double-hours” were a regular Babylonian period of time.

The lives of us all it has forfeited our trust. Nowhere does year bear resemblance to year or month to month; the very day, ever different, looks in vain for the replica of itself, and no hour’s space is fully run in the likeness of another, because the periods are mutually at variance, being, inasmuch as they are divided into all the sections of fleeting time, subject to their own special signs, and hence bring it about that the lives and fortunes of the living are a reflection of the stars, by whose changes we ourselves then change.

There are some who approve of an alternative scheme: from the sign at the edge of the rising heavens, which the founders of astrology call the Horoscope, since from that point are measured the hours of day, every class of calculation is made both in the divisions of time and in their distribution to signs; the years and months and days and hours start from the same source and are passed on to the following signs; however, even though all the periods proceed from a common origin, the sequences are dissimilar, because some periods are slower, some quicker to complete the circle. To every sign there comes an hour just once a day, a day twice in the month, a month once in the year, and a year once in twelve annual courses of the Sun. It would be difficult for all the periods to revolve concurrently in the same time, so that together in a single sign the same year and month and day and hour coincide: the cycle of time is at variance with itself. It oft happens that those who have drawn the year of a gentile sign are passing the month of a harsher one; oft that, if the
laetius inciderit, signum sit triste diei;
si fortuna diem foveat, sit durior hora.
idcirco nihil in toto sibi credere fas est,
non annos signis, menses vertentibus annis,
mensibus aut luces, aut omnis lucibus horas,
quod nunc illa nimis properant, nunc illa morantur,
et modo dest alii, modo adest, vicibusque recedit
aut redit atque alio mutatur tempore tempus
interpellatum variata sorte dierum.

Et, quoniam docui, per singula tempora, vitae
quod quandoque genus veniat, cuiusque sit astri
quisque annus, cuius mensis, simul hora diesque,
altera nunc ratio, quae sumnum continet aevi,
reddenda est, quot quaque annos dare signa ferantur.
quae tibi, cum finem vitae per sidera quaeris,
respicienda manet ratio numerisque notanda.
his quinos annos Aries unumque triente
fraudatum dabit. appositis tu, Taure, duobus
vincis, sed totidem Geminorum vinceris astro,
tuque bis octonos, Cancer, bisnoque trientes,
bisque novem, Nemeaeae, dabis sexsemque sub illis.

557 alius 571 nemeae tribues

a Since there are twelve signs of the zodiac and twelve
hours (see previous note) and twelve months, the cycles of
hours and months will always remain constant, that is, the
first hour of any day and the first month of any year will
always fall to the same sign, and similarly with the second,
third, and so on. But there being, in the Roman calendar at
any rate, sequences of 30, 31, and 28 (29) days in a month, the
cycle of days soon gets out of step. For example, if Jan. 1 is
allotted to Aries, so will be Jan. 13, Jan. 25, Feb. 6, Feb. 18,
Mar. 2, etc., with Feb. 1 falling to Scorpio, and Mar. 1 to
Pisces, etc., thus producing an irregular cycle.

b The amounts (in years) are as follows: Aries, Pisces 10 1/3;
Taurus, Aquarius 12 1/3; Gemini, Capricorn 14 2/3; Cancer,
Sagittarius 16 2/3; Leo, Scorpio 18 2/3; Virgo, Libra 20 1/3 (cf.
Introduction p. lxxix and figure 21).
Scorpios aequabit tribuentem dona Leonem.  
Centauri fuerint eadem quae munera Cancri.  
   ter quinos, Capricorne, dares, si quatuor essent  
appositi menses. triplicabit Aquarius annos  
quattuor et menses vitam productur in octo.  
Piscibus est Aries et sorte et finibus haerens:  
   lustra decem tribuent solis cum mensibus octo.  

Nec satis est annos signorum noscere certos,  
ne lateat ratio finem quaerentibus aevi:  
   tempora quoque et partes caeli sua munera norunt  
   si bene constiterit stellae conditum ordo.  
   sed mihi templorum tantum nunc iura canentur;  
   mox veniet mixtura suis cum viribus omnis,  
   cum bene materies steterit percognita rerum  
   non interpositis turbatarum undique membris.  
   si bene constiterit primo sub cardine Luna,  
   qua reedit in terras mundus, nascensque tenebit  
   exortum, octo tenor decies ducetur in annos  
   si duo decedant. at, cum sub culmine summo  
   consistet, tribus hac numerus fraudabit annis.  
   bis quadragenos occasus dives in actus  
   solis erat, numero nisi desset olympias una.  
   imaque tricenos bis fundamenta per annos  
   censetur bis adiectis messibus aevi.

588 turbatur  592 octonos  594 mensibus
591 quo

---

581 Nor is it enough to learn the total of years allotted by the signs, lest the whole scheme be hidden from us when we seek the measure of men's lives: the temples and portions of the sky also have gifts of their own to bestow, and impart in a precise gradation their respective amounts, when the configuration formed by the planets proves auspicious. But I now shall sing only of the ordinances of the temples; later the whole complex design will appear with its full force, when the constituent parts of the universe are firmly grasped and not made confusing with portions scattered everywhere. If the Moon is auspiciously placed in the temple of the first cardinal point, where the heavens return to earth, and its rising occupies the ascendant, the course of life shall be prolonged to eighty years, if two withdraw. But when it stands at the summit of the sky, the former number is cheated of three years. The setting were rich in twice forty circuits of the Sun, were not one lustrum lacking from the count. The nethermost base is assessed at years twice thirty with twice six harvests added to the year period is often used by the Latin poets (as a result of the Roman principle of inclusive reckoning) to denote a lustrum or five-year period (Ovid, Ex Ponto 4. 6. 5 f.).

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\[ a\] This seems to look forward to an account of planetary influences, which, however, is not found in the poet's extant work.

\[ b\] Temple 1 = 80 - 2 = 78. Cf. Introduction pp. lxxx f. and figure 22.

\[ c\] Temple 10 = 80 - 3 = 77.

\[ d\] Literally "olympiad," which though properly a four-

\[ e\] Temple 7 = 80 - 5 = 75.
quodque prius natum fuerit dextrumque trigonum
hoc sexagenos tribuit duplicatque quaternos.
quod fuerit laevum praelataque signa sequetur
tricenos annos duplicat, tris insuper addit.
quaeque super signum nascens a cardine primum
tertia sors manet et summo iam proxima caelo
haec ter vicenos geminat, tris abstrahit annos.
quaeque infra veniet spatio divisa sub aequo
per quinquagenas complet sua munera brumas.
quemque locum superat nascens horoscopos, ille
dena quater revocat vertentis tempora solis
accumulatque duos cursus iuvenemque relinquit.
at qui praecedet surgentis cardinis oram
vicenos ternosque dabit nascentibus annos
vix degustatam rapiens sub flore iuventam.
quod super occasus templum est ter dena remittit
annorum spatia et decimam tribus applicat auctis.
inferius puerum intermet, bis sexque peracti
immatura trahent natales corpora morti.

Sed tamen in primis memori sunt mente notanda
partibus adversis quae surgunt condita signa
divisumque tenent aequo discrimine caelum;
quae tropica appellant, quod in illis quattuor anni
tempora vertuntur signis nodosque resolvunt

\[ a \text{ Temple } 4 = 60 + 12 = 72. \]
\[ b \text{ Temple } 9 = 60 + 8 = 68. \]
\[ c \text{ Temple } 5 = 60 + 3 = 63. \]
\[ d \text{ Literally "the third temple from ..." (by the Roman principle of inclusive reckoning).} \]
\[ e \text{ The Horoscope.} \]
\[ f \text{ Temple } 11 = 60 - 3 = 57. \]
\[ g \text{ Temple } 3 = 50. \]
\[ h \text{ Temple } 2 = 40 + 2 = 42. \]
\[ i \text{ Temple } 12 = 23. \]

But above all one must mark with a retentive
mind the signs which rise from their places in opposite
parts of the sky and mark its division into equal
portions. They are called tropic signs, since in them
turn the four seasons of the year and untie the bonds
which fasten them together; they bring change to
toll. And the trigon of the Horoscope which rose
first and is on the right bestows sixty and the double
of four. The trigon on the left and following in the
wake of the preceding signs doubles thirty years and
adds three over and above. And the temple which
is separated by one intervening sign from the first
sign rising at the cardinal point and which is now
next to heaven's peak, this multiplies a score by
three and takes three years away. The temple
which comes below, separated from the cardinal
point by an equal space, completes its endowment
over fifty winters. That place, above which stands
the rising Horoscope, four times repeats ten seasons
of the revolving Sun and heaps thereon two courses,
and leaves one still a young man. That which
precedes the border of the rising quarter shall give
years three and twenty to those born under it,
plucking ere its bloom their youth scarce tasted.
The temple above the setting allows thrice ten cir­
cuits of years and adds thereto a tithe in augmenting
them by three. The lower one will despatch its
wards in childhood, the completion of twice six
birthdays consigning to death their undeveloped
bodies.
totumque emutant converso cardine mundum
inducuntque novas operum rerumque figuras.

Cancer ad aestivae fulget fastigia zonae
extenditque diem summum parvo recessu
destruet et, quanto fraudavit tempore luces,
in tantum noctes auget: stat summa per omnis.
tum Cererem fragili properant destringere culmo,
Campus et in varias destringit membra palaestras,
et tepidas pelagus iactatum languet in undas.
tunc et bella fero tractantur Marte cruenta
nee Scythiam defendit hiems; Germania sicca
iam tellure fugit Nilosque tumescit in arva.
hic rerum status est, Cancri cum sidere Phoebus
solstitium facit et summo versatur Olympo.

Parte ex adversa brumam Capricornus inertem
per minimas cogit luces et maxima noctis
tempora, producitque diem tenebrasque resolvit,
inque vicem nunc damna regit, nunc tempora supplet.
tunc riget omnis ager, clausum mare, condita castra,
nec tolerant medias hiemes sudantia saxa,
statque uno natura loco paulumque quiescit.

Proxima in effectum et similis referentia motus
esse ferunt luces aequantia signa tenebris.
namque Aries Phoebum repetentem sidera Cancri
inter principium reditus finemque coercet
tempora diviso iungens concordia mundo,
convertitque vices victumque a sidere Librae

630 destringunt 640 legit
631 trepidum 645 diebus 649 brumae

a Before the advancing Romans, no longer protected by
its swamps as it was in the winter (cf. Tacitus, Ann. 2. 5. 3).
b The Sun’s return journey is from Capricorn, and the
sign of the Ram marks the halfway stage.

the whole sky as it revolves on its axis, giving a new
look to the works of man and the face of nature.

Gleaming in summer’s topmost circle, Cancer
prolongs the day to its greatest length and then
shortens it in retreating by small degrees, increasing
night by the amount which it stole from day: for
the sum of day and night remains constant. Then
men make haste to strip the grain from the brittle
stalk, while the Field of Mars strips their bodies for
a variety of exercise, and after its storms the sea
sinks back to rest upon warm waters. Then, too,
the savage War-god wages bloody battles, from which
not now does winter protect the Scythians; Germany
retreats, its land now dry; and the Nile rises to
flood its fields. This is the state of things when the
sun makes solstice in Cancer’s sign and is found at
heaven’s summit.

On the other side Capricorn forces sluggish
winter through the shortest day and longest duration
of night, and begins to lengthen daylight and
dispel darkness; by turns it now controls day’s losses
and now repairs them. Then every field is frost-bound;
the sea is closed to ships; the camp is stationary; rocks
covered with rime are unable to endure midwinter’s
cold: nature stands motionless and for a while is
still.

Close to these in their influence and displaying
variation similar to each other are, they say, the
signs which level the hours of light and darkness.
For the Ram arrests the Sun, as it reseeks Cancer’s
stars, between the start and end of its return
journey, and dividing heaven in half, matches night
and day in harmony; and he reverses the sequence,
bidding day, overpowerd by the length of night
exsuperare diem iubet et succumbere noctes, 
aestivi donec veniant ad sidera Cancri. 
tum primum miti pelagus consternitur unda 
et varios audet flores emittere tellus; 
tum pecudum volucrumque genus per pabula laeta 
in Venerem partumque ruit, totumque canora 
voce nemus loquitur frondemque virescit in omnem. 
viribus in tantum signi natura movetur.

Huic ex adverso simili cum sorte refulget 
Libra diem noctemque pari cum foedere ducens, 
tantum quod victas usque ad se vincere noctes 
ex ipsa iubet, ad brumae dum tempora surgant. 
tum Liber gravida descendit plenus ab ulmo 
pinguiaque impressis despumant musta racemis; 
mandant et sulcis Cererem, dum terra tepore 
autumni resoluta patet, dum semina ductit.

Quattuor haec et in arte valent, ut tempora vertunt 
sic hos aut illos rerum flectentia casus 
 nec quiequam in prima patientia sede manere. 
 sed non per totas aequa est versura figuris, 
 annua nec plenis flectuntur tempora signis. 
 una dies sub utroqueaequat sibi tempore noctem, 
dum Libra atque Aries autumnum verque figurant; 
 una dies toto Caneri longissima signo, 
cui nox aequalis Capricorni sidere fertur: 
cetera nunc urgent vicibus, nunc tempora cedunt. 
una ergo in tropicis pars est cernenda figuris,
quae moveat mundum, quae rerum tempora mutet, 
facta novet, consulta alios declinet in usus, 
omnia in aversum flectat contraque revolvat.

has quidam vires octava in parte reponunt ;
sunt quibus esse placet decimae ; nec defuit auctor 
qui primae momenta daret frenosque dierum.
BOOK FOUR

It is in his fourth book that Manilius spreads his wings most widely, for here every aspect of his teaching and every facet of his genius are attractively illustrated. At the beginning, as at the end, we hear the indignant voice of the apostle of Stoicism. There follows, with a change to the poet’s lighter style, an exposition of the characteristics and influences of the signs of the zodiac (a foretaste of that treatment of the extra-zodiacal signs which will occupy most of the last book). The next two chapters, on decans and injurious degrees, present us with another glimpse of the versifier of astrological and mathematical tables. A somewhat cursory interlude on the rising of individual degrees of the ecliptic forms the transition to the chief subject of the latter portion of the book, a geographical survey and an account of the dominion of the zodiac over the various parts of the world. Ecliptic signs restore to us the philosophical poet, who takes for his peroration the theme of man as microcosm and image of the divine.
LIBER QUARTUS

Quin tam sollicitis vitam consumimus annis
torquemurque metu caecaque cupidine rerum
aeternisque senes curis, dum quaerimus, aeum
perdimus et nullo votorum fine beati
victuros agimus semper nec vivimus umquam,
pauperiorque bonus quisque est, quia plura requirit
nec quod habet numerat, tantum quod non habet optat,
cumque sibi parvos usus natura reposcat
materiam struimus magnae per vota ruinae
luxuriamque lucris emimus luxuque rapinas,
et summum census pretium est effundere censum?
solvite, mortales, animos curasque levate
totque supervacuis vitam deplete querellis.
fata regunt orbem, certa stant omnia lege
longaque per certos signantur tempora casus.
nascentes morimur, finisque ab origine pendet.
hinc et opes et regna fluunt et, saepius orta,
apaupertas, artesque datae moresque creatis
e et vitia et laudes, damna et compendia rerum.
nemo carere dato poterit nec habere negatum
fortunamve suis invitam prendere votis

8 qui
sui
10 clades
caret damno

BOOK 4

Oh, why do we spend the years of our lives in worry, tormenting ourselves with fears and senseless desires; grown old before our time with anxieties which never end; forfeiting length of days by our very quest for it; setting no limit to our wishes, so that their fulfilment leaves us still unblest, but ever playing the part of men who mean to live yet never do? Everyone is the poorer for his possessions because he looks for more: none counts his blessings, but only lusts for what he lacks. Though nature needs only modest requirements, we build higher and higher the peak from which to fall, and purchase luxury with our gains, and with love of luxury the fear of dispossession, until the greatest boon that wealth can confer is the squandering of itself. Set free your minds, O mortals, banish your cares, and rid your lives of all this vain complaint! Fate rules the world, all things stand fixed by its immutable laws, and the long ages are assigned a predestined course of events. At birth our death is sealed, and our end is consequent upon our beginning. Fate is the source of riches and kingdoms and the more frequent poverty; by fate are men at birth given their skills and characters, their merits and defects, their losses and gains. None can renounce what is bestowed or possess what is denied; no man by prayer may seize fortune if it demur, or escape if it
aut fugere instantem: sors est sua cuique ferenda.
an, nisi fata darent leges vitæque necisque,
fugissent ignes Aenean, Troia sub uno
non eversa viro fatis vicisset in ipsis?
aut lupa proiectos nutrisset Martia fratres,
Roma casis enata foret, pecudumque magistri
in Capitolinos duxissent fulmina montes,
includive sua potuisset Iuppiter arce,
captus et a captis orbis foret? igne sepulto
vulneribus victor repetisset Mucius urbem,
solus et oppositis clausisset Horatius armis
ponem urbemque simul, rupisset foedera virgo,
tresque sub uniis fratres virtute iacerent?
nulla acies tantum vicit: pendebat ab uno
Roma viro regnúmque orbis sortita iacebat.
quid referam Cannas admotaque moenibus arma
Varronemque fuga magnum | Fabiumque morando
postque tuos, Trasiméne, lacus, | cum vincere posset,
accepisse iugum victae Carthaginis arces,
sequentis Hannibalem nostris cecidisse catenis
exitium generis furtiva morte luisse?
adde etiam Latias acies Romamque suis met
pugnantem membris, adice et civilia bella
et Cimbrum in Mario Mariumque in carcere victum.
draw nigh: each one must bear his appointed lot. For were not fate the arbiter of life and death, would the flames have receded before Aeneas, and Troy, saved from destruction by one man’s survival, have emerged triumphant in the very day of ruin? Would the she-wolf of Mars have suckled the brothers exposed to die, Rome have grown out of cottages, shepherds have brought thunder to the Capitol’s slopes, or Jupiter consented to confinement in his citadel and the world been vanquished by a vanquished people? Would Mucius have quenched the fire with the blood from his wounds and returned victorious to Rome, Horatius single-handed have shut both bridge and city to the assailing host, a maiden have annulled a treaty, and three brothers have fallen to the valour of one? It was no army that won that great victory: Rome then depended on a single warrior and, though fated to rule the world, despairing. What need have I to tell of Cannae and enemy arms brought to the city walls, of the heroism of Varro’s flight and Fabius’s delays? What need to tell how after the battle at your lake, Trasimene, when victory lay in her grasp, the towers of humbled Carthage bowed to the yoke and Hannibal, judging he had fallen into our clutches, expiated in an inglorious death the destruction of his race? Add to these the battles in Latium and Rome in arms against her own person; add too the civil wars, a Cimbrian helpless at the sight of Marius, himself in

\[ a \] Virg., *Aen.* 2. 632 f.
\[ b \] Romulus and Remus.
\[ c \] Referring to the establishment by shepherds on the Capitol of the cult of Jupiter the Thunderer.
\[ d \] Gaius Mucius Scævolæ (*cf.* 1. 779, Livy 2. 12).
\[ e \] Horatius Cœles (*cf.* 1. 781, Livy 2. 10).
quod, consul totiens, exul, quod de exule consul adiacuit Libycis compar iactura ruinis
eque crepidinibus cepit Carthaginis urbem,
hoc, nisi fata darent, numquam fortuna tulisset.
quis te Niliaco periturum litore, Magne,
post victas Mithridatis opes pelagusque receptum
et tris emenso meritos ex orbe triumphos,
cum te iam posses alium componere Magnum,
erceret, ut corpus sepeliret naufragus ignis
eiectaeque rogum facerent fragmenta carinae?
quis tantum mutare potest sine numine fati?
ille etiam caelo genitus caeloque receptus,
cum bene compositis victor civilibus armis
iura togae regeret, totiens praedicta cavere
vulnera non potuit: toto spectante senatu,
indicium dextra retinens nomenque, cruore
delevit proprio, possent ut vincere fata.
quid numerem eversas urbes regumque ruinas,
inque rogo Croesium Priamique in litore truncum,
cui nec Troia rogus? quid Xerxen, maius et ipso
naufragium pelago? quid capto sanguine regem
Romanis postum, raptosque ex ignibus ignes
eedentemque viro flammam quae templo ferebat?

