M. TULLII CICERONIS
DE NATURA DEORUM
LIBRI TRES
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WITH INTRODUCTION AND COMMENTARY

BY

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TOGETHER WITH
A NEW COLLATION OF SEVERAL OF THE ENGLISH MSS.

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PREFATORY NOTE.

In the Preface to my former volume I expressed a hope that the remaining volume might be completed for publication before the end of the year 1881. This hope has been disappointed partly owing to the labour of expanding into a separate work the Sketch of Ancient Philosophy, which formed part of the Introduction to the First Book, and partly from the unforeseen difficulties which I have encountered in the endeavour to explain fully the scientific views of the Ancients, as they are reported by Cicero in his Second Book. The consequent increase in the size of the Commentary has made it necessary to devote a whole volume to this Book, and the publication of the third and last Book must still be deferred to another year.

In the present volume I have been enabled to improve on the Apparatus Criticus of my former volume, owing to the kindness of the authorities of Merton College, Oxford, in lending me their valuable Codex (Oxf. o; here denoted simply as Oxf.) written in the 12th century. It is older than any other English ms
of the *De Natura Deorum* with the exception of the fragmentary Harleian no. 2622 (k), and is closely allied with the oldest of all the mss, the Vienna Codex of the 10th century (v). I have inserted a full collation of the Merton Codex amongst Mr Swainson's Collations of English mss, showing such a remarkable resemblance between it and v, that the one might easily be supposed to have been copied from the other.

As regards the Commentary I have again to thank Mr H. J. Roby and my brother, the Cambridge Professor of Latin, both for their careful criticisms of my own work and for the notes to which their initials are attached. I have also to thank Prof. W. G. Adams of King's College, and my kind neighbours Dr Woolley and Dr Henry Kane, for allowing me to consult them in regard to physical, astronomical or physiological difficulties. We are greatly in want of good books in English on the history of Ancient Science, especially of Astronomy, which occupies so large a space in this portion of Cicero's treatise. The best known English work on the subject, that by Sir G. C. Lewis, is utterly unmethodical, a mere collection of unconnected essays; while the famous French history of Delambre consists mainly of analyses of particular treatises, and is too technical for ordinary readers, not to mention its occasional carelessness in points of detail, of which an example may be seen in the account of Posidonius cited in my note on § 92 *multis partibus*. Schaubach's *Geschichte der griechischen Astronomie* is more
helpful to a scholar, but unfortunately it only comes down to Eratosthenes; and Rudolf Wolf in his excellent GeschichtederAstronomie is only able to allow a limited space to the Astronomy of the Ancients.

While I have been engaged in the study of the scientific writings of the Old World, it has often occurred to me to deplore the neglect into which they have fallen amongst ourselves. The early guesses of Greek science exhibit in a most interesting way the development of the human mind, and they are so closely connected with the philosophy of their time, that it is scarcely possible to form a right estimate of the one without knowing something of the other. Why might not Cambridge, which has now admitted into her final classical school the Art, Philosophy, History and Law of the Ancients, add to these also the Science of the Ancients as a new alternative subject? It would be easy to have examinations in Mathematical and Biological Science in alternate years; and, if in one year students were asked to bring up for examination specified treatises of such authors as Euclid, Archimedes, Geminus and Ptolemy, and in another year portions of Aristotle, Theophrastus, Pliny and Galen, particularly the DeUsuPartium of the last, I think it would not only call attention to some very excellent and much neglected writings, but also provide a useful link between our literary and our scientific education.
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A. The Divine Existence proved (a) from the observation of the

heavens, (b) from general consent, (c) from various recorded epipha-

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Ab. Further explained. Cleanthes derives the consensus of

belief from four causes, (1) presentiments of the future (i.e. divina-
tion just treated of), (2) the blessings of life, (3) terrible and unusual

phenomena of nature, (4) the order of the heavenly bodies (treated


Ae. Argument of Chrysippus: (1) the universe shows the opera-
tion of superhuman, i.e. of divine power; (2) the universe is too

beautiful to be the habitation of man alone, it implies a superhuman

inhabitant. §§ 16, 17.

Af. Man inhabits the lowest region of the universe; the pure

ether of the higher regions is fitted for nobler inhabitants. § 17.

Ag. Still even man is gifted with reason, and this, like the

grosser elements of which his body is composed, must be derived

from the universe, as its source. § 18.

Ah. The universe being perfect must contain that which is

essential to perfection, viz. mind. § 18.

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A1. The sympathy which unites all the parts of the universe shows that they are pervaded by one Divine Spirit. §§ 19, 20.

A2. Zeno's argument for the divinity of the universe (and therefore indirectly for the Divine Existence, since the universe exists). (1) What has reason is better than what has no reason, therefore the universe, as the best of things, must possess reason: similarly it may be proved to be wise, blessed, eternal, and therefore God. (2) The universe must be sentient because it has sentient parts. (3) It must be rational because it gives birth to what is rational. §§ 20—22.

A3. Physical argument for divine existence: (1) heat is the cause of motion and of life; the whole universe is pervaded by heat; in heat we find the governing principle (γεμισμένον) of the universe: therefore it must have in the highest degree that reason which is found even in the inferior parts of the universe. §§ 23—30. (2) The mundane heat is far purer than our earthly heat, therefore it must possess the properties of heat in a far higher degree; and it acts freely without any coercion from without. §§ 30, 31. (3) What is self-moved is soul: the mundane heat is self-moved, and therefore of the nature of soul. (4) If the universe were not possessed of reason, the whole would be inferior to the part which is possessed of reason, which is absurd. § 32.

Azm. Argument from the Scale of Existence. (1) We observe the gradual ascent from vegetable to animal life, from animal to human, the last showing the potentiality of virtue and wisdom: hence we infer a yet higher stage, the divine, which is essentially and always virtuous and wise. §§ 33, 34. (2) All things are striving after perfection, but in the case of the lower limited natures, this tendency cannot fulfil itself: in universal nature it can. § 35. (3) Since it is confessed that the universe is the best of all things, it cannot be limited to vegetable or animal or merely human existence. It must be actually and essentially wise and good (and therefore divine): for a potentiality which has never risen into actuality throughout eternity would be inferior to that of man. § 36. (4) Man is born to contemplate and imitate the universe to which he belongs. The universe alone is perfect and its own end. It must therefore be possessed of what is best, viz. reason. § 37. (5) Ideal excellence can only be found in that which is complete in all its
parts; the universe alone is absolutely complete; therefore the absolute Ideal can only be found in the universe. § 38.

An. The heavenly bodies also are divine: (1) because they are composed of the purest ether corresponding to our vital heat. §§ 39—41. (2) Since each of the lower elements, earth, water, air, has its living occupant, it is probable that it is so too with the highest element, ether: and since the nature of the animal depends upon the element in which it lives, it is probable that those which live in the purest and most active element will possess the keenest and purest intelligence. §§ 42, 43. (3) The intelligence of the stars is shown by their orderly movements, which proceed not from nature or chance, but from their own free-will. §§ 43, 44.


Ba. The divine form, as it is seen in the beings already recognised as divine, viz. the universe and the heavenly bodies. §§ 45—49.

(1) The populace and the Epicureans wrongly hold that God is in the form of man. §§ 45, 46. (2) The sphere is the most perfect of solids, and circular revolution is the most perfect of movements, and this is the form and this the movement of the universe and the stars. §§ 47—49.

Bb. The divine activity, as shown in the movements and the operations of the heavenly bodies, of the sun (1), of the moon (2), of the planets (3), of the fixed stars and the heaven itself (4). §§ 49—57.

Bc. The divinity of nature shown in its creative and artistic, as well as in its providential activity. §§ 57, 58.

Bd. The Gods of the popular religion are either names for benefits received from the Gods (1), or personified virtues and passions (2), or the spirits of departed benefactors (3), or personified forces of nature (4). §§ 60—70.

Be. One divine Being is to be worshipped under these various forms in holiness and purity, avoiding all superstition. §§ 71, 72.

C. Providential government of the universe. §§ 73—153.

Ca. Introductory. The sneers of Epicurus are grounded in ignorance (1). Division of subject (2). §§ 73—75.
Cb. Providential government inferred from a consideration of
the Divine nature: (1) It is a part of our idea of God that he should
be active, and active in the noblest way, and consequently in regard
to the noblest object, i.e. the universe: (2) if he is not so, then he
must be inferior to some other power which rules the universe; but
such inferiority contradicts the very definition of Deity; therefore
he cannot be subject to any other power; therefore he must rule the
universe himself: (3) the Gods form a community, and it is natural
to suppose that they possess those same social virtues, which we
believe that we have derived from them; but that they possess them
in higher perfection and manifest them on a vaster scale in the great
city of the universe: (4) when we confess the benevolent wisdom
displayed in the universe and the heavenly bodies and agree that
these are divine, we confess that all things are ordered by divine
Providence. §§ 76—80.

Cc. Providential government inferred from the consideration
of the universe itself as embodying an intelligent principle first im-
parted to it by a creative energy. (1) Meaning of the term 'nature.'
(2) The universe is a vast organism permeated and controlled by an
intelligent nature, all the parts of which co-operate for the good of
the whole. (3) The fact that all the parts, of which the universe is
composed, are combined as is best for beauty and utility, can only be
explained as the result of intelligence. Nature exhibits a skill
ininitely beyond the reach of art, but even art testifies to the exist-
ence and intelligence of the artist. If the Orrery attests the wisdom
of Archimedes, much more must the movements of the heavenly
bodies attest the wisdom of the Creator. (4) The absurdity of
attempting to explain the universe as the result of the fortuitous
concourse of atoms. (5) Custom blinds men, or they could not fail
to acknowledge that the wonders of nature are the works of God.
§§ 81—98.

Cd. A detailed review of the wonders of nature. (1) The earth
and other elements. §§ 98—101. (2) The sun, moon, and planets.
§§ 102, 103. (3) The constellations. §§ 104—115. (4) The several
parts of the universe are held together by a strong centripetal force,
which is the cause of warmth and light to all things, and out of
which all are developed anew in the cyclical regeneration. §§ 115—
118. (5) Thus there is a harmony and sympathy between the re-
motest parts of the universe, and our earth is benefited by a stellar

α. General adaptation of animal nature for the preservation of the individual. §§ 121—123.

β. Special adaptations in particular cases for the same purpose. §§ 123—127.

γ. Adaptations of animal nature to ensure the preservation of the species. §§ 128, 129.

δ. Adaptations of external nature to meet the wants of plants and animals. §§ 130—132.

(8) The hand of Providence is most plainly visible in man. §§ 133—153.

α. In the provision made for supporting his life by food and air. §§ 134—138.

β. In the framework of his body and his erect position. §§ 139, 140.

γ. In the organs of sense. §§ 140—146.

δ. In the gift of reason. §§ 147, 148.

ε. In the gift of speech through the wondrous mechanism of the vocal organs. §§ 148, 149.

ζ. In the capacity for action through the mechanism of the hand. §§ 150—152.

η. In the capacity for meditation and worship. § 153.


Da. Whatever tends to man’s good was designed for him. § 154.


Dc. We may see this in the heavenly bodies, which, besides their general use for the preservation of the universe, afford also a beautiful and instructive spectacle to man, and man alone of animals. § 155.

Dd. The vegetable kingdom exists for his sake, as plainly as the harp for the sake of the harpist; many of its products can only be utilized by his labour and skill, and only appreciated by his finer sense. §§ 156—158.

De. Even the animals are created for him, to clothe him, guard
him, feed him, carry him, draw for him, exercise his strength and
courage. §§ 158—161.

Df. So the inorganic world needs the labour of man to provide
what is useful to him and him alone. §§ 161, 162.

Dg. Divination is the exclusive possession of man. §§ 162, 163.

Dh. Cumulative force of these proofs. § 163.

Di. The care of the Gods extends to individual men. From
them each man receives wisdom and virtue. §§ 164—167.

Dk. External misfortune is no sign of the Divine wrath or
neglect: to the philosopher all things turn out for good. § 167.

Conclusion. § 168.

ON THE SOURCES OF THE SECOND BOOK OF THE
DE NATURA DEORUM.

In discussing the sources of the First Book we have seen what
was Cicero's method in the composition of his philosophical treatises.
They are adaptations from Greek originals; and, as the comparison of
the περὶ ἰουσίδεας of Philodemus has shown us, Cicero borrows not
only the topics and arguments, but even the quotations of the author
whom he follows. We need not therefore suppose with Teuffel
(Hist. of Rom. Lit. § 173. 10, ed. 1) that, because Cicero quotes from
Aristotle, Zeno, Cleanthes, and Chrysippus, in the course of his
Second Book, he had himself studied the writings of these philo-
sophers with a view to its composition. It is much more probable
that he is following in the steps of some later writer or writers,
and using the quotations which he found there ready to hand. If
we ask who is the writer whom Cicero is most likely to have fol-
lowed, the answer is undoubtedly—Posidonius, who is referred to
in i 123 as familiaris omnium nostrum, and whose treatise 'on the
Nature of the Gods,' there cited, has been shown to be the probable
authority for the criticism of the Epicurean system, contained in the
latter half of Bk. i (cf. Introduction, vol. i, p. lli foll.). This sup-
position is confirmed by the fact that the treatises which immediately
preceded and followed the present, viz. the Tusculan Disputations
and the De Divinatione (not to mention other writings of Cicero) are
in great part taken from Posidonius; see, for the former, Heine De
font. Tusc. Disp. Weimar 1863, P. Corssen De Posidonio Rhodic,
Bonn 1878, and, for the latter, Schiche De font. lib. de Divinatione, Jena 1875, Hartfelder Die Quellen v. Ciceros 'de Divinatione,' Freiburg 1878. But the strongest argument for the Posidonian authorship of the original which Cicero here follows, is to be found in an examination of the book itself, in the agreement between the opinions there expressed, and opinions elsewhere attributed to Posidonius, sometimes in opposition to, or in contra-distinction from, other writers of his school.

The main points of distinction between Posidonius and the Stoics in general appear to have been (1) his easy and flowing style and general literary tastes, (2) his wide scientific interest, (3) his admiration for Plato and Aristotle, and his modification of the older Stoic doctrines so as to bring them more into accordance with the Academic and Peripatetic doctrines. As to (1) we are told by Strabo iii 2, § 9 Ποσειδώνος οὐκ ἀπέχεται τῆς συνθήκους βηροἱσι, ἀλλὰ συνενθοσκὰ ταῖς ὑπερβολαῖς, which agrees with what we read in § 20 of our book, haec cum uberius disputantur et fusiis, ut mihi est in animo facere, facilius efugiant Academicorum calumniam; so Galen tells us (Hipp. et Plat. p. 399 K.) that Posidonius was in the habit of relieving his philosophical discussions with illustrations from the poets and historians, which again is quite in accordance with the speech of Balbus; compare, for historical illustration, §§ 6—11 on divination, § 61 on apotheosis, § 69 on the office of Lucina, § 165 on particular providences; for poetical quotations compare § 4 and § 65 from Ennius on the divinity of the heavens; from Euripides on the same subject § 65; from Attius, illustrating the theistic argument from the impression produced by the sight of the first ship § 89; from Aratus describing the constellations §§ 104—114; from Aratus again on the Golden Age § 159. We need not suppose that all these exactly correspond to quotations in the original. Cicero has no doubt given at times examples from Roman history instead of Greek history; and Posidonius had not Cicero's temptation to tax the attention of his readers with long quotations from Aratus. It may be said however that, whatever his authority, Cicero's natural taste would have led him to rhetorical treatment of his subject: and this is certainly true. On the other hand, it must be remembered that community of taste would naturally lead him to select Posidonius in preference to other Stoics. I do not however lay so much stress on this point as on those which I have next to deal with.
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It is evident that the subject of Natural Theology is one which requires for its treatment a wide acquaintance with science; and in point of fact we find this book of Cicero's dealing more or less with almost all the sciences known to the ancients, from the most general physical speculations down to particular theories of geometry and astronomy and the various sciences of observation, such as geography, botany, zoology, anatomy, anthropology, and sociology. Now we know that Posidonius was generally regarded as the most learned and most scientific of all the Stoic philosophers; thus Galen, who quotes him largely on questions relating to human physiology and psychology, calls him 'ἐπιστημονικῶτατος τῶν Στοικῶν διὰ τὸ γεγυμνάσθαι κατὰ γεωμετρίαν (Hipp. et Plut. p. 652 Κ.); Cleomedes confesses that he compiled his treatise on Astronomy principally from his writings (Cleom. Πανταλά τῶν εἰρημένων ἐκ τῶν τοῦ Ποσειδωνίων εἰλήφθαι), and Strabo, who often cites him in his Geography, speaks of him as ἄνηρ τῶν καθ' ἡμῶς φιλοσοφῶν πολυμαθέστατος (Str. xvi 2 § 10). I shall proceed to show in detail that, as far as we are able to test the matter, there is a remarkable agreement between the scientific views of Posidonius and those put forward in this book. First as to Astronomy, which occupies the most prominent place in the argument, Cicero refers expressly to the orrery of Posidonius (§ 88), as illustrating and justifying the process by which we infer the existence of a superintending mind from the observation of the movements of the heavenly bodies. What Cicero says of the constitution of the sun and planets, and of their being nourished by terrestrial vapours, is in accordance with what we are told of the views of Posidonius (see §§ 39, 40, 118 with the notes). When Cicero tells us that the sun is many times larger than the earth (§ 92), that the moon is rather more than half the size of the earth (§ 103), that Venus and Mercury are between the earth and the sun (§ 52), all this agrees with what we read in Cleomedes, sometimes with the express addition that he is quoting from Posidonius, while it is inconsistent with the views of the older Stoics. The same agreement is to be found in regard to the properties of the sphere and its peculiar mobility (§ 48), the stability of the universe and the question as to the Cyclic Conflagration, on which Posidonius appears to have expressed himself as doubtfully as Cicero (§§ 85, 115, 118). Lunar influence again (§§ 19, 50, 119) was a favourite study of Posidonius. He was the first to establish the true theory of the tides (see nn. on §§ 19, 132), the inquiry into which was stigmatized
by the elder Stoics as frivolous and unworthy the attention of a philosopher. Like Cicero, he contrasted the denser atmosphere immediately surrounding the earth with the fine ether, which filled the upper regions of the universe (§ 17), he described the inhabited world as an island surrounded by the ocean (§ 165), and, as we learn from Seneca, he paid particular attention to the phenomena of volcanos (§ 96). Both Strabo and Galen refer to him as the chief writer on the influence of the climate of a country upon the mental and moral constitution of its inhabitants (§§ 17, 42); and Galen tells us he laid great stress on the use of diet for controlling the irrational elements of the mind (§ 42). For here too Posidonius differed from the older Stoics; he recognized an irrational element in man's nature, softening down the broad demarcation drawn by Chrysippus between the different kingdoms of nature, and adopted Aristotle's view, that each higher function of the soul involves the lower, so that all the functions are found combined with rationality in man (§§ 33, 34, 85); while certain plants make an approach towards animal life (§ 120), and animals towards human life (§ 29). The rational soul is not only an emanation from Deity (§ 17), but it is itself eternal, not, as the older Stoics believed, doomed to perish in the Cyclical Confagration (§ 62). On the origin of civilization Cicero's view (§§ 148, 150) is in complete accordance with what Seneca tells us of Posidonius (Ep. 92). Both rationalize the old belief in a Golden Age (§ 159), and attribute the early inventions of mankind to philosophic lawgivers and kings. Even Cicero's patriotic eulogy of Roman piety is not without a parallel in Posidonius (§ 8).

I go on now to the 3rd point mentioned above, the admiration shown for the writings of Plato and Aristotle. In my note on § 32 I have pointed out that Cicero's deus philosophorum, applied to the former, may be matched from the fragments of Posidonius, while it is quite opposed to the language of the older Stoics. So Aristotle is praised in § 95 and § 125; and the notes on §§ 13, 17, 26 (spontaneous generation), 33 (scale of existence), 34 (union of higher and lower functions in man), 36 (movement of all things towards perfection), 42 (each element has inhabitants corresponding to it), 43 (nature, chance and freewill), 44 (voluntary movement of stars), 51 (the Great Year), 56 (opposition of sublunary and superlunary regions), the fine passage about the cave-dwellers quoted from Aristotle's de philosophia § 95, the whole section on zoology §§ 121—
129, much of the section on anatomy §§ 134—146, show how largely the author whom Cicero follows was influenced by Aristotle. No doubt this is true generally of the Stoic school, but the views put forward in some of the above-cited passages are opposed to those of the older Stoics, and may with much probability be attributed to Posidonius, of whom Strabo says (π Σ 8) πολὺ γὰρ ἐστὶ τῷ αἰτιολογικῷ παρ’ αὑτῷ καὶ τῷ ἀριστοτελείου.

The next point for consideration is whether we have any grounds for supposing that the treatise of Posidonius, quoted in r 123, would deal with the same topics as Cicero's similarly named work. Schwencke (Jahrb. f. class. Philol. 1877 pp. 129—140) points out that in general the Stoics treated the question of the Existence and Nature of the Gods separately from that of the Providential Government of the World. Thus the περὶ προνοίας of Chrysippus is a distinct work from his περὶ θεῶν, and Diogenes Laertius mentions them in different parts of his 7th book, the former in c. 138, the latter in c. 148. But of Posidonius, and of him alone, we are told that he treated of both subjects under the title of περὶ θεῶν (Diog. Lc.). His treatise consisted of five books, in the 1st of which he maintained the divinity of the heaven and the universe, in the 3rd (so Cobet, not 13th as in Hübner’s ed.) argued in favour of the providential government of the world, while in the 5th he confuted the Epicurean doctrine (N. D. i 123). It seems not improbable therefore that, as Schwencke suggests, the first four books of Posidonius may have corresponded with the quadruple division with which Cicero commences his second book.

One other slight indication of the author may be found in § 165, where Rhodes is put on a level with Rome, Athens and Sparta, see Mr Roby's note on the passage. As Panaceius was born at Rhodes, while Posidonius resided there for the greater part of his life, this might at first sight appear to be equally in favour of either authorship, but there can be little doubt that such an allusion is more natural in the mouth of one who, like Posidonius, presided over the University of Rhodes and took a leading part in its politics, than of one who spent the active years of his life in Athens and in Rome and never returned to his native land after he had once left it (Cic. Tusc. v 107).

I think that the various considerations adduced above leave little doubt as to the Posidonian authorship of Cicero's treatise, but there are some facts which appear to militate against this and which have
induced Hirzel (*Untersuchungen zu Cicero's philosophischen Schriften* i 191—244) to assign a number of different authorities for the different parts of Cicero's book. In the first place Cicero writes to Atticus (*Att. xiii* 8) in June 45 B.C., the year before the *N. D.* appeared, asking for an epitome of the writings of Caelius by Brutus, and for Panaetius περὶ προνόιας. Must we not suppose that he asked for them with the intention of using them for the book which he was then preparing, especially as we find that he quotes from Caelius in § 8, and as he chose Panaetius as his authority in the first two books of the *De Officiis*? Much that has been said in favour of the claims of Posidonius is also applicable to Panaetius. He wrote a good style, was an admirer of Plato and Aristotle, and departed on many points from the rigid dogmatism of the older Stoics. We are not told however that he paid much attention to science, and there are certainly parts of this second book which could not possibly have been derived from him. For instance Divination is defended in §§ 7—12 and again in 162, 163, but we know from Cicero himself *Div. i* 12, ii 88, 97, as well as from other writers (see Zeller iv p. 567), that Panaetius was a disbeliever in divination; Schicke and Hartfelder even suppose his treatise περὶ προνόιας to have been the authority used by Cicero for the second book of his *de divinatione*, in which the negative side is supported. Again the immortality, or rather the eternity of the soul is maintained in § 62, but, as we see from the *Tusculans* (i 42, 78), this was entirely rejected by Panaetius. Also the manner in which his opinion in regard to the Cyclic Conflagration is referred to is inconsistent with the idea that Cicero could have been there copying from him. Still there is the fact that Cicero was studying his περὶ προνόιας at the time when he was engaged on his own book on the subject. But so also he was studying Phaedrus περὶ θεῶν, when writing about the Epicurean theology, and yet we have seen reason to believe that his authority for that portion of his treatise was not Phaedrus, but Zeno, see vol. i p. xliiv foll. If Cicero used Panaetius for his treatise on Divination, which is merely a sequel to the *N. D.*, this would be quite sufficient explanation for his request to Atticus, but he may also have thought of getting further material either for his exposition or for his criticism of the Stoic doctrine on Providence. Hirzel however is of opinion that the second book shows signs of having been compiled from different sources, and that while one part is taken from Posidonius, another part is from Apollo-
dorus and a 3rd from Panætius. In order to see what grounds there are for this opinion we must examine more minutely the structure of the book. It is divided, as shown in the analysis, into four parts (1) the proof of the Divine Existence, (2) the nature of the Gods, (3) Providential government of the world, (4) Providential care for man. But the slightest examination is sufficient to show that these divisions overlap, that much for instance of the 1st section, e.g. Zeno's argument for the divinity of the universe (§§ 20—22) and the argument for the divinity of the stars (§§ 39—44), would more naturally come under the 2nd, and much of the 3rd, e.g. §§ 133—153 might just as well come under the 4th. Moreover there are actual repetitions, as on the divinity of the stars (§§ 54, 55 compared with §§ 39—44); and we seem to have a double beginning for the 4th section (in § 133 facilius intellegetur a dis immortalibus esse provisum &c. and 153 restat ut doceam omnia hominum causa facta esse), which has misled, as I think, both Hirzel and Schwencke to commence the 4th section at § 133. It appears to me however that these difficulties arise mainly from want of care, on the part of Cicero, in marking the transitions from one part of his argument to another, and particularly, as Schwencke remarks, where he has to supply short connecting links in place of omissions. It is possible also that Posidonius may have given short summaries of the preceding argument at the commencement of each book, which Cicero may have mixed up with the substance of the book itself. The general framework, as seen in the analysis, seems to me to hold well together, if (1) we allow the use of the indirect argument for the Divine Existence in the latter half of the 1st section, (we have many instances of this indirect argument in the 9th book of Sextus Empiricus, which is evidently closely related to our own, cf. n. on A k § 20); (2) if we remember that the question proposed for examination in the 2nd section is not 'who are Gods', but 'of what nature the Gods are', (quales sint corpore animo vita, as we read 1 65); and (3) if we admit that in the nature and constitution of man we may see a proof of a creative intelligence (which would naturally fall under the 3rd section) apart from the question whether the welfare of man is the chief end designed in the creation and government of the world (which is the subject of the 4th section). The particular points in which Hirzel endeavours to show a disagreement between Cicero and Posidonius are, I think, all cleared up by Schwencke, who has also no-
difficulty in refuting the rather wild suggestion that the 2nd section is derived from Apollodorus, as being the chief writer on the interpretation of myths.

My notes show a distinct connexion between this book of the *N. D.* and the 9th book of Sextus Empiricus on the one hand and the treatises *de Providentia* of Philo and Theodoret on the other. I am not aware whether there has been any careful investigation of the sources of these books, but I should conclude that they were, in part at least, taken either from Posidonius directly or from writers who had copied from him.

1 Compare particularly the quotation from Xenophon in § 18 with Sext. *ix* 92, that from Aristotle § 95 with Sextus *ix* 20, the comparison of the movements of the heavenly bodies to the movements of an army or a ship in §§ 85, 87, 89, with Sext. *ix* 26, 78; and the reference to the orrery in § 88 with Sextus *ix* 114.
M. TULLII CICERONIS

DE NATURAE DEORUM.

LIBER SECONDE.

I. QUAEE cum Cotta dixisset, tum Velleius, Ne ego, inquit, incautus, qui cum Academico et eodem rhetore congetti sum! Nam neque indiscertum Academicum pertinuissis nec sine ista philosophia rhetorem quamvis eloquentem; neque enim flumine conturbor inanium verborum nec subtilitate sententiarum, si orationis est sicciitas. Tu autem, Cotta, utraque re valuisti; corona tibi et judices defuerunt. Sed ad ista alias; nunc Lucillum, si ipsi commodum est, audiamus. Tum Balbus: 2 Eundem equidem malum audire Cottam, dum, qua eloquentia falsos deos sustulit, eadem veros inducat. Est enim et philosophi et pontificis et Cottae de dis immortalibus habere non errantem et vagam, ut Academici, sed, ut nostri, stabilem certamque sententiam. Nam contra Epicurum satis superque dictum est; sed aveo audire, tu ipse, Cotta, quid sentias. An, inquit, oblitus es, quid initio dixerim, facilius me, talibus prae-serti de rebus, quid non sentirem, quam quid sentirem, posse dicere? Quodsi haberem aliquid, quod liqueret, tamen te vi- 3 cissim audire vellem, cum ipse tam multa dixisset.


M. C. II.
DE NATURE DEORUM.

Tum Balbus: Geram tibi morem et agam quam brevissime potero; etenim convictis Epicuri erroribus longa de mea disputatione detracta oratio est. Omnino dividunt nostri totam istam de dis immortalibus quaestionem in partes quattuor. Primum docent esse deos, deinde quales sint, tum mundum ab iis administrari, postremo consulere eos rebus humanis. Nos autem hoc sermone, quae priora duo sunt, sumamus; tertium et quartum, quia majora sunt, puto esse in aliud tempus differenda. Minime vero, inquit Cotta; nam et otiosi sumus et iis de rebus agimus, quae sunt etiam negotiis anteponendae.

II. Tum Lucilius, Ne egere quidem videtur, inquit, oratione prima pars. Quid enim potest esse tam apertum tamque perspicuum, cum caelum suspeximus caelestiaque contemplati sumus, quam esse aliquod numen praestantissimae mentis, quo haec regantur? Quod ni ita esset, qui potuisset assensu omnium dicere Ennius:

Aspice hoc sublime candens, quem invocant omnes Jovem, illum vero et Jovem et dominatorem rerum et omnia nutu regentem et, ut idem Ennius, patrem divumque hominumque et praesentem ac praepotentem deum? Quod qui dubitet, haud sane intellego, cur non idem, sol sit an nullus sit, dubitare possit. Qui enim est hoc illo evidentius? Quod nisi cognitum comprehensumque animis haberemus, non tam stabilis opinio permaneret nec confirmaretur diuturnitate temporis nec una cum saeculis aetatibusque hominum inveterascere potuisset. Etenim videmus ceteras opiniones fictas atque vanas diuturnitate extabuisse. Quis enim Hippocentaurumuisse aut Chimaeram putat? quaeve anus tam excors inveniri potest, quae illa, quae quondam credebantur apud inferos portenta, extimescat?
Opinionis enim commenta delet dies, naturae judicia confirmat. Itaque et in nostro populo et in ceteris deorum cultus religionumque sanctitates existunt in dies majores atque meliores. Idque evenit non temere nec casu, sed quod et præsentes saepe di vīm suam declarant, ut et apud Regillum bello Latinorum, cum A. Postumius dictator cum Octavio Mamilio Tusculano proelio dimicarent, in nostra acie Castor et Pollux ex equis pugnare visi sunt, et recentiores memoria idem Tyndaridae Persem victum nuntiaverunt. P. enim Vatinius, avus hujus adolescens, cum et praesectura Beatina Romam venienti noctu duo juvenes cum equis albis dixissent regem Persem illo die captum, cum senatui nuntiavit, primo, quasi temere de re publica locutus, in carcerem coniectus est, post a Paulo litteris allatis cum idem dies constituisset, et agro a senatu et vacacione donatus est.

Atque etiam cum ad fluvium Sagram Crotoniatis Locri maximo proelio devicissent, eo ipso die auditam esse eam pugnam ludis Olympiae memoriae profiditum est. Saepe Faunorum voces exauditae, saepe visae formae deorum quemvis non aut hebetem aut impium deos præsentes esse confiteri coegerunt. III. Prae-7

20 dictiones vero et praesensiones rerum futurum quid aliud declarant nisi hominibus ea ostendi, monstrari, portendi, prædici? ex quo illa ostenta, monstra, portenta, prodigia dicuntur. Quodsi ea ficta credimus licentia fabularum, Mopsum, Tiresiam, Amphiarum, Calchamtem, Helenum,—quos tamen augures ne ipsae quidem fabulae ascivissent, si res omnino repudiarent,—ne domesticis quidem exemplis docti numen deorum.

1 opinionis CE, opiniones B, opinione A (doubtful) B'HE, opinionum B² Oxf. T

comprobabimus? Nihil nos P. Claudii bello Punico primo
temeritas movebit? qui etiam per jocum deos irrident, cum
cavea liberati pulli non pascerentur, mergi eos in aquam jussit,
ut biberent, quoniam esse nollent. Qui risus classe devicta
multas ipsi lacrimas, magnum populo Romano cladem attulit.
Quid? collega ejus Junius eodem bello nonne tempestate classem
amisit, cum auspicis non paruisset? Itaque Claudius a populo
condemnatus est, Junius necem sibi ipse conscivit. C. Flami-
nium Caelius religione neglecta cecidisse apud Trasimenum
scribit cum magno rei publicae vulnere. Quorum exitio intellegi
potest eorum imperii rem publicam amplificatam, qui religioni-
bus paruissent. Et si conferre volumus nostra cum externis,
ceteris rebus aut pares aut etiam inferiores reperiemur, religione,
id est cultu deorum, multo superiores. An Atti Navii litus ille,
quo ad investigandum suum regiones vineae terminavit, con-
temnuendus est? Crederem, nisi ejus augurio rex Hostilius
maxima bella gessisset. Sed, neglegentia nobilitatis augurii
disciplina omissa, veritas auspiciorum spreta est, species tantum
retenta. Itaque maximae rei publicae partes, in his bella, quibus
rei publicae salus continetur, nullis auspiciis administrantur:
nulla perennia servantur, nulla ex acuminibus, nulla, cum
viri vocantur, ex quo in proxinctu testamenta perierunt. Tum enim
bella gerere nostri duces incipient, cum auspicia posuerunt. At
vero apud majores tanta religionis vis fuit, ut quidam impera-
tores etiam se ipsos dis immortalibus capite velato verbis certis
pro re publica deoverent. Multa ex Sibyllinis vaticinationibus,
multa ex haruspicam responsis commemorare possum, quibus ea
conferuntur, quae dubia nemini debent esse. IV. Atqui et

1 comprobabimus B²CB, comprobavimus AB²EU Oxf. Mus. Claudiae B²O,
Claudi B¹, Clodi AEB Oxf., Dodi C. 4 nolent, nolent A (cf. maelem § 1).
9 Caecilius [E], coelius ABC Mu. Trasimenum V Asc., transumen ABCBE,
Trasumenum Or. Ba. Sch. Mu. 15 investigandum MSS generally, investigan-
dam Red. C Heind. Swainson. regions vineae U Asco., regiones vin. A¹,
religiones vin. A² BC Oxf. BC, religionis vin. E, in regiones vineam LNOT
Red. 19 maximae [E], maxime ABC. 21 perennia [B], perennia ACE. nulla
cum edd. after Sch., nulla V, nulli MSS generally. 25 immortalibus MSS
generally, mortalibus A. 26 deoverent MSS generally, deoverint U, deo-
verint I of Moser.
nosterorum augurum et Etruscorum haruspicum disciplinam in P. Scipione C. Figulo consulibus res ipsa probavit; quos cum Ti. Gracchus consul iterum crearet, primus rogator, ut eos rettulit, ibidem est repente mortuus. Gracchus cum comitia nihil minus peregisset remque illam in religionem populo venisse sentiret, ad senatum rettulit. Senatus, quos ad soleret, referendum censuit. Haruspices introducti responderunt non fuisse justum comitiorum rogatum. Tum Gracchus, ut e patre au-11 diebam, incensus ira: 'Itane vero? ego non justus, qui et 10 consul rogavi et augur et ausplicato? an vos Tusci ac barbari auspicio vor populi Romani jus tenetis et interpretas esse comitiorum potestis?' Itaque tum illos exire jussit. Post autem e provincia litteras ad collegium misit se, cum legeret libros, recordatum esse vitio sibi tabernaculum 15 captum fuisse hortos Scipionis, quod, cum pomerium postea intrasset habendi senatus causa, in redeundo, cum idem pomerium transiret, auspiciari esset oblitus; itaque vitio creatos consules esse. Augures rem ad senatum; senatus, ut abdicarent consules; abdicaverunt. Quae quærímus exempla majora? Vir 20 sapientissimus atque haud sciam an omnium praestantissimus peccatum suum, quod celari posset, confiteri maluit quam haerere in re publica religionem; consules summum imperium statim deponere quam id tenere punctum temporis contra religionem. [Magna augurum auctoritas; quid? haruspicum ars nonne divina?] 12 25 Haec et innumerabilia ex eodem genere qui videat, nonne cogatur confiteri deos esse? Quorum enim interpretes sunt, eos ipsos esse certe necesse est; deorum autem interpretes sunt; deos igitur esse fateamur. At fortasse non omnia eveniunt, quae prædicta sunt. Ne aegri quidem quia non omnes convalescunt,
idcirco ars nulla medicinae est. Signa ostenduntur a dis rerum futurarum. In his si qui erraverunt, non deorum natura, sed hominum conjectura peccavit. Itaque inter omnes omnium gentium summa constat; omnibus enim innatum est et in animo quasi insculptum esse deos. V. Quales sint, varium est; esse nemo negat.

Cleanthes quidem noster quattuor de causis dixit in animis hominum informatas deorum esse notiones. Primam posuit eam, de qua modo dixi, quae orta esset ex praesensione rerum futurarum; alteram, quam ceperimus ex magnitudine commodorum, quae percipiuntur caeli temperamente, fecunditate terrarum aliarumque commoditatum complurium copia; tertiam, quae tesseret animos fulminibus, tempestatibus, nimbris, nivibus, grandinibus, vastitate, pestilentia, terrae motibus et saepe fremitibus lapideisque imbribus et guttis imbri quam quasi cruentis, tum labibus aut repentinis terrarum hiatibus, tum praeter naturam hominum pecudumque portentis, tum facibus visis caelestibus, tum stellis iis, quas Graeci cometas, nostri cincinnatas vocant, quae nuper bello Octaviano magnumar fuerunt calamitatum praenuntiae, tum sole geminato, quod, ut e patre audivi, Tudiano et Aquilio consulibus evenerat, quo quidem anno P. Africanus sol alter extinctus est, quibus exterriti homines vnum quandam esse caelestem et divinam suspicati sunt; quartam causam esse, eamque vel maximam, aequabilitatem motus, conversionem caeli, solis, lunae siderumque omnium distinctionem, utilitatem, pulchritudinem, ordinem, quorum rerum aspectus ipse satis indicaret non esse ea fortuita. Ut, si quis in domum aliquam aut in gymnasio aut in forum venerit, cum videat omnium rerum rationem, modum, disciplinam, non possit ea sine causa ferei judicare, sed esse aliquem intellegat, qui 30

praesit et cui pareatur; multo magis in tantis motionibus tantisque vicissitudinis, tam multarum rerum atque tantarum ordinibus, in quibus nihil umquam immensa et infinita vetustas mentita sit, statuat necesse est ab aliqua mente tantos naturae motus gubernari. VI. Chrysippus quidem, quamquam est acer rimo ingens, tamem ea dicit, ut ab ipsa natura didicisse, non ut ipse reperisse videatur. ‘Si enim,’ inquit, ‘est aliquid in rerum natura, quod hominis mens, quod ratio, quod vis, quod potestas humana efficere non possit, est certe id, quod illud efficit, homine melius; atqui res caelestes omnesque eae, quarum est ordo sempiternus, ab homine confici non possunt; est igitur id, quo illa conficiuntur, homine melius. Id autem quid potius dixeris quam deum? Etenim si di non sunt, quid esse potest in rerum natura homine melius? in eo enim solo est ratio, qua nihil potest esse praestantius. Esse autem hominem, qui nihil in omni mundo melius esse quam se putet, desipientis arrogantiae est; ergo est aliquid melius; est igitur profecto deus.’ An vero, si domum magnam pulchramque videris, non possis adduci, ut, etiamsi dominum non vides, muribus illam et mustelis aedificatam putes; tantum [ergo] ornatum mundi, tantam varietatem pulchritudinemque rerum caelestium, tantam vim et magnitudinem maris atque terrarum si tuum ac non deorum immortalium domicilium putes, nonne plane despere videare? An ne hoc quidem intellegimus, omnia supera esse meliora, terram autem esse infimam, quam crassissimus circumfundat æir; ut ob eam

2 tam multarum—gubernari erased here in B, then follow § 86 ex sese—§ 156 quae cum maxima, then § 15—§ 86 tam multarum—ferant aliud. 12 quo ms, a quo G edd. after Lamb and Heind. see Comm. 14 after deum there is a disarrangement in ms. ACEU Ms. Oxf. give first a few words from § 156 (largitate—videtur), then go on (as B) with § 86—§ 156 ex sese—quae cum maxima, then go back to § 16—§ 86 etenim si di—efferant aliud, closing with § 156 to end, largitate fundi—simulata. E in going back to § 16 repeats from tam multarum—deum like B. The disarrangement, which is still found in the Ascensian ed. of A.D. 1511, is corrected in the Hervagian of 1584 and in all subsequent edd. From this point we have the readings of P (following § 111 obscura specie—§ 156 quae cum maxima) and V (following § 92 terris rebusque—§ 156 quae cum maxima). 26 ergo XBN Oxf. edd., om. MEV Aso. Heind. Madv. Forch., vero G ELOUT, see Comm.
ipsam causam, quod etiam quibusdam regionibus atque urbis
contingere videmus, hebetiora ut sint hominum ingeniad propter
caeli pleniorem naturam, hoc idem generi humano eveniatur, quod
18 in terra, hoc est in crassissima regione mundi, collocati sint? Et
tamen ex ipsa hominum sollertia esse aliquam mundi mentem, et
eam quidem acriorem et divinam, existimare debemus.
‘Unde enim hanc homo arripuit?’ ut ait apud Xenophontem Socrates.
Quin et umorem et colorem, qui est fusus in corpore, et terrenam ipsum viscerum soliditatem, animam
denique illum spirabilem, si quis quaeat, unde habeamus, apparat, quod aliud a terra sumpsimus, aliud ab umore, aliud
ab igni, aliud ab aëre eo, quem spiritu ducimus. VII. Illud
autem, quod vincit haec omnia, rationem dico et, si placet
pluribus verbis, mentem, consilium, cogitationem, prudentiam,
ubi invenimus? unde sustulimus? An cetera mundus habebit omnia, hoc unum, quod plurimi est, non habebit?
Atqui certe nihil omnium rerum melius est mundo, nihil praestabilitius, nihil pulchrior, nec solum nihil est, sed ne cogitari quidem
quicquam melius potest. Et si ratione et sapientia nihil est melius, necesse est haec inesse in eo, quod optimum esse con-
19 cedimus. Quid vero? tanta rerum consentiens, conspirans, con-
nuata cognatio quem non coget ea, quae dicuntur a me, comprobare?
Possitne uno tempore flore, dein vicissim horrire terra? aut tot rebus ipsis se immutantibus solis accessus
discussusque solstitii brumisque cognosci? aut aestus mari-
timi fretorumque angustiae ortu aut obitu lunaem commoveri?
aut una totius caeli conversione cursus astrorum dispare conservari?
Haec ita fieri omnibus inter se concinentibus mundi
partibus profecto non possent, nisi ea uno divino et continuato

3 pleniorem, pinguiorem Cobet V. L. p. 462. 4 sint ABPC[CEPV]EM,
sunt A1B1LOT. 5 aliquam mundi Ed. see Comm., aliquam mss and edd.,
aliam quam conj. Sch. 9 animam—illum Brieser, animum—illum mss and
edd. 10 habeamus E, habemus mss generally. 11 apparat B3V3 Asc.
LMNO, appareat ACEPB+. 12 spiritu edd., spiritum mss. 13 ducimus
GM, dicimus mss generally (cf. below § 75). 16 plurimi GH, plurimum mss
generally. 18 ne cogitari MO1 Oxf. Asc., nec cog. ABPC[CEB] and (in ras.) V,
necotari B1, negotiari A1PE, cf. ii 23 and Madv. Fin. exc. 3. 22 coget mss
generally, cogat AB1. 23 uno, vero conj. Bouh. cf. Tusc. v 37. dein
[ABCFV]BG, deinde E Asc. +.
spiritu continenterunt. Atque haec cum uberius disputatur et fusius, ut mihi est in animo facere, facilius effugiant Academicae calumniam; cum autem, ut Zeno solebat, brevius angustiusque concluentur, tum apertiora sunt ad reprehendendum. Nam ut profluens annis aut vix aut nullo modo, conclusa autem aqua facile corrumpitur, sic orationis flumine reprehensoris convicia diluuntur, angustia autem conclusae orationis non facile se ipsa tutatur. Haec enim, quae dilatantur a nobis, Zeno sic premebat: VIII. 'Quod ratione nihil autem mundo melius; ratione igitur mundus utitur.' Similiter effici potest sapientem esse mundum, similiter beatum, similiter aeternum; omnia enim haec meliora sunt quam ea, quae sunt his carentia, nec mundo quicquam melius; ex quo efficietur esse mundum deum. Idemque hoc modo: 'Nullius sensu carentis pars aliqua potest esse sentiens; mundi autem partes sentientia sunt; non igitur caret sensu mundus.' Pergit idem, et urget angustius: 'Nihil,' inquit, 'quod animi quodque rationis est expers, id generare ex se potest animantem componemque rationis; mundus autem generat animantes compotesque rationis; animans est igitur mundus compossus rationis.' Idemque similitudine, ut saepae solet, rationem conclusit hoc modo: 'Si ex oliva modulate cantentes tibiae nascerentur, num dubitates, quin inesset in oliva tibicinii quaedam scientia? Quid, si platani fidiculas ferrent numero sonantes? idem scilicet censeris, inplatinis inesse musicam. Cur igitur mundus non animans sapiensque judicetur, cum ex se procreet animantes atque sapientes?'

IX. Sed quoniam coepi secus agere, atque initio dixeram (negaram enim hanc primam partem egere oratione, quod esset omnibus perspicuum deos esse), tamen id ipsum rationibus physicis confirmari volo. Sic enim res se habet, ut omnia, quae

7 convicia edd. after Dav., vitia mss. (Moser's O has vitia condiliuntur.) 14 his mss, tis Mu. 15 efficietur ABV Oxf. Asc. MO+, efficiitur [CEP] BB Or. Ba. Sch. 26 tibiciniti CR Asc., tibicini mss generally. si platani—numerosa sonantes Priscian iii 5. 30. 27 idem, item conj. Ba. 84 physicis
alantur *atque* crescent, contineant in se vim caloris, sine quae neque ali possent nec crescere. Nam omne, quod est calidum et igneum, cietur et agitur motu suo; quod autem alitur et crescit, motu quodam utitur certe et aequabili; qui quam diu remanet in nobis, tam diu sensus et vita remanet; refrigerato 5 autem et extincto calore occidimus ipsi et exstinguimur. Quod quidem Cleanthes his etiam argumentis docet, quanta vis insit caloris in omni corpore: negat enim esse ullum cibum tam gravem, quin is nocte et die concoquatur; cujus etiam in reliquis insit calor iis, quas natura respuerit. Jam vero venae et arteriae micare non desinunt quasi quodam igneo motu, animadversumque saepe est, cum cor animantis aliocujus evulsum ita mobiliter palpitaret, ut imitaretur ignem celeritate. Omne 20 igitur, quod vivit, sive animal sive terra editum, id vivit propter inclusum in eo calorem. Ex quo intellegi debet eam caloris naturam vim habere in se vitalem per omnem mundum pertinentem. Atque id facilius cernemus toto genere hoc igneo, quod tranat omnia, sibi subtilius explicato. Omnes igitur partes mundi (tangam autem maximas) calore fultae sustinentur. Quod primum in terrena natura perspici potest. Nam et lapidum conflicting atque tritu elici ignem videmus et recenti fossione terram fumare calentem, atque etiam ex puteis jugibus aquam calidam trahi, et id maxime fieri temporibus hibernis, quod magna vis terrae cavernis continetur caloris eaque hieme sit densior ob eamque causam calorem insitum in terris continent 25 artius. X. Longa est oratio multaeque rationes, quibus doceri possit omnia, quae terra concipiat semina, quaeque ipsa ex se generata stirpibus infixa contineat, ea temperature caloris et oriri et auge. Atque aquae etiam admixtum esse calorem primum ipse liquor aquae declarat [effusio], quae neque conglacia.

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1 alantur—crescent MSS generally, alantur—crescunt G Or. Ba. Sch.  
2 atque MSS generally, confirmari MSS generally Allen, confirmare Reg. GO Moser's M edd.  
3 id est naturalibus MSS Allen. confirmari MSS generally Allen, confirmare Reg. GO Moser's M edd.  
10 insit MSS edd.  
22 fumare calentem Aso. LO, fumare recalentem MSS generally.  
24 contineatur—at continet MSS generally, continetur—at continet Or. Ba. Sch.  
25 in terris, interius MSS Allen after Bouh. and Heind.
cipatus putatur. Principatum autem id dico, quod Graeci ἡγεμονικὸν vocant, quo nihil in quoque genere nec potest nec debet esse praestantius. Ita necesse est illud etiam, in quo sit totius naturae principatus, esse omnium optimum omniumque rerum potestate dominatuque dignissimum. Videmus autem in partibus mundi (nihil est enim in omni mundo, quod non pars universi sit) inesse sensum atque rationem. In ea parte igitur, in qua mundi inest principatus, haec inesse necesse est, et acroria quidem atque majora. Quocirca sapientem esse mundum necesse est, naturalique eam, quae res omnes complexa teneat, perfectione rationis excellere, eoque deum esse mundum, omnemque vim mundi natura divina contineri. Atque etiam mundi ille fervor purior, per lucidior mobiliorque est multo, ob easque causas aptior ad sensum commovendos quam hic noster calor, quo haec, quae nota nobis sunt, retinentur et vigent. Absurdum igitur est dicere, cum homines bestiaeque hoc calore teneantur et propterea moveantur ac sentiant, mundum esse sine sensu, qui integro et libero et puro eodemque acerrimo et mobilissimo ardone teneatur, praeassertim cum is ardor, qui est mundi, non agitatus ab alio neque externo pulsu, sed per se ipse ac sua sponte moveatur. Nam quid potest esse mundo valentius, quod pellat atque movet calorem eum, quo ille teneatur? XII. 32 Audiamus enim Platonem quasi quendam deum philosophorum; cui duo placet esse motus, unum suum, alterum externum, esse autem divinius, quod ipsum ex se sua sponte moveatur, quam 25 quod pulsu agitetur alieno. Hunc autem motum in solis animis esse ponit, ab hisque principium motus esse ductum putat. Quapropter, quoniam ex mundi ardone motus omnis oritur, is autem ardon non alieno impulsu, sed sua sponte movetur, animus sit necesse est; ex quo efficitur animantem esse mundum. Atque ex hoc quoque intellegi poterit in eo inesse intellegentiam, quod certe est mundus melior quam ulla natura. Ut

enim nulla pars est corporis nostri, quae non minoris sit, quam
nosmet ipsi sumus, sic mundum universum pluris esse necesse
est quam partem aliquam universi. Quod si ita est, sapiens sit
mundus necesse est. Nam ni ita esset, hominem, qui est mundi
pars, quoniam rationis esset particeps, pluris esse quam mundum
омнem oportet. Atque etiam, si a primis incohatisque naturis
ad ultimas perfectasque volumus procedere, ad deorum naturam
perveniamus necesse est. Prima enim animadvertimus a
natura sustineri ea, quae gignantur e terra, quibus natura nihil
tribuit amplius, quam ut ea alendo atque augendo tueretur.
Bestiis autem sensum et motum dedit et cum quodam appetitu
accessum ad res salutares, a pestiferis recessum; hoc homini
amplius, quod addidit rationem, qua regerentur animi appetitus,
qui tum remitterentur, tum continerentur. XIII. Quartus
autem gradus est et altissimum eorum, qui natura boni sapien-
tesque gignuntur, quibus a principio innascitur ratio recta con-
stantque, quae supra hominem putanda est deque tribuenda,
id est mundo, in quo necesse est perfectam illam atque absolu-
tam inesse rationem. Neque enim dici potest in ulla rerum
institutione non esse aliquid extremum atque perfectum. Ut
enim in vete, ut in pecude, nisi quae vis obstitit, videmus
naturam suo quodam itinere ad ultimum pervenire, atque ut
pictura et fabrica ceteraque artes habent quendam absoluti
operis effectum, sic in omni natura, ac multo etiam magis,
necesse est absolvit aliquid ac perfici. Etenim ceteris naturis
multa externa, quo minus perficiantur, possunt obsistere, uni-
versam autem naturam nulla res potest impedire, propter quod
omnes naturas ipsa cohibet et continet. Quocirca necesse est
esse quartum illum et altissimum gradum, quo nulla vis posset
accedere. Is autem est gradus, in quo rerum omnium natura
ponitur; quae quoniam talis est, ut et praesit omnibus et eam
nulla res possit impedire, necesse est intellegentem esse mundum

1 minoris M of Moser edd. after Ursin., minor mss. 4 qui est $V^m$ Asc.,
qui esset $X^+$. 5 rationis esset $A^C E P^v B^R H$, rat. est $A^P B^v M O$ Asc. see
mum E Mu. (who compares Ac. ii 30) see Comm. 9 gignantur mss, gignuntur
LO Or. Ba. Sch. after Manut. see Comm. 11 sensum, et sensum Heинд. and
Klotz with G. 19 in ulla $V^3$ Oxf. LM, in nulla mss generally, in illa $V$ Asc.
et quidem etiam sapientem. Quid autem est inscius quam eam naturam, quae omnes res sit complexa, non optimam dici, aut, cum sit optima, non primum animantem esse, deinde rationis et consilii compotem, postremo sapientem? Qui enim potest aliter esse optima? Neque enim, si stirpium similis sit aut etiam bestiarum, optima putanda sit potius quam deterrima, nec vero, si rationis particeps sit nec sit tamen a principio sapiens, non sit deterior mundi potius quam humana condicio homo enim sapiens fieri potest, mundus autem si in aeterno praeteriti temporis spatio fuit insipiens, numquam profecto sapientiam consequetur; ita erit homine deterior. Quod quoniam absurdum est, et sapiens a principio mundus et deus habendus est. XIV. Scite enim Chrysippus, ut clipei causa involucrum, vaginam autem gladii, sic praeter mundum cetera omnia aliorum causa esse genera ta, ut eas fruges atque fructus, quos terra gignit, animantium causa, animantes autem hominum, ut equum vehendi causa, arandi bovem, venandi et custodendi canem. Ipsae autem homo ortus est ad mundum contemplandum et imitandum, nullo modo perfectus, sed [est] quaedam particula perfecti. Neque enim est quicquam alius praeter mundum, cui nihil absit, quodque undique aptum atque perfectum expletumque sit omnibus suis numeris et partibus. Sed mundus quoniam omnia complexus est, neque est quicquam, quod non insit in eo, perfectus undique est. Quo igitur potest ei deesse id, quod est optimum? nihil autem est mente et ratione melius; ergo haec mundo deesse non possunt. Bene igitur idem Chrysippus, qui similitudines adjungens omnia in perfectis et maturis docet esse meliora, ut in equo quam in eculeo, in cane quam in catulo, in viro quam in puero, item, quod in omni

13 habendus est, after this follows in all mss and edd. neque enim—partibus, which I have put after perfecti at the end of § 37, see Comm. 16 gignit mss generally, gignat Red. Heind. Allen. 18 ortus est mss, qui ortus Red. Heind., ortus B Vaucer, who transfers est in next line to end of sentence. 19 sed H Moser's E Fa. and M Allen, sed est mss generally (perhaps dittography of set, cf. § 73). 21 cui B, quo mss generally (doubtless for original qui). quodque—sit om. BC. 23 neque est mss, neque enim est GH Heind. 24 qui G edd. after Gron., guid mss (cf. above § 5). 25 id quod [ACE] BHG, quod BPVM Oxlf. +, autem est mss, est autem Sch. 28 eculeo X +, equulo C BHNV, equuleo MR.
mundo optimum sit, id in perfecto aliquo atque absolueto esse debere; est autem nihil mundo perfectius, nihil virtute melius; 39 igitur mundi est propria virtus. Nec vero hominis natura perfecta est, et efficitur tamen in homine virtus; quanto igitur in 5 mundo facilius! est ergo in eo virtus; sapiens est igitur et propterea deus.

XV. Atque hac mundi divinitate perspecta tribuenda est sideribus eadem divinitas, quae ex mobilissima purissimaque aetheris parte gignuntur, neque ulla praetera sunt admixta-10 natura totaque sunt calida atque perlucida, ut ea quoque rectissime et animantia esse et sentire atque intellegere dicantur. Atque ea quidem tota esse ignea duorum sensuum testimonia confirmari Cleanthes putat, tactus et oculorum. Nam solis et candor illustrior est quam ullius ignis, quippe qui immenso 15 mundo tam longe lateque colluceat, et is ejus tactus est, non ut tepesfaciat solum, sed etiam saepe comburat, quorum neutrum faceret, nisi esset igneus. 'Ergo,' inquit, 'cum sol igneus sit Oceanique alatur umoribus, quia nullus ignis sine pastu aliquo possit permanere, necesse est aut ei similis sit igni, quem adhini-20 bemus ad usum atque victum, aut ei, qui corporibus animantium continentur. Atqui hic noster ignis, quem usus vitae requirit, 41 confector est et consumptor omnium, idemque, quocumque invasit, cuncta disturbat ac dissipat; contra ille corporeus vitalis et salutarius omnia conservat, alit, auget, sustinet sensisque 25 afficit.' Negat ergo esse dubium, horum ignium sol utri similis sit, cum is quoque efficiat, ut omnia floreant et in suo quaeque genere pubescant. Quare cum solis ignis similis eorum ignium sit, qui sunt in corporibus animantium, solem quoque animantem esse oportet, et quidem reliqua astra, quae orientur in ardore 30 caelestii, qui aether vel caelum nominatur. Cum igitur aliorum 42

1 id [CP]EM Asc., corr. fr. is AV, is BE. 8 mobilissima X except mobilissima PV, mobilissima B. 9 sunt mss, est Or. Ba. see Comm. 10 et candor edd. after Klots, calor et candor XB Oxf., ardor et candor H, candor et calor LNCO, candor MBVU Heind. 14 ullius [ABPV] Oxf. 0, ulla CEWH 15 tactus by corr. fr. tactu AV. 19 possset Mu. on Acad. x 72, see Comm. 20 atque XBN Oxf. +, atque ad MBV Sch. 21 atqui MN Red. edd. after Dav., atque mss generally, cf. § 16. 22 omnium mss generally, om. Oxf. V BR Asc. 29 et quidem mss, atque item Or. Ba. after Heind. see Comm.
animantium ortus in terra sit, aliorum in aqua, in aëre aliorum, absurdum esse Aristotelis videtur in ea parte, quae sit ad gi- gnenda animantia aptissima, animal gigni nullum putare. Si- dera autem aetherium locum obtinent; qui quoniam tenuissi- mus est et semper agitatur et viget, necesse est, quod animal in eo gignatur, id et sensu acerrimo et mobilitate celerrima esse. Quare cum in aethere astra gignantur, consentaneum est in his sensum inesse et intellectum, ex quo efficitur in deorum numero astra esse ducenda. XVI. Etenim licet videre acutiora ingenia et ad intellegendum aptiora eorum, qui terras incolant eos, in quibus aër sit purus ac tenuis, quam illorum, qui utantur crasso caelo atque concreto. Quin etiam cibo quo utare, interesse aliquid ad mentis aciem putant. Probabile est igitur praestantem intellectum in sideribus esse, quae et aetheriam partem mundi incolant et marinis terrenisque umoribus longo intervallo extenuatis alantur. Sensum autem astrorum atque intellectum maxime declarat ordo eorum atque constantia — nihil est enim, quod ratione et numero moveri possit sine consilio—in quo nihil est temerarium, nihil varium, nihil fortuitum. Ordo autem siderum et in omni aeternitate constantia neque naturam significat—est enim plena rationis—neque fortunam, quae amica varietati constantiam respuit. Sequitur ergo, ut ipsa sua sponte, suo sensu ac divinitate moveantur. Nec vero Aristoteles non laudandus in eo, quod omnia, quae moventur, aut natura moveri censuit aut vi aut voluntate; moveri autem solem et lunam et sidera omnia; quae autem natura moverentur, haec aut pondere deorum aut levitate in sublime ferri, quorum neutrum astra continget, propertia quod eorum motus in orbem circumferretur. Nec vero dici potest vi quadam majore fieri, ut contra naturam astra moveantur; quae enim potest major esse? Restat igitur, ut motus astrorum sit voluntarius. Quae quia videat, non indecte solum, verum etiam impie faciat, si deos esse neget. Nec sane multum interest, utrum id
neget an eos omni procuratione atque actione privet; mihi enim, qui nihil agit, esse omnino non videtur. Esse igitur deos ita perspicuum est, ut, id qui neget, vix eum sanae mentis existerim.

5 XVII. Restat, ut, qualis eorum natura sit, consideremus; in quo nihil est difficilium quam a consuetudine oculorum aciem mentis abducere. Ea difficultas induxit et vulgo imperitos et similis philosophos imperitorum, ut nisi figuris hominum constitutis nihil possent de dis immortalibus cogitare; cujus opinionis levitas confutata a Cotta non desiderat orationem meam. Sed cum talem esse deum certa notione animi praesentiamus, primum ut sit animans, deinde ut in omni natura nihil eo sit praestantius, ad hanc praesensionem notionemque nostram nihil video quod potius accommodem, quam ut primum hunc ipsum mundum, quo nihil excellentiis fieri potest, animantem esse et deum judicem. Hier quam volet Epicurus jocetur, homo non aptissimus ad jocandum minimeque resipiens patriam, et dicit se non posse intellegere, qualis sit volubilis et rotundus deus, tamen ex hoc, quod etiam ipse probat, nunquam me movebit.

20 Placet enim illi esse deos, quia necessae sit praestantem esse aliquam naturam, qua nihil sit melius. Mondo autem certe nihil est melius. Nec dubium, quin, quod animans sit habeatque sensum et rationem et mentem, id sit melius quam id, quod his careat. Ita efficit animantem, sensus, mentis, rationis mundum esse compotent; qua ratione deum esse mundum concluditur. Sed haec paulo post facilius cognoscentur ex ipsis, quas mundus efficit.

XVIII. Interea, Vellei, noli, quaeso, praec te ferre vos plane expertes esse doctrinac. Conum tibi ais et cylindrum et pyramidem pulchriorem quam sphaeram videri. Novum etiam oculorum judicium habetis. Sed sint ista pulchriora dumtaxat aspectu, quod mihi tamen ipsum non videtur; quid enim pulchrior ea figura, quae sola omnes aliae figurae complexa continet,

5 restat MSS generally, sane restat V Oxf. Asc. MCV (from sanae above).
17 resipiens edd. after Ursin., respiciens MSS.
18 rotundus AV Or. Ba.
24 his B['] Asc., 1is AB[']CV Oxf. B, is PU. animantem—compotent MSS (exc. an. esse sens. ment. rat. comp. G); P has mentem, H (like G) omits mundum esse, Heind. conj. an. mund. esse et s. m. r. c.
28 quaero Or. Ba. (by mistake?).

M. C. II.
quaeque nihil asperitatis habere, nihil offenditionis potest, nihil incisum angulis, nihil anfractibus, nihil eminis, nihil lacunosum? cumque duae formae praestantissimae sint, ex solidis globus (sic enim σφαῖραν interpretari placet), ex planis autem circulus aut orbis, qui κύκλοι Graece dicitur, his duabus formis contingit solis, ut omnes earum partes sint inter se simillimae a medioque tantundem undique absit extremum, quo nihil fieri potest ap- tius. Sed si haec non videm eruditum illum pulverem attigistis, ne hoc quidem physici intellegere potuistis, hanc aequabilitatem motus constantiamque ordinum in alia figura non potuisse servari? Itaque nihil potest indoctius, quam quod a vobis affirmari solet. Nec enim hunc ipsum mundum pro certo rotundum esse dictis; nam posse fieri, ut sit alia figura, innumerabilesque mundos alios aliquam esse formarum. Quae, si, bis bina quot essent, didicisset Epicurus, certe non diceret; sed dum palato, quid sit optimum, judicat, 'caeli palatum,' ut ait Ennios, non suspexit. XIX. Nam cum duo sint genera siderum, quorum alterum spatiiis immutabilibus ab ortu ad occasum commeans nullum umquam cursus sui vestigium infectat, alterum autem continuas conversiones duas isdem spatiiis cursibusque conficiat, ex utraque re et mundi volubilitas, quae nisi in globosa forma esse non posset, et stellarum rotundi ambitus cognoscuntur. Primusque sol, qui astrorum tenet principatum, ita movetur, ut, cum terras larga luce compleverit, easdem modo his, modo illis ex partibus opacet; ipsa enim umbra terrae solis officiis noctem efficit; nocturnorum autem spatiorum eadem est aequabilitas, quae diur-
norum; ejusdemque solis tum accessus modici, tum recessus et frigoris et caloris modum temperant; circumitus enim solis orbium quinque et sexaginta et trecentorum quarta fere diei parte addita conversionem conficiunt annum; inflectens autem sol cursum tum ad septentriones, tum ad meridiem, aesthes et hiemes efficet et ea duo tempora, quorum alterum hiemi senescenti adjunctum est, alterum aestati. Ita ex quotid temporum mutationibus omnium, quae terra marique gignuntur, initia causaeque ducuntur. Jam solis annuos cursus spatiis menstruis luna consequitur, cujus tenuissimum lumen facit proximus accessus ad solem, digressus autem longissimus quisque plenissimum. Neque solum ejus species ac forma mutatur tum crescendo, tum defectibus in initia recurrendo, sed etiam regio, quae tum est aquilonia, tum australis. In lunae quoque cursu est et brumae quaedam et solstitii similitudo, multaque ab ea manant et fluunt, quibus et animantes alantur augescantque, et pubescant maturitatemque assequantur quae oriuntur e terra. XX. Maxime vero sunt admirabiles motus earum quinque stellarum, quae fals vocantur errantes. Nihil enim errat, quod in omni aeternitate conservat progressus et regressus reliquoque motus constantes et ratos. Quod eo est admirabilius in his stellis, quas dicimus, quia tum occultantur, tum rursus aperiantur, tum adeunt, tum recedunt, tum antecedunt, tum autem subsequuntur, tum celerius moventur, tum tardius, tum omnino ne moventur quidem, sed ad quoddam tempus insistunt. Quarum ex disparibus motionibus magnum annum mathematici nominaverunt, qui tum efficit, cum solis et lunae et quinque errantium ad eandem inter se comparationem confectis omnium spatiis est facta conversio. Quae quam longa

sit, magna quaestio est, esse vero certam et definitam necesse est. Nam ea, quae Saturni stella dicitur Φαλωνυχε a Graecis nominatur, quae a terra abest plurimum, XXX fere annis cursum suum conficit, in quo cursu multa mirabiliter efficiens tum antecedendo, tum retardando, tum vespertinis temporibus delitiscendo, tum matutinis rursum se aperiendo, nihil immutat sempiternis saeclorum aetatibus, quin eadem isdem temperibus efficiat. Infra autem hanc propius a terra Jovis stella furtur, quae Φατων σε dicitur, eaque eundem XII signorum orbem annis XII conficit easdemque, quas Saturni stella, efficit in cursu variantes. Huic autem proximum inferioris orbem tenet Πυρες, quae stella Martis appellatur, eaque III et XX mensibus VI, ut opinor, diebus minus eundem lustrat orbem, quem duae superiores. Infra hanc autem stella Mercurii est; ea Στρβων appellatur a Graecis; quae anno fere vertente signiferum lustrat orbem neque a sole longius unquam unius signi intercallo discedit tum antevertens, tum subsequens. Infima est quinque errantium terraque proxima stella Veneris, quae Φωσφόρος Graece, Lucifer Latine dicitur, cum antegreditur solem, cum subsequitur autem, Ἑωσφόρος; ea currsum anno conficit et latitudinem lustrans signiferi orbis et longitudinem, quod idem faciunt stellae superiores, neque unquam ab sole duorum signorum intercallo longius discedit tum antecedens, tum subsequens. XXI. Hanc igitur in stellis constantiam, hanc tantam tam variis cursibus in omni aeternitate convenientiam temporum non possum intellegere sine mente, ratione, consilio. Quae cum in sideribus inesse videamus, non possimus ea ipsa non in deorum numero reponere. Nec vero eae stellae, quae inerrantes vocantur, non significant eandem mentem atque prudentiam; quorum est cotidiana conveniens constansque conversio, nec habent aethereos cursus neque caelo inhaerentes, ut plerique dicunt physicae rationis ignari. Non est enim aetheris ea natura, ut vi sua stellas complexa contorqueat; nam tenuis ac perlucens et aequabili calore

2 Saturni by corr. BV also Oxf. HM Asc.+, Saturnis A, Saturnia CEB. Φαλωνυχε, this and the following Greek names are given in Latin letters in ms. 19 "Εσφεσω, Hesperus Heind. Allen, Vesper Latine, Graece "Εσφέσως conj. Heind. p. xiii. 27 ponere ap. Lact. ii 5. 31 inhaerentes sunt conj. Swainson (the omission being due to s followed by ut).
LIB. II CAP. XX—XXII §§ 52—58. 21

suffusus aether non satis aptus ad stellas continendas videtur. Habent igitur suam sphæram stellae inerrantes ab aetheria 5 conjunctione secretam et liberam. Eorum autem perennes cursus atque perpetui cum admirabili incredibilique constantia declarant in his vim et mentem esse divinam, ut, haec ipsa qui non sentiat deorum vim habere, is nihil omnino sensurus esse videatur. Nulla igeretur in caelo nec fortuna nec temeritas nec erratio nec vanitas inest contraque omnis ordo, veritas, ratio, constantia; quaeque his vacant, ementita et falsa plenaque erroris, ea circum terras infra lunam, quae omnium ultima est, in terrisce versantur. Cælestium ergo admirabilem ordinem incredibilemque constantiam, ex qua conservatio et salus omnium omnis oritur, qui vacare mente putat, is ipse mentis expers habendus est. Haud ergo, ut opinor, erravero, si a 57

principe investigandae veritatis hujus disputationis principium duxero.

XXII. Zeno igeretur naturam ita definit, ut eam dicat ignem esse artificiosum, ad gignendum progredientem via. Censet enim artis maxime proprium esse creare et gignere; quoque in operibus nostrarum artium manus efficiat, id multo artificiosius naturam efficere, id est, ut dixi, ignem artificiosum, magistrum artium reliquarum. Atque hac quidem ratione omnis natura artificiosa est, quod habet quasi viam quandam et sectam, quam sequatur. Ipsius vero mundi, qui omnia com-

plexu suo coerctet et continet, natura non artificiosa solum, sed plane artifex ab eodem Zenone dicitur, consultrix et provida utilitatum opportunitatumque omnium. Atque ut ceterae naturae suis seminibus quaeque gignuntur, augescunt, continentur, sic natura mundi omnes motus habet voluntarios, conatusque et appetitiones, quas ὀμορίς Graeci vocant, et his consentaneas actiones sic adhibet, ut nosmet ipsi, qui animis movemur et sensibus. Talis igeretur mens mundi cum sit, ob eamque causam vel prudentia vel providentia etiam legit esse (Graece enim

5 iis Mu. praef. viii. 8 vanitas mss generally, varietas L Moser’s DIM.
9 ementita [BCEP]EH by corr. V, ea mentita MGE Oxf., mentita by corr. A.
11 versantur CBB, versatur ABEPV Oxf. +. cælestium G Moser’s La edd.
after Dav., cælestem mss generally (cf. below § 64). 38 quaeque AE Mus., quaequae BCPV (see Madv. F/n. p. 6561).
50 ὀμορίς: Latin in mss.
πρόνοια dicitur), haec potissimum providet et in his maxime est occupata, primum ut mundus quam aptissimus sit ad permanendum, deinde ut nulla re egeat, maxime autem ut in eo eximia pulchritudo sit atque omnis ornatus.

59 XXIII. Dictum est de universo mundo, dictum etiam [est] de sideribus, ut jam prope modum appareat multitudo nec cessantium deorum nec ea, quae agant, molientium cum labore operoso ac molesto. Non enim venis et nervis et ossibus continentur nec iis escis aut potionibus vescuntur, ut aut nimis acres aut nimis concretos umores colligant, nec iis corporibus sunt, ut casus aut ictus extimescant aut morbos metuant ex defetigatione membrorum; quae verens Epicurus monogrammos deos et nihil agentes commentus est. Illi autem pulcherrima forma praediti purissimaque in regione caeli collocati ita feruntur moderanturque cursus, ut ad omnia conservanda et tuenda consensisse videantur.

Multae autem aliae naturae deorum ex magnis beneficiis eorum non sine causa et a Graeciae sapientissimis et a majoribus nostris constitutae nominataeque sunt. Quicquid enim magnam utilitatem generi afferret humano, id non sine divina bonitate erga homines fieri arbitrabantur. Itaque tum illud, quod erat a deo natum, nomine ipsius dei nuncupabant, ut cum fruges Ceres et Libero appellamus, vinum autem Liberum, ex quo illud Terentii sine Cere et Libero friget Venus;

61 tum autem res ipsa, in qua vis inest major aliqua, sic appellatur, ut ea ipsa nominetur deus, ut Fides, ut Mens, quas in Capitolio dedicatas videmus proxime a M. Aemilio Scauro; ante autem ab A. Atilio Calatino erat Fides consecrata. Vides Virtutis templum, videns Honoris a M. Marcelllo renovatum, quod non multis

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ante annis erat bello Ligustico a Q. Maximo dedicatum. Quid Opis? quid Salutis? quid Concordiae, Libertatis, Victoriae? quarum omnium rerum quia vis erat tanta, ut sine deo regi non posset, ipsa res deorum nomen obtinuit. Quo ex genere 5 Cupidinis et Voluptatis et Lubentinae Veneris vocabula consecrata sunt, vitiosarum rerum neque naturalium; quamquam Velleius aliter existimat; sed tamen ea ipsa vitia naturam vehementius sæpe pulsant. Utilitatum igitur magnitudine 62 constituti sunt ei di, qui utilitates quasque gignebant. Atque 10 his quidem nominibus, quae paulo ante dicta sunt, quae vis sit in quoque declaratur deo.

XXIV. Suscepit autem vita hominum consuetudoque communis, ut beneficiis excellentes viros in caelum fama ac voluntate tollerent. Hinc Hercules, hinc Castor et Pollux, hinc 15 Aesculapius, hinc Liber etiam;—hunc dico Liberum Semela natum, non eum, quem nostri maiores auguste sancteque [Liberum] cum Cerere et Libera consecraverunt, quod quale sit, ex mysteriis intellegi potest: sed quod ex nobis natos ‘liberos’ appellantum, idcirco Cerere nati nominati sunt Liber et Libera, 20 quod in Libera servant, in Libero non item;— hinc etiam Romulus, quem quidem eundem esse Quirinum putant; quorum cum remanerant animi atque aeternitate fruenterunt, rite di sunt habiti, cum et optimi essent et aeterni.

Alia quoque ex ratione, et quidem physica, magna fluxit 63 25 multitudo deorum, qui induti specie humana fabulas poëtis suppedita reverunt, hominum autem vitam superstitione omni refererunt. Atque hic locus a Zenone tractatus post a Cleanthe et Chrysippo pluribus verbis explicatus est. Nam cum vetus haec

opinio Graeciam opplevisset, exsectum Caelum a filio Saturno, 64 vincum autem Saturnum ipsum a filio Jove, physica ratio non inelegans inclusa est in impias fabulas; cælestium enim altissimam aetheriamque naturam, id est igneum, quæ per sese omniaigneret, vacare voluerunt ea parte corporis, quæ conjunctione alterius ergeret ad procreandum. XXV. Saturnum autem eum esse voluerunt, qui cursum et conversionem spatiorum ac temporum contineret, qui deus Graece id ipsum nomen habet; ἡρώος enim dicitur, qui est idem χρόνος, id est spatium temporis. Saturnus autem est appellatus, quod saturaretur annis; ex se enim natos comessse fingitur solitus, quia consumit aetas temporum spatia annissque praeteritis insatiablebit expletur, vincit autem a Jove, ne immoderatos cursus haberet, atque ut eum siderum vincilis alligaret. Sed ipse Juppiter, id est ‘juvans pater,’ quem conversis casibus appellamus a juvando Jovem, a 15 poëtis ‘pater divumque hominumque’ dicitur, a majoribus autem nostris ‘optimus maximus,’ et quidem ante ‘optimus,’ id est beneficentissimus, quam ‘maximus,’ quia majus est certeque 65 gratius prodesse omnibus quam opes magnas habere,—hunc igitur Ennius, ut supra dixi, nuncupat ita dicens, 20

Aspice hoc sublime candens, quem invocant omnes Jovem; planius quam alio loco idem,

Quæ, quod in me est, exsecrabor hoc, quod lucet, quicquid est;
hunc etiam augures nostri, cum dicunt ‘Jove fulgente, tonante;’ [dicunt enim ‘caelo fulgente, tonante.’] Euripides autem, ut 25 multa praeclare, sic hoc [breviter]:

3 caelestium BM Oxf., caelestum AECE, caelestem [BCV]BOL Lact. x 12 edd.
9 ἡρώος—χρόνος, Latin in ms. qui est idem [X]B + , quod est idem quod
Lact. x 1 c. ἡρώος id est [X]E + , om. IMNOV. 15 pater quem CEP + ,
partem que A, pater quaæ BV. 19 habere, Mu. after Bake, habere. ms
Or. Ba. Sch. 22 sublime ms generally, sublile B, supplile P, sublimen Or.
Ba. Sch. of § 4. 22 planius quam BO, planius quam AVX Oxf., planiusque
EBB + , pleniusque C. 28 qui Gulielmius, cui ms generally edd., cur C Reg.
Dav. see Comm. 24 Jove fulgente tonante [ACEV] Oxf. EM, j. fulg. et ton. B,
jovem fulgentem tonantem PBLU Asc. + . 25 dicunt enim—tonante [X Mus.]
edd., om. G and 2 odd. of Gulielm. Heind. caelo B, celo A², melo A CEPVB
Oxf. + , in caelo LOV + . fulgente tonante EM, fulg. et ton. BCPV Oxf. B + ,
fulgentae tonantae A, fulgentem et tonamentem HLOT. 26 breviter ms Ba. Mu.,
om. Heind., in brackets Or. Sch., graviter Bouh. and (omitting hoc) Vaucher,
Vides sublime fumum, ìmmoderatum aetheram,
qui terram tenero circumjunctu amplexitum:
hunc summum habeto divum, hunc perhibeto Jovem.