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\[a\] A Cimbrian slave was sent to kill Marius at the nadir of his fortunes but lost his nerve in the overwhelming presence of the man (Valerius Maximus 2. 10. 6). 
\[b\] Cf. 1. 793. Pompey’s triumphs were gained in Africa, Europe, and Asia (Velleius 2. 40. 4). 
\[c\] As another Alexander. 
\[d\] Julius Caesar, descended from Venus and deified after his death. 
\[e\] Cf. Herodotus 1. 86 f. 
\[f\] Cf. Virgil, Aen. 2. 557. 
\[g\] Servius Tullius.
quot subitae veniunt validorum in corpora mortes
seque ipsae rursus fugiunt errantque per ignes!
ex ipsis quidam elati rediere sepulcris,
atque his vita duplex, illis vix contigit una.
cec levis perimit morbus graviorque remittit;
succumbent artes, rationis vincitur usus,
cura nocet, cessare iuvat, mora saepe malorum
dat pausas; laeduntque cibi parcuntque venena.
degenerant nati patribus vincuntque parentes
ingeniumque suum retinent; transitque per illum,
ex illo fortuna venit. furit alter amore
et pontum tranare potest et vertere Troiam,
alterius frons est scribendis legibus apta.
cec patrem nati perimunt natosque parentes
mutuaque armati coeunt in vulnera fratres.
non hominum hoc bellum est; coguntur tanta moveri
inque suas ferri poenas lacerandaque membra.
quod Decios non omne tuli, non omne Camillos
tempus et invicta devictum mente Catonem,
materies in rem superat sed lege repugnat.
et neque paupertas breviores excipit annos
nec sunt immensis opibus venalia fata,
sed rapit ex tecto funus Fortuna superbo
indicitque rogum summis statuitque sepulcrum.
quanta est hoc regnum, quod regibus imperat ipsis!
quin etiam infelix virtus et noxia felix,

a Lucius Caecilius Metellus, who rescued the sacred fire
from the Temple of Vesta when it was burned (Livy, Perioch. 19).
b Like Leander.  
c Like Paris.  
d Like Oedipus.  
e Like Medea.

mortal? a How oft without warning does death visit
the bodies of the strong, how oft again does death
flee its very self and wander forth through the funeral
fires! Some carried out to burial have returned even
from the grave, gifted with a twofold life whilst others
have scarcely one. Why, a slight ailment kills, whilst
one more serious allows of a reprieve; therapy fails,
rational practice is baffled, and attention harms, whilst
negligence proves beneficial and delay oft brings a
cessation of complaints; and nourishment injures,
whilst poison spares the patient. Sons fall short of
their fathers' merits or rise above their parentage
and keep a nature that is their own. The fortunes of a
dynasty rise with one member of a house and are
eclipsed with another. This one is a frenzied lover
and can swim the straits b or ruin Troy, c that one's
gravity is suited to the framing of law. See, sons slay
a father, d and parents their children, e and brothers
meet armed to shed each other's blood. f This violence
is no work of men's: a destiny drives them to such
awful passions and to suffer such punishment and
mutilation of limb. Not every age has produced men
like the Decii g and Camillos, h or a Cato with a spirit
unconquered in defeat i: more than enough material
exists to accomplish such an end, but resists through
fate's decree. Again, the poor do not fall heir to
fewer years of life, nor may one's span be purchased
with vast wealth. But Fortune carries off a corpse
from stately halls, appoints a pyre and assigns a tomb
for men of highest station. What wonderful kingship
is this, whose bidding even kings obey! Moreover,
it happens that virtue fares ill, and guilt fares well;

f Like Eteocles and Polynices.  
g Cf. 1. 789.  
h Cf. 1. 784.  
i Cato of Utica (cf. 1. 797).
et male consultis pretium est, prudentia fallit; nec Fortuna probat causas, sequiturque merentis, sed vaga per cunctos nullo discrimine fertur. scilicet est aliud, quod nos cogatque regatque, malus, et in proprias ducat mortalia leges attribuatque suos ex se nascentibus annos fortunaeque vices. permiscet saepe ferarum corpora cum membris hominum: non seminis ille partus erit; quid enim nobis commune ferisque, quise in portenti noxam peccarit adulter? astra novant formas caelumque interserit ora. denique, si non est, fati cur traditur ordo, eunctaque temporibus certis ventura canuntur? nec tamen haec ratio facinus defendere pergit virtutemve suis fraudare in praemia donis. nam neque mortiferas quisquam minus oderit herbas quod non arbitrio veniunt sed semine certo, gratia nec levior tribuetur dulcibus escis quod natura dedit fruges, non ulla voluntas. sic hominum meritis tanto sit gloria maior quod caelo laudem debent, rursusque nocentis oderimus magis in culpam poenasque creatos. nec refert seclus unde cadat, seclus esse fatendum. hoc quoque fatale est, sic ipsum expendere fatum. [quod quoniam docui, superest nunc ordine certo caelestis fabricare gradus, qui ducere flexo tramite pendentem valeant ad sidera vatem]

95-100

Poorly conceived plans are rewarded, whilst foresight fails; nor does Fortune examine the merits of a case and attend the deserving, but moves capriciously through the lives of all without distinction. Clearly, there is another and greater power to constrain and rule us, and to subject mortal affairs to laws of its own: it gives birth to men and at their birth determines the number of their years and the changes of their fortunes. Oft it conjoins body of beast with limb of man: yet that will be found no product of the seed. What has our human nature in common with a beast's? When has the sin of adultery been punished with a monstrous birth? It is the stars which fashion strange shapes; it is heaven which intrudes these hybrid features. After all, if a pattern of fate does not exist, how comes it that it is represented as existing and all that will come to pass at particular moments prophesied? Not that this reasoning goes so far as to defend crime or deprive virtue of the gifts that are its reward. For no one will hate poisonous plants the less because they grow from their appointed seed and not by their own choice, nor will tasty food find less favour because the crops are nature's bounty and not given us by any decision of their own. Let man's merits, therefore, possess glory all the greater, seeing that they owe their excellence to heaven; and, again, let us hate the wicked all the more, because they were born for guilt and punishment. Crime, whencesoever sprung, must still be reckoned crime. This, too, is sanctioned by fate, that I should thus expound the rule of fate.  

110-115

For such portents cf. Livy 27. 11. 5; 31. 12. 8.

119-121

"After this exposition, it now remains to construct in the correct order steps mounting to heaven, that they may avail to guide the hesitating seer by a winding path to the stars."

116-117

Cf. 2. 149. In the mss. follows the interpolation [119-121]:
Nunc tibi signorum mores summumque colorem et studia et varias artes ex ordine reddam. Dives fecundis Aries in vellera lanis exutusque novis rursum sper semper habebit, naufragiumque inter subitum censusque beatos crescendo cadet et votis in damna feretur, in vulgumque dabat fructus et mille per artes vellera diversos ex se parientia quaestus: nunc glomerare rudis nunc rursus solvere lanas, nunc tenuare levi filo nunc ducere telas, nunc emere et varias in quaestum vendere vestes, quis sine non poterant ullam subsistere gentes vel sine luxuria. tantum est opus, ipsa suismet asseruit Pallas manibus dignumque putavit, seque in Arachnaeo magnam putat esse triumpho. haec studia et similis dicet nascentibus artes, et dubia in trepido praecordia pectore finget seque sua semper cupientia vendere Iaude.

Taurus simplicibus dotabit rura colonis pacatisque labor veniet; nec praemia laudis sed terrae tribuet partus. summittit in astris colla iugumque suis poscit cervicibus ipse. ille suis Phoebi portat cum cornibus orbem militiam indicit terris et segnia rura in veteres revocat cultus, dux ipse laboris, nec iacet in sulcis solvitque in pulvere pectus. Serranos Curiosque tulit fascesque per arva

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122 Now shall I declare to you in due order the characters, the predominant quality, the pursuits, and the different skills which the signs impart.

124 The Ram, who is rich with an abundance of fleecy wool and, when shorn of this, with a fresh supply, will ever cherish hopes; he will rise from the sudden shipwreck of his affairs to abundant wealth only to meet with a fall, and his desires will lead him to disaster; he will yield his produce for the common benefit, the fleece which by a thousand crafts gives birth to different forms of gain: now workers pile into heaps the undressed wool, now card it, now draw it into a tenuous thread, now weave the threads to form webs, and now they buy and sell for gain garments of every kind; no nation could dispense with these, even without indulgence in luxury. So important is this work that Pallas herself has claimed it for her own hands, of which she has judged it worthy, and deems her victory over Arachne a token of her greatness. These are the callings and allied crafts that the Ram will decree for those born under his sign: in an anxious breast he will fashion a diffident heart that ever yearns to commend itself by its own praise.

140 The Bull will dower the countryside with honest farmers and will come as a source of toil into their peaceful lives; it will bestow, not gifts of glory, but the fruits of the earth. It bows its neck amid the stars and of itself demands a yoke for its shoulders. When it carries the sun's orb on its horns, it bids battle with the soil begin and rouses the fallow land to its former cultivation, itself leading the work, for it neither pauses in the furrows nor relaxes its breast in the dust. The sign of the Bull has produced a Serranus and a Curius, has carried the rods of office through the
MANILIUS

tradidit, eoque suo dictator venit aratro.
laudis amor tacitae; mentes et corpora tarda
mole valent, habitatque puer sub fronte Cupido.

Mollius e Geminis studium est et mitior aetas
per varios cantus modulataque vocibus ora
et gracilis calamos et nervis insita verba
ingenitumque sonum: labor est etiam ipse voluptas.
arma procul lituosque volunt tristemque senectam,
отia et acternam peragunt in amore iuventam.
inveniunt et in astra vias numerisque modisque
consummant orbem postque ipsos sidera linquunt:
natura ingenio minor est perque omnia servit.
in tot fecundi Gemini commenta feruntur.

Cancer ad ardentem fulgens in cardine metam,
quam Phoebus summis revocatus cursibus ambit,
articulum mundi retinet lucesque reflectit.
ille tenax animi nulloque effusus in usus
attribuit varios quaestus artemque lucrorum:
merce peregrina fortunam ferre per urbes
et gravia annonae spectantem incendia ventis
credere opes orbisque orbi bona vendere posse
totque per ignotas commercia iungere terras
atque alio sub sole novas exquirere praedas
et rerum pretio subitos componere census.

ASTRONOMICA, 4. 149-172

fields, and has left its plough to become a dictator.a
Its sons have the love of unsung excellence; their
hearts and bodies derive strength from a massiveness
that is slow to move, whilst in their faces dwells the
boy-god Love.

152 From the Twins come less laborious callings and
a more agreeable way of life, provided by varied song
and voices of harmonious tone, slender pipes, the
melodies inborn in strings and the words fitted
thereo: those so endowed find even work a pleasure.
They would banish the arms of war, the trumpet’s
call, and the gloom of old age: theirs is a life of ease
and unfading youth spent in the arms of love. They
also discover paths to the skies, complete a survey of
the heavens with numbers and measurements, and
outstrip the flight of the stars b: nature yields to
their genius, which it serves in all things. So many are
the accomplishments of which the Twins are fruitful.

162 Shining at the hinge of the year by the blazing
turning-point which when recalled the Sun rounds in
his course on high, the Crab occupies a joint of heaven
and bends back the length of day. c Of a grasping
spirit and unwilling to give itself in service the Crab
distributes many kinds of gain, and skill in making
profits; he enables a man to carry his investment of
foreign merchandise from city to city and, with an
eye on steep rises in the price of corn, to risk his
money upon sea-winds; to sell the world’s produce to
the world, to establish commercial ties between so
many unknown lands, to search out under foreign
skies fresh sources of gain, and from the high price of
his goods to amass sudden wealth. With heaven’s
longer, until the solstice is reached, and are then “bent back,”
 i.e. become shorter.

159 postquam
160 curribus
162 victam
IGNAVA ET, Celeris optando sortibus annos, 
Dulcis usus aequo Iove tempora vendit. 
Ingenuum sollores suaque in compendia pugnax.

Quis dubitet, vasti quae sit natura Leonis 
Quasque suo dictet signo nascentibus artes? 
Ille novas semper pugnas, nova bella ferum 
Apparat, et spolio vivit pecorumque rapinis; 
Hos habet hoc studium, postes ornare superbos 
Pellibus et captas domibus praefigere praedas 
Et pacare metu silvas et vivere rapto. 
Sunt quorum similis animos nec moenia frenent, 
Sed pecudum mandris media grassentur in urbe 
Et laceros artus suspensant fronte tabernae. 
Luxuriaeque parent caedem mortesque lucentur. 
Ingenuum ad subitas iras facilisque recessus 
Aequale et puro sententia pectore simplex. 

At quibus Erigone dixit nascentibus acervum 
Ad studium ducet mores et pectora doctis 
Artibus instituet, nec tam compendia census 
Quam causas viresque dabit perquirere rerum. 
Illa decus linguarum faciet regnumque loquendi 
Atque oculos mentis, qui possint cernere cuncta 
Quamvis occultis naturae condita causis. 
Hinc et scriptor erit velox, cui littera verbum est 
Quique notis linguam superet cursimque loquentis 
Excipiat longas nova per compendia voces. 

In vitio bona sunt: teneros pudor impedit annos,
magnaque naturae cohibendo munera frenat
ora magisterio nodisque coercita Virgo.
nec fecundus erit (quid mirum in virgine ?) partus.

Librantes noctem Chelae cum tempore lucis
per nova maturi post annum munera Bacchi
mensurae tribuunt usus ac pondera rerum
et Palamedeis certantem viribus ortum,
qui primus numeros rebus, qui nominas summis
imposuit certumque modum propriasque figuras.
hic etiam legum tabulas et condita iura
noverit atque notis levibus pendentia verba,
et licitum sciet, et vetitum quae poena sequatur,
perpetuus populi privato in limine praetor.
non alio potius genitus sit
Servius
qui leges proprias posuit, cum iura retexit.
denique, in ambiguo fuerit quodcumque locatum
et rectoris egens, diriment examina Librae.

Scorpios armata violenta cuspine cauda,
quae, sua cum Phoebi currum per sidera ducit,
rimatur terras et sulcis semina miscet,
in bellum ardentis animos et Martia castra
efficit et multo gaudentem sanguine mentem
nec praeda quam caede magis. quin ipsa sub armis
pax agitur : capiunt saltus silvasque peragrant,

\[190\] nudosque \[221\] civem
\[214\] proprias] potius

a The words denoting numbers, i.e. \(\varepsilon\nu\), \(\delta\nu\), \(\tau\rho\alpha\) (as it might be with us “one, two, three” etc.).
b The figures denoting numbers, i.e. \(\Lambda\beta\tau\) (as it might be with us “1, 2, 3” etc.).
c Abbreviations, specifically those used in the legal code: among examples Isidore, \(\text{Orig.}\ 1.\ 23\), cites \(\text{BF}\) \(\text{bonum}\)

the early years of such persons, for the Maid, by
holding back their great natural gifts, puts a bridle on
their lips and restrains them by the curb of authority.
And (small wonder in a virgin) her offspring is not
fruitful.

Balancing night with the length of day when
after a year’s space we enjoy the new vintage of the
ripened grape, the Scales will bestow the employment
of weights and measures and a son to emulate the
talents of Palamedes, who first assigned numbers to
things, and to these numbers names,\(a\) fixed magni-
tudes, and individual symbols.\(b\) He will also be
acquainted with the tables of law, abstruse legal
points, and words denoted by compendious signs \(c\);
he will know what is permissible and the penalties
incurred by doing what is forbidden; in his own
house he is a people’s magistrate holding lifelong
office. Under no other sign would Servius \(d\) more
fittingly have been born, who in interpreting the law
framed legislation of his own. Indeed, whatever
stands in dispute and needs a ruling the pointer of the
Balance will determine.

By virtue of his tail armed with its powerful
sting, wherewith, when conducting the Sun’s chariot
through his sign, he cleaves the soil and sows seed in
the furrow, the Scorpion creates natures ardent for
war and active service, and a spirit which rejoices in
plenteous bloodshed and in carnage more than in
plunder. Why, these men spend even peace under
arms: they fill the glades and scour the woods: they

\(f\text{actum}, \text{SC senatus consultum, RP respublica, PR populus Romanus.}\)
\(\text{a Servius Sulpicius Rufus, extolled as the greatest of}
\text{jurists by Cicero, Brutus 151-153.}\)
wage fierce warfare now against man, now against beast, and now they sell their persons to provide the spectacle of death and to perish in the arena, when, warfare in abeyance, they each find themselves foes to attack. There are those, too, who enjoy mock-fights and jousts in arms (such is their love of fighting) and devote their leisure to the study of war and every pursuit which arises from the art of war.

230 But they whose lot it is to be born under the Centaur of double form delight in yoking a team, in bringing a fiery horse to obey the pliant reins, in following herds which graze all over the grasslands, and in imposing a master on every kind of quadruped and taming them: they soften tigers, rid the lion of his fierceness, speak to the elephant and through speech adapt its huge bulk to human skills in a variety of displays. Indeed, in the stars of this constellation the human form is blended with a beast's and placed above it; wherefore it has lordship over beasts. And because it carries a shaft poised on drawn bow, it imparts strength to limb and keenness to the intellect, swiftness of movement, and an indefatigable spirit.

243 In her shrine Vesta tends your fires, Capricorn: and from her you derive your skills and callings. For whatever needs fire to function and demands a renewal of flame for its work must be counted as of your domain. To pry for hidden metals, to smelt out riches deposited in the veins of the earth, to fold sure-handed the malleable mass—these skills will come from you, as will aught which is fashioned of silver or gold. That hot furnaces melt iron and bronze, and ovens give to the wheat its final form, will come as gifts from you. You also give a fondness for clothes and wares which dispel the cold, since your lot falls for all
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qua retrahis ductas summa ad fastigia noctes nascentemque facis revocatis lucibus annum. 255
hinc et mobilitas rerum, mutataque saepe mens natat; et | Veneri mixto cum crimine servit
pars prior, at | melior iuncto sub pise senecta est.

Ille quoque, inflexa fontem qui proicit urna,
cognatas tribuit iuvenalis Aquarius artes:
cernere sub terris undas, inducere terris, ipsaque conversis aspergere fluctibus astra
litoribusque novis per luxum illudere ponto
et varios fabricare lacus et flumina ficta
et peregrinantis domibus suspendere rivos. 260
mille sub hoc habitant artes, quas temperat unda.
quippe etiam mundi faciem sedesque movebit
tsideras caelumque novum versabit in orbem.

tempore non ullo subolem taedebit Aquari,
quae per aquas veniunt, operum, fontesque sequuntur.
mite genus dulcesque fluunt a sidere partus,
pectora nec sordent; faciles in damna feruntur;
nec dest nec superest census. sic profluit urna.

Ultima quos gemini producunt sidera Pisces,
his erit in pontum studium, vitamque profundum
credent et puppes aut puppibus arma parabunt,
quidquid et in proprios pelagus desiderat usus.
innumerae veniunt artes: vix nomina rebus

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ASTRONOMICA, 4. 254-277

time in winter’s season, wherein you shorten the nights you have brought to their greatest length and give birth to a new year by enlarging the daylight hours. Hence comes a restless quality in their lives and a mind which is often changed and floats this way and that; the first half of the sign is the slave of Venus, and that with guilt involved, but a more virtuous old age is promised by the conjoined fish below.

259 The youthful Waterman, who from upturned pot pours forth his stream, likewise bestows skills which have affinity with himself: how to divine springs under the ground and conduct them above, to transform the flow of water so as to spray the very stars, to mock the sea with man-made shores at the bidding of luxury, to construct different types of artificial lakes and rivers, and to support aloft for domestic use streams that come from afar. Beneath this sign there dwell a thousand crafts regulated by water. Why, water will even set in motion the face of heaven and the starry habitations, and will cause the skies to move in a novel rotation. Never will the sons of Aquarius grow tired of the works which come in the wake of water and follow springs. They who issue from this sign are a gentle sort and a lovable breed, and no meanness of heart is theirs; they are prone to suffer losses; and of riches they have neither need nor surfeit. Even thus doth the urn’s stream flow.

277 The folk engendered by the two Fishes, the last of the signs, will possess a love of the sea; they will entrust their lives to the deep, will provide ships or gear for ships and everything that the sea requires for activity connected with it. The consequent skills are numberless: so many are the components of even

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\( ^a \) _I.e._ reservoirs and aqueducts.

\( ^b \) Cf. Vitruvius 8. 1. 1-5 and Flores 95 ff.

\( ^c \) Referring to a model planetarium operated by water, such as that of Ctesibius mentioned by Pappus 8.2, even perhaps to Archimedes’ famous orrery (cf. Cicero, _De N. D._ 2.88; _De Rep._ 1.21; _Tusc._ 1.63), also probably water-driven.
sufficiunt, tot sunt parvae quoque membra carinae. adde gubernandi studium, quod venit in astra
et pontum caelo vicit. bene noverit orbem
fluminaque et portus, mundum ventosque, necesse est
iamque hunc atque illum agilem convertere clavum
et frenare ratem fluctusque effundere rector,
iam remis agere et lentas inflectere tonsas.
quin placidum ductis everrere retibus aequor
litoribusque suis populos exponere captos
aut uncos celare cibis aut carcere fraudem,
navalis etiam pugnas, pendentia bella,
attribuunt pelagique infectos sanguine fluctus.
fecundum genus est natis et amica voluntas
et celeres motus mutataque cuncta per aevum.
Hos tribuunt mores atque has nascentibus artes
bis sex materia propria pollentia signa.
Sed nihil in semet totum valet : omnia vires
cum certis sociant signis sub partibus aequis
et velut hospicio mundi commercia iungunt
conceduntque suas partes retinetibus astra.
quam partem Graiae dixere decanica gentes.
a numero nomen positum est, quod partibus astra
condita triecnis triplici sub sorte feruntur
et tribuunt denas in se coeuntibus astra
inque vicem ternis habitantur sidera signis.

279 quod] per 284 iam] aut
280 bene] et 285 quid
283 rectos 298 Graiae] deganae

a Cf. 2. 688.
b Cf. Introduction p. lxxxv and figure 23.
sic altis natura manet consaepta tenebris
et verum in caeco est multaque ambagine rerum;
nec brevis est usus nec amat compendia caelum,
verum alis alia opposita est et fallit imago
mentiturque suas vires et munera celat.
qua tibi non oculis, alta sed mente fuganda est
caligo, penitusque deus, non fronte, notandus.

Nunc quae sint coniuncta quibus quove ordine reddam,
ne lateant aliae vires aliena per astra.
namque Aries primam partem sibi vindicat ipsi,
altera sors Tauro, Geminis pars tertia cedit.
sidera sic inter divisum dicitur astrum
totque dabit vires dominos quotcumque recepit.
diversa in Tauro ratio est, nec parte sub ulla
censetur: Cancro primam mediamque Leoni,
extremam Erigonae tribuit. natura per astrum
stat tamen et propria miscet per singula vires.
Libra decem partes Geminorum prima capessit,
Scorpios adiunctas; Centauri tertia pars est,
nec quicquam numero discernitur, ordine cedit.
Cancer in adversum Capricorni derigit astrum
bis quinas primum partes, dignatus in illo
temporis articulo sub quo censetur et ipse,
quod facit aequalis luces brumalibus umbris
cognatamque gerit diverso in cardine legem;
alterius partis perfundit Aquarius ignes.

\[303\] conspecta
\[307\] nomina

\[314\] [sidera] sic inter denas

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Housman interprets “not from your eyes but from the
depths of your mind,” but see Bühler 478 f.