XXVI. Aër autem, ut Stoici disputant, interjectus inter mare et caelum Junonis nomine consecratus, quae est soror et conjunx Jovis, quod et similitudo est aëri aetheris et cum eo summa conjunctio. Effeminarunt autem eum Junonique tribuerunt, quod nihil est eo mollius. Sed Junonem a juvando credo nominatam. Aqua restabat et terra, ut essent ex fabulis tria regna divisa. Datum est igitur Neptuno, alteri Jovis, ut volunt, fratri, maritimum omne regnum, nomenque productum, ut Portunus a portu, sic Neptunus a nando paulum primis litteris immutatis. Terrena autem vis omnis atque natura Diti patri dedicata est, qui Dives, ut apud Graecos Πλούτων, quia et recidunt omnia in terras et orientur et terris. Cui Proserpina nuptam, quod Graecorum nomen est; ea enim est, quae Περσεφόνη Graece nominatur, quam frugum semen esse volunt absconditamque quaeri a matre fingunt. Mater autem est a gerendis frugibus Ceres tamquam 'Geres,' casuque prima littera itidem immutata, ut a Graecis; nam ab illis quoque Δημήτρη quasi Γημήτρη nominata est. Jam qui magna verteret, Mavors, Minerva autem, quae vel minueret vel minaretur. XXVII. Cumque in omnibus rebus vim haberent maximam prima et extrema, principem in sacrificando Janum esse voluerunt, quod ab eundo nomen est ductum, ex quo transitiones perviae 'jani,' foresque in liminibus profanarum aedium 'januæ' nominantur. Nam Vestae nomen a Graecis; ea est enim, quae ab illis 'Εστία

DE NATURA DEORUM.

dicitur. Vis autem ejus ad aras et focos pertinet. Itaque in ea dea, quod est rerum custos intimarum, omnis et precatio et sacrificio extrema est. Nec longe absunt ab hac vi di Penates sive a penu ducto nomine (est enim omne, quo vescentur homines, penus) sive ab eo, quod penitus insident; ex quo etiam 'penetrales' a poetsis vocantur. Jam Apollinis nomen est Graecum, quem Solem esse volunt; Dianam autem et Lunam eandem esse putant; cum Sol dictus sit, vel quia solus ex omnibus sideribus est tantus vel quia, cum est exortus, obscuratis omnibus solus apparat; Luna a lucendo nominata sit, eadem est enim Lucina. Itaque, ut apud Graecos Dianam, eamque Luciferam, sic apud nostros Junonem Lucinam in pariendo invocant; quae eadem Diana 'omnivaga' dicitur, non a venando, sed quod in septem numeratur tamquam vagantibus, Diana dicta, quia noxu quasi diem efficere. Adhibetur autem ad partus, quod ii maturescunt aut septem non numquam aut, ut plerumque, novem lunae cursibus, qui quia mensa spatio conficiunt, 'menses' nominantur. Concinneque, ut multa, Timaeus, qui cum in historia dixisset, qua nocte natus Alexander esset, eadem Dianae Ephesiae templum deflagravisse, adjunct minime id esse mirandum, quod Diana, cum in partu Olympiadis adesse voluisset, aquisisset domo. Quae autem dea ad res omnes veniret, Venerem nostri nominaverunt, atque ex eae potius 'venustas' quam 'Venus' ex venustate.

XXVIII. Videtisne igitur, ut a physicis rebus bene atque utiliter inventis tracta ratio sit ad commenticios et factos deos? quae res genuit falsas opiniones erroresque turbulentos et superstitiones paene aniles. Et formae enim nobis deorum et aerates et vestitus ornatusque noti sunt, genera praeterea, conjugia, cognationes omniaque traducta ad similitudinem imbellethatis humanae; nam et perturbatis animis inducuntur—acceptimus enim deorum cupiditates, aegritudines, iracundias—nec vero, ut est a Graecis U. Cf. § 44 laudandus. 'Eoria, Latin in mss. 2 quod mss generally, quae IV, quae E. 7 after Dianam autem there is a gap in P to § 162 deorum prudentia. 16 quod ii [A]PV2, quod hi Oxf, HOC, quod B1C1 Probus, quod V1, quo dy E. 20 deflagravisse [CEP]V3BH, deagravisse A, demigravisse B by corr., deam migravisse V3 Oxf. 22 afuisset edd., aquisisset A2V3+, abuisset C1, afuisset E, afuisset BL, aquisisset Oxf, aquisisset A2V3+. 31 accipimus HILO Aug. C. D. rv 80, accipimus mss generally of. rv 42, 47.
fabulae ferunt, bellis proelisisque caruerunt, nec solum, ut Homerum, cum duo exercitus contrarios alii di ex alia parte defenderent, sed etiam, ut cum Titanis, ut cum Gigantibus, sua propria bella gesserunt. Haec et dicuntur et creduntur stultissime et plena sunt futibilitatis summaeque levitatis. Sed tamen his fabulis spretis ac repudiatis deus pertinens per naturam cujusque rei, per terras Ceres, per maria Neptunus, alii per alia, poterunt intellegi qui qualesque sint, quoque eos nomine consuetudo nuncupaverit; quos deos et venerari et colere debemus.

Cultus autem deorum est optimus idemque castissimus atque sanctissimus plenissimusque pietatis, ut eos semper pura, integra, incorrupta et mente et voce veneremur. Non enim philosophi solum, verum etiam majores nostri superstitionem a religione separaverunt. Nam qui toto dies precabantur et immolabant, ut sibi sui liberi superstites essent, superstitionis sunt appellati, quod nomen patuit postea latius; qui autem omnia, quae ad cultum deorum pertinent, diligenter retrahant et tamquam relegerent, sunt dicti religiosi ex relegando, ut elegantes ex eligendo, ex diligendo diligentes, ex intellegendo intellegentes.

His enim in verbis omnibus inest vis legendi eadem, quae in religioso. Ita factum est in superstitione et religioso alterum vitii nomen, alterum laudis. Ac mihi videor satis et esse deos, et quae essent, ostendisse.

XXIX. Proximum est, ut doceam deorum providentiam. Magnus sane locus et a vestris, Cotta,

vexatus, ac nimirum vobiscum omne certamen est. Nam vobis, Vellei, minus notum est, quem ad modum quidque dicatur; vestra enim solum legitis, vestra amatis, ceteros causa incognita condemnatis. Velut a te ipso hesterno die dictum est anum fatidicam πρόνοιαν a Stoicis induci, id est providentiam. Quod eo errore dixisti, quia existimas ab iis providentiam fingi quasi quandam deam singularem, quae mundum omnem gubernet et 74 regat; sed id praecise dicitur. Ut, si quis dicit Atheniensium rem publicam consilio regi, desit illud 'Areopagi,' sic, cum dicimus providentia mundum administrari, deesse arbitrato deorum; plene autem et perfecte sic dici existimato: providentiam deorum mundum administrari. Ita salem istum, quo caret vestra natio, in irridendis nobis nolitote consumere, et mehercle, si me audiatis, ne experiamini quidem; non decet, non datum est, non potestis. Nec vero hoc in te unum convenit, moribus domesticis ac nostrorum hominum urbanitate limatum, sed cum in reliquis vestros, tum in eum maxime, qui ista peperit, hominem sine arte, sine litteris, insultantem in omnes, 75 sine acumineullo, sine auctoritate, sine lepore. XXX. Dico igitur providentiam deorum mundum et omnes mundi partes et initio constitutas esse et omni tempore administrari; eamque disputationem tres in partes nostri fere dividunt, quaram prima pars est, quae ducitur ab ea ratione, quae docet esse deos; quo concessos confitudem est eorum consilio mundum administrari. Secunda est autem, quae docet omnes res subjectas esse naturae sentienti, ab eaevum omnia pulcherrime geri; quo constituto sequitur ab animantibus principiis eam esse generatam. Tertius

est locus, qui ducitur ex admiratione rerum caelestium atque terrestrium.

Primum igitur aut negandum est esse deos, quod et Demo-

critus simulacra et Epicurus imagines inducens quodam pacto

negat, aut, qui deos esse concedant, iis fatendum est eos aliquid

agere, idque praeclarum; nihil est autem praecarius mundi

administratione; deorum igitur consilio administratur. Quod

si aliter est, aliquod profecto sit necesse est melius et majore

vi praeditum quam deus, quale id cumque est, sive inanima

natura sive necessitas vi magna incitata haec pulcherrima opera

efficiens, quae videmus. Non est igitur natura deorum prae-

potens neque excellens, siquidem ea subjecta est ei vel neces-

sitati vel naturae, qua caelum, maria, terrae regantur; nihil est

autem praestantium deo; ab eo igitur mundum necesse est regi.

Nulli igitur est naturae oboediens aut subjectus deus, omnem

ergo regit ipse naturam. Etenim si concedimus intellegentes

esse deos, concedimus etiam providentes, et rerum quidem

maximam. Ergo utrum ignorant, quae res maxime sint, quoque eae modo tractandae et tuandae, an vim non habent,

qua tantas res sustineant et gerant? At et ignoratio rerum

aliena naturae deorum est, et sustinendi muneris propter

imbecillitatem difficilis minime cadit in majestatem deorum.

Ex quo effectur id, quod volumus, deorum providentia mundum

administrari. XXXI. Atqui necesse est, cum sint di, si modo

sunt, ut profecto sunt, animantes esse, nec solum animantes,

sed etiam rationis compotes inter seque quasi civili conciliazione

et societate conjunctos, unum mundum ut communem rem

publicam atque urbem aliquam regentes. Sequitur, ut eadem sit

in iis, quae humano in genere, ratio, eadem veritas utroque

sit eademque lex, quae est recti praecceptio pravique depulsio.

Ex quo intellegitur prudentiam quoque et mentem a dis ad

1 ducitur BEM, dicitur ACVHC, dr BO Oxf. cf. above § 18. 8 sit necesse

est melius ABCBEHLO Oxf., sit necesse est melius esse EC, sit necesse est esse melius

(esse superor.) VIMNV Asc., necesse est esse melius Heind. 9 deus B2 edd.,
deos ABABCEV Mus. Oxf. U Heind. Allen. 13 Lact. 1 5 nihil est praestantium
deo: ab eo igitur mundum regi necesse est. Nulli—ipse naturam. 24 atqui

mss generally, atque U, cf. § 89. modo sunt GNC Reg. edd. after Walker,

modo sint mss generally.
hominis pervenisse, ob eamque causam majorum institutis
mens, fides, virtus, concordia consecratae et publice dedicatae
sunt. Quae qui convenit penes deos esse negare, cum eorum
augusta et sancta simulacra veneremur? Quodsi inest in homi-
num genere mens, fides, virtus, concordia, unde haec in terram 5
nisi ab superis defluere potuerunt? Cumque sint in nobis
consilium, ratio, prudentia, necesse est deos haec ipsa habere
majora, nec habere solum, sed etiam his uti in maximis et opti-
mis rebus. Nihil autem nec majus nec melius mundo; necesse
est ergo eum deorum consilio et providentia administrari. 10
Postremo cum satis docuerimus hos esse deos, quorum insignem
vim et illustrem faciem videremus, solem dico et lunam et
vagas stellas et inerrantes et caelum et mundum ipsum et
earum rerum vim, quae inessent in omni mundo cum magno
usu et commoditate generis humani, efficitur omnia regi divina 15
mente atque prudentia. Ac de prima quidem parte satis
dictum est.

81 XXXII. Sequitur, ut doceam omnia subjecta esse naturae,
eaque ab ea pulcherrime geri. Sed quid sit ipsa natura, expli-
candum est ante breviter, quo facilius id, quod docere volumus, 20
intellegi possit. Namque alii naturam esse censent vim quan-
dam sine ratione cientem motus in corporibus necessarios, alii
autem vim participem rationis atque ordinis tamquam via pro-
gredientem declarantemque, quid cujusque rei causa efficiat,
quid sequatur, cujus sollertiam nulla ars, nulla manus, nemo 25
opifex consequi possit imitando; seminis enim vim esse tantam,
ut id, quamquam sit perexiguum, tamen, si inciderit in conci-
pientem comprehendentemque naturam nactumque sit materiam,
qua ali augerique possit, ita fingat et efficiat in suo quiisque
genere, partim ut tantum modo per stirpes alantur suas, partim 30
ut moveri etiam et sentire et appetere possint et ex sese
similia sui gignere. Sunt autem, qui omnia naturae nomine
appellent, ut Epicurus, qui ita dividit: omnium, quae sint,
naturam esse corpora et inane, quaeque his accidant. Sed nos

8 his, iis conj. Mu. 9 autem ABCEV\(\textsuperscript{u}BO,\) autem \textit{est} V\(\textsuperscript{a}+\), autem esse CR Oxf.
Asc. 19 eaque ab ea \textit{mss} generally, eaque R., \textit{ab eaque} Allen (comparing § 75).
geri \textit{mss} generally, \textit{regi} E Asc. 20 \textit{volumus mss, volimus ap.} Priscian \textit{ix 1 8}
(\textit{volim pro ‘velim’ proferabant antiqui &c.}) Allen. 34 his BECEV Mu.
cum dicimus natura constare administrariique mundum, non ita
dicimus, ut glaebam aut fragmentum lapidis aut aliquid ejus
modi nulla cohaerendi natura, sed ut arborem, ut animal, in
quibus nulla temeritas, sed ordo apparat et artis quaedam
5 similitudo.

XXXIII. Quodsi ea, quae a terra stirpibus continentur, arte naturae vivunt et vigent, profecto ipsa terra eadem vi
continentur [arte naturae], quippe quae gravidata seminibus
omnia pariat et fundat ex sese, stirpes amplexa alat et augeat,
ipsaque alatur vicissim a superis externisque naturis. Ejus-
demque exspirationibus et aëris alit et æther et omnia supera.
Ita, si terra natura tenetur et viget, eadem ratio in reliquo
mundo est; stirpes enim terrae inhaerent; animantes autem
aspiratione aëris sustinentur, ipseque aër nobiscum videt, nobis-
15 cum audit, nobiscum sonat; nihil enim eorum sine eo fieri
potest; quin etiam movetur nobiscum; quamcumque enim imus,
quacumque movemur, videtur quasi locum dare et cedere.
Quaeque in medium locum mundi, qui est infimus, et quae a 84
medio in superum quaeque conversione rotunda circum me-
dium feruntur, ea continentem mundi efficiunt unamque natu-
ram. Et cum quattuor genera sint corporum, vicissitudine
eorum mundi continuata natura est. Nam ex terra aqua, ex
aqua oritur aëris, ex ætere ætheris, deinde retrorsum vicissim ex
aethere æris, inde aqua, ex aqua terra infima. Sic naturis his,
25 ex quibus omnia constant, sursus deorsus, ultro citro commean-
tibus mundi partium conjunctio continentur. Quae aut sempi-
terna sit necesse est hoc eodem ornatu, quem videamus, aut certe
perduturna, permanens ad longinquum et immensum paene
tempus. Quorum utrumvis ut sit, sequitur natura mundum
30 administrari. Quae enim classium navigatio aut quae instructio
exercitus aut, rursus ut ea, quae natura efficit, conferamus,
quae procreatio vitis aut arboris, quae porro animantis figura
conformatioque membrorum tantam naturae sollertiae signi-

Sch., tis [ACV] B Or. Ba. 3 nulla cohaerendi MSS, sola coh. Walker, nulla
nisi coh. Heind. 8 arte naturae MSS (by repetition from above), om. Dav.
Or. Ba., in brackets Mu., et arte naturae UL Sch., naturae GH Heind. 17 qua-
cumque movemur BVM Oxfr., qua movemur ACEHIO. 24 his Sch. Mu.,
tis C Or. Ba., his B, is AV, hyss E. 31 ea quae BE, eaque ACV.
ficat, quantam ipse mundus? Aut igitur nihil est, quod sentientie naturae regatur, aut mundum regi confitendum est.

86 Etenim, qui reliquas naturas omnes earumque semina contineat, qui potest ipse non naturae administrari? ut, si qui dentes et pubertatem naturae dicat existere, ipsum autem hominem, cui ea existant, non constare naturae, non intellegat ea, quae efferant aliquid ex sese, perfectiores habere naturas quam ea, quae ex his efferantur. XXXIV. Omnium autem rerum, quae naturae administrantur, seminatur et sator et pares, ut ita dicam, atque educatur et alter est mundus, omniaque sicut membra et partes suas nutricatur et continet. Quodsi mundi partes naturae administrantur, necesse est mundum ipsum naturae administrari, cujus quidem administratio nihil habet in se, quod reprehendi possit; ex iis enim naturis, quae erant, quod effici optimum potuit, effectum est. Doceat ergo aliquid potuisse melius. Sed nemo umquam docebit, et si quis corrigere aliquid voleat, aut deterius faciet aut id, quod fieri non potuerit, desiderabit. Quodsi omnes mundi partes ita constitutae sunt, ut neque ad usum meliores potuerint esse neque ad speciem pulchriores, videamus, utrum ea fortuitane sint an eo statu, quo cohaerere nullo modo potuerint nisi sensu moderante divinaque providentia. Si igitur meliora sunt ea, quae natura, quam illa, quae arte perfecta sunt, nec ars efficit quicquam sine ratione, ne natura quidem rationem express habenda. Qui igitur convenit, signum aut tabulam pictam cum asperexis, scire adhibitam esse artem, cumque procul cursum navigii videris, non dubitate, quin id ratione atque arte moveatur, aut, cum solarium vel discrictum vel ex aqua contemplere, intellegere declarari

horas arte, non casu, mundum autem, qui et has ipsas artes et earum artifices et cuncta compsectur, consilii et rationis esse expertem putare? Quodsi in Scythiam aut in Britanniam sphaeram alquis tulerit hanc, quam nuper familiaris noster efficit Posidonius, cujus singulæ conversiones idem efficiunt in sole et in luna et in quinque stellis errantibus, quod efficitur in caelo singulis diebus et noctibus, quis in illa barbaria dubitet, quin ea sphaera sit perfecta ratione? XXXV. Hi autem dubitant de mundo, ex quo et orientur et fiunt omnia, casune ipse sit effectus aut necessitate aliqua an ratione ac mente divina, et Archimedes arbitratur plus valuisse in imitandis sphaeræ conversionibus quam naturam in efficiendis, praesertim cum multis partibus sint illa perfecta quam haec simulata sollertius. Atqui ille apud Accium pastor, qui navem numquam ante vidisset, ut procul divinum et novum vehiculum Argonautarum e monte conspexit, primo admirans et perterritus hoc modo loquitur:

—tanta moles labitur
fremibunda ex alto ingenti sonitu et spiritu.
præ se undas volvit, vertices vi suscitat,
ruit prolapsa, pelagus respergit, reflat.
ita dum interruptum credas nimbum volvier,
dum quod sublime ventis expulsam rapi
saxum aut procellis, vel globosos turbines
existere ictos undis concursantibus,
nisi quas terrestres pontus strages conciet,
ae forte Triton fuscina evertens specus
subter radices penitus undanti in freto
molem ex profundo saepe ad caelum eruit.

30 Dubitat primo, quae sit ea natura, quam cernit ignotam; idemque, juvenibus visis auditoque nautico cantu, sic, ait

Inciti atque alacres rostris perfremunt delphini.

Item alia multa: Silvani melo consimilem ad aures cantum et auditum refert.

Ergo ut hic primo aspectu inanimum quiddam sensuque vacuum se putat cernere, post autem signis certioribus, quale sit id, de quo dubitaverat, incipit suspicari, sic philosophi debuerunt, si forte eos primus aspectus mundi conturbaverat, postea, cum vidissent motus ejus finitos et aequabiles omniaque ratis ordinibus moderata immutabilique constanti, intellegere inesse aliquem non solum habitatorem in hac caelesti ac divina domo, sed etiam rectorem et moderatorem et tamquam architectum tanti operis tantique muneri. XXXVI. Nunc autem mihi videntur ne suspicari quidem, quanta sit admirabilitas cælestium rerum atque terrae.

Principio enim terra sita in media parte mundi circumfusa undique est hac animalis spirabilique natura, cui nomen est aëris Graecum illud quidem, sed perceptum jam tamen usu a nostris; tritum est enim pro Latino. Hunc rursus amplectitur im- mensus aether, qui constat ex altissimis ignibus. Mutuemur hoc quoque verbum, dicaturque tam 'aether' Latine, quam dicitur aëris, etsi interpretatur Pacuvius:

Hoc, quod memoro, nostri caelum, Graii perhibent aetheram. Quasi vero non Graius hoc dicat. At Latine loquitur. Si quin dem nos non quasi Graece loquentem audiamus. Docet idem alio loco:

Grajugena de istoc aperit ipsa oratio.

Sed ad majora redeamus. Ex aethere igitur innumerabiles flammae siderum existunt, quorum est princeps sol omnia 30


1 perfremunt, perfricant Lachm. l. c. 3 item alia multa MSS, item alto mulcta Bibb. l. c., item illa moles conj. Mu. praef. 5 consimilem ILNOV, consimile XBRM Oxf. 17 principio—est aëris Probus ad Ecl. vi p. 18 Keil. 18 animalis Prob. Oxf., animabili MSS generally. 24 id quod nostri caelum memorant Varro L. L. v 17. 28 Grajugena de istoc edd. after Bothe, Graj. d. isto MSS generally, Gr. d. ista E, Grajugenum ted esse Grotius.
LIB. II CAP. XXXV—XXXVII §§ 89—95

clearissima luce collustrans, multis partibus major atque plior quam terra universa, deinde reliqua sidera magnitudine immensis. Atque hi tanti ignes tamque multi non modo nihil nocent terris rebusque terrestribus, sed ita prosunt, ut, si mota loco sint, conflagrare terras necesse sit a tantis ardoribus moderatione et temperacione sublata.

XXXVII. Hic ego non mirer esse quemquam, qui sibi 93 persuadeat corpora quaedam solida atque individua vi et gravitate ferri, mundumque effici ornatissimum et pulcherrimum ex 10 eorum corporum concursione fortuita? Hoc qui existimet fieri potuisse, non intellego, cur non idem putet, si innumerabiles unius et viginti formae litterarum vel aureae vel qualeslibet aliquo conjicantur, posse ex his in terram excussis annales Ennii, ut deinceps legi possint, effici; quod nescio an ne in 15 uno quidem versus possit tantum valere fortuna. Isti autem quem ad modum asseverant, ex corpusculis non colore, non qualitate aliqua, quam ποιότητα Graeci vocant, non sensu praeditis, sed concurrentibus temere atque casu mundum esse perfectum, vel innumerabiles potius in omni puncto temporis 20 alios nasci, alios interire. Quodsi mundum efficere potest concursus atomorum, cur porticum, cur templum, cur domum, cur urbem non potest? quae sunt minus operosa et multo quidem [faciliora]. Certe ita temere de mundo effutiunt, ut mihi quidem numquam hunc admirabilem caeli ornatum, qui locus est 25 proximus, suspexisse videantur. Praeclare ergo Aristoteles: 'Si 95 essent', inquit, 'qui sub terra semper habitavissent bonis et illustres domiciliis, quae essent ornata signis atque pictoris instructaque rebus iis omnibus, quibus, abundant ii, qui beati putantur, nec tamen exissent 30 umquam supra terram, accepissent autem fama et auditione esse quoddam numen et vim deorum, deinde

aliquo tempore patefactis terrae faucibus ex illis ab-
ditis sedibus exire potuiissent atque evadere in haec
loca, quae nos incolumus: cum repente terram et maria
caelumque vidissent, nubium magnitudinem ventorum-
que vim cognovissent aspexissentque solém ejusque
5 cum magnitudinem pulchritudinemque, tum etiam
efficientiam cognovissent, quod is diem efficeret toto
caelo luce diffusa; cum autem terras nox opacasset,
tum caelum totum cernerent astris distinctum et orna-
tum lunaque luminum varietatem tum crescentis,
10 tum senescentis eorumque omnium ortus et occasus
atque in omni aeternitate ratos immutabilesque cur-
sus; quae cum viderent, profecto et esse deos et haec
96 tanta opera deorum esse arbitrarentur.' XXXVIII. At-
que haec quidem ille. Nos autem tenebras cogitemus tantas,
15 quantae quondam eruptione Aetnaeorum ignium finitimas re-
giones obscuravisse dicuntur, ut per biduum nemo hominem homo
agnosceret, cum autem tertio die sol illuxisset, tum ut revixisse
sibi viderentur. Quodsi hoc idem ex aeternis tenebris contin-
geret, ut subito lucem aspiceremus, quaenam species caeli videretur?
20 Sed assiduitate cotidiana et consuetudine oculorum
assuescant animi neque admirantur neque requirant rationes
earum rerum, quas semper vident, proinde quasi novitas nos
magis quam magnitudo rerum debeat ad exquirendas causas
97 excitare. Quis enim hunc hominem dixerit, qui cum tam certos
caeli motus, tam ratos astrorum ordines tamenque inter se omnia
conexa et apta viderit, neget in his ullam inesse rationem
eaque casu fieri dicat, quae quanto consilio gerantur, nullo
consilio assequi possimus? An, cum machinatione quadam
moveri aliquid videmus, ut sphæram, ut horas, ut alia per-
30 multa, non dubitamus, quin illa opera sint rationis; cum autem
impetum caeli cum admirabili celeritate moveri vertique

2 sedibus exire potuiissent atque evadere Ed., sedibus exire atque evadere
(leaving potuiissent after incolumus) Allen, sedibus evadere then (after incolumus)
atque exire potuiissent mss. 6 cum magn. ABCV, tum magn. E Oxf. UR+,
om. 10. 9 tum caelum CEVG+, cum caelum ABUV. 10 luminum,
placed after omnium below by Allen. 13 quae cum mss Heind. Allen Or.
videamus constantissime confidentem vicissitudines anniversarias cum summa salute et conservatione rerum omnium, dubitamus, quin ea non solum ratione fiant, sed etiam excellenti divinaque ratione? Licet enim jam remota subtilitate dispu-
tandi oculis quodam modo contemplari pulchritudinem rerum earum, quas divina providentia dicimus constitutas.

XXXIX. Ac principio terra universa cernatur, locata in media sede mundi, solida et globosa et undique ipsa in sese nutibus suis conglobata, vestita floribus, herbis, arboribus, frugi-bus, quorum omnium incredibilis multitudo insatiabili varietate distinguitur. Adde hoc fontium gelida perennisates, liquores per lucidos annium, riparum vestitus viridissimos, speluncarum concavas amplitudines, saxorum asperitates, impendientium montium altitudines immensitatesque camporum; adde etiam recon-
ditas auri argentique venas infinitamque vim marmoris. Quae vero et quam varia genera bestiarum vel cicerum vel ferarum! qui volucrum lapsus atque cantus! qui pecudum pastus! quae vita silvestriam! Quid jam de hominum genere dicam? qui quasi cultores terrae constituti non patiuntur eam nec immani-tate beluarum efferari nec stirpium asperitate vastari, quorumque operibus agri, insulae litoraque collucent distincta tectis et urbibus. Quae si, ut animis, sic oculis videre possémus, nemo cunctam intuens terram de divina ratione dubitaret. At vero quanta maris est pulchritudo! quae species universi! quae mul-
titudo et 'varietas insularum! quae amoenitates orarum ac litorum! quot genera quamque disparia partim submersarum, partim fluantium et innantium beluarum, partim ad saxa nativis testis inhaerentium! Ipsum autem mare sic terram appetens litoribus alludit, ut una ex duabus naturis confiata.
Utar, inquit, carminibus Arati eis, quae a te admodum adulescentulo conversa ita me delectant, quia Latina sunt, ut multa ex iis memoria teneam. Ergo, ut oculis assidue videmus, sine ulla mutatione aut varietate

cetera labuntur celeri caelestia motu
cum caeloque simul noctesque diesque feruntur,

quorum contemplatione nullius expleri potest animus naturae constantiam videre cupientis.

Extremusque adeo duplici de cardine vertex
dicitur esse polus.

Hunc circum Arctoe duae feruntur numquam occidentes.

Ex his altera apud Graios Cynosura vocatur,
altera dicitur esse Helice,
cujus quidem clarissimas stellas totis noctibus cernimus,

quas nostri Septem soliti vocitare Trionesa.

Paribusque stellis similiter distinctis eundem caeli verticem lustrat parva Cynosura:

hac fidunt duce nocturna Phoenices in alto.
Sed prior illa magis stellis distincta refuglget
et late prima confestim a nocte videtur,
haec vero parva est, sed nautis usus in hac est;
nam cursu interiore brevi convertitur orbe.

XLII. Et quo sit earum stellarum admirabilior aspectus,

has inter, veluti rapido cum gurgite flumen,
torvus Draco serpit subter superaque revolvens
seesse conficiensque sinus e corpore flexos.

Ejus cum totius sit praeclara species, in primis aspicienda est figura capitis atque ardur oculorum:

huic non una modo caput ornans stella relucet,
verum tempora sunt duplici fulgore notata,

DE NATURE DEORUM.

e trucibusque oculis duo fervida lumina flagrant,
atque uno mentum radianti sidere lucet;
obstipum caput a tereti cervice reflexum;
obtutum in cauda Majoris figere dicas.

108 Et reliquum quidem corpus Draconis totis noctibus cernimus:
hoc caput hic paulum sese subito aequore condit,
ortus ubi atque obitus partim admiscetur in unam.

Id autem caput
atingens defessa velut maerentis imago
vertitur, 10

quam quidem Graeci
Engonasin vocitant, genibus quia nixa feratur.
Hic illa eximio posita est fulgore Corona.

Atque haec quidem a tergo, propter caput autem Anguitenens,
109 quem claro perhibent Ophiuchum lumine Grai.
Hic pressu duplici palmarum continet Anguem,
atque ejus ipse manet religatus corpore torto;
namque virum medium serpens sub pectora cingit.
Ille tamen nitens graviter vestigia ponit
atque oculos urget pedibus pectusque Nepal. 20

Septentronics autem sequitur
Arctophylax, vulgo qui dicitur esse Bootes,
quod quasi temoni adjunctam prae se quatit Arctum.

110 Huic Booti

subter praeordia fixa videtur
stella micans radiis, Arcturus nomine claro,

3 a tereti mss generally, e tereti R, tereti Asc. El. 1 and 2 (reading obstipum-
tereti Lamb. Allen. 6 hoc, quod Hyg. P. A. rv 3. subito aequore condit
Or. Ba. Mu. after Grotius, subitoque recondit mss generally Sch., summo aequore
condit Dav. conj. 7 partim—in unam Klotz, partim—in una mss generally,
partem—in unam edd. after Lamb, parte—in una Hyg. N Heind. Allen. admis-
centur [A]NR Hyg., admiscetur BCEV Oxf. UBE + Mu. 12 engonasin
edd., engonasiam mss generally. 15 lumine Ed., nomine mss and edd. see
Comm. 17 atque ejus mss generally, ejus et by corr. in BT Allen. 23 te-
moni Madv. and edd., temone mss. 24 after Arctum follow in most mss and
edd. dein quae sequuntur, which I have placed below after Virgo, Red. and
Moser’s O have denique sequitur, from which Heind. gets dein quae sequitur.
huic Heind., huic enim mss generally edd., huic etenim El. Med. Asc. MCEV,
huic autem Dav., et huic Bed.
cui subjecta fertur
spicium illustre tenens splendenti corpore Virgo.

XLIII. Dein, quae sequuntur.
Et natos Geminos invises sub caput Arcti.
Subjectus mediae est Cancer, pedibusque tenetur
magnus Leo tremulam quatiens e corpore flammam.

Auriga
sub laeva Geminorum obductus parte feretur.
Adversum caput huic Helicae truculenta tuetur.
At Capra laevum umerum clara obtinet.

[Tum, quae sequuntur:]
verum haec est magni atque illustri praedita signo,
contra Haedi exiguum jaciunt mortalibus ignem.

Cujus sub pedibus
corniger est valido conixus corpore Taurus.

Ejus caput stellis conspersum est frequentibus:
has Graeci stellas Hyadas vocitare suerunt,
[a plundo ; .blank enim est pluere] nostri imperite Suculas, quasi
a subus essent, non ab imbrisbe nominatae. Minorem autem
Septentrionem Cepheus passis palmis a tergo subsequitur:
namque ipsa ad tergum Cynosurae vertitur Arcti.

Hunc antecedit
obscura specie stellarum Cassiepia.
Hanc autem illustri versatur corpore propter

Mu., cujus mss generally, cujus sub pedibus Allen, but see Madv. Fin. ii 48.
2 spicium illustre fercns insigni corpore virgo Serv. ad Geo. i 111. 3 dein
quae sequuntur transposed from beginning of § in place of atque ita—apparet
transposed to § 104. Ed. 5 mediae est edd. after Grotius, media est
(=mediaest) mss, cf. § 159. 9 Helicae edd. after Grotius, Helici or Elicae
mss generally, Helices Allen. 10 clara [ABEG], claro CVBR Oxf. +.
EVHMO +, conexus Dav. Allen. 18 a plundo—pluere mss Sch., in
brackets Or. Ba. Mu. after Gruter and Walker. 20 a tergo C Dav. edd.,
terga mss generally, tergo GR. 21 ipsa Dav. (to agree with the original)
Heind. Or. Ba., ipsum mss generally Sch. Mu., ipsa El. MB. cynosurae edd.,
cynosura mss generally, cynosyre B. 22 antecedet here P recommences (no
doubt the same as Gruter’s Pal. which recommences also).
Andromeda aufugiens aspectum maesta parentis. Huic Equus ille jubam quatiens fulgore micanti summum contingit caput alvo, stellaque jungens una tenet duplexes communi lumine formas aeternum ex astris cupiens conectere nodum. Exin contortis Aries cum cornibus haeret;

quem propter
Pisces, quorum alter paulum praelabitur ante et magis horriferos aquilonis tangitur auris.

112 XLIV. Ad pedes Andromedae Perseus describitur,
quem summa ab regione aquilonis flamina pulsant. Cujus propter laevum genu
Vergilias tenui cum luce videbis.
Inde Fides posita et leviter convexa videtur.
Inde est ales Avis lato sub tegmine caeli.

Capiti autem Equi proxima est Aquarior dextra totusque deinceps Aquarius.

Tum gelidum valido de pectore frigus anhelans corpore semiferro magno Capricornus in orbe;
quem cum perpetuo veštitum lumine Titan,
brumali flectens contorquet tempore currum.

113 Hinc autem aspicitur,

ut sese ostendens emergit Scorpios alte
posteriore trahens flexum vi corporis Arcum;
 quem propter nitens pinnis convolvitur Ales.
 At propter se Aquila ardentis cum corpore portat.

5 Deinde Delphinus,
exinde Orion obliquo corpore nitens.
Quem subsequens
fervidus ille Canis stellarum luce refulget.
Post Lepus subsequitur

10 curriculum numquam defesso corpore sedans.
 At Canis ad caudam serpens prolabitur Argo.
 Hanc Aries tegit et squamoso corpore Pisces
 Fluminis illustri tangentem pectore ripas.
Quem longe serpentem et manantem aspicies
proceraque Vincla videbis
quae retinent Pisces caudarum a parte locata.
Inde Nepae cernes propter fulgentis acumen
Aram, quam flatu permulcit spiritus austri.

Propterque Centaurus

20 cedit equi partis properans subjungere Chelis.
Hic dextram porgens, quadrupes qua vasta tenetur,
tendit et illustrem truculentus caedit ad Aram.
Hic sese infernus e partibus erigit Hydra,
cujus longe corpus est fusum,

25 in medioque sinu fulgens Cratera relucet;
extremam nitens plumato corpore Corvus
rostro tundit; et hic Geminis est ille sub ipsis
Antecanis, Ἐποκόων Graio qui nomine fertur.

115 Haec omnis discriptione siderum atque hic tantus caeli ornatus ex
corporibus huc et illuc casu et temere cursantibus potuisse effici
cuiquam sano videri potest? aut vero aliqua natura mentis et
rationis expers haec efficere potuit? quae non modo ut fierent
ratione eguerunt, sed intellegi qualia sint sine summa ratione
non possunt.

XLV. Nec vero haec solum admirabilia, sed nihil majus,
quam quod ita stabilis est mundus atque ita cohaeret ad per-
manendum, ut nihil ne excogitari quidem possit aptius. Omnes
enim partes ejus undique medium locum capessentes nituntur
aequaliter. Maxime autem corpora inter se juncta permanent,
cum quasi quodam vinculo circumdato colligantur; quod facit
ea natura, quae per omnem mundum omnia mente et ratione
conficiens funditur et ad medium rapiet et convertit extrema.

116 Quocirca, si mundus globosus est ob eamque causam omnes ejus
partes undique aequabiles ipsae per se atque inter se continentur,
contingere idem terrae necesse est, ut omnibus ejus partibus in
medium vergentibus (id autem medium infimum in sphaera est) nihil
interrumpat, quo labefactari possit tanta contentio gravitatis et
ponderum. Eademque ratione mare, cum supra terram sit, medium
tamen terrae locum expetens conglobatur undique

117 aequabiliter neque redundat umquam neque effunditur. Huic
autem continens aer fertur ille quidem levitatem sublimis, sed
tamen in omnes partes se ipse fundit; itaque et mari continuatus et
junctus est et natura fertur ad caelum, cujus tenuitatem et calore
temperatur vitalem et salutarem spiritu praebet animantibus. Quem
complexa summa pars caeli, quae aetheria dicitur, et suum
retinet ardorem tenuem et nulla admixture

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1 tundit B°C (tundit or tondit mss of Phaen. 221), tendit mss generally.
109, 170, 181, 225 Breysig), anticaneam PH, antecanem Bachrens, ante canem mss
generally edd. see Comm. Ἐποκόων, Lat. in mss. 3 discriptio A edd.
5 aliqua A°B by corr. Walker Klotz, aliqua quae [CPV] Oxf. BHO edd. (the
corruption may have arisen from the word being divided so as to end the line with
ait), aliqua quae A¹, aliqua qua E, quae aliqua UMGRV, aliqua quaedam G Heind.
9 majus, magis Walker Heind. 25 sublimis B Dav. Heind. Allen Sch., sub-
limi (s lost before sed) mss generally, sublimine Or. Ba. Mu. see Comm.
concretum et cum aëris extremitate conjungitur. XLVI. In aethere autem astra volvuntur, quae se et nis suum conglobata continet et forma ipsa figuraque sua momenta sustentat; sunt enim rotunda, quibus formis, ut ante dixisse videor, minime 5 noceri potest. Sunt autem stellae natura flammeae; quocirca 118 terrae, maris, aquarumque reliquarum vaporibus aluntur iis, qui a sole ex agris tepefactis et ex aquis excitantur, quibus altæ renovataeque stellae atque omnis aëther refundunt eadem et rursum trahunt indidem, nihil ut fere interest aut admodum 10 paulum, quod astrorum ignis et aetheris flamma consumat. Ex quo eventurum nostri putant id, de quo Panæetium addubitare dicebant, ut ad extremum omnis mundus ignesceret, cum 15 umore consumpto neque terra ali posset nec remearet æár, cujus ortus aqua omni exhausta esse non possset; ita relinqui nihil praeter ignem, ac quo rursum animante ac deo renovatio mundi fieret atque idem ornatus oraretur. Nolo in stellarum 119 ratione multos vobis videri, maximeque earum, quae errare dicuntur; quorum tantum est concensus ex dissimilimis motibus, ut, cum summa Saturni refrigeret, media Martis incendat, his 20 interjecta Jovis illustret et temperet, infraque Martem duae Soli oboediant, ipse Sol mundum omnem sua luce compleat ab eoque Luna illuminata graviditates et partus afferat maturitates quo gignendi. Quae copulatio rerum et quasi consentiens ad mundi incoluntatem coagmuntatio naturae 25 quem non movet, hunc horum nihil umquam reputavisse certo scio.

XLVII. Age, ut a caelestibus rebus ad terrestres veniamus, 120 quid est in his, in quo non naturae ratio intellegentis appareat? Principio eorum, quae gignuntur e terra, stirpes et stabilitatem

dant iis, quae sustinent, et e terra sucum trahunt, quo alantur ea, quae radicibus continentur, obducunturque libro aut cortice trunci, quo sint a frigoribus et caloribus tutiores. Jam vero vites sic claviculis adminicula, tamquam manibus, apprehendunt atque ita se erigunt, ut animantes. Quin etiam a caulisibus, si propter sati sint, ut a pestiferis et nocentibus refugere dicuntur
121 nec eos ulla ex parte contingere. Animalium vero quanta varietas est, quanta ad eam rem vis, ut in suo queaque genere permaneat! Quarum aliae coris tectae sunt, aliae villis vestitae, aliae spinis hirsutae; pluma alia, alia squama videmus ob 10 ductas, alias esse cornibus armatas, alias habere effugia pin- narum. Pastum autem animantibus large et copiose natura eum, qui cuique aptus erat, comparavit. Enumerae possum, ad eum pastum capessendum conficiendumque quae sit in figuris animalium et quam solers subtilisque discrripio partium 15 quamque admirabilis fabrica membrorum. Omnia enim, quae quidem intus inclusa sunt, ita nata atque ita locata sunt, ut nihil eorum supervacaneum sit, nihil ad vitam retinendum non 122 necessarium. Dedit autem eadem natura beluis et sensum et appetitum, ut altero conatum haberent ad naturales pastus 20 capessendos, altero secernerent pestifera a salutaribus. Jam vero alia animalia gradiendo, alia serpentando ad pastum accedunt, alia volando, alia nando, cibumque partim oris hiatus et dentibus ipsis capessunt, partim unguium tenacitate arripiant, partim aduncitate rostorum, alia sugunt, alia carpunt, alia vorant, alia 25 mandunt; atque etiam aliorum ea est humilitas, ut cibum ter- 123 restrem rostris facile contingent; quae autem altiora sunt, ut anseres, ut cygmi, ut grues, ut cameli, adjuvantur proceritate collorum; manus etiam data elephanto est, quia propter magni-
tudinem corporis difficiles aditus habebat ad pastum. XLVIII. At quibus bestiis erat is cibus, ut alii generis bestiis vescerentur, aut vires natura dedit aut celeritatem. Data est quibusdam etiam machinatio quaedam atque sollertia, ut in araneolis aliae quasi rete texunt, ut, si quid inhaeresit, conficiant, aliae autem observant et ex inopinato, si quid incidit, arripiunt idque consumunt. Pina vero (sic enim Graece dicitur) duabus grandibus patula conchis cum parva squilla quasi societatem coit comparandí cibi, itaque, cum pisciculi parvi in concham hiætem innatatervent, tum admonita squillae morsu comprimit conchas.

Sic dissimillimis bestiis communiter cibus quaeritur. In quo admirandum est, congressune aliquo inter se an jam inde ab ortu natura ipsa congregatae sint. Est etiam admiratio non nulla in bestiis aquatilibus iis, quae gignuntur in terra; veluti crocodili fluviatilesque testudines quaedamque serpentes ortae extra aquam, simul ac primum niti possunt, aquam persequuntur. Quin etiam anitum ova gallinis saepe supponimus; e quibus pulli orti primo aluntur ab iis ut a matribus, a quibus exclusi fotique sunt, deinde eas relinquant et effugiant sequentes, cum primum aquam quasi naturalem domum videre potuerunt. Tantam ingenuit animantibus conservandi sui natura custodiam. XLIX. Legi etiam scriptum, esse avem quandam, quae plataele nominaretur; eam sibi cibum quaerere advolantem ad eas aves, quae se in mari mergerent; quae cum emersissent piscemque

elephanto(t) AB¹V¹, data elephantis PV²HEMR + Sch., elephanto data est C, data elephanto B³, d. elephants Oxf. 1 habebat X Oxf. +, habebat H Sch. 2 alii generis bestiis P, aliius generis escis ABC¹ (aliius C²) BV¹ (only reading estis), alius generis bestiis HOL Or. Ba. Sch., alius generis escis V Oxf., alicyus gen. escis E, alius bestiis Mu. 6 observant et ex inopinato, si quid incidit Allen, ut ex inop. obs. et si ëc. ACEB Klotz and (reading opinato for inop.) B, (omitting ut) PV Oxf. LMGV eedd. see Comm. 8 coit conj. Mu. 10 admonita squillae morsu Sch., adm. squilla pina morsu BV (squillae having been corrupted to squilla, pina was added as a correction), adm. squilla pinae morsu Oxf. V² +, adm. squilla pina morsus ACEPB, adm. squillae morsu pinae Heind. n. Mu., adm. a squilla pina morsu Asc. O Or. (bracketing pina) Ba. (omitting pina). 13 natura ipsae eedd. after Walker, natura ipsae A, naturae ipsae (or -e -e) BCEPV + Allen. 15 crocodili C (BC in § 129), crocodili B, crocodili AEV (but AV concordilos § 129), cocodrili PU Oxf. (EPV² in § 129). 17 anitum AV¹, anetum BPT² Oxf. BI, anatum CEUTIMO, cf. Lach. Lucr. p. 16. 18 primo BCEPVG Oxf. HLC, primum [A]BMO Sch. 19 excusi mss, excusì Ba. cf. § 129.
cepissent, usque eo premere earum capita mordicus, dum illae captum amitterent, in quod ipsa invaderet. Eademque haec avis scribitur conchis se solere complere, easque cum stomachi calore conoeerit, evomere atque ita eligere ex iis, quae sunt esculenta. Ranae autem marinae dicuntur obruere sese harenae solere et moveri prope aquam, ad quas quasi ad escam pisces cum accesserint, confici a ranis atque consumi. Miluo est quoddam bellum quasi naturale cum corvo; ergo alter alterius ubicunque nactus est ova fragit. Illud vero ab Aristotele animadversum, a quo pleraque, quis potest non mirari? grueio cum loca calidiora petentes maria transmittant, trianguli efficere formam; ejus autem summo angulo aer ab iis adversus pollitur, deinde sensim† ab utroque latere, tamquam remis, ita pinnis cursus avium levatur. Basis autem trianguli, quem efficiunt grues, ea tamquam a puppi ventis adjuvatur, eaeque in tergo praevolantium colla et capita reponunt; quod quia ipse dux facere non potest, quia non habet, ubi nitatur, revolat, ut ipse quoque quiescat; in ejus locum succedit ex iis, quae acquirunt, eaque vicissitudo in omni cursu conservatur. Multa ejus modi proferre possum, sed genus ipsum videtis. Jam vero illa etiam notiora, quanto se opere custodiant bestiae, ut in pastu circumspectent, ut in cubilibus delitiscant. L Atque illa mirabilia, quod—ea quae nuper [id est paucis ante saeculis] medicorum ingenii reperta sunt—vomitione canes, purgantes autem alvos ibes se Aegyptiae curant. Auditum est pantheras, quae in barbaria venenata carne caperentur, remedium quoddam habere, quo cum

essent usae, non morerentur; capras autem in Creta feras, quae
essent confixae venantis sagittis, herbam quaerere, quae di-
tamnus vocaretur, quam cum gustavissent, sagittas excidere
[dicunt] e corpore. Cervaeque paulo ante partum perpurmant se
5 quadam herbula, quae seselis dicitur. Jam illa cernimus, ut
contra vim et metum suis se armis quaque defendant, cornibus
tauri, apri dentibus, morsu leones; aliae fugas, aliae occultatan-
tione tutantur, atramenti effusione sepiae, torpore torpedines,
multae etiam insectantes odoris intolerabili foeditate depellunt.
10 LI. Ut vero perpetuo mundi esset ornatus, magna adhibita
cura est a providentia deorum, ut semper essent et bestiarum
genera et arborem omniumque rerum, quae a terra stirpibus
continerentur. Quae quidem omnia eam vim seminis habent
in se, ut ex uno plura generentur; idque semen inclusum est in
15 intima parte earum bacarum, quae ex quaque stirpe funduntur,
isdemque seminibus et homines affatim vesentur et terrae
ejusdem generis stirpium renovatione complitur. Quid loquar,
quanta ratio in bestias ad perpetuam conservationem earum
generis appareat? Nam primum aliae mares, aliae feminae
20 sunt, quod perpetuitatis causa machinata natura est, deinde
partes corporis et ad procreandum et ad concipiendum aptissimae,
et in mare et in femina commiscendorum corporum mirae
libidines. Cum autem in locis semen insedit, raptit omnem fere
cibum ad sese coque saeptum fingit animal; quod cum ex utero
25 elapsum excidit, in iis animantium, quae lacte aluntur, omnis
fere cibus matrum lactescrece incipit, eaque, quae paulo ante
nata sunt, sine magistro duce natura mammas appetunt earum-
que ubertate saturantur. Atque ut intellegamus nihil horum
esse fortuitum et haec omnia esse opera providae sollertisque

2 venantis Allen, venenisatis MSS and edd. see Comm. 4 dicunt, in brackets
Or. Ba., om. Bake Cobet. 6 defendant PV%Heind. M., defendat
[ABCE] Ox. BM Or. Ba. Sch. 7 morsu [P]V%Asc., cursu ABCEV^B + ,
incursum morsu Ox. 9 depellunt, repellunt conj. M. (st. retinendum § 121,
and his n. on Fln. l. 34 depellendus). 11 et providentia Bake. 22 mare
rv 6 § 1, Plin. saepius p. Mm.). 24 eoque saeptum fingit MSS (except that V'
Oxf. have septum, Moser's O septum) edd., eoque cohortum fingit Gruter Dav.,
eoque conceptum fingitur Heind., perhaps ex eoque conceptum fingit, see Comm.
25 is [ACFV], his BE Ox. U.

M. C. II.
naturae, quae multiplices fetus procreant, ut sues, ut canes, iis mammarum data est multitudo; quas easdem paucas habent eae bestiae, quae pauc aignunt. Quid dicam, quantus amor bestiarum sit in educandis custodiendisque iis, quae procreaverrunt, usquo ad eum finem, dum possint se ipsa defendere? etsi 5 pisces, ut aiant, ova cum genuerunt, relinquent; facile enim illa aqua et sustinentur et fetum fundunt. LII. Testudines autem et crocodilos dicit, cum in terra partum ediderint, obruere ova, deinde discedere; ita et nascuntur et educantur ipsa per sese. Jam gallinae avesque reliquae et quietum ren quirunt ad pariem locum et cubilia sibi nidosque construunt eosque quam possunt mollissime substernunt, ut quam facillime ova serventur; e quibus pullos cum excuderunt, ita tuentur, ut et pinnis foveant, ne frugore laedantur, et, si est calor a sole, se opponant. Cum autem pulli pinnulis uti possunt, tum vola-15 tus eorum matres prossequuntur, reliqua cura liberantur. Acce-dit etiam ad non ullorum animantium et earum rerum, quas terra gignit, conservationem et salutem hominum etiam sollertia et diligentia. Nam multae et pecudes et stirpes sunt, quae sine procuratione hominum salvae esse non possunt. Magnae etiam opportunitates ad cultum hominum atque abundantiam aliae alii in locis reperiuntur. Aegyptum Nilus irrigat et, cum tota aestate obturat oppletamque tenuit, tum recedit mollitosque et oblimatos agros ad serendum relinquit. Mesopotamiam fertilem efficit Euphrates, in quam quot annis quasi novos agros 25 invehit. Indus vero, qui est omnium fluminum maximus, non aqua solum agros laetificat et mitigat, sed eos etiam conserit; magnam enim vim semen secum frumenti simillimum dicitur deportare. Multaque alia in aliis locis commemorabilia proferre possunt, multos fertiles agros alios aliorum fructuum: LIII. 30 Sed illa quanta benignitas naturae, quod tam multa ad vescen-

dum, tam varia et tam jucunda gignit, neque ea uno tempore anni, ut semper et novitate delectemur et copia! Quam tempestivos autem dedit, quam salutares non modo hominum, sed etiam pecudum generi, iis denique omnibus, quae orientur et terra, ventos Etiasias! quorum flatu nimii temperantur calores; ab isdem etiam maritimis cursus celeres et certi deriguntur. Multa praetereunda sunt [et tamen multa dicuntur]; enumerari 132 enim non possunt fluminum opportunitates, aequus maritimis [multum] accidentes et recedentes, montes vestiti atque silesvstres, salinae ab ora maritimae remotissimae, medicamentorum salutatorum plenissimae terrae, artes denique innumerabiles ad victum et ad vitam necessariae. Jam diei noctisque vicisitudo conservat animantes tribuens aliud agendi tempus, aliud quiescendi. Sic undique omni ratione concluditur mente con-silioque divino omnia in hoc mundo ad salutem omnium conservationemque admirabiliter administrari.

DE NATURA DEORUM.

provisum, si erit tota hominis fabricatio perspecta omnisque
humanae naturae figura atque perfecto. Nam cum tribus
rebus animantium vita teneatur, cibo, potione, spiritu, ad haec
omnia percipienda os est aptissimum, quod adjunctis naribus
spiritu augetur; dentibus autem in ore constrictis manditur
atque ab iis extenuatur et molitur cibus. Eorum adversi [acuti]
morsu dividunt escas, intimi autem conficiunt, qui genuini
vocantur, quae confecto etiam a linguas adjuvari videtur.

Linguam autem ad radices ejus haerens excipit stomachus, quo
primum illabuntur ea, quae accepta sunt ore. Is utraque ex
parte tonsillas attingens palato extremo atque intimo terminatur,
atque agitatio et motibus linguae cum delapsum et quasi
detrusum cibum accipit, depellit. Ipsius autem partes eae,
quaesunt infra quam id, quod devoratur, dilatantur, quae autem
supra, contrahuntur. Sed cum aspera arteria (sic enim medicis
appellatur) ostium habeat adjunctum linguae radicibus
paulo supra, quam ad linguam stomachus adnectitur, eaque ad
pulmones usque pertineat excipiatque animam, eam quae ducta
est spiritu, endemicque a pulmonibus respiret et reddat, tegitur
quodam quasi operculo, quod ob eam causam datum est, ne, si
quid in eam cibi forte incidisset, spiritus impediretur. Sed cum
alvi natura subjecta stomacho, cibi et potionis sit receptaculum,
pulmones autem et cor extrinsecus spiritum addant, in alvo
multa sunt mirabiliter effecta; quae constat fere e nervis, est
autem multiplex et tortuosa arcteque et continet, sive illud

4 quod—spiritus augetur, quo—spiritus hauritur conj. Vaucher. 5
constrictis V Oxf. MCR Vaucher, constructis [ABCE]ELO edd., constitutis HE El.
atque ab iis extenuatur mss generally (his for iis BE+), atque ext. ab iis Oxf.,
atque ext. Ba.; ab his atque ext. Sch. molitur BLO, molitur ACEPVB Oxf. +.
acuti in brackets Ed., acuto UTO, see Comm. 10 sunt ore. Is edd. after
Manut., sunt. Oris mss Allen, sunt, et oris Herrag. 11 terminatur atque
Forch. Kayser, terminatur. Atque is (or his) mss edd. 12 delapsum Ed.,
depressum conj. Heind., depulsum mss and edd. see Comm. 13 itidem depellit
conj. Allen, depellit inferius Heind., perhaps denuo ipse dep. 17 eaque ad
[BEF] Oxf. BO, ea quae ad ACV. 19 est edd. after Klotz, sit mss. 20 ne
si quid in eam [AEF]BEO and (reading quod for quid) BC, nisi quod si in eam
VMV and (reading quid for quod) Oxf. 23 addant Ed., ducunt ABCB Or. Ba.
Mu., adducant PVG Oxf. HLMCV+ Heind. Sch., abducant E. 24 constat
[CP]B, constant ABEV Oxf. +.
aridum est sive umidum, quod receptit, ut id mutari et concoqui possit; eaque tum astringitur, tum relaxatur atque omne, quod acceptit, cogit et confundit, ut facile et calore, quam multum habet, et terendo cibo et præterea spiritu omnia cocta atque 5 confecta in reliquum corpus dividantur. LV. In pulmonibus autem inest raritas quaedam et assimilis spongii mollitudo ad hauriendum spiritum aptissima, qui tum se contrahunt aspirantes, tum in respiratu dilatant, ut frequenter ducatur cibus animalis, quo maxime aluntur animantes. Ex intestinis autem 137 secretus a reliquo cibo sucus is, quo alimur, permaneat ad jecur per quasdam a medio intestino usque ad portas jecoris (sic enim appellantur) ductas et directas vias, quae pertinent ad jecur eique adhaerent. Atque inde aliae alio pertinentes sunt, per quas cadit cibus a jecore dilapsus. Ab eo cibo cum est secreta 15 bilis iisque umores, qui e renibus profunduntur, reliqua se in sanguinum vertunt ad easdemque portas jecoris confluunt, ad quas omnes ejus vias pertinent; per quas lapsus cibus in hoc ipso loco in eam venam, quae cava appellatur, confunditur proque eam ad cor confectus jam coactusque perlabitur, a corde 20 autem in totum corpus distribuitur per venas admodum multas in omnibus partes corporis pertinentes. Quem ad modum autem 138 reliquiae cibi depellantur tum astringentibus se intestinis, tum relaxantibus, haud sane difficile dictu est, sed tamen præteressum est, ne quis habeat injucunditatis oratio. Illa potius 25 explicitur incredibilis fabrica naturae: nam quae spiritu in pulmones anima ducitur, ea calescit primum ipso ab spiritu,
deinde contagione pulmonum, ex eaque pars redditur respirando, pars concipitur cordis parte quadam, quem ventriculum cordis appellant, cui similis alter adjunctus est, in quem sanguis a je Kore per venam illam cavam influit; eoque modo ex his partibus et sanguis per venas in omne corpus diffunditur et spiritus per arterias. Utraeque autem crebrae multaeque toto corpore intactae vim quandam incredibilem artificiosi operis

139 divinique testantur. Quid dicam de ossibus? quae subjecta corpori mirabiles commissuras habent et ad stabilitatem aptas et ad artus finiendos accommodatas et ad motum et ad omnem corporis actionem. Huc adde nervos, a quibus artus continentur, eorumque implicationem corpore toto pertinentem, qui sicut venae et arteriae a corde tractae et profectae in corpus omne

140 ducentur. LVI. Ad hanc providentiam naturae tam diligentem tamque sollemem adjungi multa possunt, e quibus intellegatur, quantae res hominibus a dis quamque eximiae tributae sint. Quo primum eos humo excitatos celos et erectos constituerunt, ut deorum cognitionem caelum intuentes capere possent. Sunt enim ex terra homines, non ut incolae atque habitatores, sed quasi spectatores superarum rerum atque caelestium, quorum spectaculum ad nullum alium genus animantium pertinent. Sensus autem interpretes ac nuntii rerum in capite tamquam in arce mirifice ad usus necessarios et facti et collocati sunt. Nam oculi tamquam speculatores altissimum locum obtinent, ex quo plurima conscientes fungantur suo munere; et aures, cum sonum percipere debeant, qui natura in sublime fertur, recte in altis corpore partibus collocatae sunt; itemque nares et, quod omnis odor ad supera fertur, recte sursum sunt et quod cibi et potionis judicium magnum earum est, non sines causa vicinitatem oris secundae sunt. Jam gustatus, qui sentire eorum,
quibus vescimur, genera deberet, habitat in ea parte oris, qua esculentis et potulentis iter natura patefecit. Tactus autem toto corpore aequabiliter, fusus est, ut omnes ictus omnesque minimos et frigoris et caloris appulsus sentire possimus. Atque ut in aedificis architeci avertunt ab oculis naribusque domino-
rum ea, quae profluentia necessario taetri essent aliquid habitura, sic natura res similes procul amandavit a sensibus. . LVII. Quis vero opifex praeter naturam, qua nihil potest esse calldius, tantam sollertiam persequi potuisset in sensibus? Quae primum oculos membranis tenuissimis vestivit et saepsit; quas primum perlucidas fecit, ut per eas cerni posset, firmas autem, ut con-
tinerentur; sed lubricos oculos fecit et mobiles, ut et declinarent, si quid noceret, et aspectum, quo vellent, facile converterent. Aciesque ipsa, qua cernimus, quae pupula vocatur, ita parva est. ut ea, quae nocere possint, facile vitet; palpebraeque, quae sunt tegmenta oculorum, mollissimae tactu, ne laederent aciem, aptis-
sime factae sunt et ad claudendas pupulas, ne quid incideret, et ad aperiendas; idque providit ut identidem fieri posset cum maxima celeritate. Munitaeque sunt palpebrae tamquam vallo pilorum, quibus et apertis oculis, si quid incideret, repelleretur, et somno convinentibus, cum oculis ad cernendum non egeremus, ut qui tamquam involuti quiescerent. Latent praeterea utiliter et excelsis undique partibus saepiuntur. Primum enim superiöra supercilii obducta sudorem a capite et fronte defluentem repel-
lunt; genae deinde ab inferiore parte tutantur subjectae lenitere eminente; nasusque ita locatus est, ut quasi murus oculis interjectus esse videatur. Auditus autem semper patet; ejus

enim sensu etiam dormientes egemus; a quo cum sonus est acceptus, etiam e somno excitamur. Flexuosum iter habet, ne quid intrare possit, si simplex et rectum pateret; provisum etiam, ut, si qua minima bestiola conaretur irreperere, in sordibus aurium tamquam in visco inhaeresceret. Extra autem eminent quae appellantur aures et tegendi causa factae tumultu dique sensus, et ne adjectae voces laberentur atque errarent, prius quam sensus ab iis pulsus esset. Sed duros et quasi corneolos habent introitus multisque cum flexibus, quod his naturis relatus amplificatur sonus; quocirca et in fidibus testudine resonatur aut cornu, et ex tortuosis locis et inclusis soni referuntur ampliores. Similiter nare, quae semper propter necessarias utilitates patent, contractores habent introitus, ne quid in eas, quod noceat, possit pervadere, umoremque semper habent ad pulverem multa alia depellenda non inutilem. Gustatus praecclare saeptus est; ore enim continetur et ad usum apte et ad incoluminitatis custodiam. Omnisque sensus hominum multo antecellit sensibus bestiarum. LVIII. Primum enim oculi in iis artibus, quarum judicium est oculorum, in pictis, fictis caelatisque formis, in corpore etiam motione atque gestu multa cernunt subtillis; colorum enim et figurarum [tum] venusatem atque ordinem et, ut ita dicam, decetiam oculi judicant, atque etiam alia majora. Nam et virtutes et vita cognoscunt; iratum propitium, laetatem dolentem, fortem ignavum, audacem timidumque [cognoscunt]. Auriumque item est admirabile quod dam artificiosumque judicium, quo judicatur et in vocis et in tibiarum nervorumque cantibus varietas sonorum, intervalla, distinctio et vocis genera permuta, canorum fuscum, leve asperum, grave acutum, flexibile durum, quae hominum solum auribus judicantur. Nariumque item et gustandi [et parte

5 LIX./ Iam vero animum ipsum mentemque hominis, rationem, consilium, prudentiam qui non divina cura perfecta esse perspicit, is his ipsis rebus mihi videtur carere. De quo dum disputarem, tuam mihi dari vellem, Cotta, eloquentiam. Quo enim tu illa modo dices! quanta primum intellegentia, deinde consequentium rerum cum primis conjunctio et comprehensio esset in nobis; ex quo videlicerit, quid ex quibusque rebus efficatur, idque ratione concludimus, singulasque res definimus circunscriptaque complectimur; ex quo scientia intellegitur quam vim habeat qualisque sit, qua ne in deo quidem est res ulla praestantior. Quanta vero illa sunt, quae vos Academici infirmatis et tollitis, quod et sensibus et animo ea, quae extra sunt, percepimus atque comprehendimus! ex quibus collatis inter se et comparatis artes quoque efficimus, partim ad usum vitae, partim ad oblectionem necessarias. Iam vero domina rerumi, ut vos soletis dicere, eloquenti vis, quam est praeclara quamque divina! quae primum efficit, ut et ea, quae ignoramus, discere et ea, quae scimus, alios docere possimus; deinde hac cohortamur, hac persuademus, hac consolamur afflictos, hac deducimus perterritos a timore, hac gestientes comprimimus; hac cupiditates iracundiasque restinguimus, haec nos juris, legum, urbium societate devinxit, haec a vita immani et fera segregavit. Ad usum autem orationis incredibile est, si diligenter atten-

deris, quanta opera machinata natura sit. Primum enim a pul-
monibus arteria usque ad os intimum pertinet, per quam vox
principium a mente ducens percipitur et funditur; deinde in
ore sita lingua est finita dentibus; ea vocem immoderat pro-
fusam fingit et terminat, atque sonos vocis distinctos et pressos
efficit, cum et ad dentes et ad alias partes pellit oris. Itaque
plectri similem linguam nostri solent dicere, chordarum dentes,
nares cornibus iis, qui ad nervos resonant in cantibus.

150 LX. Quam vero aptas quamque multarum artium minstras
manus natura homini dedit! Digitorum enim contractio facilis 10
facilisque prorectio propter molles commissuras et artus nullo
in motu laborat. Itaque ad pingendum, fingendum, scalpen-
dum, ad nervorum eliciendos sonos, ad tibiarum apta manus est
admotione digitorum. Atque haec oblectionis; illa necessita-
tis, cultus dico agrorum exstructionesque tectorum, tegumenta 15
corporum, vel texta vel sutae, omnemque fabricam aeris et ferri;
ex quo intellegitur, ad inventa animo, percepta sensibus adhibitis
opificum manibus, omnia nos consecutos, ut tecti, ut vestiti, ut
salvi esse possemus, urbes, muros, domicilia, delubra haberemus.

151 Jam vero operibus hominum, id est manibus, cibi etiam varietas 20
inventur et copia. Nam et agri multa efferunt manu quaesita,
qua vel statim consumantur vel mandentur condita vetustati,
et praeterea vescimur bestiis et terrenis et aquatilibus et volan-
tibus partim capiendo, partim alendo. Efficientis etiam domitu
noster quadrupedum vtectiones, quorum celeritas atque vis nobis 25
ipsis affert vim et celeritatem. Nos onera quibusdam bestii,
nos juga imponimus, nos elephantorum acutissimis sensibus,
nos sagacitate canum ad utilitatem nostram abutimur, nos e
terae cavernis ferrum elicimus, rem ad colendos agros neces-
sariam, nos aeris, argenti, auri venas penitus abditas
invenimus et ad usum aptas et ad ornatum decoras, arborum
autem connectione omnique materia et culta et silvestri partim
ad calciendium corpus igni adhibito et ad mitigandum cibum
utimur, partim ad aedificandum, ut tectis saepi frigora
caloresque pellamus. Magnos vero usus afferit ad navigia fa-
cienda, quorum cursibus suppediantur omnes undique ad
vitam copiae; quasque res violentissimas natura genuit, earum
moderationem nos soli habemus, maris atque ventorum, propter
nauticarum rerum scientiam, plurimisque maritimis rebus
fruimur atque utimur. Terrenorum item commodorum omnis
est in homine dominatus. Nos campis, nos montibus fruimur,
nostris sunt annes, nostris lacus, nos fruges serimus, nos arbores,
nos aquarum inductionibus terris fecunditatem damus, nos
flumina arcemus, derigimus, avertimus, nostris denique manibus
in rerum natura quasi alteram naturam efficere conamur.

LXI. Quid vero? hominum ratio non in caelum usque
penetravit? Soli enim ex animantibus nos astrorum ortus,
obitus cursusque cognovimus; ab hominum genere finitus est
dies, mensis, annus, deflectiones solis et lunae cognitae praedic-
taque in omne posterum tempus, quae, quantae, quando futurae
sint. Quae contuens animus accedit ad cognitionem deorum, e
qua oritur pietas, cui conjuncta justitia est reliquaque virtutes,
e quibus vita beata existit par et similis deorum, nulla alia re
nisi immortalitate, quae nihil ad bene vivendum pertinet, sedens
caelestibus. Quibus rebus expositis satis docuisse videor; homi-
nis natura quanto omnes anteiret animantes. Ex quo debet

2 elicimus mss, eligimus Mn. see Comm. 5 connectione V² Oxf. M Herv.
Lamb., confectione BLOV+ , confectionem ACEPV'B +, confectionem H. 6 cal-
ciciendum ACPV, cal faciendum B, cal faciendum Oxf. Herv., caleficiendum
EHVUT + Sch., caleficiendum BC. 7 ad aedificandum [B]o, et ad aedif.
Sch. (cf. § 131). 22 praeditaque Asc. ILOV, praeditaque X Oxf. BE +.
24 accedit ad cognitionem Or. Ba. Mn. after Dav., accedit ad cogn. Pithoens,
accipit ad cogn. ABCEPV'VUB, accipit cogn. A², accipit cogn. LO, accipit ab-
tis cogn. V³, accipit ab his cogn. Oxf. MBV Asc. Sch., accipit ab his cogn. Red. ON.
intellegi nec figuram situmque membrorum nec ingenii mentisque vim talem effici potuisse fortuna.

154 Restat, ut doceam, atque aliquando perorem, omnia, quae sint in hoc mundo, quibus utantur homines, hominum causa facta esse et parata. LXII. Principio ipse mundus deorum hominumque causa factus est, quaeque in eo sunt, ea parata ad fructum hominum et inventa sunt. Est enim mundus quasi communis deorum atque hominum domus aut urbs utrorumque. Soli enim ratione utentes jure ac lege vivunt. Ut igitur Athenas et Lacedaemonem Atheniensium Lacedaemoniorumque causa putandum est conditas esse, omniaque, quae sint in his urbibus, eorum populorum recte esse dicuntur, sic, quaecumque sunt in omni mundo, deorum atque hominum putanda sunt.

155 Jam vero circumitus solis et lunae reliquorumque siderum, quamquam etiam ad mundi cohaerentiam pertinent, tamen et spectaculum hominibus praebent; nulla est enim insatiabilior species, nulla pulchrior et ad rationem sollectiamque praestantior; eorum enim cursus dimetati maturitates temporum et varietates mutationesque cognovimus; quae si hominibus solis nota sunt, hominum facta esse causa judicandum est.

156 Terra vero feta frugibus et vario leguminum genere, quae cum maxima largitate fundit, ea ferarumne an hominum causa gignere videtur? Quid de vitibus olivetisque dicam? quorum uberrimi laetissimique fructus nihil omnino ad bestias pertinent. Neque enim serendi neque colendi nec tempestive demiendae percipiasque fructus neque condendi ac reponendiulla pecudum scientia est, earumque omnium rerum hominum est et usus et cura. LXIII. Ut fides igitur et tibias eorum causa factas dicendum est, qui illis uti possent, sic ea, quae dixi, iis solis consitutendum est esse parata, qui utuntur, nec, 30

6 quaeque—inventae sunt in brackets Heind. Or. Ba. Sch. see Comm.
20 hominum facta esse causas [X]BG Oxf., h. c. f. c. UTN Red. Heind. Sch., h. c. f. c. BY, h. c. e. f. C. 22 after cum maxima follow in ACV Oxf. §§ 16—86 etenim si di—quae efferant aliquid, in BE §§ 15—86 tam multarum—aliquid, in P §§ 16—88 etenim—Dianam autem, see on § 16. There is a gap in P from this point to § 162. 29 possunt [ABCEPv1]BE, possunt V2 Oxf. UV Heind. Allen, possunt G, potuerunt LOT. 30 dixi iis CVGB+, dixi is BA1V1, dixi his A2EH, diximus Oxf. U Heind. Allen.
si quae bestiae furantur aliquid ex iis aut rapiunt, illarum quoque causa ea nata esse dicemus. Neque enim homines murum aut formicarum causae frumentum condunt, sed conjugum et liberorum et familiarum suarum. Itaque bestiae furtim, ut dixi, fruuntur, domini palam et libere. Hominum igitur causa eas rerum copias comparatas fatendum est, nisi forte tanta ubertas et varietas pomorum eorumque jucundus non gustatus solum, sed odoratus etiam et aspectus dubitationem affert, quin hominibus solis ea natura donaverit. Tam-tumque abest, ut haec bestiarum etiam causa parata sint, ut ipsas bestias hominum gratia generatas esse videamus. Quid enim oves aliud afferunt, nisi ut earum villis confectis atque contextis homines vestiantur? quae quidem neque ali neque sustentari neque ullum fructum edere ex se sine cultu hominum et curatione potuissent. Canum vero tam fida custodia tamque amans dominorum adulatio tantumque odium in externos et tam incredibilis ad investigandum sagacitas narium, tanta alacritas in venando, quid significat aliud nisi se ad hominum commoditates esse generatos? Quid de bubus loquar? quorum ipsa terga declarant non esse se ad onus accipiendum figurata; cervices autem natae ad jugum, tum vires umerorum et latitudines ad aratra extrahenda. Quibus cum terrae subigerentur fissionem glebarum, ab illo aureo genere, ut poetae loquentur, vis nulla umquam afferebatur.

Tanta putabatur utilitas percipi e bubus, ut eorum visceribus vesci scelus haberetur. (LXIV. Longum est mulorum perseveri utilitates et asinorum, quae certe ad hominum usum paratae


161 Jam vero immanes et feras belugas nanciscimur venando, ut et vescamur iis et exerceamur in venando ad similitudinem bellicae disciplinae et utamur domitis et concocefactis, ut elephantis, multaque ex earum corporibus remedia morbis et vulneribus eliciamus, sicut ex quibusdam stirpibus et herbis, quorum utilitates longinquæ temporis usu et periclitatione perceptimus. Totam licet animis tamquam oculis lustrare terram mariaque omnia; cernes jam spatia frugiæra atque immensa camporum vestitusque densissimos montium, pecudum pastus, tum incredibili cursus maritimos celeritate. Nec vero supra terram, sed etiam in intimis ejus tenebris plurimarum rerum latet utilitas, quae ad usum hominum orta ab hominibus solis inventur.

LXV. Illud vero, quod uterque vestrum arripiet fortasse ad reprehendendum, Cotta, quia Carneades liberent in Stoicos invehabatur, Velleius, quia nihil tam irrident Epicurus quam praelectionem rerum futurarum, mihi videtur vel maxime confirmare deorum providentia consuli rebus humanis. Est enim profecto divinatio, quae multis locis, rebus, temporibus apparat, cum [in] privatis tum maxime publicis. Multa cernunt haruspices, multa augures provident, multa oraclis declarantur, multa vaticinationibus, multa somniis, multa portentis, quibus cognitis multae saepe res ex hominem sententia atque utilitatem partae, multa

etiam pericula depulsa sunt. Haec igitur, sive vis sive ars sive natura, ad scientiam rerum futurarum homini profecto est nec alii cuiquam a dis immortalibus data. Quae si singula vos forte non movent, universal certe tamen inter se conexa atque con-
5 juncta movere debebant.

Nec vero universo generi hominum solum, sed etiam singulis 164
a dis immortalibus consulì et provideri solet. Licet enim con-
trahere universitatem generis humani eamque gradatim ad pau-
ciores, postremo deducere ad singulos. LXVI. Nam si omnibus
10 hominibus, qui ubique sunt quacumque in ora ac parte terrarum
ab hujusce terrae, quam nos incomimus, continuatione distantium,
deos consulere censemus ob eas causas, quas ante diximus, his
quoque hominibus consulunt, qui ha? nobiscum terras ab oriente
ad occidentem colunt. Sin autem his consulunt, qui quasi mag-
15 nam quandam insulam incomunt, quam nos orbem terrae vocamus,
etiam illis consulunt, qui partes ejus insulae tenent, Europam,
Asiam, Africam. Ergo et earum partes diligunt, ut Romam,
Athenas, Spartam, Rhodom, et earum urbium separatim ab
universis singulos diligunt, ut Pyrrha bello Curium, Fabriciun,
Coruncanium, primo Punico Calatinum, Duellium, Metellum,
Lutatium, secundo Maximum, Marcellum, Africannum, post hos
Paulum, Gracchum, Catonem, patrumve memoria Scipionem,
Laelium; multosque praeterea et nostra civitas et Graecia tulit
singulares viros, quorum neminem nisi juvante deo talem fuisse
25 credendum est. Quae ratio poétas maximeque Homerus im-
pulit, ut principibus heroum, Ulixi, Diomedi, Agamemnoni,
Achilli, certos deos discriminum et periculorum comites adjun-
geret. Praeterea ipsorum deorum saepe praeentiae, quales
supra commemoravi, declarant ab iis et civitatibus et singulis
30 hominibus consulì ; quod quidem intellegitur etiam significa-
tionibus rerum futurarum, quae tum dormientibus, tum vigilan-

8 alii cuiquam HNEG Red., alicuiquam XB+, ab alio cuiquam V3, ab alio
tlicui quam Oxf. MV, ab aliquo quam ILOT. 5 debebant ABEVGHT, de-
beant PLO, debebant B2CV7+—Allen Sch. Mu. see Comm. 12 ob eas odd., ob
has MSS generally. 14 sin autem, si autem Bouh. Sch. in App. but see Mu.
Adn. Crit. p. 12. his consulunt Sch. Ba. Mu., iis consulunt Or, Klotz, con-
sulunt X, cons. iis NC Red. Asc., cons. illis UR+, illis cons. GH. 19 [dili-
gunt] Ba.
tibus portenduntur. Multa praeterea ostentis, multa extis admonemur multisque rebus aliis, quas diurnus usus ita notavit, ut artem divinationis efficeret. Nemo igitur vir magnus sine aliquo afflatu divino unquam fuit. Magnis autem viris prosperae semper omnes res, siquidem satis a nostris et a principe philosophiae Socrate dictum est de ubertatibus virtutis et copiis. Nec vero id ita refellendum est, ut, si segetibus aut vinetis cujusiam tempestas nocuerit, aut si quid e vitae commodis casus abstulerit, eum, cui quid horum acciderit, aut invisis num deo aut neglectum a deo judicemus. Magna di curant, parva neglegunt.