The winter solstice, which will fall in the first decan,
whether the tropic occurs in the 1st, 8th, or 10th degree (the
alternatives specified in 3. 680-682).
quem subeunt Pisces extremo sidere Cancri.

at Leo consortis meminit sub lege trigoni

praecipuum Erigone Cancro concedit honorem

cui primam tribuit partem; vicina relictâ est

sed Libra exemplo gaudet, pariterque regentem

cui primam tribuit partem; vicina relictâ est

augustus in prima Capricornum parte locavit,

et medias Tauro partes Geminisque supremas.

scorpios in prima Capricornum parte locavit,

aliterius dominum fecit cui nomen ab undis,

extremas voluit partes sub Piscibus esse.

at qui contento minitatur spicula nervo

Lanigerum sequitur: veris iuga temperat ille,

haec autumnalis componit lucibus umbras:

nulli concedit primam, traditque sequenti

extremas voluit partes sub Piscibus esse.

et medias Tauro partes Geminisque supremas.

 nec manet ingrati Capricornus crimine turpis

sed munus reddit Cancro recipitque receptus

principiumque sui donat; coniuncta Leonis

regna ferunt, summas partes et Virginis esse.

fontibus aeternis gaudens urnaque fluenti

iura sui Librae permittit prima regenda,

Fishes in the Crab's remotest stars. But the Lion,

mindful of his partner under the trigon's law, a

welcomes the Ram as leader, b and next the Bull, who

is united to him by square c; the third decan passes

under the dominion of the Twins: by his hexagonal

line the Lion reaches these too. d Erigone bestows

especial honour on the Crab, to whom she gives first
decan; the neighbouring one she leaves to you, her

neighbour, O Lion of Nemea; one decan belongs to

herself, which, since tenure of it was disdained by the

others, e was granted to her to possess. The Balance

has the pleasure of a precedent, and imitates the

Ram, who though at the opposite season agrees with

it in fixing equal hours of day and night: the Ram

regulates the scales of spring, while the Balance

matches autumn's nights with autumn's days. It

yields its first decan to none, and hands the adjoining

one to the sign which follows itf; the last third

belongs to the Centaur. The Scorpion has installed

Capricorn in the first decan; has made the man

named after water the lord of the second; and has

willed that its last degrees be subject to the Fishes.

Now he who with bow-string tensed ever threatens
to let fly his shaft surrenders his first degrees to the Ram

in accordance with the trigon's pact, the midmost

to the Bull, and the last to the Twins. Capricorn

risks not the charge of base ingratitude but discharges

his obligation to the Crab: welcomed himself to the

Crab's domain, he welcomes the Crab to his, and

presents him with his initial portion; the bordering

realm is reckoned as the Lion's, and the endmost

degrees as the Maid's. He that rejoices in the never-

ending stream that pours from his urn transfers

control of the first rights over himself to the Balance,
haerentisque decem partes Nepa vindicat ipsi; summas Centaurus retinet iuvenale per astrum. iam superant gemini Pisces, qui sidera claudunt. Lanigero primos tradunt in finibus usus, perque decem medias partes tu, Taure, receptus; quod superest, ipsi sumunt, utque orbe feruntur extremo sic et sortis pars ultima cedit.

Haec ratio retegit latitantis robora mundi in plurisque modos repetitaque nomina caelum dividit et melius sociat, quo saepius, orbem. nec tua sub titulis fallantur pectora notis: dissimulant, non ostendunt mortalibus astra. altius est acies animi mittenda sagacis inque alio quaerendum aliud iunctisque sequendum viribus; et, eius signi quis parte creatur, eius habet mores atque illo nascitur astro.

Haec ratio retegit latitantis robora mundi in plurisque modos repetitaque nomina caelum dividit et melius sociat, quo saepius, orbem. nec tua sub titulis fallantur pectora notis: dissimulant, non ostendunt mortalibus astra. altius est acies animi mittenda sagacis inque alio quaerendum aliud iunctisque sequendum viribus; et, eius signi quis parte creatur, eius habet mores atque illo nascitur astro.

talis per denas sortes natura feretur. testis erit varius sub eodem sidere fetus, quodque in tam multis animantium milibus, uno quae veniunt signo, tot sunt, quot corpora, mores, et genus externum referunt aliena per astra, confusio fluunt partus hominum atque ferarum. scilicet in partes iunguntur condita pluris diversaque ferunt proprio sub nomine leges.

\[365\] nota\[369\] quaequendo mali quod

\[363\]This is the scheme which unveils the powers of the mysterious universe: it divides the heavens in more ways than one so that the names of the signs recur; the more frequent the recurrence, the closer is the association of the signs. Do not suffer your mind to be deceived by their familiar names: they mask other signs, which they conceal from mortals. The knowing mind’s keen edge must cut more deeply: one sign must be sought in another, and in our inquiry we must take account of the powers of each, for a man also receives the characteristics of the sign dominating the decan of his nativity and is born under the influence of that sign too. Such is the nature of the forces to be found in the decans. Evidence of this will be found in the diversity of those born under the same constellation, and the fact that among so many thousands of living beings sprung from a single sign there are as many dispositions as there are individuals, that born under signs alien to their natures they display the qualities of other stars, and that men and beasts are born without distinction in human and bestial signs alike. Naturally, since they consist of several components, the signs form associations with them, and each sign passes various decrees under its
nec tantum lanas Aries nec Taurus aratra
nee Gemini Musas nec merces Cancer amabit,
nec Leo venator veniet nec Virgo magistra,
mensuris aut Libra potens aut Scorpios armis
Centaurusque feris, igni Capricornus et undis
ipse suis Iuvenis geminique per aequora Pisces ;
mixta sed in pluris sociantur sidera vires.

"Multum" inquis "tenuemque iubes me ferre laborem,
rursus et in magna mergis caligine mentem,
cernere cum facili lucem ratione viderer."

quod quaeris, deus est : conaris scandere caelum
fataque fatali genitus cognoscere lege
et transire tuum pectus mundoque potiri.
pro pretio labor est nec sunt immunia tanta,
ne mirere viae flexus rerumque catenas.
admitti potuisse sat est : sint etera nostra.
at nisi perfossis fugiet te montibus aurum,
obstabitque suis opibus super addita tellus.
ut veniant gemmae, totus transibitur orbis,
nec lapidum pretio pelagus cepisse pigebit.
annua solliciti consument vota coloni,
et quantae mercedis erunt fallacia rura!
quaeremus lucrum ventis Martemque sequemur
in praedas. pudeat tanto bona velle caduca.
luxuriae quoque militia est, vigilatque ruinis

own name. Not only in wool will the Ram take pleasure, the Bull in the plough, the Twins in the Muses, or the Crab in trade; nor will the Lion come forth as a hunter only, or as a teacher the Maid; not only over measures will the Balance preside, the Scorpion over arms, the Centaur over beasts, Capricorn over fire, the Youth over his own waters, or over the seas the Fishes twain: but the signs are mixers and acquire further influences from their fellowships.

387"But," you say, "the task you bid me undertake is great and subtle, and you are plunging my mind back into deep darkness just when I thought a simple principle was enabling me to see light." The object of your quest is God: you are seeking to scale the skies and, though born beneath the rule of fate, to gain knowledge of that fate; you are seeking to pass beyond your understanding and make yourself master of the universe. The toil involved matches the reward to be won, nor are such high attainments secured without a price; so wonder not at the winding route and the intricacy of things. It is enough that we have been given power to make the search: let the rest be left to us. Unless you mine mountains, gold will elude your grasp, and the earth that is heaped above will bar access to the wealth it hides. Men will traverse the entire globe to make jewels available, and will not shrink from occupying the sea to gain the precious pearl. Each year the anxious farmer will utter every prayer he knows, and yet how small is the yield of the treacherous countryside!

We shall face the perils of sea-winds in our search for gain and follow the god of war in hope of booty. Ah, shame on those willing to pay so high a price for perishable goods! Luxury too entails a kind of military service: the
venter, et, ut pereant, suspirant saepe nepotes. 405
quid caelo dabimus? quantum est, quo veneat omne? 410
impendendus homo est, deus esse ut possit in ipso.
Hac tibi nascentum mores sunt lege notandi. 415
nec satis est signis dominantia discere signa
per denos numeros et quae sint insita cuique;
sed proprias partes ipsas spectare memento
vel glacie rigidas vel quas exusserit ignis,
et sterilis sine utroque tamen, quas largior umor
quase minor inusto vitiat. namque omnia mixtis
viribus et vario consurgunt sidera textu.
est aequale nihil. terrenos aspice tractus
et maris et variis fugientia flumina ripis:
crimen ubique frequens et laudi noxia juncta est.
sic steriles tellus laetis intervenit arvis
ac subito rumpit parvo discrimine foedus;
et modo portus erat pelagi iam vasta charybdis,
laudatique cadit post paulum gratia ponti;
et nunc per scopulos, nunc campis labitur amnis,
et, faciens iter aut quaerens, curritve reditve.
sic etiam caeli partes variantur in astris:
ut signum signo, sic a se discrepat ipsum
momentoque negat vires usque et salubrem,
quodque per has geritur partes sine fruge creatur
aut cadit aut multis sentit bona mixta querellis.

405 The gourmet’s tastes are expensive.
406 The principle of the decans explained in 294-386.
MANILIUS

hae mihi signandae proprio sunt carmine partes.

sed quis tot numeros totiens sub lege referre,
tot partes iterare quet al, tot dicere summas,
perque J?aris causas faciem mutare loquendi ?
dum canimus verum, non aspera ponere, ut illis
incidimus, sic verba piget; sed gratia derit,
in vanumque labor eedit quem despicit auris.

sed mihi per carmen fatalia iura ferenti
et sacros caeli motus ad iussa loquendum est,
nec fingenda datur, tantum monstranda figura.

ostendisse deum nimis est: dabit ipse sibimet
rebus erit maior. nec parva est gratia nostri
oris, si tantum poterit signare canenda.

accipe damnandae quae sint per sidera partes.

Lanigeri pars quarta nocet nec sexta salubris;
septima par illi ac decima est decimaeque secunda
quaque duas duplicant summas septemque novemque;
unaque viginti numeris pars addita laedit
et quinta et duram consummans septima partem.

Tauri nona mala est, similis cui tertia pars est
post deciam nec non decimae pars septima iuncta;
bisque undena notans et bis duodena nocentes

430

433 per patris
440 suspendere
445 pars ... deccmae [est]

446 duplicat
449 quo

451 nocens

ASTRONOMICA, 4. 430-451

spoil by much that is disagreeable. These degrees I
must now specify in fitting verse. Yet who could so
oft express in metre’s laws so many numerals, repeat
so many degrees, put into words so many totals, and
vary the style of utterance in treating of the same
themes? In giving an accurate account we need not feel
that writing down inelegant phrases, just as we chance
on them, calls for apology ; but this entails a lack
of charm, and effort rejected by the ear is effort vainly
spent. Yet, as I seek to expound in verse the laws of
destiny and the sacred motions of the skies, my words
must conform to what is bidden : I am not permitted
to fashion, but only to describe, the pattern. To show
the deity is more than enough : he himself will
establish his authority. Nor is it right to glorify
heaven with words : in the reality it will prove even
greater. Still the charm of my muse is not contemp­
tible, if it can only signify what ideally should be
sung. Learn then of the degrees, sign by sign, which
merit condemnation.

444 The fourth degree of the Ram b inflicts harm,
and the sixth is also unwholesome ; the seventh is as
bad as the sixth, and so are the tenth, that second to
the tenth, c and those which double the numbers seven
and nine ; added to the count of a score one degree is
damaging, so too a fifth and a seventh, the last com­
pleting the adverse portion of the sign.

449 The ninth degree of the Bull d is malign, and the
third after the tenth is like it, and again the seventh
attached to the tenth ; the degree which signifies
twice eleven and that which signifies twice twelve are
should signify “eleventh,” but in this context of numbers
“twelfth” seems the more natural interpretation.

a If it succeeds in only signifying in hexameters what, had
the technical language not been intractable, it should have
adorned with all the flowers of poetry. The reading cavenda,
“the places to beware of,” which at first sight seems certain,
is refuted by Bühler 485. Moreover, infants about to be born
can hardly “beware of” the injurious degrees.

b Aries : 4, 6, 7, 10, 12, 14, 18, 21, 25, 27.

c According to Housman the words decimae secunda

256
MANILUS

quaeque decem trisque ingeminat fraudatque duobus triginta numeros et tu, tricesima summa, es.

Pestifera in Geminis pars prima et tertia signi, septima non melior, ter quintae noxia par est, 
quaeque bis denis brevit nocet unaque maior, et similis noxae veniet vicesima quinta
cumque duae subeunt vel cum se quattuor addunt.

Nec Cancri prima immuns nec tertia pars est
nec sexa ; octava est similis, decimaque peracta ;
primae rapit, nec ter quintae clementior usus ;
septima post decimam luctum et vicesima portat
et quinta accedens et septima nonaque summa.

Tu quoque contactu primo, Nemeae, timendus,
et quarta sub parte premis ; bis quinta salubri
terque caret caelo, vicesima et altera laedit ;
e tribus appositis vitiat totidemque secutis
et quae ter decimam claudit sors ultima partem.

Et quinta in Chelis et septima inutilis astri,
tertia et undecimae decimaque est septima iuncta

ASTRONOMICA, 4. 452–474

harmful, as well as that which doubles three and ten,
that which robs of two the count of thirty, and you,
O number thirty.

454 Baneful in the Twins \(a\) are the first and third
degrees of the sign, the seventh is no better, and the
hurt of the treble-fifth is just as great ; injurious are
the degrees numbering one less than and one more
than twice ten, whilst the coming of the twenty-fifth
will prove equally harmful, both of itself and when
two or four are added to it.

459 Neither first nor third nor sixth degree of the
Crab \(b\) is free from ill ; the eighth resembles these ;
after the completion of a decade the first carries off
its prey, and the behaviour of the treble-fifth is not
more merciful ; the seventeenth brings grief, so does
the twentieth, and also the fifth, seventh, and ninth
degrees following.

464 With you, too, Lion of Nemea, \(c\) first contact is
to be dreaded, and fearful is the onset of your fourth
degree ; double-fifth and treble-fifth preclude a
salutary sky, and noxious is the twenty-second ; of
the following three the last brings infection, and so
does the last of a further three, whilst the thirtieth is
no improvement on the first.

469 Of the Maid \(d\) neither the first nor the sixth
degree is ever beneficial, nor of the second decade the
first, fourth, and eighth ; beyond a count of twenty
the first and fourth are full of terror as well as the last
portion which concludes the sign in the thirtieth
degree.

473 In the Balance \(e\) the fifth confers no benefit, nor
does the sign’s seventh ; so, too, the third past the
eleventh, the seventh past the tenth, as also past a

\(a\) Gemini : 1, 3, 7, 15, 19, 21, 25, 27, 29.
\(b\) Cancer : 1, 3, 6, 8, 11, 15, 17, 20, 25, 27, 29.
\(c\) Leo : 1, 4, 10, 15, 22, 25, 28, 30.
\(d\) Virgo : 1, 6, 11, 14, 18, 21, 24, 30.
\(e\) Libra : 5, 7, 14, 17, 24, 27, 29, 30.
quartaque bis denis actis et septima et ambae quae numerum claudunt nona et tricesima partes.

Scorpios in prima reus est, cui tertia par est et sexta et decima et quae ter tibi quinta notatur, undecimam geminans et quae vicesima quinta est octavoque manet numero nonumque capessit.

Si te fata sinant, quartam ne selige partem Centauri; fuge et octavam; sex bisve peractis octo, bis aut denis, metuendus dicitur aer, cumque iterum duodena refert aut terna decemque aut septa quater, vel cum ter dea figurat.

Nec pars optanda est Capricorni septima; nona consentit decimamque sequens quam tertia signat et tribus aut una quae te, vicesima, fraudat quaeve auget quinto numero vel septima fertur.

Pars est prima nocens fundentis semper Aquari, damnanda et decimae succedens prima peractae tertiaque et quinta et numero quae condita nono est et post viginti prima et vicesima quinta cumque illa quartam accumulas vicesima nona.

Tertia per geminos et quinta et septima Pisces, undecima et decimae metuenda est septima iuncta; et quinta in quinos numeros revocata duasque accipiens ultra summas metuenda feretur.

Hae partes sterilem ducunt et frigore et igni aera vel sicco vel quod superaverit umor, si rapidus Mavors ignes iaculatur in illum

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475 score the fourth, the seventh, and the pair which close the tale, the ninth past a score and the thirtieth degree.

477 The Scorpion is arraigned in his first degree, matching which are the third and sixth and tenth and that which you note as fifth thrice over, the double of the eleventh, and of the twenties the fifth, that which resides at number eight, and the occupant of nine.

481 Were Fortune to give you leave, choose not the Centaur's fourth degree; shun, too, the eighth; double six or eight or ten, the atmosphere is termed fraught with dread; and so it is when he twice reckons twelve or ten and three, when he reckons four times seven, and when he thrice draws the sign of ten.

486 The seventh of Capricorn is not a degree to be desired; at one with it are the ninth, that indicated as third after the tenth, and those which rob you, O twentieth, of three or one or increase you by five or seven.

2.232 The first degree of the ever-pouring Waterman spells trouble, and meriting condemnation are the first, third, fifth, and ninth after the completion of a decade, the first after a score, the twenty-fifth and, with increase of four, the twenty-ninth.

444 In the sign of the two Fishes third, fifth, and seventh are formidable degrees, as well as the eleventh, and the seventh joined to the tenth; that which multiplies five times five and that which receives a further two will also be found fraught with dread.

498 These degrees are allotted an atmosphere made sterile by reason of cold and fire or because of drought or superabundant moisture, be it scorching Mars who
Saturnusve suam glaciem Phoebeve propinquis quem trahit a terris rorem Phoebusve calores.

Nec te perceptis signorum cura relinquat partibus: in tempus quaedam mutantur, et ortu accipiant proprias vires ultraque remittunt.

Namque, ubi se summis Aries extollet ab undis et cervice prior flexa quam cornibus ibit, non contenta suo generabite pectora cenu et dabit in praedas animos solvetque pudorem: tantum audere iuvat. sic ipse in cornua fert ut ruat aut vincat. non illos sedibus isdem mollia per placidas delectant otia curas, sed iuvat ignotas semper transire per urbes scrutarique novum pelagus totius et esse orbis in hospitio. testis tibi Laniger ipse, cum vitreum findens auravit vellere pontum orbatumque sua Phrixum per fata sorore Phasidos ad ripas et Colchida tergore vexit.

At, quos prima creant nascentis sidera Tauri, feminei incedunt. nec longe causa petenda est, si modo per causas naturam quaerere fas est: aversus venit in caelum divesque puellis, Pleiadum parvo referens glomeramine sidus. accedunt et ruris opes, propriaque iuvenicum dote per inversos exornat vomere campos.

501 [ve] sumet
505 extollit
509  aut] et ... ullus
510 iuceat
513 glomerabile

"Saturn is icy as being the planet farthest away from Earth; Phoebe (the Moon) is nearest to it."

"But having noted the injurious degrees of the signs you must not relax your attention: there are some degrees which undergo a temporary change of character, acquiring at their ascension special powers which they thereafter relinquish."

Thus, when the Ram emerges above the surface of the waves and the curve of his neck appears before his horns, he will give birth to hearts that are never content with what is theirs; he will engender minds bent on plunder and will banish all sense of shame: such is their desire for venture. Even thus does the ram himself rush forth with lowered horns, resolved to win or die. Not for them the gentle ease of a fixed abode with none but peaceful cares; it is ever their delight to travel through unknown cities, to explore uncharted seas, and enjoy the whole world’s hospitality. The Ram himself gives you evidence of this: once furrowing a trail through the glassy sea, he tinged it with the gold of his fleece, when on his back he carried Phrixus, bereft of his sister by fate’s decree, and brought him to the banks of the Phasis and to Colchis.

But they who are given life by the rising of the Bull’s foremost stars walk with an effeminate gait. The cause is not far to seek, at least if one may seek in causes an explanation of nature: it rises into the sky hind-before with a bevy of maidens, for it brings with it the stars of the Pleiades massed in a tiny cluster. The Bull is also attended by the wealth of the countryside and furnishes its sons with its own endowment of steers amid fields upturned by the plough."
When ocean displays and conceals equal portions of the Twins, it will bestow zeal for study and direct men to learned arts. It creates no gloomy disposition, but hearts imbued with a pleasant charm, and furnishes them with blessings of voice and tuneful lyre, combining with wit a dowry of melody.

When that part of the Crab rises which is dimmed by a sombre cloud, where his own fire fails, as though burnt out by the Sun's, and darkens the signs with impenetrable fog, the sight of those born then will fail, and fate will condemn them to death twice over: each one buries himself while still alive.

The man to whom the ravenous Lion has displayed its countenance through the topmost waves as it scales with jaws agape the arc of heaven, that man, sinning against his father and his sons, will not pass on his inheritance but will swallow his patrimony in his body. Such devouring hunger and such a dreadful passion for food take hold of his spirit that he consumes his very self without ever sating it and devotes to his table even his funeral expenses and the price of a tomb.

At her rising Erigone, who reigned over a bygone age and fled when it fell into sinful ways, bestows high eminence by bestowing supreme power; she will produce a man to direct the laws of the state and the sacred code, one who will tend with reverence the hallowed temples of the gods.

When autumn's Claws begin to rise, blessed is he that is born under the equilibrium of the Balance. As judge he will set up scales weighted with life and here confused with Astraea (cf. Aratus, Phaen. 98 ff.), who is often (though not elsewhere by Manilius) identified with Virgo.
imponetque iugum terris legesque rogabit.  
imum urbes et regna trement nutuque regentur unius et caeli post terras iura manebunt.  
Scorpios extremae cum tolet lumina caudae,  
siquis erit stellis tune suffragantibus ortus,  
uribus augebit terras iunctisque iuvencis moenia succinctus curvo describet aratro, 
austernet positas urbes inque arva reducet oppida et in domibus maturas reddet aristas. 
tanta erit et virtus et cum virtute potestas. 
Nec non Arcitenens, prima cum veste resurgit,  
pectora clara dabit bello, magnisque triumphis conspicuum patrias victorem ducet ad arces, 
altaque nunc statuet nunc idem moenia vertet.  
ultimus in caudae Capricornus acumine summo militiam in ponto dictat puppisque colendae dura ministeria et tenui discrimine mortis. 
Quod si quem sanctumque velis castumque probumque hic tibi naseetur cum primus Aquarius exit.  
Ve velit et primos animus procedere Pisces,  

570 vita discrmen inertis  572 neve sit

These verses allude to Augustus, at whose birth (Sept. 22, 63 B.C.) the first part of Libra occupied the Horoscope. Whilst line 552 is indecisive in determining whether Augustus was alive or dead at the time of the composition of Book 4, other evidence settles the matter: 764 ff. require Tiberius to be the reigning emperor.

*Hannibal, who lost an eye (Livy 22. 2. 11: Sagittarius is one-eyed, cf. 2. 260). As at 39 the poet wrongly dates the battle of Lake Trasimene after Cannae.

573 Lest your mind yearn also for the first portion of death; he will impose the weight of his authority upon the world and make laws. Cities and kingdoms will tremble before him and be ruled by his command alone, whilst after his sojourn on earth jurisdiction in the sky will await him.  
553 When the Scorpion uplifts the stars which shine at the end of its tail, the man then born with the blessing of the planets will enrich the world with cities and, with robes hitched up and driving a team of oxen, will trace the circuit of the walls with curved plough; else he will level the cities which have been erected and turn towns back into fields, and produce ripe corn where houses stood. Such will be his worth and such the power which is joined thereto.

560 As for the Archer, when the foremost portion of his cloak rises, he will give birth to hearts renowned in war and will conduct the conqueror, celebrating great triumphs in the sight of all, to his country's citadels. Such a one will build high walls one moment and pull them down the next. But if Fortune favours them too generously with success, the mark of her envy is to be seen on their faces, for she works cruel havoc upon their features. So was it that a dread warrior paid for his victories at the Trebia, Cannae, and the Lake, even before the hour of his retreat, with such disfigurement.

568 The last part of Capricorn, which consists of the sting at the end of its tail, prescribes for its children service upon the seas and the handling of ships, a hardy calling and one which is ever close to death.

571 But if you would have a man that is pious, pure, and good, you will find him born when the first portion of the Waterman rises above the horizon.
MANILIUS

The poet's conception of the world is schematically represented in the frontispiece: see Introduction pp. xx and lxxxix.

ASTRONOMICA, 4. 574–598

the Fishes to come forth, be told that their gift is hateful loquacity, a poisonous tongue which ever passes on slanderous talk to fresh ears, and an eagerness to carry to the people on treacherous lips the people's indiscretions. Trustworthiness will not be found in this sign's progeny; instead a consuming desire urges their fevered minds to go through fire to attain their ends. Certain it is that the goddess of Cythera changed herself into a fish when she plunged into the waters of Babylon to escape from snake-footed Typhon of the winged shoulders; and she has implanted in the scaly Fishes the fire of her own passions. No birth under the two Fishes will be marked by singleness; a brother will be born as well, or a darling sister, or else the mother of twins.

585Now you must learn the constellations which bear dominion over the several parts of the earth. But a general sketch of the world must first be given. The round heavens are divided into four parts, which accord with the day's rising, its setting, the noontide heat, and you, Great Bear. From these four quarters as many winds sally forth, and battle against each other in the empty skies. Biting Boreas rushes from the pole whilst Eurus comes flying from the dawn: Auster delights in the midday sun and Zephyrus in the sun's departure. From each of the intervals between them two breezes emit their blasts, like in kind but differing in name. The land itself is afloat, encircled by the crown of ocean which clasps the round world within it in an embrace of water. The land also receives the sea to its bosom, which, admitted from the dusky west, washes on the right

a Venus; see Introduction p. xxvi.
b The Mediterranean Sea.
c That is, east, west, south, and north respectively.
d For the inaccuracy of the use of these names, see Introduction p. xc.

crimina per

574 moventum

576 notavit

588 ipsumque

575 580 585 590 595

574 moventum

576 notavit

588 ipsumque
alluit et magna quondam Carthaginis arces, litoraque in Syrtes revocau sinuata vadosas rursum usque ad Nilum derectis fluctibus exit. laeva freti caedunt Hispanas aequora gentes teque in vicinis haerentem, Gallia, terris Italiaeque urbes dextram sinuantem in undam usque canes ad, Scylla, tuos avidamque Charybdin. hac ubi se primum porta mare fudit, aperto enatat Ionio laxaque vagatur in undas et, prius ut, laeva se fundens circuit omnem Italiam, Hadriaco mutatum nomina ponto, Eridanique bibit fluctus vetat aequore bellum Illyricum Epirumque lavat claramque Corinthum et Peloponnesi patulas circumvolat oras; rursus et in laevum refluit vastoque recessu Thessalae fines et Achaica praeterit arva. hinc penitus iuvenisque freto mersaeque puellae truditur invitum, faucesque Propontis aperto Euxino inuigint ponto Maeotis et undis, quae tergo coniuncta manet fontemque ministrat. inde ubi in angustas revocatus navita fauces Hellespontiacis iterum se fluctibus effert, Icarium Aegeumque secat laevaque nitentis miratur populos Asiae totidemque tropaea quot loca et innumeris gentus Taurumque minantem fluctibus et Cilicum populos Syrianque perustam

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600
605
610
615
620
625

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a The Straits of Messina. b The River Po. c Phthiotis. d Hellespont; Phrixus; Helle. e The Greeks of Asia Minor are meant.
ingentique sinu fugientis aequora terras,
donec in Aegyptum redeunt curvata per undas
litora Niliacis iterum morientia ripis.
haec medium terris circumdat linea pontum
atque his undarum tractum constringit harenis.
mille iacent mediae diffusa per aequora terrae.
Sardiniam in Libyco signant vestigia plantae,
Trinacria Italia tantum praecisa recessit,
adversa Euboicos miratur Graecia montes,
Aegaeis Crete civem sortita Tonantem
Aegyptique Cypros pulsatur fluctibus amnis.

has praeter terras, celebrat quas maxima fama,
totque minore solo tamen emergentia ponto
litora, inaequalis Cyclades Delonque Rhodonque
Aulidaque et Tenedon vicinaque Corsica terris
Sardiniae primumque intrantis in orbem
Oceani victicem Ebusum et Balearica rura,
innumeris surgunt scopuli montesque per altum.

Nec tantum ex una pontus sibi parte reclusit
faucibus abruptis orbem; nam litora plura
impulit oceano Phorcys, sed montibus altis
est vetitus totam ne vinceret aequore terram.
namque inter borean ortumque aestate nitentem
in longum angusto penetrabilis aequore fluctus
pervenit et patulis tum demum funditur arvis
Caspiaque Euxini similis facit aequora ponti.

625
630
635
640

et genetrix
et aequalis
aequitya ... omnis
pocius
minora

Astronomica, 4. 625–649

lands which form a great gulf in their flight from the
sea. At last the shore curves through the waves and
returns to Egypt, coming to an end again with the
banks of the Nile. This is the coastline which
encompasses the midland ocean, these are the shores
which confine the expanse of its waves. A thousand
islands lie in the middle of these far-spread waters.
Sardinia has the shape of a footprint in the Libyan
sea, whereas the triangle of Sicily is distant from Italy
only so far as serves to cut it off; Greece is awed as it
faces the mountains of Euboea, whilst Crete, who
counts the Thunderer her citizen, is battered by the
waves of the Aegean sea, as Cyprus is by those of
Egypt's river. Besides these, which are the most
important islands, and all those strands, though of
smaller size, which rise from the sea, the unequal
Cyclades, Delos, Rhodes, Aulis, Tenedos, Corsica,
whose shore lies near the land of Sardinia, Ebusus,
which triumphs over Ocean at its first entrance
into the circle of our lands, and the Balearic fields—
besides these, rocks and peaks past counting spring
up over the deep.

642 Nor in one place alone has the sea burst through
a gap and opened a way for itself into the land; for
the Sea-god has confronted many a shore with the
thrust of his waves, but has been prevented by high
mountains from overwhelming the whole earth with
his flood. For, penetrating by a narrow channel be-
tween the north and the shining summer orient, the
ocean makes a long arm inland, then at last spreads
over low-lying fields and, in semblance like the

a Phoenicia and adjacent lands.
b Jupiter, born and brought up in Crete (cf., for example,
Virgil, Aen. 3. 104 f.).

272

By not being submerged.

d i.e. where the Sun rises in summer, Caccias: thus the
compass-point indicated is Aquilo (cf. frontispiece).
altera sub medium solem duo bella perinde
intulit Oceanus terris. nam Persica fluctus
arva tenet, titulum pelagi praedatus ab isdem
quae rigat ipse locis, latoque infunditur orbe.
nec procul in mollis Arabas terramque ferentem
delicias variaeque novos radicis odores
leniter affundit gemmantia litora pontus,
et terrae mare nomen habet. media illa duobus.

* * * * *

quondam Carthago regnum sortita sub armis,
ignibus Alpinas cum contudit Hannibal arces,
fecit et aeternum Trebiam Cannasque sepulcris
obruit et Libyam Latias infudit in urbes.
huc varias pestes diversaque monstra ferarum
congesit bellis natura infesta futuris.
horrendos angues habitatque membra veneno
et mortis pastu viventia, crimina terrae,
et vastos elephantas habet, saevosque leones
in poenas fecunda suas partit horrida tellus
et portentosos cercopum ludit in ortus
ac sterilii peior siecas infestat harenas,
donec ad Aegypti ponat sua iura colonos.
inde Asiae populi divesque per omnia tellus :
auratique fluunt amnes gemmisque relucet
pontus, odoratae spirant medicamina silvae :

Euxine, forms the Caspian sea.\textsuperscript{a} In like manner,
towards the midday sun, Ocean has launched two
other attacks against the land; for its tide occupies
Persian plains, having stolen from the very region it
waters a name for its gulf, and floods in to form a wide
circle \textsuperscript{b}; and at no great distance, into the land of the
unmanly Arabs, which produces delicacies and the
exotic perfumes of many a plant, the sea gently pours
shores rich with pearls, and the waters take their
name from the country which lies between the two
gulfs.\textsuperscript{c}

Earth's mainland is divided into three continents:
Libya, Asia, and Europe. Over the first \textsuperscript{658} Carthage
once obtained sovereignty by force of arms, what time
Hannibal blasted with fire the Alpine peaks,\textsuperscript{d}
immortalized the Trebia, covered Cannae with graves, and
poured Libya into the cities of Latium. Hither has
nature assembled many a kind of plague and all
manner of monstrous beasts to be the foe of future
invaders. Libya shelters horrible serpents and, a
reproach to the land, creatures which make a home
for poisons and live by feeding on death, and gigantic
elephants; and, so fruitful to its own hurt, this grim
country breeds ferocious lions and jests in giving
birth to hideous monkeys. Worse than were it sterile,
its desert sands a bane until it lays down its
authority before the inhabitants of Egypt.\textsuperscript{e}
Thereafter come the peoples of Asia, and a land that is rich
in everything: rivers flow with gold and the sea
sparkles with gems; aromatic woods breathe forth

\textsuperscript{a} Manilius falls into a common error (e.g. Strabo 2. 5. 18)
in making the Caspian or Hyrcanian Sea an arm of Ocean,
though Herodotus (1. 202. 4) had recognized it as a lake.
\textsuperscript{b} Persian Gulf.
\textsuperscript{c} Arabian Gulf (i.e. Red Sea).
\textsuperscript{d} By heating the rock with bonfires of wood and then
pouring on acid to crack it (Livy 21. 37).
\textsuperscript{e} This verse, like 4. 627, shows that the Nile forms the
boundary between Libya and Asia, as the Tanais forms the
boundary between Europe and Asia (cf. Pliny, \textit{N.H.} 3. 3).
India notitia maior, Parthique vel orbis alter, et in caelum surgentis moenia Tauri totque illum circa diverso nomine gentes ad Tanain Scythicis dirimentem fluctibus orbes Maeotisque lacus Euxinique aspera ponti. [aequora et extremum Propontidos Hellespontum] hanc Asiae metam posuit natura potentis. quod superest Europa tenet, quae prima natantem fluctibus exceptaque Iovem taurumque resolvit, ponere passa suos ignes, onerique iugavit. ille puellari donavit nomine litus et monumenta sui titulo sacravit amoris. maxima terra viris et fecundissima doctis artibus : in regnum florentes oris Athenae ; Sparta manu, Thebae divis, et rege vel uno princeps Pella domus, Troiani gratia belli ; Thessalia Epiroque potens vicinaque ripa Illyris, et Thrace Martem sortita colonum, et stupefacta suos inter Germania partus ; Gallia per census, Hispania maxima bellis ; Italia in summa, quam rerum maxima Roma imposuit terris caeloque adiungitur ipsa.

Hos erit in fines orbis pontusque vocandus, diviso urbisb

...iu...-

676 diviso
677 tantam scythicas
683 pondere
suo signi...iuravit

675
680
684
685
690
695
696

a The River Don (cf. previous note).
b [679], interpolated to procure a noun for aspera: "... sea and the Hellespont which closes the Propontis." c Alluding to the story of Jupiter and Europa. d The girl Europa.
e Bacchus, son of Jupiter and Semele, daughter of Cadmus; and Hercules, son of Jupiter and Alcmena, wife of Amphitryon.

ASTRONOMICA, 4. 674–696

balm. Thence on to India, too vast to be known, and Parthia, verily another world, and the ramparts of the Taurus that rises to the sky, and all the many races of different name that dwell around it, reaching as far as the Scythian Tanais, a which separates two continents with its waters, the meres of Maeotis, and the inclement Euxine. b This is the limit nature has set to the might of Asia. The rest of the world is Europe's: it first received Jupiter as he swam the waves c and freed him from a bull's form, suffering him to set down his desire d and uniting him with his burden. The god bestowed the girl's name on the shore, which by that title he consecrated as a memorial of his love. It is the continent most renowned for heroes and most productive of learned arts. There is Athens, distinguished by its sovereignty over eloquence; Sparta, pre-eminent for its feats of arms; Thebes, for the gods e it bore; and Pella, for but a single king f of its royal house, return for help it gave in the Trojan war g; Thessaly, Epirus, and the contiguous Illyrian littoral, powerful lands all three; Thrace, who counts Mars a citizen h and Germany, who stands struck with wonder at the stature of her sons around her; Gaul unrivalled for her wealth, Spain for her bellicosity; and finally Italy, which Rome, capital of the world, has made mistress of the earth, herself made one with heaven. i

696 These then are the boundaries which land and

f Alexander.
g A contingent of the Paeones (cf. 1, 770).
h Mars (Ares) was specially associated with Thrace (cf. Homer, Il. 13. 301).
i The Romans deified their city (Dea Roma in inscriptions), and Augustus permitted the dedication of a temple to himself and Urbs Roma (Tacitus, Ann. 4. 37).
MANILIUS

quem deus in partes per singula dividit astra
ac sua cuique dedit tutelae regna per orbem
et proprias gentes atque urbes addidit altas,
in quibus assererent praestantis sidera vires.
ac, velit humana est signis discripta figura,
et, quamquam communis eat tutela per omne
corpus, et in proprium divisis artubus exit
(namque Aries capiti, Taurus cervicibus haeret,
bracchia sub Geminis censentur, pectora Canco,
te scapulae, Nemeae, vocant teque ilia, Virgo,
Libra colit clunes et Scorpios inguine regnat,
et femina Arcitenens, genua et Capricornus amavit,
errorque defendit Iuvenis, vestigia Pisces),
sic alias alid terras sibi vindicat astrum.
Idcirco in varias leges variasque figuras
dispositum genus est hominum, proprio colore
formantur gentes, sociataque iura per artus
materiamque parem privato foedere signant.
flava per ingentis surgit Germania partus,
Gallia vicino minus est infecta rubore,
asperior solidos Hispania contrahit artus.
Martia Romanis urbis pater induit ora
Gradivumque Venus miscens bene temperat artus,
perque coloratas subtilis Graecia gentes
gymnasium praefert vultu fortisque palaestras,

et

ASTRONOMICA, 4. 697-721

sea are to be summoned to observe, for the creator
has divided the world into portions, distributing it
among the individual signs. To each guardian power
he has given a special region of the world to rule,
bestowing also the peoples and mighty cities proper
to them, wherein the signs should claim their pre-
dominant influences. And just as the human frame is
apportioned among the signs, and the protection
they afford, though collectively extending over the
whole body, is in addition exercised separately over
the limbs allocated among them (the Ram is attached
to the head, the Bull to the neck; the arms are
reckoned as under the Twins’ domain, the breast
under the Crab’s; the shoulders appeal to you,
Nemean, and to you, Maiden, the belly; the Balance
attends the loins, and the Scorpion is lord of the
groin; the Archer has bestowed his love upon the
thighs, Capricorn upon the knees, whilst the Youth is
protector of the shanks and the Fishes of the feet), so
in like manner do different signs lay claim to different
lands.

For this reason the human race is so arranged
that its practices and features vary: nations are
fashioned with their own particular complexions;
and each stamps with a character of its own the like
nature and anatomy of the human body which
all share. Germany, towering high with tall off-
spring, is blond; Gaul is tinged to a less degree with
a near-related redness; hardier Spain breeds close-
knit, sturdy limbs. The Father of the City endows
the Romans with the features of Mars, and
Venus joining the War-god fashions them with well-
proportioned limbs. Quick-witted Greece proclaims
in the tanned faces of its peoples the gymnasium and

a Cf. 2. 456-465.
b Romulus, son of Mars and Ilia.
et Syriam produnt torti per tempora crines.
Aethiopes maculant orbem tenebrisque figurant perfusas hominum gentes; minus India tostos progenerat; tellusque natans Aegyptia Nilo lenius irriguis infuscat corpora campis
iam propior mediumque facit moderata tenorem.
Phoebus harenosis Afrorum pulvere terris exsiccat populos, et Mauretania nomen oris habet titulumque suo fert ipsa colore.
adde sonos totidem vocum, totidem insere linguas et mores pro sorte parvis ritusque locorum; adde genus proprium simili sub semine frugum et Cererem varia redeuntem messe per urbes nec paribus siliquas referentem viribus omnis, nec te, Bacche, pari donantem munere terras atque alias alis fundentem collibus uvas, cinnama nec totis passim nascentia campis; diversas pecudum facies propriaque ferarum et duplici clausos elephantas carcerem terrae.
quod partes orbis, totidem sub partibus orbis, ut certis discipita nitent regionibus astra perfunduntque suo subjectas aere gentes.
Laniger in medio sortitus sidera mundo, lance ubi sol aequa pensat noctemque diemque Cancrum inter gelidumque Caprum per tempora veris, assert in vires pontum quem vicerat ipse,

725a tostis 726b aequore 727 poenus 728 [caprum] 729 et

a Mauretania is derived (cf. Isidore, Orig. 14. 5. 10) from μαύρος "dark."
b Africa and India.
c Hellespont: the girl is Helle, her brother Phrixus.

the manly wrestling-schools. Curly hair about the temples betrays the Syrian. The Ethiopians stain the world and depict a race of men steeped in darkness; less sun-burnt are the natives of India; the land of Egypt, flooded by the Nile, darkens bodies more mildly owing to the inundation of its fields: it is a country nearer to us and its moderate climate imparts a medium tone. The Sun-god dries up with dust the tribes of Africans amid their desert lands; the Moors derive their name from their faces, and their identity is proclaimed by the colour of their skins. Add the sounds of as many voices as there are races; include in your reckoning as many languages and customs and practices appropriate to the regions allotted to those races. Add the several characteristic kinds of fruits that grow from a like seed, and also the goddess of food, who comes round with harvests which vary from state to state and produces an unequal yield of every kind of vegetable. Nor do you, Bacchus, endow the lands with a similar bounty, but bring forth different grapes on different hills. Cinnamon does not grow far and wide in every field. Consider the different breeds of cattle, the peculiar species of wild beasts, and the elephant, restricted to two confines on earth. For all that they are reckoned parts, there are as many worlds as there are parts of the world, even as the signs shine upon the special regions to which they have been allocated and imbue with their climate the peoples that lie beneath.

744 The Ram, whose stars are allotted place in the middle of the firmament, where with even balance the Sun levels night and day in springtime halfway between the Crab and chilly Capricorn, claims for his influence the sea which he overcame himself, when after the
MANILIUS

virgine delapsa cum fratrem ad litora vexit
et minui deflevit onus dorsumque levari.
illum etiam venerata colit vicina Propontis
et Syriae gentes et laxo Persis amictu
vestibus ipsa sui haeren Nilosque tumescens
in Cancerum et tellus Aegypti iussa natare.
Taurus habet Scythiae montes Asiamque potentem
et mollis Arabas, silvarum ditia regna.
Euxinus Scythicos pontus sinuatus in arcus
sub Geminis te, Phoebe, colit ; vos Thracia, fratres,
ultimus et sola vos tranans colit Indica Ganges.
ardent Aethiopes Cancro, cui plurimus ignis :
hoc color ipse docet. Phrygia, Nemeae, potiris
Idaeae matris famulus regniqve feroci
Cappadocum Armeniaeque iugis ; Bithynia dives
tel colit et Macetum tellus, quae vicerat orbem.
Virgine sub casta felix terraque marique
est Rhodos, hospitium recturi principis orbem,
tumque domus vere Solis, cui tota sacra est,
cum caperet lumen magni sub Caesare mundi ;
Ioniae quoque sunt urbes et Dorica rura,
Arcades antiqui celebretaque Caria fama.
quod potius colat Italiana, si seligat, astrum
quam quod cuncta regit, quod rerum pondera novit,

756 host hrachia fratris
757 solidos ganges et
758 regnique ferocis
transcolit india cancer

760

765
tuque

The summer solstice, when the Sun reaches Cancer.

b Cf. Strabo 2. 5. 22.

c The Sun being the dominant deity of Gemini (cf. 2. 439 f.).

d Cybele.

e Tiberius, who withdrew from public life to the island of Rhodes in 6 B.C., returning in A.D. 2.

f Ionia doubtless includes Attica in addition to the Ionian islands and the coast of Asia Minor.

g The Arcadians, who took a pride in their antiquity, were called προσέληνοι, "older than the Moon" (Aristotle, Frag. 591).

h Cf. Herodotus 1. 171.

ASTRONOMICA, 4. 747–770
designat summas et iniquum separat aequo,
tempora quo pendent, coeunt quo noxque diesque?
Hesperiam sua Libra tenet, qua condita Roma
orbis et imperium retinet discrimina rerum,
lancibus et positas gentes tollitique premitque,
qua genitus Caesar melius nunc condidit urbem
et propriis frenat pendentem nutibus orbem.
inferius victae sidus
Cyrenes lacrimis radices
et Libyam Aegyptique latus donataque rura
Cnoria Centauro tellus circumdata ponto
paret, et in geminum Minois filius astrum
ipse venit geminus. celeris hinc Creta sagittas
asserit intentosque imitatur sideris arcus.
insula Trinacriae fluitantem ad iura sororem
subsequitur Triviae sub eodem signo,
proximaque Italiae tenui divisa profundo
ora paris sequitur leges nee sidere rupta est.
tu, Capricorne, regis quidquid sub sole cadente
est positum gelidamque Helicen quod tangit ab illo,
Hispanas gentes et quot fert Gallia dives;

775 melius] -que meus
780 tyrrenos
781 eruit

785 Triviae] crentens
786 radiat... arces
787 expositum
788 quod

a According to Tarutius Firmanus (Cicero, De Div. 2. 98)
the Moon was in Libra at the foundation of Rome.
b Tiberius was born (Suetonius, Tib. 5) Nov. 15, 42 B.C.,
when the Moon was in Libra (at Augustus’s birth the Moon
was in Capricorn, cf. 2. 507 ff., Suetonius, Aug. 94).
c Hammonia.
d The juice of silphium (see, for example, the commentators
on Catullus 7. 4 and the edition of Apicius by Flower and
e The Minotaur, half-man, half-bull, supposititious son of
Minos, the offspring of his wife Pasiphae’s union with a bull.
f Crete.
g Cf. 2. 444.
h Housman refers this to Magna Graecia and not just
Bruttium.
teque feris dignam tantum, Germania, matrem
asserit ambiguum sidus terraeque marisque
aestibus assiduis pontum terrasque sequentem.

sed Juvenis nudos formatus mollior artus
Aegyptum ad tepidam Tyriareth recedit in ares
et Cilicum gentes vicinaque Caribus arva.
Piscibus Euphrates datus est, ubi ab his ope sumpta
cum fugeret Typhona Venus subsedit in undis,
et Tigris et rubri radiantia litora ponti.
magna iacet tellus magnis circumdata ripis
Parthis et a Parthis domitae per saecula gentes,
Bactraque et Aethiopes, Babylon et Susa Ninosque,
nominaque innumeris vix complectenda figuris.