LXVII. Haec mihi fere in mentem veniebant, quae dicenda putarem de natura deorum. Tu autem, Cotta, si me audias, eandem causam agas teque et principem civem et pontificem esse cogites et, quoniam in utramque partem vobis licet dis-putare, hanc potius sumas eamque faculatem disserendi, quam tibi a rhetorico exercitationibus acceptam amplificavit Academia, potius huc conferas. Mala enim et impia consuetudo est contra deos disputandi, sive ex animo id fit sive simulata.

1 exitis NR Red. Lamb. edd., in exitis X Oxf. UTHMO+.
4 magnis—copitis comes at the end of the § (after parva neglegunt) in all mss and edd. see Comm.
5 prosperae semper ACPBHO, prospere semper BEV1G, prospere eveniunt semper V1 Oxf. UCBV, prospere semper eveniunt N Red. Sch.
7 ita refellendum mss Allen Klotz, id ita refellit. edd. after Heind., id ita premendum conj. Or. see Comm.
14 agas, ages Sch. (by mistake?).
15 nobis [X]BLO, quovis V1 Oxf. U+, nobis H.
17 acceptam, om. Or. Ba. (by mistake).
18 et impia CEV1, et ampia V1, etiam pia ABP.
NOTES.

BOOK II.

STOIC ARGUMENT.

Division of the subject: the Divine existence (A); the Divine nature (B); Providential government of the world (C); Providential care for man (D). §§ 1—3.

Ch. i § 1. ne ego incautus: cf. i 51 n., and for omission of substantive verb § 20, § 68, § 84, and final Index under 'ellipsis'.

et eodem rhetore: idem is added to give prominence to the union of different attributes (often apparently incongruous, as in i 30,) in the same person. Rhetor means properly a teacher of rhetoric as in Plin. Ep. iv 11 (cited by Sch.) eo decedit ut rhetor ex oratore fieret; then, as here and Brutus § 265, one trained in all the rules of speaking. Cicero often speaks of the importance of the study of philosophy, especially the Academic philosophy, to the orator, see below § 168, Orator 12, Fat. 3, and cf. Quintilian xii 2 § 23 M. Tullius non tantum se debere scholis rhetorum quantum Academiae spatii frequenter ipse testatur. Oratory without philosophy is as defective on the one side, as philosophy without oratory on the other; docto oratori palma danda est, Orat. III 142, Tusc. i 7. We are told elsewhere that Cotta devoted himself to the Academy with a view to oratory, see Orat. III 145 and vol. i pref. p. xl.

rhetorem: Martial (ii 64 1 and 5) uses the Greek forms rhetora and rhetorēs, see Roby § 480 and Varro L. L. x 70.

neque enim fumine—siccatas: 'I am not disconcerted either by (i.e. at having to answer) a stream of empty verbiage or by exactness of thought accompanied by jejuneness of style'. We have here the faulty extremes of two styles which are distinguished in Brutus 89, cum duas summæ sint in oratore laudes, una subtiliter disputandi ad docendum, altera graviter agendi ad animos audientium permovendos. Elsewhere C. distinguishes three styles, having for their respective aims to instruct, to influence, to delight. Cf. Mayor's Quintil. x 1 § 44 n. pp. 99, 100, 102, 103, § 46 p. 106. Sub-
tilitas, clear definite statement, belongs to the 1st: it is described at length in Orator 76 foll., cf. also ibid. 69, Brut. 185, Opt. gen. dic. 1 3, and Ernesti Lex. Techn. Lat. s. v. Subtilias. The word siccus is sometimes used by way of praise, as in Brut. 202, where it is said of our Cotta, nihil erat in ejus oratone nisi sincerum, nihil nisi siccum et sanum; so Opt. gen. dic. 8 sicci et sani, and essociatum Brut. 291. In such passages the literal force corresponds to our word 'wiry', as opposed to flabby and fleshy, see Cato 34 with Reid's n. But it is also used in a bad sense and opposed to sucus, as in Brut. 283 foll. where we read of a speaker who, in aiming at too great subtily, verum sanguinem desperebat: such a style is characterized by sicitas, jejunitas and inopia. Similarly in the treatise ad Herenn. iv 9 we find arescant siccitate. In opposition to this, C. says (Orator 76) that the subtilis orator, eti non plurimi sanguinis est, habeat tamen sucum aliquem oportet. flumen: cf. Orator 53 flumen aliis verborum volubilitasque cordi est; distincta alios et interpuncta intervalia...delectant. Quid potest esse tam diversum? tamen est in utroque alicquid excellens; also Orat. ii 62, 188, Acad. ii 19, and N. D. ii 20.

corona: 'an audience', cf. Ov. Met. xiii 1 consedere duces, et vulgi stante corona surgit Ajax, Pro Mil. 1 non enim corona consessus vester cinctus est, ut solet, Brut. 192 in etsi etiam causis, in quibus omnis res nobis cum judicibus est, non cum populo, tamen si a corona reticis sim, non queam dicere, Seneca De Ira i 12 relicto judice ad coronam venis 'the galleries'. On the adversative asyndeton see Index.

ad ista alias: for the omission of the verb (dicam) cf. i 17 hoc alias (tractenum), § 19 ad omnia (dicere), § 28 eadem (dicit), i 2 tum Balbus (dicit) and Index under 'ellipsis'. [Madv. on Fin. i 9. Swainson.]

§ 2. Balbus: it is rather curious that, while C. Aurelius Cotta is only called by his cognomen, Q. Lucilius Balbus is called indifferently either by nomen or cognomen, e.g. B. in i 16, 22, 50, iii 2, L. in ii 20, 25, 47, iii 3.

mallem audire—dum—inducat: 'for my part I should have preferred to hear' that same Cotta using the eloquence, with which he removed the false Gods, to bring in the true'. This, which is Mr Roby's translation, seems to me to give a better force to eundem than I had done in my own previous version 'I too should have agreed with you in preferring to hear Cotta, rather than speak myself, provided he is as eloquent in introducing the true worship, as he was in overthrowing the false' (where the use of dum would resemble that in Rosc. Am. 119 ipse sese in cruciatum dari cuiperet, dum de patris morte quaeretur). I now take the sentence to be equivalent to mallem audire eundem inducentem qui sustulerat, cf. below § 24 animadversum est cum cor palpitaret, Suet. Dom. 4 auditus est dum ab eo quaerit, and n. on i 58 video audisse cum te togetatis anteferret. Draeger (§ 597 n) cites it as an example of dum, 'whilst', followed by the Subj., and compares pro Plancio § 95 dixisti, dum Plancii in me meritum estollerem, me arcum facere e cloaca; pro Mur. 48 populum Romanum in eum metum adduxisti, ut pertimesceret ne consul Catilina
BOOK II CH. I § 2.

fieret, dum tu accusationem comparares; cf. also Orat. i 187 hoc video, dum breviter voluerim dicere, dictum esse paulo obscurius. For the discrepancy of tenses Draeger (§ 152. 2) cites Fam. xiii 6 a. 4 quae quantum valeant, vellem expertus esse, sed tamem suspicior, N. D. iii 10 primum fuit, cum caelum suspexissemus, statim nos intellegere esse aliquod numen quo haec regantur; cf. also Fin. i 25 si concederetur, etiam si ad corpus nihil referatur, ista per se esse jucunda (where see Madv.), Tusc. i 60 illud, si ullo alia de re obscura affirmare possem, sive anima sive ignis sit animus, cum jurarem esse divinum. The difference of tense in the case before us is facilitated by the peculiar attraction which dum has for the Present, see Roby § 1458 and below § 49 dum judicat non suspexit. There is a similar discrepancy in ii 147 according to the mss, dum disputarem—velim, but see n. there. As a rule the tense of the subordinate verb is attracted to that of the governing verb, as in i 45 deorum natura coloretur, cum aeterna esset (for sit), ii 3 te audire vellem cum ipse dixisse (for dixerim), § 32 quoniam esset particeps (for sit), § 49 si didicisset, his bina quo esset (for sint), § 67 cum vim haberent (for habeant) maximam prima et extrema, principem Janum esse voluerunt, § 118 ex quo eventurum putant id, de quo Panaetium addubitare dicebant, ut omnis mundus ignosceret (for ignoscat), iii 9 cur contuerere altero oculo causa non esset, cum idem obtusus esset (for sit) amborum, § 70 sic soletis occurrere, non idcirco non optime nobis a dis procedim, quod multi eorum beneficio perverse utentur (for utantur).

et philosophi—et Cottaes: cf. § 168 and iii 5. On the pontifices see Harusp. Resp. 12 foll.

errantem et vagam: 'hesitating and unsettled,' see Acad. ii 66 ego sum magnus opinator...so fit ut errem et vager latius, and note on N. D. i 2.

oblitus es quid dixerim: the interrogative pronoun is commonly used after obliviocor, as in Brut. 218 obliscicebatur quid posuisset; it is here explained by the following Infinitive, as in Fin. ii 10 (cited by Allen) quid paulo ante, inquit, dixerim, nombre memini, cum omnis dolor retractus esset, variari, non augeri voluistatem? The ref. is to i 57, 60.

§ 3. haberem...quod liqueret: cf. mn. on i 29, 117.

geram tibi morem: this means literally 'to show a certain behaviour for the sake of another', and hence to humour or oblige another. The compounds morigerus and morigeror are common in the comic poets, the latter is also found in Orator 159. The contrary to this is ponere or imponere morem 'to impose a behaviour', to lay down the law for another.

[detracta oratio est: that this is the usual order is shown by Madv. Fin. v 86. Swainson.]

omnino: 'to take a general view'. So in Lael. 78 omnino omnium horum vitiorum atque incommodorum una cautio est, ut ne nimir sicito diligere incipient, Off. i 66 omnino fortis animus et magnus duabus rebus maxime cernitur.

istam: the matter you have been discussing.

5—2
primum docent—humanis: on this division see the Introduction on the sources of this book, and Schwenke, who shows (p. 130) that the questions περὶ θεῶν and περὶ προοιμίας were usually treated separately, but that they were combined by Poseidonius in his treatise π. θεῶν.

sumamus: not, as in 1 89, ‘assume’, but ‘take into consideration’. Sch. quotes Orat. π 366 quis Antonius permissit, ut et partes faceret: et, utram vellet, prior ipse sumeret.

minime vero: ‘no! no!’ For this emphatic force see 1 86.

et otiosi—anteponendae: Moser cites Plato Phaedr. 227 b πεινόσει οἳ σοι σχολῆς ἄκοιτεν. Τί δέ; οὐκ ἂν οἴει με, κατὰ Πίθαρον (Isthm. 1 1) καὶ διαφορικά υπότερον πράγμα ποιήσατε, τό σή τε καὶ Λυσίου διατριβὴν ἀκούσας; cf. also Leg. x 887 b, and Cic. Divin. i 10 de quibus quid ipse sentiam, si placent, exponam; ita tamen, si vacas animo neque habeas aliquid, quod hunc sermoni praeventendum putas. Ego vero, inquam, philosophiae semper vaco.


a. From the observation of the heavens § 4, b. from the general consent of mankind § 5, c. from various recorded appearances of the Gods § 6, d. from the fact of divination §§ 7—12.

a. That ‘the heavens declare the glory of God’ is more fully shown in §§ 15—17, 39—44, 90—97, 102—119, 153—155. For the same argument cf. Plato Leg. x pp. 896—899, and the well-known words of Kant: ‘Two things are there which, the oftener and the more steadfastly we consider them, fill the mind with an ever new, an ever rising admiration and reverence;—the Starry Heaven above, the Moral Law within....The one departs from the place I occupy in the outer world of sense; expands, beyond the bounds of imagination, the connexion of my body with worlds rising beyond worlds, and systems blending into systems; and pretend it also into the illimitable times of their periodic movement—to its commencement and perpetuity’. (Krit. d. Prakt. Vern. Beschluss, translated by Hamilton Metaphysics i p. 39.)

Ch. π § 4. quid enim—regantur: paraphrased by Minucius Oct. 17.

cum caelum suspeximus: cf. Harusp. resp. 9 Quis tam vocors, qui aut, cum suspexerit in caelum, deos esse non sentiat, et ea, quae tanta mente fiunt, ut vix quisquam arte ulla ordinem rerum ac necessitudinem persequar, casu fieri putet; aut, cum deos esse intellexerit, non intellegat eorum numine hoc tantum imperium esse natum et auctum et retentum? Lactant. i 2 nemo est tam rudis, tam fieris moribus, quin oculos suos in caelum tollens, tametie nesciat cujus dei providentia regatur hoc omne quod cernitur, non aliquam tamen esse intellegat; Minuc. 18 audio vulgus: cum ad caelum manus tendunt, nihil aliud quam ‘Deum’ dicunt, et ‘Deus magnus est’; ‘Deus verus est’; Tertull. Apol. 17.
quo regantur: Abl. of Cause, where we might have expected the Abl. of Agent with ad, but numen is rather abstract than personal ‘an influence of an all-perfect Reason’, as in the parallel passage N. D. III 10, and generally in Cic., cf. Harusp. Resp. 9 cited above, ib. 19 deorum numine omnia regi, N. D. II § 16 id quo illa conficiuntur, § 83 terra natura tenetur, § 85 natura administrari, n. regatut.

qui potuisset: see i 57 n.


aspice—Jovem: cited again in § 65 and III 10 and 40. We learn from Festus p. 306 M (sublimem est in altitudinem sublatum ut Ennius in Thyeste, where Vahlen, Ribbeck, &c. would read sublimem) that the line is from the Thyeste, apparently the latest play of Ennius (Brut. 78), from which C. quotes also in Tusc. i 107, III 26. There was a play of Atellus on the same subject (the Areus) by which quotation is given below III 68. hoc sublime candens: ‘this dazzling vault of heaven’. For the use of the pronoun hoc, pointing to the sky, cf. the fragment below § 65, hoc quod lucet, quicquid est; Ennius Telamon i. 367 V. hoc lumen candidum claret mihi; Pacuvius (Ribb. 86) hoc vide circum supragne quod complexu continet terram (preceding the quotation in N. D. II 91); Plaut. Mil. Gl. 217 lucet hoc; Amphitry. 543; Curcul. 182; Terent. Haut. 410; so caelum hoc often in Cic. e.g. Tusc. 1 43, 1 Cat. 15 potestae haec lux aut hujus caeli spiritus esse jacundus? candens and candidus are favourite words with Ennius, see Vahlen’s Ind. On the form sublimem read here by most of the later edd, see L. and S. s. v. It was introduced by Vahlen and Ribbeck, in their collections of the fragments, from the Benedictine MS of Apuleius De Mundo 33, where the line occurs. Ritschl reads it with an adverbial force in many passages of Plautus, see his paper in Rhein. Mus. 1880 p. 556 (Opusc. ii p. 263 foll.). Whatever Ennius may have written, it seems to me probable that C. here used the ordinary form sublimem, as in the translation from Euripides, probably made by himself, in § 65 vide sublimem fuisse.

quam: for the attraction of the Pron. to the gender of the predicative noun, see Roby § 1068. invocat: the lexicons give this the force of vocant, and cite supposed parallels from Curtius. I do not see why it may not be translated ‘call upon’ in all cases, the Acc. being treated as oblique complement after factitive verb, like te saluto imperatorem or ascisco augures in § 7.

illum vero et Jovem: ‘Aye! and not only invoke him as Jupiter, but also as sovereign of the world’. [Cf. Liv. i 12 hic ego tibi templum Statori Jovi voco, ‘I vow a temple to thee by the name of Jove the Stayer’. R.] Only one other instance of dominator is cited (Lact. II 14 2) but dominatrix occurs De Invent. i 2. [Add for the former Sen. H. F. 1181, Thy. 1078, Med. 4, Phaedr. 1039, 1159, Sil. xiv 79, Wilmanns Insgr. Lat. 590 15, Serv. Aen. III 73 fin., Aug. Serm. 290 2, Tert. adv. Hermog. 9, Hier. in eccl. 4 col. 425, in Malach. 3. 1. J. E. B. M.] I do not agree with Sch. in con-
sidering that there is an allusion to the derivation of *Jovem* from *juvo*, as though *Jovem* here meant a helper.


**paterem divumque hominumque**: *Enn. Ann. vii* fr. 2 V., quoted again below § 64—*μαρτυρίων ὑπὲρ τὸ ἄλος τοι Ἰομ. II. iv 360, Hes. Theog. 47, Diod. Sic. i 12. *Virgil’s divum pater atque hominum rex* is also borrowed from Ennius. The name *Ju-pter*, *Zeus* *μαρτυρίων*, corresponding to the Odin All-father of the north, is of course inconsistent with the genealogical details of later mythology, see *Pfatter R. M.*. p. 1643 foll., *Welcker Gr. Gött. i* 179 foll. In Homer we find *Zeus* styled *μαρτυρίων* by *Thetis* (II. i 503), *Poseidon* (vii 446), *Hera* (xix 121); and in *Od. xx* 202 he is appealed to as the father of men, *εἰρήν δὲ γείως αὐτός*. It was from the hymn of *Cleanthes*, expressing this belief in the fatherhood of *Zeus*, that the Apostle *Paul* took the text of his address to the *Athenians*, τοὺς γὰρ καὶ γένος ἔσμεν. On the other hand the common origin of *Zeus* and *men* from *earth* is asserted in *Hesiod Op. 108* ὡς οὐδὲν γεγάλαγε θελὶ θνητοὶ τῇ ἀνδρωποι, and *Pindar Nom. vii* 5 παν ἀνδρῶν, ἐν θεῶν γένεσιν, ἐκ μᾶς δὲ πνεόμεν ματρός ἀμφότεροι. *Lactantius iv* 3 arguing in favour of a primary monotheism from the universal use of the term *pater* in the ceremonies of the different gods, quotes *Lucilius ut nemo sit nostrum quin pater optimus divum, ut Neptunus pater, Liber, Saturnus pater, Mars, Janus, Quirinus pater, nomen dicatur ad unum*. The *Stoics* justly claimed the authority of ancient tradition, not only for their doctrine of the Divine fatherhood, but also for their identification of the Deity with heaven. The name *Zeus* itself means originally the sky (*Max Müller* vol. ii *Lect. x*) and so we find in *Homer II. xiii* 837 *αιῠβα καὶ Διὸς αὐξα*, II 412 *Zeus* *αἱβα* vail, and in *Aeschylus fr. 295 Dind*. we have the same idea widening out into a true *Stoic pantheism, Ζεὺς ἵστω αἰῠβα, Ζεὺς δὲ γῆ, Ζεὺς δ’ οὐρανὸς Ζεὺς τοῦ τὰ πάντα χάρις τῶν δ’ νυμερετρον*. So *Democritus* ap. *Clem. Al. Protr. § 68*, and *Strom. v* § 103, 'there are men who have learnt, as they raise their hands to heaven, to say that all is *Zeus*, and that he knows and gives and takes away all things, and is the king of all'. Compare also the old *Orphic* line so much quoted by the *Stoics*, *Zeus ἀρχή, Zeus μόσσα, Διος δ’ ἐκ πάντα τεύχεται* (Lobeck Agl. p. 530) and that of *Valerius* *Soranus* (ap. *Aug. C. D. vii* 9) *Jupiter omnipotens, regum rerumque deumque progenitor genetrixque deum deum unus et omnis*. Further illustrations may be found in *Seneca Qu. N. ii* 45, *Epict. Diss. i* 3, *Cornutus c. 9* with Osann’s n.

**quod qui dubitet—posuit**: on the hypothetical use of the Subj. cf. i 43 *qui consideret n. Madv. Fin. ii 86, Tusc. v* 118. The Ind. is read by most edd. in § 93 *qui existimat, non intellego cur non putet*.

**sol sit an nullus sit**: the more common form of alternative is *sol sit necese*, as in i 61 *sintente di necese*, III 17 *di utrum sint necese sint*; here we have a stronger opposition, see on i 61 *nulli esse*. 
§ 5. **cognitum comprehensumque**: the Stoic καταληπτόν, cf. i 1 n. on perceptum et cognitum.

**inveterascere**: I have followed Forchhammer (Nord. Tidsk. 1880 p. 40) in adopting this form, as it seems to be the form regularly used by Cic. and his contemporaries in the sense of becoming fixed, cf. 3 Cat. 26 (res nostrae) litterarum monumentis inveterascere, Nepos Att. 2 inveterascere ase alium patiebatur, Lucr. iv 1068 inveterascit alendo, Caesar B. G. v 40 inveterascere consuetudinem, ib. ii 1 exercitum inveterascere in Gallia; and there is no certain example of inveterare in the same sense (though Forcellini refers to it all the exx. of the Perf. stem inveteravi), nor of inveterari before the time of Pliny.

ceteras: i.e. all but the naturae judicia mentioned below. The antithesis is concealed by the parenthetical quis—extimescat.

fictas := fictas œuras.

extabuisse: 'to have dwindled away'; only found here in tropical sense.

**Hippocentaurum**: cf. i 105. The writer of the notice of vol. i in the Saturday Rev. adds a ref. to Digest 45. 1. 97.

**Chimaera**: i 108. **anus**: see i 55 n.

**excors**: 'senseless', the old Romans regarded the heart as the seat of the understanding; hence the derivatives Corculum (the surname of Nasica), and cordatus.

**apud inferos portenta**: for constr. cf. praeter naturam portentis § 14; for the thought Juv. ii 149, Seneca Consol. ad Marc. 19 cogita—illa quae nobis inferos faciunt terribiles, fabulam esse; nullas imminere mortuis tenerbras nec carcerem nec flamina flagrantia igne nec oblivios amnem, Ep. 24, Cornutus c. 35 (Osann p. 383), Serv. ad Aen. xi 755, Cic. Tusc. i 10 and 48. According to Plutarch Stoic. Rep. p. 1040, Chrysippus attacked Plato for his doctrine of future punishment àis oüi diadiforonta τῆς Ἀκκοῦς καὶ τῆς Ἀλφαγοὺς, δὲ ὅ τὰ παιδάρια του κακογυλεῖν αὐτοῖς ἀνείγοντο. Sext. Emp. ix 66 explains why that general consent, which is considered to prove the existence of the Gods, is disregarded in the case of Tartarus.

**opiniores commenta**: cf. Sext. Emp. Math. ix 62 at ψυχεῖς δῶσαι καὶ πρόσκαιροι φύσεως σώμα πλεῖον παρεκτένωσιν ἀλλὰ συνελεύσώσιν ἐκείνως δὴν χάριν ἐφολάττοντο (e.g. divine honours paid to kings ibid. 35).

**deorum cultus—meliores**: On the state of religious belief at this time see my Sketch of Ancient Philosophy p. 212 foll. We find a less favourable view, as regards divination, in § 9, and as regards the reverence for sacred things in i 81; the latter view agrees with what we read in Livy iii 20 nondum haec, quae nunc tenet saculum, neglegentia deum venerat, cf. x 21, Varro ap. Aug. C. D. vi 2 (V. dicit) se timere ne (dì) pereant, non incursu hostili, sed civium neglegentia, de qua illos velut ruina liberari a se dicit.

§ 6. **et praesentes**: et prepares the way for prædictiones in § 7, but this is delayed by a series of exx. cf. Madv. Fín. exx. i. For the matter cf. §§ 163, 166, and n. on occurrit i 46. Cic. himself Harusp. Resp. fin. denies
that such epiphanies really occurred, "nolite id putare accidere posse, quod in fabulis saepé visitis ieri, ut deus aliquid delapsus e caelo coactus hominum adeat, versetur in terris, cum hominibus colloquatur," the divinity reveals himself through omens and portents, not in personal form." See Xen. Mem. iv 3.

Castor et Pollux: cf. iii 53, Lucian Dial. Deor. 26 with Hemsterhuis' nn., Preller (Gr. Myth. ii 99, R. M. 660), who gives a long list of their appearances. Theocritus xxxi 6 calls them ἄνθρωποι σωτῆρα ἐν ξυρὸν ἕδη ἐότων ἔπων θ' ἀμαράντας παρασομένων καθ' ὀμλον ναῶν θ'. We read (Divin. i 75) of their fighting for the Spartans at Aegos Potami, in memory of which two golden stars were dedicated at Delphi, (Orat. ii 352) of their saving Simonides in the fall of the palace of Scopas. Florus (iii 3 20) says they carried the news of the defeat of the Cimbri to Rome. Their worship was brought from Sparta to Tarentum and Locri and thence to Rome, where equestrian processions were yearly held in their honour. The surname Ahenobarbus was connected with the miraculous story of the battle of Regillus; Domitius refusing to give credit to the tidings brought by the Dioscuri, Pollux by a touch changed his beard from black to red (Suet. Nero 1). The same belief in heavenly warriors mixing in the fray in bodily form is found both among Jews (2 Maccabees x 29, xi 8), and the Christians of the Middle Ages; see Mrs Jameson Sacred and Legendary Art p. 234, (abbreviated) 'the Spanish historians number 38 visible apparitions, in which St James of Compostella descended from heaven in person and took command of their armies against the Moors. The first and most famous was at the battle of Clavijo (939 A.D.) when the glorious saint showed himself in the heat of battle, as he had promised King Ramirez on the previous night, mounted on a milk-white charger and waving aloft a white standard: he led on the Christians, who gained a decided victory, leaving 60,000 Moors dead on the field'.

ex equis pugnare: the same phrase occurs Liv. i 12 9; cf. ex equis colloqui Caesar B. G. i 43, ex vinculis causam dicere ib. i 4, and Liv. xxxix 19, λαμπά χιταί ἄφθη πτων τῇ δεό Plato Rep. i 328 A; ab ego (jaceere tela) is found Ov. A. A. i 210, see Mayor's Juvenal v 155. The Tyndaridae are called λευκόπωλοι (Pind. Pyth. i 66). In iii 11 Cic. refers to the story of the print of a horse's hoof being still visible in the rock near Regillus.

Persem victum: the last king of Macedonia, defeated by L. Aemilius Paulus at Pydna 168 B.C. Another marvel is related of this war in Div. i 105, which perhaps may be considered to betoken the anxiety which it caused.

hujus adulescentis: cf. i 79 n., and Off. i 121 hunc Paulo natum. The ref. is to Vatinius the Legatus of Caesar, accused by Cic. in a scurrilous speech still extant, but afterwards reconciled to him through Caesar's influence. As he was quaestor in 63 B.C., he would be under 20 years of age in 76 B.C., the supposed date of the Dialogue.

praefectura Beatina: Cic. often mentions this town, with which he
was officially connected, having acted as its patron in the cause against the town of Interamma. The waters of the river Velinus, which flows through R., are so strongly impregnated with carbonate of lime, that they are continually forming deposits of travertine, and thus tending to block up their own channel; so that unless their course was artificially regulated, the valley of the Velinus was liable to be inundated; while, if these waters were carried off too rapidly into the Nar, which runs at a much lower level, the valley of that river and the territory of Interamma suffered the same fate. (E. H. Bunbury in Dict. of Geog.) In the speech Pro Scaulo 27 Cic. mentions that he visited the locality in order to be thoroughly informed of the facts: compare also Att. iv 15 and 3 Cat. 3, where he speaks of his bodyguard of Reatines. The Italian towns are classified by C. (Sext. 32, 2 Phil. 58) as municipia, coloniae, praefecturae. Festus defines the last as towns in which et fusc dicebatur et munditiae agebantur et erat quaedam earum res publica, neque tamen magistratus suos habeant. He mentions Reate among the praefecturae to which one praefectus was sent annually by the praetor urbanus; in other cases there were several praefecti elected by the immediate vote of the Populus Romanus. After the 2nd Punic war Capua was punished by being degraded into a praefectura. The name praefectus recalls the old conquests of Rome, when a Roman governor was sent with a colony to overawe the inhabitants of some Latin or Samnite town, cf. Marwardt p. 9, 29, 41 foll.

cum equis: so Q. Fr. ii 13 (Domitium publicani) cum equis prosecuti sunt, 2 Verr. v 7 editum ne quis servus cum telo esset, Div. i 119 Caesar cum purpurea veste processit, cf. Hand Tursell. II p. 144. Cum in such cases is used idiomatically, instead of a more definite preposition, to give prominence to some accessory circumstance. So in Gr. we find (Xen. Cyrop. vii 1 8) ἐφοίτων ἐπὶ τὰς βόρας Κύρων οἱ ἔτυμοι σὺν τοῖς ἐπεοικοι καὶ ταῖς αἰχμαῖς, like the ἵππον ἕκαν of Plato Smyr. 221, and σὺν ὅπλοις 'in armour', σὺν μητὶ 'on board ship'.

cum senatu nuntiavisset: so Vahlen (Zeitschr. f. Öst. Gymn. 1873 p. 241) proposes to read, as cum might have been easily lost after the preceding captum (see crit. nn.). He cites Div. i 51 P. Decius...cum esset tribunus militum...a Samnitibusque premereetur noster exercitus, cum pericula proeliorum iniret audacia &c.; Parad. i 8 cujus cum patriam opisisset hostias, ceterique ita fugerent, ut multa de suis rebus asportarent, cum esset ad montes a quodam &c. For the loss of cum in the MSS cf. below § 63 nam cum.

quasi locutus = ὃς δὲ πάντης ἐπηκόω, 'on the ground that he had spoken', cf. Val. Max. i 8 § 1 (Vatiniius) tamquam majestatis senatus...vano sermone contemtor in carcerem conjec tus. Draeger § 536 confines this use of quasi to Tacitus. [It is common in the lawyers, e.g. Gai. ii 198 plerique putant legatarium petentem per exceptionem doli mali repellere, quasi contra voluntatem defuncti petat, iv 163, Dig. ii 14 l. 7 § 15. R.]

constitisset: 'tallied'; idem is pleonastic, cf. ad Herenn. i 9 § 16 veris similis narratio erit, si spatio temporum, personarum dignitates, consiliorum
rationes, locorum opportunitates constabunt, and the common phrase ratio constat.

vacationes: exemption from military service was granted to those who held a priesthood or a magistracy, or on the ground of eminent merit, e.g. to Aebutius for giving information about the Bacchanalia (Liv. xxxix 19 4), to the soldiers who had joined Octavius and Hirtius against Antonius (Philipp. v 53). Exemption for five years was granted to the Praenestines in the 2nd Punic war for their brave defence of Casilinum. In times of emergency the Senate might pass a decree ‘ne vacationes valerent’ (Philipp. v 12, Marquardt iii 2 p. 289).

Locri: these were the I. Episephyri, a colony sent out by the Locrians of Opus probably in the 7th cent. B.C. who first occupied the Bruttian promontory of Zephyrium, and afterwards moved to a site 15 m. further to the north. They paid divine honours to their national hero Ajax son of Oileus, regularly leaving a place for him in their line of battle (Paus. iii 19 § 11 with n. by Siebelis), and sending yearly to Ilium two maidens chosen by lot to serve as ministers in the temple of Athena, by way of atonement for the rape of Cassandra (Peller Gr. M. ii 454, Plut. S. N. Vind. c. 12 with Wyttenbach’s n.). The river Sagra separated Locri from Caulonia. Lenormant (La Grande-Grèce ii pp. 27—35) identifies it with the Turbolo, a precipitous torrent running between rocky banks; near the mouth of this there is a narrow pass, like that of Thermopylae, which, he thinks, affords a natural explanation of the victory of the Locrians. He gives B.C. 560 as the date for the battle. In N. D. iii 13 Cic. alludes to the proverb ἀληθεύεται τῶν ἐπὶ Ζάγρεω, which Suidas s.v. ἀληθήτες explains as follows: the Locrians being threatened by Crotona asked help of Sparta, from which many of their citizens had come, but the Spartans declined to give them any thing but the Dioscuri, i.e. probably the images or symbols (Δώκαια) which were carried with the kings on their warlike expeditions. (So the Greeks asked for the Aecids before the battle of Salamis.) The Locrians accepted this as a good omen, went to the shrine, and offered sacrifices to the Twin Gods. When the news of the victory came the Spartans refused to believe it; hence the proverb is used ἐπὶ τῶν ἀληθῶν μὲν, οὐ πεπεισμένων δὲ. In the battle it is said that 120,000 Crotoniates were ranged against 15,000 on the side of Locri; pugnantibus Locris aquila ab acie numquam recessit, esque tam diu circumvolavit, quoad vincerent. In cornibus quoque duo juvenes diverso a ceteris armorum habitu, eximia magnitudine et albis eguis et coccinis paludamentis, pugnare visi sunt, nec ultra apparuerunt quam pugnatum est. Hanc admirationem auxit incredibilis famae velocitas. Nam eadem die, qua in Italia pugnatum est, et Corintho et Athenes et Lacedaemonem nuntiata est victoria (Justin xx 3). The people of Crotona were roused from the apathy which followed their defeat by the coming of Pythagoras shortly afterwards. Among other marvels related in connexion with this war we are told that the two Crotoniate generals, Leonymph and Phormion, having
been wounded, one by Ajax, one by Pollux, were healed when they made their supplications to the heroes they had defied (see Meineke Frag. Com. ii 1230. App. on Phormio), and that the temple of Persephone at Locri was saved by miracle from the assault of the invaders, Liv. xxix 18. Strabo (vi 1 § 10) speaks of the altars to the Dioscuri on the banks of the Sagra.


Faunorum: usually connected with favo, Favonius, 'the kindly god' =μουρός, but H. Nettleship in an interesting paper on the Earliest Italian Literature (J. of Phil. xi p. 180 foll.) prefers the older view, which connects it with fari and φωνή. He considers that the Fauni were the seers of the early rustic communities and that, as their functions were superseded, they became unreal beings, speaking with unearthly voices in the recesses of mountain and forest, and were thus gradually identified with the Πάρες and Σάραπος of Hellas. Cf. Div. i 101 saepe etiam et in proelii Fauni auditi, et in rebus turbidis veridicæ voce ex occulto missæ esse dicuntur. Lucr. iv 550 haec loca (i.e. where echoes are heard) capripedes satyros nymphasque tenere finitimi fingunt et Faunos esse locuntur, quorum noctivo vago strepitum ludogine jocantí adefirmant volgo taciturna silenitia rumpi, Varro L. L. vii 36 Faunos versibus, quos vocant Saturnios, in silvestribus locis traditum est solitos fari futura; so Virgil tells of Latinus consulting Faunus at Albunea (Aen. vii 81), Ovid of Numa consulting him on the Aventine (Fasti iv 640), and Dionysius (v 16), speaking of the voice which encouraged Valerius, after the battle of Aricia, with the news that the Etruscans had lost more than the Romans, adds that the Romans ascribe to Faunus any sudden alarm whether from an apparition or a voice.

saepe—coegerunt: cf. for the argument Div. i 35 foll. Allen reads coegerint which is perhaps more natural with quemvis than the Ind. of the mss.

Ch. iii § 7. ea ostendi—praedici: Sch. was the first to omit quae sint after ea, as having been added by the scribes from a misunderstanding of the construction. In his Opusc. iii 326 he cites, among other examples of a neuter plural where a different gender might have been expected, Div. ii 117 aestatus ex terra mentem ita novens, ut eam providam rerum futurarum efficiat; ut ea non modo cernant ante, sed etiam numerò versuque pronuntiat, and from this book § 15 'ea fortuita after rerum, § 18 haec referring to ratione et sapientia, § 87 ea referring to partes, § 88 illa referring to conversionibus, cf. Orat. ii 20 with Wilkins' n. It may be questioned, however, whether quae sint is a very natural addition, whether it is not more probable, as Walker suggests, that the original was quae futura sint, as we have it combined with res fut. in Div. i 127 qui enim teneat causas rerum futurarum, idem necesse est omnia teneat, quae futura sint; and, by itself, the phrase is of constant occurrence, e.g. Div. i 82 (bis), N. D. 163. Cic. repeats himself in Div. i 93 (portentorum) vim, ut tu soles dicere, verba ipsa prudenter a majoribus posita declarant. Quis enim ostendunt, portendunt,
monstrant, praedicunt (Ba. after Lamb. prodicunt, which Swainson would read here); ostenta, portenta, monstra, prodigia, dicuntur. Schultz thus discriminates their meaning; ostentum and monstrum point to the nature of the phenomenon, ost. as something marvellous, monst. as something unnatural and odious, e.g. the Minotaur; the other words have reference to the import of the phenomenon, prodigium (which Vaniček derives from aic, comparing nago, adagium, indigito) implying something fateful and usually, but not always, evil, while portentum forebodes actual ruin. Hence port. and monst. are often used metaphorically to express destestation and loathing. Augustine, in a parallel passage (C. D. xxi 8), derives prodigium from porro dicere.

ea fícta: this is explained by the following accusatives in apposition; ‘but if we believe these things to be mere baseless fictions of romance, I mean the stories about Mopsus and the others, though even these must have had some foundation’ &c.

Mopsus: said to be a Semitic word meaning ‘seer’. It was believed that there were three of the name, the most famous being the prophet who accompanied the Argonauts; another was son of Apollo and Manto, who had oracles at Mallus and Mopsuestia in Cilicia. He is referred to Div. i 88, Amphilochoús et Mopsus Argivorum reges fuerunt, sed iídem augures, iique urbes in ora marítima Cíliciá Graecas considérunt. At Mallus he was worshipped in conjunction with the rival seer Amphilocho. Pausanías i 34 speaks of this as the most trustworthy oracle in his day. Plutarch Def. Or. c. 45 tells a story of an Epicurean being converted by a response given from his oracle. See Cic. Leg. ii 33 and Preller Gr. M. ii p. 483, Bouché-Leclercq vol. iii p. 341.

Tiresiam: ‘observer of τείρεα (stars or marvels)’. In the Odyssey he appears as the sole man who retains his faculties intact in the underworld, solum sapere, ceteros umbrarum vagari modo Div. i 88. He plays an important part in the Seven against Thebes, the Oedípus Rex, the Antigone, Baccæae and Phoenissae.

Amphiaraus: the blameless prophet described by Aeschylus in the words, which all applied to Aristides, oι γάρ δοκεῖν ἄριστος ἄλλ' εἶναι θελει Sept. c. Theb. 588. He was induced by his wife Eriphyle to join the expedition against Thebes, and saved from the pursuit of his enemy by Zeus, who caused the earth to open and swallow him up. His oracle at Oropus was said to cover the spot, others favoured the claims of Thebes (Herod. i 46, 49, 52, viii 134, Pausan. i 34); it was not destroyed till the time of Constantine (Euseb. V. C. ii 56), see Dict. of Ant. under oraculum.

Calchante:m: the prophet who accompanied the Greeks to Troy, οἰωνοπόλων ἄριστος, ὁ γάρ τὰ τ' ε.drawText τα τ' ἑσάομαι προ τ' ἑοντα. Strabo vi 284 mentions an oracle of his near Mt Garganus in Apulia. It was foretold that he would perish on meeting a superior soothsayer, viz. Mopsus.

Helenum: Πριμάθης ἔλενος οἰωνοπόλων ἄριστος Π. vi 76. Having
accompained Neoptolemus to Epirus after the fall of Troy, on the death of the latter he inherited a part of his kingdom, and foretold the fortunes
of Aeneas (Aen. III 245). The most famous of all the seers, Trophonius, is
omitted here, but appears below III 49.

quos—ascivissent: 'whom even the legends would not have ac-
nowledged as diviners, if the facts (in each case) had been decidedly
against it'. I see no reason to change the plural repudiarent of the mss;
the Imp. seems to suit better a series of facts than an abstract idea such as 'reality', cf. I 75. On the sentence generally, cf. Leg. II 33 neque enim
Mopsi—tantum nomen fuisset neque tot nationes id ad hoc tempus retinu-
issent...nisi vetustas ea certa esse docuisset; Sch. cites Verr. II 138 ut,
etiamsi homines tacerent, res tamen ipsa illum censum repudiaret.

domesticis exemplis: the same exx. are cited Div. I 29, II 20, Min.
Fel. c. 7, cf. also Valerius Maximus i (De neglecta religione).

P. Claudius Pulcher: consul 249 B.C., was defeated by Adherbal in the
sea-fight off Drepanum. He was tried for high treason, but there is some
doubt as to the result of the trial; we read however (Gell. x 6) that three
years later his sister, a Vestal virgin, being rudely pushed by the crowd,
expressed a wish that her brother were alive again to lessen their numbers
in another engagement.

etiam per jocum: Cic. has altered the form of the sentence, which
should naturally have continued cum mergi jussisset poenas dedit.

pulli: on the curious augury by means of the sacred chickens see
Plin. N.H. x 24 horum gallorum sunt tripudia solistima: hi magistratus
nostros quotidie regunt...hi fasces Romanos impellunt aut retinent, jubent
acies aut prohibent, victoriarum omnium toto orbe partarum auspices; hi
maxime terrarum imperio imperant, extis etiam fbrisque haud aliter quam
opimae victimae dis grati. The story of Claudius may be illustrated by
that of Papirius, 293 B.C. told by Livy x 40: the keeper of the chickens
(pullarius) had falsely reported that they had eaten so greedily that some
of the corn dropped to the ground, making the omen called tripudium solis-
timum. Just as the battle was about to begin, the consul learnt the truth
from his nephew, born, as L. says, ante doctrinam deos spernetem: he re-
plied that he must act on the official report, but that the pullarius should
be placed in front of the battle, so that the vengeance of the Gods might
fall on him, if he were guilty. This being done, the pullarius was at once
killed by a chance javelin and the Romans won the victory.

L. Junius Pullus: shipwrecked at Pachynus in the same year, neg-
lectis auspiciis classem tempestate amissit damnationisque ignominiam volun-
taria morte praevenit (Val. M. i 5 4).

§ 8. C. Flaminius Nepos: carried an agrarian law as tribune B.C. 232
and in consequence became hateful to the aristocracy, who endeavoured
to deprive him of his consulship in 223 B.C. on the pretence of faulty auspices;
Fl. marched against the Insubrians in spite of their opposition, and won a
great victory on the Addua; in 221 B.C. he was required to resign the
offices of Mag. Eq. on account of the squeaking of a mouse (Val. M. I 1 5).
When elected consul for the 2nd time in B.C. 217, he left Rome without
waiting for the usual ceremonies, fearing lest the senate should try to
detain him auspiciis ementiendis Latinarumque feriarum mora (Liv. xxi 63).
The disastrous omens which followed are related by Cic. Div. 1 77 cum
contra Hannibalem legiones duceret et ipse et equis ejus ante signum Jovis
Statoris sine causa repente concidit...Idem cum tripudio auspiciaratur, pulla-
rius diem proelii committendi differebat. Tum Fl. ex eo quaesivit, si ne
postea quidem pulli pascerentur, quid faciendum censeret. Cum illae 'quies-
cendum' respondisset, Fl. 'praeclera vero auspiciæ, si exsurrétibus pullis res
geri poterit, sature nihil geretur'. Itaque signa convelli et se sequi jussit,
foll. See also Liv. i. c. and xxii 1. On the other hand Cic. Div. ii 52
gives exx. of successful disregard of augury, e.g. Jul. Caesar crossing over to
Africa, and of misfortune following strict regard to the auspices, e.g. Paulus
at Cannae (ibid. 71).

L. Caecilius Antipater: a contemporary of C. Gracchus; wrote a history
of the Punic Wars. Cic. speaks of him as superior to the earlier historians
(Orat. ii 54) but of rough unpolished style, Antipater paulo inflavit vehem-
entius habuitque vires agrestes ille quidem atque horridas sine nitore ac
palaestra (Leg. i 6). He is frequently cited in Divin. e.g. i 48 (dream of
Hannibal), i 56 (dream of C. Gracchus), i 78 (the prodigies which preceded
Thrasymene). In June 45 B.C., the year before the publication of the
N.D., we find C. asking Atticus (xiii 8) for a copy of Brutus’ epitome of
the works of Caecilius, at the same time that he asks for Panætius πεπλωματα.

cum magno vulnere: 'entailing serious disaster', cf. § 80 inesse cum
magnu usu.

eorum imperii—paruisse: that the prosperity of Rome was owing
to its piety is constantly asserted, as by Horace Od. iii 6.5 die te minorem
quod geris imperas; by Cic. N.D. iii 5 mihi ulla persuasi Romulum auspiciis,
Numam sacris constituendis fundamenta jecisse nostrae civitatis, quae num-
quam profecto sine summa placentione deorum tanta esse potuisse; in the
speech of App. Claudius (Liv. vi 41) auspiciis hanc urbem condiam esse,
auspiciis bello ac pace, domi militiaeque omnia geri, quis est qui ignoret?
and a little below, in reference to the proposal to admit plebeians to the
consulship, eludant nunc licet religiones. Nunc enim est, si pulli non pas-
centur, si ex cavae tardius exierint, si oocinerit avis? parva sunt haec, sed
parva ista non contentumque maiores vestri maximam hanc rem fecerunt:
nunc nos tamquam jam nihil pace deorum opus sit, omnes caeremonias pol-
luimus. Cf. Val. Max. i 1 8 non mirum igitur, si pro eo imperio augendo
custodiendoque pertinax eorum indulgentia deorum semper excubuit, (in)
quo tam scrupulosa cura parvula quoque momenta religiosis examinari
videntur. Augustine wrote the De Civitate Dei to refute the charge brought
by the heathen against their Christian fellow-countrymen, that the dis-
asters of the age were owing to the neglect of the old deities who had
watched over the fortunes of Rome. The same charge is asserted by the heathen interlocutor in the Octavius of Min. F. (c. 6) and controverted by the Christian (c. 25). [Cf. Polyb. vi 56 § 6 foll. Dionys. ii 18, 19, 66—73, Plin. Paneg. 74 fn., Tertull. Apol. 25, Oras. vi 1 § 10, Prudent. c. Symm. ii 488 sed multi duxere dei per prospera Romam, quos colit ob meritiun magnis donata triumphis foll. J. E. B. M.]

religione—superiores: see my Sketch of Ancient Philosophy p. 207 foll., Gieseler Chr. Hist. i § 11, Preller, R. M. p. 113, Harusp. Resp. 19 quam volumus licet ipsi nos amemus, tamen nec numero Hispanos, nec robors Gallos, nec calliditates Poenos, nec artibus Graecos, nec denique hoc ipso hujus genitis ac terrae domestico nativoque sensu Italos ipso ac Latinos, sed pietate ac religione atque hac una sapientia, quod decurio immortalium numine omnia regi gubernarique perspeximus, omnes gentes nationesque superavimus. Posidonius (as we read in Athenaeus vi 107) had remarked in one of his works on the σωφρονία ἰσμαηρές of the Romans.

§ 9. Atti Navii: the story of Attus is more correctly given Div. i 31, cf. ib. ii 80, R. P. ii 36. Here C. has written Hostius instead of Tarquinius Priscus, and suem for uvam. According to the usual tradition Attus had promised to the Lares the largest bunch in his vineyard, if he could find a pig which had strayed, itaque sue inventa ad meridiam spectans in vinea media constitut, cumque in quattuor partes vineam divisisset, tresque partes aves abdixisset, quarta partes in regiones distributa mirabili magnitudine uvam invent. For similar carelessness in C. cf. the confusion between Agamemnon and Ulysses (Div. ii 63), Ulysses and Ajax (Div. ii 82), Hector and Ajax (Gell. xv 6).

litus: Cic. describes the famous litus of Romulus (clarissimum insignis auguratus, which was found unhurt amid the ashes of the curia of the Salii on the Palatine) as incurvum et levier a summo inflexum bacillum (Div. i 30). 'In works of art the end is always twisted into a spiral shape, like a bishop's crozier, of which it is supposed to have formed the model' (Rich Companion s.v.).

credderem—cessisset: 'the litus might be contemptible if its only use were to discover a pig; not so when it enabled Host. to carry on his wars.' Livy (i 36) tells the story of Attus cutting through a whetstone with a razor, and says it was this which convinced the king of the truth of augury; hence auguris tantus honos accessit ut nihil belli domique postea nisi auspicio geretur. ejus augurio, 'at the augury, i.e. under the direction, of Attus', Abl. of Attendant Circumstances, cf. Roby § 1240 foll.

neglegentia—omissa: disciplina omissa Abl. Abs., negleg. Abl. of Cause. Plebeians descended from an ancestor who had held a curule office were termed nobiles, and included with the old patricians in the nobilitas. As the magistracies rarely went out of this class to a novus homo, neg. nob. is equivalent to the negligence of the magistrates, esp. the augurs themselves, see Div. i 25 quoted below. A few religious ceremonies (such as the confraratio) were still confined to patricians: Tacitus Ann. iv 16 speaks
of their growing disuse penes incuriam virorum feminarumque. On the
general subject cf. Leg. ii 33 dubium non est quin haec disciplina et ars
augurum evanuerit jam et vetustate et neglegentia; Div. i 25 auspicia...nunc
a Romanis auguribus ignorantur...a Cilicibus, Pamphyliae, Pisidiae,
Lyciae tenentur; ib. 27 nostri quidem magistratus auspiciis utuntur coactis.
Necessis est enim, offa objecta, cadere frustum ex pulli ore, cum passivur...
Itaque multa auguria, multa auspicia, quod Cato ille sapiens queritur, neg-
legentia collegii amissa plane et deserta sunt; Liv. xliii 13 non sum nescius
ab eadem neglegentia, qua nihil deos portendere vulgo nunc credant, neque
nuntiari admodum ulla prodigia in publicum neque in annales referri.
Hartung (Rel. Röm. i 259) remarks on the fact that Caesar makes no
mention of auspices in his Commentaries. Even more conclusive as to
the state of belief are such facts as the discussion between two augurs of
C.'s time, C. Claudius Marcellus and Appius Claudius Pulcher, in which the
former maintained that augury was merely a useful piece of state-craft;
the contempt with which Caesar treated the repeated obnuntiatio of Bibulus,
and the law of Clodius forbidding a magistrate to observe the heavens on
comital days. Cic. elsewhere contrasts the older form of augury from the
observation of birds, as by Romulus and Remus, with the later from the
entrails of victims, (Div. i 28) ut nunc exitis, quamquam id ipsum aliquanto
minus quam olim, sic tunc avibus magnae res impetriri solebant. So we read
of omens from birds in Homer, but never of extispicium: it is only noticed
whether the smoke ascends to heaven, how the victim behaves &c. Divi-
nation by the entrails was said to have been introduced by Prometheus:
Hesiodus derives it from Egypt, Lenormant from the Chaldeans (cf.
Ezekiel xxxi 21); it made its appearance in Athens about the time of Solon.
(Bouche-Leclercq i 166 foll.)

Veritas spreta — species retenta: 'the reality') (the show'; see
Wilkins on Orat. i 149. We find the same opposition Div. ii 71 ut sint aus-
picia, quae nulla sunt; haec certe quibus utimur, simulacra sunt auspiciorum,
auspicia nullo modo, where many exx. are given; instead of the interpres
et satelles Jovis, we have now the caged fowls with their prepared offa;
Marcellus used to journey in a closed litter, when on important business,
that he might not be interrupted by unfavourable omens. So Div. i 28
nihil fere quondam majoris rei nisi auspicio, ne privatim quidem, gerebatur;
quod etiam nunc nuptiarum auspices declarant, qui re omissa nomen tantum
tenent; Dion. Hal. ii 6 διέμενε μέχρι πολλὸς φυλαττόμενον ὑπὸ Ῥωμαίων το
πρί τούς οἰωνίσμον κύμων...πιστασία δ' ἐν τοῖς καθ ἡμᾶς χρόνοις, πλὴν
οἶον εἰκόν τις λείτουργεί: he illustrates this by the way in which the auspices
were taken at the appointment of a magistrate; an augur stands by him
and announces lightning from the left, though nothing of the kind has
occurred, and the bare fact of the announcement is equivalent to an omen;
cf. Tac. Ann. xi 15 on the auspices in the time of the emperor Claudius.

Nulla peremnia servatur: Festus p. 250 M. Petronia amnis est in
Tiberim perfluens, quem magistratus auspice transseunt cum in Campo quid
agere volunt; quod genus auspicii perennius vocatur (‘apparently this stream formed the southern boundary of the Campus Martius’ E. H. Bunbury in *Dict. of Geog.* II p. 382): but, though the term was most often used in reference to a stream which had to be continually passed, it applied generally to all streams, Fest. p. 245 perennius dicitur auspicii qui amnem aut aquam, quae ex sacro (i.e. the fountain sacred to the deity of the stream) oritur, auspiciato transit, and again under *manalis fons*. Servius (on *Aen.* ix 23 summoque hausit de gurgite lymphas multa deos orans) tells us that, when augurs, after receiving an augury, approached a stream, it was their custom to take up water in their hands and pray that the augury might not be broken by crossing. Compare the religious importance attached to the repairing of the *Pons Sublicius*, whence the name *pontifex* (Preller *R. M.* p. 517, Boucché-Leclercq *iv* 230 foll.).

nulla ex acuminibus: sc. auspicia. Boucché-Leclercq *iv* 185 describes these as ‘signes fournis par la phosphorescence électrique des pointes des lances’, and gives as the reason for their disuse, ‘il était inutile de maintenir, à coté de procédés expéditifs et sûrs, des méthodes aléatoires ou d’une pratique difficile’. So Pliny (*N. H.* ii 37 translated by Lydus *Ost.* i 5) connects them with the electric lights known to sailors as *Castorum stellae* (the fires of St Elmo); *exsistunt stellae et in mari terrisque*. *Vidi nocturnis militum vigiliis inhaerere pilis pro vallo fulgore effugie ea; et antennis navigantium aliisque navium partibus insistent...* Hominum quoque capita vespertinis horis magno praesagio circumspectant, and Seneca *N. Q.* i 1 § 13 in magna tempestate apparent quasi stellae velo insidentes: adjuvari se tunc periclitantes existimant Pollucius et *Castoris numine...* § 14 Glyppho *Syracusae petenti visa est stella super ipsum lanceam constitisse. In Romanorum castris visa sunt ardere pilas, ignibus solitum in illa delapsis, qui seques fulminum more animalia ferire solent... sed si minore vi mittuntur, defluunt tantum et insident.*

In Livy this sign is often counted as a prodigy needing atonement, e.g. *xii* 1, *xxiii* 26, *xliv* 13, also in Tac. *Ann.* x 7 pilae militum arsere insigni prodigio, Plut. *Sull.* c. 7, and apparently in *Caesar* *B. Aftr.* 47 eadem nocte quintae legiones pilorum cacumina sua sponte arserunt; but in Dion. Hal. v 46 it is a good omen, ‘flames lit up about the points of the javelins, which shed a light as from torches throughout the greater part of the night; this was accepted by all as a sign of victory’. Probably it was the same feeling which made Homer dilate on the flashing of the spear of Diomed in the tent by night (*II. x* 155) ἡθει δὲ χαλκὸς λάμψῃ ὁτε στερεώθη παροκε Δίας, so of Idomeneus (*xiii* 245), of Achilles, the point of whose spear shone like Hesperus (*xxii* 319). For various erroneous explanations see Giese on *Div.* ii 76. Schneider *Eccl. Phys.* refers to *Ostertag de Ausp. ex Acum.* Regensb. 1779. Prof. W. G. Adams of King’s College tells me that “the electric lights described by Pliny and Seneca are well known phenomena, resembling the glow at the end of a pointed conductor which is placed on an electrical machine. It is formed by the gradual passage of electricity from the machine through the air to sur-
rounding conductors; or on the other hand the pointed conductor may be held in the hand and be directed towards the machine and so receive the gradual, or ‘glow’, discharge from it. If a cloud is the body charged with electricity, points directed towards it will carry off the discharge from it in the same way. So at sea this ‘glow’ discharge is frequently seen: the ship is charged with electricity from the earth or sea, but the density at points is very much greater than over other portions of the surface and so the discharges take place at the points.” Compare Darwin’s account of a scene he witnessed in the estuary of the Plata (Naturalist’s Voyage, p. 39), ‘the mast-head and yard-arm-ends shone with St Elmo’s light; and the form of the vane could almost be traced, as if it had been rubbed with phosphorus. The sea was so highly luminous, that the tracks of the penguins were marked by a fiery wake, and the darkness of the sky was momentarily illuminated by the most vivid lightning’.

nulla, cum viri vocantur: this is the certain emendation of Sch. who refutes (Opusc. iii 274 foll.) the explanations offered of the ms reading nulli viri by Turnebus, Beier and others. The phrase viri voc. is technically used either of the summoning of the citizens by a magistrate, as by the censor (Varro L. L. vi 86 foll.), or of the calling together of the soldiers for a battle or review, as in the law cited by Varro ap. Macr. R 16 § 19 viros vocare fieris non oportet; si vocarit, piaeculum esto: Servius (Aen. x 241) speaks of it as an ancient military term, see also Gell. XV 27 quoted below. The soldiers made their wills while the auspices were being taken, see Sabidius ap. Schol. Veron. ad Aen. x 241 (is apud quem) in exercitu auspiciunt imperiumque erat, in tabernacula in silla sedes auspiciabant eorum exercitu pullis e cavea liberatis....Interim ea mora ustebantur qui testamenta in procinctu facere volebant.

ex quo in procinctu testamenta perierunt: the phrase in procinctu is used of an army in readiness for battle, Milton’s ‘war in procinct’ (P. L. vi 19), cf. Festus pp. 43 and 225, procincta classis diecebatur, cum exercitio cinctus erat Gabino cinctu confestim pugnaturus. Vetustius enim fuit multitudo hominum, quam navium, classem appellari, also p. 249 procincta toga Romani olim ad pugnam ire solit. The cinctus Gabinus was a particular way of wearing the toga, so as to use part of it as a girdle, tying it in a knot in front. Servius (Aen. vii 612) says the ancient Latins, before they were acquainted with the use of defensive armour, procinctis togis bellabat, unde etiam militis in procinctu esse dicentur, (the toga, as Gellius tells us vii 11, was the only garment used in early times). Besides its proper use, of which we have exx. Tac. Hist. iii 2, Ov. Pont. i 8 10, Gell. i 11, Plin. N. H. vii 22, the phrase is used metaphorically of readiness in general, as in Quint. x 1 § 2 in procinctu habere eloquentiam. The testamentum in procinctu was an informal will which might be made by soldiers on the field of battle. [‘Compare our Nuncupative Will which may be made by seamen or soldiers in actual service, Stephen Comm. ii p. 615, E. C. Clark Early Roman Law p. 123’. Swainson.] It is thus described by Gellius xv 27
tria genera fuisset testamentorum accepimus, unum quod velut comitii in populi contione ficeret; alterum in proxinctu cum viri ad procurationes venissent in aciem vocabantur; tertium per familias emancipationem, cut ad certam mortem eiunum foret. It is strange that though C. here distinctly states that the custom was obsolete in his time, a statement not at all at variance with the allusion to it in Orat. I 228 (tamquam in proxinctu testamentum faceret sine libra et tabulis), yet both G. Long, in Dict. of Ant., and T. C. Sandars, on Justinian Inst. II 10, quote C. as witnessing that this form was still practised in his day. The case mentioned by Caesar B. G. I 39 is quite distinct: through terror of Arioistus and his Germans vulgo totis castris testamenta obsignabantur; no obsignatio was required in the form in proxinctu. In later times we read of further relaxations in regard to the military testament (Gaius II 109).

ex quo: 'in consequence of which'; as the auspices were no longer taken, there was no longer an opportunity for the soldiers to make their wills. For this use of ex quo see Div. I 65 ex quo et illud est Callani, Orat. II 154 referita quondam Italia Pythagoreorum fuit, ex quo quidam Numam fuisset Pythagoreum putant, where Wilkins cites Tusc. V 17 ex quo nec timor attingat.

cum auspicia posuerunt: compare for this and what precedes, Div. II 76 bellicam rem administrari majores nostri, nisi auspiccato, nonuerunt. Quam multi annis sunt, cum bella a proconsulis et a praetoribus administrantur, qui auspicia non habent? Itaque nec annes trans sunt auspissi cato nec triudio auspiciantur. Nam ex acuminibus guidem, quod totum auspiciatum militare est, iam M. Marcellus ille qui quino consul totum omissit, idem imperator, idem augur optimus. The growth of the empire had led, as early as b.c. 327, to the practice of sending out proconsuls and praetors to the provinces, instead of consuls and praetors, who alone had the auspicia; this practice was made law by Sulla's Lex Cornelia de provinciis b.c. 81, and carried further by the Lex Pompeia b.c. 52, which required an interval of five years to elapse before an ex-magistrate could succeed to the charge of a province. On his entrance into office the consul was said accipere auspicia, while in office habere ausp., on his resignation ponere ausp., see Bouché-Leclercq IV 233 fol.

§ 10. at vero: 'but assuredly it was the contrary among our ancestors; they did not neglect religion'. So in III 87, Orat. I 38, Att. v 11, but in Div. I 51 it merely confirms what precedes by a stronger case.

imperatores: III 15 tu autem etiam Deciorem devotionibus placatos deos esse censes. It is doubtful whether two or three of this family devoted themselves. The self-sacrifice of the father, P. Decius Mus, in the Latin war b.c. 340 is attested by Livy (viii 9 where the rules and ceremonies of devotio are fully laid down) and Cic. Div. I 51, but questioned by Mommsen
Hist. i. 366 tr. His son of the same name fell at Sentinum B.C. 295, in the war against the Etruscans and their allies (Liv. x 28). According to Cic. (Tusc. i 89, Fin. ii 61) the grandson followed the family tradition and perished at Assulam B.C. 279 in the war against Pyrrhus; but this is positively denied by Zonaras viii 3, and Cic. speaks only of father and son in Sext. 48, Cato 43, Parad. i 13.

dis immortalibus: i.e. dis Manibus Tellurique Liv. viii 9.

capite velato: pontifex sum togam præstextam sumere jussit, et velato capite manu subter togam ad mentum aserta...sic dicere ibid.

verbis certis: 'in a set form of words' = 'concepsis sollemnibus verbis' Seneca Ep. 67. The form (carmen) is given in Liv. l. c., cf. Marquardt Staatas. iii p. 268. Lescaloperius quotes an interesting passage from Augustine C. D. v 18, in which he compares the Decii with the Christian martyrs.

Sibyllinis vaticinatiónibus: the oldest collection of Sibylline prophecies is thought to have been made about the time of Solon and preserved at Erythrae, from whence it was brought to Magna Graecia and to Rome. The three books said to have been purchased by Tarquin were kept in the temple of Jupiter Capitolinus under the charge of the xv viri, and burnt with it 83 B.C. After the rebuilding, the senate sent to Erythrae to get a new copy of the prophecies, and we are told that the envoys were able to collect from private sources about 1000 verses (Lact. i 6 § 14). These were again revised under Augustus and Tiberius, and placed in the temple of Apollo Palatinus, where they were destroyed by fire about 400 A.D. The Sibylline books were consulted by order of the senate in all emergencies of state, see Liv. v 18, vii 27, &c. We learn from Div. i 110 that they were written in acrostics (like the 119th ps.), which C. regards as a proof that they did not proceed from an inspired frenzy. See further on iii 5 Sibyllae interpretes, and Marquardt l. c. p. 336 foll.

possum: the opposite assertion is made by C. when arguing in his own person against divination, Div. ii 52 possum innumerabilia (haruspicum responsa commemorare) quae aut nullus habuerint exitus aut contrarios. For the Ind. see n. on longum est i 19, and ii 121, 126, 131.

Ch. iv. àquī: cf. i 19, ii 18. 'I might quote many exx. of respect paid to auguries, but their reality is shown conclusively by the following fact'.

augurum—haruspicum: the anecdote which follows brings out clearly the contrast between the augurs, who were connected with the earliest history of Rome, and the Etruscan soothsayers. The former were concerned with the auspicia ex avibus, ex quadrupedibus, ex caelo, ex tripudio, ex diris, and also with consecrations; the latter with extispicium, fulgura, ostenta, cf. Div. i 35, (I will not believe) aut in exitis totam Etruriam deliberare, aut in fulguribus errare, aut fallaciter portenta interpretari, ib. i 2, 92, 93. An account is given of their founder Tages, ibid. ii 50; their books (Etruscorum haruspicini et fulgurales libri) are mentioned i 72. One of C.'s laws (Leg. ii 21) touches on their duties, prodigia, portenta ad
Etruscos haruspices, si senatus jussit, deferunt; Etruriaque principes doctrinam doceto. We often read of haruspices summoned from Etruria in order to avert calamities threatened by prodigies, e.g. 3 Cat. 19, Liv. xxvii 37: see Mayor on Juven. xiii 62 prodigiosa fides et Tuscis digna libellis.

in P. Scipione: 'in the case of Scipio'. Bouhier added in, which might easily be lost after the preceding m, and which appears to me to give a better sense than the simple date. P. Cornelius Scipio Nasica, surnamed Corculum from his wisdom and especially from his knowledge of law, was elected consul with C. Marcus Figulus in 162 B.C. He was also censor and pontifex maximus. He married his second cousin, the daughter of Scip. Afric. Maj., and was thus connected with Gracchus.

Ti. Sempronius Gracchus: consul in B.C. 177 and 163 (iterum), censor in B.C. 169, married a daughter of Scip. Afric. Maj. and was father of the two famous tribunes, with whom he is favourably contrasted by C. (Off. ii 43), and of a daughter who married Scip. Afr. Mi. He gained a triumph over the Celtiberians and Sardinians. Perhaps the experience here related may have given him more respect for the haruspices, as C. tells a story of his consulting them about two snakes, which had found their way into his house (Div. i 36).

crearet: used sometimes of the assembly, as Leg. iii 9, 10 plebs creat tribunos, Liv. xxiv 8 §§ 9 and 15, or even of the vote of one tribe, as Liv. v 18, xxiv 9 praerogativa creat; sometimes of the presiding magistrate who announces the result of the voting, Leg. iii 9 patres ex se producunt qui comitatu creari consules rite possint, Att. ix 9 where C. finds fault with Caesar's proposal that the praetor should preside at the election of consuls, nos autem in libris habemus non modo consules a praetore, sed ne praetores quidem creari jus esse, idque factum esse numquam; consules eo non esse jus, quod majus imperium a minore rogari non sit jus, praetores autem, quod ita rogantur, ut collegae consulibus sint, quorum est majus imperium. The presiding magistrate had considerable power; thus Livy xxii 35 § 3 Terentius consul unus creatur, ut in manu ejus essent comitia rogando collegae. He might even stop the election and recommend a different choice, Liv. x 22, xxiv 8, where Fabius ends his speech with the words praeco, revoca (tribum); or he might allow another to speak against the apparent choice before the formal renuntiation Liv. v 18, xxvi 22.

rogator: as the word rogo is the technical term for taking the votes of the assembly (e.g. in Liv. xxii 35 and Att. ix 9 quoted above), so rogator was used in old Latin for the presiding officer (cf. Lucil. Sat. 27 consilium patrae legumque orivundus rogator), especially in the fuller phrase comitiorum rogator used below. Its more common sense however, when used alone or (as in Div. ii 75) with centuriae, is that of polling-clerk, as here and p. red. in sen. 28, where C. asks, in reference to the enthusiasm shown about his recall from exile, 'when did any one see men of such distinction acting as rogatores diribitores custodes?'
ut eos rettulit—mortuus: the story is told again Div. i 33, ii 74 (propter mortem repentinam ejus qui in praerogativa referenda subito concidisset), Quint. Fr. ii 2. eos—eorum nomina Sch. Referre, ‘to report’, is here used (1) of the clerk who gives in the list to the consul, (2) of the consul’s reference to the senate, (3) of the senate’s reference to the haruspices, (4) of the augurs’ to the senate.

in religionem venisse: it would seem from this that, though the morbus comitialis would vitiate the proceedings, a death had not this effect, but merely caused an uncomfortable feeling that something must have gone wrong: it was a prodigium, but not a vitium.

quos ad soleret: for the subaudition of the Inf. see Draeg. § 119, p. 197¹ foll.; for omission of ad eos, Phil. i 4 parum erat, a quibus debuerat, adjutus, cited by Madv. § 321. Monoysyllabic prepositions rarely follow their case in prose-composition, except in legal or archaic phrases, or when they stand between the noun and its adjective, as magna ex parte, certis de causis. Probably quos ad soleret is a legal phrase like quo de agitur (see Orat. i 209 with Wilkins’ n.) of which many exx. may be found in Bruns’ Fontes cap. v pt. 4 §§ 7, 11, pp. 162, 163²; so Gell. xvi 4 § 2 ad C. Laelium, Luciumve Cornelium sive quem ad uter eorum jussert, proferes, Bruns iii 3 a Lex Corn. pp. 80, 81 quam in quise decuriam ita viator (praeco &c.) lectus erit, is in ea decuria viator esto. We find exceptionally ripam ad Araxis (Tac. Ann. xii 51), hunc post (Tusc. ii 15), agrum quem per (Leg. Agr. ii 81 reading doubtful), cf. Lucr. i 841, iii 140 with Munro’s nn., Roby § 1805, Madv. § 469, Zumpt § 324. [Further exx. may be found in Ussing ad Plaut. Amph. 234, Kühner’s Ausf. Gramm. ii p. 425. It should be noted that the transposition is most frequent after a relative, as in the common phrases qua de causa, qua ex causa, quam ob causam, qua de re, quam ob rem, quem ad modum; so quo pro agru in Bruns p. 75² (Lex agrar. 74, 76, 80), but pro eo agru ib. 68, 73, dies quam ad Ter. Phorm. 524, see Gr. § 1038. R.]

haruspices introducti: see Leg. ii 21 quoted above, Liv. xxxi 1 ob hoc veniam prodigium haruspices in senatum vocati.

justum: ‘regular’, ‘according to law’, so justa uxor Tusc. i 85, justus hostis iii 108, justa pugna Liv. xxii 28. [Very common in the lawyers, e.g. justi liberi Gal. i 72, j. matrimonium i 87, j. dominium iv 16, see Dirksen’s Man. s. v. R.]

§ 11. e patre audiebam: so below § 14; we may probably interpret of C. himself what he here puts into the mouth of Balbus. The elder C. was a man of education and a friend of the jurists Scaevola and Aculeo.


et consul: it would have been enough if he had been simply consul with an augur at hand, how much more when he held both offices!

Tusc ac barbari: Div. ii 75 quid enim scire Etrusi haruspices aut de tabernaculo recte capto aut de pomerii jure potuerint? Dion i 30 says
they were wholly distinct from every other people in language manners and
religious rites, cf. Liv. i 27, ix 36 habebi augures vulgo tum Romanos pueros,
sicut nunc Graecis, iva Etruscis litteris erudiri solitos, Gell. ix 7. They
received the franchise a.c. 89. Mommsen Bk i c. 9 speaks of them as a
nation quite distinct from the Graeco-Italic stock, and it still remains an
unsolved problem to what family the Etruscan language belongs, see
Deecke’s Art. on Etruria in the new Enc. Brit. barbari, so Demosthenes
speaks of Philip and the Macedonians as barbarians. The word was
borrowed and applied at first even to Romans, e.g. Plautus Trin. prol.
19 Philemon scripet, Plautus vortit barbaro, so even Cic. Orator 169; but
more commonly it is used of all who were not Greeks or Romans, e.g.
Fin. ii 49 non solum Italia et Graecia, sed etiam omnis barbaria.

tenetis: ‘understand’. interpretet comitiorunum: i.e. of the laws re-
ating to the comitia.

provincia: cf. Quint. Fr. ii 2 habet quiddam Sardinia apposita ad
recordationem praeteritae memoriae. Nam ut ille Gracchus augur, postea-
quam in istam provinciam venit, recordatit est quid sibi in Campo Martio
comitia consulum habenti, contra auspicia accidisset, sic tu &c. Sardinia
was made a provincia 235 B.C. but in 181 a fresh insurrection broke out,
which was suppressed with great slaughter by Gracchus. He went there
as proconsul 162 B.C.

libros: on the lib. auguras see Marquardt R. St. i 364. They are
mentioned by C. Div. ii 42, 73, pro Domo 39, 40, Att. ix 11. collegium:
the college of augurs consisted of 15 members according to Sulla’s consti-
tution. Cic. was elected B.C. 53 (N. D. i 14).

vitio captumuisse: Plup. Inf. as in Leg. Man. 20 dico Luculli ad-
ventu maximas Mithridatis copias omnibus rebus institutas fuisse urbemque
Cyzicenorum obsessam esse (in direct narration copiæ instructæ erant urbēgque
obsidebatur), Macr. § 408. For the story compare Liv. xlv 12 jam primum
cum legionibus ad conveniendum diem dixit (consul), non auspiciato templum
intranvi. Vitio diem dictam esse augures, cum ad eos relationem est, decre-
verunt; iv 7 tertio mense augurum decreto, perinde ac vitio creati, honore
abiere, quod C. Curtius, gui comitiis eorum praefuerat, parum recta taber-
naculum cepisset; viii 15 religio inde injecta de dictatore, et cum augures
vitio creatum videri dixissent, dictator magisterque eum quidam abdicaretur;
ibid. c. 23, Bouché-Leclercq iv 250 n.

tabernaculum captumuisse hortos Scipionis: when the augur
was about to take the auspices he stood with his titus in his hand,
boarding the south, as it would seem, according to the oldest usage, though
this varied very much in later times (see Bouché-Leclercq iv p. 20 foll.),
and marked out the sky, called templum majus, with a line from N to S
called cardo and another bisecting it at right angles, called decumanus.
He then drew the lines of a corresponding templum minus on the ground
immediately surrounding the spot where he stood, and on the centre of
this he pitched his tent (tabernaculum cepit). The tent had an opening
towards the south and there the augur sat waiting for the auspices. Some
of the edd. omit hortos Scipionis as a gloss, but it is not such a gloss as
we should have expected from an ordinary scribe, and its correctness has
been recently confirmed by the discovery of the ms of Granius Licinianus,
edited 1858 by a 'heptas' of Bonn philologers. (The writer is variously
assigned to the age of Augustus or to that of the Antonines or even later.)
In p. 11 of this there occurs a fragment thus restored so, cum augu-
rales libros legeret, consoles vitio creatos esse doctum, quod denuo extra
pomerium auspiciari debuisse, cum ad habenda in campo comitia con-
tenderet, quoniam pomerium finis esset urbanorum auspiciorum; se vero in
villa Scipionis (villam... in ms) tabernaculum posuisse et quom
ingredietur pomerium... The gardens of Scipio are mentioned R. P. 1
§ 14 cum P. Africanus feris Latinis constituisset in hortis esse, and Lael.
25 tum magis id diversus, Fanni, si nuper in hortis Scipionis, cum est de
republica disputatum, auffuisse; in Lael. 7 we read of the augurs meeting
in the gardens of D. Brutus for the purpose of practising their art, where
Reid says 'as the augurs required for their practice an open space whence
they could get an uninterrupted view of the sky, they usually met in some
gentleman's park outside the city'. If the reading is to be altered, I
should prefer Lamb.'s in hortis, which seems to have been the common
phrase, to Sch.'s ad hortos, which would merely state vaguely that the
auspices were taken near the gardens. We cannot, I think, take the
phrase to be orat. obl. of tabernaculum captum est horti Scipionis, like ini-
tium fuit ludi Capitolini, for that would imply that the vitium lay in
selecting this spot, and not in forgetting to renew the auspices on
crossing the pomerium; but Mr Roby suggests that hortos Scipionis may be
added in apposition, 'he remembered that his augural tent—the gardens
of Scipio—had been faultily taken'. By vitium was meant any irregularity
which might render the proceedings invalid, see Bouché-Leclercq iv 249
foll. and on the mode of taking the auspices generally p. 187 foll., also
Marquardt loc. iii 386, Mommsen R. Alt. i 2 101.

pomerium: (pone murum), this was an ideal line, running within the
actual wall, the course of which was marked by stone pillars placed at
certain intervals. ['Mommsen who has carefully examined the meaning of
pomerium (Forschungen ii p. 23) considers that it properly denoted the
space occupied by the city inside the wall, excluding both the wall itself
and the unoccupied strip of land on the inner side of the wall. Varro
(L. L. v 143) and others describe it as the bounding line of the inclosed
town. The two conceptions are easily confused, as fines often equals ager
finitus. Livy (x 44) is wrong in making pomerium include the wall with a
free space both on the inside and outside'. R. Mommsen's view would suit
one of the phrases here used, pom. intrassest, but not the other, pom. trans-
iret.] It was the boundary of the city from the augur's point of view, facit
finem urbani auspicii (Gell. xiii 14); all the non-urban auspices, e.g.
all relating to the army and therefore to the comitia centuriata (in
which the people were considered to form an army), had to be taken outside the *pomerium*. The irregularity committed by Graccus is explained as follows by Bouché-Leclercq iv 230, ‘we must imagine the magistrate who leaves the city, as carrying with him in a manner the auspices and the temple. Il fallait qu’avant de partir, il allât chercher cet attirail abstrait sur le Capitole, où il consulta tout d’abord Jupiter: il marchait alors, vers la porte; s’arrêta un instant sur le *pomerium* pour interroger mentalement le ciel et poursuivait sa route, environné de son temple idéal’; p. 235 ‘a magistrate returning to the city lost the military auspices and had to go through all the ceremonies again to acquire them. Graccus forgot this on his way back from the city to the Campus Martius and passed the pomerium without going through the necessary formalities’. On the other hand, Mommsen (*Staatsrecht* 18 p. 93, 100), considers that the negligence was shown in passing the stream Petronia; this however is not in accordance with C.’s words *cum pomerium transiret* ‘in crossing’. Plutarch gives a different account from either (*Marcell. 5*): when a magistrate seated in the *tabernaculum* to observe the auspices is compelled for any reason to return to the city before completing his observations, he is bound to begin the auspices again in a new *tabernaculum*; Graccus had broken this rule and therefore the elections held under his presidency were declared void. Plutarch’s explanation seems to me the most natural: Leclercq’s agrees best with C. but, as far as I know, there is no definite statement in any ancient author in regard to ceremonies to be observed in passing the *pomerium*.

*habendi senatus*: the phrase was used of the presiding magistrate, like *habere censum*, *comitia*, *delectum*, *ludos*. All religious scruples were laid before the senate, Gell. xiv 7, Liv. xxii 1.

*rem ad senatum*: *sc. rettulerunt* as above.