Sic divisa manet tellus per sidera cuncta,
e quibus in propria partes sunt iura trahenda ;
namque eadem, quae sunt signis, commercia servant,
(non illa inter se coeunt odioque repugnant,
nune adversa polo, nune et conjuncta trigono,
quaeque alia in varios affectus causa gubernat,
sic terrae terris respondent, urbibus urbes,
litoribus, regnis contraria regna ;
sic erit et sedes fugienda petendaque cuique,

The defeat of Varus (cf. 1. 899 ff.) still rankled in Roman minds.

c Than Capricorn's.
d To Phoenicia.
e Lycia and Pamphylia.
sic speranda fides, sic et metuenda pericla, 
ut genus in terram caelo descendit ab alto.

Percipe nunc etiam quae sint ecliptica Graio 
nomine, quod certos quasi delassata per annos 
non numquam cessant sterili torpencia motu.
scilicet immenso nihil est aequale sub aevo 
perpetuosque tenet flores unumque tenorem, 
mutantur sed cuncta die variantque per annos ; 
et ecunda suis absistunt frugibus arva 
continuosque negant partus effeta creando, 
rursus quae fuerant steriles ad semina terrae 
post nova sufficient nullo mandante tributa.
concutitur tellus validis compagibus haerens 
subducitque solum pedibus ; natat orbis in ipso 
et vomit Oceanus pontum sitiensque resorbet 
nec sese ipse capit. sic quondam merserat urbes, 
humani generis cum solus constitit heres 
Deucalion scopuloque orbem possedit in uno.

nece non, cum patrias Phaethon temptavit habenas, 
aserunt gentes timuitque incendia caelum 
fuguruntque novas ardentia sidera flammas 
atque uno metuit condi natura sepulcro.
in tantum longo mutantur tempore cuncta 
atque iterum in semet redeunt. sic tempore certo 
signa quoque amittunt vires sumuntque receptas.

live in, so hope for loyalty or be forewarned of peril, 
according to the character which has come down to 
earth from high heaven.a

818Mark now, too, the signs which are, to use a 
Greek term, ecliptic,b because over certain periods of 
years, as though worn out with toil, they sometimes 
lag with unavailing movement and fail. Assuredly, 
nothing remains constant through the vastness of 
 eternity, keeping its prime for ever and holding a 
single course, but all things change with the passage 
of time and vary over the years. Fertile fields with­
hold their crops and refuse to supply a continuous 
yield, exhausted by production ; again, lands which 
had given no return for seed sown furnish unexpected 
tribute afterwards, and that unbidden. The earth is 
shaken to its foundations for all the strength of the 
framework which holds it together, and the ground 
gives way beneath our feet c; the land is afloat upon 
its very self,a as Ocean vomits forth its seas and gulps 
them back in thirst, and cannot contain the whole of 
 itself. So on a time it flooded every city, when 
Deucalion was left sole heir of the human race, and 
his occupation of a single rock made him master of the 
world. Moreover, when Phaethon e made trial of his 
father’s reins, nations were burnt up and heaven 
feared to be set on fire ; the blazing stars fled before 
fresh flames, f and nature was afraid of interment in a 
single grave. All things undergo such changes over 
long periods and then return to their normal states 
again. Even thus at a certain time the signs too lose 
their powers and on recovering them exert them

a For example, says Housman, a man born in Italy 
(Libra) will do better to settle in Cilicia (Aquarius, linked in 
triangular federation with Libra) than in Syria (Aries, which 
confronts Libra across the sky) : in the former he may expect 
loyalty, in the latter, peril.
b From εἴλείπειν, “to fail.”

c A reference to earthquakes.
d I.e. has its coastal areas inundated.
ea Cf. 1. 736 ff. f The flames of the Sun.
causa patet, quod, Luna quibus defecit in astra
orba sui fratris noctisque immersa tenebris,
cum medius Phoebi radios intercipient orbis
nec trahit assuetum quo fulget Delia lumen,
litelum quoque signa suo pariter cum sidere languent
incurvata simul solitoque exempta vigori
et velut elatum Phoebein funere lugent.
ipsa docet titulo se causa: ecliptica signa
dixere antiqui. pariter sed bina laborant,
nec vicina loco sed quae contra fulgent,
sicut Luna suo tum tantum defect orbe
cum Phoebe in adversis currentem non videt astra.
nec tamen aequali languescunt tempore euncta,
se modo in affectus totus productur annus,
nunc breuius lassata manent, nunc longius astra
exceduntque suo Phoebea tempora casu.
atque, ubi perfectum est spatum quod cuique dicitur
impleruntque suos certa statione labores
bina per adversum caelum fulgentia signa,
tum vice bina labant ipsis haerentia casus,
quae prius in terras veniunt terrasque relinquunt,
sidereo non ut pugnet contrarius orbi
sed, qua mundus agit cursus, inclinet et ipse,
amissentque negant vires, nec munera tanta
nec similis reddunt noxas. locus omnia vertit.
Sed quid tam tenui prodest ratione nitentem
scrutari mundum, si mens sua cuique repugnat

ASTRONOMICA, 4. 841–867

The cause is plain: whatever signs have seen
the Moon eclipsed, ref of her brother and plunged
into the darkness of night, when the Earth comes
between to cut off Phoebus’ rays and Delia draws
not the light wherewith she is wont to shine, those
signs too become as stricken as the planet occupying
them, bowed the while in grief and deprived of their
customary powers, and they mourn Phoebe as though
she had been carried out for burial. The cause
is revealed by its name, for the ancients called these
signs ecliptic. However, signs suffer together in
pairs, not of those situated side by side but of those
which shine at each other from opposing quarters,
since the Moon’s orb only fails when she does not see
Phoebus as he courses in the opposite sign. But the
signs are not all enfeebled for an equal duration, but
sometimes a whole year is spent in this condition,
sometimes they remain exhausted for a shorter
period, and sometimes for a longer one, when their
affliction outlives the Sun’s yearly cycle. Now when
the period allotted to each is accomplished, and the
pair of signs which shine at each other across heaven
have at the appointed limit discharged their tour of
toil, then the two adjacent signs which precede them
in rising above and setting beneath the Earth’s
horizon succumb by a shift of affliction, in such a way
that this does not battle against the rotation of the
starry sphere but advances in the direction of heaven’s
motion; and the signs lose their influences and no
longer exert them, neither imparting their usual
blessings nor inflicting their wonted hurt: all these
changes are caused by the proximity of the eclipse.

But what avail is it to search out the secrets of
the shining firmament with such subtle reasoning, if a
MANILIUS

man's spirit resists and fear banishes confidence and bars access to the gate of heaven? "See," he objects, "nature is buried in deep concealment and lies beyond our mortal gaze and ken; it cannot profit us that all is governed by fate, since the rule of fate cannot by any means be seen." What boots it to assail oneself with self-reproach, to deprive oneself of benefits ungrudged by God himself, and to renounce that mental vision which nature has bestowed? We perceive the skies, then why not the skies' gifts too? The mind of man has the power to leave its proper abode and penetrate to the innermost treasures of the sky; to construct the mighty universe from its component seeds; to transport the offspring of heaven about the places from which it came; to make for Ocean's farthest horizon, descend to the inverted parts of the Earth, and inhabit the whole wide world. Now nature holds no mysteries for us; we have surveyed it in its entirety and are masters of the conquered sky; we perceive our creator, of whom we are part and rise to the stars, whose children we are. Can one doubt that a divinity dwells within our breasts and that our souls return to the heaven whence they came? Can one doubt that, just as the world, composed of the elements of air and fire on high and earth and water, houses an intelligence which, spread throughout it, directs the whole, so too with us the bodies of our earthly condition and our life-blood house a mind which directs every part and animates the man? Why wonder that men can comprehend heaven, when heaven exists in their very beings and the poet is representing man as performing physical actions beyond the power of his body.

ASTRONOMICA, 4. 868-894

spemque timor tollit prohibetque a limine caeli?
conditur enim inquit vasto natura recessu
mortalisque fugit visus et pectora nostra,
nec prodesse potest quod fatis cuncta reguntur,
cum fatum nulla possit ratione videri.

quid iuvat in semet sua per convicia ferri
et fraudare bonis, quae nec deus invidet ipse,
quosque dedit natura oculos deponere mentis?
perspicimus caelum, cur non et munera caeli?
mens humana potest propria discere sede
inque ipsos penitus mundi descendere census
pendentis tractus et toto vivere in orbe.

[quanta et pars superet rationem discere noctis]
iam nusquam natura latet; pervidimus omnem
et capto potimur mundo nostrumque parentem
pars sua perspicimus genitique accedimus astris.

an dubium est habitare deum sub pectore nostro
in caelumque redire animas caeloque venire,
ule sit ex omni constructus corpore mundus
aeris atque ignis summi terraeque marisque
hospitium menti totum quae infusa gubernet,
sic esse in nobis terrenae corpora sortis
sanguineasque animas animo, qui cuncta gubernat
dispensatque hominem? quid mirum, noscere mundum
si possunt homines, quibus est et mundus in ipsis

870
875
880
885
890

emim quid
portum
superest

aetheris
spiritum et totum rapido
quae iussa gubernent

a I.e. man.
b About the sky.
c [882] (modelled on Germanicus 573): "...and to learn how to calculate the remaining portion of the night." But

d Cf. 2. 105-125.
e Cf. 1. 247-251, 2. 60-83.
exemplumque dei quisque est in imagine parva? an cuiquam genitos, nisi caelo, credere fas est esse homines? proiecta iacent animalia cuncta in terra vel mersa vadis, vel in aere pendent, omnibus una quies venterque venusque voluptas, mole valens sola corpus censumque per artus, et, quia consilium non est, et lingua remissa. unus in inspectus rerum viresque loquendi ingeniumque capax variasque educitur artes hic partus, qui cuncta regit: secessit in urbes, edomuit terram ad fruges, animalia cepit imposuitque viam ponto, stetit unus in arcem erectus capitis victorque ad sidera mittit sidereos oculos propiusque aspectat Olympum inquiritque Iovem; nee sola fronte deorum contentus manet, et caelum scrutatur in alvo cognatumque sequens corpus se quaerit in astris. huile in tanta fidem petimus, quam saepe volucres accipiunt trepidaque suo sub pectore fibrae. an minus est sacris rationem ducere signis quam pecudum mortes aviumque attendere cantus? atque ideo faciem caeli non invidet orbi ipse deus vultusque suos corpusque recludit volvendo semper seque ipsum inculcat et offert, ut bene cognosci possit doceatque videntis, quals eat, cogatque suas attendere leges. ipse vocat nostros animos ad sidera mundus nee patitur, quia non condit, sua iura latere. quis putet esse nefas nosci, quod cernere fas est?

901 [in] 903 orbes 905 arce 916 reducit 918 videndis

a Astronomy. b Astrology.
nec contemne tuas quasi parvo in pectore vires:
quod valet, immensum est. sic auri pondera parvi
exsuperant pretio numerosos aeris acervos;
sic adamas, punctum lapidis, pretiosior auro est;
parvula sic totum pervisit pupula caelum,
quoque vident oculi minimum est, cum maxima cernant;
sic animi sedes tenui sub corde locata
per totum angusto regnat de limite corpus.
materiae ne quaere modum, sed perspice vires,
quas ratio, non pondus, habet: ratio omnia vincit.
ne dubites homini divinos credere visus,
iam facit ipse deos mittitque ad sidera numen,
maius et Augusto cresceat sub principe caelum.

for us to see? Scorn not your powers as if proportionate to the smallness of the mind: its power has no bounds. Thus a small amount of gold exceeds in value countless heaps of brass; thus the diamond, a stone no bigger than a dot, is more precious than gold; thus the tiny pupil of the eye takes in the whole of heaven, and eyes owe their vision to that which is so very small, whilst what they behold is so very large; thus the seat of the mind, though set within the puny heart, exercises from its constricted abode dominion over the whole body. Seek not to measure the material, but consider rather the power which reason has and mere substance not: reason is what triumphs over all. Be not slow to credit man with vision of the divine, for man himself is now creating gods and raising godhead to the stars, and beneath the dominion of Augustus will heaven grow mightier yet.

\[a\] Julius Caesar was deified in 42 B.C., Augustus in A.D. 14.
BOOK FIVE

The last book of the Astronomica is the most artistic, and best illustrates the poet’s ingenious rhetoric. The versification of arithmetic or geometry or bare astrological doctrine is here avoided; and for the most part the book consists of witty and colourful portraits of the different types of person produced by the influences of the extra-zodiacal constellations. After several hundred lines Manilius, perhaps taking a lead from Virgil in the last book of the Georgics, abandons the proportions of his scheme to narrate the story of Perseus and Andromeda; comparison with Ovid’s treatment of the myth, however, redounds to our poet’s disadvantage and reveals how much the insistence on verbal point has deprived his composition of the power to engage our feelings. Towards the end of the work some common ancestor of our manuscripts has evidently suffered the loss of several pages, a loss which leaves in some doubt whether or no Manilius dealt, as he had promised, with planetary influences. The last topic to be handled is the magnitudes of the stars, not a matter of astrological significance, but one which enables the poet to conclude with an imaginative description of the republic of the sky.
Hic alius finisset iter signisque relatis
quis adversa meant stellarum numina quinque
quadriugis et Phoebus equis et Delia bigis
non ultra struxisset opus, caeloque rediret
ac per descendum medios percurreret ignes
Saturni, Iovis et Martis Solisque, sub illis
post Venerem et Maia natum te, Luna, vagantem.
me properare etiam mundus iubet omnia circum
sidera vectatum toto decurrere caelo,
cum semel aetherios ausus conscendere currus
summum contigerim sua per fastigia culmen.
hinc vocat Orion, magni pars maxima caeli,
et ratis heroum, quae nunc quoque navigat astris,
Fluminaque errantis late sinuantia flexus
et biferum Cetos squamis atque ore tremendo
Hesperidumque vigil custos et divitis auri
et Canis in totum portans incendia mundum
araque divorum, cui votum solvit Olympus;
ilinc per geminas Anguis qui labitur Arctos
Heniochusque memor currus plaustrique Bootes

Here would another have ended his journey in the
skies: having dealt with the signs against which
move the deities of five planets together with Phoebus' team of four and Diana's pair, a he would have
carried his work no further. Here would another
leave the celestial sphere and make his descent
through the intervening fires of Saturn, Jupiter,
Mars, and the Sun, and you, O Moon, beneath them,
whose wandering path follows Venus and Maia's
son. b But me the heavens entice to hasten on a
tour of all the stars in the sky as well, now that I
have once dared to mount an aerial car and reached
the summit of the dome along its upward slopes. On
this side c Orion beckons to me, in the mighty sky
the mightiest constellation; the heroes' ship d
that amid the stars sails even now; the Rivers e
whose winding coils meander far and wide; the
Whale which with its scales and dread jaws has part
of two creatures f; the wakeful warder g of the
Hesperides and the golden treasure; the Dog who
brings fire upon the entire universe; and the altar
of the gods, at which Olympus pays its vows. On
yonder side h the Dragon beckons which glides
between the two Bears; the Charioteer still minding

a I.e. the Sun and the Moon.
b Mercury.
c Among the southern constellations.
d Argo.
e Not subsequently mentioned. See 1. 439, note.
f Cetus has the scaly tail (and rear) of a fish, the jaws (and
front) of a land animal.
g Hydra, not subsequently mentioned.
h Among the northern constellations.
MANILIUS

atque Ariadnae cælestia dona coronac,
victor et invisae Perseus cum falce Medusae
Andromedanque necans genitor cum coniuge Cepheus,
quaque volat stellatus Equus celerique Sagittae
Delphinus certans et Iuppiter alite tectus, 25
ceteraque in toto passim labentia caelo.
quæ mihi per proprias vires sunt cuncta canenda,
quid valeant ortu, quid cum merguntur in undas,
et quota de bis sex astris pars quæque reducat.

Vir gregis et ponti victor, cui parte relicta
nomen onusque dedit nec pelle immunes ab ipsa,
Colchidos et magicas artes qui visere Iolcon
Medææ fuisse movitque venena per orbem, 32
nunc quoque vicinam puppi, ceu naviget, Argo
sed tum prima suos puppis consurgit in ignes,
quattuor in partes cum Corniger extulit ora.
illa quisquis erit terris oriente creatus, 40
rector erit puppis clavoque immobiles haeres
mutabit pelago terras ventisque sequetur
fortunam to tumque volot tranare profundum
classibus atque alios menses altumque videre
Phasin et in cautes Tiphyn superare ruentem.
tolle sitos ortus hominum sub sidere tali,

30 f.: see after 709
31 colchon
32 medeam
33 puppim celi
38 cum
39 illis
40 aliumque
45 trementem
46 istos

ASTRONOMICA, 5. 21-46

his car and Bootes his wain; the heavenly gift of
Ariadne’s crown; Perseus, a slayer of the abominable
Medusa, blade yet in hand; with his wife, Cepheus
sacrificing his daughter Andromeda; the region of
the sky where fly the Horse of stars, the Dolphin
seeking to outstrip the swift Arrow, and Jupiter in
swan’s disguise; together with the other stars that
glide at large throughout the heavens. I must tell of
the powers peculiar to all these constellations, their
influences both when rising and when they sink into
the waves, and which degree of the zodiac brings
each of them back above the horizon. b

33 Lord of the flock and conqueror of the sea, to
which, a horn lost and robbed even of its fleece, it gave
its burden c and a name, the Ram, which bade the
magic arts of Colchian Medea journey to Iolcos and
spread her poisons throughout the world, even now
draws Argo by the poop to its side, as though still on
the seas, through the stars on its right. d But the fore­
most part of the poop emerges to show its fires only
when the Ram has brought four degrees of its
countenance above the horizon. Whoever is born on
earth at the rising of Argo will be the captain of a
ship; holding fast to his helm, he will forsake dry
land for the sea and pursue his fortune with the
winds; he will crave to traverse the entire ocean
with his fleet, visit foreign climes and the deep
Phasis, and better the speed of Tiphys towards the
rocks. e Take away the births of men situate beneath

For a tabulation of the poet’s doctrine of the paranatellonta,
see tables 5 and 6, pp. xciv f.

a Subsequently mentioned only in connection with Andro­
meda, not on his own account.

b Manilius does not in fact deal with the influences of the
extra-zodiacal constellations at their setting and in several
instances fails to specify the zodiacal degree of their rising.

c Helle.

d An error: Argo is a southern constellation and rises on
the left of the zodiac, but never contemporaneously with
Aries.

e The Symplegades.
sustuleris bellum Troiae classemque solutam
sanguine et appulsam terris; non invehet undis
Persida nec pelagus Xerxes facietque tegetque
versa Syraecsis Salamis non merget Athenas,
Punica nec toto fluitabunt aequore rostra
Actiacosque sinus inter suspensus utrimque
orbis et in ponto caeli fortuna natabit.

his ducibus caeco ducuntur in aequore classes
et coit ipsa sibi tellus totusque per usus
diversos rerum ventis arcessitur orbis.

Sed decima lateris surgens de parte sinistri
maximus Orion magnumque amplexus Olympum,
quo ful gente super terras caelumque trahe nente
emenita diem nigras nox contrahit alas,
sollertis animos, velocia corpora finget
atque agilem officio mentem curasque per omnis
indelassato properiantia corda vigore.

instar erit populi totaque habitabit in urbe
limina pervolitans unumque per omnia verbum
mane salutandi portans communis amicus.

Sed, cum se terris Aries ter quinque peractis
partibus extollit, primum iuga tollit ab undis
Heniochus clivoque rotas convellit ab imo,
qua gelidus Boreas aquilonibus instat acutis.

50 vera GL: utra M

---

a Of Iphigenia and Protesilaus.
b By cutting a canal through Athos.
c By the vastness of his fleet (cf. 3. 20); some interpreters
see an allusion to the bridging of the Hellespont, but Housman
considers this unlikely.
d Another mistake (repeated by Firmicus, Math. 8. 6. 2):
Orion cannot rise with Aries. Moreover enthusiasm for
hunting, chiefest of the influences of Orion, is conspicuously
absent from this paragraph: the mobility here predicted
this constellation, and you will take away the Trojan
war and the fleet which both set sail and made landfall
with bloodshed a; then will no Xerxes launch
Persia on the main or open up a new sea b and cover
over the old c; no reversal of Salamis at Syracuse
will overwhelm Athens, nor will Punic prows ride
every sea, the world within Actium’s bays hang in
the balance between opposing forces, and heaven’s
destiny float at the mercy of the waves. Men born
under Argo are the guides who guide our ships over
the trackless deep; it is through them that land
meets land and the whole world’s wares are
summoned with the winds to supply men’s divers needs.

57 Now on the Ram’s left flank and together with
its tenth degree rises Orion d; mightiest of constel-
lations he girdles with his course the mighty skies:
when Orion shines over the horizon drawing heaven
in his train, night feigns the brightness of day and
folds its dusky wings. Orion will fashion alert
minds and agile bodies, souls prompt to respond
to duty’s call, and hearts which press on with unflagging
energy in spite of every trial. A son of Orion’s will
be worth a multitude and will seem to dwell in every
quarter of the city; flying from door to door with the
one word e of morning greeting, he will enjoy the
friendship of all.

67 But when the Ram raises himself above the earth
with thrice five degrees completed, then straightway
the Charioteer lifts his team from ocean and wrests
his wheels up from the downward slope of the horizon
where icy Boreas lashes us with his bitter blasts. He
rather reflects the Ram’s swift courses (cf. Aratus, Phaen.
225 ff.). Orion’s endowment is to be sought in that of the Belt
(175 ff.).
Manilius

ille dabit proprium studium caeloque retentas
quas prius in terris agitator amaverat artes:
stare levi curru moderantem quattuor ora
spumigeris frenata lupis et flectere equorum
praevales vires ac torto stringere gyro;
at, cum laxato fugerunt cardine claustra,
exagitare feros pronumque antire volantis
vixque rotis levibus summum contingere campum
vincentem pedibus ventos, vel prima tenentem
agmina in obliquum cursus agitare malignos
obstantemque mora totum praeccludere circum,
vel medium turbae nunc dextros ire per orbes
fidentem campo, nunc meta currere acuta
spemque sub extremo dubiam suspendere casu.
nec non alterno desultor sidere dorso
quadrupedum et stabilis poterit defigere plantas,
pervolitans et equos ludet per terga volantum;
aut solo vectatus equo nunc arma movebit,
nunc leget in longo per cursum praemia circo.
quidquid de tali studio formatur habebit.
hinc mihi Salmoneus (qui caelum imitatus in orbe,
pontibus impositis missisque per aera quadrigis
expressisse sonum mundi sibi visus et ipsum
admovisse Iovem terris, dum fulmina fingit

ASTRONOMICA, 5. 71–94

will impart his own enthusiasms and the skills, still
retained in heaven, which as driver of a chariot he
once took pleasure in on earth. The Charioteer will
enable his son to stand in a light chariot and hold in
check the four mouths curbed with foam-flecked bits,
guide their powerful strength, and keep close to the
curve round which they wheel. Again, when the
bolts have been drawn and the horses have escaped
from the starting-pens, he will urge on the spirited
steeds and, leaning forward, he will seem to precede
them in their swift career; hardly touching the
surface of the track with his light wheels, he will
outstrip the winds with his coursers’ feet. Holding
first place in the contest he will drive to the side in a
baulking course and, his obstruction delaying his
rivals, deny them the whole breadth of the circustrack; or if he is placed mid-way in the press, he will
now swing to a course on the outside, trusting in the
open, now keep close to the pointed turning-post, and will leave the result in doubt to the very
last moment. As a trick-rider too he will be able to
settle himself now on one, now on a second horse, and
plant his feet firmly upon them: flying from horse to
horse he will perform tricks on the backs of animals
in flight themselves; or mounted on a single horse
he will now engage in exercise of arms, now whilst
still riding pick up gifts scattered along the length of
the circus. He will possess virtuosity in all that is
connected with such pursuits. Of this constellation,
I think, Salmoneus may be held to have been born:
imitating heaven on earth, he imagined that by
setting his team of four on a bridge of bronze and
driving it across he had expressed the crash of the
heavens and had brought to earth Jove’s very self;

* That is, the constellation is identified with Erichthonius.
sensit, et immissos ignes super ipse secutus morte Iovem didicit) generatus possit haber. hoc genitum credas de sidere Bellerophonten imposuisse viam mundo per signa volantem, cui caelum campus fuerat, terraeque fretumque sub pedibus, non ulla tulit vestigia cursus. his erit Heniochi surgens tibi forma notanda.

Cumque decem partes Aries duplicaverit ortus, incipient Haedi tremulum producere mentum hirtaque turn demum terris promittere terga qua dexter Boreas spirat. ne crede severae frontis opus fingi, strictosque hinc ora Catones, abruptumque pari Torquatum et Horatia facta. maius onus signo est, Haedis nec tanta petulcis conveniunt levibus gaudent lascivaque signant pectora; et in lusus facilis agilemque vigorem desudant; vario ducunt in amore iuventam; in vulnus numquam virtus sed saepe libido impellit, turpisque emitur vel morte voluptas; et minimum cecidisse malum est, quia crimine vincunt. nee non et cultus pecorum nascentibus addunt pastoremque suum generant, cui fistula collo haereat et voces alterna per oscula ducat.

Sed, cum bis denas augebit septima partes Lanigeri, surgent Hyades. quo tempore natis

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95 immensos
102 patri
103 conanda
104 signi
105 incoda catonis

\(a\) Some sources identify the Charioteer with Bellerophon (Schol. Aratus, \textit{Phaen.} 161). \(b\) Cf. 1. 365. \(c\) Men like Cato the Censor. \(d\) Who killed his son (Livy 8. 7. 14 ff.). \(e\) Who killed his sister (Livy 1. 26. 3). 

However, while counterfeiting thunderbolts he was struck by real ones and, falling after the fires he had flung himself, discovered in death that Jove existed. You may well believe that under this constellation was born Bellerophon,\(^a\) who flew amid the stars and laid a road on heaven: the sky was the field over which he sped, whilst land and sea lay far beneath his feet, and his path was unmarked by footprints. By examples such as these are you to mark the rising figure of the Charioteer.

\(^{102}\) When at his rising the Ram has completed twice ten degrees, the Kids\(^b\) will begin to display their quivering chins, promise to mankind of their shaggy backs at a later hour, on the right horizon where the north wind blows. Think not that hence is fashioned a product of severe mien, that hence are born stern-faced Catos,\(^c\) an inflexible Torquatus,\(^d\) and men to repeat the deed of Horatius.\(^e\) Such a charge would be too much for the sign, nor does such greatness befit the frisking Kids, who rejoice in frivolity and stamp their young with a wanton breast. These abandon themselves to playful sport and nimble activity, and spend their youth in fickle loves. Though honour never inspires them to shed their blood, lust often drives them to do so, and their base desires cost even their lives: to perish thus is their least disgrace, since their triumph is a triumph of vice. The Kids also give to those born under them the custody of flocks, and beget a shepherd of their own kind, one to hang a pipe round his neck and draw from its different stops melodious strains.

\(^{118}\) The Hyades will rise when twenty degrees of the Ram are augmented by a seventh.\(^f\) Those born

\(^{1}\) A gross error: the group is situated in the sign of the Bull.
at this time take no pleasure in tranquillity and set no store by a life of inaction; rather they yearn for crowds and mobs and civil disorders. Sedition and uproar delight them; they long for the Gracchi to harangue from the platform, for a secession to the Sacred Mount, leaving but a handful of citizens at Rome; they welcome fights which break the peace, and provide sustenance for fears. They herd their foul droves over the untilled countryside, for this constellation also begot Ulysses’ trusty swineherd. Such are the qualities engendered by the Hyades at the rising of their stars.

When the zodiac releases the Ram’s last degree, which thus displays the whole of him to the earth, plucking him from Ocean’s waves, there rises the Olenian goat, keeping watch over the Kids which stray ahead, enstarred on the right in the cold north sky for her services as foster-mother of mighty Jove. She gave the Thunderer sound nourishment, satisfying with her own milk the infant’s hungry body, and giving him therewith sufficient strength to wield his bolts. Of the Goat are born anxious minds and trembling hearts which start at every noise and are apt to flutter at the slightest cause. Inborn in them, too, is a longing to explore the unknown, even as goats seek fresh shrubs on mountain slopes and rejoice, as they browse, to move ever further afield.

As he emerges in his backwards rising with head hanging down, the Bull brings forth in his sixth degree the Pleiades, sisters who vie with each other’s radiance. Beneath their influence devotees of Bacchus and Venus are born into the kindly light, (Schol. Aratus, Phaen. 164), or from Olenus in Achaea, its residence (Strabo 8. 7. 5).
perque dapes mensasque super petulantia corda
et sale mordaci dulcis quaerentia risus.
illis cura sui cultus frontisque decorae
semper erit : tortos in fluctum ponere crines
aut vinclis revocare comas et vertice denso
fingere et appositis caput emutare capillis
pumicibusque cavis horrentia membra polire
atque odisse virum teretisque optare lacertos.
femineae vestes, nec in usum tegmina plantis
sed speciem, fictique placent ad mollia gressus.
naturae pudet, atque habitat sub pectore caeca
ambitio, et morbum virtutis nomine iactant.
semper amare parum est : cupient et amare videri.

IAM VERO GEMINIS FRATERNIS FERENTIBUS ASTRA
in caelum summoque natantibus ponti
septima pars Leporem tollit. quo sidere natis
vix alas natura negat volucrisque meatus :
tantus erit per membra vigor referentia ventos.
ille prius victor stadio quam missus abibit ;
ille cito motu rigidos eludere caestus,
nunc exire levis missas nunc mittere palmas,
ille pilam celeri fugientem reddere planta
et pedibus pensare manus et ludere fulcro
mobilibusque citos ictus glomerare lacertis,
ille potens turba perfundere membra pilarum
per totumque vagas corpus disponere palmas,
ut teneat tantos orbes sibique ipse reludat

sterilisque

...and people whose insouciance runs free at feasts and banquets and who strive to provoke sweet mirth with biting wit. They will always take pains over personal adornment and an elegant appearance: they will set their locks in waves of curls or confine their tresses with bands, building them into a thick topknot, and they will transform the appearance of the head by adding hair to it; they will smooth their hairy limbs with the porous pumice, loathing their manhood and craving for sleekness of arm. They adopt feminine dress, footwear donned not for wear but for show, and an affected effeminate gait. They are ashamed of their sex; in their hearts dwells a senseless passion for display, and they boast of their malady, which they call a virtue. To give their love is never enough: they will also want their love to be seen.

...Now when the Twins lift their fraternal stars into the sky and float on the surface of the sea, their seventh degree brings to view the Hare. To those born under this constellation nature all but gives wings and flight through the air—such will be the vigour of limbs which reflect the swiftness of the winds. One man will come off winner in the footrace before even receiving the signal to start; another by his quick movement can evade the hard boxing-glove and now lightly avoid, now land a blow; another can with a deft kick keep in the air a flying ball, exchanging hands for feet and employing in play the body's support, and execute with nimble arms a volley of rapid strokes; yet another can shower his limbs with a host of balls and create hands to spring up all over his body with the result that, without dropping any of the number, he plays against himself
et velut edoctos iubeat volitare per ipsum.
invigilat curis, somnos industria vincit,
otia per varios exercet dulcia lusus.

Nunc Cancro vicina canam, cui parte sinistra
consurgunt Iugulae. quibus aspirantibus orti
te, Meleagre, colunt flamnis absentibus ustum
reddentemque tuae per mortem munera matri,
cuius et ante necem paulatim vita sepulta est,
atque Atalantaeos conatum ferre labores,
et Calydonea bellantem rupe puellam
vincentemque viros et quam potuisse videre
virgine maius erat sternentem vulnere primo.
quaque erat Actaeon silvis mirandus, et ante
quam canibus nova praeda fuit, ducuntur et ipsi,
retibus et claudunt campos, formidine montes.

174 Next shall I sing of the neighbours of the Crab. On
its left rise the stars of the Belt. Those born
beneath its influence are devoted to you, Meleager,
who, consumed by absent flames, at death returned
to your mother the gift she gave, whilst your life,
even before you died, experienced a lingering funeral-
pyre; and to him who undertook to endure the
toils brought on him by his wooing of Atalanta; and
to Atalanta herself, who joined in the hunt at rocky
Calydon and surpassed the male warriors, for by
inflicting the first wound she laid low a monster
beyond a maiden's strength to look upon. The
activity in which Actaeon excited the wonder of the
woods, even before he became the novel quarry of
his hounds, attracts them, too, and they enclose the
plains with nets, the hills with scare-feathers. They
prepare treacherous pitfalls and tenacious traps, and capture beasts on the run with the shackles

176 habentibus
177 somnis curas 183 quamque ... mutandus
178 Althaea. At his birth the Fates ordained for Meleager
the length of life of a log burning on the hearth; his mother
promptly removed and extinguished it, thus presenting him
with the gift of life. This gift he was to return when Althaea,
angered at the news that he had killed her brothers, threw on
the fire the log she had carefully preserved, causing the
absent Meleager to burn slowly on a funeral-pyre, as it were,
even before he died. Cf. Ovid, Met. 8. 451 ff.
180 Milanius.
181 Strings with coloured feathers attached, which were
shaken and advanced to scare and corner the hunted animal
(Seneca, Dial. 4. 11. 5).
aut canibus ferrove necant praedasque reportant. sunt quibus in ponto studium est cepisse ferarum diversas facies et caeco mersa profundo sternere litoreis monstrorum corpora harenis horrendumque fretis in bella lacessere pontum et colare vagos inductis retibus amnes ac per nulla sequi dubias vestigia praedas, luxuriae quia terra parum, fastidit et orbem venter, et ipse gulum Nereus ex aequore pascit.

At Procyon oriens, cum iam vicesima Cancro septimaque ex undis pars sese emergit in astra, venatus non ille quidem verum arma creatis venandi tribuit. catulos nutrire sagacis et genus a proavis, mores numerare per urbes, retiaque et valida venabula cuspide fixa lentaque correctis formare hastilia nodis, et quaecumque solet venandi poscere cura in proprios fabricare dabit venalia quaestus. Cum vero in vastos surget Nemeaeus hiatus, exoritur candens latratque Canicula flammas et rabit igne suo geminatque incendia solis. qua subdente facem terris radiosque vomente divinat cineres orbis fatumque supremum sortitur, languetque suis Neptunus in undis, et viridis nemori sanguis decedit et herbis. cuncta peregrinos orbes animalia quaerunt atque eget alterius mundus; natura suismet

190 dubitat 197 Procyon rises at the moment when Cancer’s twenty-seventh degree ascends from the waves to the stars. He bestows upon those born under him not hunting, but its weapons. To rear keen-scented whelps and to tell their class by their pedigree, their qualities by their place of origin; to produce nets, and hunting-spears tipped with strong points, and pliant shafts with knots smoothed out; and to manufacture and sell at a profit whatever the art of hunting is likely to require: these are the gifts Procyon will bestow.

206 But when the lion of Nemea lifts into view his enormous gaping jaws, the brilliant constellation of the Dog appears: it barks forth flame, raves with its fire, and doubles the burning heat of the sun. When it puts its torch to the earth and discharges its rays, the earth foresees its conflagration and tastes its ultimate fate: Neptune lies motionless in the midst of his waters, and the green blood is drained from leaves and grass. All living things seek alien climes, and the world looks for another world to repair would ultimately be engulfed in a cosmic conflagration and all things would return to the condition of primeval fire.
aegrotat morbis nimios obsessa per aestus
inque rogo vivit: tantus per sidera fervor
funditur atque uno cessant in lumine cuncta.
haec ubi se ponto per primas extulit oras,
nascentem quam nec pelagi restinxerit unda,
offrenos animos violentaque pectora finget
irarumque dabit fluctus odiumque metumque
totius vulgi. praecurrent verba loquentis,
anter os est animus nec magnis concita causis
cordae micant et lingua rabit latratque loquendo,
morsibus et crebris dentes in voce relinquit.
ardescit vino vitium, viresque ministrat
Bacchus et in flammam saevas exsuscitat iras.
nee silvas rupesque timent vastosque leones
aut spumantis apri dentes atque arma ferarum,
effunduntque suas concesso in corpore Iammas.
ne talis mirere artes sub sidere tali,
cernis ut ipsum etiam sidus venetur in astris;
praergessum quaerit Leporem comprehendere cursu.

Ultima pars magni cum tollitur orta Leonis,
Crater auratis surgit caelatus ab astris.
inde trahit quicumque genus moresque, sequetur
irriguos ruris campos amnesque lacusque,
et te, Bacche, tuas nubentem iunget ad ulmos,
disponetve iugis imitatus fronde choreas,
robore vel proprio fidentem in bracchia ducet

to; beset by temperatures too great to bear, nature
is afflicted with a sickness of its own making, alive,
but on a funeral-pyre: such is the heat diffused
among the constellations, and everything is brought
to a halt by a single star. When the Dogstar rises
over the rim of the sea, which at its birth not even the
flood of Ocean can quench, it will fashion unbridled
spirits and impetuous hearts; it will bestow on its
sons billows of anger, and draw upon them the hatred
and fear of the whole populace. Words run ahead of
the speakers \(\text{a}\): the mind is too fast for the mouth.
Their hearts start throbbing at the slightest cause,
and when speech comes their tongues rave and bark,
and constant gnashing imparts the sound of teeth
to their utterance. Their failings are intensified by
wine, for Bacchus gives them strength and fans their
savage wrath to flame. No fear have they of woods
or mountains, or monstrous lions, the tusks of the
foaming boar, or the weapons which nature has given
wild beasts: they vent their burning fury upon all
legitimate prey. Lest you wonder at these tendencies
under such a constellation, you see how even the
constellation itself hunts among the stars, for in its
course it seeks to catch the Hare in front.

\(\text{226}\) When the last degree of the mighty Lion
appears at its rising, the Bowl comes into view, chased with
the gilt of its stars. Whoever derives hence his birth
and character will be attracted by the well-watered
meadows of the countryside, the rivers, and the
lakes. He will join your vines, Bacchus, in wedlock
to your elms; or he will arrange them on props,
so that the fronds resemble the figures in a dance;
or, allowing your vine to rely on its own strength, he
will lead it to spread out its branches as arms, and

\(\text{217}\) ceu sunt in flumine

\(\text{226}\) vino | vitio

\(\text{215}\)

\(\text{220}\)

\(\text{225}\)

\(\text{230}\)

\(\text{235}\)

\(\text{240}\)

\(\text{234}\)

\(\text{318}\)

\(\text{319}\)

\(\text{a}\) The impetuosity of the speaker causes him to utter
words before he has time to adapt them to his grammar or
logic. Here our author perhaps echoes [Longinus], \(\text{De Subl.}
19.1\) τὰ λεγόμενα . . . φθάνοντα καὶ αὐτῶν τῶν λέγοντα "words . . .
running ahead of the speaker himself" (see Bühler 475 f.).
teque tibi credet semperque, ut mater resectum, 
abiunget thalamis, segetemque interseret uvis, 
quaeque alia innumeris cultus est forma per orbem 
pro regione colet. nec parce vina recepta 
hairet, emeritis et fructibus ipse fruetur 
gaudebitque mero mergetque in pocula mentem. 
nec solum terrae spem credet in annua vota: 
anonae quoque vectigal mercesque sequetur 
praeipue quas umor alit nec deserit unda.
talis effinget Crater umoris amator.

IAM subit Erigone. quae cum tibi quinque feretur 
partibus ereptis ponto, tollentur ab undis 
clara Ariadnaeae quondam monumenta coronae 
et mollis tribuent artes. hinc dona puellae 
namque nitent, illinc oriens est ipsa puella.
ille colet nitidis gemmantem floribus hortum 
caeruleumque oleis viridemve in gramine collem. 
pallentis violas et purpureos hyacinthos 
liliaque et Tyrrias imitata papavera luces 
vernantisque rosae rubicundo sanguine florem 
consert et veris depinget prata figuris. 
aut varios nectet flores sertisque locabit 
effingetque suum sidus similisque 
Cnosiaceae faciet; calamosque in mutua pressos 
incoguet atque Arabum Syriis mulcebit odores 


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241 -que ut] qui 242 adiungit 245 emiseris 245 tibi] ter 260 foliis 264 silvis

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a Semele, daughter of Cadmus: see note on 2. 17.
b I.e. become a tax-collector.
c Papyrus, for example, or sponges.
d I.e. after Leo.
e In her lifetime.
f The maiden’s gifts are the constellation Corona Borealis, which rises with the sign of the zodiac that is a maiden’s self, namely Virgo.

entrusting you to yourself will for ever protect you from the bridal bed, seeing how you were cut from your mother.a He will sow corn among the grapes, and will adopt any other of the countless forms of cultivation that exist throughout the world, as the conditions of the district require. He will drink without stint the wine he has produced and enjoy in person the well-earned fruits of his labours; neat wine will incite him to jollity, when he will drown all seriousness in his cups. Nor only on the soil will he stake his hopes for paying his yearly vows: he will also go in pursuit of the grain-tax,b and of those wares c especially which are nourished by moisture or to which water clings. Such are the men to be fashioned by the Bowl, lover of all that is wet.

251 Next d to rise is Erigone. When you behold her ascending with five degrees wrested from the sea, there will emerge from the waves the bright memorial of what was once e Ariadne’s crown; and gentle will be the skills herefrom bestowed, for on this side shine a maiden’s gifts, on that there rises a maiden’s self.f The child of the Crown will cultivate a garden budding with bright flowers and slopes grey with olive or green with grass. He will plant pale violets, purple hyacinths, lilies, poppies which vie with bright Tyrian dyes, and the rose which blooms with the redness of blood, and will stipple meadows with designs of natural colour. Or he will entwine different flowers and arrange them in garlands; he will wreath the constellation under which he was born, and like Ariadne’s crown will be the crowns he fashions; and stems he will squeeze together, and distil mixtures therefrom, and will flavour Arabian with Syrian scents and produce unguents which give
et medios unguenta dabit referentia flatus,
ut sit adultero sucorum gratia maior.
munditiae cordi cultusque artesque decorae
et lenocinium vitae praesensque voluptas.
Virginis hoc anni poscunt floresque Coronae.

At, cum per decimam consurgens horrida partem
Spica feret prae se vallantis corpus aristas,
arvorum ingenerat studium rurisque colendi
seminaque in faenus sulcatis credere terris
usuramque sequi maiorem sorte receptis
frugibus innumeris atque horrea quaerere messi
(quod solum decuit mortalis nosse metallum : nulla fames, non ulla forent ieiunia terris;
dives erat census saturatis gentibus olim argenti venis aurique latentibus orbi)
et, si forte labor vires tardaverit, artes
quis sine nulla Ceres, non ullus seminis usus,
subdere fracturo silici frumenta superque
ducere pendentis orbes et mergere farra
ac torrere focis hominumque alimenta parare
atque unum genus in multas variare figuras.
et, quia dispositis habitatur spica per artem
frugibus, ac structo similis componitur ordo,
seminibusque suis cellas atque horrea praebet,
sculpentem faciet sanctis laquearia templis
condentemque novum caelum per tecta Tonantis.
haec fuerat quondam divis concessa figura,
off a mingled fragrance, that the charm of the perfume be enhanced by the blending. His heart is set upon elegance, fashion, and the art of adornment, upon gracious living and the pleasure of the hour. Such is the endowment prescribed by the years of the Maid and the flowers of the Crown.