*senatus ut abdicarent*: *so. decrevit*. On the omission of the verbs in rapid narration see Madv. *Fin.* 1 9, Draeg. § 116. *Abdicarent* here used absolutely: in general we find *abdicare se consulatu*, or *abdicare consulatum*.

*haud sciam an*: ‘I might perhaps say’, more diffident than the Ind., cf. Orat. 2 255 *haud sciam an tu primus ostenderis*, where Wilkins cites Orat. ii 18, 72, 209, and Lael. 51. Seyffert, in his n. on the last, speaks of the use of the Subj. as ‘fast übertreibende Form der Bescheidenheit u. Zurückhaltung’.

*quod celari posset*: ‘though it might have been concealed’.

*haerere religionem*: ‘that guilt (lit. sense of guilt) should adhere to the republic’. *Haerere* is often thus used with *peccatum*, *crimen* &c. either with *in* or the dative.

*deponere*: subaud. *maluerunt* from *maluit*, Draeg. § 119 ii 2.

*punctum temporis*: i 52, 67, ii 94.

§ 12. *magna augurum—divina*: the natural place for this sentence would be after an argument to prove the authority of the augurs, and
before an argument to prove the authority of the *karaspíces*. It is impossible that C. could have meant it to stand where it does. Perhaps the passage may have been rewritten and this sentence be a relic of the earlier form. On C.'s idea of the importance of the augur, see *Leg.* 11 31 cited on *N. D.* 1 14.

qui videat: see n. on qui consideret 1 43.

*quorum interpretes sunt*: this argument, called the *ärx* *Stoicorum* in *Div.* 1 10, is given there in a slightly different form, *sic reciprocantur ut et, si divinatio sit, di sint, et si di sint, sit divinatio*, to which C. retorts *Div.* 11 41 *muto est probabilium, 'non est audem divinatio, non sunt ergo di'*. Not unlike is the argument ridiculed in Lucian *Jup.* Trag. 51 *ei γὰρ εἰσὶ βωμοί, εἰσὶ καὶ θεοί. ἄλλα μὲν εἰσὶ βωμοί, εἰσὶ δὲ καὶ θεοί*, to which the opponent replies *ἡ πρὸ τούτων γελασία εἰς κόρον, ἀποκρινούμαι εστι*, id. *Hermot.* 70 'most arguments are based upon things which are disputed, and others on things which have nothing to do with the matter, ἀπὸ τοῦτο ἡ διάδοχεσ εἶναι δεινός βωμὸς αὐτῶν ἐντὸς φαίνονται'. So Sext. *Emp.* 13 132 *ei μὴ εἰσὶ θεοί, οὐδὲ μαντικὴ ὑπάρχει, ἐπιστήμη οὐδὲ θεωρητικὴ καὶ ἐγχειρικὴ τὰν ἐν τοῖς θεών ἀνθρώποις διδομένας σημείας, οὐδὲ μὴ θεολογικὴ καὶ ἀστρολογικὴ, οὐ λογικὴ, οὐχ ἢ ἐνώπιον πρόβτησις* άτοπος δὲ γε τοσοῦτο πλῆθος πρεσβών ἀναμενεῖ πεπωτευμένων ἢδε παρὰ πάνω ἄνθρωπος* εἰσὶ δὲ καὶ θεοί. There is a certain analogy between this and two Christian arguments, the one from the nature of God inferring the antecedent probability of revelation: 'if there be a wise and good God, it is probable that he would reveal something of his will to men'; the other from the fact of prophecy inferring a divine Inspirer, 'the prediction of particular future events is beyond the power of man, but the life and death of Christ, and the dispersion of the Jews, are particular events predicted by Jewish prophets centuries before they came to pass, therefore these prophets were gifted with a superhuman power'. Cicero's real belief in regard to divination is stated *Leg.* 11 32, *si deos esse concedimus corumque mente mundum regi et eosdem hominum consile vertat et posse nodis signa rerum futurarum ostendere, non video cur esse divinationem negem. Jam vero permultorum exemplorum et nostra est plena res publica et omnia regna.......ex augurum praedictis multa incredibile vera occidisse. But though he accepts these stories as proofs of the former reality of divination, he regards it now as a lost art. The best statement of the Stoic argument is to be found *Div.* 1 82; while maintaining that it was inconsistent with the divine goodness to hide the future from man, they denied that this involved any departure from the established order of the universe: signs and portents were the results of a pre-established harmony, *Div.* 1 118 *non placet Stoicis singulis jecorum fuisse aut avium cantibus interesse deum; neque enim decorum est nec dis dignum nec fieri ullo pacto potest; sed ita a principio incolatum esse mundum, ut certa rebus certa signa praecurrerent, alia in exitis, alia in avibus, alia in fulgoribus, alia in ostentis, alia in stellis, alia in somniumvis viis, alia in furentium vocibus.
at fortasse: cf. Div. i 24 at non numquam ea quae praedicta sunt minus eveniunt. Quae tandem id ars non habet? earum dico artium quae conjectura continentur et sunt opinabile. An medicina ars non putanda est? quam tamen multa fallunt? and so navigation, tactics &c. Divination rests on conjecture; ea fallit fortasse non numquam, sed tamen ad veritatem suaeissime derigit, being founded on long experience and observation. This answer is criticized below (iii 15).

ne aegri quidem: Arist. Rhet. i 1 20 οὗτος γὰρ λατρεύει τὸ ὑγίν ποιήσαι, ἀλλὰ μὴρισ συ ἐνδέχεται, μὴρισ τούτον προαγαγεῖν’ ἵστι γὰρ καὶ τούτο ἄμφατος μεταλαβεῖν ὑγείας διὸς θεραπεύει καλῶς. The same comparison is used by Cyril c. Jul. x p. 354 D, in answer to the objection that there were gueses among Christians, ‘The Gospel may fail, as medicine fails, from the patient refusing to carry out the prescription’.

medicinae: I have adopted Madvig’s emendation of the medicina of mss, as it is certainly the more natural construction, and involves no alteration of the letters medicinaest. Madv. himself objected to the old reading on the ground that Latine dicitur ‘medicina ars non est’, non ‘ars nulla’ (keine Wissenschaft), but Mu. gives exx. of the adjectival use of medicina, as Varro L. L. v 93 ab arte medicina...medicus dicit, Quint. xii 11 § 34 Rei militaris et rusticae et medicinae; cf. too Hyginus Fab. 274 Chiron arte medicinam chirurgicam instituit cited by L. and S.

deorum natura: ‘not the divinity, but human guess-work blundered’; for natura cf. i 23 n.

omnes omnium gentium: i 46, for the consensus gentium see nn. on i 43, where it is asserted by the Epicurean. Sext. Emp. ix 60 gives as the 1st of four proofs alleged by theologians τὴν παρὰ πάσων αὐθετημὸν συμφωνιὰν, see ib. 61—74 with notes of Fabricius. summa constat: ‘the main point’, Sch. cites Acad. ii 29 cum summa consisteret, Fin. v 12 nec in summa tamen ipsa varietas est.

innatum est: the doctrine of Innate Ideas was not held in the strict sense by the early Stoics any more than by the Epicureans, but we find it asserted by C. in more than one passage, e.g. Fin. v 39 (natura hominis) dedit talem mentem, quae omnem virtutem acipere posset, ingenuitque sine doctrina notitias parvas rerum maxinarum, et quasi institut docere et induxerit in ea quae inerant tamquam elementa virtutis. Sed virtutem ipsam incohavit, nihil amplius. Itaque...artis est ad ea principia quae accepimus consequentia exquirere, quoad sit id quod volumus effectum; Tusc. i 30. In all probability C. here follows Posidonius, see below n. on § 62 aeterni, and Corssen de Posid. Rhod. p. 30 foll., also Zeller iv p. 6595. insculptum: i 45, Acad. ii 1 in animo res insculptas habebat.

animo...animis: the Sing. is used generically of man in the abstract, the Pl. of different individuals variously affected by different grounds of belief, cf. Draeger § 7. 3.

Ch. v § 13. varium est: ‘there is a variety of opinions’, ‘is variously viewed’.
A b. further explained. Cleanthes derives the consensus of belief from four causes, (1) presentiments of the future (i.e. divination, just treated of), (2) the blessings of life, (3) terrible and unusual phenomena of nature, (4) the order of the heavenly bodies (treated of in § 4). §§ 13—15.

Bywater (Journal of Philology vii p. 76 foll.) shows that the substance of this section is probably derived from Aristotle through Cleanthes and Posidonius. 'The psychical and cosmical causes, the 1st and 4th in Cleanthes' series', are stated by Sext. Emp. ix 20 to have been also alleged by Aristotle (in the dialogue de philosophia, as is generally supposed), as the grounds of religious belief. 'In such abnormal psychical phenomena as dreams, ecstasy, enthusiasm, the second-sight with which we credit the dying (the phenomena, in short, on which, according to the ancient distinction, natural as opposed to artificial divination was based) Aristotle found an explanation of the way in which the mind comes to divine, or have a presentiment of, the existence of other minds greater and mightier than anything human'. Sextus (ibid. 21 and 26) goes on to describe the effect of the contemplation of the ordered movements of the sun and stars on the mind of the observer. He gives this very succinctly, but Bywater from a comparison of other writers, makes it probable that in the original dialogue the two causes were connected in some such way as follows: 'the presentiment, originating in the core of our inner psychical experience, acquires a new force and import, as soon as we reflect on the facts of the universe outside us; we seem introduced into a temple, like that at Eleusis, only more august and solemn, because the figures (the heavenly bodies), which we see circling around us, are not lifeless or made with hands, and the celebrants are not men, but the immortal gods'. Compare several passages in this book, in which the universe is compared to a palace or mansion, §§ 15, 17, above all § 95. We must take care to distinguish the historical question, how man arrived at the idea of God, of which Cleanthes here treats, from the philosophical question, what is the validity of that idea. Sextus in like manner treats separately of the two, discussing the former, πῶς οἱ πρότερον νόμων θεῶν ἱγχον, in §§ 14—47, the latter, εἰ οἱ θεοί, in the sections which follow. Lucretius deals with the former v 1161—1240. In § 15 Cic. seems to be rather trenching on the philosophical ground.

informatas notiones = informatio i 100. On the argument see iii 18.

eam quae orta esset: in this and the following clause (quam ceverimus) Cic. carelessly predicates of causa what should have been predicated of notio. It is only in regard to the 4th that he extricates himself from the confusion (quartam esse aequabilitatem). Observe the change of tense, quae orta esset—quam ceverimus—quae terteset. The 1st is regarded as a single act antecedent to the action of the principal verb, the 3rd is continuous, going on at the same time with the principal verb, in the 2nd C. treats
the subordinate clause from his own, the present, standpoint, cf. Fam. xiv 7 qui causae fuerit postridie intellexi, 10 Phil. 9 quo consilio redierim initio audiat, post estis experti, and others cited by Draeg. § 131 b.

cali temperamentone: below § 49 solis tum accessus modici tum recessus et frigoris et caloris modum temperant.

commoditas: the cause and occasion of the commoda mentioned before. St Paul at Lystra appeals to the same evidence, Acts xiv 17.

§ 14. quae terreret: it is not correct to say that ‘the cause terrifies men’, the terror itself is the cause. This cause is admitted both in iii 16 and in Div. ii 42 nonne perspicuum est ex prima admiratione hominum, quod tonitrux factusque fulminum extimuisset, credidisse ea efficere rerum omnium praepotentem Jovem? So Petron. fr. 27 Buc. primus in orbe deos fecit timor, ardua caelo fulmina cum caderent; Democritus ap. Sext. Emp. ix 24 órāntes tā en τοῖς μενεφόροις παθήματα οἱ παλαιοὶ τῶν ἀνθρώπων, καθάπερ βροντάς καὶ ἀστραπάς κεραυνον τε καὶ ἀστρων συνώδους ἡλίου τε καὶ σελήνης ἐκλείψεις, ἐβωμαστὸν θεοῦ οἴμαιναι τούτων αἰτίων εἰναι, sec n. on i 54 quis non timeat. Cf. Ps. xxix and Job xxxviii.

fulminibus: the portents which follow are often mentioned in Livy, e.g. lightning xxiv 10, xxv 7, xxxvi 37 (cf. Div. i 16); storms xl 2, 45; pestilence xl 19; earthquake iii 10, iv 21, xxx 38; noises xxxix 14, xxxi 12, cf. Div. i 35 terrae aeque fremitus, aeque mugitus, aeque motus multa nostrae rei publicae, multa ceteris civitatibus gravia et vera praedicerunt, Har. Resp. 20 quod in agro Latinishe auditus est strepitus cum fremitu, ib. 62 cogitare genus sonitus ejus, quem Latinissena nutiariunt: recordamini illud quod...nuntiatur terrae motus terribilis...et enim haec deorum immortalium vox, haec paene oratio judicanda est, cum ipsa mundus, cum aer atque terrae motus quodam contremiscunt et inutito aliquid solum incredibilique praedictum; showers of stones i 31, vii 78, xxxi 62, xxx 38, (creta pluit) xxiv 10, of blood (carne pluit) iii 10, xxiv 10, xxxix 46, 56; Cic. here speaks more cautiously (quasi cruentis), see his explanation Div. ii 58 decoloratio quaedam ex aliqua contagione terrena maxime potest sanguini similis esse, such prodigies in metu et periculo cum creduntur facilius, tum finguntur impunius. See Eng. Cycl. under ‘Aerolites’ for the actual facts.

nimbus: so Lucretius places the storm-cloud among the phenomena of nature, which he conceived to be the cause of superstition (vi 489), haud igitur mirum est si parvo tempore aeque tam magnis nimbis tempestas atque tenebrae coperti sunt maria ut terras inspensa superne; and in the quotation from Aristotle (below § 95) we find nubium magnitudinem noticed as one of those phenomena which should naturally incline men to the belief in a Divinity; cf. Ruskin Modern Painters v 137 foll., on the Greek idea of the clouds.

vastitate seems here to mean the desolation produced by some natural cause, as drought or flood or frost or hurricane; or we might take it to refer to the religious influences of lonely places, of which Lucretius speaks rv 580—594, or lastly to a devastating plague, such as
we find ascribed to the wrath of the gods in Pis. 85. [In the formula lustrationis in Cato R. R. 14 prayer is made uti tu morbos visos invisoque viduertatem (?) vastitudoegumes, calaminitates (blight) interpetiareque pro-
hibebis. R.]

labibus: (‘landslide’) corrected from lapidibus after Divin. i 78 multis locis labes factae sunt, and 97 quoted below. It occurs in the Digest, xix tit. 21.15, and 62. [Add Festus M. p. 210 avertas morbun, mortem, labem, nebula, impetiginem, and an old prophecy from an Etruscan seer con-
tained in the Gromatici (p. 351 Lachm.) tum etiam terra a tempestatisibus vel turbinibus plerumque labes movebitur. R.]

praeter naturam portentis: for exx. of an adjective supplied by ad-
verbs or adverbia phrases, see Nægelsb. § 75, and below § 87 solarium aut disciprum aut ex aqua, § 144 introitus cum flexibus, § 166 deorum saepe praesentiae. hominum: e.g. a boy with an elephant’s head Liv. xxvii
11, cock and hen changed into man and woman, xxxii 1. pecudum: e.g. partus mulae Div. i 35, lamb with swine’s head Liv. xxxi 12, pig with
man’s head xxvii 4, ass with three heads xli 20, cow speaking iii 10, cf. Juven. xiii 65 foll. with the nn.

facibus caelestibus: Lucretius v 1188 enumerates meteors and shoot

ing-stars among the grounds of religious belief: (men placed in heaven
the abodes of the gods, because there were seen there) luna, dies, et nos,
et noctis signa severa, noctivagaque faces caeli flammaeque volantes, nubila,
sol, imbres, nix, venti, fulmina, grando, et rapidi fremitus et murrura
magnar minorum; see on their nature Arist. Meteor. i 4 αi φλόγας αι
κάλυμα καi οι διαβεγκεσ αντίρεις καi οι καλωσάναι δαλαι καi αγες with
Ideler’s nn. and Sen. N. Q. i 1, who speaks of their being seen at the
deaths of Augustus and Germanicus and the fall of Sejanus.

cometas: one of the portents in C.‘s poem on his consulship, Div. i 18
tremulos ardore cometas; called diri cometae Geo. i 488. Pliny(N. H. ii 22)
after a minute description continues terrifcum magnam ex parte sidus ac
non levier pium, ut civili motu Octavio consul, iternunique Pompeii et
Caesariis bello; Seneca, who (following Arist. Meteor. i 6) treats of comets
N. Q. vii, makes the unlucky remark (c. 17) that Nero’s comet com-
etis detruxit infamiam; he also prophesies (c. 24), with that sanguine
belief in human progress which makes one of the chief attractions of his
writings, that the movements of comets will one day be understood, venet
tempus quo posteri nostri tam aperta nos necisse mirentur. The comet
which appeared after the death of Jul. Caesar was made an object of
iv 12. cincinnatas: the usual translation of κομῆς is crinita, as
Plin. N. H. ii 22 cometas Graeci vocant, nostri crinitas; cinc. is found else-
where in this sense only in the Schol. to Juv. vi 207.
nuper: about ten years before the date of the supposed dialogue.

bello Octaviano: Cn. Octavius, consul in 87 B.C., a partisan of Sulla
(who was then engaged in the war against Mithridates), opposed the
attempts of his colleague Cinna in favour of Marius and after bloody conflicts was put to death by Censorinus. Cic. tells us (Div. i 4) that the prophecies of a certain Culleoitus were rife at the time.

calamitatum: the proscriptions of Marius and Sulla.

sole geminato: cf. R. P. i 15 viisse igitur videamus quidnam sit de isto altero sole quod nuntiatum est in senatu? ib. 17, 19, 31, Divin. i 97 nam et cum duo soles vixi essent et cum tres lunae et cum faces et cum sol nocte visus esset et cum e caelo fremitus auditus (responsis haruspicum parvisi senatus). Delata etiam ad senatum labes agri Privenatis cum ad infinitum altitudinem terra desedisset, Apulique maximis terrae motibus conquassata esset; Seneca N. Q. i 11 explains the phenomenon on natural principles, historici soles vocant et binos ternosque apparisse memoriae tradunt; Graeci parelia appellant...sunt autem imaginis solis in nube spissa et vicina, in modum speculi; Pliny N. H. ii 31 mentions several occasions on which they were seen. It is curious that Cic. in his list of prodigies omits eclipses, which were the most generally feared of all, and which he himself mentions among the portents which accompanied the Catilinarian conspiracy, Div. i 18.

Tuditano: C. Sempronius Tud. consul with M. Aquilius 129 B.C.: on the death of Africanus see iii 80.

evererat: Plup. because attracted to the time of the parenthetic ut audivi, see below § 23 on dixeram.

sol alter: Hor. Sat. i 7 24 solem Asiae Brutum appellat.

§ 15. aequabilitatem motus, conversionem caeli: Sch., adopting Ernesti’s correction conversionumque, compares Leg. i 24 perpetuis cursibus conversionibusque caelestibus and Tusc. v 69 totius mundi cursum conversionisque as exx. of C.’s way of adding a limiting clause. Dav.’s reading in conversione may be illustrated by § 54 hanc in stilis constantiam. I think however that the text of the MSS is more rhythmical than either of the emendations, and that there is no reason why C. may not have separated the idea of uniformity of motion from that of its concrete embodiment, the revolution of the heavenly bodies. Thus Aristotle treats of the kinds and qualities of motion in the abstract, apart from our own experience, cf. Met. Λ 7, p. 1072 ἐστι τι δεί κυκλωμένον κίνησιν ἀπαντων, αὐτῇ δ’ ἡ κύκλῳ καὶ τούτῳ οὐ λόγῳ μόνον αλλ’ ἔργῳ δήλου and on the uniformity of the heavenly movements Caes. ii c. 6. Cicero is probably translating some such phrase as ὑμάλωσις κινήσεως, πορὰν οὐρανοῦ. We find aequab. motus again below § 48. Sext. Emp. ix 26 mentions that some (i.e. Aristotle) refer the origin of religious belief to τὴν ἀπαράβαστον καὶ ἐξακοντῶν τῶν οὐρανῶν κίνησιν.

distinctionem: fr. distinguo ‘to prick in different places’, hence immensi corporis pulchritudo distinguitur astra ‘spangled with’ (Sen. N. Q. vii 1), and below 95 caelum astra distinctum. The word implies an intentional variety, one shade or colour setting off another (πετοκιλμάμα) as in mosaic, cf. § 99 insulae litoraque colucent distincta (‘studded’) testis et
Here the idea intended is not simply 'difference' (as L. and P.), but as below § 104, the dotting about of stars, the varied grouping of constellations.

utilitatem: edd. adopt the conjecture of Manutius, varietatem, which is more in agreement with the context, but I think the text may be defended. Beauty and utility are often joined as the two characteristics of the universe, see below, § 87, 155, Orat. III 178 ut in plerique rebus incredibilius hoc natura est ipse fabricata, sic in oratione, ut ea, quae maximam utilitatem in se continerent, plurimum eadem haberent vel dignitatis vel saepe etiam venustatis: it is then shown that it is so with the heavenly bodies. Cleom. I 1 gives, as one proof of a governing Reason, that all things μεγαλωφελεστάτας παρέχεσθαι τὰς χρήσις, cf. Philo Leg. All. p. 107 (man learnt the knowledge of God) θεωσάμενοι ούρανον εν κύκλῳ περιπολούντα,... πλανήτας δὲ καὶ ἀπλανείς άστερας κατα ταύτα καὶ ἦσαντος κινουμενος, ἐμμελεῖς τε καὶ ἐναρμονίως καὶ τῷ παντὶ ἀφελίμος, Plato Er. 982 τούτο δ’ εἶναι τὴν τῶν ἄστρων φύσιν, ἵδειν μὲν καλλιστην, πορείαν δὲ καὶ κορείαν πάσης χρόνων καλλιστήν καὶ μεγαλουργεστάτην χαράνων πᾶσι τοῖς ξύφοις τὸ δὲν ἀνυστηλείν. Nor is it necessary to suppose that C. would have been precluded from speaking of the utilitas of the sun and stars here, because he has spoken of the commoda received from the temperatio caeli in § 13. He is far from punctilious about his divisions, and he might treat of the benefit of light apart from that of heat to which he confines himself in the earlier §.

pulchritudinem: Plac. Phil. I 6 καλὸς δὲ οὐ κόσμος· δηλον δὲ ικ τοῦ σχήματος καὶ τοῦ χρωμάτος καὶ τοῦ μεγεθος καὶ τῆς περί τοῦ κόσμου τῶν ἀστέρων παντικάς, see below § 98 foll:

ea fortuita: on the Neut. instead of the Fem. see § 7 ea ostendi and Leg. II 28.

ut: followed by multo magis instead of sic. The comparison of the world to a house is here used to prove that it must be governed and directed by reason; in § 17 it is used to prove that it cannot be made simply for man; in § 95 to prove that there are gods and that it must be their handiwork.


immensa et infinita: 1 26 n.

mentita sit: 'disappointed expectation'. There has been no infringement of law, no exception to the rule, cf. Pseudo-Arist. de Mundo 5 § 9 τίς δὲ γένοις· ἀν ἀφετία τοιάδε ἦν των ψυχικῶν· αἱ καλαὶ καὶ γόνιμα τῶν ἄλων ἀρχαί δήρη τε καὶ χειμώνας ἐπάγωσαν τεταγμένοις ἡμέρας τε καὶ νύκτας εἰς μηνύς ἀποκέλεσμα καὶ ἔναυστον;

A e. Argument of Chrysippus: (1) the universe shows the operation of a superhuman i.e. of a divine power § 16; (2) the universe
is too beautiful to be the habitation of man alone, it implies a superhuman inhabitant § 17.

Ch. vi § 16. quamquam—tamen: ‘clever as he is, he has here so far surpassed himself, that his words sound like a vox naturae, he speaks like one inspired’. On the argument of Chrysippus see iii 25 and Lact. Ira c. 10.

atqui introduces the 2nd premiss, as below § 41, and often, see Index.

id quo illa conficiuntur: Sch. (Opusc. iii 328 and 370) would insert a before quo, to suit the ab homine, but the indefinite id obscures the idea of agency, see § 4 numen quo regantur, § 30 natura contineri, 124 natura congregari.

[quid potius dixeris: ‘what could one say it was rather than a god?’ For the Perf. Subj. with words like potius see Gr. § 1540, and for the indefinite second person § 1544. R.]

et enim: from the criticism in iii 26 idemque si di non sint &c., it would appear that C. is here giving a new argument, viz. ‘if there are no gods, man must be the highest of existing things, but that is absurd, therefore there must be gods’. If we take it thus, etenim must have the force of ‘again’ ‘further’, see Madv. Fin. i 3 particula ‘etenim’ utimur non tam cum proxima confirmamus, quam cum in universa argumentatione progrediatur, ut soepe idem sit ac ‘porro’. He cites Tusc. iii 20, Div. ii 89, 142, N. D. ii 77, to which Forchhammer (Nord. Tidsskr. 1880 p. 41) adds ii 42, iii 30, 31. On the other hand this second argument is capable of being employed to back up the conclusion of the former (viz. that the universe indicates the existence of a superhuman power); for this in itself is not conclusive as to a divine existence, until it is further shown that whatever is superhuman must be divine. It is possible therefore that C. takes etenim in its usual sense. For the arg. Lescal. quotes from Augustine, mens humana de visibilibus judicantis potest agnoscre omnibus visibilibus se ipsam esse meliorem; quae tamen, cum etiam se propter defectum...fatemur esse mutabilem, inventit supra se incommutabilem veritatem.

esse hominem — arrogantiae est: the regular constr. would have been esse hominem mirandum est, as in § 93 hic ego non mirer esse quemquam qui, but this is confused with another constr. hominem putare est arrogantiae. For the thought compare Leg. ii 16 quid est verius quam neminem esse oportere tam stulte arrogariem, ut in se rationem et mentem putet inesse, in caelo mundoque non putet l...Cumque omnia, quae rationem habent, praestent iis quae sint rationis expertia, nefasque sit dicere ullam rem proestare naturae omnium rerum, rationem inesse in ea confitendum est. We must remember this side of Stoic teaching when we come to the extravagances of § 153.

§ 17. an...non possis adduci ut (domum)...mustelis aedificatam putes: tantum ornatum...si tuum...putes nonne desipere videare? I omit ergo after tantum with Heind. Forchhammer (p. 43) and Madv.
The last (in his *Emend. in Cic. lib. phil. i* pp. 19—53) gives many *exx.* of this co-ordination of contrasted clauses. The regular form would have been *domum non mustelis aedificatam putas: tantum ornatum tum putabis?* as below § 18 an cetera mundus habebit: hoc unum non habebit? § 97 an, cum moveri spheeram videamus, non dubitamus quin illa opera sint rationis: cum autem caelum moveri videamus, dubitamus quin ea ratione fiat? Leg. i 46 an ea non aliter: honesta et turpia non ad naturam referri necesse erit? Fin. i 15 an ‘utinam ne in nemore’ legimus: quae autem a Platone disputata sunt, haec explicari non placebit Latine? Fin. i 13 an ‘partus ancillae sit in fructu habendus’ disseretur: haec quae quae omnem omnem continent neglegentur? Fin. ii 33 ergo in bestiis erunt simulacra virtutum: in ipsis hominibus virtus nulla erit? Fin. ii 88 an dolor longissimis quisque miserrimus: voluptatem non optabiliorem diuturnitas factis? Fin. v 91 an hoc usquequaque: aliter in vita? Cat. i 3 an vero Gracchum privatum interfert: Catilinam nos confessus perferimus? Sulla 32 an vero clarissimum virum nemo reprehendit qui filium vita privavit: tu rem publicam reprehendis quae domesticos hostes necavisti? Ovat. i 250 an vero, si de re ipsa controversia est, contortas res perdiscimus: in leges . . . cognoscenda sunt, verumur ne ea quaeus cognoscere? Planc. 41 an vero clarissimi civis nomen editicii judicis non tulerunt: nos ab accusatore constituitos judices feriimus? where see Holden; also Tusc. v 90, Philipp. xiv 12, Liv. v 52 an ex hostium urbibus Romam transierit sacra religiosum fuit: hinc sine paculo in hostium urbem Veii transierimus? The regular form is sometimes broken by anaclotus, as in Phil. i 17 an si cui quid ille promisit, id erit faxum, which should naturally have been followed by *leges ejus ratae non erunt?* but this is made into an independent sentence: in Tusc. v 73 an Epicuro dicere licebit, which should have been followed by *Stoicis non dicendum est?* but this appears as a new sentence § 75. The foregoing *exx.* show that the former of the contrasted clauses should contain an undoubted fact, apparently inconsistent with the supposition contained in the latter clause. Here the undoubted fact is, ‘you could not be induced to believe that a fine house was built for weasels’; the opposed supposition is ‘will you believe that this beautiful world was made only for men?’ Of course, if the reading of the MSS is kept, and the former clause treated as an independent sentence, *non before possess* would be out of place. We find the same comparison of the universe to a household in an interesting passage of Arist. *Metaph. xi* 10 p. 1075 a.

**mustelis:** see n. on *faelis* i 101. The weasel was employed like our cat, cf. Phaedr. i 22 of the weasel supplicating for life *quaeso parcas mihi quae tibi molestis muribus purgo domum;* iv 1 (the fable of the mice and old weasel); Plaut. *Stich. iii* 2 auspicio hodie optimo exii foras: *mustela murem abutulit praeter pedes;* Ov. *Met. ix* 233 Galanthus is changed into a weasel, *nostrasque domos ut et ante frequentat;* Plin. *N. H.* xxix 16 there are two kinds of *mustela*, one larger and wild, the other *quaes in domibus nostris oberrat et catulos suos, ut auctor est Cicero, quotidie transfert, mu-
BOOK II CH. VI § 17.

tatque sedem, serpentes perseguitur; Anton. Max. Serm. LXVII in a house where there is much provision there are many mice and weasels (μῶς καὶ γαλάζ); Perizon. on Aelian V. H. xiv 4. Rolleston (Journ. of Anatomy and Physiology Vol. II p. 47 foll.) shows that this weasel was probably the Mustela Foina, our ‘white-breasted marten’, and cites Palladius IV 9 4, as proving that both it and the cat were domesticated in Italy in the 4th century A.D. See Houghton Nat. Hist. of the Ancients pp. 40—49. We find the same comparison below § 157, but here we have an additional point in the invisibility of the master.

ornatum mundi: the phrase is probably suggested by the Gr. κόσμος, see below § 94, 115, 118, 127, Acad. II 119.

A f. Man inhabits the lowest region of the universe; the pure ether of the higher regions is fitted for nobler inhabitants. [The argument is incompletely stated by C.] § 17.

an ne hoc quidem intellegimus gives the reason why it is folly to think that the earth-born creature man can be the highest, ‘or are we such fools as not to know that the things above are better?’ See Arist. Cael. II 5 θεότερος δ' ἕως τόπος τού κάτω, de Mundo VI 31 συνεμπαργωρεύει ὁ βίος ἀπας τὴν ἄνω χώραν ἀποδούς θεό: καὶ γὰρ πάντες οἱ ἄνθρωποι ἀνατελομένοι τὰς χεῖρας εἰς τὸν οὐρανόν εὐχὴς πονοῦμεν, καθ' ὃν λόγον οὐ κακός καίκειν ἀνατελομένοι—Ζεὺς δ' Ἰακωπ οὐρανὸν εὐρύν ἐν αἰθρί καὶ νεφέλωσιν—ὅτι καὶ τῶν αἰθρίων τὰ τειμωστα τῶν αὐτῶν ἐπίξει τόσον, ἀπρά τε καὶ ἡλίων καὶ σελήνη, R. P. VI 17 infra autem (lunam) nihil est nisi mortale et caducum praeter animos munere deorum hominum generis datos; supra lunam sunt aeterna omnia; nam ea quae est media et nona, Tellus, neque movetur et infima est; Tusc. I 43 (when the soul on its departure from the body has mounted above this lower air) naturamque sui similem contigit...finem altius se offerendi facit; Plin. N. H. II 21 Posidionius non minus quadraginta stadiorum a terra altitudinem esse in qua nubila et venti nubesque proveniant; inde purum liquidumque et imperturbatae lucis aerem.

ut ob eam—collocati sint: the main purpose of this awkward sentence is to introduce the conclusion ut hebetius sit genus humanum; eam ipsam causam refers to crassissimus and is repeated again in quod in terra—sint; the parenthetical statement of fact in the relative clause quod...videmus is explained by hebetiora ut sint, and afterwards taken up by hoc idem—contingere: not simply ‘befalls’, but ‘is a quality of’ like συμβαίνει. pleniorem: ‘denser’ ‘more stuffy’. No other instance of this meaning is cited. On the effect of climate see below § 42, de Fato 7 inter locorum naturas quantum intersit videmus: alios esse salubres, alios pestilentes, in alios esse putantur Attici, crasium Thebii, itaque pinguea Thebani et valentes, Div. I 79, Hor. Ep. II 1 244; Juvenal x 50 cites Democritus as an instance on the contrary side.

7—2
The originator of the theory is probably Heraclitus (fr. 76 Byw. οὗ γὰρ ἔτοι, ψυχῆ σοφωτάτη καὶ δριστή), who was followed by Hippocrates xxviii 31 foll. It is interesting, as confirmatory of the Posidonian authorship of the treatise from which C. is borrowing, to find Strabo attacking Posidonius for maintaining the influence of climate on character (Π 3 p. 102 foll.). He seems to have spoken of the distribution of the different parts of the earth and the effect on the character of the people inhabiting them, as proofs of divine Providence, in opposition to which Strabo says, "such arrangements οὐχ ἐκ πρωτοκλάσις γίνονται, καθάπερ οὐδὲ ἕνα καὶ τὰ ἔθνη διαφοράι ἀλλ’ κατὰ ἐπίπτωσιν καὶ συνυπάγματ’, οὐ γὰρ φύσει Ἀθηναίοι μὲν φιλοκόλους, Ῥακδαμίνων δὲ οὐ καὶ οἱ ἐγγυνώροι Θηβαῖοι, ἀλλ’ ὅλλοι θεοὶ οὕτως οὐδὲ Βασιλείνωι φιλόσοφοι φύσει καὶ Διονύσιοι, ἀλλ’ ἀσκήτης καὶ θεῖοι... οὗτος οὐδὲ (Poe.) συγχεῖ πάντα’. Similarly Galen (Hipp. Plat. p. 464 κ) 'Posidonius maintains οὐ σμικρῷ τινι διενεργῶν τοῖς ἔθεσιν τοὺς ἀνθρώπους εἰς δειλινὲς καὶ τὸλμας, ἦτοι φιλόδοντον τε καὶ φιλόπονον, ὀς τὸν παθητικὸν κινήσων τῆς ψυχῆς ἐπιμέλειαν δεῖ τῇ διαβιβάζει τοῦ σώματος, ἵνα ἐν τῇ κατὰ τὸ περιέχον κράσως οὗ κατ’ ὀλίγον ἀλλοιοφόρον. crassissima regio: C. omits to draw the conclusion, as to the existence of beings superior to man in the higher element, which we find below § 42 and in Sext. Emp. IX 86, εἰσὶν γὰρ καὶ θαλάσση πολλῆς οὐσίας σαμυμερεῖας (cf. pleniorem naturam) ποικillum συνιστάται ζύμα ψυχῆς τε καὶ αἰσθητικῆς μετέχοντα δυνάμεως, πολλῷ πιθανῷ τερόν ἐστιν εἰς τὸ ἀέρι, πολὺ τὸ καθάρον καὶ εἰλικρίνεις ἐξορίζει παρὰ τὴν γῆν καὶ τὸ ὑδωρ, ἐμφυχώ τιμα καὶ νοερὰ συνιστάθη ζύμα. Omitting this, he hastens on at once to another argument, which follows it in Sextus; see n. on et tamen below. collocati sint: Zumpt § 366 says that, while we never find C. using a plural verb after a singular noun of multitude, yet he sometimes employs a plural of the same subject in a following clause, as here and p. Arch. 12, Marcell. 11, Quint. 23, Fin. i 70, cf. Madv. § 215 a.

A g. Still even man shares in the gift of reason: this, like the grosser elements of which his body is composed, must be derived from the universe, as its source. § 18.

§ 18. et tamen: 'and yet, mean as he is, man has a trace of something higher'. The same argument is referred to in the same connexion by Sext. l. c., (If the air has living beings belonging to it, so, we may infer, must the ether have beings, of a yet higher grade) ἐθνι καὶ ἀνθρώπου νοερᾶς μετέχουσι δυνάμεως κάκειθεν αὐτὴν σπάσαντες, but it is not fully stated till § 94, where the same quotation from Xenophon occurs.

esse aliquam mentem: Brieger (p. 17) rightly objects to this reading, that the following et eam quidem shows that the subject, of which it introduces the attribute, must be already clearly before the mind, but aliquam leaves it indefinite. There is plainly allusion to a mind which is distinct from that of man and is stated to be keener than it. Hence Sch. and
Brieger propose to read *alia quam*; the latter comparing § 115 where *aliaqua* is read for *alia quae* in some MSS, and suggesting as alternatives *mundi mentem* (as in § 58), which I prefer, or *in mundo mentem* (as in III 27 quaeque apud Xenophon tem Socrates, unde animum arripuerimus, si nullus fuerit in mundo).

*et eam quidem*: *et in, et es quidem, and et quidem* are used to emphasize some quality or fact in reference to what precedes, cf. § 29 natura est quae tuaest, et ea quidem non sine sensu, § 30 et acriora quidem, see Index, and (for a different use) I 79 n.

*unde arripuit*: quoted by Lact. de Ira 10. The words of Xenophon (Mem. I 4 § 8), quoted in the same connexion by Sext. Emp. IX 92 foll., are *οὐ δὲ σαυτόν δοκεῖ τι φρόνιμον ἤχων ... ἀλλοθι δὲ οὐδαμοῦ οὐδὲν οἷος φρόνιμον εἶναι*; *καὶ ταύτα εἰδὼν δι' γῆς τοῦ μικρὸν μέρος εῦ τῷ σώματι πολλής οὕτως ἤχις, καὶ ὑψῶν βραχύ πολλοῦ διότι, καὶ τῶν ἄλλων δῆμον μεγάλων ὄντων ἐκάστοι μικρὸν μέρος λαβόντω τὸ σώμα συνήμορπται σοὶ· νῦν δὲ μονὸν ὧρα οὐδαμοῦ οὕτως σε εὐφυκώς πας* (Sextus has πόθεν) *δοκεῖς συναρπάσαι* (and that all the host of heaven are not guided by reason in their movements); cf. Odyss. VII § 20 διαλυμένιον ἀνθρώπων δηλαί ἀστρα ἔκαστα ἀπίστω πρὸς τὸ ὡμόφυλον πληθί τῆς ἔντυχε· αὐτὴ δὲ μόνη ὤντε παρασύρεται *ἀπιόνοι δράται*. Plato also attributes the same thought to Socrates (Phileb. § 54), τὸ παρ' ἰμάν σώμα ἃρ' οὖν ἔντυχεν φύσιμον ἤχιν ... πόθεν, ἃ φίλε, λαθοῦν, εἰπέρ μή τέ γε τοῦ παρθένου σώμα ἔντυχεν ἐν ἐντυχεῖ, ταύτα γε ἕχον τούτῳ καὶ ἐκ πάντη καλλίστα; f.oll. so below § 79 unde (mens fides virtus) *in terram nisi a superis defugeret potuerunt? Tusc. I 60 terrane tibi, hoc nebulo et caliginoso caelo, aut sata aut concreta videtur tanta vis memoriae? § 63 ex hacne tibi terrenam mortalitique natura et caduca concreta ea (excoquitatio) videtur? For the criticism see III 27.

*quin*: the previous argument is further supported by analogy; we might assume *a priori* that the soul must have come to us from some other quarter, but we have additional reason for believing this, when we remember that the remaining elements of our nature may all be traced to an external source. *fusus in*: *diffused throughout*, cf. § 28 calidum illud ita in omnibus esse natura, 141 tactor totus corpore aqueabiliter fusus est, I 39 animi fusionem universam.

*terrenam ipsam viscerum soliditatem*: 'even the earthy firmness of the flesh'; *visc. like σπλαγχνα* includes all that is covered by the skin except the bones; hence the public distribution of meat was called *visceratio*, so *visceribus vestis* § 159, cf. Tusc. II 20 and 34; *ipsam* as the least probable case, least resembling the element from which it was derived, so of the air § 26 *ipsa vero aer*.

*animam illam*: so, Brieger for the *animum* of MSS, *animus* being never used of breath or air; while *anima* is often used for the element by Lucretius and Cic., cf. Acad. I 124, Tusc. I 19 and especially Tim. c. 14 cited on § 32 mundi ardor.

*spirabilum*: 'inbreathed', 'the air we breathe'; so § 138 *spiritu in pul-
mones anima ducitur; cf. § 91 terra circumfusa est hac animali spirabilique natura cui nomen est aer, Tusc. i 40, 70, Hippocr. ap. Galen (Hipp. et Plat. p. 677) τὸ ἀρέσιον στοιχεῖον ἐν τοῖς τῶν ζῴων σώμασι όργανον, ἐν ταῖς ἀναφοραῖς καὶ τὰς σφυγμοὺς (pulsations). On the 'microcosm' compare Epictet. Diss. III 13 (on death thou must depart) eiς οὐδέν δεινόν, ἀλλ' ἄλλον έγένο, eiς τὰ φίλα καὶ συγγενῆ, eiς τὰ στοιχεῖα: δοσὶν ἐν ὑγίᾳ πνεῦμα εἰς πνεύματι, δοσὶν ἐν γηδίου εἰς γηθίδιον, δοσὶν πνεύματι εἰς πνεύματι, δοσὶν θάνατον εἰς θάνατον, M. Anth. iv 4 άσπερ γὰρ τὸ γαέδιον μοι ἀπὸ τινος γῆς ἀπορείμωσιν, καὶ τὸ υγρόν δὴ ἀτέρου στοιχεῖον, καὶ τὸ δερμόν καὶ πυράδες ἐκ τινος ἰδίας πυγής ...οὕτω δὴ καὶ τὸ νοερὸν ἦκε πνεύμ. Philo Mund. Op. § 51 πᾶς άθροισσα κατὰ μὲν τὴν διάνοιαν φησίωτα θεία λόγος, τῆς μακαρίας φύσεως ...ἀπόστασις γεγονός, κατὰ δὲ τοῦ σώματος κατασκευὴ ἀπαντὶ τῷ κόσμῳ συγκεκριστα γὰρ ἐκ τῶν αὐτῶν, γῆς καὶ θάνατος καὶ άειρος καὶ πυρός, ἐκάστου τῶν στοιχείων εἰρενεγκύκτως τὸ ἐπιβάλλον μέρος. The Stoics borrowed this theory from Plato Tim. 42, where the Demiurgus distributes the immortal souls to the created gods to combine with particles derived from the four elements: Galen (Hipp. et Plat. p. 665) says that Plato himself followed Hippocrates, who built on this foundation his doctrine of humours, so celebrated in the after history of medicine; thus yellow bile corresponds to fire, black bile to earth, phlegm to water, blood to air, giving rise to the four temperaments bilious, melancholic, phlegmatic, sanguine (Galen l. c. 672), cf. Vitruv. i 4 § 5 ex principiis quae Graeci stoiciæ appellant, ut omnia corpora sunt composita, id est ex calore et umore et terreno et aere, ita his mixtionibus naturali temperatura figurantur omnium animalium in mundo generatim qualitates.

si quis quæserat—apparet: for this form of the hypothetical sentence, cf. § 76 qui concedant, ita fata est, I 122 quod ni ita sit, quid veneramur deos (unless we should there read est for sit), and Roby § 1574.

Ch. vii. unde sustulimus: the answer given below is that we received it from the aether also called mundi fervor (§ 30) or ardor caelestis or caelum (41), which is a species of fire corresponding to the vital heat (41) but far purer than that which is to be found in any earthly creature (30), and in which resides the θεμοὲς τῆς, in the universe, non sine senti et ratione (29, 31), which holds all things together and is indeed God (30), and of which the stars are made and are therefore divine (39—42). The Stoics distinguished ether, πῦρ τεχνικὸν or πυρομά, as they called it, from ordinary fire, πῦρ αύξηρον, not only as purer, but as moving in a circle in its own sphere, while the other, being out of its sphere, moved vertically up to regain it; but they did not go so far as to make it a distinct fifth element (quintessence) like Aristotle (Acad. i 39). We find the same answer R. P. vi 15 animus datur ex illis sempiternis ignibus quae sidera et stellas vocavit, but elsewhere C. speaks more doubtfully as in Tusc. i 40, 43, 65 si deus aut anima aut ignis est, idem est animus hominis; nam, ut illa natura caelestis et terra vacat et umor, sic utriusque harum rerum humanus animus est express. Sin autem est quinta quaedam natura, haec et deorum est et animorum: at times
he follows Socrates and Plato and makes the soul a pure immaterial substance, thus after speaking of the origin of the body (Tusc. i 56) sanguinem bilem putavitam ossa nervos venas, omnes denique membrorum et totius corporis figuram videor posse dicere unde concreta et quo modo facta sint: as to the soul animorum nullia in terris origo inventi potest, it has nothing of earth or water, nothing even of air or fire; his enim in naturis nihil inest quod vim memoriae mentis cogitatiois habeat... quae sola divina sunt. Nec inventetur unquam unde ad hominem venire possint, nisi a deo. ...Nec vero deus ipse alio modo intelligi potest nisi mens soluta quaedam et libera. We may say indeed that C.'s answer to unde is always a deo, but at times he takes the Stoic materialist view of the divine nature, at other times the Platonic spiritualist view.

an cetera mundus habebit, hoc unum non habebit: on the coordination of contrasted clauses see above § 17.

A h. The universe being perfect must contain that which is essential to perfection, viz. mind. [Conclusion omitted 'and this mind is God'.] § 18.

ne cogitari quidem quicquam melius potest: on Stoic optimism cf. § 87 n.

A i. The sympathy which unites all the parts of the universe shows that they are pervaded by one divine spirit §§ 19, 20.

§ 19. consentiunt consiprians continuata cognatio: cf. N. D. iii 28, Div. ii 142 quae est continuatio conjunctioque naturae, quam, ut dixi, vocant sumptadum, ejus modi, ut thesaurus ex ovo intelligi debet? ib. ii 33 cum rerum natura quam cognitionem habent (portenta)? quae ut uno consensu juncta sit et continens... quid habere mundus potest cum thesauri inventione conjunctum? ib. 34 quae ex conjunctione naturae et quam concenctu atque consensu, quam sumptadum Graeci appellant, convenire potest meus quaesticularum cum caelo terra rerumque natura? it is also called naturae or rerum contagio (de Fato §§ 5, 7, Div. ii 33). We find the Greek equivalents in Diog. L. vii 140 ēn τῷ κόσμῳ μιθὲν εἶναι κενῶν, ἄλλ’ ἦνεσθαι αὐτῶν τοῦ γὰρ ἀναγκάζειν τὴν τῶν αὐθαίρων πρὸς τὰ ἐπίγεια σύμπνοιαν καὶ συντονίαν, Alex. Aphr. de Mixt. 142. (Zeller p. 119) ἦνεσθαι μὲν ὑποτίθεται Χρύσιππος τῇ σύμπασαν οὐσίαν πνεύματος τοῖς διὰ πάσης αὐτῆς δυσκόντως, υφ’ οὖ συναγειρεῖ τε καὶ συμμείνει καὶ συμπάθει ὡστοὶ αὐτῷ τὸ πᾶν, Philo. Mund. Op. 40 ἐκ τῶν αὐθαίρων τὰ ἐπίγεια ἡρτηγα κατὰ τινα φυσικὴν συμπάθειαν, Plut. de Fato p. 574 ε (the ground of necessitarianism is) τὸ φύσει διακόσμησαν τῶν κόσμων, σύμπνοιν καὶ συμπάθει καὶ αὐτῶν αὐτὰ ἐν, Cleomedes i 1 § 4 εἰ γὰρ μὴ δι’ ὅλου συμφθυς ὑπήρχεν ἡ τῶν ὄλων οὐσία, οὔτ’ ἄν ὑπὸ φύσεως οἷον τ’ ἦν συνέχεσθαι καὶ διακόσμησαν τῶν κόσμων, οὔτε, μὴ υφ’ ἔνος τοῦ συνεχομένου αὐτοῦ καὶ τοῦ πνεύματος μὴ δι’ ὅλου ὄντος συμφθυς, οἷον τ’ ἄν ἦν ἡμῖν ὅραν ἢ ἀκούειν foll. By such language the Stoics meant to express not merely the universality
and invariableness of law throughout the whole realm of nature, as of gravitation alike on earth and in the heavens, but the organic unity of the world, as an animate body, and the correlation and mutual interdependence of all its parts, see Diog. vii 143, Sext. Emp. ix 78. The word συμβάδων is used by Epicurus to denote the common feeling of the members of the human body. On the alliteration with c cf. below § 34.

continuata = συνκτάσσομαι. See Heinz p. 94, Osann on Cornutus pp. 231, 413. On the recurrence of words compounded with the same preposition Heind. (on § 81) cites 1 65 effingis atque efficis, 11 139 obrutam oppletamque—oblinitos, 158 confectis atque contextis and many others.

possetne uno tempore: the protasis is given in the following sentence, where the apodosis is repeated in a categorical form. uno temp. usually means ‘at one and the same time’; here Heind. takes it to mean ‘at one time’ as opposed to vicissim, which he makes equal to alio tempore, cf. Craner on Caesar B.C. III 15. I am inclined to think that the ordinary sense gives a better instance of the continuata cognatio, and that we need not trouble ourselves as to how far the statement accords with the facts as to our antipodes.

florent—horrent: so Epict. Diss. 1 14 ‘Do you not think that all things are knit together into one whole and that there is a sympathy between things on earth and things in heaven? If it were not so, how could all the plants put forth leaves and flowers and fruit, and again shed their fruit and their leaves, and retire into themselves and rest at the bidding of God?’ Pliny N. H. II 39 quis enim aestates et hiemes, quaegue in temporibus annua vice intelliguntur, siderum motu fieri dubitet? besides this, each star has its peculiar virtue, e.g. dogs run mad under the deg-star—quin partibus quoque signorum quorumdam sua vis inest, as our own experience tells us in regard to the winter solstice and the autumnal equinox. The olive and some other trees turn their leaves at the summer solstice, dried mint flowers at the winter solstice. See also a list of phenomena coelesstibus nesca causis ib. c. 80. On the other hand Lucr. (II 515) adduces the regularity of the seasons as a proof of the limited variety of atoms.

ipsae se immutantibus—cognoscit: the varying distance of the sun is perceived by what appear to be spontaneous changes in the objects about us, e.g. the growth of plants and such changes as are described by Pliny 1 c.

solstitia brumisque: Abl. of Point of Time. In pre-Augustan writers solst. is used only of the summer solstice. solis accessus discussaque: cf. § 49.

aestus maritimi: see below § 132, III 24, Div. II 33 ut enim jam sit aliqua in natura rerum contagio, quam esse concedo, multa enim Stoici col-ligunt, (then after exx. like those cited above from Plin. N. H. II 39) quid de fretis aut de marinis aestibus plura dicam? quorum accessus et recessus lunae motu governantu. Sescenta licet ejus modi proferri, ut distantium
rerum cognatio naturalis appareat; Seneca Prov. I (undae) ad horam ac diem subeunt, ampliores minoresque prout illas lunare sidus elicuit, ad eujus arbitrium Oceanus exundat, cf. N. Q. III 28, Plin. N. H. II 97; Caesar notices the fact (B. G. IV 29) eadem nocte aequidit ut esset luna plena, qui dies maritimos aequos maximos in Oceano efficere consuevit, nostrique id erat incognitum; pseudo-Aristotle de Mundo 4 § 35 pollit τις ἀμφότεροι λέγονται καὶ κυμάτων ὀρέσεως συμπεριοδεύεται αἱ τῇ σελήνῃ κατὰ τινας ἀφαι- μένους καίρους. οὐ δὲ τό πάν εἰσίν, τῶν στοιχείων ἐγκεκριμένων ἀλλὰ ὁ ἄνθρωπος ἐν ἀεί τε καὶ γη καὶ βαλάνη κατὰ τὸ εἰκός αἱ τῶν παθῶν ὁμοίοτητες συνύσταται, τοῖς μὲν ἐπὶ μέρους φθοράς καὶ γενέσεις φέρονται, τὸ δὲ σύμπαν ἀνάληθρον τε καὶ ἀγένετον φυλάπτουσι. We have a short sketch of the views entertained on the subject of tides in the Plac. Phil. III 17 (πάσας ἀμφότεροι γίνονται καὶ πλημμύραι); Aristotle and Heraclitus say the tides are produced by the sun, which is the exciting cause of winds; these when they rise push the sea before them and cause it to swell; when they sink the sea falls back into its place. Pytheas (the famous traveller of Massilia b.c. 300, see Bunbury Anc. Geog. I p. 600) says the tide rises when the moon is waxing and sinks as it wanes; Plato, that there is a kind of natural circulation of the waters of the sea (the reference is to the description of the rivers of Tartarus, Phaedo p. 111); Timaeus, that the tides of the Ocean are caused by the violent torrents of Gaul; Seleucus (cf. Plut. Plac. Quaest. p. 1006) that they proceed from the contrary currents of air generated by the rotation of the earth and the moon. Bunbury writes as follows (II 97) 'Posidonius (C.'s chief authority in this book) appears to have been the first Greek writer that arrived at clear ideas about the tides. For this he was indebted to his journey to Spain, where he spent some time at Gades, and from his own observation, coupled with the information he received from the natives, acquired a distinct knowledge not only of the diurnal recurrence of the tides, but of their monthly cycles of variation, which he correctly ascribed to the influence of the moon, and its different positions with regard to the sun; so that the highest tides, as he observed, always coincided with the full moon and the lowest with the half-moon or intermediate quarter', cf. Strabo III 3 p. 229, 5 p. 261—264, where he tells us that Aristotle had referred the tides to the peculiar nature of the Spanish coast, but that Pos. rightly maintained τῇ τοῦ Ἡκανών κύρισιν ὑπέχειν ἀστερειδῆ περίοδος, τῶν μὲν ἡμερήσιων ἀποδιδόσαν, τῆς δὲ μηναίας, τῶν δ' ἐναυασίας, συμπαθῶς τῇ σελήνῃ. Strabo (11 p. 9) thinks Homer referred to this in his ἀφφυρίους Ἡκανών and the description of Charbydias. Though the true theory of tides had thus been established early in the first century b.c. yet we find later writers still doubting as to their cause, e.g. Lucan I 412, as to whether they are due to the wind or to the moon, Pomp. Mela (time of Caligula) III 1 as to whether they may not be due to the respiration of the mundane animal. The early Stoics, in this agreeing with the Epicureans, thought the subject undeserving of the curiosity of a wise man. See Diog. L. VII 123 τῶν.
sofoν oúδεν θαυμάζειν τῶν δοκούντων παραδόξων, οἷον Χαρώνεια (oetía Ditia) καὶ ἀμφώτιδας.

fretorunque angustiae: Varro L. L. vii 22 dictum fretum a similitudine feronitiam aqua, quod in fretum saepe concurrat aequus atque effervesceat, cf. below iii 24 on the currents of the Euripus and other straits.

ortu aut obitu: 'shortly after the appearance of the moon above the horizon the tide-wave begins to show itself and increases till she reaches her greatest elevation (μέχρι μεσοπολύνων); after which the ebb commences and continues till the moon sets, when the flow again begins and increases till the moon reaches her greatest elevation on the opposite side of the heaven' (τῶν τοῦ ὑπό γῆν μεσοπολύνων), Posidonius ap. Str. iii 5 § 8. Cic. here only notices this diurnal variation.

cursus dispare: Lact. ii 5 stellarum inerrantium vel vagarum disparum cursus, cf. below § 49 cum duo sint genera stellarum, one of which moves invariably from east to west, while the other makes two distinct revolutions, we may see in both the same law of circular revolution: all make the daily revolution, some, the planets, have a further movement of their own; § 51 quorum ex disparibus motionibus magnum annuum nominaverunt.

concinentibus partibus: § 119 (stellarum) tantus est concentus ut... with allusion to the harmony of the spheres, on which see R. P. vi 18, also Oeconom. 6.

continuato spiritu: Celsus (ap. Orig. vi 71) charged the Christians with borrowing from the Stoics their doctrine of an all-pervading Spirit τῶν Στοίκων φασκότων ὧτι ὁ θεὸς πνεῦμα ἐστί διὰ πάντων διελμυθὸς καὶ πάντ' ἐν ἑαυτῷ περιέχων. But the Stoic πνεῦμα, as Origen points out, is material: it is the warm air or ether which penetrates and gives life to all things and connects them together in one organic whole; just as man's body is unified by the living soul, which is also material, πνεῦμα σύμφωνα ἡμῖν συνεχεῖς παντὶ τῷ σώματι δείκνυον (Chrys. ap. Galen Hippocr. et Plat. p. 257). Posidonius defined God as πνεῦμα νοερόν καὶ πυρόδε, όν ἄγχων μεν μορφήν, μεταβάλλει δὲ εἰς δ'o βουλεύει τὰ καταξιωματικὰ πάνω (Stob. Ecl. i 2 p. 56). The term πνεῦμα is Aristotelian, it is the material basis of soul (Zeller iii p. 483a foll. and note on N. D. i 33 caeli ardorem). See the passage cited from Alex. Aphr. under consentiunt above.

continerentur: quasi quodam vinculo, as we read in § 115.


uberosus et fusius: 'a more exuberant and flowing style'; this was not usual with the Stoics, of whom C. says (Orat. ii 159) brevis angustiusque genus sermonis affert, non liquidum, non fusum ac profuens, sed exile aridum concium ac minutum, and Leg. 1 36 quae fuse olim disputabantur ac libere, ea nunc articulatim distincta dicuntur. The speeches of Antony and Brutus in Shakspeare may be taken as illustrating the two styles. We are told that Posidonius, whom C. here follows, was distinguished from others of his school by a natural eloquence (Strabo iii 2 § 9).
ut Zeno solebat: his love of brevity is shown by the story told Diog. L. vii 20 εἰπότοις δὲ τινος ὡς μικρὰ αὐτῷ δοκεῖ τὰ λογάρια τῶν φιλοσοφῶν, λέγει, εἰπε, τάλιθη, δεὶ μνῦν καὶ τὰς συλλαβὰς βραχίας ἔγινα, εἰ δυνατόν.

concluduntur: see n. on i 89 argumentus sententiam conclusiast.

profluens: aqua prof. is the regular term for running water, see Off. i 52. [Ambros. Off. i 16. J. E. B. M.]

conclusa: Jordan (Hermes 1880 p. 535) quotes from an inscription Esquiliis ad aqua conclusa, showing that the phrase was in regular use for a pond. So we often have locus conclusus, and Caesar B. G. iii 9 opposes mare conclusum to apertissimus Oceanus.

orationis flumine convicia diluntur: the imitation by Minucius c. 16 conviciorum amanissimam labem verborum veracium flumine diluere is sufficient to prove the correctness of the emendation convicia against Zumpt on the Orat. pro Murena § 13; compare also Fam. xii 25, Plin. Ep. vi 12 cited by Heind.; and for the general sense Fin. ii 3 cum furtur quasi torrens oratio, quamvis multa cujusque modi raptat, nihil tamen teneas...nusquam coerces.


premebat: 'compressed', so pressus 'concise' in Orat. ii 96, see n. on § 149 below.

A k. Zeno's argument for the divinity of the universe [and therefore (indirectly) for the divine existence, since the universe exists]. (1) What has reason is better than what has not reason, therefore the universe, the best of things, has reason: similarly it may be proved to be wise, blessed, eternal, and therefore God. §§ 20, 21.

This indirect argument is constantly used in Sext. Emp. see ix 85 ἀλλ' εἰ άριστή ἐστιν φύσις ἢ τῶν κόσμων διωκόνσα, νοερά τε ἐσται καὶ σπουδαία καὶ ἀδιάφορα: τουαίτη δὲ τυγχάνοντα θεός ἐστιν εἰσὶν ἄρα θεόν. ib. § 118 ἐπεὶ δὲ τῶν κόσμων φύσις ἐστιν αἰτία τῆς τοῦ διὸν κόσμου διακοσμήσεως, εἴη δὲ αἰτία καὶ τῶν μερῶν: εἰ δὲ τούτω, κρατίστη ἐστιν: εἰ δὲ κρατίστη ἐστι, λογική τέ ἐστι καὶ νοερά: προσέτη δὲ ἄδειος ἄν εἰσίν· ἄρα δὲ τουαίτη φύσις ἀντίθετς ἐστι θεῶν. So §§ 120, 122.

Ch. viii § 21. quod ratione utitur: the same argument is given Leg. ii 16 cum omnia quae rationem habent praestent iis quae sint rationis expertia, nefasque sit dicere ullam rem praestare naturae omnium rerum, rationem inesse in ea confundendum est; and Sext. Emp. ix 104 πολὺν ὁ Ζήνων φησιν, εἰ τὸ λογικὸν τοῦ μή λογικὸν κρεῖττον ἐστιν, οὐδὲν δὲ γε κόσμων κρεῖττον ἐστιν, λογικῶν ἄρα ὁ κόσμος· καὶ ψυχῶν ἐπὶ τοῦ νοεροῦ καὶ ἐμψυχίας μετέχοντωσ. It was also employed, as Diog. L. tells us (vii 123), by Chrysippus, Apollodorus and Posidonius. For the answer to it see N. D. iii 21.

haec meliora sunt quam ea quae sunt his carentia: the de-
monstrative hic is carelessly used, 1st for the concrete existence, and 2nd for the abstract quality. The thought is more correctly expressed in § 46 quod habeat sensum et rationem et mentem, id sit melius quam id quod his careat. For the subaudition of the abstract from the concrete see i 80 n.

efficietur: there seems no reason why edd. should have departed from the best ms by reading the Pres. here: the Fut. implies 'will be proved, if we take the trouble to lay out the argument, as we have done in the previous case'. Cf. Roby § 1465.

A k (2) The universe must be sentient, because it has sentient parts, (3) the universe must have an animated and rational nature, because it gives birth to what is animated and rational. § 22.

§ 22. nullius: used here as Gen. of nihil, instead of the more common nullius rei Madv. § 494 Obs. 3. 'Where a part can feel, the whole cannot be without feeling'.

mundi partes sentientes: so Sext. Emp. ix 85 ἥ τὰς λογικὰς περι­έχουσα φύσεις πάντως ἐστὶ λογική, οὐ γὰρ οἶδα τὸ δῶν τοῦ μέρους χείρον εἶναι, Philo Provid. I 25, 32, 51, 68. Lactant. II 5 first controverts the argument (non est mundi pars homo, sicut corporis membrum. Potest enim mundus esse sine homine, sicut urbs et domus. Atqui ut domus unius hominis habitaculum est, sic et mundus domicilium totius generis humani; et aliud est quod incolitur, aliud quod colet), and then turns it against the Stoics, si mundi pars est homo, quia mortalis est homo, mortalis sit et mundus necesse est, nec tantum mortalis, sed etiam omnibus morbis subjectus. On the same principle, if the world is divine, its parts must be divine; therefore not man alone, but all sentient creatures divine. Lact. also points out the inconsistency of making the world the home of the gods (as in § 17) and then deifying the world itself.

urget: i 70, iii 76.

angustius: used of close logical argument, as opposed to rhetorical amplification, cf. Orator 117 erit haec facultas in eo quem volumus esse elo­quentem, ut definire rem possit, neque id faciat tam presse et anguste quam in illis eruditissimis disputationibus fieri solet, sed, cum explanatibus, tum etiam ubernus; Part. Orat. 139 vel anguste disserere, ut dialectici qui appellantur, vel, ut oratorem decet, late exprimere; above § 1 subtilitate.

nihil quod animi—composque rationis: Sext. Emp. ix 77 τὸ γενη­τικὸν λογικὸν καὶ φρονίμου πάντως καὶ αὐτὸ λογικὸν ἐστὶ καὶ φρονίμου, and more technically § 101 Ζήμων δὲ ἀπὸ ἑνοφωνίας τὴν ἀφορμὴν λαβὼν οὕτως συνε­ργεῖ, τὸ προϊόμενον στήριμα λογικοῦ καὶ αὐτὸ λογικὸν ἐστὶν' ὁ δὲ κόσμος προϊόν τα στήριμα λογικοῦ, λογικὸν ἂρα ὁ κόσμος. Lact. II 5 points out the fallacy, neque mundus generat hominem...nam hominem a principio idem deus fecit, qui et mundum. Disentangled from Stoic materialism it is the argument of the Psalmist (xciv 6) 'He that planted the ear shall he not hear?' Cf. below § 79.
nihil—id: for the pleonastic pronoun Allen cites III 24 sed non omnia quae cursus certos habent, ea deo tribuenda sunt; see also below § 27 reliqua quarta pars mundi, ea &c., III 34 nihil esse... quin id interest, Draeg. § 37.

similitudine: so Chrysippus below § 38.

rationem conclusit: see 1 89 n.

canentes tibiae: can. is constantly used both of the instrument (tibia cornu &c.) and the performer, cf. § 146.

inesset in oliva scientia: the expression may be compared with Aristotle’s illustration of a final cause in nature (Phys. II 8 p. 199) ἀτόμων τὸ μὴ ὅσεσθαι ἕνικα τοῦ γίνομαι, ἵνα μὴ ἰδωσει τὸ κινοῦν βουλευόμενον καὶ τού καὶ ἡ τέχνη οὐ βουλεύεται καὶ γὰρ εἰ ἐν ἑνὶ ἐν τῷ ἔξυπερ ἡ ναυπηγεία δρομὸς ἐν φύσει ἐποίησε· ὡστ’ ἐν τῇ τέχνῃ ἐνοτι δὲ ἕνικά του καὶ ἐν φύσει, and with C.’s supposition (Fin. IV 38) of an art of viticulture inherent in the vine.

[nodiculas: see Madv. on Fin. IV 75. Swainson.]

numerose sonantes: so numerose cadere not unfrequently in Cic., and acute sonare R. P. vi 18.

idem: if we take this as Neut. explained by inesse musicam, we may perhaps retain the ms reading. Otherwise, taking it as Masc., Baiter’s conjecture (item) seems required, because the stress is on identity of procedure, not of person, cf. below § 38 item... debere. Ba. also reads item for idem in Murena § 21.

A 1. Physical argument for divine existence. (1) Heat is the cause of motion and of life: the whole universe is pervaded by heat: in it we find the governing principle (ἡγμονικόν) of the universe. Therefore it must have in the highest degree that reason which is found even in the inferior parts of the universe. §§ 23—30.

The Stoic idea of the divinity of fire may be illustrated by the words of Plut. (Conv. VII p. 703) ὅσεὶν γὰρ ἄλλο μᾶλλον ἐμψύχω προσέκεν ἢ πῦρ κινούμενον τε καὶ τρεφόμενον δι’ αὐτοῦ, καὶ τῇ λαμπρότητι δηλοῦν, ὡστερ ἡ ψυχή, καὶ σαφεῖτων ἀπαρτα, and by those of a modern divine “God is the fire of this world, its vital principle, a warm pervading presence everywhere. What thing of outward nature can so picture to us the mysterious, the subtle, the quick, live, productive thought, which has always lifted men’s hearts and solemnized their faces, when they have said the word ‘God’, as this strange thing, so heavenly, so unearthly, so terrible and yet so gracious; so full of creativeness, and yet so quick and fierce to sweep whatever opposes it out of its path?...Here is the universe full of the diffused fire of divinity”. Philip Brooks Serm. on the Candle of the Lord.

Ch. IX § 23. dixeram—negaram: in English we should naturally use the preterite, where there was no danger of misconception, ‘since I have
begun to treat the subject otherwise than I at first proposed, for I said the first part needed no discussion’, but the Latin is more precise, marking by the difference of tense that the action dixeram is prior to the action coepi agere; Verr. iv 48 tamen, quod ante a dixeramus—argentum redditum, Orator 101 redeo ad illam Platonis, de qua dixeram, rei formam, Marcell. 1 diuturni silentii, quo eram his temporibus usus, finem hodiernus dies attulit. Brix cites a number of exx. from Plautus and Terence in his n. on Captivi prol. 17 fugitivus ille, ut dixeram ante, and refers to Lübbert Syntax von quom p. 168; see above § 14 on evenerat. [Caesar uses dixeram with this force B. G. ii 1 § 1, 24 § 1, 28 § 1, and demonstraveram ib. iv 27 § 2. R.]

rationibus physicis: ‘by scientific reasoning’, ‘on grounds of natural philosophy’, as distinguished from the general reasoning which precedes. Cf. below § 54, § 63, § 70, Div. i 110 physica disputandi subtilitate. It may be questioned whether edd. are right in omitting the explanatory clause added in the mss, see i 20 physiologiam n.

confirmari: the Active is read by edd. after Dav. on the ground that Balbus at once carries out his wish himself, but the Passive is similarly used Quint. Fr. iii 1 § 2 ea te cura liberatum volo, Att. viii 3 rem publicam defendam volunt, Div. ii 34. Perhaps the Passive may have been preferred as the more modest, giving less prominence to personal agency.

quae alantur atque crescant: the lowest stage of organic life, cf. § 33 n. I have followed Ba. in reading atque for the et quae of mss, because I can see nothing here to justify such precision of statement. Müller (praef. p. viii) cites § 22 quod animi quodque rationis est expers, and Leg. iii 12 haec est enim quam Scipio laudat in illis libris et quam maxime probat temperationem, but the latter is intentionally definite and the repetition of the Relative is also needed for clearness, while quodque in the former is by no means equivalent to et quod. With some hesitation I have retained the Subjunctive both here and in § 33, the relative clause being in the one case subordinate to the Subj., in the other to the Inf., and allowing therefore the dependent verb to be in the Indefinite Subj. (‘all such things as have the property of growth’, à ἀν τρέφωνα as opposed to ρα τρέφωνα), though in a direct unconditional sentence we must have had the Ind. e.g. quae aluntur continent; cf. Draeger § 151. 5a, Tusc. i 91 natura si se sic habet, ut, quo modo initium nobis rerum omnium ortus noster afferat (for affert) sic exitium moris; Reid on Cato § 42 invitus feci ut for-tiassimi viri fratrem ejicerem septem annis post quam consul fuisset (for fuerat); Wilkins on Orat. ii 2 quo etiam fecit libentius ut eum sermonem, quem illi quondam inter se de his rebus habuisset, mandarem litteris (for habuerant); below § 46 nec dubium quin, quod animans si...id sit melius quam quod his careat, where, apart from the subjunctival subordination, we should have had quod animans est, est melius; § 59 dictum est de sideribus ut jam appareat multitudo nec cessantium deorum nec ea quae agant molientium. I do not think however that we need employ this principle to explain the Subj., in Arch. 18 quoties hunc vidi, cum litteram scriptisset
nullam, magnum numerum optimorum versuum de eis ipsis rebus, quae tum agerentur, dicere ex tempore (see n. in Reid's ed.); the Subj. is that of indefinite repetition after the Inf.; agebantur would necessarily refer to a single occasion. [Mr Roby writes "I think that, where a short relative clause constituting a definition of an existing person or thing is used as the subject of the sentence, Cicero would employ the Indicative, notwithstanding its dependence on a Subjunctive, as below § 50 guibus pubescant quae orientur a terra, and in Off. 1.51 ut quae descripta sunt...teneantur, lb. 89 ut ii qui praesunt rei publicae...similes sint, 98 efficitur ut et illud quod ad omnem honestatem pertinet...appareat. I should therefore prefer either to read aluntur and crescant here, or to translate 'which are to be fed and grow'."] It seems to me that a writer would use either Mood according to his feeling at the moment. He might have the class before him as a fixed and definite conception, irrespective of the changing individuals of which it is composed, and of the particular character of the proposition in which it is included. In that case he uses the Indicative, but otherwise the Subjunctive. C. combines them below § 44 (Aristoteles) omnia quae moventur aut natura moveri consuet aut...quae autem natura moverentur, haec aut deorsum aut in sublime ferri, cf. § 72 qui precabantur n.

quod est calidum cietur motu suo: δύναμις αὐτοκίνητος Sext. ix 76. In making fire the essential element the Stoics followed Heraclitus (cf. below III 35) and Arist. (though the latter usually prefers the word βερμότης to πῦρ, see below) Respi. c. 8 τὸ ζηύ καὶ ἡ τῆς ψυχῆς ἐξει μετὰ βερ- μότητος τινὸς ἑπτὼν πυρὶ γὰρ ἐργάζεται πάντα ... τὰς μὲν οὖν ἄλλας δυνάμεις τῆς ψυχῆς ἀδύνατον ὑπάρχειν ἀνευ τῆς θρησκείας, ταύτην δὲ ἀνευ τοῦ φυσικοῦ πυρὸς, Gen. An. III 11 γίνεται δ' ἐν γῇ καὶ ἐν χρόνῳ τὰ ζηύ καὶ τὰ φυτὰ διὰ τὸ ἐν γῇ μὲν ὑπὸρ ὑπάρχειν, ἐν δ' υἱατὶ πνεῦμα, ἐν δ' τούτῳ παυτὶ βερμότητα ψυχῆς, ὅστε τρόπον τινὰ πάντα ψυχῆς εἶναι πληρή, de Anim. II 2 §§ 8 and 16, Trendel. p. 153', Zeller iii p. 483' foll. The argument, loosely stated by C., is as follows: 'life depends upon movement; this movement is connected with the internal heat; when heat goes, life departs'; cf. Seneca Ben. iv 6 unde sanguinem, cujus cursu vitalis continentur calor?

§ 24. quod Cleanthes docet, quanta vis: quod is strictly speaking the relative explained by the following clause, as in 1 2, 38, II 93 quod nescio an ne in uno quidem versus tantium possit valere fortuna, Div. ii 87 quod Carneadom Cithocamus scribit dicere solitum, nusquam se fortunatiorem &c., cf. Tac. Ann. iv 4, Liv. xxvii 7, Fin. ii 12, Caesar B. C. iii 68, Draeg. § 484. In use quod becomes little more than a conjunction.

quin is: see Madv. § 440 a Obs. 3, and N. D. iii 34 cited on nihil—id § 22, Roby § 1688.

nocte et die: Roby § 1182 cites Liv. xxv 39 nocte ac die bina castra expugnata. Nocte is naturally placed first in reference to the cena.

reliquis: cf. reliquiae cibi § 138.

insit calor īs quas natura respuerit: I have followed Heind. in read-
ing *inest* for *inset*, making it a part of the argument of Chrysippus, not a direct statement by Cic., as it would otherwise be difficult to explain the Subj. *resperuit*. The Inf. *inesset* would have been more regular after the simple Relative (which I take *cujus* here to be); for its interchange with the Subj. in such cases, see n. on *existit* i 12 and below § 44.

*jam*: transitional, cf. i 30 n.

*venae et arteriae*: on the ancient view of these cf. § 138. Sch. refers to Gellius xviii 10, where it is said to be a common blunder, not only with the unscientific (e.g. Ov. *Met.* x 289 *saliunt tentatae pollice venae*, Persius iii 107 *tange miser venas*), but even with physicians to speak of the pulsation of the vein, *quod venae quidem suapte vi immobiles sint...arteriae autem motu atque pulsu suo habitum et modum februm demonstrant*, and he adds the Greek definition *φυγμός ἶτη διαστολή καὶ συντολή ἀνθρωποίες δρηπίας καὶ καρδίας*. There are occasions however in which a venous pulse becomes visible (Huxley, *Elem. Phys.* p. 111). *micare*: to twitch or throb.

*animadversum est cum cor palpitaret*: so Huxley ib. p. 47 ‘If the heart of a living animal be removed from the body, it will go on pulsating for a longer or a shorter time, much as it did in the body’. For constr. cf. i 58 *cum te anteferret* n.; usually *animadv.* is followed by Acc., or Acc. with Inf., or Interrogative Clause. *mobiliter*: *Div.* ii 129 m. *animus agitatur*.

*ut imitaretur igneam celeritatem*: ‘so as to resemble the flickering of flame’.

*terra editum*: cf. i 4 and Index under *Periphrasis*.

*caloris naturam*: ‘the element of fire’ like *terrena natura* below; so *alvi natura* § 136, cf. n. on *animi natura* i 23.

*pertinenter*: cf. i 36; it is the *divinus spiritus* (see above § 19) *per omnia maxima et minima aequali intentione diffusus*; *Sen. ad Hel.* viii 3 (inferiora aeris tepent) *eo spiritu qui omnibus animalibus arbustisque ac satis calidus est*. *Nihil enim viverei sine calore*.

§ 25. *conficte*: the same word occurs *Div.* ii 44 *nubium conficte*; cf. *Aen.* vi 6 *quaerit pars semina flammæ abstrusa in venis silicis*.

*terrarum fumare calentem*: I have printed this as a verse quotation, because it does not seem to me at all likely that C. could inadvertently have fallen into the hexameter metre, as Sch. thinks. It is true there is nothing very noticeable in the line, but neither is there in § 151 *venas penitus abditas*, or iii 37 *cur se sol referat nec longius progreditur solstitiali orbì*, where see n.; or *Tusc.* ii 34 *ut multus e viscibus sanguis exeat*. For the use of *fumo* see *Lucr.* v 469 (at dawn) *tellus fumare videtur*; *Plin. N. H.* ii 42 *humidum a terrâ, alias vero propter vapores fumidum, exhalari caliginem certum est*; *Aen.* xii 338 *equi fumantes sudore*. The evaporation which takes place from newly ploughed land is of course no proof of internal heat, any more than the steaming of a damp towel before the fire, but is simply caused by the exposure of a damp surface to dry warm air. The vapour becomes visible if the exposed surface is either colder or
warmer than the overlying air: in the former case the air is heated by contact with the ground and its moisture discharged: in the latter case, the warm earth yields more vapour than the air; can retain at the given temperature. See Huxley, Physiography, p. 44. It is not likely that a philosophic observer, like Posidonius, would have used so weak an argument; and this appears to me an additional reason for supposing that Cic. is here illustrating the Stoic doctrine by a quotation from some Latin poet.