Now when the bristly Corn-Ear rises together with the Virgin's tenth degree, bearing before it the spikes which palisade its grain, it engenders a love of fields and of agriculture. Its son is destined to invest seed in the furrowed soil for interest, to obtain usury greater than the principal by reaping a crop past reckoning, so that he will look in vain for barns to hold the crop. This is the only metal it were right for mortals to know: then would there be no hunger or scarcity on earth; rich indeed was the lot of those well-fed folk when on a time deposits of silver and gold lay hidden from mankind. Upon him whose strength is perchance enfeebled by toil it bestows skill in occupations without which there would be no bread or any benefit from the grain: putting the corn beneath the rock which will crush it, he will turn over it the upper millstone, moisten the flour and bake it at the hearth; he will prepare men's daily food and mould the selfsame substance into a host of different shapes. And, because the ear of corn acts as a dwelling for grains skilfully arranged, and its structure is designed like a building, since it provides cells and granaries to the seedlings within it, Spica will produce a man who carves panelled ceilings in the sacred temples, creating a second heaven in the Thunderer's abode. Such ornamentation was once reserved for the gods;
nunc iam luxuriae pars est: triclinia templis
concertant, tectique auro iam veicimur auro.

Sed parte octava surgentem cerni Sagittam
Chelarum. dabit haeac iaculum torquere lacertis,
et calamum nervis, glaebas et mittere virgis,
pendentemque suo volucrem dependerit caelo,
cuspidis vel tripli secum fugere piscem.
quod potius dederim Teucer sidusve genusve,
teve, Philoctetes, cuui malim credere parti?
Hectoris ille faces arcu taedamque fugavit,
mittebat saevos ignes quae mille carinis.
hic sortem pharetra Troiae bellique gerebat,
maior et armatis hostis subsedet exul.
quin etiam ille pater talii de sidere cretus
esse potest, qui serpentem super ora cubantem
infelix nati somnumque animamque bibentem
substituit missis petere ac prosternere telo.
ars erat esse patrem; vicit natura periclum
et pariter iuvenem somno et morte levavit
tunc iterum natum et fato per somnia raptum.

At, cum secretis improvidus Haedus in antris
erranti similis fratrum vestigia qu aerit
postque gregem longo productur intervallo,

b It was decreed that Troy could not be taken without the
arrows of Hercules: these were held by Philoctetes, who,
afflicted with a noisome wound in the foot, had been aban-
c Alcon (cf. Valerius Flaccus 1. 398 ff., Servius, Buc. 5. 11).
d See Introduction pp. xciv f.
MANILIUS

sollertis animos agitataque pectora in usus
effingit varios nec deficientia curis
nec contenta domo. populi sunt illa ministra
perque magistratus et publica iura feruntur.
non illo coram digitos quaesiverit hasta,
defueritque bonis sector, poenamque lucretur
noxius et patriam fraudarit debitor aeris.
cognitor est urbis. nec non lascivit amores
in varios ponitque forum suadente Lyaeo,
mobilis in saltus et scaenae mollior arte.

Nunc surgente Lyra testudinis enatat undis
forma per heredem tantum post fata sonantis,
qua quondam somnumque fretis Oeagrius Orpheus
et sensus scopulis et silvis addidit aures
et Diti lacrimas et morti denique finem.
hinc venient vocis dotes chordaeque sonantis
garrulaque in modulos diversa tibia forma
et quodcumque manu loquitur flatuque movetur.
ille dabit cantus inter convivia dulcis
mulcebitque sono Bacchum noctemque tenebit.
quid curas inter secreta movebit
solum et ipse suas semper cantabit ad aures,
sic dictante Lyra, cum pars vicesima sexta
Chelarum surget, quae cornua ducet ad astra.

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adroit mind and a spirit which occupies itself with
business of every kind, which falters not under cares,
and which is never satisfied with home. Such men are
the servants of the state, passing through the magis-
tracies and judicial offices. When he is there, the
auctioneer's spear \(^a\) will not look in vain for a lifted
finger or confiscated goods lack a bidder; when he is
there, no criminal will go scot-free or any debtor to
the treasury defraud the state. He is the city's
attorney. In addition, he indulges in a host of love
affairs, and at the Wine-god's behest drops public
business, when he reveals himself as agile at dancing
and more supple than performers on the stage.

\(^b\) Mercury (Eratosthenes, Catast. 24).
MANILIUS

Ara ferens turis stellis imitantibus ignem,
in qua devoti quondam eecidere Gigantes,
nec prius armavit violento fulmine dextram
Juppiter, ante deos quam constitit ipse sacerdos?
quos potius fingent ortus quam templam colentis
atque auctoratos in tertia iura ministros,
divorunque sacra venerantis numina voce,
paene deos et qui possint ventura videre?

Quattuor appositis Centaurus partibus effert
sidera et ex ipso mores nascentibus addit.
aut stimulis agitabit onus mixtasque iugabit
semine quadrupedes aut curru elsior ibit
aut onerabit equos armis aut ducet in arma.
ille tenet medicas artes ad membra ferarum
et non auditos mutarum tollere morbos.
hoc est artis opus, non exspectare gementis
et sibi non aegrum iamdudum credere corpus.

Hunc subit Arcitenens, cuius pars quinta nitentem
Arcturum ostendit ponto. quo tempore natis
Fortuna ipsa suos audet committere census,
regalis ut opes et sancta aeraria servent
regnantes sub rege suo rerumque ministri,

340 345 350 355 360
340 345 350 355 360

340 345 350 355 360

a Housman identifies the third order as temple-slaves or
freedmen, comparing Digest 33. 1. 20. 1 sacerdoli et hiero-
phylaco et libertis qui in illo templo erunt: "... priest and
sacristan [these being Manilius's "temple dignitaries"] and
temple-freedmen."
b I.e. onus signifies ȅνους.
c Playing on the derivation of Centaur from ƞεντεύω,
"to goad."
d Literally "he will load horses with arms (that is his own,
he being armed and mounted) or will drive them into arms
(that is yoked to war-chariots)."

what of the Altar bearing incense-flame of which its
stars are the image? On this in ages past the Giants
were vowed to destruction before they fell, for
Jupiter armed not his hand with the powerful
thunderbolt until he had stood as priest before the
gods. Whom rather than temple dignitaries will
such risings shape and those enrolled in the third
order of service, those who worship in sacred song
the divinity of the gods and those who, all but gods
themselves, have power to read the future?

348 After a further four degrees the Centaur rears
his stars and from his own nature assigns qualities
to his progeny. Such a one will either urge on
asses b with the goad c and yoke together quadru-
peds of mixed stock or will ride aloft in a chariot;
else he will saddle horses with a fighter or drive them
into the fight. d Another knows how to apply the
arts of healing to the limbs of animals e and to relieve
the dumb creatures of the disorders they cannot
describe for his hearing. His is indeed a calling of
skill, not to wait for the cries of pain, but recognize
betimes a sick body not yet conscious of its sickness.

357 Him the Archer follows, whose fifth degree shows
bright Arcturus f to those upon the sea. To folk
born in this hour Fortune herself makes bold to
entrust her treasures, so that the wealth of monarchs
and temple finances will be in their keeping g: they
will be kings under kings, and ministers of state, and

* These endowments reflect the identification of Centaurus
as Chiron (Eratosthenes, Catast. 40).

* Strictly speaking Arcturus is a star, but the name is
occasionally used for the whole constellation of Bootes or
Arctophylax, the Bearward.

* Custodianship is a suitable endowment for the Bearward.
tutelamque gerant populi, domibusve regendis praepositi curas alieno limine claudant.

Arcitenens cum se totum producerit undis, ter decima sub parte feri formantibus astris plumeus in caelum nitidis Olor evolat alis. quo surgente trahens lucem matremque relinquens ipse quoque aerios populos caelo dicatum alituum genus in studium censusque vocabit. mille fluent artes : aut bellum indicere mundo et medios inter volucrem presare meatus, aut nidis damnare suis, ramove sedentem pascentemve super surgentia ducter lina. atque haec in luxum. iam ventri longius itur quam modo militiae : Numidarum pascimur oris Phasidos et lucis ; arcessitur inde macellum unde aurata novo devecta est aequore pellis. quin etiam linguas hominum sensusque docebit aerias volucres novaque in commercia ducet verbaque praecipiet naturae lege negata. ipse deum Cycnus condit vocemque sub illo non totus volucer, secumque immurmurat intus. nec te praeteret clausas qui culmine summo pascere aves Veneris gaudent et reddere caelo aut certis revocare notis, totamve per urbem qui gestant caveis volucres ad iussa paratas,

be charged with the guardianship of the people; or, as the stewards of grand houses, they will confine their business to the care of another’s home.

When the Archer has fully emerged from the waves, the Swan ascends into heaven with this creature’s thirtieth degree, its down and glittering wings figured by stars. Accordingly he who at its rising leaves his mother’s womb and beholds the light of day shall make the denizens of the air and the race of birds that is dedicated to heaven the source of his pleasure and profit. From this constellation shall flow a thousand human skills: its child will declare war on heaven and catch a bird in mid-flight, or he will rob it of its nestlings, or draw nets up and over a bird whilst it is perched on a branch or feeds on the ground. And the object of these skills is to satisfy our high living. Today we go farther afield for the stomach than we used to go for war: we are fed from the shores of Numidia and the groves of Phasis; our markets are stocked from the land whence over a new-discovered sea was carried off the Golden Fleece. Nay more, such a man will impart to the birds of the air the language of men and what words mean; he will introduce them to a new kind of intercourse, teaching them the speech denied them by nature’s law. In its own person the Swan hides a god \( ^{a} \) and the voice belonging to it; it is more than a bird and mutters to itself within. Fail not to mark the men who delight to feed the birds of Venus in pens on a rooftop, releasing them to their native skies or recalling them by special signs; or those who carry in cages throughout the city birds taught to obey words of command, men whose total wealth consists

\( ^{a} \) As being the disguise of Jupiter; \( \text{cf. 1. 339 f., 5. 25.} \)
quorum omnis parvo consistit passere census.
has erit et similis tribuens Olor aureus artes.

Anguitenens magno circumdatus orbe draconis,
cum venit in regione tuae, Capricorne, figurae, 
non inimica facit serpentum membra creatis.
accipient sinibusque suis peploque fluenti
osculaque horrendis iungent impune venenis.

At, cum se patrio producens aequore Piscis
in caelumque ferens alienis finibus ibit,
quisquis erit tali capiens sub tempore vitam,
litoribus ripisve suos circumferet annos,
pendentem et caeco captabit in aequore piscem,
et perlucentis cupiens presare lapillos
verticibus mediis oculos immittet avaros
cumque suis domibus concha valloque latentis
protrahet immersus. nihil est audirem reticendum :
quaeque naus fragio petitur corpusque profundo
immissum pariter quam praeda exquisitor ipsa.
nec semper tanti merces est parva laboris :
censibus aequantur conchae, lapidumque nitore
vix quisquam est locuples. oneratur terra profundo.
tali sorte suas artes per litora tractat,
aut emit externos pretio mutatque labores
institor aequoreae varia sub imagine mercis.

Cumque Fidis magno succedunt sidera mundo

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a For such performing birds, see Pliny, *N.H.* 10. 116.
b Implying that a diver’s life was usually an unenviable one (Seneca, *Dial.* 4. 12. 4).
c I.e. all the rich men have beggared themselves to buy pearls.
d On the identity of *Fides* see Introduction p. xcvi. The synonymous *fidicula*, occasionally used to designate the constellations of the Lute *d* rises into the mighty heavens, there shall be born a man of a little sparrow. These and like skills will be the gift of the golden Swan.

389 When Ophiuchus, encircled by the serpent’s great coils, rises beside the figure of Capricorn, he renders the forms of snakes innocuous to those born under him. They will receive snakes into the folds of their flowing robes, and will exchange kisses with these poisonous monsters and suffer no harm.

394 But when the Southern Fish rises into the heavens, leaving its native waters for a foreign element, whoever at this hour takes hold of life will spend his years about sea-shore and river-bank:

394: he will capture fish as they swim poised in the hidden depths;

394: he will cast his greedy eyes into the midst of the waters, craving to gather pellucid stones and, immersed himself, will bring them forth together with the homes of protective shell wherein they lurk. No peril is left for man to brave: profit is sought by means of shipwreck, and the diver who has plunged into the depths becomes, like the booty, the object of recovery. And not always small is the gain to be derived from this dangerous labour:

394: pearls are worth fortunes, and because of these splendid stones there is scarcely a rich man left.

c Dwellers on land are burdened with the treasures of the sea. A man born to such a lot plies his skill along the shore; or he purchases at a fixed wage another’s labour and sells for a profit what it has brought him, a pedlar in the many different forms of sea products.

394: When the constellation of the Lute rises into the mighty heavens, there shall be born a man...
to investigate wrong-doing and punish the guilty: he will get to the bottom of crimes by sifting the evidence for them and bring to light all that lies hidden under the silence of deceit. Hence, too, are begotten the merciless torturer, the dispenser of penalties, whoever insists on the truth and abominates evil, and the man whose profound understanding will put an end to disputes.

When the sea-dark Dolphin ascends from Ocean to the heavens and emerges with its scales figured by stars, birth is given to children who will be equally at home on land and in the sea. For just as the dolphin is propelled by its swift fins through the waters, now cleaving the surface, now the depths below, and derives momentum from its undulating course, wherein it reproduces the curl of waves, so whoever is born of it will speed through the sea. Now lifting one arm after the other to make slow sweeps he will catch the eye as he drives a furrow of foam through the sea and will sound afar as he thrashes the waters; now like a hidden two-oared vessel he will draw apart his arms beneath the water; now he will enter the waves upright and swim by walking and, pretending to touch the shallows with his feet, will seem to make a field of the surface of the sea; else, keeping his limbs motionless and lying on his back or side, he will be no burden to the waters but will recline upon them and float, the whole of him forming a sail-boat not needing oarage. Other men take pleasure in looking for the sea in the sea itself: they dive beneath the waves and try to visit Nereus and the sea nymphs in their caves; they bring forth the spoils of the sea and the booty that wrecks have lost to it, and eagerly search the sandy bottom.
From their different sides swimmers and divers share an equal enthusiasm for both pursuits, for their enthusiasm, though displayed in different ways, springs from a single source. With them you may also reckon men of cognate skill who leap in the air, thrown up from the powerful spring-board, and execute a see-saw movement, the first’s descent throwing up the second and the plunge of the second lifting the first on high; or hurl their limbs through the fire of flaming hoops, imitating the dolphin’s movement in their flight through space, and land as gently on the ground as they would in the watery waves: they fly though they have no wings and sport amid the air. Even if the Dolphin’s sons lack these skills, they will yet possess a physique suited to them; nature will endow them with strength of body, briskness of movement, and limbs which fly over the plain.

But Cepheus, rising beside the dripping Waterman, will not engender dispositions inclined to sport. He fashions faces marked by a stern demeanour, and moulds a countenance whereon is depicted gravity of mind. Such men will live on worry and will incessantly recall the traditions of a bygone age and commend old Cato’s maxims. Cepheus will also create a man to bring up boys of tender age: he will lord it over his lord by virtue of the law which governs a minor and, bemused by this semblance of power, will mistake for reality the role of arrogant guardian or stern uncle which he plays. Offspring of Cepheus will also furnish words for the buskin of tragedy, whose pen, if only on paper, is drenched in blood; and the paper no less will revel in the spectacle of crime and catastrophe in human affairs. They will
Thyestes unwittingly ate his three sons, whom, their extremities cut off, his brother Atreus served up to him as a meal (cf. Apollodorus, Epit. 2. 13): the burial (incomplete because the sons were not completely eaten) took place in the father's stomach (Cicero, De Off. 1. 97, who perhaps quotes the Atreus of Accius).

Between Eteocles and Polynices (cf. Aeschylus, Septem contra Thebas).

Oedipus (cf. Sophocles, Oedipus Tyrannus).

Referring (out of chronological order) to her murder of her children; to her father Aeetes, whose pursuit she delayed.

ASTRONOMICA, 5. 461–480

delight to tell of scarce one burial accorded three: the father belching forth the flesh of his sons, the sun fled in horror, and the darkness of a cloudless day; they will delight to narrate the Theban war between a mother's issue, and one who was both father and brother to his children; the story of Medea's sons, her brother and her father, the gift which was first robe and then consuming flame, the escape by air, and youth reborn from fire.

A thousand other scenes from the past will they include in their plays; perhaps Cepheus himself will also be brought upon the stage. If anyone is born with the urge to write in lighter vein, he will compose for presentation at the merry games scenes of comedy about the loves of headstrong youths and abducted maidens, hoodwinked old men, and slaves of infinite resource. In such plays Menander made his own day live for all generations: a man whose eloquence surpassed that of his native Athens (and that when its language attained its richest bloom), he held up a mirror to life and enshrined the image in his works. Should his powers not rise to such masterpieces, the child of Cepheus will yet be fitted to perform those of others: he will interpret the poet's words, now by his voice, now by silent gesture and expression, and the lines he declaims he will make his own. On the stage he will take the part of Romans or the mighty heroes of

by tearing her brother Absyrtus to pieces and throwing his mangled limbs in the way; to the poisonous robe sent as a wedding gift to Glauce (or Creusa), daughter of Creon, king of Corinth, which killed both the bride and her father; to the dragon-chariot sent by the Sun-god for Medea's escape; and to Aeson, Jason's father, whose youth Medea magically restored (see Ovid, Met. 7. 162 ff.). Cf Euripides, Medea.

c Cf. Euripides, Andromeda.
aut magnos heroas aget, | solusque per omnis
ibit personas et turbam reddet in uno;
omnis fortunae vultum per membra reducit,
eaquabitque choros gestu cogetque videre
praesentem Troiam Priamumque ante ora cadentem. 485

Nunc Aquilae sidus referam, quae parte sinistra
rorantis iuvenes, quem terris sustulit ipsa,
fertur et extensit praedam circumvolat alis.
fulmina missa refert et caelo militat ales
bis sextamque notat partem fluvialis Aquari.
illius in terris orientis tempore natus
ad spolia et partas surget vel caede rapinas
nee pacem bello, civem discernet ab hoste,
cumque hominum derit strages, dabit ille ferarum.
ipse sibi lex est, et qua fert cumque voluntas
praecipitant vires; laus est contemnere cuncta.
et, si forte bonis accesserit impetus ausis,
improbitas fiet virtus, et condere bella
et magnis patriam poterit ditare triumphis.
et, quia non tractat volucris sed suggerit arma
immissosque refert ignes et fulmina reddit,
regis erit magnive ducis per bella minister
ingentisque suis praestabit viribus usus.

484 pace ac LM: pacem a G poterunt ornare
dederit

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a An error: Aquila, a northern constellation, rises on Aquarius's right.
b The poet here identifies Aquarius as Ganymede.
c Another error (shared with Hyginus, Poet. Astr. 2. 16):

Aquila hovers above Capricorn and Sagittarius rather than Aquarius.
At, cum Cassiope his denis partibus actis
aequorei iuvenis dextra de parte resurgit,
artifices auri faciet, qui mille figuris
vertere opus possint caraeque acquirere dotem
materiae et lapidum vivos miscere colores.
hinc Augusta nitent sacratis munera templis,
aurea Phoebeis certantia lumina flammis
gemmarumque umbra radiantes lucibus ignes.
hinc Pompeia manent veteris monumenta triumphi
et Mithridateos vultus induta tropaea,
non extincta die semperque recentia flammis.
hinc lenocinium formae cultusque repertus
corpus atque auro quaesita est gratia frontis
per pedibus niveis fulserunt aurea vincla.
quid potius matrona velit tractare creatos
quam factum revocare suos quod possit ad usus ?
ac, ne materies tali sub munere desit,
quae rere sub terris aurum furtoque latentem
naturam eruere omnem orbemque invertere praedae
invitamque novo tandem producere caelo.
ille etiam fulvas avidus numerabit harenas
perfundetque novo stillantia litora ponto

507 carnique
514 : see after 542
515 lues
524 [omnem]

a Elsewhere Manilius employs the conventional ancient spelling of the queen's name: Cassiepia. The variant Cassiope is exclusive to this passage and points to a special source, possibly Ovid, Met. 4. 738.

b Augustus claimed (Res Gestæ 20) to have restored eighty-two temples, and is said (Suetonius, Aug. 30. 2) to have presented to the temple of Capitoline Jupiter in a single donation sixteen thousand pounds of gold and fifty million sestercæ's worth of jewels.

c His third triumph, over Mithridates, whose collection of jewels is mentioned by Pliny, N.H. 37. 11 ff.

d Images of Mithridates are mentioned by Appian, Bell. Mithr. 116 ff.

e In the temple of Capitoline Jupiter.
MANILIUS

parvaque ramentis faciet momenta minutis
Pactolive leget census spumantis in aurum ;
aut coquet argenti glaebas venamque latentem
eruet et silicem rivo saliente liquabit ;
aut facti mercator erit per utrumque metalli,
alterum et alterius semper mutabit ad usus.
talia Cassiope nascentum pectora finget.

Andromedae sequitur sidus, quae Piscibus ortis
bis sex in partes caelo venit aurea dextro.
hanc quondam poenae dirorum culpa parentum
prodidit, infestus totis cum finibus omnis
incubuit pontus, fluitavit naufraga tellus,
et quod erat regnum pelagus fuit. una malorum
proposita est merces, vesano dedere ponto
Andromedan, teneros ut belua manderet artus.
hic hymenaeus erat, solataque publica damna
privatis lacrimans ornatur victima poenae
induitque sinus non haec ad vota paratos,
virginis et vivae rapitur sine funere funus.
at, simul infesti ventum est ad litora ponti,
mollia per duras panduntur bracchia cautes ;
astrixere pedes scopulis, iniectaque vincla,
et cruce virginea moritura puella pependit.
servatur tamen in poena vultusque pudorque ;
supplicia ipsa decent ; nivea cervice reclinis
molliter ipsa suae custos est visa figurae.

530 protulit ut legeret 545 solaque
531 f. : see after 398 546 poena
533 ad M : et GL 555 visa] ipsa
543 timuit naufragia

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flood; he will make small weights to measure the tiny
grains, or else will collect the wealth of gold-foaming
Pactolus; or he will smelt lumps of silver, separating
the hidden metal and causing the mineral to flow
forth in a running stream; otherwise he will become
a trader of the metals produced by these two
craftsmen, ever ready to change coinage of the one
metal into wares of the other. Such are the inclina-
tions which Cassiope will fashion in those born under
her.