**ex puteis jugibus:** cf. Lucr. vi 840 frigidior porro in puteis aestate fit umor, rarescit quia terra calore, et semina siqueae forte vaporis habet propere demittit in auras... Frigore cum premitur porro omnis terra coitque et quasi concrescit, fit sollicit ut coeundo exprimat in puteos siqueam gerit ipsa calorem; Hippocr. de Nat. Pueri xxvi foll. τὸ κάρτο τῆς γῆς τοῦ μὲν χειμώνος θερμὸν ἐστὶ τὸ δὲ θέρμων ὕπρον, because the earth is wet in winter and pressed together from the weight of water, and so admits of no ventilation, but wet substances pressed together generate heat; Arist. Meteor. i 12 § 11, with Ideler's n.; Strato, the successor of Theophrastus (ap. Seneca N. Q. vi 13), hiberno tempore, cum supra terram frigus est, calent putei, nec minus specus atque omnes sub terra recessus; quia eo se calor contulit superiora possidenti hiemi cedent, qui cum in inferiora pervenit et eo se, quantum poterat, ingessit, quo denuior, hoc validior est; Seneca himself gives a more sensible account of the matter (N. Q. iv 2) Oenopides Chius ait hieme calorem sub terris contineri; ideo et specus calidos esse et tepidiorum puteis aquam... Aqua et specus et putei tepent, quia aera rigentem extrimosus non recipuunt; ita non calorem habent, sed frigus excludunt; Macrobr. Sat. vii 8 § 10 usw. tibi compertum est aquas quae de alitis puteis hauriuntur fumare hieme, aestate frigescere foll., Plin. N. H. ii 106, xxxi 2, Theoph. Fr. 3 § 16 Wimmer, Diod. i 41. From a comparison of the passages quoted from Lucr. and Hippocr. it seems that ea before hieme must refer to terrae, not to vis; there is great awkwardness in the unnecessary in terris which follows—perhaps the Pl. generalizes, meaning terrestrial heat generally, while the S. terra refers to the particular spot where the well is situated—but in any case calorem would be more awkward, if we understand ea of vis caloris. Sch. compares the repetition of aquas § 26, natura iii 28 (and 34), beiua R. P. ii 67. Most edd. alter the Subjunctives continetur, sit, continent, but they are intentionally used to show that C. is here merely a reporter, and does not vouch for the validity of the reasons assigned.

**vis caloris:** cf. i 54 n. and potestas plumbi Lucr. v 1241.

**terrae cavernis:** so in § 151. The order vis terr. cau. cal. is very unusual.

Ch. x § 26. Longa est oratio: cf. i 19 longum est.

**terra concipiunt semina:** 'receives in its bosom', so Divin. ii 68 censes ante coronam herbae existitesse quam conceptum esse semen?

**ipsa ex se generata:** i. e. by spontaneous generation, autóματος γένεσις Arist. An. ii 4 § 2 (generatio aequinocta). Compare Arist. Hist. An. v 1 κοινὸν μὲν οὖν συμβέβηκα καὶ ἐπὶ τῶν ζώων, ὅπερ καὶ ἐπὶ τῶν φυτῶν τὰ μὲν...

M. C. II.
γάρ ἀπὸ σπέρματος ἐτέρων φυτῶν, τὰ δ’ αὐτῶμα γίνεται, συντάσσει τινὸς τοιαύτης ἄρχης, καὶ τούτων τὰ μὲν ἐκ τῆς γῆς λαμβάνει τὴν τροφήν, τὰ δ’ ἐν ἑτέροις ἐγγίνεται φυτοὶ, διόπερ ἐσπέρα ἐν τῇ θεωρίᾳ τῇ περὶ φυτῶν, also c. 19 and vi 15, Gen. An. 1 § 11 τὰ μὲν γὰρ (τῶν φυτῶν) ἐκ σπέρματος γίνεται, τὰ δ’ ἀὐτοματομοίοντας τῆς φύσεως γίνεται γὰρ ἡ τῆς γῆς σποριμάδες ἡ μορίων τινῶν ἐν τοῖς φυτῶι. ἐνα γὰρ αὐτὰ μὲν οὐ συνεταίται καθ’ αὐτὰ χωρίς, ἐν ἑτέροις δ’ ἐγγίνεται διέθεσιν, οἷον ὁ ἄξιος (mistletoe); for other exx. see Bonitz’s Index under αὐτόματα, Theoph. H. P. ii 11 αἰ γενέσεις τῶν δέντρων καὶ δῶς τῶν φυτῶν ἡ αὐτόματα ἡ ἀπὸ σπέρματος κ.τ.λ., ib. iii 1 § 4, and, on aequivo-cal generation of animals, Meteor. iv 1 § 18 Ideler, p. 449, Sext. Emp. P. H. i 14 § 40, Lucr. ii 871, ν 797. The words stirpibus in ōsca are, I think, equivalent to ἑτέρους ἐγγίνεται φυτοῖς in the passages quoted from Arist., and refer to parasitic plants, such as the mistletoe, quod non sua seminat arbo (Dem. vi 206), and perhaps to fungous growths. Spontaneous generation is probably mentioned as giving the strongest proof of the generative virtue of heat (calido solis concreta vapore). For ipse see Roby § 2264 b.

**temperazione caloris**: ‘by the due proportion of heat’, cf. below § 28, § 49 (solum accessus et recessus) caloris modum temperant, § 131 (ventorum flatu nimi temperaturo calores), Aristotle (Anima ii § 4 § 8) makes heat the condition, not the cause of growth, δοκεῖ δὲ τισιν ἡ τοῦ πυρός φύσιν ἀπλός αἰτία εἶναι τὴν τροφὴν καὶ τὴν αὐξήσεων καὶ γὰρ αὐτὸ φαίνεται μόνον τῶν σωμάτων ἡ τῶν στοιχείων τρεφομένων καὶ αὐξομένων...τὸ δὲ συν- αίτιον μὲν τις ἐστίν, οὐ μὲν ἀπλὸς γε αἰτίον, ἀλλὰ μᾶλλον ἡ ψυχή. ea: on the pleonastic Demonstrative see above § 24 nihil...id.

**ipse liquor aquae**: ‘the very fact of the fluidity of water, independently of any other proof’. So in Lucr. i 454 liquor is said to be the property of water, as heat of fire. The mss generally read effusio after declarat. Probably this is a gloss to explain liquor. In a few mss the text is altered to make it grammatical. It is an objection to Madv.’s emendation (et fusio) that it creates confusion by interposing a noun of the same gender between the relative and its antecedent. **primum**: this is opposed to atque etiam maris below.

**nive pruinaque concresceret**: we should rather have expected in nivem pruinamque as we find umorem in lapidem concrescere Plin. N. H. xxxvi 45. In Lucr. iii 20 (nix concreta pruina) we have a similar expression, where pruina is Abl. of Cause, being used loosely of frost, and we might at first sight be inclined to explain it similarly here, since frigoribus must certainly denote a cause; but the addition of nive seems to show that we must take these ablatives to denote the manner of congelation, as probably in Virg. G. ii 376 frigera...cana concreta pruina. [Swainson cites Ov. M. v 673 rigido concrescere rostro ora videt.]

**frigoribus**: ‘frost’, may be added to Draeger’s list (§§ 7, 8) of plural abstracta used for concretes, cf. below § 98.

**frigoribus adjectis**: ‘through the application of different kinds of
cold'. There is something tempting in Heind.'s emendation *adstrictus*, which is constantly used of the effect of cold, as by Lucr. v 436 *Scythicam adstringens Bosporus undas*; but *adjectis* corresponds to *admixto* in the previous sentence; we find it often used for the making up of potions in Celsus, as *adjecere sulphur aquae*.

**tabescit**: cf. Lucr. vi 964 (*sol*) *nives radiis tabescere cogit* and Liv. xxi 36 *tabes liquentis nives* ‘slush’.

**maria tepescunt**: Min. 18 *Britannia sole defecitur, sed circumfluentes maris tepore recreatur* (the Gulf Stream, as we say). Sch. quotes Plut. *N. Q.* c. 8 *τὴν τῆς βαλασίης αὐτόν εὐτάρε γερμότητα ἑκριπίζουσι μᾶλλον οἱ ἄνεμοι καὶ τρίφωσι*.

**aer qui natura est maxime frigidus**: Aristotle explained the origin of the four elements out of the original θαλ(Q)(the potentiality of material existence) by the combination with it of the four contraries, hot, cold, wet, dry; fire is matter which is warm and dry, air matter which is warm and moist, water is cold and moist, earth cold and dry; but the distinctive and prominent quality of fire is heat, of air moisture, of water cold, of earth dryness. The Stoics not unnaturally interchanged the characteristics of air and water. See Zeller III 439 foll., Arist. Gen. Corp. II 1 ἡμεῖς δὲ φαμεν εἰναι τινά ὀδη τῶν σωμάτων τῶν αἰθητῶν, ἄλλα ταύτην οὐ χαρισμὴν ἄλλ' δὲ μὲν ἐναντίον, εἶ δὲ γίνεται τὰ καλούμενα στοιχεῖα...οὐτε πρῶτον μὲν τὸ δυνάμει σῶμα αἰθητοῦ ἄρχη, διέτερον δὲ αἱ ἐναντίοις, λέγω δ' οἷον θερμότης καὶ ψυχρότης, τρίτον δ' ἥδη πῦρ καὶ ὕδας καὶ τὰ ταυτά, ibid. 3, Meteorol. i 2, iv 1 with Ideler's nn. and, on the Stoics, Diog. L. vii 137 τὰ δὲ τέταρτα στοιχεῖα εἶναι ὁμοίω τὴν ἄστους οὐσίαν, τὴν υδη, εἰναι δὲ τὸ μὲν πῦρ τὸ θερμῶν, τὸ δὲ ὕδας τὸ ψυχρῶν, τὸ δὲ δέρα τὸ ψυχρῶν, καὶ τὴν γῆν τὸ ἥμι, Seneca Ep. 31 *nihil sine aere frigidum*. Plutarch (de Primo Frigido c. 9, p. 948), after arguing that cold is not a mere absence of heat, says that Empedocles and Strato assigned the quality of cold to water, the Stoics to air (p. 952 *Χρύσαϋστος δέρα πρῶτος ψυχρῶν*), but that it might with equal justice be ascribed to earth.

§ 27. *ille vero et multo quidem calore admixtus est*: ‘No indeed: it has an admixture of heat, and a very considerable admixture too’. For exx. of the emphatic *vero* see I 86 and Index, also Div. II 114 *nonne ea praedixit quae facta sunt? Ile vero, et ea quidem quae...ib. § 132, Off. I 89. Ruhnken wished to omit the sentence as a mere repetition of what precedes, but Stamm (p. 32) rightly defends it as natural to the warmth of debate, comparing § 94 et multo quidem, III 40 *mih quidem esse multo videntur*. On the heat contained in air, see Seneca N. Q. II 10 *summa pars ejus (aeris) siccissima calidissimaque et ob hoc etiam tenuissima est propter viciniam aerorum ignium* (see below § 117)...infiriora quouque tepent, primum terrarum halitu, qui multum secum calidi adfert, deinde quia radii solis replicantur...deinde etiam illo spiritu, qui omnibus animalibus arbustisque ac satia calidus est; *nihil enim viveret sine calore...haec tot partes ejus, fertiles rerum, habent aliquid teporis, quoniam quidem* —2
sterile frigus est, calor gignit. Media ergo pars aeris ab his submota in frigore suo manet. Natura enim aeris gelida est. Plutarch cites (Perin. Frig. p. 381) Posidonius as witnessing involuntarily that the water which sends up the vapour is the cause of the coldness in the air.


is autem: i.e. vapor.

Quam similitudinem: ‘the likeness of which’, Roby § 1279. Sch. quotes two instances from Fin. v 42 ex sequimur ad quae nati sumus. Quam similitudinem videmus in bestias, and suam cuique rei naturam esse ad vivendum ducem: quae similitudo in genere etiam humano apparat, where Madv. cites Off. i 14 ‘man has a natural perception of symmetry in outward things, quam similitudinem natura ab oculis ad mentem transferens seeks the fitting mean in action’, Orat. ii 53 hanc similitudinem scribendi multi secuti sunt, i.e. a style of writing like that before described. Madv. notes (1) the peculiarity in the use of the abstract similitudo for the concrete, for which he cites Tusc. iv 23 dum morbis corporum comparatur morborum animi similitudo=morbi similes comparantur; and (2) the case of the pronoun made loosely to agree with the governing substantive, for which he cites Fin. ii 66 stuprata per vim Lucretia se ipsa interfecit. Hic dolor populi Romani causa libertatis fuit, where hic=hinc ortus, iii 11 haec defensio=hujus rei def., cf. Nepos Lys. 3 quo dolore incensus for cuius dolore, Dat. 9 in quo itinere ‘in the journey to which place’, Cic. Lael. 3 in eam ipsam mentionem =ejus rei ment. (where see Seyffert), ib. 2 in eum sermonem incidere qui tum multis erat in ore, 38 ex hoc numero=ex horum numero, pro Mil. 74 qua invidia=cuius inv.; similarly, 1 Pet. iii 21 καὶ υἱὸς ἀνθρώπων νῦν οὐδεις.

In his aquis quae effervescunt: the readings vary, and I think it possible that Allen may be right in supposing the original to have been in aeneis quae eff. The syllable aem would easily be lost after in, and it would be natural to supply aquis. Heind. inserts in aeneis after quae, citing Plin. N. H. xx 19 lento igni in aeneo subferfaciat (sordibus).

Subditis ignibus: cf. Liv. viii 50 domum ambitiorem subdito igne concremavi, and other exx. in Day.

Quarta pars mundi: the 4th element was divided by the Stoics into (1) the νῦρ τεχνικὸς or other, Aristotle’s περικτή οὐσία, the seat of life and reason, which, while it permeated this lower world, being mixed up with the three other elements, as above stated, and showing itself especially in all animated beings (hic noster calor § 30, ignis corporum § 41), existed in its purest form in the higher regions of space where it is collected into the
heavenly bodies (ardor caelestis qui aether vel caelum nominatur § 41); and (2) the πῦρ ἄρχον (hic noster ignis quem usus vitae requirit, confector consumptorque omnium, ib.).

ea et ipsa: on the pleonastic demonstrative, see above § 22, 24, 26, Fin. v 23 ista animi tranquillitas, ea est ipsa beata vita, where Madv. says gravius insignitur ea notio quae in substantivo inest, ib. 22 conjunctio...id ipsum honestum quod efficit vult, id efficit turpe, cf. Draseg. § 37.

natura fervida: from a comparison of § 26 aer qui natura est frigidus, it would seem that we must translate this 'fiery by nature' rather than 'of a fiery nature'.

§ 28. simili parique: often joined, as in § 153; so par et aequalis, par et idem; but sometimes contrasted, as in Quint. x 1 § 103 (of Livy and Sallust) pares magis quam similis. The phrase is here used to allow for the distinction which might be made between fire and ether, or between the πῦρ ἄρχον and πῦρ τεχνικόν, cf. below § 41.

in tanta diuturnitate: 'that its continued preservation for so long a time is due to a like element', Roby § 1975; cf. §§ 51, 95 in omni aeternitate, 36 in aeterno temporis spatio.

in omni natura fusum: cf. fusus in corpore § 18.

a quo: somewhat rare with nascor, but the connexion is obscured by the length of the sentence, cf. below § 60 a deo natum.

procreandī vis—gignendi: the male and female principles of generation, cf. Arist. Gen. An. ii 3 πάντων μὲν γὰρ ἐν τῷ σπέρματι ἐνπάρχει, δὲ πολὺ γόνυμα ἐλατά τὰ σπέρματα, τὸ καλούμενον θερμόν' τοῦτο δ' οὐ πῦρ οὐδὲ τιμωτὴ δύναμις ἔστω, ὡλὰ τὸ ἐμπεριλαμβανόμενον ἐν τῷ σπέρματι καὶ ἐν τῷ ἀπρόφθει πνεῦμα καὶ ἡ ἐν τῷ σπέρματι φύσις, ἀνάλογον οὖσα τῷ τῶν ἀστρων στοιχείῳ, ib. i 1, ii 1, also Rœspīr. c. 8 cited on § 23, anim. ii 4 § 8 cited on § 26. The Stoics insisted much on the analogy between creation and generation, and marked this by the term λόγος σπερματικός used of the divine element of fire, see nn. on § 57, 81, 86. The fact that heat is necessary for birth and growth is here taken to prove that it possesses a generative power.

quorum stirsae terra continentur: for similar periphrasis see § 83 ea quae a terra stirpibus continentur and Index. Note that the mood is here unaffected by the subjunctival subordination.

Ch. xi § 39. natura est igitur quae continent mundum. None of the edd. question the ms reading here, but it seems to me very unsuitable to the context. From § 23 the argument has been as follows: 'animal and vegetable life is sustained by internal heat, which is the cause of all motion. This heat is also the source of life in the universe. Traces of it may be seen in the sparks of flints, hot springs, the very fluidity of water. Nay even air, the coldest element, contains heat'. Then in § 29 it proceeds 'this living principle must be the ruling principle of the world, it must possess all the properties of its parts, it must be rational and sensitive, it must in fine be a soul'. But the prominent position of natura would imply rather that it
followed an argument, such as we have below § 82 and in Sext. Emp. ix 81, to prove that the unifying principle of the world is a φύσις and not a mere ἕξις. 'Unless some such argument has been lost here, I think the true reading must be Est igitur ignea quaedam natura or something of the kind. Again the prominence given to natura makes more awkward the recurrence of the word in another sense just below. I cannot agree with Sch. in taking it as a predicate of the foregoing subject calidum illud.

continent: C. uses this word to translate συνέχω, by which the Stoics expressed the organic unity of the world. In spite of the centrifugal tendency of some of its parts it is held together by the all-pervading ether, and in a less degree by the second active element, air, see below § 83, 115, 117 and Plut. Comm. Not. 49 'γῆν μὲν γὰρ ἱσασὶ καὶ ὅθωσ οὔτε αὐτὰ συνέχειν οὔτε ἔτερα, πνευματικὰς δὲ μετοχὰς καὶ πυρᾶδων δυνάμεις τὴν ἐνόπτη διαφυλάττειν' ἀέρα δὲ καὶ πῦρ αὐτῶν τα ἐναίνει δὲ εὐτοιχεῖ ἐκτάσει (expansive owing to their own elasticity), καὶ τοῖς δυσφαί τε κείσσοις ἐγκεκραμένα τόν τον παρεῖχεν καὶ τὸ μάνιμον καὶ ὀνούσες, cf. Stoic. Rep. 43. Similarly we have odoore teneuntur 31, sustineuntur 28, retinentur 30, cf. Hirsel p. 94, Arist. Phys. v 2 p. 226 b.

omnem naturam: 'every thing that exists by nature, i.e. every element or organism', referring apparently to mundus, not to natura above.

quaes non solitaria sit: 'provided it does not stand alone and is not a simple substance'. The argument is given with more precision by Sextius ix 119 καὶ μὴν ἐν παντὶ πολυμερείς σώματι καὶ κατὰ φύσιν διοικουμένη ἐστι τὸ κυριεύον· καθ' ὁ καὶ ἐφ' ἡμῶν μὲν ἐν καρδίᾳ τούτῳ τιμακεῖν ἄξιον ἐστιν ἐν ἐγκεφάλῳ ἐν ἀλλῷ τινὶ μέρει τοῦ σώματος· ἐπὶ δὲ τῶν φυτῶν οὐ κατὰ τῶν αὐτῶν τρόπον, ἡν' ἐφ' ἄν μὲν κατὰ τὰς μίας, ἐφ' δὲ κατὰ τὴν κόην, ἐφ' δὲ δὲ κατὰ τὸ ἐγκαρδίον (the pith). ὅστω ἐστὶ καὶ ὁ κόμου ὑπὸ φύσεως διοικεῖται πολυμερῆς καθεστώς, ἐγὼ ἐν τι ἐν αὐτῷ τὸ κυριεύον καὶ τὸ προκαται-
χάμον τῶν κυψεύσεων· οὐδὲν δὲ δυνατὸν ἐναίνει τοιούτων ἢ τὴν τῶν ὅστων φύσιν, ἢ γε εὐτύτως. See ib. § 102. The Stoics held τὸν δῶαν κόμον, ἐφ' ὅτα καὶ ἕμφυγον καὶ ἱτυκών, ἔγενεν ἡμεμονίκοι μὲν τοὺς ἄλθεα ορ, in the equivalent phrase of Chrissippus and Posidonius, τῶν οὐρανῶν (Cleanthes preferred τῶν ἁλῶν), Diog. L. vii 139, Zeller iii 1 p. 137.

cum alio juncta: Madv. Fin. p. lxvi n. tam disputationem Cicero obscurovit et inanem reddidit, cum σάμα πολυμερέσ εἰς interpretatus est, non, ut debuit, 'quaes esset ex pluribus partibus ipse composita'.

principatus: also used in Tusc. i 20 (Plato triplicem finxit animum, cuius principatum, id est rationem, in capite sicut in arce posuit) for the Stoic τὸ ἡγεμονικόν, better translated principale by Seneca Ep. 92 1, &c. Diog. L. gives the definition (vii 159) ἡγεμονικὸν εἶναι τὸ κυριατεύον τῆς ψυχῆς, ἐν ὑ αἱ φαντασία καὶ ἰδοὺ καί γίνεται καὶ δεδομόνας ἀναπέμπεται· ὅπερ εἶναι ἐν καρδίᾳ, cf. Sext. Emp. ix 102 πάσας γὰρ φύσεως καὶ ψυχῆς ἡ καταρχὴ τῆς κυψεύσεως γίνεται διὰ τὸ ἡγεμονικόν καὶ πάσαι αἱ ἐπὶ τὰ μέρη τὸν ἄλθον ἔζαποστελλόμεναι δυνάμεις ὡς ἀπὸ τῶν πηγῶν τῶν ἡγεμονικῶν ἔζαποστελλοῦσα, ὅστε πάσαιν δύναμιν τὴν περὶ τὸ μέρος οὖν καὶ περὶ τὸ
BOOK II CH. XI § 29.

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διὸν εἶπα διὰ τὸ ἀπὸ τοῦ ἐν αὐτῷ ὕγμοιν καὶ διαδίδοσθαι. The word is constantly recurring in Epictetus and Aurelius.

ut in homine mentem: the regular construction would have been ut est mens in homine, but the verb is omitted, and the subject subordinated to the general construction necesse est habere; for exx. of similar attraction see i 82 Squipum, 86 quam te, and Madv. Fin. ii 88.

quiddam simile mentis: so Arist. Hist. An. viii 1 p. 588 ἐνοτι γὰρ ἐν τοῖς πλείστοις καὶ τῶν ἄλλων ὅφειν ἢπη τῶν περὶ τῆν ψυχήν τρόπων... οἷς γὰρ ἐν ἀνθρώπῳ τέχνη καὶ σοφία καὶ σύνεσις, οὕτως ἐνοτι τῶν ζωῆς ἐστὶν ἐν τούτῳ τοιούτῳ φυσικῇ δύναμις, cf. Fin. v 38 sunt bestiae quaedam in quibus instat aliquid simile virtute, ut in leonibus, ut in camibus, ut in equis, in quibus non corporum solum, ut in viibus, sed etiam animorum aliqua ex parte motus quaedam videmus; Seneca de Ira i 3 muta animalia humanis affectibus carent: habent autem similes illis quaedam impulsus; Chalecius in Tim. c. 217 (cited by Hirschel p. 214) habet quippe etiam muta vim animae principalem, qua discernunt cibos, imaginantur, declinant insidias, praerupta et praecipitatione superavit, necessitutinem recognoscunt, non tamen rationabilém, quin potius naturalém. Solus vero homo ex mortalibus principali mentis bono, hoc est ratione, utitur, ut ait idem Chrysippus.

rerum appetitus: more fully described below § 34 om quodam appetitu accessum ad res salutares, a pestiferis recessum.

radicibus inesse principatus: so Aristotle says (P. A. iv 7) that plants have their head and their mouth in their roots.

[omnium rerum potestate dominatuaque dignissimum: 'most worthy of authority and lordship over all things'. So the pater familias has potestas over his children, dominium over his slaves. R.]

§ 30. in partibus mundi: we have had the argument from the rationality of the part to that of the whole before in §§ 18 and 22.

et acriora quidem: so above § 18 et eam quidem acriorem, and just below acerriro ardore.

res omnes complexa tenet: so of the circle figuras o. c. continet § 47.

natura divina contineri: for the absence of the preposition cf. § 16 quon concurrunt, 83 terra natura tenetur, 85 nat. regatur, Madv. Fin. iv 17 natura tributum, and Acad. i 28 cited below: for its use, below § 33.

A 1 (2) The mundane heat is purer than our earthly heat, therefore it must possess the properties of heat, motion and life, in a higher degree; and it acts freely, not under any coercion from without. §§ 30, 31.

perlucidior: more brilliant, free from smoke or haze.

retinentur: 'are preserved' (kept back from dissolution), = retinetur in vita Fin. iii 61.

§ 31. non agitatus ab alio: Chrysippus held ἐνα τὸ δὲ πνεῦμα κινοῦν ἔατο πρὸς ἔατο, ἢ πνεῦμα ἔατο κινοῦν πρόσω καὶ ὀψιω, Stob. Eel. i 374.
quod pellat—teneatur: 'so as to set in motion a heat that is to hold the world together'.

quid potest esse mundo valentinus: for this and for the whole passage compare the view of Antiochus as given in Acad. i 28 partes esse mundi omnia quae insint in eo, quae natura sentiente teneatur, in qua ratio perfecta insit, quae si eadem sempiterna (nihil enim valentinus esse, a quo intereat); quam vim animum esse dicunt mundi, eandemque esse mentem sapientissimam perfectam, quem deum appellant; and Chrysippus ap. Plut. Sto. Rep. p. 1050 nothing can resist the will of nature διὰ τὸ μὴ ἔχειν εἰναι τὸ ἑντονόμενον τῇ οἰκονομίᾳ, μήτε τῶν μερῶν μηδὲν ἓκειν ὡς κυρβήσεται ἢ σχῆσις ἄλλης ἢ κατὰ τὴν κοινὴν φύσιν, see below, § 35 nulla res potest impedire.

A 1 (3) What is self-moving is soul: the mundane heat is self-moving and therefore of the nature of soul. (4) If the universe were not possessed of reason, the whole would be inferior to the part which is possessed of reason, which is absurd. § 32.

Ch. xii § 32. audiamus enim: gives a reason for the penultimate sentence.

Platonem...deum: Cicero's own opinion of Plato is given in a well-known sentence, Tusc. i 39 errare me hercule malo cum Platone...quam cum istor (deniers of immortality) vera sentire, and Att. iv 16 deus ille noster Plato, cf. Leg. iii 1; but in this he merely follows the eclectic Stoics; thus we read of Panaetius (Tusc. i 79) Platonem omnibus locis divinum, sapientissimum, sanctissimum, Homerum philosophorum appellat, cf. Fin. iv 79; and of Posidonius, whom C. is here copying, Galen tells us (Hipp. Plat. p. 421) that he was a great admirer of Plato καί θείων ἄρωξελε. On the other hand the older Stoics e.g. Chrysippus argued strongly against Plato, cf. Galen ib. p. 468 καὶ περὶ τούτων ὁ Χρ. ἐπιρέαζε τὸν Πλάτωνα. For the use of the term deus cf. Orat. i 106 equidem te (Crassum) in dicendo semper putavi deum, i 179 dispositio argumentorum in qua tu (Antonius) mihi semper deus videri soles, ib. iii 53; Augustine (C. D. ii 14) says of Labo, themime, Platonem L. inter semideos commemorandum putavit, sicut Herocleum, sicut Romulum; semideos autem heroibus anteposimus, sed utroque inter numina collocat.

duo placet esse motus: Plato Tim. 89 τῶν δὲ αὐτήν ζών ἢ ἐν ἑαυτῷ ὑπὲρ ἑαυτοῦ δύναται κίνεσις: ἀκλίματα γὰρ τῇ διανοητικῇ καὶ τῷ παντὸς κινήσει ἑγγεγείρα τῇ δὲ ἐν τῷ ἀλλον χείρι. He uses this contrast to prove the divine existence Leg. x 892—898, and Phaedr. 245, a passage translated by C. in Tusc. i 53, and R. P. vi 28, see following nn. and below § 44.

unum suum: for exx. of se, suus, referring to other than the subj. of the sentence see §§ 124 sui conservandi, 158 se esse generatos.

hunc autem motum in solis animis: thus given Tusc. i 54 cum pateat igitur aeternum id esse quod a se ipso moveatur, quis est qui hanc
naturam animis esse tributam negat? inanimum est enim omne quod pulsa agitatur externo; quod autem est animal, id motu cietur interiori et suo: nam haec est propria natura animi atque vis; and just before, ita fit, ut motus principium ex eo sit quod ipsum a se movetur. The argument from the fact of motion to a First Mover was also employed by Aristotle, Met. xii 6 p. 1071 b etsi tī diē kynoménon kynsas ἐπιστῶτον...ēstō toíny tī kal ὁ κεῖται: and by the Stoics, cf. Sextus i 75 ὅτι τῶν ὅλων ἡλιον θεοφρονίτες κωπομένη...εἴλογον ἂν εκποιημένα τὸ κυνόν αὐτῆν τούτο δὲ οὐκ ἄλλο τί πιθανόν ἔστω εἶναι ἡ δύναμις τῶν δὲ αὐτῆς περιτηκίας, καθάπερ ἦμων ἴτας ὁ ψυχή περιτήκην' αὐτή ὁδ' ἡ δύναμις ήται αὐτοκίνητος ἐστίν ἢ ἐπ' ἄλλης κινεῖται δυνάμεως (ad infinitum, which is absurd), ἢτι τις ἄρα καθ' ἐαυτῇ αὐτοκίνητος δύναμις, ἃς ἂν ηὲ θεῖα καὶ άδιώς.

esse ponit: Wytenbach's assertion that the Latin idiom is either in animis ponit, or in animis esse statuit, is disproved by Madv. Fin. v 73 positum est a nobis in eis esse rebus, Acad. 1 19 corporis autem alia ponebant esse in toto, alia in partibus.

mundum ardor—animus: Plato held that the world was a living creature and divine ((φῶν ἔμφυτον ἐνόω τε Tim. § 11) but still it was created, the work of the Demiurgus. He did not believe in any thinking matter, as the Stoics did, and would never have identified ardor with animus; cf. Cic. Tim. c. 6 sic deus ille aeternus hunc perfecte beatum deum proceavit (out of the four elements), animumque ut dominum atque imperantem oboedienti praefecit corpori; c. 14 animus sensum omnem effugit oculorum, at ignis, anima, aqua, terra, corpora sunt, eaque cernuntur.

mundum universum pluris esse quam partem: Sext. ix 85 ou γὰρ οἴωντε τὸ δύον τοῦ μέρους χείραν εἶναι.

hominem, quoniam rationis esset particeps, pluris esse quam mundum oporteret: the readings here are noticeable; in three lines we have (according to edd.) est—sit—est—esset—est—esset; but the authority for the 3rd est is only a correction in one of Orelli's mss (V²), and for the 4th an original reading in one (B), and a correction in two others (AV). Esset is the original reading of all his six mss in the former case, and of five out of the six in the latter. I believe that the latter esset at any rate is right; and had indeed written this as a conjectural emendation in the margin, before I discovered that it was the original reading. It is subordinated to the Inf. in order to show that it gives the reason for the following pluris esse, not for the preceding pars est, and the tense is attached to that of the principal verb, as in passages quoted on mallem audire § 2. It is possible that qui esset also may be right, meaning 'though he is a part', but I think that Cic. would have shrunk from repeating esset so often with a different force, and that this esset has arisen merely from careless assimilation. The corrections in AV were probably intended for this qui esset. For the thought compare Pascal Pensees i 6 'l'homme n'est qu'un roseau...mais c'est un roseau pensant. Il ne faut pas que l'univers entier s'arme pour l'écraser... Mais quand l'univers l'écrasait,
l'homme serait encore plus noble que ce qui le tue, parce qu'il sait qu'il meurt...l'univers n'en sait rien'.

A m. Argument from the Scale of Existence. (1) We observe the gradual ascent from vegetable to animal life, from animal to human, the last showing the potentiality of virtue and wisdom: hence we infer a yet higher stage, the divine, which is essentially and always virtuous and wise. §§ 33, 34.

§ 33. incohatis naturis: 'rudimentary orders of being', cf. I 56

incohatam n., Leg. i 27 prima et incohata intelligentia, Tim. c. 4 quae sunt nobis nota animantia sunt...omnia in quaedam genera partita aut incohata, nulla ex parte perfeta, 'the only perfect animal is that ideal which the Demiurgus copied in making the world'. The argument from the Scale of Existence appears first in Arist. fr. 15 καθὸλος γὰρ ἐν οἷς ἦστι τὰ βέλτιον, ἐν τούτοις ἦστι τὰ καὶ ἁριστῶν, ἐστὶ οὖν ἐν τοῖς οὐσίαις ἡ ἁλλὰ ἁλλοί βέλτιον, ἡ ἁριστὸς τὰ καὶ ἁριστῶν, ἄπερ ἢ ἂν τὸ θεῖον. It was borrowed from him by Cleanthes (ap. Sext. i. 88) οἱ φύσεις φύσεως ἦστι κρείττων, εἰ ἦν τὰς ἁριστὰς φύσεις: ἔχει γὰρ θυμὸν ἢ πρὸς κρείττων, ἢ τὰς ἁριστὰς φύσεις: καὶ οἱ φυσικοὶ κρείττων ἦστι ζῆσον, εἰ ἦν τὰ κρατίστον ζῶον ὧν γὰρ εἰς ἐπιφανεῖς πλῆθυντες τὰ τοιοῦτα. 'Of all creatures on earth man is best, but he cannot be the absolutely best owing to his moral and physical weakness. No! man is ἄτελες καὶ πολὺ κεχωρισμένοι τῷ τελείῳ. That which is perfect must be fulfilled with all virtues and unapproachable by evil (πάσας ταῖς ἁρεταῖς συμπεπληρωμένοι καὶ παντὸς κακοῦ ἀνεπιθέτοι); and this perfection we ascribe to God alone'. The physical argument is given in greater detail, ibid. § 81 'the life of the universe shows itself in four degrees of power (1) εἶνα the unifying principle in inorganic matter, (2) φύσις the principle of growth in plants, (3) ψυχή the principle of movement in animals, (4) λογική ψυχή or nous in man; by which of these is the universe itself held together? Not by simple εἶνα, as in stones, for that admits of no change, but by some form of ψυχή, and that the highest form viz. the rational soul'. Cic. here omits the lowest grade and distinguishes two grades of the rational soul, the imperfect belonging to man, the perfect existing only in God (as in Sext. § 88 and Anton. vi 14 where see Gataker). Compare Philo Mund. Op. § 24 τῶν δυνατῶν τὰ μὲν οὐσία ἁρετῆς ὠρθαίς ἔργας, ὠσπερ φυτὰ καὶ ζῶα ἄλογα...τὰ δὲ αὐτὰ μόνης κεκοινωνίας ἁρετῆς, ἀμέτοχα πάσης ὁμοίας κακίας, ὠσπερ οἱ ἀστέρες...οὐκ άπειρα τὰ ἐνίχνη λέγονται καὶ Ἰερὰ κοραῖς μάλλον...αὐτός ἐν αὐτῶν ἐκατός, τὸς δὲ οὐκ οὐκ εἰσερχόμενον κακοῦ ταῦτα τὰς μικρὰς ἡμῖν φύσεως, ὠσπερ ἀνθρώπος, ὁς ἐπιδίπτεσται τὰ ἕναντα, φρόνησιν καὶ ἀφρόσυνην...ἀρετῆς καὶ κακίας, ib. § 50 on the λογικὰ θειὰ φύσεις, who may be justly called μεγαλοπολίται, citizens of the universe. Other passages bearing on the Physical Scale are cited by Zeller iv 192. It is really a development of Aristotle's doctrine of the soul (Anim. 11 3) 'the vital principle of organized bodies
manifests itself in an ascending scale of functions, nutritive (θρηστικόν), sentient (αισθητικόν), locomotive (κινητικόν), appetitive (αφετικόν), rational (διανοητικόν). Cf. Fīn. v 33—40 and below §§ 82, 86.

**prima advertimus**: the edd. read primum or primo, but I think we may understand the reading of the mss as referring back to primis incohatiique naturis; 'the first and lowest class in which we observe the sustaining power of nature, is that which constitutes the vegetable kingdom'.

**a natura sustineri**: nature personified as in § 83 a terra stirpibus contineri, § 133 a natura sustinentur, Invent. i 35 ab natura datus (but in § 36 natura datam), Orat. i 215 interdictionum a rerum natura aut a legte aliqua. For exx. of the omission of the preposition see § 30 natura contineri, Tusc. i 58 natura sustentari.

**quae gigantur**: for Subj. cf. the exactly similar sentence in i 97 an quicumam tam puerile dici potest, quam si ea genera belurarum quae in rubro mari gigantur, nulla esse dicamus? and above § 23 alantur n. Perhaps the Subj. is used here in order to make a distinction between the definition of a class, and the further statement of a fact respecting that class, by the Ind. tribuit, for Imp. Subj. following proper Perf. see n. on i 3 fuerunt qui censerent.

**alendo atque augendo**: cf. above § 23 alantur atque crescent; so Arist. Eth. i 13 describes τὸ φυτικὸν (or θρηστικόν) μόριον τῆς ψυχῆς as the cause τοῦ τρέφοντος καὶ αὔξοντος. In § 120 however Cic. allows that some kinds of plants make an approach to the habits of animals. Posidonius seems to have softened down the broad demarcation drawn by Chrysippus between the different kingdoms of nature; thus he noticed that the zoophytes shared in the appetites (ἐπιθυμία), but not in the emotions (τὸ θυμοειδές) of animals (Galeni Hipp. Plat. p. 476), and he not only agreed with Plato and Aristotle in dividing the human soul into rational and irrational elements (ibid.) but he assigned to man all the lower forms of life, including even that principle of attraction (ζητεῖ) which bound together the atoms of lifeless things, cf. Diog. L. vii 139 (where, after referring to Posidonius' 3rd book peri techon, he continues) τὸν δὲ κόσμον οἰκείον καὶ νοῦν καὶ πρόνοιαν, ἐκ ἅπαν αὐτοῦ μέρους δυσφυόντος τοῦ νου, καθάπερ ἐφ' ἢμῶν τῆς ψυχῆς, ἀλλ' ἢμῶν δὲ ἂν μὲν μάλλον, δὲ ἂν δὲ ἢμῶν δὲ ἂν μὲν γὰρ ὡς ἢμῶν καὶ τῶν νοστῆρων, ἄλλ' ἂν δὲ ἢμῶν τῶν νοστῶν καὶ τῶν νοστῶν, ὡς δὲ ἂν νοῦς, ἂς δὲ τῆς ἡμεροκοιμίας ὡς δὲ τῶν λογικῶν, ξύλων δεκαὶ ζῷων καὶ λογικῶν, ἕξων ἡμεροκοιμίας τῶν αἰθέρων, ib. 86 ἐφ' ἢμῶν τῶν φυτοειδῶν γύνεων. We learn from Nemesius c. xv p. 98 that Panætius, the master of Posidonius, had already commenced this reformation of the Stoic psychology, excluding Zeno's 'phonetic' and 'spermatic' faculties from the rational soul, and ranking τὸ σπερματικόν not under ψυχῆς, but under φύσις.

§ 34. **cum quodam appetitu—recessum**: cf. below § 58 and iii 33 nullum potest esse animal in quo non et appetitio (ἀφιμη) sit et declinatio
naturalis. Appetuntur autem quae secundum naturam sunt, declinantur contraria; Fin. iii 16 (the Stoics hold) simul atque naturam sit animal ipsum nonibi conciliari et commendari ad se conservandum et ad suum statum eaque quae conservantia sunt ejus status diligenda, alienari autem ad interitu itaque rebus quae interitum videantur afferre; Diog. vii 86 έκ περιτοῦ τῆς ὀρμῆς τοῦ καθότι ἐγκεκομῆνη, ἡ συγχρόμενα παρεί ναι ἀπὸ τα ὀλκεία, τούτου μὲν τὸ κατὰ φύσιν τῷ κατὰ τὴν ὀρμήν διουσικείσθαι' τοῦ δὲ λόγου τοῦ λογικοῦ κατὰ τελειότερα προστασίαν δεδομένου, τὸ κατὰ λόγου ζην ὁρθῶν γίνεσθαι τούτου κατὰ φύσιν τεχνῆς γαρ οὗτος ἐπιγίνεται τῆς ὀρμῆς, Fin. iv 37, 38, Hirschel p. 212 foll., Schwendcke p. 136.

addidit rationem: as mentioned above, Posidonius, whom C. follows, departed from Chrysippus and adopted Aristotle's view that each higher function of the soul involves the lower, so that all the functions are found combined with rationality in man, while the nutritive function, for instance, exists separately in vegetables. So in the parallel passage Fin. iv 37, describing quod iter sit naturae, quaeque progressio, C. continues semper assumit aliquid, ut ea quae prima dederit, ne deserat; itaque sensibus rationem adjunxit et, ratione effecta, sensus non reliquit.

remitteretur—contineretur: 'let go' ( 'hold in', a metaphor from driving horses, cf. Arist. Eth. vii 1 ἐστὶν τις σκοπός πρὸς ὑπὸ ἀρδεύσεως ο τῶν λόγων ἐκαίνετε καὶ ἀνατευκ. Off. i 101 foll. una pars (anima) in appetitu posita est, quae est ὀρμή Graecae, quae hominem huc et illuc rapiat; altera in ratione, quae docet et exemplat quid faciendum fugiendumque sit. Ita fit ut ratio praestet, appetitus obtemperet. Efficacium autem est ut appetitus rationi oboediat, eamque neque praecurrent, nec propter pigritiam aut ignaviam deserant...Nam qui appetitus longius evagantur et tamquam exultantes sive cupiendo sive fugiendo non satis a ratione retenetur; ii sine dubio finem et modum transseunt; Tusc. iv 22 intemperantia is defined as a recta ratione defectio...ut nullo modo affectiones animi nec ragi nec contineri queant. The Mood is the Final Subjunctive like the preceding regeneratur.

Ch. xiii. natura boni: Sch. cites Sen. ep. 95 § 36 (as Seneca twice cites Posidonius in the same letter, we may infer that he copies from him), di immortales nullam didiceris virtutem, cum omni editi, et pars naturae eorum est esse bonos; Epict. iv 11 § 3 'as the Gods are φύσει καθαροί καὶ ἀκόροοι, so men, in proportion as they have approached to them κατὰ τῶν λόγων, by the way of reason, are themselves participant of purity', but this is only ἀπὸ τῶν θεῶν αὐτὸ πρῶτον λαμβάνοντες, as he says in the preceding sentence; Cic. Top. 76 deorum virtus natura excelsit, hominem autem industria. Such expressions must be set against others in which the Stoics appear to claim equality with God, as below § 153.

a principio innascitur ratio: so § 36 (twice) a principio sapiens. Man has the semina rationis which must be developed by education. As Seneca says ep. 90 § 44 (the whole epistle is probably taken from Posidonius) non dat natura virtutem, ars est bonum fieri. Virtus non contingit
animo nisi instituto et edocto et ad summum assidua exercitatione perducto. See my Sketch of Anc. Phil. pp. 227, 228. Nemesius c. r p. 21 makes the same distinction between man and all higher orders of being (γένη θαυμών) οὐδὲν γάρ ἐκείνον μανθάνει, ἀλλὰ φύσει οἶδεν ἡ οἶδεν. recta constansque: Diog. vii 88 ὅ νόμος ὁ κόσμος, διοντε ἐστιν ὁ ὅρμος λόγος διὰ πάνως ἐρχόμενος ὁ αὐτὸς ὁ τῷ Δι, Ciec. ap. Lact. vi 8 est quidem vera lex recta ratio, naturae congruens, diffusa in omnes, constans, sempiterna, quae vocet ad officium jubendo, vetando a fraude deterret. Sch. cites Plut. de Virt. Mor. c. 3 τῆς ἄρετῆς λόγον οὖσαν ὄμως ὁμογενεῖας καὶ βέβαιον καὶ ἀμετάπτωτον ὑποτίθεται.

supra hominem putanda: Tusc. ii 51 in quo vero erit perfecta sapientia —quem adhuc nos quidem vidimus neminem, sed philosophorum sententias qualis hic futurus sit, si modo aliquid fuerit, exponitur—is igitur, sive ea ratio quae erit in illo perfecta atque absoluta, sic illi partis imperabat inferiori (the appetites &c.) ut justus pares probis filius, see also Sketch of Anc. Phil. pp. 169, 170.

A m (2). All things are striving after perfection, but in the case of the lower limited natures, this tendency cannot fulfil itself: in universal nature it can. § 35.

§ 35. rerum institutione: 'plan', 'system', 'organization', see Fin. iv 32 (which should be compared throughout) quae autem natura suae primae institutionis obista est? iv 41 ipsa institutio hominis, si loqueretur, haec diceret, primos suos quasi coeptus appetendi fuisse, ut se conservaret in ea natura in qua ortus esset, which Madv. explains to be the original framework or constitution (habitum et constitutionem a natura datum); ibid. v 24 hanc initio institutionem (i.e. appetitum a natura datum ad vitam tuendam) confusa habet.

aliquid extremum atque perfectum: cf. Fin. iii 26 cum enim hoc sit extremum (satis enim credo me jam diu, quod τῶν Graecí dicunt, id diceret tum extremum, tum ultimum, tum summum; licebit etiam finem pro extremo aut ultimo dicere), cum igitur extremum hoc sit congruenter naturae vivere, &c. esse like habent below is true of the idea, not of the fact: throughout we must understand the proviso nisi quae vis obtinuit, cf. Arist. Pol. i 8 ἡ φύσις οὐδὲν ἄρετῆς ποιεῖ οὐδὲ μάρτυρ.

ut in vite, ut in pecude: in the similar passage Fin. iv 32 foll: we have (1) the assertion of a resemblance in the ends of all things, nemo enim est qui aliter dixerit, quin omnium naturarum simile esset id ad quod omnia referrentur, quod est ultimum rerum appetendarum; (2) this instantiated in the case of animals, in omni enim animante est summum aliquid atque optimum, ut in equis, in canibus...sic igitur in homine perfectio ista in eo potissimum quod est optimum, id est, in virtute, laudatur. Itaque mihi non satis videmini considerare quod iber sit naturae quaeque progressio; (3) in the case of a plant; if a vine were gifted with understanding and
thus made capable of aiming at higher ends, it would not therefore lose its former ends 1.c. § 38. (The same comparison occurs in v 39): (4) in the case of the artist, 1.c. § 34 ut Phidias potest a primo instituere signum idque perficere, potest ab alio incohatum accipere et absolvere, huic similia est sapientia: non enim ipsa genuit hominem, sed acceptit a natura incohatum. hanc igitur intuens debet institutum illud, quasi signum, absolvere. Compare also Tusc. v 37 (natura) quicquid genuit, non modo animal, sed etiam quod ita ortum esset e terra, ut stirpibus suis niteretur, in suo quidque generis perfectum esse voluit...neque est ullam quod non ita vigat interiore quodam motu et suis in quoque seminibus inclusus ut aut flores aut fruges fundat... omniaque in omnibus, quantum in ipsis sit, nulla vi impedita perfecta sint. Still more is this the case in beasts, atque earum quaeque suum tenens munus, cum in disparis animantis vitam transire non possit, manet in lege naturae...but most of all in man; hic igitur si est excultus...si perfecta mens, id est absoluta ratio, quod est idem virtus.

naturam ad ultimum pervenire: Arist. Part. An. i 1 § 10 μάλλον δ' ἐστι τὸ οὐ ένεκα καὶ τὸ καλὸν ἐν τοῖς τῆς φύσεως ἐφορύς ἢ ἐν τοῖς τῆς τέχνης, cf. also Zeno’s definition of Nature below § 57, 81, where οἷα προγεγραμμένα = suo quodam itinere here.

pictura: cf. Orator 9 ut in formis et figuris est aliquid perfectum et excellens, cujus ad cogitationem speciem imitando referuntur ea quae sub oculos non cadunt &c. Cicero seems to combine in his extremum et perfectum the ideal and the final cause, of which latter Arist. says πᾶσα τέχνη ἀγαθοῦ τῶν ἐφίστηθα δοκεῖ, and of the former ἡ μὲν ἀρετὴ τελείωσις τις ἢν γὰρ λάθη τῆς ἔκαστος ἀρετῆς, τὸν λέγεται τέλειον ἑαυτόν, τὸν γὰρ μάλιστα ἐστὶ τὸ καλὸν φύσιν, Phys. vii 3 p. 246 a. The Stoics seem to have dwelt more on τέλειον, the ideal, than τέλος, the end, cf. Diog. vii 89 ἡ φύσις ἀφορμᾶς διδώσαν ἀδιαστρέφους ἀρετῆς δὲ τοι ἡ μὲν τις κομὴς παντὶ τελείωσις, ὑπερ ἀνδράστου, καὶ ἡ θεωρητικὴ, ὑπερ ύπερία, καὶ ἡ θεωρηματική, ὡς φρόνησι.

fabrica: so Seneca Ep. xcv § 7 I cannot agree with Posidonius in assigning to philosophy the glory of architecture (fabricae); illa, inquit, docuit...tecta moliri”; Auct. ad Herenn. iii 32 situm loci ad suum arbriculum fabricari et architectari. Elsewhere C. uses the more precise architectura (Off. i 151), and distinguishes architectus from faber (Fam. ix 2 non modo ut architectos, verum etiam ut fabros, ad aedificandam rem publicam).

quendam absolvit operis effectum: (there is in art) ‘something which may be called the execution of a finished workmanship’: cf. Fin. iii 24 wisdom may be compared to the art of dancing, in so far as in ipsa inquit, non foris petatur extremum, id est artis effectio, ib. 45 recta effectio, κατάρθωσιν enim sic appello, quoniam rectum factum κατάρθωμα. The argument founded on the idea of perfection is borrowed from Aristotle. He finds in all things an upward striving which meets in the one supreme and perfect Being. It is briefly and obscurely worded by C. and clumsily stated by Sextus ix 81 (cited on § 33 incohatis naturis), and in 116 ‘since
the horse is more admirable than the vine, the motive power (ἵματι ἀργία) in the horse is more admirable than that in the vine, and the motive power in the world more admirable than all other motive power. It is therefore best, and if best, must be rational and immortal, i.e. it must be Divine'.

in omni natura: 'in universal nature', cf. I 27, 36 = rerum omnium natura below.

absolvi aliquid: 'there is a progress towards completion', lit. 'something in course of completion'.

universam naturam nulla res potest impedire: see above § 31 quid mundo valentius? and Philolaus ap. Stob. Ecl. I 418 (ὁ κόσμος) ἀδυνατος καὶ ἀκαταστάτος διαμένει τὸν ἄνευν αἰῶνα 'οὐτε γὰρ ἔσσοθεν ἄλλα τις αἰῶν ἐναντιοστέρα αὐτὸς εὑρεθεῖσαι οὐτ' ἔκτους ἐτειριαν αὐτὸν δυνάμενα, Philo Inc. Mund. 503 οὐδεμανθανοίν αἰῶναν εὑρείν ἄτομον, ὥστε ἐντος οὐτ' ἐκτος, ἣ τὸν κόσμον ἀνελεῖ. The argument is 'Every thing by nature aims at perfection, but in most cases this aim may be frustrated by external forces (Αρ. Προπ. II 8 § 14 ἐν δὲ τοῖς φυσικοῖς αὐτών [γίνεται τὸ οὐ ἐνεκα] ἀν μή τι ἐρποδιογ) : were there no such external force, the tendency towards perfection would be realized; but the universe has no force external to it; therefore the tendency to perfection in the universe will not be frustrated'. Cic. confuses the argument by repeating as a part of the conclusion what is really one of the premises, viz. the fact that there is no power external to the universe: see below quo nulla vis possit accedere.

Am (3). Since it is confessed that the universe is the best of all things, it cannot be limited to vegetable or animal or merely human existence. It must be actually and essentially wise and good (and therefore Divine): for a potentiality which has never risen into actuality throughout eternity would be inferior to that of man. § 36.

§ 36. et prae sit omnibus et eam nulla res possit impedire: change of subject as in § 38 mundus omnia complexus est, neque est quicquam quod non insit in eo, § 58 quaram est cotidiana conversio nec habent curus, § 64 ne curus habet atque ut illum alligaret.

quid autem est inscitius: gives another reason (besides the universal striving after perfection) in proof of the preceding statement, that the world is sapiens in the strong Stoic sense.

stirpium: here improperly used for φυτῶν instead of the ordinary periphrasis, see Madv. Fin. IV 13.

deterior potius: 'the condition of the world rather than that of man would be the inferior one'.

homo sapiens fieri potest: i.e. man is wise ἄνωθεν, but God (here the universe) is wise ἀείπετι. See above § 34.

in spatio: cf. in diurnitate § 29.
A man (4). Man is born to contemplate and imitate the universe to which he belongs. The universe alone is perfect and its own end. It must therefore be possessed of what is best, viz. reason. § 37.

Ch. xiv § 37. scite enim Chrysippus: Bywater, J. of Philol. vii p. 85, gives reasons for supposing this passage to be ultimately derived from Aristotle's dialogue De Philosophia (cf. the parallel passage in Fin. ii 40 cited below). For the ellipsis of the verb see Index.


cetera aliorum causa esse genera: so Arist. Pol. i 8 τά τε φυτά τῶν ζώων ἔνεκεν εἶναι καὶ τάλα ἥπα τῶν ἀνθρώπων χώρων, cf. Xen. Mem. iv 3 § 10, Nemesius Nat. Hom. i 21—28 τῶν γενομένων τά μὲν δι' ἑαυτᾶ γέγονε, τά δὲ δι' ἄλλα. δι' ἑαυτᾶ μὲν τά λογικά πάντα, δι' ἑτέρα δι' τά τε ἄλογα καὶ ἄψυχα: he then argues at length that other animals are made for man, man for God; see also below §§ 133, 151—153, 156—161.

ad mundum contemplandum et imitandum: cf. § 140 quasi spectatores superarum rerum; Tusc. i 69 hominem ipsum quasi contemplatorem caeli ac deorum cultorem; Fin. ii 40 hi (Epicurei) non viderunt, ut ad cursum equum, ad arandum bovem, ad indagandum canem, sic hominem ad duas res, ut ait Aristoteles, ad intellegendum et ad agendum esse naturam, quasi mortalem deum; Cato 77 credo deos immortales sparsisse animos in corpora humana ut essent qui terras tuenterunt, qui caelestium ordinem contemplantes imitantur cum vitae modo atque constantia; Fin. iv 11 modestiam quandam cognitionem rerum caelestium afferit ii qui videant quantam sit etiam apud deos moderatio, quantus ordo, et magnitudinem animi deorum opera et facta cementibus, justitiam etiam cum cognitionem habere quod sit summi rectoris ac domini numen, quod consilium, quae voluntas; cujus ad naturam apta ratio vera ilia et summa lex a philosophis dicitur, i.e. the four cardinal virtues spring from the contemplation and imitation of nature; also ibid. v 11, iii 83. This is one aspect of the Stoic ὁμολογοῦν μὲνος τῇ φύσει ζην, of the Pythagorean ἐστον θεῷ, of the Platonic ὁμοιοσίς θεῷ, carried out much in the same way by Plato himself in the Timaeus 47 b, 'God gave us sight, that imitating τάς τοῦ θεοῦ περιόδου πάντως ἀνθρώπους οὖνα τάς ἐν ἡμῖν πεπλανημένα καταστησάμεθα', also p. 90. See Beier Exc. on Off. i 13, Plut. S. Num. Vind. p. 550 c with Wytt. s. n.


eaque enim...partibus: in the mss this sentence stands at the beginning of § 37; I have transferred it to the end, as it is not really a proof of what precedes, but a part of another argument. On the other hand, the sentence scire enim Chrysippus is the commencement of a long piece of
BOOK II CH. XIV § 37.

reasoning ending in propertea deus, and might therefore properly follow § 36, as confirmatory of the conclusion there arrived at.

undique aptum: 'knit together on every side', cf. i 9 n. and below § 47 aptus, 97 tamque inter se conixa et apta, Orator 235 facilis est apta dissolvere quam dissipata coneceret, Acad. ii 119 (Aristotle says) ita esse eum (mundum) undique aptum ut nulla vis tantos quae motus mutationesque moliri, nulla sequitur devolutur temporis existere, ut hic ornatus (=sapidus) omnium dulceplex occidat.

cui nihil absit: desesse is used below in the same sense, cf. Orat. i 48 quid hic absesse poterit de scientia with Wilkins' n.


Am (5). Ideal excellence can only be found in that which is complete in all its parts; the universe alone is absolutely complete; therefore the absolute Ideal can only be found in the universe. § 38.

§ 38. omnia in perfectis meliora: Arist. Eth. Eud. ii 1 p. 1219 a 36 ἐπεὶ δὲ ἢ ἡ εὐθαιμία τελειῶν τι, καὶ ἐστὶ ζῴη καὶ τελεία καὶ ἀτελής, καὶ ἀρετὴ ἀσαντες (ἡ μὲν γὰρ δλη, ἢ δὲ μόρου), ἢ δὲ τῶν ἀτελῶν ἐνεργεια ἀτελῆς, εἰ δὴ ἡ εὐθαιμία ζῴης τελείας ἐνεργεια κατ' ἀρετὴν τελειαν, Pol. i 13 ἐπεὶ δ' ο παῖς ἀτελης, διδοὺ δὲ τοῦτο μὲν καὶ ἡ ἀρετὴ οὐκ αὐτῷ πρὸς αὐτὸν ἠστιν, ἀλλὰ πρὸς τὸν τελοιον καὶ τὸν ἐγκυμονον, Plato Tim. 30 c ἀτελεί γὰρ ἀοικὸν οὐδὲν ποτ' ἀν γενέσθω καλὸν' οὗ δὲ ἐστὶ τάλλα ζῴα καθ' ἐν καὶ πάντα γένη μόρα, τούτῳ πάντων ὀμοιότατον αὐτὸν (the Cosmos) ε'ναι τιθειεν (the Demiurgus makes the Cosmos after the pattern of a complete and perfect being).

eculo: Cic. Hortens. ap. Non. p. 105 fame debilitatur eculeorum nimis effrenata vis, Liv. xxxi 12. The more common form is eculus as in Varro R. R. ii 7 12, 13 &c. The word pullus being used generally for the young of any animal, ec. is employed where definiteness is desired.

§ 39. est autem nihil mundo perfectius: I think this is probably part of the argument of Chrysippus, though Cic. has taken it out of the indirect construction; cf. for similar anacoluthon below § 125 illud ab Aristotele animadversum quis potest non mirari? gruses...trianguli efficere formam; ejus autem summum angulo aer adversus petitur; Sulla § 10 hoc totum ejus modi est, ut, si ego sum inconstant...nec testimonio fidem tribui conveniret...sin est in me ratio rei publicae...nihil minus accusator debet dicere quam doc.
efficitur tamen in homine virtus: tamen as in § 18. 'Efficitur—ad effectum perductur.' Virtue is defined as the perfect development of the nature of each thing (Leg. i 22 nihil aliud quam in se perfecta et ad summum perducta natura). In the wise man this perfection is attained but rarely, owing to the res impedientes which surround him. In the universe there are no such hindrances, and perfection is always attained'. Sch.

sapiens et propterea deus: this is in accordance with the Pythagorean and Platonic sentiment that σοφός is too high a title for any but a God (Phaedr. 278), but the Stoics allowed the abstract possibility of a man being wise. Strictly speaking there should have been an additional clause, answering to προστὶ δὲ δίδοσ ἄν εἰ in Sext. ix 118, but eternity is here assumed.

An. The heavenly bodies also are divine: (1) because they are composed of the purest ether corresponding to our vital heat. §§ 39—41.

Indirect argument, as before (§ 21), cf. Sext. Emp. ix 86 where it is shown that there must be inhabitants of ether, and that these must possess such and such qualities; and if so δοθήσεται καὶ θεός ύπάρχειν τούτων μὴ διαφέρων.

Ch. xv. tribuenda est sideribus divinitas: on the divinity of the stars cf. i 25, 27, 36, 39 and Π 42, 43, 54, Acad. Π 119 (the Stoics hold) hunc mundum esse sapientem, habere mentem, quae et se et ipsum fabricat et omnia moderetur, movet, regat:...solem, lunam, stellas omnes, terram, mare deos esse, quod quaedam animalis intelligentia per omnia ea permanet et transeat; R. P. vi 15 homines sunt hac lege generati qui tueruntur illum globum quem in hoc templo medium videis, quae terra dictur; ipsis animus datus est ex ills sempiternis ignibus quae sidera et stellas vocatis, quae globosae et rotundae divinis animatas mentibus circulos suos erosque constat celebrare mirabili, Zeller iv p. 190, Villoison on Cornutus p. 526 foll. The belief in the divine nature of the stars, which had long prevailed in Egypt and Babylon and to which we find allusions in Deuteron. iv 15, Job xxxi 26, was brought into vogue in Greece by Plato and his followers and held as a doctrine by all the later orthodox schools, see Plato Leg. vii 821, Tim. 40 quoted on i 30, Zeller Π 686 foll., Aristotle quoted on i 33, Zeller Π 466 foll., Philo quoted on Π 33. Anaxagoras, Democritus and the Epicureans held that the heavenly bodies were mere dead matter. Opinions were divided among the early Fathers, some holding with Origen (Cels. v p. 238) that οἱ ἐν οὐρανῷ ὀντεῖς ζῷα ἢ ἑορτα καὶ σπονδαί, others, as Lactantius Π 5, denying it. Origen's view was anathematized in the 5th council, held A.D. 553.

mobilissima purissimaque aetheris parte: Chrysippus held that the ἄγεμονων of the universe resided in τὸν αὐθέν τὸν καθαρότατον καὶ ἐλεύσυ
νέοτατον, ἀνε πάντων εὐκομητότατον ὅτα καὶ τὴν ἄλην περιάγωντα τοῦ κόσμου
BOOK II CH. XV § 39.

ϕύσιν (Ar. Did. ap. Euseb. Pr. Ev. xv 15 § 8); Posidonius defined ἄστρον (including under the term the sun and moon) as σώμα θείον εἰς αἰθήρος συνεστικός λαμπρὸς καὶ πυρώδης (Stob. Ecl. i 24 p. 540), cf. below § 92.

Neque ulla sunt admixta natura: ‘compounded of any other element’, cf. for construction aer molto calore admixtus est § 26. Chrysippus named the sun as an instance of a being consisting only of one element, fire; the moon as an instance of a being into which two elements entered, viz. fire and air; while all four elements were combined in the nature of animals, Stob. Ecl. i 10 p. 315. This opinion of the mixed nature of the moon was common to most of the Stoics, who spoke of it as consisting of πῦρ θολερὸν (Plut. Fac. in Orb. L. p. 935), as ἀερωμογίς and γεωδεστέρα (Posidonius ap. Diog. L. vii 145). Pliny (N. H. ii 9) says that the moon draws up earthly particles along with the exhalations on which it feeds, cf. Stob. Ecl. i 26 p. 550, Zeller iv p. 189, Macr. S. Scip. i 19 § 12.

perlucida: are we to take this in the sense of ‘very bright’ as in Div. i 130 illustris et perlucida stella, and probably N. D. ii 30, or in the more usual sense of ‘transparent’, as in i 75, π. 142, cf. perlucens π. 54? Doederlein wished to keep the form perlucidus for this latter sense. We know that some of the Pythagoreans conceived the sun and moon to be ναυλουστίς (Zeller i 839); and Plut. (Fac. in Orb. 929 c) refers to those who compared the substance of the moon to glass or crystal; Seneca (N. Q. vii 1) leaves it doubtful whether the stars were composed of fire or of earth penetrated by a fiery atmosphere. Posidonius believed that the moon received its light from the sun, and that owing to its rarity it was transfused by this light to a considerable depth (Cleom. ii 4 p. 106). Anaxagoras and Democritus held the sun (some say the moon also) to be a red-hot mass of metal or stone. On the other hand we are told that Xenophanes thought that the moon was inhabited (Acad. ii 123).

§ 40. sensuum testimonio confirmando: so Posidonius ap. Diog. vii 144 πῦρ μὲν ὁυν εἶσαι (τὸν ἅλιον) δὴ τὰ πυρὸς πάντα ποιεῖ, Seneca N. Q. vii 1 that the stars are of flame visus noster confirmat et ipsum ab illis fluxens lumen et color inde descendens. Aristotle denied this (de Caelo π. 7), οὐτε πῦρν ἐστιν οὐτ' ἐν πυρι φέρεται (τὰ ἄστρα), see below for his own view.

immenso mundo: Sch. takes this as Dat., Ba. and Mu. insert in; I am inclined to agree with Klotz that it is the Abl. of Attendant Circumstances, non est ‘in mundo immenso’, sed ‘cum mundus immensus sit’; cf. i 22 hoc spatio.

is ejus tactus est: ‘its influence’, much the same as appelles in i 24, π. 141; cf. Div. π. 97 plus terrarum situs quam lunae tactus ad nascentum volere, and the figurative use in Orat. π. 60 of the influence of the study of Greek authors, sentio illorum tactus orationem meam quasi colorari, where the metaphor is justified by the immediately preceding comparison of the influence of the sun.

9—2
non-ut—comburat: 'such as, I do not say, to warm only, but even to burn to ashes'.

Oceanique alatur umoribus: cf. below § 118 and III 37, Porphyri. Antr. Nymp. p. 257 touts de απ' της Στούος ἴλου μεν τρέφεσθαι εκ της απ' της θαλάσσης αναθημάτως ἑδόκει, σελήνη τ' εκ των πυγιών και ποταμών ἱδάτων, τους δ' αστέρας έξ ἀναθημάτως της απ' της γῆς, Seneca N. Q. vi 16 § 2 totum hoc caudum...omnes haec stellae quarium finiri non potest numerum, alimentum ex terreno tradunt...non ullo alio scilicet quam habitu terrarum sustinentur, ibid. II 5 § 1, Stob. Ecl. i p. 540, Cleom. i 11 p. 61, Posidonius Bake p. 66, Zeller iv p. 189. The doctrine became a commonplace of the poets e.g. Anacreon xix 3 πίνει θάλασσα δ' αὐρας, ὅ δ' ἴλος θάλασσαν, Lucr. i 231 unde aether sidera pascit? v 524, Aen. i 608, Lucon x 258 nec non Oceano pascai Phoebunque polumque cedimus: it is put into the mouth of the angel by Milton P. L. v 415 'for know, whatever was created needs to be sustained and fed: of elements the grosser feeds the purer; earth the sea, earth and the sea feed air; the air those fires ethereal, and, as lowest, first the moon; whence, in her visage round, those spots, unpurged vapours, not yet into her substance turned. Nor doth the moon no nourishment exhale from her moist continent to higher orbs. The sun, that light imports to all, receives from all his alimental recompense in humid exhalations, and at even sups with the ocean', cf. Timon of Athens iv 3 439—443. It was held by Xenophanes (Zeller i p. 500, Karsten p. 161), Anaximander (Zeller p. 206 foll.), Heraclitus (Zeller p. 622 and fr. 32 Bywater, νέος ἰφ' ἱμάρ τ' ἴλοις with nn.), Philolaus, who speaks of the lunar vapour as part of the nourishment of the world (Zeller p. 410, Boeckh p. 111), Democritus, who identified these exhalations with the ambrosia of the poets (Zeller i p. 802). The Stoics seem to have connected it with the old belief in the sweet savour of sacrifices ascending to heaven, cf. Musonius ap. Stob. Flor. xviii 43, p. 286 M. (τοὺς θεῶς ὀρκεῖν εἰς τροφῆν) τους ἀπὸ γῆς καὶ ἰθανός ἀναφερομένου ἀμείου, and Sext. Emp. ix 73 with note of Fabricius. Aristotle had long pointed out the absurdity of supposing that the sun was really fed by evaporation, Meteorol. ii 2 § 5 'the exhalations which rise from the sea are condensed by the cold of the upper air and return again in rain, διὸ καὶ γελοιον πάντες δοσι των πρότερον ὑπελαβον των ἴλων τρέφεσθαι τῷ ύγρῷ: they argued that fire required nutrient; but if this were the case, the sun would be merely the combustion of ever-changing fuel. It is really like the boiling of water; the fire beneath the kettle is not fed by the steam, of which it is the cause'; ibid. 12 'all that is taken up comes down in rain sooner or later'; Plac. Phil. ii 17 (Aristotle says) μὴ δείσθαι τὰ οὐράνια τροφῆς, οὐ γὰρ φθαρμα ἄλλα ἄδημα εἶναι.

possit permanere: Mu. reads posset, as in § 49 in globosa forma esse non posse, referring to his note (Praef. p. x) on Acad. ii 72; this would mean ‘could have continued’, but there is no reason why we may not take it ‘could continue under the supposed circumstances, viz. without food’, cf. Roby § 1534.
pastus: Seneca N.Q. ii 5 tot sidera, tam exercitata, tam avida per diem noctemque, ut in opere ita et in pastu.

On the two kinds of fire see n. on § 18 unde sustulimus, and Stob. Ecl. i 25 p. 538 Ζημῶν τὸν ἰλιὸν φυσι καὶ τὴν σελήνην καὶ τῶν ἄλλων ἄστρων ἐκατον εἶναι νόρθον καὶ φοῖνικαν πύρων δὲ πυρὸς τεχνικοῦ· δύο γὰρ γένη πυρὸς, τὸ μὲν ἄγερμον καὶ μεταβάλλων εἰς ἑαυτὸ τὴν τροφήν, τὸ δὲ τεχνικὸν ἀληθικὸν καὶ τηρητικὸν, οἷον ἐν τοῖς φυτοῖς ἑστὶ καὶ ὕψοις, δὴ φύσει ἑστὶ καὶ ὕψη. Aristotle seems to allow the name 'fire' for the latter in a passage from Respr. c. 8, quoted on § 23 quod est calidum, and Anim. Gen. iii 11 cited below on animantium ortus; but elsewhere he argues strongly on the other side, as in Meteor. i 3 'if the intervals between the heavenly bodies were full of fire, and if they were themselves composed of fire, all the other elements would have been burnt up. Fire has not the power of generating life, as the sun has, πῦρ μὲν οὐδὲν γεννᾷ ζωῆν...δὴ τὸν ἰλιὸν θερμότης καὶ τὴν ζωῆν...ἐχεὶ ζωτικὴν ἀρχήν. The life-giving principle is πνεύμα καὶ ἡ ἐν τῷ πνεύματι φύσις ἀνάλογον οὖσα τῷ τῶν ἄστρων στοιχεῖο (cf. Zeller iii p. 483 foll.). Ether extends from the uttermost circumference to the moon, becoming less pure as it approaches the air below the moon. The upper portion of the air becomes ignited by the rapid motion of the celestial spheres and thus generates the heat we feel' ; ibid. i 4 § 2 'there are two kinds of evaporation (ἀναδημιάσις), one damp from moisture, the other dry and smoke-like from earth; the latter rises higher and forms the belt of fire improperly so called, because what we know by the name of fire is the combustion of this warm vapour' ; see Stob. Ecl. i 25 p. 534 and Theophrastus fr. iii 6, where he distinguishes between τὸ θερμὸν (which is a true ἀρχή and the cause of natural growth) and fire, of which he says τὸ δὲ πῦρ γεννητικὸν μὲν αὐτῷ, φθαρτικὸν δὲ ὡς ἐπίπαν τῶν ἄλλων, ὅπερ καὶ δῆλον ὡς ἑτέρα τις ἡ φύσις πῦρος καὶ θερμόν. The difference may be illustrated by the Persian and Egyptian ideas of fire (Herod. ii 16) 'the former believe it to be a god, the latter believe it to be a wild animal, which eats whatever it can seize, and then, glutted with the food, dies with the matter which it feeds upon'. Some of A.'s arguments had been previously employed by Socrates against Anaxagoras, Xen. Mem. iv 7 § 7 ἐκεῖνος γὰρ λέγων μὲν τὸ αὐτὸ εἶναι πῦρ τε καὶ ἰλιον ἤγοιει, ὡς τὸ μὲν πῦρ ὁ ἄνθρωποι βαδίος καθορίσων, εἰς δὲ τὸν ἰλιον οὐ δύναται ἀποβλέπειν· καὶ ὅτι μὲν τοῦ ἰλιον καταλαμπὸμενοι τὰ χρώματα μελάντερα ἔχουσιν, ὡς δὲ τοῦ πυρὸς οὐ ἤγοιει δὲ ὅτι καὶ τῶν ἐκ τῆς γῆς φυτεύμαν ἀνέκει μὲν ἰλιον ἄγοιει οὐδὲν δύναται καλῶς αὐξηθῆναι, ὡς δὲ τοῦ πυρὸς θερμαίνομεν πάντα ἀπόλλυμαι· φάσκων δὲ τὸν ἰλιον λίθον διαπερνεῖ εἰςαὶ καὶ τοῦτο ἤγοιει, ὅτι λίθος μὲν ἐν πυρὶ οὐτὲ λάμπει οὐτὲ τούτο χρόνων ἀντέχει, ὁ δὲ ἰλιος τὸν πάντα χρόνον πάντας λαμπρότατος ὑπὸ δυσμένει.

§ 41. confector: cf. § 137 cibus confectus coctusque, and § 134; Sch. citos confectis rerum vetustas quoted from Cic. by Lact. vii 11 § 5.

corporus=qui corporibus animantium continetur above, 'situated in the body', so Fin. iii 45 rerum corporearum aestimatio splendore virtutis
obscuretur necesse est. The more common sense is 'corporeal' i.e. 'consisting of body' as in Tim. 4.

utri similis—similis ignium: we have the same variety of construction below § 149 plectri sim. cornibus sim., Lucret. iv 1211 tum similis matrum materno semino fuit, ut patribus patrio, with Munro's n.

et quidem reliqua astra, quae: 'aye and the other stars, since they have their origin in ether'. It is implied that the life of the stars is not quite so easy of belief as that of the sun. There is no reason for Orelli's correction atque item. Müller (on Tusc. v 50 praef. p. xlv) cites Aene. ii 11, 50, Fin. ii 13, iii 8, v 94, Tusc. i 83, iii 13, 14, 50, Div. i 112, ii 77, Orat. 152, see above § 36 and i 79 n.

aether vel caelum: cf. i 33 n. and Diog. vii 139 quoted on § 29 quae non solitaria sit.

A n (2). Since each of the lower elements, earth, water, air, has its living occupant, it is probable that it is so also with the highest element, ether: and since the nature of the animal depends upon the element in which it lives, it is probable that those which live in the purest and most active element will possess the keenest and purest intelligence. §§ 42, 43.

§ 42. animantium ortus: for the argument compare Sext. Emp. ix 86, cited on § 17 above, 'If earth and sea, in spite of their gross nature, produce various sentient creatures, how much more will the far finer and purer element of air produce rational creatures! And indeed we have Hesiod's authority for this in the lines, in which he speaks of the myriad watchers of Zeus who haunt the earth. Further if the air is inhabited by living beings, surely the same must be true of the ether, from which we men derive our rational faculty. Such ethereal beings must far transcend the creatures of earth, being uncreated and immortal'. This is further explained by a passage of Varro ap. Aug. C. D. vii 6, 'the universe is divided into heaven (including ether and air), and earth (including land and water): each region has its own inhabitants, immortals in heaven, mortals on earth; ab summo autem circuitu caeli ad circulum lunas aetherias esse animas, astra ac stellas; eos caelestes deos non modo intellegi esse, sed etiam videri; inter lunae vero gyrum et nimborum ac ventorum cacumina aeras esse animas, sed eas animo non oculis videri, et vocari heros et lares et genios. Galen Hist. Phil. 124 traces this doctrine to Plato and Aristotle, P. L. and 'Αρ. τέσσαρα είναι ζώον γένει λέγουσι χερσαία ἄνυδρα πτηνά οὐράνια καί γάρ τὰ ἀστρα ζώον είναι καί αὐτὸς ὁ κόσμος ζώον λογικῶν ἄθανατον, cf. Plac. Phil. v 20. We find it in Tim. 40 'the Demi-urgus attached to each element its appropriate animals, εἰς δὲ τέταρτας, μία μὲν οὐράνιον θεῶν γένος (stars), ἀλλὰ δὲ πτηνῶν καί ἄρσιπορον (birds and men), τρίτη δὲ ἄνυδρον έίδος (fishes), ζωῶν δὲ καί χερσαίοισ τέταρτον (beasts), τού μὲν οὖν θείου τῆς πλειότητι ιδέαν ἐκ πυρὸς ἀσημένιος, ὅπως ὤν Λαμπρότατον
idein te kallistov eip, tō di panti prosneikágon eukulon époli. In the Epinomis § 8 we find five elements, fire, ether, air, water, earth; the stars inhabit fire, animals and plants the earth, and the intermediate elements are inhabited by different orders of rational beings, water by nymphs &c. Zeller p. 992. The reference to Aristotle in the text is doubtless to the lost dialogue De Philosophia (see Bernays Dial. Ar. p. 102), but it agrees with occasional hints in his extant writings, e. g. Anim. Gen. III 11 τὰ μὲν γὰρ φυτὰ θεία τις ἀν γῆς, ἵδατος δὲ τὰ ἄνδρα, τὰ δὲ πεταί αέρος... τὸ δὲ τέταρτον γένος οὐκ ἐπὶ τοῦτον τῶν τῶν πάλιν δὲ ζητεῖν καίτοι βουλετάτα γε τι κατὰ την τοῦ πυρὸς εἶναι τάξιν, τούτο γὰρ τέταρτον ἀριθμείται τῶν σωμάτων (though it is usually found in combination with one of the other elements), ἀλλὰ δὲ τὸ τούτου γένος ζητεῖν ἐπὶ τῆς σελήνης· αὐτῇ γὰρ φανεραί εἰσπροσάτα τῆς τετάρτης ἀποστάσεως, Resp. v. 13, Eth. vii 7 § 4 καὶ γὰρ ἄνθρωπον ἀλλὰ (ζώα) πολὺ θείότερα τὴν φύσιν, οἷος φανερωτάτα γε εἰ δὲν ὁ κόσμος συνείστηκεν. These inhabitants of the fourth element (called in his later writings τὸ ἄνω or ἔτερον στοιχεῖον) are not of course to be confounded with the pyrausta referred to in 103, though Philo (Gigant. 2) strives to bring them into connexion; ἀνάγκη γὰρ ἔλθῃ δὲ ἔλθων τῶν κόσμων ἐν τοῖςα, τῶν πρῶτων καὶ στοιχείων μερῶν ἐκατόν τὰ οἰκεία καὶ πρόσφορα ζώα περιεχοντο· γῆς μὲν τὰ χερσαία, θαλάσσις δὲ καὶ ποταμῶν τὰ ἄνδρα, πυρὸς δὲ τὰ πυρίγονα...οὕπονοι δὲ τούτο ἀντίφας, ῥὰ fortiori the air, which supplies life to the other elements, must itself be inhabited by rational beings, perceptible not to sense, but to reason', cf. Cassaub. on Athen. p. 618, Apul. D. Socr. c. 8 foll.

acerrimo: cf. above, 30, 31.

Ch. xvi. etenim: refers to last sentence but one, see nn. on etenim above § 16 and i 91, also on itaque i 85.

acutiora ingenia: on the influence of climate see above § 17 n.

§ 43. cibo quo utare: I am indebted to Mr Roby for the following note. "I should translate, then again, what it is one uses as food, they think makes some difference", taking cibo as Predicative Dative (Gr. ii pref. pp. XXXIII and XXXIX). Compare Lucr. vi 771 (in the earth there are many things) cibo quae sunt, Varro R. R. iii 8 § 3 cibatui quod sit, objectum triticum siccom in centenos vicemos turtures fere semodium, ib. iii 5 § 4 cibatiu offas postis. In the two former exx. the Dative precedes the pronoun, and in the 3rd it stands first in the clause. We have another example of cibo predicative in Phaedr. iv 8 4 haec cum temptaret, si qua res esset cibo, limam momordit (ms have cibi: cibo is Bentley's conj.). We find utor with a similar Dative in Varro L. L. x 27 eam dicimus muliabrem (tunicam) quae de eo genere est quo indutui mulieres ut uterentur est institutum. For the order compare further Varro L. L. v 131 prius dein indutui, sum amicitui quae sunt tangam, Liv. xiii 11 beneficii etiam suis, ingenitia quae in cum congrega erant, Lucr. i 336 namque officium quod corporis existat, officere atque obstare, id in omni tempore obesset." Three reasons may be assigned for the order here; it puts the new subject matter prominently
forward, it avoids the hexameter rhythm quinetiam quo utare cibo, it suggests that quo and cibo are in different cases.

intresse ad mentis aciem: the vegetarianism of the Pythagoreans is well known, cf. Mayor on Juv. xv 173, 174, Iambi. V. P. c. 24, Cic. Div. i 62 (beans were forbidden) quod habet inflationem magnam is cibus tranquilliati mentis quaerenti vera contrariam. Plato recommended spare eating to produce good dreams, Rep. ix 571 translated by C. Div. i 60; see for the general subject Musonius de Vici, Stob. Flor. xix p. 159, and on the use of hellebore for restoring sanity, Juvenal xiii 97 with Mayor's n. We learn from Galen (Hipp. Plat. p. 466 K.) that Posidonius, in the 1st book of his περί παθών, gave a sort of summary of Plato's rules with regard to the training of children, laying stress on their diet and on that of the mothers during pregnancy, in order to prevent the preponderance of the irrational part of the soul.

A n 3. The intelligence of the stars is shown by their orderly movements, which proceed not from nature or chance, but from their own free-will. §§ 43, 44.

sensum astrorum declarat ordo atque constantia: see above on §§ 4 and 15 and below § 55. The argument is fully given by Plato Leg. x 897, as follows: 'it having been shown that soul is the origin of movement, and that the movements of the heavenly bodies are therefore evidences of psychical energy, the question arises as to the character of the soul by which they are actuated. This may be inferred from the character of the movement: the uniform rotatory movement of the spheres is a rational movement; therefore the soul which causes this movement is rational, and each soul presiding over any portion of the movement rational also'. Compare too the Epinomis 982 τοῖς ἀνθρώποις ἔχεν τεκμήριον εῦθι τοῦ νοοῦ ἔχειν ἀστρα τε καὶ σύμπαθαν ταύτην τὴν διαπόρειαν, δι' τὰ αὐτὰ δεὶ πράττει διὰ τὸ βεβουλεύμενα πάλαι πράττειν...ἀλλ' οὐ μεταβουλεύμενον ἄνω καὶ κάτω...πλανᾶσθαι τε καὶ μετακυκλοθαί, and Aris. Cael. i 3 'the celestial substance is eternal, neither increased nor diminished, and this is shown not only by reason but also by experience, ἐν ἀπαντὶ γὰρ τῷ παρελθόντι χρόνῳ κατὰ τὴν παραδεδομένην ἄλληλοις μημήν οὐδέν φαινεται μεταβεβληκός ὡστε καθ' ἐλον τὸν ἔκαθον οὐρανὸν ὡστε καθά μόρον αὐτοῦ τῶν ὁλεθρίων οὐδέν'. On the immutability of this upper region cf. § 55 n.

ratione et numero moveri:—λόγῳ καὶ ὑμβάς ή κατ' ἀριθμὸν (Plato Tim. 37). The movements of the stars were often compared to a dance as in Epinomis 982 ε.

neque naturam neque fortunam: we have here nature (φύσις), chance (τύχη), and free-will (προαιρεσις or νοῦς) opposed, as in Arist. Eth. iii 3 § 7 αὕτα γὰρ δοκοῦσιν εἶναι φύσις καὶ ἀνέγκη καὶ τύχη, ἦτι δὲ νους καὶ πῶς το αὐτόποιησιν, ibid. i 9 § 5. Phys. ii 6 § 8 ὄστερον ἄρα το αὐτόματον καὶ ἴ τύχη καὶ νοῦ καὶ φύσεως' ὡστε εἶ διὰ μάλιστα τού οὐρανοῦ αἰτίου το αὐτό-
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maton, ἀνάγκῃ πρότερον νοῦν καὶ φύσιν αἰτιὰν εἶναι καὶ ἄλλων σολλῶν καὶ τοῦτο τοῦ παντόσ, ibid. II 5 foll., and 4 § 5 εἰσὶ δὲ τινες οἱ καὶ τοῦ οὐρανοῦ τούτου καὶ τῶν κοσμικῶν πάντων αἰτιῶν τὸ αὐτόματον ἀπὸ ταυτώματον γὰρ γίνεσθαι τὴν δινὴν καὶ τὴν κίνησιν τὴν διακρίνασαι καὶ καταστήσασαι εἰς ταὐτὴν τὴν τάξιν τὸ πάντων καὶ κάλα τοῦτο δαιμόνια ἄξιον. λέγοντες γὰρ τὰ μὲν ἔσοδα καὶ τὰ πυρα ἀπὸ τούχῃ μῆτε εἶναι μῆτε γίνεσθαι, ἀλλ' ἦτοι φύσιν η νοῦν, ἤ τι τοιοῦτον ἐπερον εἶναι τὸ αἰτίαν ... τὸν δ' οὐρανὸν καὶ τὰ θεώτατα τῶν φανερῶν ἀπὸ τοῦ αὐτόματος γενέσθαι, τοιαύτην δ' αἰτίαν μηδεμίαν εἶναι οἰον τῶν ζωῶν καὶ τῶν φυτῶν, κ.τ.λ., further on (II 8 foll.) Arist. discusses the relation of τὸ ἀναγκαῖον to causation, cf. also Part. An. I 1 § 35 foll. where the action of φύσις is compared with that of τέχνης, τύχης and ἀνάγκης.

Much the same is Plato's division (Leg. x 888 E) λέγουσι ποὺ τινες ἀπὸ πάντα ἐστὶ τὰ πράγματα γεγομένα καὶ γεγομένα καὶ γεγομένα τὰ μὲν φύσις, τὰ δὲ τέχνη (Arist.'s νοῦς), τὰ δὲ διὰ τύχης, that all great changes are due to the former, and only slight modifications to the latter. Thus the elements exist by nature, and the world, as we see it, is produced by chance, i.e. by the fortuitous concourse of elementary particles; art enters in subsequently and gives us our systems of religion, politics, &c. They have forgotten the real first principle, Soul, the powers and properties of which are prior to the powers and properties of bodies; of these powers intelligence is the first, of which art is one development; and that which we call nature is the effect of reason and art, so that τὰ μεγάλα καὶ πρῶτα ἔργα καὶ πράξεις τέχνης ἀν γίγανον ... τὰ δὲ φύσις καὶ φύσις ... ὠστερὰ καὶ ἀρχόμενα ἀν ἐκ τέχνης εὖ καὶ νοῦ. Stobæus (Eol. i 6 § 17) says that Aristotle makes four causes καθ' ἀνατα συνιστασαν νοον, φύσιν, ἀνάγκην, τύχην καὶ τούτων διπλῆ ἐκατηρ, τὴν μὲν ἐν τοῖς ἀνθρώποισι πράγμασι, τὴν δ' ἐν ἄλλοις ... τὴν δ' εἶμαι τρεῖς οὐκ αἰτίαν μὲν, τρόπον δὲ τινα αἰτίας, and attributes the same classification of causes to Theophrastus, with the substitution of προαίρεσις for νοον, and to Anaxagoras and the Stoics, except that, omitting φύσις (which, according to the Stoic view, would include all), he adds εἰμαι τρεῖς and τὸ αὐτόματον. See below § 88 where casus, necessitas and mens are opposed.

neque naturam significat: it is evident that natura is not used in the full Stoic sense, but as defined below § 81 vim quandam sine ratione carentem motus necessarios, cf. I 35, iii 27.


§ 44. nec vero Aristoteles non laudandus: for the omission of est cf. § 59 dictum etiam de sideribus, § 67 Vestae nomen a Graecis, § 73 magnus sine locus et a vestris vexatus, § 80 nihil autem majus mundo, § 167 magnis viris prosperae semper omnes res, et Index.

quaes moventur—quaes moverentur: for the combination of moods see above § 23 quae alantur n. and below § 72 qui procaebantur n., and

natura, vi, voluntate: here we have vis taking the place of fortuna above: compare Arist. Met. v 5 p. 1015, where, after giving an account of φύσις, he goes on to speak of ἀναγκαῖον and says in one use it is equivalent to τὸ βίαν, τοῦτο δ’ ἐστι τὸ παρὰ τὴν ὀρμῆν (=φύσιν) καὶ τὴν προϊστασιν. So Eik. π 1 virtue is neither φύσιν nor παρὰ φύσιν (=βία) but (as shown at length in bk. iii) προαιρέσεις, cf. Cael. iii 2 κυμάτις τῶν ἀναγκαίων βίας, εἰ μὴ οἰκείων ἔχει κίνησιν, τὸ δὲ βία καὶ παρὰ φύσιν ταῦτα.

quae natura moventur...circumferretur: Aristotle distinguishes two kinds of simple motion, the circular and the rectilinear: the latter belongs to the sublunar elements, thus it is the nature of fire and air to rise from the centre towards the circumference, of water and earth to sink towards the centre; the former (the circular) naturally belongs to the superlunar region, the heaven and the spheres on which the heavenly bodies revolve (ἀναγκαῖον εἶναι τί σῶμα ἀπλοῦν ὡς ὑποκεκλεῖσται τὴν κύκλῳ κίνησιν κατὰ τὴν ἐναυτὸ φύσιν, Phys. viii 9, Cael. i 2). We do not however find him ever denying that the circular movement is natural, or contrasting it, as voluntary, with the natural movements of the terrestrial elements. On the contrary he blames Plato for defining soul as the self-moving principle (An. i 3), and for assigning circular movements to the soul, both in the macrocosm and in the microcosm, as opposed to the rectilinear movements of bodies (ὡς οὕσας τὰς τοῦ οὐρανοῦ φοράς τὰς τῆς ψυχῆς κινήσεις, ibid. § 12, cf. Plato Leg. x 897 foll., yet elsewhere Arist. seems to have compared the activity of νοῦς to circular movement, see Trend. in loc.); see also Cael. π 1 'it is impossible that the circular movement of the heaven should be caused by the compulsion of a soul residing in it, for that would be to attribute the fate of Ixion to such a soul. It moves by the attractive force of the First Mover, that divine supernatural principle which κινεῖ οὐ κυνοῦμεν'. Still we are not to think of the heavenly bodies as consisting of brute matter, Cael. π 12 ἀλλ’ ὡμοὶ ὡς περὶ σωμάτων αὐτῶν μονόν, καὶ μονάδων τάξιν μὲν ἐχόντων, ἄφυκοι δὲ πάμπαν, διανοούμενα ἄτυχοι ὡς μεταχέων πράξεως καὶ ζῆν...διὸ δεὶ νομίζει καὶ τὴν τῶν ἀτετρωμένων πράξιν εἰρήνη τοιαύτην οἰκεῖα ἡ τῶν ἐφοί καὶ φυτῶν καὶ γὰρ ἐντάξει αὐτῷ τὸν ἄνθρωπον πληίστως πράξεως...τῷ δ’ ως ἀριστα ἔχουτε οὐδὲν δεὶ πράξεως ἤστι γὰρ αὐτῷ τὸ οὐ ἐνεκα; in Met. xiii p. 1073 a, it is distinctly said that there must be besides the First Mover a separate eternal mover for each of the separate planetary movements; cf. Cael. π 3 θεοῦ δ’ ἐνεργεία αἰθανασία...δου’ ἀνάγκη τῷ θείῳ κίνησιν αἴδων ὑπάρχειν. ἐπεὶ δ’ οὐ χαρῶς τοιοῦτος (σῶμα γὰρ τιθεῖον) διὰ τούτω ἔχει τὸ ἐγκύκλιον σώμα, δ’ φύσει κυκλόφιτα κύκλῳ δεῖ, and Plac. Phil. π 3, Stob. Edel. i 486. Proclus on Tim. 82 a infers the same from Metaph. xiii p. 1072 b 3 (κινεῖ οὐκ ἐφοίμενον) 'if the universe is in love with Reason and moves towards it, it must have feelings and impulses of its own'. So Theophrastus (fr. 12 §§ 7—9 Wimmer) speaks of the ὕπατε
and ἐφεσίς which impels the stars, and Eudemus says that the movement of the heaven must be a vital movement (ὤρωτας πνεύμα) like one’s breath, for it is self-impelled (Brandis Schol. p. 433 a 45). Arist. seems to suggest something of the kind in the de Anima iii 11 § 3 ‘at times appetite (ἔφεσίς) moves the will, at times the will the appetite, like the sphere’, which Trendelenburg explains of the highest sphere which carries round with it all the inferior planetary spheres; the readings however vary. On the other hand there is a curious passage (Met. xi 10 p. 1075 a) in which necessity seems to be attributed to the movements of the heavenly bodies in contrast to the spontaneous movements of the inferior members of the universe, see Grant’s comment upon it in his essay on Aristotle’s Conception of Nature. Bernays Dial. Arist. p. 103 foll. thinks that Aristotle may have spoken of the stars having a motion of their own (ἐφ’ ἐαυτός) distinct from the motion which we regard as natural, and that C.’s voluntate may have arisen from a confusion between this and ἐφ’ ἐαυτός, ‘a motion depending on themselves’; but the passages cited by Bywater in the Journal of Philology make it probable that Arist. in his popular dialogue may have attributed voluntary action to the stars, and certainly in the preceding paragraphs of the N. D. the orderly movements of the stars are ascribed to their own intelligence, not to any superior power.

pondere aut levitate: Arist. believed that there were such qualities as absolute weight and absolute lightness, Cael. iv 4 ἐστι τι ἀστράκος κοῦφον καὶ ἀπλᾶς βαρύν λέγω δ’ ἀπλᾶς κοῦφον δ’ ἀεὶ ἰσομερές, καὶ βαρύν δ’ ἀεὶ κάτω πέρας φέροντες μὴ κολυμβών τοιαύτα γὰρ ἐστι τις, καὶ οὐχ ἀστράκος ὁμολογεῖ τις πάντες ἐχεν βάρος. See the criticism in Lucr. i 1083, ii 184 foll.

in sublime ferrī: this is the reading of Orelli’s mss here and below § 141, but the edd. have omitted in in both places. Again in § 117, where the edd. read sublimis, the reading of the mss is sublime or sublimis. We have however no variation of reading in § 101 sublimis fertur, § 89 sublimis rupti, § 65 sublimis fusesum, Tusc. i 40 sublimis ferris, ib. 102 sublimis putrescat, Div. ii 67 sublimis fusa. In the last two instances it is used without any idea of motion. These instances show that the copyists found no difficulty in the omission of the preposition; so that, unless it is contrary to the Latin idiom, there is no occasion to suppose that they have interpolated it here; and there is no a priori reason against in sublimis more than against in altum; moreover the lex. cite many exx. of sublimis used with in and other prepositions.

quorum neutrum contingeret: the Inf. would have been more regular here after the simple relative, but the Subj. is sometimes substituted for it, see above § 24 cujus in reliquiis insit, i 12 ex quo existit with n., Acad. i 41 quod erat sensu comprehensionum, id ipsum sensum appellabat, et si ita erat...scientiam; sin aliter, inscientiam nominabat; ex qua existeret etiam opinio, quae esset imbecilla; Madv. Fin. i 30, and Reid on Lael. 45 qua frui non possit.
rorum motus in orbem circumferretur: I have followed Sch. in omitting the *que* after *circum*. Heind. reads *circum quaque*, but that seems to be post-classical. The expression *motus ferretur* is pleonastic, like *cursus movetur R. P. vii 18*, see on *caeli impetus* below § 97.

*vi quadam majore*: the same argument is used below § 76 to prove that God governs the world. Aristotle argues (*Caed. i 2*) that the circular movement cannot be against nature, because, if it were so, it must speedily die away (as a stone thrown upward).

*motus astrorum voluntarius*: whether rightly or wrongly ascribed to Aristotle, this was certainly the Stoic doctrine, cf. § 31 *sua sponte* and below, § 54. Cleomedes 1 3 makes the general movement of the heaven necessary, and the particular planetary movements voluntary, *κινεῖται μὲν καὶ τὴν σὺν τῷ κόσμῳ κίνησιν ἀναγκαῖον, κινεῖται δὲ καὶ ἔτηρα προαριτικῆν*. In fact the word *προαριτική* becomes with him technical in this application, as in *π* 1 pp. 81 and 84. Lucretius alludes to the Stoic doctrines v 78 *praesterea solis cursus lunaeque meatus expeditam qua vi flectat natura gubernans*; *ne forte haec inter caelum terramque reamur libera sponte sua cursus lustrare perennes, morigeras ad fruges augendam atque animantes.*

*qui vident*: hypothetical subjunctive, cf. i 43 n., ii 12, 76.

*impie faciat*: cf. Philo *Incorr. Mund.* p. 489 M. *‘Aristotle charged with impiety (δεινὴν ἀθεότητα κατεγιγμωκε) those who thought that the visible divinity, who embraces in himself the sun and moon and all the heavenly host, was to be compared with the works of men’s hands’. Lactantius *π* 5 accepts the challenge here given, *si deos esse idcirco opinantur quia certos et rationabiles cursus habent, errant. Ex hoc enim apparent deos non esse, quod exorbitare illis a praestitutis itineribus non licet. Ceterum si di essent, hoc atque illuc passim sine ulla necessitate ferrentur, sicut animantes in terra ...Nimium Deus universi artifex sic illa disposita ut per spatia caeli divina ratione decurrerent...‘ if the Stoic had seen the figures of the planets moving in the orrery of Archimedes, would he have said that they moved of their own free-will?...inest sideribus ratio, sed Dei est illa ratio.*

*nec multum interest*: is this an unseasonable piece of anti-Epicurean polemic inserted by Cicero, or is it a caution added by the original writer against a special point in the Aristotelian theology?

*qui nihil agit—esse non vident*: cf. i 110 *actuosa* n. and below § 76.

*vix sanae mentis existimem*: that atheism is insanity is a commonplace with Balbus, cf. 4, 16, 31, 36, 44, 55, 56, 115, 147.


a. *The Divine form, as it is seen in the beings already recognized as Divine, viz. the universe and the heavenly bodies* §§ 45—49; b. *the Divine activity as shown in the same* §§ 49—57; c. *the provi-
dential activity of nature §§ 57, 58; d. the gods of the popular religion §§ 60—70; e. how they are to be worshipped §§ 71, 72.

B a (1). The populace and the Epicureans wrongly hold that God is in the form of man. §§ 45, 46, cf. § 59.

Compare with this r 45 foll. where Velleius, after stating the grounds on which the Epicureans believed in the existence of the Gods, goes on to describe et formam et vitae actionem mentisque agitationem in deo; so § 51, quaerere soletis quae vita deorum sit, quaeque ab uiis degatur aetas.

Ch. xvii § 45. a consuetudine ocularum: cf. Tusc. i 38 (of the difficulty of conceiving the existence of the disembodied spirit) magni est ingenii sevocare mentem a sensibus et cogitationem ab consuetudine abducere; also § 96 and iii 20. The reference is to the images of gods in human form which met the eye at every turn, cf. i 77.

vulgo imperitos: ['uneducated people generally'. Vulgo, like partim, was used almost like an indeclinable substantive; see the passages from Cic. and Liv. quoted in Gr. § 1428. R.] We find imperiti contrasted with philosophi also in iii 39.

levitas: 'shallowness'. confutata a Cotta: i 46 and 76.

 nihil sit praestantius: so even the Epicureans, as we see in the next § and i 47.

ad praesensionem accommodem: cf. i 37 in animi notione tamquam in vestigio reponere, and Orat. 23 unum (Demosthenem) accommodare ad eam quam sentiam eloquentiam.

quam ut... judicem: pleonastic for quam mundum.

primum hunc mundum: we should have expected this to be followed by deinde sidera, but the connexion is broken by a parenthesis lasting to § 49.

§ 46. quam volet: 'let him jest as he will'; cf. Ter. Hec. iv 4 12 turbent quam velit; pro Caesio 63 quam velit sit potens; ib. 67 quam volent faceti sint; Leg. Agr. ii 34 emere agros quam volent magno poterunt; Div. i 56 quam vellet cunctaretur tamen esse pereundum; Verr. v 5 facinus quam vultis improbum. In the last ex. the meaning is scarcely to be distinguished from quamvis.

non aptissimus ad jocandum: cf. below § 74 and i 123 n.

resipiens patriam: Mart. iii 20 lepore tinctos Attico sales narrat. Epicurus, though born in Samos, was the son of an Athenian citizen and belonged to the deme Gargettus; hence called Gargettius, Fam. xv 16.

volubilis et rotundus: cf. i 18, 24.

necesse sit: is not this a Stoic way of putting it? The Epicureans admitted the existence of an ideal, but this was on the ground of experience, cf. i 49.

nihil est melius: repeated from §§ 18, 31, 36, 38.

§ 47. paulo post cognoscentur: below § 57.
The sphere is the most perfect of solids, and circular revolution is the most perfect of movements, and this is the form and this the movement of the universe and the stars. §§ 47—49.

Ch. xviii. noli...doctrinæ: ‘pray don’t display your utter ignorance of science’. The reference is to 124. What follows may be thus paraphrased: ‘You tell us a cone is more beautiful than a sphere. That is a solecism in taste as well as in science. But suppose your ignorance in geometry excuses this, surely as a natural philosopher you ought to have understood the advantages of the sphere’.

doctrinæ: cf. 172 nn. Acad. ii 106 Polyaeus, qui magnus mathematicus fuisse dicitur...Epicuro assentiens totam geometriciam falsam esse credidit; Fin. 172 where the Epicurean speaker justifies his contempt for music, geometry, arithmetic, astronomy; and my Sketch of Ancient Philosophy p. 183 foll.

sphaera: the word seems to have been naturalized by Ennius, Orat. iii 162 quamvis sphaeram in scenam, ut dicitur, attulerit Ennius: Cic. uses it below §§ 88 in the sense of ‘orrery’.

oculorum judicium = judicium subtile videndis artibus Hor. Ep. ii 1 242; cf. Orator 150 offendunt aures quaram est judicium superbissimum, and below § 146.

dumtaxat aspectu: ‘as far as the eye is concerned’. Sch. refers to Madv. Fin. ii 21.

quod mihi tamen ipsum non videtur: ‘though I don’t even allow that’.

figura quae sola omnes alias continet: cf. Tim. 6 a quo enim animant omnes relictus continer i velit animantes, hunc ea forma figuravit, quae una omnes formae reliqua concluduntur, et globus est fabricatus, quod σφαερείς Graeci vocant, cujus omnis extremitas paribus a medio radii attingitur: idque ita tornavit...nihil asperitat ut habetur, nihil offensionis, nihil incisum angulis, nihil anfractibus, nihil lacunosem, omnesque partes simillimas omnium. This is a filling out of the original (Plato Tim. 33) τὸ δὲ τὰ πάντα ἐν αὐτῷ ἥπα περιελεῖ τὸν κυκλοειδέα τῷ κόσμῳ τὸν κυκλοειδέα ἀναπτύσσεται ἀπὸ τοῦ τέλους τοῦ κύκλου, κυκλοειδέα τὸν κόσμον τοῦ τέλους. The sphere is the limit of the dodecahedron which Pythagoras and Plato made the cosmic figure, and contains in itself all the other regular solids, in such a manner that all their angles will touch the circumference.

nihil offensionis: ‘nothing to impinge against,’ lit. ‘nothing of impingement’.

incisum angulis...anfractibus: ‘no indentation or concavity’. It is curious that though Cic. here affirms that there is no anfractus in the curve, he uses this term of the sun’s orbit in R. P. vii 12 cum aetas tua septem octiens solis anfractus reditusque convertitur, and Leg. ii 19 in
annuis anfractibus; so Lucretius (v 683) of 'the unequal daily curves it makes above and below the horizon' Munro; Plin. ii 71 (of the earth's sphericity) e freto emergentibus, quae in anfractus pilae latuere, sideribus. Anfractus =ambi-fractus (like anoepe), properly of a twig broken so as to form a curve. Key however suggests another form of the prefix, and would divide it as amf-actus, see Roby § 1843.

eminens, lacunosum: 'no protuberance or depression'; cf. the use of lacuna for a dimple, and our phrase 'pitted with smallpox'. On eminens see i 75 n. and 105.

praestantissimae: I agree with Klotz in reading the superlative, after Nonius. It is certainly more natural with ex solidis than the positive, and the reading of AV praestantis sint is easily explained by the repetition of si in simae and sint. Aristotle in his Mechanica dilates on the wonderful powers of the circle; in the de Caelo ii 4 he calls the circle the first and most perfect of plane figures, as the sphere is of solids: so Pythagoras held τῶν σχημάτων τὸ κάλλιστον σφαῖραν εἶναι τῶν στρεφῶν, τῶν δὲ ἐπιπέδων κύκλων, cf. Cleomedes i 148, Quintil. i 10 § 41, Ocellus Lucanus § 15 p. 514 Gale, 'the absence of beginning or end in the (spherical) form and (circular) movement of the world betokens its eternity'. Hence the comparison of God to the sphere by the Eleatic philosophers, and the Stoic argument for the sphericity of the world, for this form πάντων σχημάτων προεύθετον τὸν γὰρ τότῳ τοῖς ἐν τούτῳ μέρεσιν ὡμοτόνως, the world is therefore round like the sun and moon (Plac. Phil. i 6). Pliny N. H. ii 2 argues that the world is round non solum quia talis figura omnibus in partibus verit in se se ac sibi ipsa toleranda est, sequae includit et continet, nullarum egens compaginum, nec finem aut initium ullis sui partibus sentiens, nec quia ad motum...talis aptissima est &c., see below § 117, Arist. Cael. ii 14. Lactantius iii 24 derides the notion of a round earth propter antipodas, so Chrysostom and Augustine.

circulus: so mss, but Nonius p. 432 reads circus, a form which we find elsewhere in C. e.g. Aratoe 248 vidisti magnum cendentem serpere circum, and in R. P. vi 16 edd. read with one ms circus elucens, ib. 15 Macrobius has circos, see Osann's n.

a mediocie tantundem undique absit extremum: mss with unimportant exceptions have a mediocia tantum absit extremum, which is nonsense; one or two add quantum idem a summoto, but that does not improve matters, idem should naturally refer to extremum, but would have to be taken of medium; then extremum is not the same as sumum, and even if we pass over these difficulties, the definition is still defective; in any figure you can find a point equidistant from the two extremes of a line passing through it. Most edd. have been satisfied with the emendation (tantundem for tantum) suggested by Allen and Madvig (Schm. Philol. ii p. 140), but this is not enough; we must state that the circumference is in every part equidistant from the centre, as in Tim. 6 globosem, cuius omnis extremitas paribus in medio radiis attingitur. The word extremitas is also
used by Pliny *N. H.* ii 17 for circumference, *sicuit in illis propinquitas centri accelerat, ita in his extremitas circuli; extremum* by Varro *R. R.* i 51 *omne brevisimum in rotundo e medio ad extremum* (cited by Mü. praef. on *Fin.* i 17). Klotz followed by Sch. proposed to complete the definition by inserting *ubi que after medioque*, but this use of *ubi que* was denied to be Ciceronian, see Lachmann on Lucr. p. 250, Kühner’s translation (where he refers to his ed. maj. of the *Tusculans* p. 525), and Sch. *App.*, and the emendation was abandoned by Sch. in his last ed. I propose to read *undi que after tantundem, cf. undique ad inferos tantundem vias est, Tusc.* i 43. It may be objected that *undi que* should properly denote the starting-point, to which it is here opposed; but I think it may be understood generally to mean ‘on every side’, like *ab omni parte*, without reference to motion. [This might be illustrated from Boethius *Art. Geom.* p. 394 ed. Friedlein, *plana vero summits quae aequaliter rectis lineis undique versum finitur*, ‘a plane surface is one which is bounded by right lines in every direction’. For the use of *ab* see *Gr.* § 1813. R.] Failing this, I should adopt Brieger’s *ab sit omne extremum*, see his *Beitr. z. Krith. d. Cic.* Posen 1873, pp. 18, 24. Pleckeisen (*Jahrb. f. Cl. Ph.* x p. 142) seems to me to have utterly failed in his endeavour to defend the old reading.

*aptius*: ‘more compact’, cf. *§ 37 undique aptum.*


*physici*: the Epicureans are so called on account of the importance they attached to the study of natural philosophy as driving away superstitious fears, cf. i 77 n.

*aequabilitatem motus—ordinum*: ‘this uniformity of motion and these unchanging ranks (of stars)’; cf. *§§* 15, 90, 96, 116, *Diog. vii* 140 *ἓα τὸν κόσμον εἶναι...σχῆμα ἔχοντα σφαιροειδιά, πρὸς γὰρ τὴν κίνησιν ἀρμοδιάτατον το τοιοῦτον, καθὰ φθος Ποσειδάνιος.* Aristotle (*Cael.* ii 8) speaks more guardedly *πρὸς τὴν ἐν αὐτῷ κίνησιν (i.e. rotation) ἡ σφαῖρα τῶν σχημάτων χρησιμοδιάτατον*, but the opposite for onward movement.

*nihil potest indoctius*: so I read with the majority of the better mss. For the omission of *esse* cf. *Fin.* iv 48 *quo nihil potest brevisius*, where Madv.
BOOK II CH. XVIII § 48.

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cites Att. viii 38 hoc quicquam potest impurius? adding sic saepius in hoc negativo comparandi generis post 'potest' omittitur 'si' vel 'esse'. See also Madv. on Fm. v 84, Holden on Off. iii 39.

posse fieri ut sit alia figura: Epic. ap. Diog. x 45 κόσμοι ἄπειροι εἰσὶν ἐνθ’ ὅμως τοῦτο ἐν ἄνωμοι, for the atoms are infinite in number and not all used up in making a single world; cf. below § 88, Lucr. ii 1048 foll., and my Sketch of Ancient Philosophy p. 194 foll. on the easy indifferrence with which the Epicureans acquiesced in a number of incompatible hypotheses.

§ 49. bis bina quot essent: I know of no other instance of this phrase in Latin, but it occurs in Galen Hipp. Plat. viii p. 654 εἰ μαθήματα οὖν πατείνουσιν τὰ συμπεράματα (the argument by which Euclid proves the central position of the earth) ὡς καὶ τῇ δίς δύο τέταρτα εἶναι. [Cf. Diog. L. vi 26 σύ, φράσι, ἕως ἐρωτήθης δύο καὶ δύο πόσα ἓστιν κ.τ.λ. J. E. B. M.] On the use of the distributive numeral in multiplication see Roby Gr. i p. 443. For tense see Madv. § 383 and my n. on mallem above § 2.

didicisset—diceret: 'he would not have been saying such things, if he had (previously) learnt'.

palato—palatum: 'while he makes the palate his test of happiness (cf. Fm. ii 29) he forgot to look up to what Ennius calls the palate of the sky', cf. Varro ap. Aug. C. D. viii 8 palatum Graece οὐρανόν appellant et nonnulli poetae Latinis caelum vocaverunt palatum. The same pun is found in Clem. Al. Paedag. i 1 ἴμην δὲ τοῖς θηραμένοις τὴν βρῶσιν τὴν ἐπωραίων ἄρχειν ἄνγκη τῆς ὑπὸ τῶν οὐρανῶν γαστρόν, and Athen. viii 34 where a witticism of Theocritus of Chios (fl. at the end of the 3rd century B.C.) is reported. A certain Diocles, who had squandered his estate by luxurious living, having burnt his palate with hot fish, Th. said it only remained for him to drink up the sea, and then ἔσῃ τρία τὰ μέγατα ἡφαῖνες, γῆν καὶ βιλάσσαν καὶ οὐρανόν. Columna, in his note on the line in Ennius p. 327 says hoc tempestate Neapoli mulierculae palati concavitatem vulgo palati caelum dicunt, and Sch. cites Grimm in Haupt's Zeitsch. f. Deutsch. Alt. vi p. 541 as giving parallels from other languages. So Lucr. iv 624 linguai templā of the palate. οὐρανός is the ordinary term used by Arist. Part. An. ii 17, Dion. Hal. Comp. Verb. xiv 96; Galen (Us. Part. vii 5) uses οὐρανικός.

caeli: Gen. of Definition (Roby § 1302) like caeli elipeo Enn. Iphig. fr. 1 Vahl.

Ch. xix cum duo sint genera siderum: 'whereas there are two kinds of heavenly bodies, one of which moving from east to west in unchangeable courses never makes the slightest deviation from its path, while the other completes two unbroken revolutions in the same courses and paths' &c. The first reference is to the general celestial movement by which the fixed stars are carried round the polar axis; the second to the double movement of the planets, partly carried round with the fixed stars by the general celestial movement, and partly revolving round the earth (as was supposed) with a movement of their own. Cf. below § 102, 118 on the stars generally. The contrast between the general movement of the heaven and the
particular movements of the planets, is brought out clearly in Plato Tim. 34 foll. thus summed up by A. Butler: 'Pl. first presents us with two vast spheres which embody the principles of Same and Different (ravτων καὶ
θερετων). The outer sphere includes the innumerable multitude of the
fixed stars: the inner sphere is subsequently divided by the divine Artist
into seven spheres, which revolve with various velocities, and in various
directions'. Eudoxus resolved the complex apparent movements of the
planets into the simple circular movements of several supporting spheres,

δι την μέν πρότερον την των αστερων ἔναι, την δὲ δευτέραν κατὰ τῶν διὰ
the double movement by the comparison of people on board ship walking
in a direction opposite to that in which the vessel was going, or to an ant
going round the potter's wheel in a direction opposite to that of its
movement. The apparent daily movement of the outer sphere from east
to west in the plane of the equator, is of course due to the daily rotation of
the earth, the 'different' movement of the planets is due to their periodic
revolution round the sun in the plane of the ecliptic.

nullum—vestigium inflectat: does not bend aside (lit. inwards) a
single step of its course, as the sun does to north and south, but describes
a perfect circle.

continuas conversiones: this is a true description according to our
modern astronomy, but scarcely agrees with what is said below § 51, as to
their varying rates of motion and occasional pauses.

ıadem spatiiis: Abl. of Place; the sun, moon and planets are in the
same stadium or race-course (cf. Virg. G. ı 513, Aen. v 316), viz. the
zodiac. If we distinguish between spatiiis and cursibus, the former would
be the broad band in which all the movements take place, the latter the
particular line followed by each without change in successive periods. Cf.
ıadem spatiiis in § 103, and eadem spatia Orat. III 178, also Tusc. ı 68 tum
videmus in eodem orbe in duodecem partes distribueto quinque stellas ferri,
eadem cursus constantissime servantes disparibus inter se motibus.

ex utaque re: C. fails here, as he has done before (cf. ı 87), to bring
out the argument, which should be 'we gather from the observation both of
planets and fixed stars that circular movement is the law of the heavenly
bodies, and this movement requires a spherical shape, therefore they are
all spheres'.

volubilitas: 'rotatory movement', cf. ı 18. rotundi ambitus:
'circular revolutions'.

Bb. The divine activity as shown (1) in the solutary movements
of the sun. § 49.

astrorum tenet principatum: R. P. vi 17 (sol) dux et princeps et
moderator luminum reliquorum.
larga luce compleverit: perhaps a reminiscence of Lucr. II 806 larga
cum luce repleta est, and v 281 largus item liquidi fons luminis.

opact: 'leaves in shade', cf. Soph. Aj. 674 δεμών ῥ' ἀπα πνευμάτων
ἐκοίμησε στίβουτα τόνων, Hor. Od. i 3. 15, V. Ecl. ii 26, G. iv 484, Aen. iii
69; Sch. cites § 102 below sol tristitia contrahit terram, Hor. C. S. 9 alme
sol currui diem qui promis et celas.

umbra terrae soli officiens: Heind. emends, after Gesner, officientis.
It is the earth, not its shadow, which intercepts the light of the sun, and
so makes the conical shadow called night (umbra terrae meta noctis Div.
II 17). Beier (Jahn's Jahrb. 1827. 3 p. 25) cites on the other side Hyg.
Poet. Astr. iv 9 noctem dicemus umbram terrae esse cunctque obstare lumini
solis.

ipsa enim: 'for it is just the earth's shadow, which makes night', i.e. it
is no more than this, a mere negative result of the sun's action. I think
officentis suits better this minimization of activity.

eadem est aquabiltas: 'there is the same evenness (regularity)
in the nightly as in the daily courses; and the same sun tempers the
degrees of heat and cold by neither departing too far nor approaching
too near'. C. is of course inaccurate in saying that summer is caused by
the greater proximity (accessus) of the earth to the sun: if so, all the earth
would have summer at the same time, but when the south pole is turned
towards the sun, the northern hemisphere is in winter, when the northern
is turned towards him we have summer, as in fact we read below inflectens

circumitus orbium: the words spatia, cursus, orbis, circumitus may all
be used in the same sense, but here circ. means the actual traversing of
the path (orbis) of the sun, cf. Tim. 9 nox et dies...umum circumitum
orbis efficit. As regards the case of the numerals, almost all the MSS have
trecentorum, but the edd. apparently agree in taking them as Nominatives.
I think, if it were so, we should probably have had the Sing. orbis, '365
journeys over the sun's path'; and that the MS reading gives the true
sense 'the traversings of 365½ diurnal rounds complete the round of the
year', i.e. if we follow the sun's track throughout these diurnal revolutions,
we shall find that while each day's course is different, yet at the end of the
year he has completed the circuit of the heaven and returned to the point
from which he originally started.

quarta fere diei parte addita: Julius Caesar reformed the calendar
in B.C. 46, two years before the publication of the N. D. See Dict. of Ant.
under Calendarium.

hiemi senescenti: see below § 95 lunae senescentis, Plin. Ep. vi 16 § 6
spiritus senescentis (of a volcano). Allen quotes Varro L. L. v 2 mensis senes-
centis extremus dies.
The divine activity as shown in the salutary movements of the moon. § 50.

§ 50. solis annuos cursus spatiis menstruis luna consequitur: 'the moon in her monthly heats overtakes the yearly courses of the sun', i.e. traverses the zodiac in a month instead of a year, cf. Plin. N. H. II 9 in duodecim mensium spatia oportere dividir annum, quando ipsa (luna) toties solem redentum ad principia consequatur; Lucr. v 618 lunaeque mensibus id spatium videatur obire, annua sol in quo consumit tempora cursu.

proximus accessus: at the new moon.

defectibus: 'by gradual diminution'. Georges compares Solinus xxvii 3 sali defectus vel incrementa; so we have, of the waxing and waning moon, crescente, deficiente luna Gell. xx 8; nam et defectui lunae comatum tur elementa, et processu ejus quae fuerant exinanit cumulatur Ambr. Hex. iv 7.

regio (mutatur): Plin. N. H. II 9 (luna) nunc in Aquilonem elata nunc in Austros dejecta; Macrobr. S. Sc. i 6 § 53 septem diebus ob extremitate septentrionalis orae oblique per latum meando ad mediatum latitudinis pervenit, qui locus appellatur eclipticus; septem sequentibus a medio ad imum australis delabitur; septem alis rursus ad medium obiquata consecdit: ultimis septem septentrionali redditur summatis.

aquilonis: all the better MSS have Aquilenta, which is only found elsewhere in Varro Sat. Men. ap. Non. 351 (Buecheler § 400) of the moon, contremula aquilenta apud alta litora oronis ac nobilis omnibus reducere. It is explained in the Lexx. as 'watery', fr. aqua, like turbulenta from turbare. The form aquilentanus 'northern' occurs in Chalcid. Tim. 67 and 69. Aquilonius is used by Varro Sat. Men. 77 ap. Non. p. 139, Livy (so Madv. for Apolloniam) xl 58 § 8, and frequently in Pliny. Aquilonaris is found in a doubtful fragment of Cic. Orelli p. 1057 § 14, Aquilonalis in Vitru. ix 4 § 3 and Gromat. vet. 332. 30, 334. 1 (chiefly from Georges' Lex.).

in lunae quoque cursu: there seems no reason to alter the reading of the MSS by the insertion of inde. There are three different facts connected with the moon's 'solstice', the approach of the moon's orbit to the north, the pause (properly called solstitium in the case of the sun), the length of time during which the moon is above the horizon (also connoted more loosely by the term solstitium). These facts though really connected, may be viewed independently, and so it is in this passage. Cic. mentions, as a new idea, that we have in the moon's orbit an analogue to the longest and shortest day. The solstitia similitudo is the 'lunis tice', thus defined in the Imperial Dictionary, 'the furthest point of the moon's southing and northing in its monthly revolutions'. It is recognize by Arist. Gen. An. iv 2 δ μεν γαρ γβως ἐν δελ γεναιτ ρω τοι τε χειμώνα καὶ χειρος, ἢ δὲ σελήνη ἐν τῷ μήνι τούτῳ 8' οὐ διὰ τὰς τρόπας, ἀλλὰ τὸ μεν αυξανομένων συμβαίνει τοῦ φωτός, τὸ δὲ φθίνοντος. In June 1881 the moon's solstitium was on the 24th, the lunar day consisting of 16 h. 40 m,
but the five days from the 23rd to the 27th were all more than 16 hours, whereas the ordinary rate of change is 1 hour per day. Again the bruma was on the 11th, the moon rising that day at 7.42 p.m. and setting at 2.41 a.m., being thus above the horizon for only 6 h. 59 m., but the four days from the 10th to the 13th varied less than 30 m. from this.

multae ab ea manant et fluunt: on the influence of the moon cf. above § 19 and § 119 below, and the chapter on Lunar Influences in Lardner’s Museum I pp. 113—128. I give the substance of one paragraph from the latter: ‘According to popular opinions and traditions, which have prevailed among mankind in almost all countries and throughout all ages, our satellite is responsible for a vast variety of influences on the organized world. The circulation of the sap in vegetables, the qualities of grain, the goodness of the vintage are severally laid to its account. It presides over human maladies, nay the very marrow of our bones and the weight of our bodies suffer increase or diminution under its influence. Nor is this limited to mere physical and organic effects; it extends its sway into the region of intellectual phenomena.’ Cic. while denying or minimizing the influence of the moon on the birth of children Div. II 95, 97, grants this influence in regard to plants and animals, Div. II 33 ostretis et conchyliis omnibus contingere, ut cum luna crescent pariter, pariterque decrescat; arboreseque ut hiemali tempore, cum luna simul senescentes, quia tum exsiccatae sint, tempestive caedi putentur; Aristotle asserts it more generally, Gen. An. IV 10 ἡ σελήνη συμβάλλει εἰς πάσας τὰς γενέσεις καὶ τελευσεῖς, and he applies this to the birth of children (ib. IV 2); and Pliny N. H. II 101 after giving instances of the power of the moon, such as the tides, and the fact that omnia pleníunio maria purgantur...nullum animal nisi aedt recedente espirarit, proceeds quo vera conjectio existit haud frustra spiritus sidus lunam exstirpami. Hoc esse quod terras saturat, accedensque corpora impiecet, abscendens inaniat: ideō cum incremento ejus augeri conchylia et maxime spiritum sentire quibus sanguis non sit. Sed et sanguinem hominum etiam cum lumine ejus augeri ac minii; frondes quoque ac gabula, ut suo loco dicetur (cf. XVI 39, XVIII 75, 79), sentire, in omnia adem penetrante vi; cf. Seneca Benef. IV 23 num dubium est quin hoc humani generis domicilium circuitus solis ac lunae vicibus suis temperet? quin alterius calore alantur corpora, terrae relaxentur, immodici umores comprimuntur, alligantis omnia hiemis tristitia frangatur; alterius teopore efficac et penetrabili rigetur maturitas frugum? quin ad hujus cursum fecunditas humana respondet? Gellius has a chapter (XX 8) headed De ipsis quae habere sumptuans videntur cum luna augeteque ac senescente. Cic. is no doubt following here the same authority as Sext. Emp. IX 79, κατὰ γὰρ τὰς τῆς σελήνης αὐξήσεις καὶ φθίσεις πολλὰ τῶν τε ἐπιγείων φυών καὶ θαλάσσιων φύλων τε καὶ αὐξήσεις, where Fabr. refers to Allatius on the Hexameron of Eustathius, cf. Plut. Fac. in Orb. L. p. 939 f., Qu. Conv. p. 658 f., Is. et Os. p. 367, Macrob. Sat. VII 16 §§ 16—32, Ambr. Hex. IV 7, Philo Prov. II 76, Germanicus Schol. p. 197 Breysig. These ideas as to the moon’s influence may be traced to the sup-
posed connexion between the dew and the moon,—Alcman called the Dew daughter of Zeus and Selene,—and to the reckoning of the time of pregnancy by moons, cum hoc ergo propter hoc.

_amanet et finunt_: so Plutarch _Mor._ p. 658 contrast the dry efflux (_deívarma_) of the sun with the moist efflux of the moon.

_alantur_: Consecutive Subjunctive. Note that here, as in § 28, the Mood of the Relative Clause defining the subject is unaffected by its Subjunctival subordination.

B b (3). The divine activity shown in the orderly movements of the planets §§ 51—54.

Ch. xx § 51. _falso vocantur errantes_: so _Div._ i 17 (planetae) quae verbo et falsis Graiorum vocibus errant, re vera certo lapso spatiiogue feruntur; _Tusc._ i 63 astra non re sed vocabulo errantia; Plato _Leg._ vii 821 καταφευ- δόμεθα Ἑλληνες πάντες μεγάλων θεῶν, Ἡλιóν τε ἄμα καὶ Σελήνης...ἐπονο- μάζοντες ελανίκας εἶναι...τῶν δὲ τοιούτων ἥξει τοιῶν τῷ αὐτῷ γὰρ αὐτῶν ὦν ἠκάτον καὶ οὐ πολλάς ἀλλὰ μιᾶν αὐτῷ κύκλου διεξέρχεται, φαίνεται δὲ πολλάς φερόμενοι, Plin. _N. H._ ii 6.

_quinque_: so Milton 'and ye five other wandering stars that move in mystic dance'. Sometimes the sun and moon are included so as to make up the number seven, as in § 68 _septem vagantibus_ and Cleomedes i 3 τὰ δὲ πλανώμενα ἄνθρωποι μὲν εἴ καὶ πλεῖον ἐστίν, ἐπιτὰ δὲ ὑπὸ τὴν ἡμέραν γράφων ἐλήμυθος. Seneca prophesies (_N. Q._ vii 13) that many more planets will be discovered.

_in omni aeternitate_: so in § 43, cf. § 28 _in tanta diuturnitate_ n. and Dumesnil on _Leg._ i 8.

_progressus et regressus_: 'direct and retrograde motions', cf. Herschel _Astron._ ch. ix § 457 foll. 'the apparent movements of the planets are much more irregular than those of the sun or moon....Sometimes they advance rapidly, then relax in their apparent speed, come to a momentary stop, and then actually reverse their former motions, and run back upon their former course with a rapidity at first increasing, then diminishing, till the retrograde movement ceases altogether. Another station, or moment of apparent rest, now takes place; after which the movement is again reversed and resumes its original direction. On the whole however the amount of direct motion more than compensates the retrograde; and by the excess of the former over the latter, the gradual advance of the planet from west to east is maintained'. It is then shown by diagrams that this irregularity arises partly from these evolutions being seen by a spectator from the earth in section, and therefore foreshortened, and partly from the fact that the earth is being carried round the sun on her own orbit at a different rate from that of the planet under observation. See below § 103, _Tusc._ i 62, Seneca _N. Q._ vii 25 _harum quinque stellarum...quae alio atque alio occur- rentes loco curiosos nos esse cogunt, qui matutini vespertinique ortus sint, quae_
BOOK II CH. XX § 51.

stationes, quando in rectum forantur, quare agantur retro, modo coepimus scire. Utrum emergeret Jupiter, an occideret, an retrogradus esset, antepassos annos didicitimus.

occultantur: at the time of their conjunction with the sun.

recedunt: at the time of their eastward or westward elongation.

anteecedunt—subsequuntur: ‘when Venus and Mercury have receded from the sun eastward to their respective distances, they remain for a time, as it were, immovable with respect to it, and are carried along with it in the ecliptic with a motion equal to its own; but presently they begin to approach it, or, which comes to the same, their motion in longitude diminishes, and the sun gains upon them....Then for a time they are not seen at all...(on their re-appearance) their motion is rapidly retrograde, until they reach their greatest western elongation, when the motion again becomes direct, and they acquire sufficient speed to commence overtaking the sun again’, Herschel § 467.

magnum annum: R. P. vi 22 cum autem ad idem, unde semel proiecta sunt, cuncta astra redierint eandemque totius caeli descriptionem longis intervallis retulerint, tum ille vere vertens annus appellari potest, in quo vis dicere audo quam multa hominum saecula teneantur; Hort. fr. 26 is est magnus et verus annus quo cadem positio caeli siderumque, quae cum maxime est, rursum existat, isque annus horum quos nos vocamus annorum duodecin milia nongentes quinquaginta quattuor complectitur; Fin. ii 102; Tim. c. 9; Serv. ad Aen. iii 284 (given as frag. 5 at the end of N. D. iii) Tullius in libris de Natura Deorum tria milia annorum dixit magnum annum tenere; Censorinus 18 est praeterea annus quem Aristoteles maximum potius quam magnum appellant, quem solis et lunae vagarumque quinque stellarum orbis conficient, cum ad idem signum, ubi quondam simul fuerunt, una referuntur; cujus anni hiemis summa est cataclysmos, quam nostri diluvionem vocant, aetas autem ecyprosis, quod est mundi incendium. The passage referred to by Cens. is not to be found in the existing works of Arist., probably it may have been in the dialogue de Philosophia from which so much of C.'s argument is borrowed (cf. Bywater in J. of Philology l. c.) : we do find however (Meteor. i 14 § 20) a reference to a periodical deluge, γίνεται διὰ χρόνων εἰμαρμένων, οὗον ἐν ταῖς κατ' ἐναυτῷ ὕδαις χειμῶν, οὐτως περίδος τωσ μεγάλης μέγας χειμῶν καὶ ὑπερβολὴ δήμων. Probably the conception of a Cosmic Year was first introduced among the Greeks by the Pythagoreans (Zeller i pp. 397, 410); it is also attributed to Heraclitus (Zeller i 640), but the earliest notice of it occurs in Plat. Tim. 39 ἔ γε τέλεος ἄριστος χρόνον τῶν τέλεων ἐναυτῶν πληρῆς τότε, ὅταν ἀπαύγων τῶν δικτο περίδων τά πρὸς Ἀλήθη ἐκμεταδιδέται τάχη σχῆ κεφαλὴ ἐκ τοῦ ταφῶν καὶ ὅμως ἱῶν ἄναμετρήθητα κύκλω, a period of 10,000 years (Zeller ii p. 264). Other calculations of the length of the Great Year are given in Censor. l. c., Plac. Phil. ii 32 (Diels p. 369), Macrobr. S. Sc. ii 11, Sextus Emp. v 105, where Fabricius refers to Thomasius De Anno Magno contained in his treatise De Stoica Mundi Exuctione,
cf. Schaubach *Gesch. d. Astron.* pp. 196 foll. 504 foll. The scientific conception of an astronomical period, analogous to the Metonic cycle amongst the Greeks, to the Sothis or Canicular period among the Egyptians, and to the Julian period among ourselves, was mixed up, especially by Pythagoreans and Stoics, with mystical ideas of a cyclical regeneration (τῶν περιο-

δικῶν τῶν διων παπλυγενεσίαν Anton. xi 1, where see Gataker), such as that of which Virgil speaks *Magna ab integro saecorum nascitur ordo*; cf. Nemesius c. 38 οἱ δὲ Σωκικοὶ φασίν ἀποκαθισταμένου τοὺς πλανήτας εἰς τὸ αὐτὸ σημεῖον κατὰ τέ μήκος καὶ πλάτος ἐνθα τὴν ἀρχὴν ἔκαστος ἤν, ὥστε τὸ πρῶτον ὁ κόσμος συνέστη, ἐν ῥήμασι χρόνων περίδοξοι ἐκτύφωσαν καὶ φθοράν τῶν ὅσων ἀπερ-

γάζεσθαι καὶ πάλιν ἐξ ὑπαρχῆς εἰς τὸ αὐτὸ τὸν κόσμον ἀποκαθιστασθαι, and that then the whole series of past history is reproduced; also Seneca *N. Q.* iii 29, Orig. *Cels.* v 21, Zeller *iv* p. 154 foll., Lewis *Astr.* p. 282 foll., and my Sketch of *Anab. Phil.* pp. 173, 174. It is worthy of note that the writers of the N. T. have borrowed from the Stoics the terms παπλυγενεσία and ἀποκαθιστασία. The idea of a Great Year is also found among the Etruscans (see Preller *R. M.* p. 472 foll.) and the Iranians (Döllinger *Gentile and Jev.* I p. 394).

**nominaverunt**: 'an abbreviation for constituterunt quem nominaverunt'; cf. *Leg.* i 24 ex quo vere vel agnatio nobis cum caelestibus vel genus vel stirps appellari potest, for ex quo exstitit quae appellari potest; *Invent.* iv 27 ex quo in aliis anizetam, in aliis incundatum dicitur, for ex quo exstitit quae dicitur', Sch. who also refers to Madv. *Em. Liv.* p. 367. Other exx. of this pregnant force are *Leg.* ii 8 ex quo illa lex...recte est laudata for deri-

vata et laudata; *Fin.* iii 63 illa quae in concho patula pinna dicitur for habitat et pinna dicitur; [Virg. *Aen.* vi 106 hic inferni janua regis dicitur, Schäfer on Greg. *Cor.* p. 986. J. E. B. M.]. See above i 83 laudamus *Vulcanum* n. and below § 109, where I read quem claro perhibent *Ophiuchum lumine Graii.*

**ad eandem inter se comparationem**: ὁ αὐτὸς τῶν ἀπόφων συνήμα-

ταιμός Sext. v 105, cf. *Tim.* c. 4 quae Graeca analogia, Latine...comparatio proportio dicit potest, and c. 5 ἵκα contiguit ut inter ignem atque terram aquam deus animamque poneret eaque inter se compararet et proportione conjugaret. Translate 'when, after completing their several courses, they return to the same relative positions'.

§ 52. **Saturni stella**: the first Greek writing in which we find the names of the five planets is the *Epinomis* (p. 987) written by a disciple of Plato; he says 'they have no proper names of their own, but have received their appellations from the Gods (*πτωνυμίαν εἰλήψας θεῶν*), which seems to show that the descriptive Greek names given by Cic. were of later origin. Plato himself (*Tim.* 36, *Rep.* x 616) only mentions 'Εσωφόρον καὶ τὸν ἱερὸν 'Ερμοῦ; Aristotle *Met.* xiii 8 gives the following names 'Ἀφροδίτης, Ἐρμοῦ, Δίὸς, Κρόνου, to which he adds Ἀρεός (*Cael. ii* 12), cf. also Meteorol. i 6. Hare in his Art. on *The names of the Days* (*Phil. Mus.* i 71) says 'that these names were not of common use in the time of Euripides may
fairly be inferred from their never occurring in any of his tragedies; though, as the author of the argument prefixed to the Rhesus observes, he was πολυπράγμων περὶ τὰ μετάφρασις; and though, if he had been acquainted with them, he would assuredly have introduced them into the description of the πέλας in the Ion 1148—1158. There however we only find Εὐστέρος, Πλαίας, Ωρίων, Ἀρκτος, Υώδης, and Εὐας φωσφόρος. In the pseudo-Aristotelian treatise De Mundo (cf. 2) an arrangement of the whole system, along with a great variety of names: φαίων, φαιών, πυρεύς and στὸνβωυ occur here, I believe, for the first time: perhaps they were given by Eudoxus, who, Seneca says (N. Q. vii 3), primus ab Aegypto quinque siderum motus in Graeciam transtulit. We are likewise told that the star of Mars was also termed the star of Hercules, that of Mercury by some the star of Apollo, that of Venus by some the star of Juno', ibid. The descriptive names are fairly appropriate (cf. Plin. H. N. ii 16 § 79); Saturn is the shining, Jupiter the blazing (φαιών only used of the sun in its original sense), Mars the red and fiery (cf. the Stoic etymology for Ἀρμῆς=άιων πύρ, on which see Lydus de Mena. 18 and other passages quoted by Flack Glosses z. Hesiod. Theol. p. 80 foll.), Mercury the twinkling (Simplicius, ap. Brandis Schol. p. 495 b, notices the twinkling of Mercury in connexion with its name; cf. Arist. Cael. ii 8 on the reasons for the twinkling of the stars as opposed to the planets).

a terra abest plurimum: according to Macrobius S. Scip. i 20, the order of the planets, after the three first, Saturn, Jupiter, Mars, as to which there was general agreement, was differently determined by the Egyptians and Chaldeans. The former, followed by Pythagoras (Zeller i 395), Plato (Tim. 38, Rep. x 616), Aristotle (Met. xi 8, cf. Krische Forschungen p. 290), Chrysippus (Stob. Ed. p. 448), made Venus and Mercury 4th and 5th, the Sun 6th, then the Moon, then the Earth. The latter, followed by Archimedes, Geminus, Cleomedes, Vitruvius, Ptolemaeus, Hyginus (Grom. p. 184 L.), Pliny (H. N. ii 32—40), and Cic., here, placed the Sun above Venus and Mercury. There were great doubts as to the relative position of these two. Cic. himself, who in this passage places Mercury furthest from the earth, follows another authority in Dion. ii 91, where we read docet ratio mathematicorum quanta humificate luna feratur terram paene contingens, quantum abit a proxima Mercurii stella, multō autem longius a Veneris, deinde alio intervallo distet a sole. In N. D. ii 119 we have a third view, that these two planets revolve, not immediately round the earth, but around the sun, duae solis oboediant, as in R. P. vi 17 hunc (solem) ut comites consequuntur Veneris alter, alter Mercurii cursus: and Vitruv. ix 1 Mercurii et Veneris stellas circum solis radios, uti centrum, itineribus eum coronantes regressus retrorsus et retroductiones faciunt; Marcianus Capella viii 25 Venus et Mercurius non ambit terram. Heraclides Ponticus was one of the first to propound the doctrine that they were satellites of the sun, Zeller ii 885. Macrobius S. Sc. i 19 § 5 notices the discrepancy of opinions as to the relative positions of

**XXX fere annis**: these periodical times seem to have been brought from Egypt by Eudoxus (Simplic. *Schol.* *Arist.* p. 499 Br., Seneca *N. Q.* vii 3) whom C. calls *in astrologia facile princeps* (*Div. ii 87*). They agree with those given by Pliny (*N. H.* ii c. 6), Cleomedes (i 3), Achilles Tatius, Geminus, and the author of the *Plac. Phil.* (ii 32), except that Geminus assigns 27 6th., and Cleomedes 27 5th. to Mars, and that Pliny assigns 349 days to Venus, and 339 to Mercury. They are compared below with the times given by Vitruvius *ix* 1 and by Herschel.

<table>
<thead>
<tr>
<th>Eudoxus</th>
<th>Vitr.</th>
<th>Herschel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury 1 year</td>
<td>360 days</td>
<td>87° 23'</td>
</tr>
<tr>
<td>Venus 1</td>
<td>485 &quot;</td>
<td>224° 16'</td>
</tr>
<tr>
<td>Mars 2</td>
<td>17. 318'</td>
<td>17. 321' 28'</td>
</tr>
<tr>
<td>Jupiter 12</td>
<td>11° 323'</td>
<td>11° 315' 14'</td>
</tr>
<tr>
<td>Saturn 30</td>
<td>29° 160'</td>
<td>29° 174' 14'</td>
</tr>
</tbody>
</table>

**se aperiendo**: just above we have the Passive with Middle force, also in *Off. i 129 corporis partes aperiuntur.*

**sempiternis saecorum aetatibus**: ‘in the never ending periods of eternity’. I have not met with this phrase elsewhere.

§ 53. **proximum inferiorem**: Heind. cites after Wopokens *Fam.* i 9 *quem proximis superioribus diebus accerime oppugnasset*; *Orator* 216 non loquor de uno pede extremo, adungeo proximum superiori...saepe etiam tertium; *N. D.* iii 54 proximae (al. proxime) superioris; *Tac. Ann.* i 77 proximo superiori anno.

**quae stella Martis appellantur**: C. has carelessly inverted the clauses. We should have expected *stella Martis quae pupo dis appellatur.*

**sex diebus minus**: ‘less (than two years) by six days’. I have not been able to find any authority for this statement of C.’s. For the construction of *minus* see Roby § 1273.

**anno vertente**: ‘in the course of the year’ lit. ‘the revolving year’, cf. Quint. 40 *sex quidem mensibus profecto; anno vertente sine controversia*; Vitr. *ix* 1 § 6 *sol perpetuo spatium vertentis anni*; ibid. *mense vertente*; Heind. on *Hor. Sat.* i 1. 36.


**unius signi intervallo**: the path of the sun is divided into twelve Signs, one for each month, and each Sign is again divided into thirty parts, through one of which the sun travels in the course of each day (Geminus
in *Uranologion* p. 2). Ptolemy uses the word μόρα for a degree, Manilius *gradus* or *pars*. Cleomedes gives the elevation of the star Canopus as τέσσαρις γεζίου, ἤ ἐνί τεσσαρακοστίν δύσιον τοῦ ζεδιακοῦ. Pliny *N. H.* II 8 states on the authority of Timaeus and Sosigenes that Mercury is never more than 23° from the Sun; Herschel gives 28°.45 as his extreme elongation.

infima est: the mean distances are given by Herschel as follows, from the sun to Mercury about 36 millions of miles, to Venus about 68 millions, to the earth 95 millions; (later calculations give for the earth about 93 millions).

*Φωσφόρος—* Ἐστερός: it was a question whether Pythagoras or Parmenides was the first to discover their identity, cf. *Diog. L.* viii 14, ix 23, Plin. *N. H.* viii 37, *Epinomis* 987. In Homer they are still distinct, see *II.* xxiii 226, *Od.* xiii 93 of the morning-star ἐστερός; *II.* xxiii 318 of the evening-star, ἐστερός, ὃς κάλλωσιν ἐν οὐρανῷ ἱπταμαι ἄστρῳ. The Latin equivalent to *Στεφέρος* is *Vesper* or *Vesperugo*, Catullus uses noctifer, but Varro *R. R.* iii 5 § 17 speaks of *Lucifer* and *Hesperus*, which perhaps may suggest that Cic. here treats it as a word common to both languages, and that it should therefore be printed in Latin letters.

*latitudinem et longitudinem:* it traverses the zodiac with a zigzag movement.

duorum signorum intervallo: cf. Plin. *N. H.* II 8 ab sole nunquam absistens partibus sex et quadraginta longius, ut Timaeo placet, and Herschel *Astr.* § 467 “Venus extends her excursions on either side the sun to about 47°”.

Ch. xxii § 54. *Hanc in stellis constantiam:* 'such a persistency in the stars, such a perfect adjustment of times throughout all eternity notwithstanding such a variety of courses (Gr. § 1240) I cannot understand without supposing mind, calculation, purpose'. R.

sine mente: sc. ωσκαν, not adverbial with *intellegere* but adjectival with constantiam, cf. *Orat.* i 105 non loquacitatem sine usu requirent, where Wilkins cites *Part. Orat.* 48 illa quae sine arte (=δρασα) appellantur, and *Ov. Met.* i 20 pugnabat mollia cum duris, sine pondere habentia pondus, also *N. D.* i 45 metus a vi n. and above § 14 praeter naturam portentis. For the use of *intellegere* cf. *i* 73, *iii* 38.

in deorum numero reponere: cf. *in deorum numero refert* i 29 n., 2 *Verr.* iii 210 tanta auctoritates sunt ut in illo antiquorum et clarissimorum hominum numero reponentur; but we find the Acc. in *Opt. Gen.* Orat. 17 *Isocrates* hunc in numerum non repono, *Invent.* i 26 § 39 in *fabularum numerum rep.*, ib. 51 § 97 partium in numerum rep., (in the last two passages the readings vary; I have given Weidner's). There is the same variation in *Livy*: we find the Acc. in *XXXI* 13 § 1, and *XXXIX* 19 § 7 pecuniam in thensauros reponi; but c. 18 § 15 reposita pecunia in thensauros fuerit, c. 21 § 4 pecuniam in thensauros reposuerunt. So in *N. D.* iii
23 and 51 all MSS have the Abl. but in § 47 the Acc. The passage from
hanc igitur—reponere is quoted by Lactant. ii 5.

B b (4). The divine activity shown in the rational and voluntary
movements of the fixed stars and of the heaven itself §§ 54—56.

innerrantes: Gr. ἰσημένης, see n. on ινυκαται i 108, and ινεγκνητα below
§ 73.

[quarum est cotidiana conveniens constansque conversio: the
alliteration might be preserved by translating 'regular revolution daily
and duly recurring'. R. Cf. above § 19.]

nec habent aetherios cursus neque caelo inhaerentem: two expla-
nations of the apparent movement of the fixed stars were given by the
older philosophers (1) that the fixed stars were fastened like nails in a
solid heaven or sphere and of course revolved with it, ἡλεν διαν καταπετη-
γέα τῇ κρυσταλλοειδε, as is said of Anaximenes Plac. Phil. ii 14, and
Empedocles, ib. 13; Anaximander, Pythagoras and Parmenides preferred
to speak of the stars being attached to spheres: (2) that they were light
bodies borne along by αἴθεροι δίνος (Arist. Νυμ. 379); so Xenophanes,
Heracitus, Anaxagoras, Democritus. Aristotle took the former view
λείπεται τοῦ μὲν κύκλου κυκλίδει, τὰ δὲ ἄστρα ἄρματι καὶ ἑνεδεμένα τοῖς
κύκλοις κυκλίδει Cael. ii 8; in Met. xii 7 foll. he enumerates 55 spheres, in
addition to that of the fixed stars, which were required to
move the movements of the sun, moon and planets; both the stars and the spheres
are composed of ether; see Lewis Astr. p. 161 foll.; Zeller iii p. 453. It
would seem that Balbus here condemns both explanations, and would
attribute the movement of the fixed stars, as well as of the planets, to
their own free will: so Manutius ap. Lescalop. (not in Var. ed.) negant
Stoici stellas aetheri (rather ab aether eacta) sive caelo affixa esse, quod
animantes eas esse opinantur et motu voluntario ferri. aetherius cursus
will not then mean 'the path of the stars through the ether', for this the
Stoics admitted, see below § 117 in aether astra volventur; but 'a move-
ment caused by ether', going by ether, as we talk of going by steam; cf.
below non est aetheris ea natura ut contorqueat, and, for the expression,
such phrases as mola asinaria, aquaria worked by an ass or by water.
The argument however is not very clear: two theories having been put
forward and declared inadmissible, why should not this be shown in the
case of the second (caelo inhaerentes) as well as the first (aetherios cursus)?
and if, as appears below, the fixed stars have their sphere, how does the
Stoic view differ after all from that of Aristotle? All that is there asserted
is that the motion of the sphere is independent of the surrounding ether,
but that is admitted by Arist. at all events in the case of the planetary
spheres. One expects the assertion that each fixed star moves inde-
pendently and yet in such harmony as to give the appearance of a great
all-embracing sphere. Apparently Chrysippus denied their independent
motion (Stob. Εδ. i 446 ἐν τῷ αἴθερ ῥὰ ἄστρα καθιδρυται, and shortly after-
wards tertium latus multis etiam etiamque, etiamque alioque); and so Cic. R. P. vii 17 novem tibi orbibus vel potius globis conecta sunt omnia, quorum unus caelestis est extimus, qui reliquis omnes compeleoctit, summis spectus arcens et continentia ceteros, in quos sunt infusi illi qui voluntam stellarum cursus semiperni. Tusc. v 69 sideraque viderit innumerabilia caelo inhaerentia cum eis ipsius motu congruere certis infinita sedibus. We may compare an obscure passage in Chalcidius Tim. c. 83, Aristoteles contra opinionem omnium, neque quiescente corpore aetherio ferri stellas, veluti soluto ac libero motu (the Stoic view) nec secundum universae rei motum. Possibly we should read circa here for cursus, answering to the κύκλος of Aristotle. Manilius i 292 has siderum orbis aetherios rotat cursus, where aeth has its common sense.

sequabilis: 'uniform'.

§ 55. cum admirabilis constantia: for cum see Index and § 101 cum admirabilissima maxima. This insistence on the harmonious movement of the stars seems to show that each star was free to move differently; otherwise, if they were all fastened on a sphere, there would have been nothing wonderful in it, cf. below § 60 icta feruntur ut ad omnia conservanda consensisse videantur.

§ 56. fortuna—constantia: 'in the heavens there is nothing by chance, nothing at random, no wandering nor illusion, but the perfection of order, reality, calculation, consistency'. The contrasted pairs are fortuna (constantia; temeritas) (ratio; vanitas) (veritas, (cf. Tusc. iii 2 icta varie imbuimus erroribus ut vanitati veritas cedat, Acad. ii 34 cum sit incertum vere inaniterne moveatur); erratio (ordo; cf. above § 43.

contraque: for the adversative force of que see i 75 sitque perlocida n.

omnis ordo: for the qualitative force of omnis see below § 58 omnis ornatus, and i 37 divinitatem omnem; and cf. Wetstein on Jas. i 2 πᾶσαν χαρὰν ἐγγίσαυθε.

infra lunam: the moon was regarded as the limit between the celestial region in which there was no change, and the sublunar sphere, where chance and evil ruled. Thus Ocellus Lucanus c. 2 395, γὰρ ἐστών αἰθανασίας καὶ γενήσεως ὁ περὶ τὴν σελήνην δρόμος τὸ μὲν ἀναθεῖν ὑπὲρ ταύτης πάν... θεόν κατέχει γένος, τὸ δ’ ὑπόκατω σελήνης, νεκτόρ καὶ φῶς, and Chalcidius Tim. c. 75 at vero sub luna usque ad nos omne genus motum, omne etiam mutationem, prorsus ut est in vetere versus Naevii, 'exuviae, rabies, furiarum examina mille'. Namque generatio et iterum mori in isto loco; incrementa quoque et imminences. The belief was as old as Philolaus, see Boeckh p. 167, Zeller i 409 and Stob. Ecd. i 488 there quoted, τὸ μὲν οὖν ἀνωτάτῳ μέρος του περίχωντος, ἐν δ' τῆς εἰλικρίνειας εἶναι τῶν στοιχείων, ὁλυμπον καλεῖ, τὰ δὲ ὑπὸ τὴν Ὁλυμποῦ φορὰν, ἐν δ' τοὺς πέντε πλανήτας μεθ' ἢλιον καὶ σελήνης τετάχθαι, κόσμον, τὸ δ' ὑπὸ τούτων ὑποσκελών τε καὶ περίγειον μέρος, εν δ' τὰς τῆς φιλομεταβελού γενέσεως, οἰκανόν, καὶ περὶ μὲν τὰ τεταγμένα τῶν μεταφών γένεσθαι τὴν σοφίαν, περὶ δὲ τὰ γενόμενα τῆς ἀταξίας τὴν ἀρετὴν, τελείαν μὲν ἐκείνην, ἀτελῆ δὲ ταύτῃ (compare above § 34 of the
quartus gradus). Hippolytus (Ref. Haer. i 4) says the same of Heraclitus and Empedocles πάντα τὸν καθ’ ἡμᾶς τὸν κακὸν μετὸν εἶσαι καὶ μέχρι μὲν σελήνης τὰ κακὰ φθάνειν εἰ τοῦ περὶ γίνῃ τοῦτο ταῦτα, περιμένω δὲ μὴ χωρεῖν, ἄτι καθαρώτερον τὸν ὑπὲρ τὴν σελήνην παντὸς ὄντος τοῦτο. Plato scorns the idea that the stars, being visible and possessed of bodily form, can themselves be eternal and unchangeable (Rep. vii 530), but he seems to allude to this theory in Theaet. 176 Α ὑπεναισκόν τι τῷ φύσι σε αὐτῇ ἰδρύσασθα, τὴν δὲ θεωτὴν φύσιν καὶ τούτω τῶν τῶν περιπολεῖ εἰς διάγεγον; it appears in more definite form in Aristotle Met. iv 5 p. 1010 a, ὁ γὰρ περὶ ἡμᾶς τοῦ αληθεύου τὸς ἐν φθορᾷ καὶ γενέσθαι διατεκεῖ μόνου ὃν ἄλλη ὄντων οὐδέν, ὡς εἰσίν, μέροι τοῦ παντὸς ἑστιν, Caes. i 2 p. 269 ἵστι τι παρὰ τὰ σώματα τὰ δειδό καὶ περὶ ἡμᾶς ἐτέρου κεχαραμεύμενοι, τοσοῦτοι τιμωτέρων ἔξαιρ' τὴν φύσιν, δεόμερον ἀφώτηται τῶν ἐνταῦθα πλείων, ib. 3 εἰπὼ τῷ κύκλῳ σώμα (the ether) μὴρ' αὖχθησαν ἔχειν ἐνδέχεται μὴτε φύσιν, εἴδους καὶ ἀναλλοίωτον εἶναι...συμβαίνει δε νῦν καὶ διὰ τὴς αὐθορείας ἑκατον, ὡς γε πρὸς ἀναπεοπην εἰσίν πιστῶν ἐν ἄπαντι γὰρ τῷ παρελθοῦσιν χρόνῳ οὐδέν φαίνεται μεταβεβλημένοι οὐτέ καθ’ θαλαμοῦ οὐρανῶν οὐτε κατὰ μόρον αὐτοῦ τῶν οὐκείων οὐδέν, Meteor. i 1 ‘after general philosophy and the description of the upper region (astronomy) we proceed to what is called meteorology’, ταύτα δ’ ἐτόν διὰ συμβαίνει κατὰ φύσιν μὲν, ἀναπεοπην μέντοι τῆς τοῦ πρῶτου στοιχείου (ether) περὶ τῶν γεννώματα μᾶλλον τοῦτον τῇ φορᾷ τῶν ἀστρων, e.g. the milky way, comets, meteors, winds, earthquakes, storms, lightning, (called by Ach. Tattius μετάρσια as opposed to μετέωρα, the heavenly bodies) Part. Ἀν. i 1 p. 641. Hence he is accused by early Christian writers of setting a limit to Divine Providence, μέχρι σελήνης ἤ πρόνοια Clem. Al. Strom. v 14 § 91, Epiphani. adv. Haer. iii 31, Theodoret Prov. i p. 485 Sch. (some believe that God governs the universe, but only within certain limits) τῇ σελήνῃ περιορίζεται τὴν πρόνοιαν, τὸ δὲ λοιπὸν τοῦ κόσμου μέρος ὡς ἶτουχε φθερεῖν. The same doctrine is asserted by Cic. R. P. vi 17 in infinito orbe luna radiis soles accensa convertitur. Infra autem jam nihil est nisi mortale et caducum praefer animos munere deorum hominum generi datos; supra lunam sunt aeterna omnia; cf. Varro ap. Aug. C. D. viii 6 ab summno circuitus caeli ad circulum lunae aesthenias animalis esse astrum positum, eos caelestes deos non modo intellegi esse sed etiam videri; inter lunae vero gyrum et nimborum ac ventorum cacumina aeraeas esse animas, sed eas animo non oculo videri, et vocari heros et lares et genios; Lucan x 6; Plut. Is. et Osir. c. 26 (of Xenocrates); Wetstein on Eph. ii 2 ‘the prince of the power of the air’; Plin. N. H. ii 38 infra lunam haec sedes infinitum ex superiore natura aeris, infinitum et terreni halitum miscens utraque sorte confunditur. Hinc nubila, tonitrura et alia fulmina...hinc plurima mortalium mala et rerum naturae pugna secum: terrena in caelum tendentia deprimt siderum vis, eademque quae sponte non subeunt ad se trahit; ibid. 21 Posidonius non minus quadranginta stadiorum a terra altitudinem esse in quae nubila ac venti nubesque proveniant; inde purum liquidumque et impuriturbatæ lucis aereum; sed a turbido ad lunam vicies centum millia stadiorum;
BOOK II CH. XXI § 56.