538 There follows the constellation of Andromeda,
whose golden light appears in the rightward sky when
the Fishes have risen to twelve degrees. Once on a
time the sin of cruel parents a caused her to be given
up for sacrifice, when a hostile sea in all its strength
burst upon every shore, the land was shipwrecked in
the flood, and what had been a king’s domain was
now an ocean. From those ills but one price of
redemption was proposed, surrender of Andromeda
to the raging main for a monster to devour her
tender limbs. This was her bridal; relieving the
people’s hurt by submitting to her own, she is amid
her tears adorned as victim for the beast and
dons attire prepared for no such troth as this; and
the corpseless funeral of the living maiden is hurried
on its way. Then as soon as the procession reaches
the shore of the tumultuous sea, her soft arms are
stretched out on the hard rocks; they bound her
feet to crags and cast chains upon her; and there to
die on her virgin cross the maiden hung. Even
in the hour of sacrifice she yet preserves a modest
mien: her very sufferings become her, for, gently
inclining her snow-white neck, she seemed in full
possession of her liberty. The folds of her robe

a See Introduction p. xxvii, under 27 CEPHEUS.

344
defluxere sinus umeris fugitque lacertos
vestis et effusi scapulis haesere capilli.
te circum alyones pinnis planxere volantes
fleureuntque tuos miserando carmine casus
et tibi contextas umbram fecere per alas.
ad tua sustinuit fluctus spectacula pontus
assuetasque sibi desit perfundere rupes,
exitulit et liquido Nereis ab aequore vultus
et, casus miserata tuos, roravit et undas.
ipsa levi flatu refovens pendentia membra
aura per extremas resonavit flebile rupes.
tandem Gorgonei victorem Persea monstri
felix illa dies redeuntem ad litora duxit.
isque, ubi pendentem vidit de rupe puellam,
deriguit, facie quem non stupefecerat hostis,
vixque manu spolium tenuit, victorique Medusae
victus in Andromeda est. iam cautibus ipsis
feliscisque vocat, teneant quae membra, catenas;
et, postquam poenae causam cognovit ab ipsa,
destinat in thalamos per helium vadere ponti,
altera si Gorgo veniat, non territus illa.
concitat aerios cursus flentisque parentes
promissu vitae recreat pactusque maritam
ad litus remeat. gravidus iam surgere pontus
copererat ac longo fugiebant agmine fluctus
impellentis onus monstri. caput eminet undas
scindentis pelagusque vomit, circumsonat aequor
dentibus, inque ipso rapidum mare navigat ore;
hine vasti surgunt immensis torquibus orbes
ter quaetum pelagus. sonat undique Phorcys

slipped from her shoulders and fell from her arms,
and her streaming locks covered her body. You,
princess, halcyons in circling flight lamented and
with plaintive song bewailed your fate, shading you
by linking their spans of wing. To look at you the
ocean checked its waves and ceased to break, as was
its wont, upon the cliffs, whilst the Nereids raised
their countenance above the surface of the sea and,
weeping for your plight, moistened the very waves.
Even the breeze, refreshing with gentle breath your
pinioned limbs, resounded tearfully about the cliff-
tops. At length a happy day brought to those shores
Perseus returning from his triumph over the mon-
strous Gorgon. On seeing the girl fastened to the
rock, he, whom his foe had failed to petrify with her
aspect, froze in his tracks and scarcely kept his grasp
of the spoil: the vanquisher of Medusa was van-
quished at the sight of Andromeda. Now he envies
the very rocks and calls the chains happy to clasp
such limbs. On learning from the maiden's lips the
cause of her punishment, he resolves to go through
war against the sea to win her hand, undaunted
though a second Gorgon come against him. He
quickly cuts a path through the air and by his
promise to save their daughter's life awakens hope in
the tearful parents; with the pledge of a bride he
hastens back to the shore. Now had a heavy surge
begun to rise and long lines of breakers were fleeing
before the thrust of the massive monster. As it
cleaves the waves, its head emerges and disgorges
sea, the waters breaking loudly about its teeth and
the swirling sea afloat in its very jaws; behind rise
its huge coils like rings of an enormous neckchain,
and its back covers the whole sea. Ocean clamours
MANILIUS

atque ipsi metuunt montes scopolique ruentem.
infelix virgo, quamvis sub vindice tanto
quae tua tunc fuerat facies ! quam fugit in auras
spiritus ! ut toto caruerunt sanguine membra,
cum tua fata cavis e rupibus ipsa videres
adnantemque tibi poenam pelagusque ferentem
quantula praeda maris ! quassis hic subvolat alis
Perseus et semet caelo iaculatur in hostem
Gorgoneo tinctum defigens sanguine ferrum.
illa subit contra versamque a gurgite frontem
erigit et tortis innitens orbibus alte
emicat ac toto sublimis corpore fertur.

sed, quantum illa subit, semper, iaculata profundo,
in tantum revolat laxumque per aethera ludit
Perseus et ceti subeuntis verberat ora.
nec cedit tamen illa viro, sed saevit in auras
morsibus, et vani crepitant sine vulnere dentes ;
efflat et in caelum pelagus mergitque volantem
sanguineis undis pontumque extillat in astra.
spectabat pugnam pugnandi causa puella,
iamque oblita sui metuit pro vindice tali
suspirans animoque magis quam corpore pendet.
tandem confossis subsedit belua membris
plena maris summasque iterum reneverit ad undas
et magnum vasto context corpore pontum,
tum quoque terribilis nec virginis ore videnda.
perfundit liquido Perseus in marmore corpus,
maior et ex undis ad cautes pervolat altas

in every quarter, and the very mountains and crags
quake at the creature’s onset. What terror then,
unhappy maiden, was expressed on your counten-
ance, defended though you were by such a
champion! How all your breath fled into the air!
How all the blood ebbed from your limbs, when from
the cleft in the rocks you beheld with your own eyes
your fate, the avenging monster swimming towards
you and driving the waves before it, how helpless
you a victim for the sea! Hereupon with a flutter of
winged sandals Perseus flies upwards and from the
skies hurls himself at the foe, driving home the
weapon stained with the Gorgon’s blood. The beast
rises to meet him, rears its head, twisting it out of
the water, leaps aloft upon its support of winding
coils, and towers high in the air with all its bulk.
But as much as it rises hurtling up from the deep,
always so much does Perseus fly higher and mock the
sea-beast through the yielding air, and strike its head
as it attacks. Yet not submitting to the hero the
monster bites furiously at the breezes, though its teeth
snap vainly and inflict no wounds; it spouts forth sea
towards heaven, drenches its winged assailant with
a blood-stained deluge, and sends in spray the ocean
to the stars. The princess watches the duel of which
she is the prize and, no longer mindful of herself,
sighs with fear for her gallant champion: her feelings
more than her body hang in suspense. At last, its
frame riddled with stabs, through which the sea fills
its body, the beast sinks, returns once more to the
surface, and covers the mighty ocean with its massive
corpse, still a fearful sight, and not for a maiden’s
eyes to look on. Having bathed his body in pure
water, Perseus, a greater warrior now, flies from the
MANILIUS

solvitque haerentem vinclis de rupe puellam
desponsam pugna, nuptam dote mariti.

hic dedit Andromedae caelum stellisque sacravit
mercedem tanti belli, quo concidit ipsa
Gorgone non levis monstrum pelagusque levavit.

Quisquis in Andromedae surgentis tempora ponto
nascitur, immittis veniet poenaeque minister
carceris et duri custos, quo stante superbe
prostratae iaceant miserorum in limine matres
pernoctesque patres cupiant extremis humilum
oscula et in proprias animam transfere medullas.
carnificisque venit mortem vendentis imago
accensosque rogos, cui stricta saepe securi
supplicium vectigal erit, qui denique posset
pendentem e scopulis ipsam spectare puellam,
vmctorum dominus sociusque in parte catenae
interdum, poenis ut noxia corpora servet.

Piscibus exortis cum pars vicesima prima
signabit terrae limen, fulgebit et orbi,
aerius nascetur Equus caeloque volabit,
velocisque dabit sub tali tempore partus
omne per officium vigilantia membra ferentis.

hic glomerabit equo gyros dorsoque superbus
ardua bella geret rector cum milite mixtus;

615

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sea to the lofty crags and releases from the chains
which bind her to the rock the girl whose betrothal
was sealed by his readiness to fight and who could
now become a bride thanks to the bridegroom’s
dowry of her life. Thus did Perseus win place in
heaven for Andromeda and hallow in a constellation
the prize of that glorious battle, wherein a monster
no less terrible than the Gorgon herself perished and
in perishing relieved the sea of a curse.

619 The man whose birth coincides with the rising
of Andromeda from the sea will prove merciless, a
dispenser of punishment, a warder of dungeon dire;
he a will stand arrogantly by while the mothers of
wretched prisoners lie prostrate on his threshold, and
the fathers wait all night to catch the last kisses of
their sons and receive into their inmost being the
dying breath. From the same constellation comes
the figure of the executioner, ready to take money
for a speedy death and the rites of a funeral pyre;
for him execution means profit, and oft will he bare
his axe; in short, he is a man who could have looked
unmoved on Andromeda herself fettered to the rock.
Governor of the imprisoned he occasionally becomes
a fellow convict, chained to criminals so as to save
them for execution.

631 When the twenty-first degree of the rising
Fishes illuminates earth’s threshold and shines upon
the world, the winged Horse b will appear and gallop
aloft in the heavens. In that hour it will bring forth
people endowed with swiftness of movement and
limbs alert to perform every task. One man will
cause his horse to wheel round in caracoles, and
proudly mounted on its back he will wage war from
on high, horseman and soldier in one. Another

---

a The following passage is clearly based on Cicero, Fifth
Verrine 118 ff.
b The Horse seems to be here identified as Pegasus, and to
have wings as on the Farnese globe.
MANILIUS

hic stadium fraudare fide poteritque videri
mentitus passus et campum tollere cursu.
nam quis ab extremo citius revolaverit orbe
nuntius extremumve levis penetraverit orbem?
vilibus ille etiam sanabit vulnera sucis
quadrupedum, et medicas herbas in membra ferarum
noverit, humanos et quae nascentur ad usus.

Nixa genu species et Graio nomine dicta
Engonasin, cui nulla fides sub origine constat,
dextra per extremos attollit lumina Pisces.
hinc fuga nascentum, dolus insidiaeque creantur,
grassatorque venit media metuendus in urbe.
et, si forte aliquas animus consurget in arthes,
in praerupta dabit studium, vendetque periculo
ingenium, ac tenuis ausus sine limite gressus
et caeli meditatus iter vestigia perdet
paene sua et pendens populum suspendet ab ipso.

Lacva sub extremis consurgunt sidera Ceti
Piscibus Andromedan ponto caeloque sequentis.
hoc trahit in pelagi caedes et vulnera natos
squamigeri gregis, extentis laqueare profundum
retibus et pontum vincis artarre furentis;

ASTRONOMICA, 5. 638–660

will possess the ability to rob the racecourse of its
true length: such is his speed that he will seem to
dissemble the movement of his feet and make the
ground vanish before him. Who more swiftly could
fly back from the ends of the earth as messenger or
with light foot to the earth’s ends make his way?
He will also heal a horse’s wounds with the sap of
common plants, and will know the herbs which bring
aid to an animal’s limbs and those which grow for the
use of man.

The figure on bended knee and called by
the Greek name of Engonasin, about whose origin no
certainty prevails, brings forth its stars on the right
simultaneously with the last portion of the Fishes.
Of this constellation is begotten the desertion,
craftiness, and deceit characteristic of its
children, and from it comes the thug who terrorizes
the heart of the city. If perchance his mind is
moved to consider a profession, Engonasin will
inspire him with enthusiasm for risky callings, with
danger the price for which he will sell his talents:
daring narrow steps on a path without thickness he
will plant firm feet on a horizontal tightrope;
then, as he attempts an upward route to heaven,a
he will all but lose his footing and, suspended in
mid-air, he will keep a multitude in suspense upon
himself.

On the left, as the last portion of the Fishes
rises, appears the constellation of the Whale, pur­suing
Andromeda in heaven as on the sea. This
monster enlists its sons in an onslaught on the deep
and a butchery of scaly creatures; theirs will be a
passion for ensnaring the deep with nets spread wide
and for straitening the sea with bonds; they will
et velut in laxo securas aequore phocas
carceribus claudit raris et compede nectent
inautosque trahent macularum nemine thynnos.
nec cepisse sat est : luctantur corpora nodis
exceptantque novas acies ferroque necantur,
infecturque suo permixtus sanguine pontus.
tum quoque, cum toto iacuerunt litore praedae,
altera fit caedis caedes : scinduntur in artus,
corpore et ex uno varius discrribitur usus.
illa datis melior, sucis pars illa retentis.
hinc sanies pretiosa fluit floremque cruoris
evomit et mixto gustum sale temperat oris ;
illa putris turbae strages confunditur omnis
permiscetque suas alterna in damna figuras
communemque cibis usum sucumque ministrat.
aut, cum caeruleo stetit ipsa simillima ponto
squamigerum nubes turbaque immobilis haeret,
excipitur vasta circum vallata sagena
ingentisque lacus et Bacchi dolia complet
umorisque vomit socias per mutua dotes
et fluit in liquidam tabem resoluta medullas.
quin etiam magnas poterunt celebrire salinas
et pontum coquare et ponti secernere virus,
cum solidum certo distendunt margine campum
appelluntque suo deductum ex aequore fluctum
claudendoque negant abitum : sic suscipit undas
area et epoto per solem umore nitescit.

a The best garum, called haemation (Geoponica 20. 46. 6).
b Hallec.  c The common garum, also called liquamen.
congeritur siccum pelagus mensisque profundi
canities detonsa maris, spumaeque rigentis
ingentis faciunt tumulos, pelagique venenum,
quo perit usus aquae suco corruptus amaro,
vitali sale permutant redduntque salubre.

At, revoluta polo cum primis vultibus Arctos
ad sua perpetuos revocat vestigia passus
[aut Cynosura minor cum prima luce resurgit
et pariter vastus Leo vel Scorpius acer
nocte sub extrema promittunt iura diei]
umquam tincta vadis sed semper flexilis orbe,
on inimica ferae tali sub tempore natis
ora ferent, placidasque regent commercia gentes.

ille manu vastos poterit frenare leones
et palpare lupos, pantheris ludere captis,
nec fugiet validas cognati sideris ursas
inque artes hominum perversaque munera ducet;
ille elephanta premet dorso stimulisque movebit
turpiter in tanto cedentem pondere punctis;
ille tigrim rabie solvet pacique domabit,
quaeque alia infestant furiis animalia terras

sed nota 705 cunctis
quod erit 709 silvis
salubrem 690

the sun. When the sea’s dry element has collected,
Ocean’s white locks are shorn for use at table, and
huge mounds are made of the solid foam; and the
poison of the deep, which prevents the use of sea-
water, vitiating it with a bitter taste, they commute
to life-giving salt and render a source of health.

Now when, after completing a revolution round
the pole, the Bear a with muzzle foremost replaces
her unceasing steps in her former tracks, never
immersed in Ocean but ever turning in a circle,b
to those born at such a time wild creatures will show no
hostile face, and in their dealings with animals these
men will find them submissive to their rule. Such a
one will be able to control huge lions with a gesture,
to fondle wolves, and to play with captive panthers;
so far from shunning the powerful bears that are the
kin of the constellation, he will train them to human
accomplishments and feats foreign to their nature;
he will seat himself on the elephant’s back and with
a goad will direct the movements of a beast which
disgraces its massive weight by yielding to tiny
jabs; he will dispel the fury of the tiger, training it
to become a peaceful animal, whilst all the other
beasts which molest the earth with their savageness

a I.e. the Great Bear. Since the circumpolar constellations
never disappear below the horizon, they cannot properly be
said to rise above it simultaneously with the horoscopying
degree; however, as the poet implies in the text, they are
held to be paranatellonta when at the bottom of their orbit
(i.e. nearest the horizon) and on the point of ascending.

b [696-698], interpolated (perhaps under the influence of
Aratus, Phaen. 303 ff.) to bring in mention of other animal
constellations: “... or when the Cynosure, the Lesser Bear,
restarts her climb at the break of day and when likewise the
monstrous Lion or fierce Scorpion towards night’s close gives
the day promise of her rights...”
he will join in friendship to himself; keen-scented whelps he will train...

Such are the special powers and times of influence which in ages past the creator of the mighty firmament appointed for the planets.

Finally, that I may bring my account of heaven to a close, let me tell you of the different degrees of luminosity with which the stars shine. Brilliant stars of the first order enable you to identify easily the constellations of the Bull, the Lion, and the Virgin; Bootes, the Lyre, and the Charioteer; Orion, the Dogs, the Ship, and the Southern Fish. Twinkling with a lesser radiance, although still passing bright, are stars which mark the Twins, the Balance, the Scorpion, and the Archer; Helice, the Crown, the Swan, the Horse, and Perseus and Andromeda. The third magnitude has provided the dowry of the Pleiad sisters, spreading over their maiden faces a blush of bronze. It includes as of like degree your brightness, Lesser Bear, and the fires which the Dolphin emits from its four torches and the Triangle from its three; and, as shining with similar brightness, the Eagle and the snakes with their slippery coils. Then out of all the

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\( a \) Here, if the editor's conjecture is correct (cf. Introduction p. cvii), eight pages of A, i.e. 176 lines including chapter-headings, have been lost. The end of the chapter on paranatellonta may be fairly surmised from Firmicus, *Math.* 8. 17. 6 ff. (cf. Introduction p. xcvi). That the missing passage chiefly dealt with planetary influences seems probable in view of the misplaced verses 5. 30 f., which, clearly in Manilius's style (cf. 4. 292, 498, 696, etc.) and yet belonging nowhere else, purport to conclude the poet's treatment of the subject promised at 2. 965 and 3. 156 ff.

\( b \) For this restoration of the poet's treatment of stellar magnitudes see Introduction pp. c ff.

\( c \) Actually none of the Pleiades is of the third magnitude (cf. Introduction p. ciii and figure 24).

\( d \) Cf. Aratus, *Phaen.* 317 ff., who like Manilius omits \( e \).

\( e \) It would seem that Manilius forgot to take account of Altair (\( a \) Aql), a star of more than second magnitude according to Ptolemy, *Synt.* 7. 5, vol. 2, pp. 72 ff.

\( f \) Draco and the snake of Ophiuchus, and perhaps Hydra too, though its brightest star, Alphard, is of the second magnitude.
tum quartum sextumque genus discernitur omnino numero, summanque gradus qui iungit utramque maximae pars numero censu concluditur imo, quae neque per eunctas noctes neque tempore in omni resplendet vasto caeli summota profundo, sed, cum clara suos avertit Delia cursus cumque vagae stellae terris sua lumina condunt, mersit et ardentis Orion aureus ignes signaque transgressus permutat tempora Phoebus, effulget tenebris et nocte acceditur atra. tum conferta licet caeli fulgentia templaque seminibus minimis totumque micare stipatum stellis mundum nec cedere summa floribus aut siccae curvum per litus harenac, sed, quot eant semper nascentes aequore fluctus, quot delapsa cadant foliorum milia silvis, amplius hoc ignes numero volitare per orbem. utque per ingentis populus discritur urbes, principiumque patres retinent et proximum equester ordo locum, populumque equiti populoque subire vulgus iners videas et iam sine nomine turbam, sic etiam magno quaedam res publica mundo est quam natura facit, quae caelo condidit urbem. sunt stellae procerum similis, sunt proxima primis sidera, suntque gradus atque omnia iusta priorum : maximus est populus summo qui culmine fertur ;
MANILIUS

cui si pro numero vires natura dedisset,
ipse suas aether flammas sufferre nequiret,
totus et accenso mundus flagraret Olympo.

ASTRONOMICA, 5. 743–745

heaven’s dome a: had nature given it powers consonant with its legions, the very empyrean would be helpless before its fires, and the whole universe would become embroiled in the flames of a blazing sky.

a Referring to the Milky Way.
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[Index vocabulorum omnium: Fayus; Index nominum et artis vocabulorum: Housman, ed.min.]

Entries are as far as possible clued to book and line number of the Latin text. References followed by the letter n direct the reader also to an appended footnote, those followed by another letter (but not f. = "and following") solely to the footnote thus indicated. Asterisks invite the reader to consult, besides the text, the appropriate section of the Guide to the Poem given in the Introduction.

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These star-charts are designed to illustrate Manilius's conception of the skies as expressed in his poem, whether or no he derived it from a celestial globe so marked. The frame adopted is that of the star-charts in the Loeb Aratus, centred on the north and south poles respectively, i.e. northern and southern hemispheres are projected on to the plane of the celestial equator as located in the time of Hipparchus, with the equinoxes at 0°E and 0°W (projection on to the plane of the ecliptic, though convenient for the plotting of Ptolemaic coordinates, carries unfortunately with it the disadvantage of bisecting every sign of the zodiac).

Manilius's Constellations, detailed in his poem at 1.256-455 (a list of which is given on pages xxiv-xxxxi), are figured as closely to his descriptions as is consistent with astronomical accuracy; all Stars of the first three magnitudes visible from Rome (as registered in the catalogue on pages ci-cv) are plotted together with Bayer's identification letters.

The parallel circles are described at 1.589-602. The Arctic circle is located 54° north of the celestial equator (see page xxxii). The Summer tropic is a parallel circle drawn through the summer solstitial point, located according to the poet's rough reckoning at latitude 24°N. Next comes the Equator (represented by the outer circle of
each star-chart), a parallel circle midway between the two poles and at right-angles to the polar axis. The Winter tropic and the Antarctic circle are symmetrically located at 24° S and 54°S respectively.

The Equinoctial colure is the great circle connecting the equinoxes and the poles; the Solstitial colure, that connecting the solstices and the poles; on the star-charts these are represented by horizontal and vertical straight lines respectively. The poet describes their paths in detail at 1.608-630.

The Ecliptic is the path of the Sun's apparent annual circuit through the skies: at 1.666-680 the zodiac is represented as a zone, and it is possible that Manilius's globe, like the Farnese, was marked with parallel circles at a distance of 6° on either side of the ecliptic.

A three-dimensional representation of all these circles is given in figure 2, page xxxiii.

The poet's mapping of the Milky Way at 1.684-698 is clearly a versified form of something much more detailed. Ptolemy goes to great lengths to give a precise account (Syntaxis 8.2, volume 2, pages 170-179 Heiberg), and the boundaries of the Milky Way here given are based on his.