Macrobi. S. Sc. i 11 § 6 et immutabilem quidem mundi partem constat, quae in plenarum vocatur usque ad globi lunarum exordium, mutabilem vero luna ad terras usque dixerunt; et vivere animas dum in immutabili parte consistunt, mori autem cum ad partem ociderint permutationis capaces, atque ideo inter lunam terrasque locum mortis et inferorum vocari; ipsamque lunam vitae esse mortisque coniunx et animas inde in terram fluentes mori, inde ad supera mean tes in vitam reverti...a luna enim deorsum natura incipit caducrem; Philo Prov. ii 68. Seneca disputed some of these conclusions, N. Q. vii 22 ego nostris non adantior, non enim existimo cometen subitaneum ignem sed inter aeterna opera naturae; Prov. i 1 ne illa quidem quae videntur confusa et incerta, plurias dico nubesque et elisorum fulminum jactus et incendia ruptis montium verticibus effusa...et alia quae tumultuosa pars rerum circa terras movet, sine ratione, quanvis subita sint, accidunt. Pliny (N. H. ii 26) mentions an exception to the unchangeable order of the celestial region, 'Hipparchus discovered a new star, and was thence led to commit the impiety of numbering the stars, in order that future naturalists might have the means of knowing whether such a marvel were repeated'. Bacon Cogit. de Nat. Rer. (iii 32 Spedding) has some interesting remarks on this opposition of the celestial and sublunary regions. He says 'neque caelo ea competit aeternitas quam fingunt, nec rursus terrae ea mutabilitas. The apparent regularity of the former is owing to the distance from which we behold it. A spectator in the moon would suppose the earth equally free from change. Moreover new comets and new stars have appeared in the heavens'.

ex qua conservatio omnium: see the fine passage in Seneca Benef. vii 20 foll. on the benefits we receive from the regular movements of the heavenly bodies.

B c. Divinity of nature shown (1) in its creative and artistic, (2) in its providential activity §§ 57, 58.

§ 87. princiipe investigandae veritatibus: for constr. cf. 7 Philipp. 9 Firmiani principes pecuniae pollicendae fuerunt. Zeno is called inventor et princeps Stoicorum, Acad. ii 131.

Ch. xxiii ita definit ut dicat: cf. Off. i 96 eam sic definiunt ut id decorum velit esse quod &c.

ignem artificiosum: Diog. vii 156 gives the original τὴν φῶς εἶναι πῦρ τεχνὸν ὡς βαθίζω εἰς γένεσιν, see Plac. Phil. i 7, N. D. iii 27 artificiosate ambulantis, and n. on quarta pars mundi above § 27; also Hirzel i p. 220, and Heracl. fr. 69 Byw. ὁδὸς ἄνω κάτω μία. Sch. compares the πῦρ πάντερχον of Aesch. Prom. 7; we may also compare the ἰγνῖς sapiens of Minucius 35, and Clem. Al. Strom. vii 6 § 34 φαμέν δὲ ἡμεις ἀγνάζειν τὸ πῦρ τὰς ἀμφιλοχίας ψυχὰς, πῦρ οὗ τὸ παμφάγιον καὶ βάσανον, ἀλλὰ τὸ φρόνιμον λέγοντες.

via: see below § 81, and Cleanthes' definition of Art, ars est potestas
via, id est ordine, efficiens Quintil. II 17 § 41. We often find it coupled with ratione as in Orator 11, 116, Fin. 29. It is used colloquially Ter. Andr. 443 rem reputavit via; see Roby § 1236. [See on ἄρω Cobet Collectan. 514, Musonius in Stob. Flor. lxvii 8 (iv p. 87 m). J. E. B. M.]

artis proprium creare: Arist. Eth. vi 4 § 4 τέχνη πᾶσα περὶ γέ-

nuin.

multo artificiosius naturam efficeret: Arist. Part. An. i 1 p. 639 b ἀρχὴ
ὁ λόγος ὁμοίως ἐν τῷ τοῖς κατὰ τέχνην καὶ ἐν τοῖς φύσεῖ συνεστηκόσων...μᾶλλον
δ' ἔστι τὸ οὐ ἑνεκα καὶ τὸ καλῶ ἐν τοῖς τῆς φύσεως ἔργοις ἢ ἐν τοῖς τῆς τέχνης,
Phys. π 2 p. 194 ἡ τέχνη μμειναι τῷ φύσιν, Meteorol. iv 3 § 24, below § 83
arte naturae vigent.

omnis natura: 'nature in every department' contrasted with univer-

sal nature, which is not only artificiosa but artifex: cf. below § 141 quis
vero opifex praeter naturam, qua nihil potest esse callidius tantam sollicitam
persequi potuisse?, § 138, Acad. ι 30, Val. Max. i 8 extr. 18 omnis bona
malaque materias fecunda artifex rerum natura, Seneca Ep. xc § 27 artifex
vitae philosophia, Ov. Met. xv 218 artifices natura manus admovit, Plin.
N. H. x 91 naturae architectae vis; Swainson cites ib. vi 35 (30), (it is no
wonder that monsters were found in Ethiopia) artifici ad formanda cor-
pora effigiesque caelandas mobilitate ignea.

viam et sectam: 'a prescribed line', cf. Caes. 17 hanc sectam rationem-
que vitae re magis quam verbis securi sumus. L. and S. derive it from seco
'to cut', but it is so constantly joined with sequor by Cic. (e.g. Flacc. 104,
Rabir. 22, Fam. xiii 4, Brut. 120) that there can be no doubt it is rightly
connected with this word, or rather with its archaic form seco 'to follow',
by Nettleship (J. of Phil. xi p. 107) who cites from Naevius eorum sectam
secundur multi mortales, and from Servius on Aen. x 107 (quam quiaque
secat spem; securi, sequitur...unde et sectas dicimus habitus animorum et insti-
tuta philosophiae.

§ 88. artifex: so Diog. L. vii 86 τέχνης ὁ λόγος τῆς ὁμοίως.

consultrix et provida: so consulto and provido are joined i 4 a diis
honominum vitae consuli et providerii, Q. Fr. i 1 § 31 ut consulas omnibus, ut
provideas saluti. consultrix appears to be ad. λεγ.

ut ceterae naturae—sic natura mundi: Sch. treats this as an ex-
ample of the comparison of opposites, like Fin. ii 67 ut nos ex annalium
monumentis testes excitamus...sic in vestris dispositionibus historia muta est,
and other passages cited by Madv. on Fin. i 3. It would then oppose
the necessary growth and movement of plants, mentioned in § 33, to the
voluntary movement of the universe mentioned in §§ 43 and 44 &c.
But it is certainly awkward that it is immediately followed by a com-
parison of resemblance, actiones sic adhibet ut nosmet ipsi; besides the
supposed opposition is far from clearly marked, and elsewhere we find an
analog suggested between the seeds of plants and the natural impulses
which determine the course of life of sentient and rational creatures;
thus Cleanthes ap. Stob. Ecl. i 372 ἀσπερ γὰρ ἐνὸς τινος τὰ μέρη πάντα
BOOK II CH. XXII § 58.

φύεται ἐκ σπερμάτων ἐν τοῖς καθήκουσι χρόνοις, οὕτω καὶ τοῦ δόλου τὰ μέρη, ὅπως καὶ τὰ ζῷα καὶ τὰ φυτὰ δύναν ἄνθρωποι, ἐν τοῖς καθήκουσι χρόνοις φύεται, Seneca N. Q. III 29 eiv e an im a est mundus eiv corpus natura gubernabile, ut arbores, ut animalia, ab initio usque ad extum, quicquid facere, quicquid pati debet, in semine est. Ut in semine omnis futuri ratio hominis comprehensa est, et legem barbae et canorum nondum natus infans habet; ...sic origo mundi...solem et lunam et vicios siderum continuat; Cic. Fin. III 23 appetitus animi, quae uxor vocatur, non ad quodvis genus vitæ sed ad quandam formam vivendi videtur datus, itaque et ratio et perfecta ratio; Divin. I 128 ut in seminibus vis inest earum rerum quae ex ipsis prosignuntur: sic in causis conditiae sunt res futurae; Seneca Ep. xc 29; Zeno ap. Varr. L L. v 59 animalium semem ignis, qui anima ac mens: qui caldor et caelo, quod hic innumerabilia ac immortalia ignes. The metaphor was often used in reference to the Cyclical Conflagration, when the universe was shut up into its seed, as it were, Philo Inc. Mund. 505 (Chrysippos holds) τὸ διακόσμημα τῆς θεοτοκισίων τῆς διακόσμημα τοῦ μελλόντος ἀποτελεῖται κόσμου σπέρμα ἦναι, Plut. Sto. Rep. § 41, Diog. vii 136; cf. below §§ 81, 86, Heineze p. 107 foll. and Villoison in Osann’s Corn. p. 465 foll. on the λόγος σπερματικός. Possibly we ought to put a stop after mundi, and read omnesque. [The argument seems to be as follows: art is shown by arrangement and purpose: all parts of nature show this and are therefore artificiosa. The art is as it were stored in the seed: the universe has no seed; but, just as each particular part has sua semina, and so far is self-contained, so the universe has its movements and feelings belonging to itself and not caused from without. R.] Heind. proposed to read suis quaeque seminibus instead of suis sem, q., but we find the same order in § 127 suis se armis quaeque defendant.


πρόνοια: see I 18 n.

aptissimus sit ad permanendum: self-preservation is the object of the first appetite, Fin. III 16 quoted on § 34; the end is ut natura explectur (ibid. v 25, 26, 27, 40); this involves the perfection of beauty both of body and mind (ib. 47, 48).

omnis: qualitative, as in § 56.

Ch. xxiii § 59. nec cessantium: cf. I 24, 45, 51, 101, Fin. II 41.

moliementum cum labore: cf. I 22, 24, 51, 52 and III 92. On constr. cf. cum maxima celeritate below 97, 142, and see Index under cum.

acres aut concretos umores colligant: ‘so as to contract a sharp or sluggish condition of the juices’. Cf. Plato Tim. 86 πυρὸν καὶ χρόνος χυμολ, Cels. II 19 aliae res boni suci sunt, aliae mali, ...alae facile in stomacho acecunt. For coll. cf. colligere frigus, sitim, &c. We have umorem colligens in a different sense below § 101 and in Plin. N. H. XIX 26 ra-phanos medici suadent ad colligenda acria viscerum. con. properly ‘curded’ ‘clogged’, see n. on concrescet above § 26, and Celsus quoted in Georges’ Lex. sī quid umoris intus concreverit.

M. C. II.
monogrammos: ‘unsubstantial’, lit. ‘sketched in outline’, cf. i 75 adumbratorium n., 123 lineamentis duntaxat extremis, and 49. It is thus explained by Nonius p. 37 monogr. dicti sunt homines macie pertenues ac decolores; tractum a pictura, quae prius quam coloribus corporatur, umbra finge tur (this is the pictura linearis of Plin. N. H. xxxv 5). He quotes from Lucil. vicis vivi homini ac monogramma.

B d. The name of God is given by the popular religion (1) to the benefits received from the Gods, (2) to personified virtues and passions §§ 60, 61.


tum illud: answering to tum autem res ipsa below.

a deo natum: Dav. conjectured datum or donatum. Wopkens p. 87 compares § 62 below utilitates gignebant, Leg. iii 30 non vides a te id ipsum natum, Plin. v 69 orientur a suo cujusque genere and Off. ii 16 nulla...pestis est quae non hominio ab homine nascatur. For general subject see i 38 and 118, where the same belief is attributed to Persaeus and Prodicus, and Zeller iv 316 foll. It is criticized below iii 41, and in Sext. Emp. ix 39 there cited.

ut cum fruges: elliptical for ut nos facimus cum. Sch. refers to Plut. Is. et Os. c. 70 ὥσπερ ἡμεῖς τον ἀνεόμην βιβλία Πλάτωνος ἀνείσθαι φαμέν Πλάτωνα, καὶ Μένοδρον ὑποκρίνοντας τὸν τὰ Μενόδρων ποιήματα ὑποτίθηκέν καταφέρων, οὕτως ἐκεῖνο τοῖς τῶν θεῶν ὀνόμασι τὰ τῶν θεῶν δώρα καὶ ποιήματα καλέων οὐκ ἐφεισόντο. Plutarch warns his readers against confounding the Gods with their operations (ibid. c. 66 p. 377), ὅπως φασίνονται μὴ λάθουσιν εἰς πνεύματα καὶ ρεύματα καὶ ὁπότοι καὶ ἀρνοῦσαι καὶ πάθη γῆς καὶ μεταβολὰς ὁρῶν διαγράφοντες τὰ θεῖα καὶ διαλύοντες ὅσπερ οἱ Δίωνυσος τῶν ὀινῶν, Ἡφαίστεων δὲ τὴν φλόγα, Περσεφόνην δὲ φησὶν του Κλεάνθης τὸ διὰ τῶν καρπῶν φερόμενον καὶ φοινικώδες πνεῦμα ποιήσεις δὲ τις ἐπὶ τῶν θερίζων, τίμος δὲ αἴξηθε θηρίων κολοσσεῖν. Οὔτε γὰρ ὡστε διαφέρεις τῶν ἱστία καὶ κάλως καὶ ἥκυμα ἡγομένων κυβερνήτη...ἀλλὰ δειμᾶς καὶ ἰδέως ἐμπνεούσι δόξας, ἀναστήθοις καὶ ἀφόροις καὶ φθειρομένοις ἀναγκαίως ἦν ἀνθρώπων δομινσιν καὶ χρωμάσιν ἄνωσι καὶ πράγμασιν ὀνόματι θεῶν ἐφείσοντες. Cf. Lucr. ii 655 hic sigis mare Neptunum, Cereremque vocare constituit fruges, et Bacchi nomine abuti masvolt quam laticis proprium proferre vocamen &c. [Swainson cites Naevius sp. Fest. p. 58 ‘cocos edit Neptunum, Venerem, Cererem’; significat per Cererem panem, per Neptunum pisces, per Venerem olera.] On Ceres see below § 67.

vinum: the deification of wine is perhaps derived from the old Homasacrifice of the early Aryans, see Döllinger i p. 400 foll. ‘The Homadrink was the medium through which the deity manifested itself’. ‘Homa was the vivifying spirit of nature’. ‘In the Homa the Parsees had a
sacrifice which had the plenary signification of a sacrament and a communion, imparting a fellowship with the deity'.


§ 61. res in qua vis inest major: the presence of Divinity is felt in the unaccountable or overpowering movements of the heart, as well as in the wonders of the external universe. The former correspond to the 4th class of deities in the list given Plac. Phil. i 6 (παθῶν μὲν Ἔρωτα, Ἀφροδίτην, Πόδων), though C.'s exx. (Virtus, Salus &c.) correspond more to the 5th class (πραγμάτων δὲ Ἑλπίδα, Δίκη, Ἐνυμολαυ), being signs rather of bonitas divina, than of vis major, which is more appropriately predicated of the succeeding class Cupido, &c. Similarly Theodoret Therap. iii p. 45 ὁ γὰρ παθητικὸν τε καὶ διάλογον τῆς ψυχῆς ὁμοίωςν μόριον, τοῦτο θεολογοῦσα...καὶ τὴν μὲν ἐπιθυμίαν Ἀφροδίτην καλοῦσα καὶ "Ερωτα: Ἄρεα δὲ τῶν θυμῶν ὁμοίωςν, τὴν δὲ μῆν Δίομον, καὶ τὴν μὲν κλοτὴν Ἐρμήν, τῶν δὲ λογισμὸν Ἀθηνᾶν. res here is perfectly indefinite, 'ein gewisses Etwas' as Sch. says.

ut Fides: cf. below § 79 and iii 61, Lactant. i 20, Arnob. iv 1, Val. Max. vi 6 (De Fide Publica), Hor. Od. i 35. 21 te Spes et albo rara Fides colit velata panno; Leg. ii 28 bene vero quod Mens, Pistas, Virtus, Fides consecrator humana: quorum omnium Romae dedicata publice templà sunt, ut illa qui habent...deos ippos in animis suis collocatos putent. Nam illud virtutum Athenis, quod Cylonio sedere exipti, Epimenide Erecto suadente, fecerunt Contumeliae fanum et Impudentiae; virtutes enim non vitia consecrar decet (on this see Grote Hist. iii p. 114 and Journal of Phil. vi 21); ibid. 19 (colunto) olla propter quae datur homini ascensus in cadum, Mentem, Virtutem, Pistatem, Fidem; earumque laudum delubra sunto, neve ulla vitiorum; Off. iii 104 praeclare Ennius 'O Fides aima apta pennis et justurandum Jovis'. Qui jus igitur jurandum violat, is Fidem violat, 'quam in Capitolio vicinam Jovis optimi maximi', ut in Catonis oratione est, majores nostri esse voluerunt. This temple on the Capitol was first built by Numa, restored as we are told by Attilius Calatinus, dictator b.c. 249, and about 150 years later by Aemilius Scaurus. Meetings of the Senate were held there, and it was from thence that the senators rushed out and murdered Tib. Gracchus near the statues of the seven kings, which stood at the door of the temple, see Val. Max. iii 2 § 17, Burn's Rome 192, Preller R. M. p. 224. Jablonski wrote a treatise De cultu Virtutum apud Gentes, cf. Mayor on Juv. i 115.

Mens: her temple, vowed at the time of panic which followed the battle of Thrasymerne, was built on the Capitol b.c. 217 by order of the Sibylline books (Liv. xxi 9, Ov. Fast. vi 241). Preller R. M. p. 628 cites an inscription to Mens Bona. Scaurus restored the temple at the time of the Cimbric panic, when, as Plutarch says (Fort. Rom. p. 318), the influence of the sophists made people think more of abstract ideas.

Aemilius Scaurus: b.c. 163—90, a strong supporter of the Optimates,
always spoken of in the highest terms by Cic., who is followed by Horace
(\textit{Od.} i 37) and Juvenal (xii 91), but charged with ambition and corruption
by Sallust. The authority which he exercised is shown by a striking
anecdote. Being accused by the tribune, Varus, of exciting the allies to
revolt, he deigned no other reply than \textit{Q. Varius Hispanus M. Scaurus
principem senatus socios in arma ait convocasse: M. Scaurus pr. sen. negat:
testis nemo est: utri vos Quirites convenit credere?} and was forthwith ac-
quitted. (Asconius on the \textit{pro Scauro} cited in Orelli's \textit{Onomasticon} p. 19.)

\textbf{Attilius Calatinus} triumphed over the Carthaginians in the first
Punic War. Cic. refers to him as an example of ancient virtue below
§ 165, \textit{Tusc.} i 13, 110, Cato 61 (where his epitaph is given, \textit{hunc unum
piurimae consentiunt gentes populi primarium fuisse virum}), \textit{Fin.} ii 116,
\textit{Planc.} 60. We read (\textit{Leg.} ii 28) that he dedicated a temple to \textit{Spe}s, and
hence Lambinus followed by Heind. reads \textit{Spe}s instead of the 2nd \textit{Fides},
because \textit{Spe}s, which is mentioned in iii 61 (but not below § 79) ought not
to be omitted here, and because Numa was the first builder of the temple of
\textit{Fides}. Dav. defends the text, on the ground that \textit{proxime} and \textit{ante} must
refer to the same.

\textbf{consecrata}: this verb means first 'to hallow', then 'to deify', as in
iii 39 \textit{omne genus bestiarum Aegyptii consecraverunt}. Like \textit{dedico} (lit. 'to
devote') it is used both of persons and of things, cf. below 79 \textit{Virtus},
\textit{Concordia}, \textit{consecratae et dedicatae}, iii 13 \textit{aedem Castori dedicatum}, ib. 43
\textit{templa dedicata}, 61 \textit{consecrata simulacra}, \textit{Leg.} ii 28 \textit{Fides consecratur, templo
sunt dedicata}.

\textbf{Virtutis}: there were two temples at Rome to \textit{Honos} and \textit{Virtus} com-
bined; one near the \textit{porta Capena}, dedicated originally to \textit{Honos} by
Fabius Cunctator b.c. 233, in consequence of a victory over the Ligurians:
this was afterwards enlarged by Marcellus 'the sword of Rome', and 'dedi-
cated to the two divinities to whom his life was consecrated' (Mommsen).
He had vowed it first in the battle at Clastidium b.c. 222, where he won the
\textit{spolia opima} by slaying the Gallic king, and a second time during the
siege of Syracuse. The temple was finally dedicated by his son 205 b.c.
and adorned with treasures of art from Syracuse (\textit{Verr.} iv 121, 123, \textit{Liv.}
xxvii 25, xxxix 11); among other things we read of the sphere of Ar-
chimedes being placed there (\textit{R. P.} i 14). The second temple was erect-
ed by Marius on the Capitol in commemoration of his victories over the Cimbi
and Teutons (\textit{Sext.} 116 with Halm's n., Burn p. 193, Preller p. 613). Later
a separate temple was built to \textit{Virtus} by Scipio the Younger, and one to
\textit{Honos}, mentioned \textit{Leg.} ii 58.

\textbf{multis}: as only eleven years intervened between the dedication by
Fabius and the vow at Clastidium, and only twenty-eight years between
the earlier and later dedication, and as Fabius and Marcellus were too well
known for C. to have forgotten that they were contemporaries, we ought
perhaps to alter the reading of the \textit{mss} by the insertion of the negative.

\textbf{Opis}: wife of Saturnus and goddess of the earth, identified in later
times with Rhea the mother of the gods. She had a temple on the Capitol Liv. xxxix 22, see Preller p. 417. Here she is regarded as synonymous with wealth. **Quid**: ‘why should I mention her temple’?

**Salutis**: originally a Sabine goddess whose shrine was on the Quirinal. A temple was dedicated to her, as presiding over the safety of Rome, in the Samnite War 302 B.C., and decorated by Fabius Pictor (Preller p. 601).

**Concordiae**: her chief temple was built by Camillus on the slope of the Capitol b.c. 367, after the passing of the Licinian laws to establish harmony between the patricians and plebeians. This was enlarged by Opimius 121 B.C. after the overthrow of C. Gracchus (Aug. C. D. III 25) and again restored by the emperor Tiberius. It was here that the senate often met. A brazen shrine of Concord was erected by Flavius near the Senate-house in 303 B.C. to commemorate his attempt to assert the rights of the plebs. There was another chapel of Concord on the Arx, dedicated by L. Manlius to commemorate the suppression of a mutiny at the beginning of the 2nd Punic War; see Burn 84, 90 foll., 194, Preller 623.

**Libertatis**: there was a temple of L. on the Aventine built by Gracchus, father of the victor of Beneventum, in which the latter placed a picture of himself proclaiming the freedom of the volunteer slaves who had fought under him (Liv. xxiv 16). We also read of an atrium Libertatis, see Preller p. 616, Merkel praef. to Ov. Fasti p. cxxx. Clodius dedicated the house of the exiled Cicero to Libertas (Dom. 110).

**Victoriae**: cf. Preller 609, Leg. II 28 ‘if we are to invent names of gods, let us avoid such as Febris and rather choose those Vicae Potae atque Statuae cognominaque Statoris et Invicti Jovis, rerumque expetendarum nomina, Salutis, Honoris, Opis, Victoriae’. L. Postumius dedicated a temple to Victory in the Samnite war 294 B.C. (Liv. x 33). Hiero sent to Rome a golden statue of victory after the battle of Cannae, which was gratefully accepted by the senate and placed in the temple of Jupiter on the Capitol (victoriem omneque accipere, sedemque et se divae dare dicare Capitolium, templum Jovis O. M.; in ea arce urbis Romanae sacratam volentem propitiamque, firmam ac stabilem fore populo Romano Liv. xxii 37). Augustus placed in the Senate-house an altar and statue of Victory, which were afterwards regarded as the palladium of the state. The removal of the altar by Gratian gave rise to a famous dispute between Symmachus and St Ambrose.

**regi non posset**: this is scarcely the description we should have expected of such abstractions as Salus and Concordia. As was said above, C. probably applies to them what belongs to the personified passions which follow. Even then *sine deo regi* is hardly a suitable expression. The supernatural character of these passions is suggested by the fact that man feels himself overmastered by them; that they seem something distinct from his own personal being; not because they demand the control of a god.
Cupidinis: cf. III 58, 60. [Lactant. i 20 cites a lost passage from the De Legibus (?), magnum audaxque consilium Graecia suscepit quod Cupidinum et Amorum simulacra in gymnasiis consecravit. No temple of Cupid is known to have existed at Rome. The ruins called the Temple of Venus and Cupid have been so named without authority (Burn p. 219). Swainson].

Voluptatis: more properly Voluptia, see Varro L. L. v 164 in Nova Via ad Voluptias sacellum; Macrob. Sat. i 10 § 8 mentions her sacellum and ara.

Lubentinae: better known under the form Libitina, as the goddess of funerals, because every death had to be registered in her temple, and all that was needed for funerals was exposed for sale there. Hence we have the name libitinarii for undertakers, and the phrase Libitina ad funera vis sufficiat to express a scarcity of coffins in time of plague (Liv. xl 19). Plutarch offers various explanations for this association of birth and death under a common divinity Qu. Rom. 23, Frller p. 387.

vitiosarum rerum: see IV 44, 63 perniciosis rebus...Febris, Orbona; Leg. ii 28 cited above; Seneca ap. Aug. C. D. vi 10 Hostilius Pavorem atque Pallorem teterimos hominum affectus (dedicavit); Plin. N. H. ii 5 innumeros credere (deos) atque etiam ex virtutibus vitiales hominum, ut Pudicitiam, Concordiam, Mentem, Speram, Honorem, Clementiam, Fidem, aut, ut Democritos, placuit, duas omnino Poenam et Beneficium, majorem ad socordiam accedit. ‘Fear led men to deify Disease and Misfortunes’; sed super omnem impudentiam adulteria inter ipsos figi, max jurgia et odio; atque etiam furorum esse et scelerum numina. The Christian apologists, such as Minucius and Tertullian, naturally take advantage of such admissions.

neque naturalium: Sext. Emp. xi 73 Κλαίωντις μήτε κατὰ φύσιν μήτε δια χειν τιν ἢ δομήν, Cato 39.

pulsant: cf. Ἰμέρρις πεπληγμένος Agam. 1204.

B d (3). The name of God is given by the popular religion to the spirits of departed benefactors. § 62.

§ 62. utilitatum igitur: referring back to § 60 quicquid magnum utilitatem.

Ch. xxiv suscepit vita hominum ut tollerent: cited by Lact. i 15. In Plac. Phil. i 6 ‘the 7th description of divinity is’ τὸ διὰ τὰς εἰς τὸν κοινὸν βιον εὐεργεσίας ἐκτεταμένων, ἀνθρώπων δὲ γεννηθέν, ὡς Ἰρακλίως, ὡς Διοσκόρους, ὡς Δώρων. The more natural construction here would be suscepit in caelum ‘has admitted to divine honours’, but this is defined by ut tollerent, cf. Tim. c. 11 vos suscipite ut dignatis.

fama ac voluntate: 3 Catil. 2 (Romulum) ad deos immortales benevolentia famaque sustulimus; Off. iii 25 Herculem illum quem hominem familia beneficiorum memor in consilio caelestium collocavit foll. vo-luntaes is the gratitude shown in the popular belief. Prodicus seems to
have been the first to throw the heroic legends into the form of a moral apologue.

**Hinc Hercules**: Hor. Od. iii 3. 9 *hic arte Pollux et vagus Hercules enieus ares attigit igneas...hic te merentem, Bacche pater, tuae vexere tigres...hac Quirinus Martis equis Acheronta fugit*; Sext. 143 imitemur nostros Brutos, Camillos...innumerables alios...quos equidem in deorum numero repono...neque hanc opinionem si in illo sanctissimo Hercule conseratam videmus, cujus corpore ambusto vitam ejus et virtutem immortalitas exceptisse dicitur, minus existimemus eos qui hanc tantam rem publicam sui consulis aut laboribus auserint...esse immortalem gloriam consecutos; Plin. N. H. ii 5 deus est mortalii juvenis mortalem, et haec ad aeternam gloriam via: *hic proceres iere Romani, hic nunc caelesti passu cum liberis suis vadit maximus omnis aevi rector Vespasianus Augustus...Hic est vetustissimus referendi bene merentibus gratiam mos, ut tales numinibus adscrivant*; see i 9, 38 with nn., Leg. ii 19, Tusc. i 28, Parad. i 11, R. P. iii 40; and on Apotheosis generally Preller p. 769 foll., Düllinger i p. 343 foll. ii p. 31, 165 foll. A remarkable instance is that of Brasidas, to whom yearly sacrifices were offered after his death by the people of Amphipolis, Thuc. v 11. We are told (Macr. Sat. i 23 § 7) that Posidonius was the author of a special treatise on the Heroes, see Bake Pos. p. 45. **Hercules** is properly the god of husbandry, identified with the old *Semo Sancus*, the god of fidelity (Seeley’s Livy p. 30, Preller p. 640). The Greek Heracles is properly a solar deity, but foreign and oriental elements have been mixed up with his story, cf. below iii 42. He became as it were the ‘patron saint’ of the Stoics, see my Sketch of Anc. Phil. p. 250, and Mayor on Juv. x 361.

**Castor et Pollux**: see above § 6 and iii 53.

**Aesculapius**: see below iii 39, 45, 57. The worship of the Epidaurian *Ἀσκληπιὸς* was introduced into Rome at the command of the Sibylline books, on occasion of a pestilence b.c. 291. Ovid tells the story of the voluntary departure of the sacred snake from the original shrine, of his leaving the vessel, in which he was being conveyed to Rome, when they reached the island in the Tiber where his temple afterwards stood (*Met. xv* 622 foll., Preller p. 607). Possibly the name may be an epithet of Apollo: at Smyrna he was worshipped as Zeus Asclepios (Grote Hist. i 248). Galen (*Protr. 9 p. 22 K.*) discusses whether he is to be regarded as *θεὸς ἕλπις* or a defined man; Pausanias (ii 26) believed the former.

**Liber**: properly means ‘unconstrained’ ‘jovial’. Liber and Libera were the male and female deities of harvest and vintage, and of productivity both in plant and animal. In the festival of the *Liberalia*, described by Ovid *Fasti* iii 713, they were worshipped along with Ceres, the goddess of growth and production (*creo*), and identified at an early period with Demeter, Dionysus and Persephone. A joint temple was dedicated to them b.c. 494 in accordance with the Sibylline books. It was built in the Greek fashion, and priestesses were brought from Neapolis to
instruct the Romans in the customary rites (Preller p. 132, 440). The Cerealia are described by Ovid, ib. iv 393 foll. Cicero's derivation is naturally suggested by the Gr. κόρη, but the common phrase Liber pater is opposed to it. The Roman deity was never supposed to be of human origin. On the Iacchus of the mysteries see i 119 n.

**auguste sancteque**: the two words are also joined below § 79, as in i 119 and iii 53.

*quod quale sit...potest*: 'the import of which joint consecration may be learnt from the mysteries'.

**ex nobis natos**: see Lact. 27 ex se natos. **Cerere nati**: see i 103 n.

**in Libero non item**: we might understand this as follows 'we always remember that Libera means the daughter of Ceres; but when we use the name Liber, we think of Bacchus, the god of wine, without reference to his parentage'. But it seems better to take it as a translation of some such Greek as ἐν Κόρῃ τηρούμεν ἄλλ' ὕπκ ἐν Κόρῃ, because the name Daughter was in regular use for the goddess Persephone, but not Son for the god Iacchus? It will then mean 'a use which they (perhaps the third person rather implies that C. is not speaking of Romans) observe in the case of the Daughter but not of the Son'. I do not see any probability in Preller's idea (Gr. M. i p. 614?) that it may refer to the doubtful parentage of the mystic Bacchus. Heind. inverts Libero and Libera, taking it to mean that liber, in the sense of 'child', was used for a boy, but not for a girl, cf. Hyg. 9 procreavit liberos septem, totidemque filias; the Sing. is found occasionally in post-Augustan writers. **non item**: used when a negative statement follows the positive, to save the repetition of the predicative word, cf. Tusc. iv 31 animorum non item, Att. ii 21 § 4 ceteris non item, Acad. ii 22 alterum percepta tenere videmus, alterum non item, Leg. i 45 ingenia juvenum non item.

**Romulus**: "the first generation of Romans which turned its attention to the national antiquities, the generation of Fabius, Cincius and Cato, was quite prepared to take that view of many of the national deities which Euhemerus had taken of deities in general (N. D. i 119). A striking example is contained in Virg. Aen. vii 177, where, in the palace of Latinus, there are said to stand statues of his ancestors, and among them are enumerated some of the leading names in the old Italian pantheon (Saturnus, Janus, Picus, Faunus)" , Seeley's Livy p. 18. Romulus is properly one of the two guardian deities (lares) of Palatine Rome (Seeley p. 31, Preller p. 694). **Quirinus** is the Sabine god of war (Seeley p. 38, Preller p. 326).

**quorum cum remanerent—di sunt habit**: on this form of the Relative construction, instead of qui, cum eorum & c., see n. on i 12 ex quo existit, and Madv. § 445 there cited. For rite Wopkens cites i 52 rite beatum, Leg. i c. 7 nominatur rite sapientia.

**aeterni**: according to the old Stoical view the good survive only to the next conflagration (Diog. L. vii 157), but we find this innovation on
the old doctrine elsewhere in Cic. cf. above i 1 n. on agnitionem animi; 
Div. i 115 (animus) quia visit ab omni aeternitate versaturque est cum in-
numerableibus animis, omnia, quae in rerum natura sunt, videt; si modo 
temperatis escis modicitatem potius ita est affectus, ut sopito corpore ipse 
vigilet; ib. 131 quid est igitur cur, cum... animi hominum semper fuerint 
futurique sint, cur ii, quid ex quoque eveniat et quid quamque rem signifcat, 
persecere non possint? Tusc. i 55 sentit igitur animus se moveri; quod cum 
sentit, illud una sentit, se vi sua, non aliena moveri, nec accidere posse, ut 
ipse unquam a se deseratur; ex quo efficitur aeternitas: also in Seneca 
Ep. 102 § 2 juvabat de aeternitate animarum quaerere, immo mehceres 
credere; ib. § 26 dies iste, quem tamquam extremum reformidas, aeterni 
natalis est. As there is reason to believe that Posidonius is the author 
copied by C. in both the works cited (see Schiche on the Fontes of the De 
Divinatione and Corssen on Tusc.), and as Seneca continually quotes from 
Posidonius, there can be little doubt that we may trace his finger here, 
cf. Corssen l. c. pp. 10—30. There is an apparent inconsistency, which is 
hardly to be escaped in speaking of such matters, between this passage 
and § 153 below, where the wise man is spoken of as nulla alia re nisi im-
mortalitate cedens caelestibus; we find many parallels in Seneca.

B d (4). The name of God is given by the popular religion to the 
personified forces of nature. §§ 63—71.

§ 63. physica ratio = λόγος φυσικός, a physical explanation: cf. Fir-
micus 2 defensores volunt addere physicam rationem, frugum semina Osirim, 
Isiim terram, Typhonem calorem &c., and the nn. on N. D. i 36, 38, 40, 41, 
ii 23. The Stoics agreed with a modern school of mythologists in tracing 
back the abominations of the legends to the misinterpretation of the 
mythical representation of nature, see M. Müller Lectures on Lang. ser. ii, 
Lect. 9, p. 384 foll. So Bacon (Wisdom of the Ancients) argues that there 
must have been a mystical sense in the fables from the absurdity of their 
outward form, habemus sensus occulti signum non. parvum, quod nonnullae 
ex fabulis tam insulsae inventantur ut parabolam veluti clament. Another 
proof is the significance of the names Metis, Typhon, Pan, &c. The same 
grounds are alleged by Max Müller, but the lessons drawn from the myths 
by Bacon are for the most part moral or political, like those which Horace 
finds in the Odyssey; though his interpretation of the story of Caelus and 
Saturnus (12) and of Proserpina (29) is not unlike the Stoic. On the allego-
rization of the myths see i 36 (n. on θεριστήρας), iii 62, Zeller iv p. 323 foll. 
Grote Hist. Pt. i ch. 16. Metrodorus of Lampsacus, a friend of Anaxagoras, 
is said by Diog. L. (ii 11) to have been the first to allegorize Homer, but 
the same thing had been already done by Theagenes of Rhegium 520 B.C. 
(Grote i p. 557). Democritus seems to have followed the fashion (Zeller i 
385). The Scholia to Hesiod contain many specimens of Stoic allegories, 
see Flack Glossen u. Scholien p. 29 foll.; but the chief storehouse for them
is to be found in the *Natura Deorum* of Cornutus with Villoison’s notes and in the *Homeric Allegories* of Heraclitus.

*et quidem*: ‘and that, genuinely philosophical, not superstitious’, cf. *Div. II* 148 (printed as the motto of vol. 1) *religio propaganda est, quae est juncta cum cognitione naturae*. On *et quidem* see Índex.

*induti specie humana*: ‘who have had a human form put upon them, and have thus furnished a supply of fables to the poets’.

*nam cum vetus—opplevisset*: the insertion of *cum*, which might easily be lost after *nam*, explains the *opplevisset* of the best ms, and gets rid of the harsh asyndeton, involved in the reading adopted by Mu. and Sch. The latter objects (*Opusc. III* 371) that the Stoics considered their *physica ratio* to be the original sense of the myths, and that it is incorrect to represent this meaning as foisted into them by philosophers in recent times. But we may understand the Latin as follows ‘whereas the general belief throughout Greece was that Uranus was mutilated and Cronos bound, the theory which was put into that coarse form was far from wanting in refinement’. [Perhaps rather ‘wanting in point’. *Elegantia* is a common word in Law Latin and generally used in this way, e.g. *elegit* ‘puts a nice point’, ‘reasons closely and neatly’. R.]

*Caelum*: for the story see Hes. Theog. 159—182, and for other interpretations Cornutus c. 7, Flack pp. 44 foll., 62 foll., Lactantius i 12. Preller’s explanation (*Gr. M. i* 45) is not unlike that given by Cornutus: Cronos, the god of harvest (connected by him, as by Cornutus, with *sphaera*, ‘to bring to perfection’, hence Zeus Cronion ‘the son of Perfection’) puts an end to the excessive fecundity of Uranus, and thus allows the various powers of earth and heaven to grow to maturity. He compares it with other myths in which heaven and earth are said to have been so closely joined at first that there was scarcely room for the other gods to exist between them.

§ 64. *non inelegans*: *Brutus* 203 orationis *non inelegans copia*, ‘a choice vocabulary’, ib. 101 *historia non ineleganter scripta*, *Fin. II* 26 *divinit ineleganter, duo enim genera quae erant, fecit tria*, § 27 *contemnit disserendi elegantiam, confusae logitutur*. See Ernesti *Lex Techn. s. v.*


*caelestium*: though the edd. have followed Dav. in changing *caelestem* in § 56, they retain it here with far less ms authority. Heind. maintains
that the ref. is to the heaven itself and not to the heavenly bodies, but both are alike ethereal, only that the latter are a concentrated form of ether. For the substantival use of caelestia cf. Cato 77 caelestium ordinem contemplantes, Tusc. v 8 caelestium divina cognitio.

vulnerunt: those who clothed the truth in the form of fable meant that that highest all-creative element of ether or fire, of which the heavenly bodies are composed, was compelled in itself and needed no other aid.


Saturnus quod saturaetetur annis: it is curious that a similar derivation was given for كρόνος, see Plat. Cratyl. 396 κάρον νοῦ, Lydus Mens. p. 96 κρόνου διακορη νοῦν ολοις πληρή και μεταίην ιτών, ἀετιον μακαιαν. Varro (L. L. v 64 and Ant. xvi) gives the more correct etymology, ab sātō est dictus. The older form is Saturnus. For the Mood cf. § 68 Diana dīcta quia effic'eret and Roby Gr. § 1744.

natos comesse fingitur: Flack p. 63 cites Greek authorities for the interpretation given, which he traces back to Zeno. Preller's explanation is that the summer heat, while it ripens the fruit, also burns up the plant. For the form cf. esse in § 7.

insaturabiliter: the adv. appears to be ἀπερ. λεγ., the adj. is found Sest. 110.

vinctus a Jove: Hes. Theog. 718, Plato Euthyphr. 5 e.

ne habet atque ut eum alligaret = ne habet sed sidereis cursibus coeroceretur. Time is limited by the sidereal movements. For the change of Subject cf. § 36 n. and Wopkens Lect. Tull. p. 264 cited by Sch.

juvans pater: Ennius gave this derivation in his Epicharmus fr. 7, istic est Juppiter, quem dico, quem Graeci vocant aerem; qui ventus est et nubes, imber postea, atque ex imbre frigus; ventus post fat, aer denuo. Haece propter Juppiter sunt ista quae dico tibi (they are called by the name Juppiter) quoniam mortales atque urbes belugasque omnes juvuit. Varro in citing this gives a better etymology olim Divius et Diespiter dictus, ید est dies pater, L. L. v 66. Gellius v 12 follows Ennius.

conversis casibus: 'by a change of inflexions', not, I think, 'in the oblique cases, as being the cases which undergo change of form' (L. and S. after Sch.), nor as Lesscal. 'in the heterocline cases'. Cic. uses casus in Ora1 ii 358 where he describes a mnemonic system in which the word to be remembered is suggested by one slightly differing, simulium verborum conversa et immutata casibus notatio; Herenn. iv 31 variae hic unum nomen in commutatione casuum volutatum est (the name Alexander has just been used in the Nom. Gen. Dat. &c.); Ora1 i 60 casus rectus. Varro opposes obliqui (πτωχος πλαγια of the Greeks) to rectus L. L. viii 46, 49 &c. Aristotle uses πτωχοs in a wider sense of any sort of inflexion including the Adverb, but excluding the Nom. from which it declines or falls away.
(Categ. i, Rhet. iii 9); cf. Ammonius (quoted by Lersch Sprachphilosophie) eikónes légomen πτωσεις διὰ τὸ πεντακάκμα ἀνά τῆς εὐθείας (II p. 181—194, 229—233). The Stoics, who paid great attention to grammar, included the Nom. among the πτωσεις, calling it ἀρθῆ. This terminology was objected to by the Peripatetics. Perhaps the pl. casus implies not only Jove, but Jovis, Jovi &c.

pater divumque hominumque: see above § 4 n.

optimus: see Preller p. 183 foll., who thinks the original meaning referred not to moral excellence, but to rank, the highest and greatest' [lit. 'the uppermost' from ob, cf. extimus, intimus, R.], meaning little more than that the Capitolian Jove was the universal sovereign; cf. R. P. iii 23 sunt...tyranni, sed se Jovis Optimi nomine malunt reges vocari. Cic. however often ascribes to it an ethical purport, cf. pro DomO 144 quem propter beneficia Populus Romanus Optimum, propter vim Maximum nominavit, Fin. iii 66 Jovem cum Optimum et Maximum dicimus, cumque eum Salutarem, Hospitalem, Statorem, hoc intelligi volumus, salutem homi-
nam esse in eis tutela, so Pliny Paneg. 88, on the title Optimum granted to Trajan by the Senate, minus est Imperatorem et Caesarum et Augustum quam omnibus Imperatoribus et Caesaribus et Augustis esse meliorem. Ideoque ille parens deorum Optimi prius, deinde Maximi nomine colitur.

beneficentissimus: adjectives compounded with the verbs facio, dico, volo, as well as egenus and providus form their comparatives and superlatives as if from participles in -ens. Pientissimus is found in inscriptions.

certeque: we should rather say 'or at least', correcting the previous statement.

§ 65. hunc igitur Ennius: in the mss these words begin a new sentence; I have followed Mu., who understands them to resume the construction of ipse Juppiter, and considers a poetis—dicitur to be διὰ μόνον interposita, 'neque enim id agit Cicero, ut, quae nomina dis dederint poetae, demonstrat, sed ut physicam deorum rationem explicit' (Adn. Crit. p. ix), cf. Bake Mnemosyne ii p. 415 foll. and, for similar instances of Anaclathon, Madv. § 480 and Index s. v.; for resumptive force of igitur I 44 n.

ut supra: § 4.

qui quod in me est—quicquid est: I have followed Gulielmius ap. Gruter in reading qui for cui, of which, I think, no satisfactory interpre-
tation has been given. Wytenbach is certainly wrong in interpreting cui ego omne quod in me est et lucet, i. e. vitam meam, consecrabo. It is plain that hoc quod lucet must mean 'the sky', see § 4 on hoc. For quicquid est cf. Eurip. fr. 483 Zeús, δοτις ὁ Zeús, οὗ γὰρ οἶδα πλὴν λόγω κλῆσιν, Troad. 884 δοτις πόροι εἰς φιλιάν, ἐνυπόπτασας εἴδων, Zeús, εἰτ' ἀνάγκη φύσεως, εἰτ' νοῦς βροντῶν. [Add Blomfield on Agam. 160, Schömann on Prom. V. 98, Servius on Aen. iv 577, Heind. on Hor. Sat. ii 6, Philostr. Apollon. i 28. J. E. B. M.] Heind. translates 'on whom with all my might I will invoke the curse of
heaven', comparing the construction of καταράσσωι in the epigram ἶν τοι' εὖς ἕχοιν, διανύσει, μη καταράσσῃ την ἱσων τούτω. It does not seem that we have any ex. of essecor used in this sense or with Dat.; it is found absolutely Tusc. 1 107 essecoratur apud Ennium Thyestes ut pereat Atreus, and with in and Acc. or with Acc. alone, e.g. essecor te, or essecoratur in sc Liv. x 28, xxx 20. Kühner translates 'that to which I will devote all my powers is this shining vault, whatever its name'; Sch. agrees in thinking that essecor may have this force, 'to consecrate one thing out of all other things', but adds no translation. Vahlen and Ribbeck read cur for cui referring to Hartung Eur. Rest. ii 53; this seems to me improbable with the strong phrase quod in me est. Reading qui (Abl.) I translate 'Wherefore with all my might I will curse this shining heaven'. Mr Roby remarks that such words would be natural in the mouth of Thyestes, and that the preceding fragment is taken from the play of that name.


dicunt—tonante: if this is not a gloss, we have dicunt used in the sense of 'mean', as in rationem dico § 18, solemn dico § 80, not as immediately before.

ut multa praeclare: cf. below § 79 concinne, ut multa.

breviter: is plainly inappropriate here. Some have suggested graviter. Ba. refers to Div. ii 107 festive et breviter, but there terseness is the conspicuous quality of the preceding argument: here the lines of Euripides are wordy in comparison with that of Ennius. The same may be said of the exx. cited by Mu. (Fleckesiens's Jahrb. 1864 p. 134) Leg. ii 23, Ic. i 43, Brut. i 14, Fronto p. 254 Nieb. omnem sententiam breviter et scite concludet. I think Heind. is right in considering it to be a marginal note calling attention to the abbreviation of the formula Jove fulgente cum populo agi nefas.

vides sublime fusum: translated from an unknown play of which this fragment is fortunately preserved, ὃς τον ὑψον τοῦτ' ἀπειρον ἀδερα καὶ γῆν περὶ ἔχοιν ὑγραίς ἐν ἀγκάλισ τοῦτον νόμιζε Ζηνα, τόνδ' ἤγου θεόν (fr. 836). Paley (Eurip. i p. xxviii) gives other passages in which Eur. deifies ether. The translation is probably by C. Herod. (i 131) says the Persians τὸν κύκλον πάτα τοῦ ὑψανοῦ Διὰ καλοῦνων.

immoderatum: Lucr. i 1013 simplices natura pateat tamen immoderatum.

tenero: so Lucr. i 207 teneras auras, π 106 aera tenerum; Munro remarks that 'the air has the same epithet in Ennius, Virgil and Ovid: it implies what is soft, yielding, elastic'; he also cites Cic. Orat. iii 176 where oratio is described as tenera.
circumjectu: used of the rampart of the arx R. P. ii 6.

Ch. xxvi § 66. aer—Junonis nomine consecratur: the Greek mythologists considered "Hra to be another form of áirp, e.g. Plato Cratyl. 404 άφως δὲ μεταφρασών ὁ νομοθέτης τὸν ἀέρα "Hraν αὐθώμασεν ἐπικρυπτόμενος, θεὶς τὴν ἀρχὴν ἐπὶ τελευτή γνωίς δ' ἄν, εἰ πολλάκις λέγοις τῷ τῆς "Hraσ δομα (like the autómaλάμεν of the Equites) cf. Grote Plato π 516 foll. The elements had been previously deified by Epicharmus cited by M. Müller p. 393 ὁ μὲν Ἑπι- χαρμος τοὺς θεοὺς εἶναι λέγει άνέμους δύαν γῆν ήλιον πύρ ἀστέρας, and by Empedocles Plac. Phl. 1 3 τίσαρα τῶν πάντων μικράμα πρῶτον ἀκο�ε. Ζεὺς ἄργην "Hρη τε φερέσβουσ ὡς Αἴδωνες Νήστις θ, ἦ δακρύως τέγγαι, κραῦνωμα βρότειον, thus explained by the epitomator, Δλα μὲν γάρ λέγει τὴν ζεὺσ καὶ τὸν αἰθέρα, "Hρην δὲ τὸν ἀέρα, τὴν δὲ γῆν τὸν Αἴδωνα, Νήστιν δὲ καὶ κραῦνωμα βρότειον, οἶοιν τὸ σπέρμα καὶ τὸ ὄξων: others however identified "Hra with earth and Aíðównes with air, see Sturz Emped. p. 209 foll. The Stoics followed in the same line, see Cornutus c. 3, Diog. L. vii 147 with nn., Heracle. Alleg. p. 429 Gale, δῶ γὰρ ὅτι καθά τούς φυσικοὺς τῶν πνευματικῶν στοιχείων, αἰθέρος τε καὶ ἄηρος, τὸν μὲν Δλα τὴν πυρότηθα φαρμέν αὐτίκαν ἀρ ὡς "Hρα μετ' αὐτῶν ἐστίν ἄηρ, μαλακτέρων στοιχείων, διὰ τῶον καὶ δῆλον, Varro ap. Aug. C. D. vii 6 (while professing monotheism, V.) adjungit mundum dividit in duas partes, caelum et terram; et caelum bifariam in aethera et aera; terram vero in aquam et humum...quas omnes partes animarum esse plenas.

interjectus inter mare et caelum: on the order of the four elements see §§ 26, 42, 101, 117.

et similitudo est aerī aetheris et cum eo conjunctio: the edd. change the first et into ei after Probus. I think both are needed: Juno is sister and therefore like, wife and therefore united. Also it seems to me there would be awkwardness in ei and eo referring to different subjects. I have ventured to insert aerī before aetheris, as Mu. has done i 103. It is to a certain extent in favour of this emendation, that Probus has aerīs instead of aetheris. The Dat. is of course dependent on est, as in Leg. i 25 est igitur homini cumdeo similitudo.

sed Junonem—nominatam: this clause is questioned by Baiter, Stamm (Interpol. p. 33) and Vaucher; but it is preserved by Probus, and I see no particular objection to it. It would be strange if the etymology were wanting in the case of Juno alone. I take sed to introduce an incidental remark like autem or δὲ, 'by the way'; not (as Degenhart p. 65) to denote the opposition between the physical derivation of "Hra and the non-physical derivation of 'Juno'. Perhaps Allen is right in inserting utem after Junonem. Credo implies that Cic. is not quite certain as to the etymology, which he has borrowed from Varro L. L. v 67.

[The stem Junon is in Roman vowels jov-en-ōn, in primitive jau-an-an. The first syllable is seen in Jov-īs Δi-ōs (= ΔiF-os): the second as well as the first in Δi-āv-η, Di-ān-α, Zār (= ΔiF-av), J-ān-α (the old or Doric a corresponding, as often, to ō), and also jūv-ēn-in, jū-n-in, jūv-en-ca reminding one of boōmis "Hra and of the use of heifers in the rites of Juno.
The third syllable is more difficult, because the termination -on (not -ion) in Latin is, when applied to personal names and generally, masculine (see Gr. §§ 851, 852). But the early poets here come to our help. They treated Greek feminine substantives in -o as having this termination, and spoke of Didonem, Calypsoonem &c. (Gr. § 481), probably suggested by the accusatives in ν (-ων, -ου) occasionally found (Kühner Gr. Gr. § 129). R.]

ex fabulis: Hom. II. xv 187.

Portunus: pater Portunus in Aen. v 241, the god of entrances and harbours, cf. Preller p. 158.

Neptunus: Preller p. 502 compares the Etruscan 'Nethuns', which he connects with νείος, νείο, considering that the digammatized forms νεύσματι, ναύς show the possibility of a derivative such as Nept. = Nereus. Curtius and Vaniček agree with Varro L. L. v 72 in connecting it with nubes (νέφος) quod mare terras omnubit, ut nubes caelum.

Diti, qui dives: for the omission of the verb in Rel. Clause see 1 68 n.; for the etymology Plato Cratyl. 403 τδ δε Πλούτανοι, τούτο μην κατα την του πλούτου δόσιν, ότι ἐκ τῆς γῆς κάτωθεν ἀνιήται ὁ πλούτος, ἑπεφωμάθη, Tib. III 3. 38 dives Orcus. Another Stoic view was that Pluto was the lower region of the air (Cornutus 5, Varro L. L. v 66), in which Seneca believed that the soul underwent purgatorial discipline before ascending to the ether, Cons. ad Marc. 25 integer ille (filius) nihilque in terris relinquens sui fugit et totus exsequiis, paulumque supra nos commoratur, dum expurgatur et inhaerentia vitia situmque omnem mortalis aevi exsolutae, deinde ad excelsa sublatus inter felices currit animas.

cui Proserpinam nuptam: I think C. wrote thus, intending to make it dependent on fingunt; but the construction was broken through by the parenthesis. The similarity of termination would account for the disappearance of nuptam. Edd. read nuptam dicunt before Proserpinam without ms authority.

Graecorum nomen est: Preller (p. 443) and Vaniček agree with Cic. in considering it a corruption of the Greek, the oldest form being Proserpina, which was naturally altered so as to derive it from prospero, cf. Varro L. L. v 68 hinc Epicharmus Enni Proserpinam quoque (lunam) appellat, quod solet esse sub terris. Dicta Proserpina, quod haec ut serpens modo in dexteram, modo in sinistram partem late movetur. A more plausible explanation is that of Arnobius III 33 quod sata in lucem prosperant cognominatam esse Proserpinam; for other explanations see Osann on Cornutus pp. 341—344. 'Persephone signifies the seed-corn, which, when cast into the ground, lies there concealed, i.e. she is carried off by the god of the under-world; it reappears, i.e. Persephone is restored to her mother and abides with her two-thirds of the year', Keightley Mythology p. 176.

§ 67. a gerendis frugibus Oeres: the same derivation appears in Varro L. L. v 64, apparently after Ennius. The Romans were naturally led to such an etymology by the fact that the same character (C) was used indiscriminately for the sharp and flat guttural till the beginning
of the sixth century B.C. when the modified symbol (G) was introduced to
distinguish the flat sound; and that C. still stood for Gaüs &c. thus Varro
adds l. c. antiquis enim C quod nunc G. A better etymology is given by
Serv. on Geo. i 7 alma Ceres a creando dicta, Preller p. 70 and 403.

quasi θησις: cf. Sext. Emp. ix 189 ἡ γάρ Δημήτης, φασίν, οὐκ ἄλο τι
ῖσθων ἢ γά μήτηρ, Cornutus c. 28, and the Orphic line in Diod. i 12 ἡ μήτηρ
πάντων Δημήτηρ πλουτοδότειρα, who adds βραχύς μεταθείεται διὰ τὸν χρόνον
τῆς λέξεως: this etymology is accepted by Preller, but rejected by Curtius
after Ahrens Dial. Dor. p. 80, who says we never find her called θησις,
and that the supposition that ἄν or ἄν stands for earth has no support
beyond the conjecture of grammanians. He considers Δη to be a cognate
form of Δείδη, Διας, the divine Mother, as contrasted with the Daughter (κόρη).

jam: particle of transition as below § 68. See Index.

qui verteret: Causal Relative.

Mavors: Swainson quotes from Lord Brooke's Treatise of Warres. i.
67 'was not this Mars then Mavors rightly named, that in one instant all
thus overthrows.' Varro connects Mars, with max, quod maribus in bello
praeset L. L. v 73, in which Preller agrees, citing the collateral forms,
Mauris, Maners, Marmar. Max Müller Lect. ii 323 derives it from a root
MAR to grind, whence mors, and Mars the killing god, so also mommsen i
175; Corssen connects it with mar to shine.

Minerva: really connected with mens, as is shown more clearly in the
older form Menerva. Cicero's derivations miss the orthodox Stoic interpre-
tation, according to which Athene is the highest manifestation of Zeus
in the ether, as πρόσωπα; see n. on Diogenes of Babylon i 41, Cornutus c. 20
with Osann's nn. and Paulus (Festus) p. 125 Müller, Minerva dicta quod
bene moveat; ...Cornificius vero, quod fingatur pingaturque minutis armis.
On all these etymologies see the contemptuous remarks of Cotta iii 62 foll.

minueret: referring to her martial attributes, 'to humble'.

Ch. xxvii cum haberent—voluerunt: though subordinated in tense
to the apodosis, the protasis is not limited in meaning to past time, see
below § 80 videtur et inessent depending on docuerimus, and passages
cited on § 2 mallem audire, also Draeger § 151. 4. For the thought
compare such proverbial expressions as principio obsta; dimidium facti
qui bene coepit habet.

principem in sacrificando: cf. Ov. Fasti i 170 cur, quamvis aliorum
numina placem, Jane, tibi primum tura merumque fero? ut posses aditum
per me, qui limina servo, ad quoscumque voles, inquit, habere deos; Hor. Sat.
ii 6. 20 matutine pater, seu Jane libentius audis, unde homines operum
primos vitaeque labores instituunt, sic dis placitum, tu carminis esto princi-
pium; Macrobr. Sat. i 9 with nn.; so we find Janus standing first in the
devotio of Decius (Liv. viii 9) Jane, Juppiter, Mars, pater; and in the
Acta Arvalium (Wilmanns ii p. 297) Janus, Juppiter, Mars, Juno. On the
distinction between Janus and Juppiter Augustine cites Varro (C. D. vii 8)
penes Janum sunt prima, penes Iovem summa.
ab eundo nomen: i.e. janus or canus, as we read in Macrob. Sat. i 9. 11 Janumque ab eundo dictum, quod mundus semper cat, dum in orbem volvitur et ex se initium faciens in se refertur: unde et Cornificius Etymorum libro tertio, 'Cicero', 'iniquit 'non Janum sed Eanum nominat ab eundo'. This is the etymology given by L. and S.; I prefer the more common one supported by Peller and Buttman, which regards it as another form of Dianus, connected with Zeús and dies (see below on Diana); but they seem to be mistaken in attributing this derivation to Nigidius Figulus (ap. Macrob. i. c.) pronuntiavit N. Apollinem esse Janum Dianamque Janam, apposita d littera quae saepe i litterae causa decoris apponitur, ut 'reditur'...et similia. Janum quidam solemn demonstrari voluist, et idem geminus, quasi utrisque janueae caelitis potestem, qui exorient aperiatur diei, occidens claudit. Nigidius here distinctly says the d is otiose and added merely for the sake of euphony, so that he may very well have concurred with C.'s derivation. The chief objection to this latter is that it would make the original attribute of the deity simply to preside over doors, whereas he is the old Latin god of the sky, styled deorum deus in the ancient hymns of the Salii, and the learned augur Messala, who was consul 53 B.C., writes of Janus as the god qui cuncta festinae aestuque regit, aquae terraeque vim ac naturam gravem atque pronam in profundum dilabentem, ignis atque animae levem in immensum in sublime fugientem, copulavit circundato caelo (Macrob. i. c.).

transitio: this appears to be the only instance of the concrete use.

janis: 'archways' cf. Suet. Dom. 13 janos arcusque cum quadrigis extinxit, Octav. 31 Pompeii statuum marmoreo jano superponuit; especially used of the Roman Exchange, the arcade with four arches in the forum, where merchants used to meet. Janus is distinguished from arcus by its length, from fornis as being essentially pervious. Peller thinks it was named from the god, as symbolic of the vault of heaven; but it seems better to regard it, with Buttman, as a perfectly distinct word, derived (as C. says) from ire, and merely associated with the god at first from similarity of sound; afterwards etymologists discovered such connecting links as we read in the passages cited above from Macrobius.

in liminibus profanarum aedium: the janus was properly the front door (anticum) of private houses, see Vitruv. vi 7, Serv. Aen. i 449; not of temples, for which valvae is the regular term, see 2 Verr. i 61, iv 94, 124, p. Domi 121, Div. i 74, Caesar B. C. 105; Virgil however speaks of atri janua Ditis; and Pliny (Ep. i 17. 5 &c.) and Horace (Sat. ii 6. 112) use valvae of folding doors in private houses.

nam Vestae nomen a Graecis: I think it is unnecessary to change nam into jam (as Ba.). Nam implies that what follows is expected: and here Cic. had already mentioned the beginning and the end as of prime importance: he has finished with Janus, and introduces Vesta as presiding over the end. 'So much for Janus; as for Vesta she is a Greek goddess'. On the elliptical use of nam in lists of names cf. n. on i 27.
Holden on Off. ii 47, and Dumesnil on Leg. ii 26. C. repeats here what he had said Leg. ii 29, that Vesta is a borrowed word, but it is merely an off-shoot of the same root vas, to which both ura and òw belong. Curtius in his later editions distinguishes this root from vas 'to dwell' from which òw is derived. Another etymology is given by Ovid Fast. vi 399 stat vi terra sua, vi stando Vesta vocatur, which reminds one of that of ἑστία from ἑστάνω in Cornutus.

In ea dea omnis sacrificatio extrema est = extrema pars sacrificationis est in ejus deae veneratione, Sch. The rare word sacr. is also found Macrob. Sat. i 7 § 35, Tertull. Idol. 9. The evidence in favour of religious services being closed with the name of Vesta, as they commenced with that of Janus, is not very strong, see Preller p. 546. On the other hand the proverb ἀφ' ἑστίας ἀρχεθαι (Euthyrh. p. 3, Vesp. 842 with schol., Cratyl. 401 bουλεῖ ὄν ἀφ' ἑστίας ἀρχιμεθα κατὰ τοῦ νόμον, and a little below τὸ γὰρ πρὸ πάντων θεῶν τῇ ἑστίᾳ πρῶτῃ προβόθει εἰκὸς ἐκεῖνος οἰ τινες τὴν πάντων οὐσίαν ἑστίαν ἑπιφονόσαν) shows the usage in the classical time of Greece. In the Homeric hymn xix 6 she is worshipped last as well as first, οὐ γὰρ ἦτε σοὶ εἰλατνίαν θυσιῶν, ὡς οἷς πρῶτη πυράτη τῇ ἑστίᾳ ἀρχέας προβόθει καὶ ἐκείνη γενέσθαι τῷ εἰς ταύτην (as the earth) ἀναλύουσθαι τὸ ἀπ' αὐτῆς γενόμενα καὶ ἐξ αὐτῆς ἐξιστάσθαι: καθὼ κἀν ταῖς θυσίαις αἱ Ἑλλήνες ἀπὸ πρῶτης τε αὐτῆς ἅρρυστοι καὶ εἰς ἐσχάτην αὐτῆς κατέσανον. Ovid (Fast. vi 303) follows Plato, inde precando praefamur Vestam, quae loca prima tenet, which shows at any rate that the idea of the end being sacred to Vesta was dying out.

§ 68. Penates: Curtius connects the gods of the store (penus) with pasto pabulum, and refers penitus penetreo to the same root. Servius (on Aen. xi 211) calls the focus the ara Penatium, and Virgil (Aen. i 704) uses the phrase adolare Penates in the sense of keeping up the fire: see Preller p. 532 foll. and Gell. iv 1.


Apollo: on the introduction of his worship from Cumae into Rome, see Preller (pp. 130 and 266), who connects it with the admission of the Sibylline books under Tarquin. The oracle at Delphi was consulted by the Romans in the early years of the republic. Apollo was known to them from the beginning as the god of healing: his first temple was built 429 B.C.

Solem esse volunt: so Eurip. Phoeth. fr. 775 ὡς καλλιφέρρες "Ηλία ὡς μ' ἄφωλες καὶ τόνω" Ἀπόλλω δ' ἐν βροτοῖς ο' ὀρθῶς καλεί, ὡστ' ἐν στηγών ὀνόματ' ὀδέ δαμώνων, and Plato Crat. 405, who derives the name Ἀπόλλων from ἄμα πολλάν signifying τὴν ὁμοίαν πόλιν καὶ περὶ τῶν οὐρανῶν...καὶ περὶ τῆν ἐν τῇ φόβῳ ὀμοιοίοι...ὅτι ταύτα πάντα, ὡς φασίν οἱ κομψοὶ περὶ μονακῆν καὶ ἀστρονομών (i.e. the Pythagoreans) ὀμοιοί πλιν τοις ἀμα πάντα. The philosophers were probably right in identifying Apollo with the god of
light, but his various secondary attributes had obscured his original character in the common mind, and the actual Sun-god Helios was quite distinct from him. Macrobius Sat. i 17 cites the opinions of the principal Stoics on the subject and proves at length that Apollo was originally identical with the Sun, both from his epithets and characteristics. See also Cornutus c. 32, Herac. All. Gale p. 416 foll.

**Diana:** originally a feminine form of Janus (Dianus) connected with dies, divus, Zeus, see Varro R. R. i 37 § 3 nunquamne rure audisti octavo (die ante) Janam et crescentem et contra senescentem, and hence the goddess of the moon. She became identified with the Greek Artemis and associated with the worship of Apollo about the beginning of the 4th century B.C. cf. Catullus xxxiv 13 tu Lucina dolentibus Juno dicta puiperis: tu potens Trivia et notho es dicta lumine Luna, and Hor. C. S. where Apollo is addressed as alme Sol currur nítido diem qui promis et condit, and Diana as siderum regina bicornis. On the identity of Artemis and the moon see Aesch. fr. 158 ἄστρεφον δὲμα Λυρίδας γόρης, and Callim. fr. 48, where the poet blames those who separate Apollo from the Sun and Persephone from Artemis.

**cum Sol dictus sit—Luna nominata sit:** 'the Sun being so called because he is unique in magnitude, the Moon from her shining'. I am rather tempted to make this an independent sentence, reading cumque for cum and nominata est for nom. sit.

**Sol quia solus:** cf. III 54. It is curious that this etymology, like that given for Saturnus, seems to have been borrowed from the Greek. Thus Macrobius Sat. i 17 § 7 Chrysippus Apollinem /ws oíchi τῶν πολλῶν καὶ φαίλων οὐσίων τοῦ πυρὸς δια, primam enim nominis litteram retinere significationem negandi; ἢ ὅτι μόνος ἦσσι καὶ οὗτος πολλοί, nam et Latinitas eum, quia tantam claritudinem solus obtinuit, solem vocavit. So Plut. Delph. p. 388, Clem. Strom. i p. 151 &c. Varro gives the same derivation. Wyttensch, with whom Curtius agrees, connects it with σφαῖρα. Sch. compares Goth. sauil 'sun'.

**Luna a lucendo—lucna, like penna, urna; Lucina is a secondary adjectival formation.**

**Lucinam in pariendo invocant:** by that constant confusion of the cum hoc or post hoc with the propter hoc, which characterizes so much of the old superstitions, especially in connexion with the moon, it was believed that the goddess who presided over the moon's changes was the goddess of birth; cf. Plut. Symp. 658 πάντα ἐλήφθη στὸ καὶ πρὸς εὐτυχίαν συνεργεῖν (ἡ σέλην) δόλων ἢ διαμύρισος, ἀνέσει τῶν ὑγρῶν ἀμβλακωτέρας παρέχοντα τὰς ἄδινας ἢ δόλων ὑμνιῶν καὶ τὴν Ἀρτεμιν Δάκτην καὶ Εἰλείθυιαν οὐκ οὕτως ἐτέραν ἢ τὴν σέλην, ὁμομάθαι, Eur. Hýpp. 166 τῶν εὐσχον οὖραν τῶν με- βουσών ἄτειν Ἀρτεμιν, Hor. C. S. 13 rītēs maturos apārīre partus lenis, Ἡθύπη, τέρε τρατης, sive tu Lucina probas vocari, seu Genitalis. Properly speaking however Εἰλείθυα was distinct from Artemis, and is sometimes represented as the daughter of Hera, the goddess of wedlock, or even
identified with her, see Preller Gr. M. p. 401 and p. 134 foll. The Latin poets mostly followed the Greeks in regarding Lucina as a name of Diana, see Ennius ap. Varro viii 16 ut tibi Titanis Trivia dederit stirpem liberum, V. Ecl. iv 10 casta fave Lucina, tuus jam regnat Apollo: but the Roman goddess of light, especially of the new moon, was Juno Lucina, worshipped by matrons at the Matronalia and invoked in child-birth, as in Plaut. Aud. iv 7, Ter. Andr. iii 1. 15 Juno Lucina for opem, Adolph. iii 4. 41. On the other hand Menander represented Artemis as invoked by Greek women in similar circumstances (Schol. on Theocry. ii 66).

Luciferam = φωσφόρος, one of the names of Artemis, see Arist. Lysist. 443, Thesm. 365, Iph. T. 21.

omnivaga: this is not found elsewhere as an epithet for Diana, nor is it easy to suggest any corresponding Greek word, of which it might be a translation. The moon is vaga luna (Hor. Sat. i 8. 21), her chariot is noctivagus Λευ. x 315, the sun vagus sol (Tib. iv 1. 76), the heaven itself is solivagum (Cic. Tim. c. 6); Pliny N. H. ii 7 speaks of Lunae multivagos flexus; [- Venus is volgivaga Lucr. iv 1071' Swainson]. For the explanation we may compare that given in Cornutus 32 of Loxias, ‘Apollo is so called because he traverses the zodiac obliquely’, and that of Trivia in Varro L. L. vii 16, quod Luna in caelo tribus vias movetur in altitudinem et latitudinem et longitudinem.

tamquam vagantibus: tamquam, because falso vocantur errantes above § 51.

§ 69. Diana dicta: ’being called Diana’. The edd. have a full stop before Diana, which makes a very abrupt construction; perhaps sed has been lost before Diana, cf. § 66 sed Junonem.

septem aut novem: more correctly Virgil, Ecl. iv 60 matri longa decem tulerunt fastidia menses, i.e. lunar months making 280 days; the philosophers however had various speculations on the subject; which may be found in Plac. Phil. v 18, Gell. iii 16, where see nn. Gellius states it as the received opinion igni hominem septimo rarentem, numquam octavo, saeppe nono, saepius numero decimo mense; cf. also Diog. L. viii 29 (on Pythagoras), Arist. Hist. An. vii 4, Plin. N. H. vii 5, Digest xxxviii 16. 3 § 11.


mensa spatio: this etymology is approved by Curtius on μίν, μιν, and Max Müller Lect. i 6.

concinque: cited by Madv. Fin. iii 73 as an ex. of the transitional use of que; cf. below § 127 cervaeque.

Timaeus: banished from Tauromenion in Sicily by Agathocles about 310 B.C., passed 50 years of exile at Athens, where he wrote his history of Sicily, extending from the earliest period to his own date: much blamed by Polybius for the unscientific and unpractical nature of his history, for his superstition, want of judgment, unfairness, and affectation of style. Longinus agrees in condemning the style (Sublim. 4 ὡς ἔρωτος τοῦ ἔξις νοῆσεν ἀδικίαν καὶ κακίας ἐπιπτῶν ἐς τὸ παρακατεύθυνσιν) and quotes
from it exx. of frigidity (τὸ ψυχρόν), not unlike that in the text, e.g. ‘it was natural that the instrument of divine vengeance on the mutilators of the Hermæ should be Hermocrates’. Cic. praises his learning and copiousness (Orat. ii 58), but is not an admirer of the Asiatic style which he practised, cf. Brut. 325 genera Asiaticæa dictionis duo sunt, unam sententiosum et argumentum, sententias non tam gravibus et severis quam concinnæs et venustæs, quæs in historia Timæus. Of Hegesias, a professor of the same Asiatic school, to whom the saying in the text is attributed by Plutarch (Alex. 3) Cic. speaks even more severely (Brut. 206) quid est tam fractum, tam minutum, tam in ipsa, quam tamen consequitur, concinnae puerile? These passages prove that concinnae need not be taken to imply very high praise, any more than our ‘neat saying’ or ‘pretty conceit’. Plutarch, in telling the story, himself outdoes the frigidity of Hegesias, Ἡγ. ἐπιφανή- κεν ἐπιφάνημα κατασβίασα τὴν ψυχραίαν ἔκλειν ὑπὸ ψυχρίας δυνάμεως· εἰκότως γὰρ ἐκατακληθῆναι τὸν νεών τῆς Ἀρτέμιδος ἀποχαλομήνης περι τῆν Ἀλεξάνδρου μαίουν.

partu Olympiadi: the Dat. Olympiadi might have seemed more natural with adesse, but partus is often used with a Genitive of the mother in this sense, e.g. me Romae tenuit partus Tulliae, Fam. vi 18.

Venus: Arnobius (III 33) follows C. in his absurd derivation: it is probably connected with venia ‘grace’, ‘favour’, veneror, Sans. vanah ‘wish’. Varro L. L. v 62 derives it from vincio vieo.

ex ea venustas: sc. nominatur, see Index under Ellipsis.

Ch. xxviii § 70. videtisne—levitatis: the account here given of the pagan mythology was eagerly caught up by Christian writers, and the passage itself is quoted by Aug. C. D. iv 30, Lact. i 17.

ut a physicis rebus—tracta ratio sit ad factos deos: ‘how this imaginary pantheon was developed out of a good and useful philosophy of nature’, lit. ‘how men (the course of thought) proceeded from one to the other’.


aniles: see i 55 n. on aniculis.

formae deorum: the Stoics are laughed at (i 24) for believing in round gods, but really they assign no form to their highest divinity, the all-pervading ether. Thus we are expressly told that Posidonius held God to be πυθήμα νοερόν καὶ πυρότερε, ὁυκ ἕχον μὲν μορφήν, μεταβάλλον δὲ εἰς δωματία καὶ συνεξομολογεῖσθαι πάντων (Stob. EcL i 2); so that Lactantius is right (de Ira 18) in saying Stoici negant habere ullam formam Deum; see Philod. p. 84 Gomp. ‘the Stoics do not worship the same gods as others’, ἀνθρωποει- δεῖς γὰρ οὐ νομίζοντιν, διὰ δέρας καὶ πνεύματα καὶ αἴθερας. On what follows see the Epicurean speaker i 42, here agreeing with the Stoic.

noti sunt: cf. Juvenal i 7 nota magis nulli domus est sua quam mihi lucus Martis &c.

omniaque traducta—imbecillitatis humanæ: it seems best to take noti sunt as supplying the predicate for the whole sentence, and to under-
stand traducta as a simple participle in agreement with omnia. For the thought cf. i 45 necque ira necque gratia teneri, quod quae talia essent imbecilla essent omnia.

et perturbatis animis inducuntur: et is taken up by nec bellis carus-runt. pert. an. Abl. of Quality, cf. n. on soliditate i 49. We have the same use of induco 'to bring on the stage' below § 73.
cupiditatis, aegritudines, iracundias: the Stoics distinguished four kinds of vicious affection, Fin. III 35, Tusc. iv 11 est igitur Zenonis haec definitio, ut perturbatio sit, quod nábos ille dicit, averse a recta ratione contra naturam animi commotio...partes autem perturbationum volunt ex duobus opinatis bonis nasci et ex duobus opinatis malis; ita esse quattuor, ex bonis libidinem et laetitiam, ut sit laetitia praesentium bonorum, libido futurorum, ex malis metum et aegritudinem nasci censent, metum futuris, aegritudinem praesentibus. Under each head are included various subordinate passions, e.g. libidini (subjecta sunt) ira, odium, discordia &c. l. c. 16. Thus the gods are represented as subject to every kind of passion except fear.
ut apud Homerum: ac. inducuntur, cf. ut plerumque § 69.
ut—bella gesserunt: an abbreviated expression for ut inducuntur cum Titanis bella gerentes. For a similar abbreviation cf. § 60 ut cum fruges. Gruter proposed to omit cum before duo, and to read defenderunt for defenderent.

Titanis: the Latinized forms are frequent in the early writers e.g. Ennius Ann. i fr. 25 Vahl. cum saevo obidio magus Titanus premebat, Euhem. fr. 19 qui Titan vocantur, fr. 6 Titanum vicisse, Naev. ap. Prisc. vi p. 679 Titan N. Pl., also in Plaut. Pers. i 1. 26; Titan Abl. S. Varro L. L. vii 16. The preceding cum-is of course the preposition. The wars of the gods at Troy (II. XX 67 foll.) as well as those against the Titans were allegorized by Cleanthes in his Θεομαχία and περὶ θεομαχίαν (Zell. iv p. 328); cf. Flack Glossen p. 93 foll., Heracl. All. p. 477 Gale, who gives both a physical and ethical interpretation. Lucretius alludes to such allegories in v 117.

creduntur stultissimem—stultissimum est credere, cf. below § 143 latent utilitas, and Madv. on Fin. iv 63 acute putant, and Advers. ii 507.

B.e. One Divine Being is to be worshipped under these various forms, in holiness and purity, avoiding all superstition. §§ 71, 72.

§ 71. deus pertinens per naturam: see i 36 n., II 24, III 64, Heinze pp. 85, 93 foll.
poterunt intelligi: we should have expected the Sing. but the number is changed to suit the clause in apposition.
quos deos: I am disposed to retain this, the reading of the best MSS. The general sense will then be 'the previous discussion has shown what is the nature of these subordinate and partial deities; that they are not distinct and opposed personalities, but the varied activity of the one God disguised under many names. It has shown also how they have come
to be named as they are: and it is these deities, i.e. deities thus understood, that we ought to worship.' This seems to me to agree better with the context than Keil's emendation *hoc eos*; for there is no occasion here to insist on the employment of the popular names, but rather to guard against the abuse to which this might lead. For the change from the personal construction *poterunt intellegi* to the impersonal (*poterit* *intellegi*, cf. *Cato 63 consursum esse dicuntur... Dixisse quemad*;

**cultus optimus**: cf. *Off. II 11 deos placatos pietas efficit et sanctitas; Leg. II 22 impius ne audelo placare donis iram deorum; Sen. Ep. 95 § 47 deum colit qui novit... primus est deorum cultus deos credere; deinde reddere illis majestatem suam, reddere bonitatem...* Vis deos propitiare? bonus esto. Satis illos coluit quisquis imitatus est? *Hor. Od. III 23; Pers. II 71, Plin. Paneg. 3, Xen. Mem. I 3 § 3*; also the Christian Minucius 32 *litabilit est hostia bonus animus et pura mens et sincera conscientia. Igitur qui innocentiam colit Deo supplicat, qui justitiam, Deo libat, qui fraudibus abstinet, propitiat Deum,* and *Lact. vi de Vero Cultu.*

**superstitionem a religione separaverunt**: 'In the later age of heathendom the complaint of the spread of superstition is frequently repeated. Nothing however is more vague, indistinct or capricious than the *deusda-monia* of the Greeks and the *superstitio* of the Romans. No one drew or was capable of drawing the line between this erroneous excess of the religious sentiment, and real religiousness. The Romans of the early period had certainly a simple criterion. They deemed a religious man to be one who adhered to the legal traditions in his relation to the Gods, a superstitious man to be one who gave himself up to strange rites or the worship of strange Gods. But this distinction was no longer available in the earlier times of the Caesars, when there were few who were prepared either on the one side to take up the cause of the entire hereditary *cultus* with its endless confusion of Gods, or on the other side, to reject every outlandish worship on account of its foreign origin.... So the attempt was made to fix the relation between religion and superstition upon other grounds. Thus Varro held that the superstitious were those who feared the Gods as enemies, the religious those who loved them as parents (*Aug.: C. D. vi 9,*). Theophrastus (*Char. 16*) had previously defined superstition as *deilia pro oro daumono,* and Plutarch's whole treatment (in his tract on Superstition and Atheism) hinges on the sentiment of anxiety and terror of the wrath of the Gods and the punishments of the world below, as evidenced by those whom it haunted. *Maximus of Tyrtَ (Diem. xx 6) takes much the same view* ὁ μὲν εὐσεβὴς φιλος θεώ, ὁ δὲ δεισιδαιμον κόλαξ θεωĩ, καὶ μακάρως εὐσεβὴς φιλος θεοῦ δυστυχεῖς ἐν ὑμοῖς ἄπειρον ἄνθρωπον ἄθεον (*altered from Döllinger p. 170 foll.*). *The older Roman view is given by Festus p. 289* religios dicuntur qui faciendarum praetermittendarumque rerum dicinarum secundum morem civitatis dilectum habenti nec se superstitionibus implicant; *Cic. Leg. II 19* (the law against superstition) *separatim nemo habessit deos, neve novos neve advenas nisi publice adseutos: privatim colunto quos rite a patribus cultos acceperint; Virg.
Aen. viii 187 vanus superstitione spectat unus deorum; Plut. Marc. 5

1) either by the introduction of new and strange rites (N. D. iii 5) or from its arousing irrational fears (N. D. i 117 non modo superstitionem tollunt, in quas inest timor inani deorum, sed etiam religionem, quae deorum cultu pio continetur) or from its connexion with immorality (Cluent. 194 neque intellectus pietate et religione et justis precibus deorum mentes, non contaminatae superstitione neque ad seclus perficiendum caesis hostis posse placari) or its

2) contradicting the teaching of science (Div. ii 148 ut religio propaganda est, quae est juncta cum cognitione naturae, sic superstitionis stipres omnes oificentiae, and the whole passage). Seneca takes the new view, Clem. ii 5 religio deos colit, superstitione violat; Ep. 123 § 16 superstition error inanitus est: amandos timet, quos colit violat. Quid enim interest utrum deos neges an


§ 72. qui preclabant—qui autem retractarent: a remarkable combination of the two Moods, to express the same conception, the only difference being that the Ind. speaks definitely of ‘those who used to pray’, and the Subj. indefinitely of ‘such as anxiously repeated their religious observances’; see above § 44 (Aristoteles) omnia quae moventur aut natura moveri censuit aut … quae autem natura moventur haec aut deorum aut in sublimi ferri, n. i 101 nullam beluam nisi ob alienam utilitatem, quam ex ea caperent, consecraverunt, and n. on ii 33 quae alantur, 118 quod consuevat. This use of the Subj. is closely allied to the hypothetical use, of which we have had examples above §§ 12, 44 qui videat, and below § 76 qui concedat (which last is followed, like the present, by an Ind. in the apodosis, ipsis futendum est).

totus dies preclabatur: on the superstitious feeling with which the ancients regarded the death of children before their parents, see Tusc. i 93, Plaut. Asin. i 2, and Mayor on Juv. x 241. [Menage on Diog. L v 12 quotes from the Digest to show that the Roman lawyers, when contemplating the possibility of a child dying before the parents, avert the omen with a quod abominor. J. E. B. M.]

superstitiosus: various attempts have been made to explain the meaning of this word from its etymology. Thus Serv. on Aen. viii 187 superstitione est timor superfluos et delirius: aut ab aniculis dicta superstition quia
multas superstites propter aetatem delirant: aut secundum Lact. id est caelestium et divinarum quae super nos stant, inanis et superflius timor.

L. and S. consider it to denote originally 'a standing still over or by a thing'; hence amazement, wonder, dread': Grimm D. M. p. 1059 compares it to ube-glaube (ube-glaube) implying a persistent holding to extravagant beliefs which were abandoned by men of sense: Nettleship J. of Phil. vi p. 98 thinks that it meant originally 'being present at (compare superstes in the sense of 'witness') and hence knowledge of a thing or pondering over a thing'. He quotes passages in which superstitious seems to imply prophetic knowledge, as Plaut. Amph. I 1. 170 iltic homo supersticiosus est vates; Curc. III 1. 27 supersticiosus hic quidem est: vera praedicat; Rudens iv 4. 94 quid si ista aut superstitiona aut ariola est atque omnia quiqum inuit, vera dicit; Ennius Trag. 79 Vahl. missa sum superstitionis ariolationibus; Poet. ap. Cic. Div. ii 115 sancte Apollo, qui umbilicium certum terrarum obtine, unde superstitione primum saeva evasit voce foras. He also refers to the use of superstition in Div. ii 129, Har. Resp. 12, p. Domo 105, Aem. xii 817, as showing that it connoted two ideas 'power of foresight and anxious reflexion'; and cites the Gr. epiotma as illustrating the etymology suggested. I must confess I prefer to any of these the 3rd explanation given by Lact. iv 28. After condemning C.'s as inepta, he continues superstitionem autem vocantur, non qui filios suos superstites optant (omnes enim optamus), sed aut ii qui superstitem memoriam defunctorum colunt, aut qui parentibus suis superstites celebant imagines corum domi tamquam deos Penates. The same origin of superstition is asserted in Wisdom xiv 15 'a father afflicted with untimely mourning, when he hath made an image of his child soon taken away, now honoureth him as a god, which was then a dead man, and delivered to those that were under him ceremonies and sacrifices'. This doctrine of 'animism', as it is called by Tylor, Herbert Spencer and others, evidently had a firm hold of the early Romans, as shown in their worship of the Lares and divi Manes, in the Novendiale, Perialia and Parentalia, cf. Cic. Leg. ii 55, 57, Lael. 13 (nostri majores) qui mortuis tam religiosa jura tribuerunt, and the saying of Cato in Plat. vol. iii p. 411 Didot 'the proper sacrifices to parents are not lambs or kids, but the tears of enemies'. With regard to the actual formation of the word Nigidius Figulus ap. Gell. iv 9 maintains that the termination -osus always implies a vicious excess, as in the words vinous, mulierous, nummosus. Galliuss adds verbus, moruous, famosus, gratiosus, but also mentions exceptions, such as victoriosus, formosus; and a glance at the list in Roby Gr. § 813 is enough to show that there is really no special ethical character attaching to adjectives of this formation. Still there is the fact that one who spoke the language had such a feeling about this class of words, and there can be no doubt as to the particular word superstitosus, that it was used of one infected to an excessive degree with superstition, which itself denotes 1st the act, and 2nd the quality, of the superstes, i.e. of the man whose
function it is, as superestes, 'the survivor' (lit. the friend who bends over the dying man: or had superest originally the force of supersum? cf. presto), to do proper honours to the dead and carry out his wishes &c. One who was to an excessive degree occupied with the thought of the dead and was held to be in close intercourse with the unseen world was superstiosus, either a necromancer and wizard, or a foolish believer in ghosts, according to the degree of enlightenment in surrounding society.

religiosi ex relegendo: C.'s derivation is supported by the old verse preserved by Gellius l.c. religentem esse oportet, religiosum nefas, and is favoured by Curtius a.v. λέγεται, who compares θεῶν ἰδίων οὐκ ἀλητορεῖ (II. xvi 388); but here too Lactantius (iv 28) seems to me right, nomen religionis a vinculo pietatis esse deductum, quod hominem sibi Deus religaverit et pietate constinixerit... melius ergo (quam Cicero) id nomen Lucretius interpretatus est, quia ait religionem se nodos ex solvere (1932). See Munro on Lucr. I 109, who cites de Domo 105 nisi etiam muliebris religionibus te implicuisse, as proving that C. himself could not help connecting the word with the idea of obligation: so we find religione obstringere (2 Phil. 83); solvi religione (Caecina 98); religionibus susceptis impetitur (in PIs. 58); domum religione obligare (p. Domo 106, 124); exsolvere religione Liv. III 20; Numam religionibus populum devinxit Tac. Ann. III 26. Max Müller (Hibbert Lectures p. 11) is inclined to prefer C.'s etymology on the ground that there is no trace of the religious sense in the use of the verb religare (except in Lact. l.c.); but it may be replied that neither is there in relegere, except in passages which are intended to prove the connexion. With these exceptions we do not get nearer than Troiani belli scriptorem relegi Hor. Epp. I 2. 2, janua difficilis filo est inventa relecto Ov. Met. VIII 173, egressi relegant campos Val. Fl. VII 121.

elegantes ex eligendo: Stamm rightly says (p. 35) that this clause, which is omitted by some MSS and etd. is needed to justi£fy the following omnibus, which could hardly be used of less than three clauses. Elegans seems to show that the root leg had two conjunctival forms, as the root lig must have had if we derive religio from it: M. Müller l.c. compares lictor and the double forms implied in opinio and rebellio by the side of opinari, rebellari. For the sense cf. electe Invent. I 49, electissima verba Fin. III 26, ad Herenn. IV 36, and so often lectissima 'dainty'.

diligentes: diligo is 'to prefer', hence 'to care for'; and diligens 'careful', 'attentive'.

C. Providential Government of the Universe §§ 73—153.

a. Introductory. The sneers of Epicurus are founded on ignorance (1); division of subject (2) §§ 73—75.

Ch. xxix § 73. proximum est ut: Madv. § 373.

providentia: Plato according to Favorinus (Laert. III 19) was the first to speak of θεοῦ πρόσωπον (as in Tim. 30 and 44), but we have Eurip. Orest.
BOOK II CH. XXIX § 73.

1179 theo legeis pronoian, Phoeniss. 640 omoa pathe tos otei prooonai neukion epoymon, Xen. Mem. i 4. 6 ou dokei sou kal tode pronoias ergon to beleforos tis dhv. It formed the subject of distinct treatises by Chrysippus (Diog. L. vii 138, Gell. vi 1 foll.), Panaetius, referred to by Cic. Att. xiii 8, velim mihi mittas Posidionis plei pronoias, Philo, still extant in an Armenian translation, and Seneca. Cicero probably took this part of his treatise from Posidonius plei theon bk. 3 (Diog. vii 138). Among Christian writers who have written on the subject may be mentioned Theodoret, and Salvianus de Gubernatione Dei.

magnus sane locus: most mss add est, for the omission of which Allen compares Div. ii 3 his libris adnumerandii sunt sex de republica...

Magnus locus philosophiaeque proprius, a Platone tractatus uberrime, where Giese cites Orat. ii 79, Orator 52, Lael. 79, Cato 14, Off. ii 73.

vestatus: ‘a question much debated by your school’.

vestra solum legitis: on the narrow training of the Epicureans see i 72 n. and Piso 70 litteras fere negligere. [And especially Seneca Ep. 79 § 15. J. E. B. M.]

solum: their own writings were only read amongst themselves, Tusc. ii 8 Epicurum et Metrodorum non fere praeter suos quisquam in manus sumit. incognita: see n. on inerrana § 54.

hesterno die: here and in iii 18 omnia quae a te nudiis tertius dicta sunt, C. writes as if he had broken up the treatise into three distinct conversations held on three successive days, as the five books of Tuscan Disputations are supposed to occupy five days. It is one of the many signs that the book was published without having undergone the author’s final revision.

anum fatidicum: see i 18.

eo errore—quia: the more regular construction would have been either in quo errobas quia, or eo errore dixisti ut existimares.

praecide: ‘it is an elliptical expression’. Wytt. cites Herenn. iv 31 praecisio est cum, dictis quibusdam, reliquum relinquitur inochatum in auditoris judicio; cf. Cato 67 brevi praecidam. Praecisio itself is not found in this sense before Quintil. v 2 § 17 qui praecisis conclusionibus obscuri, Sallustium atque Thucydidem superant.

§ 74. illud ‘Areopagi’: ‘to complete the meaning we should want that further term, viz. the council of the Areopagus’. Sch. refers to Ahrens de Athen. Studi 1839 Götting., and Philippi Der Areopag. u. d. Epheten as proving that this council had more authority in C.’s time than it had had since the time of Pericles. We learn from Gellius xii 7 that Dolabella when proconsul of Asia referred a difficult case to the Areopagus ut ad judices graviores exercitatoresque, cf. Att. i 14 § 5 senatus “Apeios Hpios, nihil constantius, nihil severius.

arbitrato: this appears to be the only ex. of the Act. form after the time of Plautus, but arbitror is found with Pass. signification Att. i 11 § 2. Caesar B. C. iii 6 § 3. [See Madv. Opusc. ii 241. J. E. B. M.]
salem quo caret vestra natio: cf. above § 46 minime resipiens patriam, and i 123 non tam faceto. Natio is used contemptuously, 'your tribe', 'your set', see n. on gen. i 89. For salem see Fin. i 9 cum multa venustate et omni sale Lucilius, Plin. N. H. xxxi 41 ergo hercle vita humanior sine sale non quid degere: adeoque necessarium elementum est ut transierit intellectus ad voluptatem animi quoque. Nam ita saeas appellantur, omnium vitae lepos et summa hilaritas laborumque requies non alio magis vocabulo constat; Plin. Ep. iii 21 § 1 with Mayor's n. Cic. classifies the different sales in Orator 87; in Orat. ii 216 he says nullam esse artem salis.

hoc in te unum convenit: unless we adopt Madv.'s emendation, for which see Critical Notes, I am disposed to take this as Wytt., 'does it apply to you individually'. In any case it seems to me more natural to oppose unum to religuos, than to take it, as most edd., with limatum.

moribus domesticis: 'by our national habits'. Cf. R. P. ii 29 facile patior non esse nos transmarinis nec importatis artibus eruditos, sed genuinis domesticis virtutibus.

limatum: (lima 'a file'), cf. Orat. i 180 vir oratiane limatus.
sine arte, sine litteris: cf. i 58, 72, 85, 89, Tusc. ii 45, iii 50.

insultantem: see i 18 fidenter n., 73 vexat contumeliis, 92 omnes delirare, and foll.

Ch. xxx § 75. constitutas: not 'created', but 'set in order'. For the three arguments see Zeller iv p. 141.

ab animantibus principiis eam esse generatam: Sch. who reads ea generata in common with most edd., objects to the reading of the ms on the ground that the sentiens natura must be identical with the animantia principia, the λόγος σπερματικός, which pervades the universe. But though this is the usual way of speaking among the Stoics, yet we find other passages in which a distinction is made between the sentient nature of the universe and that to which its sentience is owing, viz. the divine spirit, the νεωμα ἐνω κυων, cf. just below deus omnem regit naturam; Acad. ii 119 (the Stoics hold) hunc mundum esse sapientem, habere mentem, quae se et ipsum fabricata sit, et omnia moderatur, moveat, regat; and above § 22 mundus generat animantes compotesque rationis: animans est igitur mundus composque rationis; where the argument resembles that of the present passage; for the sentience of nature is here too taken as a proof that it proceeds from a living principle. So in § 29, a distinction is drawn between natura and τὸ ἡγεμονικὸν; see n. on incohatus naturis above § 33, for the narrower technical sense of φύσις, as the vegetative principle. Again we are told expressly that Posidonius (Zeller iv p. 143) distinguished between the action of the Deity and of nature; Plac. Phil. i 28 § 5 πρῶτον μὲν εἶναι τὸν Δία, δεύτερον δὲ τὴν φύσιν, τρίτην δὲ τὴν εἰμαρμένην, with which we may compare the language of Chrysippus (Plut. Comm. N. 36) ὅταν ἐκτύρωσις γένηται, μόνον ἀδάφαρον ἀνὰ τὸν Δία τῶν θεῶν ἀναχωρεῖ ἐπὶ τὴν Πρόνοιαν, ἐίτα ὡμοῖο γενομένου ἐπὶ μᾶς τῆς τοῦ ἀλήθους οὐσίας διατελεῖν ἀμφοτέρους. I think then that C. here uses natura
to express the ordinary course of nature, and that, in speaking of its being generated from living principles, he refers to the periodic regeneration of the world. In the cyclic conflagration the ordinary course of nature is suspended, the universe retires into its fiery seed, of which Diog. tells us (vii 136) ἐδεύ οὖν ἄφθαρτος καὶ φύσις, δημιουργός δὲν τίς διακοσμήσας, κατὰ χρόνων ποιάς περιέσθεν αναλίσκων εις ἑαυτῷ τινα ὑπάρχαν οὐδεν καὶ πάλιν ἐξ ἑαυτοῦ γενέων. So we read (Plac. Phil. i 7) the Stoics define God as πῦρ τεχνικὸν ὃ δὴ βαδίζων ἐπὶ γενέσει κόσμου, ἐμπειρείληφος τε πάντως τοῦ σπερματικοῦ λόγου, while nature itself is defined as working in accordance with these, ἵπτε δὲ φύσις ἔχει ἀυτὴς κινομῆναι κατὰ σπερματικοῦ λόγου (Diog. vii 148). Sch. speaks of this clause as being out of place here, since Providence is shown in the government, but not in the formation of the world. There seems no ground for such a limitation; and as a matter of fact C. has already divided his subject into these two parts, iniitio constitutas, omni tempore administrari. Epicurus had taught that the world was produced by the fortuitous movements of dead atoms: Balbus maintains in opposition to this that it is due to animantia principia; cf. below § 89 hi dubitunt de mundo, causae ipse sit effectus aut necessitate aliqua an ratione ac mente divina; 90 non solum habitatore sed etiam...architectum tanti operis, also §§ 93, 95, 115. We need not at present define the latter more closely: that which is of the nature of soul is, as Plato is so fond of insisting, essentially prior to that which is without soul.

C b. Providential Government inferred from the consideration of the Divine nature §§ 76—80. (1) It is a part of our idea of God that he should be active, and active in the noblest way, i. e. in regard to the noblest object, which is the universe § 76; (2) if he is not so, then he must be inferior to some other power which rules the universe; but such inferiority contradicts the very definition of Deity, therefore he cannot be subject to any other power, therefore he must rule the universe himself §§ 76, 77. (Cic. seems to have put the two last steps of the argument in the wrong order. We can hardly impute this to the carelessness of a scribe, as the words are quoted in the same order by Lact. i 5 and Salvianus Cüb. i 1 § 4.)

§ 76. Democritus simulacra, Epicurus imagines: I have said (on i 49) that it seemed to me probable that some of the later Epicureans had adopted the more spiritual theism of Democritus. In this passage however I understand Cic. to be drawing a distinction between the crude intermundian gods of Epicurus and the Democritean spirits of the air. We may compare the distinction in Sext. Emp. ix 42, where the doctrine of the ἑιδῶλα is ascribed to Democritus, the φαντασία εἰδῶλως, the nightly vision of images to Epicurus, ὃ δὲ εἰδῶλα εἶναι ἐν τῷ περιεχομένῳ ψυχήν καὶ ἀνθρώπων ἐκ τοῦ ποιεῖται δυσπαράξετον τὰ δὲ αὐτά
kai pro's to'n 'Eπικουρον ἵνατε λέγειν οἶδανον ὅτι κατὰ τὰς ἐνυπνίους φαντασίας τῶν ἀνδρομενόρων ἐιδώλων ἐνούθησαν θεό. Cic. himself is not consistent in his use of terms for the ἐιδώλα. In i 29, 73 he speaks of the imagines of Democritus, in Fam. xv 16 he employs the term spectra. Lucretius uses simulacra or imago indiscriminately.

inducens: see above § 73.

qui concedant: hypothetical or indefinite relative—οἷς ὁμολογῶσι; see above §§ 12, 44 and i 43; and on the Ind. in the apodosis, § 18 si quae quaerat, apparet; § 72 qui retractarent—sunt dicti; § 97 cum videamus—dubitamus, Roby § 1574.

majore vi—quam deus: so edd., but MSS have deos. Is it possible that C. may have confused the two constructions, necesse est sit and necesse est esse, as we have a confusion between the abstract and the personal construction in Thuc. vii 42 τοῖς Συρακοσίοις κατάπληξις ἐγένετο...ἀπώντες? More probably the scribe may have fallen into the Inf. constr. as the more familiar,—some MSS add esse—and into the Pl., because of the preceding deos and deorum.

quale id cumque est: cf. Leg. ii 46 quod ad cumque legis genus, Fin. iv 69 quod erit cumque visum.

inanima natura: cf. below § 81 and Strato (i 59 n.), who is mentioned by Lactant. (Ira c. 10) in a similar context, naturam habere in se vim gignendi et minuendi, sed eam nec sensum habere illum nec figuram. Plato Soph. 265 c speaks of it as the common view τὴν φύσιν πάντα γενών ἀπὸ τινος ἀλήθεις αὐτομάτης καὶ ἀνεν διανοιας φυσικῆς.

vi magna incitata: ‘speeding onwards with mighty force’. We find a similar use of inc. in Tim. c. 6 caelum volubile et in orbe incitatum.

§ 77. ea subjecta est necessitati: for pleonastic Pron. cf. § 27. On the Stoic view of the relation between God and necessity; see i 39 n. Acad. i 28, 29; Seneca N. Q. ii 45 vis illum (Jovem) fatum vocare? Non errabis. Hic est ex quo suspensæ sunt omnia, causa causarum; ib. proł. § 3 (the philosopher studies whether it is in the divine power) ex lege fatorum alicuius derogare, an majestatis diminutio sit et confessio erosis mutanda fecisse. Necesse est enim ei eadem placere, cui nisi optima placere non posunt. Nec ob hoc minus liber et potens est: ipse enim est necessitas sua.

qua regantur: ‘a power of such a nature as to control the universe’, nihil praestantius: the characteristic of Deity, see i 45, 47, 121.

naturae oboedientis: Sen. ib. § 15 sunt qui putent hoc universum express esse consilii et aut ferri temeritate quadem aut natura nesciente quid faciat. On the inferential series, non est igitur—ab eo igitur—nulli igitur—omnem ergo, cf. above § 56 nulla igitur—caelestium ergo—aud ergo—Zeno igitur.

et enim: introduces a new proof of Divine Providence, not a further step in the last proof, see above § 16 n.
C b (3) The Gods form a community, and it is natural to suppose that they possess those same social virtues, which we believe that we have derived from them; but that they possess them in higher perfection and manifest them on a vaster scale in the great city of the universe §§ 78, 79. (The argument is obscurely worded by C. What is the ground of his necessum in § 78? Has he omitted a reference to the heavenly host all moving in willing obedience to law, cf. § 44?)

si intellegentes—etiam providentes: Aristotle would not have asserted to this argument: with him God is νόησις νοσεως, but he does not exercise any superintending providence.

ergo: we should have expected mundum administrant; but Cic. puts first two alternatives 'unless they are wanting in knowledge or power', and he puts them in the form of a question, 'Whether are they wanting in knowledge or power, (that they should refrain from governing the universe)?' [C. supposes his opponent to hesitate in drawing the desired conclusion from et rerum guidem max., and immediately comes down on him with Ergo: 'Take then your choice of these alternatives'. R.]

utrum ignorant: this seems a singular point to argue. It has been assumed that, if the Gods are intelligent, they must show their intelligence by taking charge of the greatest matters, and then it is suggested that possibly they would not know which were the greatest. Perhaps C.'s first clause quae res &c., is a careless rendering of a clause which was Relative, not Interrogative in the Greek.

minime cadit in: cf. I 19 apte cadere n., 23 figuram cade, 95 in solem cadere, Div. II 125 nec enim ignorare deus potest qua mente quisque sit, nec frustra ac sine causa quid facere dignum deo est...Ita si plerique somnia aut ignorantur aut negliguntur, aut nescit hoc deus aut frustra somniorum significatane utitur. Sed horum neutrum in deum cadit; Att. xiii 19, Sulla 27.

Ch. XXXI § 78. atqui: I hardly see what force we can give to atqui here. Possibly we should read atque, as in I 16, where the best mss have atqui. We find the converse, atque for atqui, in II 41. We should then have an independent argument for providential government, based upon the analogy of human society and the qualities which it calls out in man.

si modo sunt, ut profecto sunt: 'assuming as we must their existence'. Dav. compares Lact. I 3 deus vero, si perfectus est (nam perfectus est, ut esse debet), non potest esse nisi unus; Theodoret Prov. IX 642 si δικαιο (ἀπερ οὐν καὶ δικαιο) ὁ τῶν Δαν ἤφορος, καὶ ὡς τὰ γινόμενα καὶ κρίνει δικαιο. Cf. also R. P. III 3 sinit nobis isti magni homines, ut sunt; Of. III 117 quamvis dicat Epicurus, sicuti dicit; Fam. III 64 si te fautore unus erit, sicut profecto et utetur et unus est; Lact. I 1 § 8 quod si est verum, sicut est.

societate conjunctos: see below § 154, Fin. III 64 mundum autem consent regi numine deorum, eumque esse quasi communem urbem et civitatem
hominum et deorum; Leg. 1 23 est igitur, quoniam nihil est ratione melius, eaque est et in homine et in deo, prima homini cum deo rationis societas. Inter quos autem ratio, inter eodem recta ratio est communis; Off. 1 149 communem totius generis hominum conciliatatem et consociationem colere debebimus; Plato Gorg. 508 χαίρε σοφοί καὶ συναφῶν καὶ γίνε καὶ θεοὶ καὶ ἄνθρωποι τὴν κοινωνίαν συνίχειν καὶ ἄλλαν καὶ κοσμίωτητα καὶ σωφροσύνη καὶ δικαιότητα, καὶ τὸ δυσ τοῦτο διὰ ταύτα κάσμων καλοῦσιν.

unum mundum: opposed to the countless worlds of Epicurus.

§ 79. eadem in iis quae humano in genere: cf. nn. on III 38, Leg. 1 25 virtus eadem, Themist. Or. II 27 εἶναι τὴν αὐτὴν ἀρετήν καὶ ἀληθείαν ἄδειος καὶ θεοῦ.

recti praeceptio pravice depulsio: cf. I 36 naturalem legem recta imperantem prohibentemque contraria with nn.

mentem a dis ad homines pervenisse: see on § 18, also Leg. 1 22, 24 animum esse ingeneratum a deo.

mens, fides: see on § 61.

qui convenit: so below § 87. Dumesnil on Leg. 1 35 cites a number of other exx.

augusta et sancta: cf. I 119.

quodsi inest: in opposition to the last sentence, though repeating the one before.

ab superis defluere: cf. § 18, n. Tusc. 1 66 (memoria, mens, cogitatio) sola divina sunt, nec inveniatur umquam unde ad hominem venire possint nisi a deo; Off. III 44 mentem qua nihil homini dedit deus ipsa divinius; Seneca Ep. 41 bonus vir sine deo nemo est; ib. 73 nulla sine deo mens bona est; but elsewhere we find the Stoics distinguishing between the gifts of God or nature or fortune, and the moral qualities which a man must acquire for himself, as below III 86 foll. and Hor. Ep. 1 18 haec satis est orare Iovem quae donat et auferet; det vitam, det opes, aequum mi animum ipse parabo.

deos habere majora: on this argument per viam eminentiae see Sextus I 23 ὁ νοῦς ἡμῶν καὶ εὐφάντητος ἐν τῷ μεταβάλλει τῇ αὐτοῦ φιλίᾳ ἡλθε καὶ εἰς ζύμασιν τοῦ παντὸς καὶ ὑπενόησε τινα ὑπερβαλλόντως δύναμιν νοητικήν, καὶ ἀναλογοῦσαν μὲν αὐτῷ, θείαν δὲ τὴν φύσιν, ibid. §§ 45, 46; also above § 30 sensum et rationem in ἴγιμον ἐνέσσει acriora atque majora; § 39 quanto igitur in mundo facillus virtus.

C b (4) When we confess the benevolent wisdom displayed in the universe and the heavenly bodies, and allow that these are divine, we confess that all things are ordered by Divine Providence § 80.

§ 80. cum docuerimus esse deos quorum—videremus: cf. § 39 foll. vid. is Imp. Subj. (like inessent below,) because subordinated to doc.: no statement is made as to its being the fact now, it is simply repeated as a part of a former argument.
BOOK II CH. XXXI § 80.

caelum = aethere, as in § 91 and § 101 caeli complexus qui aether vocatur, Diog. L. viii 138 ouvastos de iostin hy ekaghy periphreia in y par ïdrvai to theion.

cum magno usu: cf. cum admirabilitate § 101 and Index under cum.

C c. Providential government inferred from the consideration of the universe itself as embodying an intelligent principle first imparted to it by a creative energy §§ 81—98. (1) Meaning of the term ‘Nature’. §§ 81, 82.

Ch. xxxii § 81. eaque ab ea: if the reading is right, we have here an example of the Pleonastic Demonstrative, for which see n. on § 27 and Index.


vim participem rationis: Sch. quotes Ac. I 28 (natura sentiens) in qua ratio perfecta insit, quae ut eadem sempiterna,...quam vim animum esse dicunt mundi; eandemque esse mentem sapientiamque perfectam, quem deum appellat, omniumque rerum, quae sunt ei subjectae, quasi prudentiam quadam.

via progredientem: see § 57 and the passages quoted on seminis below.

declarantemque quid cuiusque rei causa efficac, quid sequatur: ‘nature shows plainly what she does to produce each effect and what is the end she aims at’, i.e. we see the rationality of nature both in the adaptation of means to ends and in the choice of ends. Cf. i 12.

cuius sollertiam: cf. §§ 35, 57, 85, 88, I 92, Arist. Eth. II 6 § 9 et de aeretis tyches akribostera kai ameis en istin, oster kal h physis, Paley Nat. Theol. c. 3 ‘the contrivances of nature surpass the contrivances of art in the complexity, subtlety and curiosity of the mechanism; and still more, if possible, do they go beyond them in number and variety’ foll.

seminis vim: the seed was a favourite illustration of the working of the creative principle in nature; see above § 58, and Diog. L. vii 136 (tov theon) kar' arxas kath' auton ouna trepein tin pavelos oustian di' aeros eis edos kai oster en tis geit to otrima periuchetai, outhe kai touton, stematikou loion oun to koum, apoygenwv ta tisxara stoicheia, Stob. Ed. I p. 66 oi Stроmclinov bein apofainontai pur tephkówn ede badojov eli geinei koumou emperielesphos pavelou tou stematikou loion kath' outhe ananta kath' eimarmenyn gineta. Senece enlarges on the energy of seed from another point of view (N. Q. II 6) consideremus quae ingentem vim per occultum agunt: parvula admodum semina et quorum existit in commiserura lapidum locum inventit, ut ingentia sasa distrahant; Cic. Cat. 52 omitto vim iepam omnium quae generantur e terra, quae ex foci tantulo grano aut ex...minutissimis seminis tantos truncos proceret.

condicientem naturam: on the adjectival use of the participle see Nigeliab. § 117. For the thought cf. § 128 below; Simplic. on Arist.
Categ. O γ Br. p. 78 (cited by Heinze p. 114) kataleptikēν γὰρ τὸ σπέρμα ἀνακτηρίας τοῖς οἰκείοις λόγοις καὶ ἐπιστήμα τὴν παρακείμενην ἐλευθερίαν καὶ διαμορφοῖ. Pseudo-Philo Inc. Mund. p. 506 οὐδὲν ἐκ μονοῦ σπέρματος δίχα τῆς οἰκείας τροφῆς ἀποτελεῖται σπέρμα γὰρ ἔκειν ἀρχή, ἀρχή δὲ καθ’ αὐτὴν ὁ οὐ τελειογονεῖ, as the writer proceeds to show in the case of vegetable and animal production, and hence argues that the world can never be reduced to the single fire-seed of the Stoics; and Cic. l. c. 51 terra, cum premio mollito ac subacto spartum semen exceptu, primum id occaeatum cohibet, deinde tepfactum vapore et compressu suo diffundit fœl.

partim—partim: on the Scale of Existence see above § 33.

§ 82. omnium quae sint naturam esse corpora et inane: in Epicurus' own words ἡ τῶν ἠλων φύσις σώματα ἐστὶ καὶ κενῶν (Sext. ix 333), thus rendered by Lucr. 1 445 ergo praeter inane et corpora tertia per se nulla potest rerum in numero natura reliqui. For the constr. 1α διδιδ—esse cf. Tusc. v 03 vides ut Epicurus cupiditatum generis divisierit...partim esse naturales.

quaque his accidit: Lucr. l. c. continues nam quaecumque cluent aut his conjuncta dubius rebus ea invenies aut horum eventa videbis, where Munro says 'conj. and ev. appear to have been devised by L. himself to distinguish the two kinds of ἁμβεβηκότα or accidentia', and cites Sext. Emp. x 221, as distinguishing two classes of ἁμβεβηκότα, the ἀχρύσα ἀκατάληπτα such as solidity of atoms, the οὐχ ἀχρύσα such as motion. He also quotes Plac. Phil. i 3 (Epicurus holds) συμβεβηκέναι τοῖς σώμασι τρία ταῦτα, σκῆμα, μέγεθος, βάρος. Compare Waitz on Arist. An. Post. i 2 συμβεβηκότα appellantur tum omnia quae non sunt substantiae, etiam neccessario de his prae dicantur, tum maxime ea quae substantiae ita adhaerent, ut non necessario cum its conjuncta sint, Top. i 5 p. 102 b, Grote Arist. i 412 n., Quintil. iii 6 § 36 Theodorus de eo 'an sit', et 'de accidentibus ei quod esse constat', id est per οὐσία καὶ συμβεβηκότων existimatum quaeri; ib. v 10 § 58 proprium est aut quod soli accidit, ut homini sermo, rius; aut quod utique accidit sed non soli, ut igni calfacere, Prantl Gesch. d. Logik i p. 518. Quintilian also uses the word in its grammatical sense, whence our word 'accidence', as in i 5 § 41 plurima verbo accidunt, ideoque in eo sunt solocismi per genera, tempora, personalis, modos.

nulla cohaerendi natura: 'with no natural connexion'; this seems inconsistent with what we read elsewhere, as in Orig. de Orat. c. 6 (Lomm. xvii p. 107) τῶν κινούμενων τὰ μὲν τινα τὸ κινούμενον ἐχοντα, ἀπτὴν τὰ ἄγαν καὶ ἐντὸ ἡκεος μόνος συνεχόμενα (such as hewn stones and dead wood); Achill. Tat. in Arat. c. 14 σώματα ἰσογένες λέγεται ὅσα ἐντὸ μᾶς ἡκεος ἰσογένεα παρατίθεται, οἷον λίθος ἐκλυόντος ἀπερὶ δὲ ἡκεος πνεύμα σωμάτων συνεκτικον, Sext. ix 78 foll., who, after showing that the world is ἰσογένες, a unit of which all the parts are joined by common sympathy (see above nn. on § 19), proceeds τῶν ἰσογέων σωμάτων τὰ μὲν ἐντὸ ψυχή ἐκεῖται, τὰ δὲ ἐντὸ φύσεως, τὰ δὲ ἐντὸ ψυχής καὶ ἡκεος μὲν οὐ λίθος καὶ ἐκλυόντος, φύσεως δὲ καθ᾽ ἄντο ττα φυτά, ψυχής δὲ τὰ ἱδια, Nemesius c. 2
p. 114 Matth. ζην οὖν λέγουσι καὶ τὰ πάντῃ ἄφυκα ἐκτικὴν ἔφην, καθ’ ὁ σωμ-ἐχεται ὑπὸ τῆς τοῦ παντός ψυχῆς εἰς τὸ εἶναι μόνον καὶ μῆ διαλεισθαι. From such passages it would appear that even the lowest grade of inorganic matter was unified by a principle of cohesion. But Sextus in one passage seems to exclude inorganic matter from the class of ἕωμενα (ix 78) ἕωμενα μὲν οὖν ἐστι τὰ ὑπὸ μᾶς ἔξωσ κρατοῦμενα, καθάπερ φυτὰ καὶ ζωά, and Sch. thinks that cohaerere may here be used to express organic unity. In support of this he cites §§ 87, 115, 155, Acad. i 28 omni natura cohaerente et continuata, Leg. i 24 alia quibus cohaerentem homines (which make up the human frame), Orat. ii 325 ut non adjectum aliquid sed cohaerens cum omni corpore membrum esse videatur, Sen. N. Q. ii 2 naturam corporis nulla ope externa sed unitate sua cohaerentis; compare also Leg. fr. 3 una eadem-que natura mundus omnibus partibus inter se congruentibus cohaeret ac nivitur. It seems to me however that if nat. coh. had this force, there was no occasion for C. to particularize the fragmentary nature of the substances chosen for his example: why should he not have spoken generally of wood or stone, as in the passages cited from the Greek? Perhaps we may ex-plain the difficulty thus: a fragment of earth or stone has lost the unity of the earth or rock from which it was taken, though as a part of the world, governed by laws of gravitation &c., it is still under a uniting principle. [Taking Cicero’s words and argument here, I should think he would include in ‘connected things’ not only organic unities like plants and animals, but all fitted things, e.g. the corner of a box shewing the two sides dove-tailed into one another. He instances a turf or bit of pebble, because they can be separated without impairing the utility or changing the character of either themselves or the parent mass. The unity is only one of adhesion, not of adaptation as well. The two combined he calls ‘cohesion’. R.]

ut glæbam: so. constare dicimus natura. nulla temeritas: ‘nothing at hap-hazard’, as in the fragment of stone.

Cc (2). The universe is a vast organism permeated and controlled by an intelligent nature, all the parts of which cooperate for the good of the whole. §§ 83—86.

Ch. xxxiii § 83. a terra stirpibus continetur: same phrase § 127. For the personification implied by the proposition see § 33 n., 134, and Draeg. § 230. Here however there is a special reason for its use, as C. wishes to contrast the agency of the earth with the instrumentality through which it acts, cf. below § 125 ejus summo angulo aer ab ipsis adversus pollutur.

arte naturae: see above § 81, Leg. i 26, Arist. Meteor. p. 587 Ε μοιρᾶται ἐτέχη τῆς φύσεως, Posidonius ap. Seneca Ep. 90; Theodoret Prov. c. 3.

gravidata: of course Nom. ‘impregnated’.

amplexia alat: Nægelsb. § 30 cites this as an ex. of a Latin Parti-
oiple standing for a substantival clause, 'in its bosom': perhaps it is rather 'by its embrace'.

**superis naturis**: water, air, ether, cf. § 24 foll.


**aspirationes aeris**: 'by the blowing upon them of the air', cf. below § 136 aspirantes and Lact. *vii* 3 ventorum diversa et utilis aspiratio.

**nobiliscum videt**: *Plac. Phil.* iv 13 Χρώσισσας κατὰ τὴν συνέντασιν τοῦ μεταξὺ αέρος ὅραν ἡμᾶς, γενόμενοι μὲν ὑπὸ τοῦ ὁματικοῦ πνεύματος, ὅπερ ἀπὸ τοῦ ἑγερμοκοῦ μέχρι τῆς κόρης διήκει, κατὰ δὲ τὴν πρὸς τὸν περικείμενον αέρα ἐπι-βολὴν ἐπεισίννωτοι αὐτὸς κωνοειδῆς, ὅταν ὧν ὄμογες ὃ ὁμήροι, *Diog.* vii 157 γίνεσθαι μέντοι τὸ κωνοειδὲς τοῦ αέρος πρὸς τῇ δρέα, τὴν δὲ βάσιν πρὸς τῷ ὀρφείῳ ὃς διὰ βακτηρίας οὖν τοῦ ταχύτατος αέρος τὸ βλεπόμενον ἀναγγελ-λεσθαί. In *Att.* i 3 Cic. contrasts the Stoic theory of vision (*ἐκείνως ταξί-οραμ) with the Epicurean κατ’ εἴδαλων ἐμπτώσεις. The air was equally important according to both theories, cf. *Lucr.* iv 240—323 'an image pushes before it the air between it and the eye: this air sweeps through the pupil and lets us judge of the distance of the object', 'thus the mirror and its distance from us is seen by means of its image which propels before it the air between the mirror and the eye, then when we have caught sight of the mirror, the image which goes from us to it, comes back to us but drives onward an air which is perceived before the image' *is quoque enim duplici geminoque fit aere visus* l. 274. Diogenes of Apollonia seems to have been the first to assign this importance to air as the means of producing sensation: his view is more allied to the Stoic than to the Epicurean, cf. Theoph. *de Sensu* 39 *Διαγένες δὲ, ὅπερ τὸ ἔξω καὶ τὸ φρο-νεῖν, τῷ ἀεί καὶ τὰς αἰσθήσεις ἀνάπτει...τὴν μὲν ὕσφησα χαὶ περὶ τῶν ἐγκύ-θαλῶν ἀεί...τὴν δ’ ἀκοήν ὅταν ὃ ἐν τοῖς διῶν ἀεί κυμήθη ὑπὸ τοῦ ἐξω διαβὰ πρὸς τῶν ἐγκύθαλων...τὴν δ’ ὄψιν ὅραν ἐμφανωμένων εἰς τὴν κόρην, ταῦτα δὲ μεγάλωσεν τὸ ἐντὸς ἀεὶ ποιεῖν αἰσθήσεων. For further information see Cleom. i 1 p. 4 cited on § 116, Gell. vi 16, Macrob. vii 14, Schneider *Ed. Phys.* i pp. 329—408 and notes in pi 185—367, where references are given to Arist. *de Sensibus*, Galen *de Usu Corporis* x, Euclid *Optica* &c.

**nobiliscum audit**: all philosophers (except Epicurus, on whom see Lucr. iv 522—614, *Diog.* x 53) agreed in this (see *Plac. Phil.* iv 16), but they differed as to the way in which sound was produced by air, whether it was by external air or internal air or both together (as Diogenes held), cf. Sext. *P. H.* iii 51 ἢν τὸ πνεύμα ἄκουε δ’ ἢν τὰ μόρια τῆς φωνῆς φέροις περὶ τὰ ἀκούει τῶν ἀκούσκων πνεύμα, ἢστι τὴν ἀντιλήψιν τῆς φωνῆς ἀπεργαζόσθαι. *Diog.* L. vii 158 gives the view of Chrysippus ἀκούει δ’ τοῦ
BOOK II CH. XXXIII § 83.

metac(n) τοῦ τε φαινούτος καὶ τοῦ ακούσας δέρος πληθυμένον σφαιροειδές, εἴτε κυματισμένον καὶ ταῖς ακοισ προσπίπτοντος, see Cleomedes, quoted on § 116, and Schneider i pp. 288—328.

tum noster sonat: Seneca. N. Q. ii 6 quid est vox nisci intentio aeris... linguae formata percussum? Diog. vpi 55 ἐστι δὲ φωνὴ δόρος πνευμάτων, which Theon, cited by Menage in loc., says is the generally accepted definition; Epicurus however considered voice a material substance distinct from air. Compare a curious passage in the Christian apologist Theophilus i 7 (of the spirit of God) τοῦ σωτ. ἀληθείς ἄγαθος, τούτου τὸ πνεῦμα ἀνασκεπτεί.

movetur nobiscum: Seneca attributes to air a more important part in motion (N. Q. ii 6) quid curres et motus omnis nonne intenti spiritus opera sunt? hic facit vindemerv svel cladatem currentibus.

§ 84. medium—qui est insimus: see § 116 n. and Tusc. v 69 omnia delata gravitate medium mundum locum semper expetunt, qui est idem insinus in rotundo. The things which move upwards are according to Sch. exhalations, those which move downwards rain, lightning &c., those with circular movement the stars; but if we compare § 44 and Tusc. i 40, it seems more natural to explain these movements of the four elements mentioned immediately below: water and earth move downwards, air and the earthly fire upwards, while ether, i.e. the heavenly fire, has a circular movement. Compare on the whole passage Greg. Nysa. Dial. de Anim. p. 187 τὸ γὰρ βλέψων τὴν τοῦ παντὸς ἀρμανίαν, τῶν τε οὐρανίων καὶ τῶν κατὰ γῆν θαματῶν (θαμαστῶν), καὶ ἕως, ἐκείστι ηὐντα πρὸς ἄλληλα τὰ στοιχεῖα κατὰ τὴν φύσιν, πρὸς τὸν αὐτὸν τὰ πάντα σχόπον διὰ τῶν αἵρητων κοινώνιας συμπλέκεται, τὴν πάρ' ἑαυτοῦ δύναμιν ἑκατὸν πρὸς τὴν τοῦ παντὸς διαμονὴν συνεισφέρων... καὶ οἷς ἀνεφερή ἐστιν ἡ φύσις ἐπὶ τὰ κάτω φέρεται, τῆς ἡλιακῆς θερμοτροποῦ διὰ τῶν ἀκτίων καταρρευόντης, τὰ δὲ ἐμβρύθη τῶν σωμάτων ἀνακοουφιζέται διὰ τῶν ἀτόμων λειτυ-νόμενα κ.τ.λ.

continens—continuata: merely the difference of a neuter and passive expression, as below § 117 we have both used of air.

vicissitudine eorum: cf. iii 30 foll., Tusc. v 69, Lucr. i 782 foll. This was the doctrine of all the Ionic schools, but esp. of Heraclitus, the apostle of 'Flux'. See the Introduction.

sursus deorsus: on the asyndeton in such antithetic phrases see Draeg. § 359 b b.

conjectio continetur: a pleonastic expression for conjunctio servatur or partes continentur, cf. below § 97 impetus movetur.

§ 85. aut semperiter...aut certe perdiuturna: the 1st is the doctrine of Panaeitus, the 2nd that of Stoics generally, see on § 118.

utrumvis ut sit: 'taking whichever view you please'.

classicorum navigatio...instructo exercitus: see below § 87 (which, one would think, should have followed here, the intervening arguments being rather out of place), and Sext. ix 26 foll. 'if anyone sitting on Ida had beheld the army of the Greeks in battle array, he would have understood that it was under the guidance of a rational being, and so, if anyone
saw a ship moving onwards with sails set; the same inference is suggested by the orderly movements of the stars'. Sextus (ib. 78) mentions a ship as an ex. of a body compounded ex συναρτηματα, an army as an ex. of a body ex διευθυνω, and contrasts these with the strictly ἡμωμενa such as φυτα και ζωa.

procreatio vitis: the reference to the plant and animal as exhibiting lower stages of the divine Reason is found in Sext. ib. 116. See above § 35 and passages there quoted from Fin. iv 32, v 39.

natura regatur: for constr. cf. § 4 qui haec regantur n.

§ 86. qui...semina contineat: cf. Sext. ix 103 ο κόσμος περιέχει σπέρματος λόγους λογικών ζωων, λογικός δρα ο κόσμος, and a little before αυς ας αν είσουσα την ἀμπελου γυνάρων είσαι περικτικής, τοικεία κατα περιγραφής, αλλ' οτι λόγου σπερματικοι λογικών ζωων εν αυτοι περιέχονται. See above § 81 seminis vim.

ut: 'for instance', cf. i 88 n.

dentes et pubertas: these were cited as examples of the coexistence of the lower and higher forms of life in man, cf. Posidonius ap. Diog. vii 138 των κοσμων οικείσθακα κατα νοον και πρόνοια...εις απαν αυτου μέρους διέκοστος τοι νοο, καθάπερ εφ' ημών την ψυχήν· αλλ' ηδή δε αν μεν μάλλον δι' αν δε ηττομ- δι' αν μεν γαρ εις κεκήρυκεν, εις δια των δοστών και των νεώρων δε' δι' αν δι' ας νοοι, εις δια του ηγεμονικού. Cic. however seems rather to misapply the argument: his argument here seems to be that since life appears in its lower form of φυσις or εις in parts of the human frame, therefore man himself is actu- ated by—it ought to be—'this lower life'; but he says instead 'by nature' in its highest Stoic sense. It may be questioned however whether he distinctly realized that φυσις had this lower meaning, though we catch uncon- cious glimpses of it. For the use of the abstract pubertas instead of the concrete pubes cf. Plin. N. H. xxi 97.

cui ea existant: 'in whose body they are produced', for Dat. see Roby § 1152.

Co (3). The fact that all the parts of which the universe is composed are combined as is best for beauty and utility, can only be explained as the result of intelligence. Nature exhibits a skill infinitely beyond the reach of art, but yet even art testifies to the existence and intelligence of the artist. If the orrery attests the wisdom of Archimedes, much more must the movements of the heavenly bodies attest the wisdom of the Creator. §§ 86—92.

Ch. xxxiv. seminator: see above semina contineat and § 58. The word occurs also in iii 66.

antor: only found here in Cic. though terra is called altrix nostra Tim. c. x.

sicut membræ: cf. i 34 and 100. nutricatur: the deponent form, about which Heindorf doubted, is attested in this passage by Priscian viii 14 § 77 and Nonius p. 478, where other exx. are given.
BOOK II CH. XXXIV § 86.

quodsi mundi partes natura administrantur: we have had the same thing said at the beginning of § 83 and of § 86.

*quod effici optimum potuit*: we find this admission of a necessity limiting the action of Providence, both in Chrysippus (πολῶ τὸ τῆς ἀνάγκης μεμίκθαι, on which Plutarch remarks that, if so, οὐτε κρατεῖ πᾶτων ὁ θεὸς, οὐκ πάντα κατὰ τὸν ἐκείνου λόγον διωκεῖται St. Rep. 37) and in Seneca, Prov. v 9 non potest artifex mutare materiam. See also Philo Prov. ii 74 Providentia, ut dicit Chrysippus et Cleanthes, nihil praetermissit pertinentium ad certioraum uti surremque dispensationem. *Quod si alter melius esset dispensari res mundi, eo modo sumpsisset compositionem*, Galen Us. Part. xi 14 εἴναι γάρ της λέγομεν ἁδύνατα φύσει, καὶ τούτοις μηδ' ἐπιχειρεῖν ἀλλὰ τὸν θεὸν, ἀλλ' ἐκ τῶν δυνάτων γενίσθαι τὸ βέλτιον αἱρεῖσθαι, Philodemus π. θεῶν διαγωγής col. 8 Vol. Herc. vi 53 (Zeller iv 178) 'the Stoics while they assign all power to God', ótan ὑπὸ τῶν ἐλέγχων πιέζονται, τότε καταφεύγουσιν ἐπί τὸ διὰ τούτῳ φάύκει τὰ συναπόμενα (what is fitting) μὴ ποιεῖν, ὅτι οὐ πάντα δύναται. On the Stoic theodicy generally see Zeller p. 173 foll., and compare the doctrine maintained by Leibnitz Theod. i § 8 'il demeure toujours vrai qu'il y a une infinité de mondes possibles dont il faut que Dieu ait choisi le meilleur, puisqu'il ne fait rien sans agir suivant la suprême raison'; also J. S. Mill's Theism Pt 2, where he argues in favour of the hypothesis of a benevolent Creator 'working under the limitation (*quod potuit*) of inexorable laws and indestructible properties of matter'.

§ 87. *ergo*: elliptical, 'you deny it? Then let some one show a better'. Cf. § 77 *ergo utrum ignorant*, and the elliptical force of *cui* with Imperative.

*potuisse melius*: compare the famous saying of Alphonso of Castile (A. D. 1252), 'If the Creator had consulted me, the world would have been constructed on a simpler and better plan' (than that of Ptolemy). Theory is put in place of fact, and the supporters of the theory require it to be accepted as perfect and divine. St Paul takes a different view of the existing order of nature: with him 'the whole creation is groaning and travelling together, waiting for the manifestation of the sons of God'. And a philosopher like Butler does not pretend to maintain the perfection of the order of nature, as it is at present known to us; he only asserts that we do not know enough to pronounce positively that it is imperfect.

*potuerit*: completed future indicative. *Quod potuerit* is to desiderabit what *quod potuit* would be to desiderat. Both denote what could not have taken place before the time of the principal verb. Cicero says 'any fancied improvement will be either a deterioration or an improvement precluded by the nature of things'. Poterit would be out of place here as it would denote a subsequent time. *Quod fieri non poterit, facere conabitur* would describe the impotency of a constructor: *quod fieri non potuerit, desiderabit* reproves the vanity of the critic. 'He will be regretting the absence of that, which could not possibly have been there'. R.]

*ad usum—ad speciem*: see i 1 ad agnitionem pulcherrima.
eo statu: Abl. of Quality. We often find *status* used of the order of the universe, as in the parallel passage Orat. III 178 *incoluntatias ac salutis omnium causa videmus hunc statum esse hujus totius mundi atque naturae, rotundum ut caelum, terraque ut media sit, eaque sua vi nutuque teneatur, sol ut circumferatur, ut accedat ad brumalum signum et inde sensim ascendat in diversam partem, ut luna accessit et recessu suu sola lumen accipiat, ut eadem spatia quinque stellas dispari motu cursuque conficiant. Haece tantum habent vim, paulum ut immutata cohaerere non possint, tantam pulchritudinem ut nulla species ne cogitari quidem posse ornatori.

*utrum* ea fortuitane sint: cf. Tusc. IV 9 *utrum navis statimne nos vela facere an remigare?* ib. 59 *utrum illudine non videatur aegre ferendum... an tollenda aegritudo;* Divin. II 120 *utrumigitur censemus dormientium animos per speci ipsos in somniando moveri an externa visione pulsori?* pro Quint. 92 *ea res nunc in discrimine versatur utrum possitne contra luxuriam parsimonia defendere an loc. Inven. I 51 utrumne tuum virum malis an illius; ib. II 115 *utrum copiane sit aegris... an penuria, consideratur.* See Draeg. § 158 A c, § 468 A b. This use has grown out of the original pronominal use, which we find in such passages as *Fin. II 60 utrum tandem censes? tuamne orationem tuberius auditusrum fuisses an meam?* Acad. II 71, Madv. Gr. § 452, Wagner on *Aulul. 427, L. and S. v. utrum.* The *ne* is joined to the most important word following *utrum.* There seems no occasion to make a broad distinction between the two uses, as Madv. has done; there are cases which might be assigned to either. For the neuter *ea* referring to preceding feminines, cf. §§ 7, 15 with mn.

*sensu moderante:* here used in the later sense of *‘intelligence,’ ‘self-consciousness’,* cf. *sentiens natura* § 85.

*ne—quidem:* in the milder sense as I 71, 110, 113, see Index.

*qui convenit:* see above § 79.

*signum aut tabulam pictam:* cf. Philo *Procr. I 72* (Aucher’s trans. fr. the Armenian) *status videntes statuarium intellegimus; et imaginem venustae pictam cornentes pictorem ipsum admiramur; atque navem ineiti fabricatam videntes architectum navis laudibus celebramus...quomodo non magis universorum sapientem providentiam propter constantes mundi partes sapienter ordinatam?*

*cum procul cursum navigii videris:* see above § 85, and Theophilus I 5 *τιν ἐν τρόπον καὶ πλοῖον θεασάμενος τις ἐν βαλάσσῃ κατηργοῦμεν καὶ τρέχον καὶ κατερχόμενον εἰς λυμάν* ‘infers a pilot, so we infer a pilot of the world’; and immediately afterwards he speaks in thoroughly Stoic fashion of the Divine Spirit which contains the world, as the seeds of the pomegranate are contained by the rind: also Theodoret *Provid.* II p. 500 Schulze.

*solarium discriptum:* ‘a sun-dial marked out with lines,’ see engraving in *Dict. of Ant.* under *horologium.* Solarium is properly the *horologium sciothericam* of Pliny (*N. H.* II 78), but is used as a general name for all kinds of *horologia,* as we read in Censorinus c. 23 *illud satis constat nullum* (*solarium*) *in foro prius fuisses quam id quod M. Valerius ex Sicilia advac-
tum ad rostra in columna posuit (273 B.C. according to Varro): deinde aliquanto post P. Cornelius Nasica, censor (159 B.C.), ex aqua fecit horarium, quod et ipsum ex consuetudine noscendi a sole horas solarem excepit vocari. This seems to be the only passage in which discissum is used as a distinctive name for the sun-dial, but Censorinus l.c. goes on to say, in regard to the Sicilian dial, that, quoniam ad clima Siciliae discissum ad horas Romae non conveniret, L. Philippus, censor, aliud juxta constituit; and Vitruvius IX 8 gives a full account of the way in which the lines of sun-dials (descriptiones horologiorum) are to be drawn. On the subject of ancient clocks generally see Vitri. ib. c. 9, Lewis Astron. pp. 177, foll., Beckmann Inventions I p. 135 tr.

(solarium) ex aqua = κλεψφόρα, Lewis Astr. p. 182. For constr. cf. Tusc. I 51 animum sine corpore, 116 mortes cum gloria, π 7 lectio nem sine delectatione, and above § 14 praeter naturam portentis with n. For the comparison see Philo Prov. I 42 'a piece of skilful workmanship at once reveals the worker, though he may be unseen; as in the case of him who invented an instrument for determining the time of day by the division of a circle into twelve parts', and the famous passage at the beginning of Paley's Nat. Theol. [Mr Swainson refers to the Sat. Rev. for May 15, 1875.]

artes: 'works of art,' cf. Leg. II 2 exquisitis antiquorum artibus; Hor. Od. IV 8 5 artium, quas aut Parrhasius protulit aut Scopas: it is also used for a treatise, as in Fin. IV 5 praecepta in artibus reliquerunt; Invent. I 8 neque eo dico, quod ejus ars, quam edidit, mibi mendosissime scripta videtur; see Mayor on Juv. VII 177.

§ 88. sphearam: the orrery of Posidonius is not mentioned elsewhere, but that of Archimedes is often referred to, as in Tusc. I 63 cum Arch. lunae solis quinque errantium motus in sphearam illigavit, effect idem quod illi qui in Timaeo mundum aedificavit Platonius deus, ut tarditatem et celeritate dimissimulos motus una regeret conversio. Quod si in hoc mundo fieri sine deo non posset, ne in spheara quidem eosdem motus Arch. sine divino ingenio potuisse imitari. In R. P. I 14 it is said that Marcellus brought to Rome two spheres of Arch. one of which he dedicated in the temple of Virtus, the other he kept in his own house; the former was solid, a celestial globe, such as had been previously made by Thales (Anaximander ?), Eudoxus and others; the latter was hollow, showing the movements of the planets: cf. Ov. Fast. VI 276 arte Syracosia suspensus in aere clauso (i.e. inclosed in a glass case) stat globus immensi parva figura poli; Sext. Emp. IX 114 ορόστατα δὲ τοιαύτα (νοεραί) φύσις ἐν κόσμον περιεχόμενα· ἄναγκη ἄρα και αὐτών νοερῶν ἵναι φύσιν, ύπ' ἵνα τεταγμένοι κинητὰ, ἥτις εὑρεθήσεται ἐστὶν θεος. τά γε μὴ αυτόματα κινούμενα τῶν κατασκευασμάτων βασιλευτέρα ἦστι τῶν μη τοιούτων (see above ηθος καὶ οὐκαὶ θέλωσιν &c.), τῆς γοῦν 'Αρχιμήδειον σφαίραν σφάδα θεωρουντες ἑκατομένα, ἐν ἣν ἥλιος τε καὶ σελήνη κινεῖται καὶ τὰ λοιπὰ τῶν ἄστρων, οὐ μὴ Δία ἐπὶ τοῖς ξύλοις οὐδὲ ἐπὶ τῇ κινήσει τούτων τεθητέτες, ἀλλ' ἐπὶ τῷ τεχνίτη καὶ ταῖς κινούσαις αἰτίαις. Lactantius
(Π 5) turns the illustration against the Stoic doctrine of the divinity of the stars, utrumne igitur Stoicus si astrorum figurae in illo aere pictas effectasque vidisset, suo illo consilio moveri diceret ac non potius artificis ingenio? Inest ergo sideribus ratio ad peragendos meatus suos apta, sed Dei est illa ratio...non ipsorum siderum quae moventur. See also Claudian Epigr. 18 (translated by H. Vaughan Π 57 Grosart), Fabric. Bibliogr. Gr. IV c. 14, p. 455, Schick Die Himmelsgloben d. Arch. Hanau 1846, Lewis Astr. p. 194.

Britanniam: just made known by Caesar's conquest, cf. Catull. xi 11 horribilesque ultimosque Britannos; Hor. Od. i 35. 29 ultimos orbis Britannos; V. Ec. i 67 penitus toto divinis orbe Britannios; Paneg. v 12 (Caesar) alium se orbem terrarum scripsit repellerisse.

barbaria: see 3 81 n. and below § 126. It seems to be used here not as a collective, but as a common noun.

Ch. xxxv. Archimedes plus valuisse: much as Comte affirms that we have come to see in the heavens the glory, not of God, but of Kepler, Newton, Laplace &c.

praesertim cum: 'although', see n. on cum praesertim i 26. It is strange that this use is still unnoticed in the Lexx.

multis partibus: 'by many degrees', not, as Kühner, 'in vielen Hinsichten', cf. below 92, 102, and i 24 minima ex parte 'in the slightest degree'; Fin. Π 108 omnibus partibus majores 'infinitely greater'; ib. v 91; Acad. Π 82 duodeviginti partibus major 'eighteen times as large', things being viewed as fractions of a whole, not as themselves units.

§ 89. Accidum: b. 170 B.C. The lines, as probably those quoted in 111 67, are from his Medea (Nonius p. 90, 8) not the Argonauti, as asserted by Priscian in the passage cited below. See Boissier Le poète Attius, Par. 1856. Cic. says he often conversed with him (Brut. 107), which shows that his death must be put later than 104 B.C. (Teuffel). Quotations from his Atreus are given in 111 68, from uncertain plays ib. § 41 and § 90.

divinum ac novum vehiculum: made by the advice and with the aid of Pallas (Palladia compacta manu Sen. Med. Π 365), who placed in it a vocal plank from the sacred oak of Dodona and afterwards made it a constellation, see below § 114 and Eratosth. Catast. 35. nov. cf. Sext. ix 32 τήν 'Αργώ πρωτόπλοιν τι σκάφος παρελθήσας, and Apoll. Rhod. (who was much admired by the Romans and translated by Varro Atacinus, a contemporary of Cic.) Argon. iv 315 οi δ' ύψοι νήσοι κατ' ἀκροτάτης ἐνικοῦ τηλείων εἰς μεναύας δε ἐν ἀπόστα πόλεων οἰκίαις ἄγαλμα ηῶν φόβοι οία τε θυρας ὀσφύμενοι πόντον μεγακύτευος ἐξοικονομας. ου γάρ πω ἀλλας γε πάροι φοβη νῆς ἱδονο. 

tanta moles labitur: six of the lines are given with some alterations and in different order by Priscian de Mtr. Terent. 15. Omitting tanta moles labitur he begins with the last three lines aut forte—caelum eruit, and then gives frembunda ex alto—reflat. In three places his readings have been generally preferred to those of the mss, viz. reflat for profuit, spiritu for strepitu, undanti in for undantes veniant. On a 4th reading
vomit for <i>eruit</i> see n. below. As regards the poetic quotations found in Cicero’s philosophical writings, Heine (de Font. Tusc. Disp. p. 4) considers that they are all taken from his authorities. We know that it was usual with the Greek philosophers, especially the Stoics, to relieve their graver disquisitions with quotations, cf. <i>Tusc. </i>26 <i>fuisse saepe credo, cum Athenis esse, in scholis philosophorum...animadverbes igitur...versus ab iis admissi ieratione...Philò et proprio numero et lecta poemata et loco adunquebat. Itaque...studiosa equidem utor nostris poetis; sed sicubi illi defecerunt, verti etiam multa de Graecia, ne quo ornamento in hoc genere disputationis carere<sup>1</sup> Latina oratio. Galen (Plac. Hipp. et Plat. p. 315) ἐμπλήγας ὁ Χρυσεππος Ἐλων τὸ βιβλίον ἐπὶ ὁ Ὀρμικῶν καὶ Ἑνωδεῖων καὶ Στηριγμείων Ἐρμεῖδοκλείων τε καὶ Ὀρμικῶν, ἐτι δὲ πρὸς τούτοις ἐκ τῆς τραγωδίας καὶ παρὰ Τυρταίου καὶ τῶν ἄλλων ποιητῶν...ταύτα κατὰ λέξιν ἐπιφέρει ταύτα μὲν φύσιν οὖν ἀδελθογλίαν ἐτι γραφότω, τυχόν δὲ καὶ γραμμάτων διδασκαλίαν βουλομένων στίχοις ὅτι πλείστους ὑπὸ τὸ αὐτὸ διαιόμη τάξιν, followed and so we are expressly told of Posidonius (Galen Hipp. Plat. p. 399) <i>ρήσεις τε ποιητικάς παρατίθεντα καὶ ἱστορίας παλαιῶν πράξεων μαρτυροῦσας ἀλε lēgei</i>. [Add Sen. Ep. 8 § 8, 9 § 21, 108 § 8. J. E. B. M.]

<strong>frembunda: </strong>the dashing of the oars and rustling of wind in the sails.

<strong>sonitu et spiritu: </strong>so Ennius <i>Achill. </i>fr. 2 <i>oritur imber sonitu saevo et spiritu ‘with loud roaring and a mighty blast’. </i>

<strong>vertices vi suscitat: </strong>the favourite alliteration in <i>v. </i>

<strong>ruit prolapsea: </strong>‘throws itself headlong (as it rides the billows), scatters and blows back the sea’. 

**dum—dum :** ‘one while—another while’. Sch. refers to Catull. <i>lxxii 45 dum intacta manet, dum cara suis est, </i>which Quintil. <i>ix 3 § 16 explains as quoad—usque eo, but which need not have any other than the ordinary force of dum. </i>[Cf. Plaut. <i>Truc. </i>i 21 dum habeat, dum amet; ubi nil habeat, alium quaestum coeplt; Fleckesen in <i>Jahrb. </i>(1870) p. 648. J. E. B. M.] It is more to the point to compare the compounds <i>nondum, nullusbis, vixdum, nihildum, quidum, primumdum, etc.,</i> and the colloquial use with Imperatives, like <i>agedum. </i>“It is originally the Acc. of <i>dies</i> (an old form for <i>dies, </i>cf. noctu diueque, interdies) and is therefore a compression of <i>dium </i>meaning ‘a while’.” Wagner on <i>Trin. </i>98. I believe however that there is no exact parallel to the present. The indefinite Adjective <i>qui </i>(<i>quod</i>) is rarely found in classical Latin except in connexion with <i>si, ne, num: </i>Tacitus has <i>aliudve quod belli commercium (Ann. xiv 38), </i>and some edd. read <i>alia quae </i>below § 115, and <i>aliam quam </i>above § 18.

**interruptum nimbum: **‘a broken cloud’, i.e. not melting into the sky, but with what Ruskin calls ‘the threatening and terrible outlines of the thunder-cloud’, ‘deep as the slope of some dark hollowed hill’, ‘like globes of rock tossed by Titans’. (Mod. Painters v 127, 141.)

**globosos turbines:** ‘circling water-spouts to arise smitten by the warring billows’. So Pacuvius in his fine description of a storm (Orat. <i>iii 157 </i>undique omnes venti erumpunt, saevi existiment turbinis, fereit aestu
pelagus. Cf. also Lucr. vi 423 foll. where the προσηρήστηρ is described, esp. l. 426 nam fit ut interdum tamquam demissa columna in mare de caelo descendat, quam fleta circum fervescunt gravius spirantisibus incita flabris; this is called (l. 436) versabundus turbo, see Munro in loc.

nisi quas terrestres strages: ‘unless (=or it may be) the sea is preparing devastation for the land’.

evertens specus—eruit: ‘upheaving the caverns from under their roots in the depths of the stormy sea, throws up the stony mass to the light of heaven’. The old eds. of Priscian give vomit, which Day. prefers, as Longinus (Syl. 3) has noticed the phrase πρὸς οὐρανὸν ἐξεμείν, but, as Heind. has pointed out, it would be extremely incongruous here, as spoken of Triton; and, in point of fact, three of Keil’s four ms give eruit and the fourth meruit.

quam cernit ignotam: by a sort of attraction the epithet of the Subject of the principal clause (ignota natura) is attached to the Object of the subordinate clause; and is thus made more prominent, ‘which he sees without knowing it’; cf. Verr. iv 27 vasa quae pulcherrima apud eum viderat. See for the converse attraction (Subject of subordinate changed into Object of principal clause) 1 23 n.

juvenibus visis: [The spectator catches sight of the rowers bending forwards and backwards, and the oars flashing and splashing in the sea. At first it reminds him of a school of dolphins with their quick movements and dashes of spray: afterwards he recognizes that they are juvenes. R.]

From the following explanation of the simile (primo aspectu inanimum, post incipit suspicari) we should have expected juvenibus to be followed by a more distinct explanation of the real nature of the ship. The same opposition is suggested by the dubiatus primo here; it is taken up by idemque, where deinde would perhaps have been more natural, but possibly the Greek was ὃ δὲ αὐτῶς, implying the inconsistency of the two views. In all probability the original gave a long quotation, describing how the spectator gradually awoke to a right appreciation of the fact before him, which C. has cut down with his item alia muta.


‘sic’ ait ‘inciti’: so I propose to read for the sicut inciti of ms. Thus perfrenunt will refer simply to the dolphins; the behaviour of the Argo...
is compared to that of dolphins at play; but reading *sicut* we seem to want either ships or men, as Nom. to *perfemunt*. The former is impossible, because there is only one Argo, and the latter are not the subject of observation. The construction also of *idem* is simplified by reading ait. It is difficult to see the point of *sic aut*, proposed and abandoned by Ribbeck and adopted by Ba.; if it is intended to prepare the way for other similes (concealed under *item alia multa*), that is a prosaic and cold-blooded way of introducing the comparison. For other readings see critical note. *Incitit* has the penultimate long, like *concita* in Lucr. π 266.

*rostris perfemunt*: 'so the gay dolphins, as they dart forward, cleave the sea with their snouts and make a whizzing sound' (lit. whiz through the sea). * Aristotle* (*Hist. An. ix 48*) speaks of the extraordinary swiftness and activity of the dolphin *épátaon dòkéi einaí zéwv táxustan...* because *mepán- lountai de plóion megalón iatón*, so Pliny *N. H. ix 8* *ocior volutere, ocior telo*, and a little below *pro v#ce gemitus humano similis...rostrum simum*. *perfum*: of the rushing sound (*bódos*) caused by the prow, as it cuts through the waves, cf. *Tusc. v 116* *fremuntur cumurantur maris*, and Philostr. Jun. *Imag. xi* (of the Argo) η δικταύονα τοι ποταμοι ναυς ὑπὸ πολλὰ τῷ βοθίῳ τῆς εἰρείας.

*Silvani melo*: the Romans, identifying Silvanus with Pan, attributed to him the reed (καλάμωφθογγα παίζων *Ar. Ranac*, 229), see Tib. π 5 30 foll. *garrula silvestri fīstula sacra deo, fīstula cui semper decrēci harundinis ordo*. Probably it is Orpheus with his lyre, not the *naucitus canthus*, which is here compared to the only music known to the shepherds. Lachmann suggests in his note on Lucr. τν 581 (where stringed instruments as well as pipes are assigned to the Fauns), that the vocal plunk from Dodona is here alluded to. We are told of its giving prophetic warnings (as in *Orphicos 1160* ἐκ δ' ἀρα κολης ὁσοι ἐπιθρομέουσα Τομαρίας ἐκλαυς φηγοί, ἦν ποθ ὧν 'Αργυφός τοιμαί ἐμβλάσα Παλλά), but not, I think, of music proceeding from it. Both are mentioned in Philostr. *Imag. x ii* ἢ ἵν ἵν τέμνει τὸ μόριον τοῦ Πόντου, καὶ θλεγει τὴν θαλαταν 'Αρφενος ἄδων, ἢ ἰδακόει, καὶ ὑπὸ τῇ φθίς καίει ὧν Πόντος...τρόπας δὲ ὑφήρωσαι τῇ νη ὀφνήν αρχαίων, δ' ἐκά Δωδώνης ὦ Ζεὺς ἄγκων ἐς τὰ μαντεία ἐχρήα, and Philostr. Jun. *Imag. xi* ὁ ἑμελέλει προσφέρων τοῖς τῆς κιθάρας κρύμασι ἦν ὀρθή τιάρα, ὧ τε ὑπὲρ τῆς ιερᾶς ἐκκλης φηγοῦ δράκων.

*cantum et audïtum*: 'a song and a hearing'. Georges in his Lexicon compares the use of *auditus* in Vegetius *Mil. 3. 7* p. 73 *status emittere audïtum*, and Apul. de *Mund. p. 15* *auditus dum ad aures venit*.

*refert*: the uncertainty as to the Subject of the verb makes its meaning also uncertain. If it is Orpheus, as suggested by the quotation from Hyginus under *naucitico cantu*, it might mean 'responds', 'takes up the strain'; and then *et audïtum* might be added to facilitate the connexion with *ad aures*. Perhaps however *Argo* is the Subject: if the words were *A. refert melos*, this might mean 'recalls the strain', but *consimile cantum* is hardly consistent with such a use of *refert*. Possibly again the reference
BOOK II CH. XXXV § 89.

is to an echo, or to the wind bringing back the sound as the ship passes on.

§ 90. *inanimum quiddam*: but this scarcely agrees with the present order of the lines, which begin with describing a living creature *tanta moles*—reflat. Perhaps these lines ought to be placed after *eruit*, as by Priscian. The thought is better carried out in Dryden’s *Indian Emperor* Act i, quoted in the Eng. trans. of 1741, where a fleet is compared first to strangely shaped clouds, then to trees with wings growing out of them, then to floating palaces &c.

*conturbaverat*: ‘had puzzled them’: cf. § 1 *conturbor*.

*muneris*: cf. 1 19 n.

Ch. xxxvi. *nunc autem*: used like *nunc* and *nunc vero* to introduce the actual fact in contrast with an imagined case; see Dumesnil on *Leg.* i 55, and *Tusc.* ii 45, iii 2.

§ 91. *terra sita in media parte mundi*: the prevailing view as opposed to that of the Pythagoreans, who supposed the earth to revolve with the other heavenly bodies round a central fire, and of Aristarchus of Samos (fl. 280 B.C.) who anticipated Copernicus and was charged with impiety by Cleanthes ὁ κυβὼν τοῦ κόσμου τῆς θεᾶς (Plut. *Fac. Lun.* p. 923 A).

*animali*: see above § 18 n. also § 136, iii 34, *Tusc.* i 41. The reading *animabili* is compared by Mu. on *Tusc.* iii 12 (*Adv. Crit.* p. xxxviii) to other corruptions *naturabilis, morabilis, aequabilis* for *naturalis* &c.

*perceptum usu*: *Fin.* iii 5 *rhetorica, dialectica, grammatica, geometria, musica, quamquam Latine ea dici poterant, tamen, quoniam unum percepta sunt, nostra ducamus*, and Quint. v 12. Cic. speaks in the same hesitating tone as to the word *aer* in *Acad.* i 26. Pliny mentions *spiritus etaelum* as older synonyms (*N. H.* ii 5 and 38). Sch.

*tritum*: cf. *Divin.* ii 11 *sortes satis sermone Latino tritus est*.

Pacuvius: B.C. 220–130, a native of Brundisium, nephew of Ennius. The lines quoted are assigned to the *Chryses* by Ribbeck, by others to the *Dulorestes*, an adaptation of the *Iphig. in Aul.* of Euripides. The former play relates to the fortunes of Orestes and Pyladæ after they have taken refuge from the pursuit of Thoas with Chryses, the priest of Apollo. The lines are thus arranged by Ribb. *hoc vide circum supra quod complexus continet terram...solisque exito capessit candorem, occasu nigret, id quod nostri caelum memorant, Graii perhibent aesthara*: quicquid est hoc omnia animat, format, alit, auget, creat, sepelit recipitque in seae omnia, omniumque idem est pater, indidemque ea quae oriuntur de integro aequo eodem occidunt. The next fr. is evidently closely connected, *mater est terra*: *ea parit corpus, animam aether adjugat*.

*hoc quod memoro*: probably by *lapesus memoriae* on the part of Cic. for the *id quod memorant* in Varro *L. L.* v 17.

*quasi vero non Graius*: ‘just as though the speaker were not a Greek’. ‘But he talks Latin’. ‘Quite so, only we are supposed to be
hearing him talk Greek’ (lit. ‘if we were not listening to him as speaking in Greek’).

**idem**: Pacuvius shows this (that the language is understood to be Greek).

**Grajugena**: Ribbeck and Bothe suppose this to be the answer of Orestes to Thoas from the *Dulorestes*, and place a comma after Graj.; Sch. makes Graj. an epithet of oratio (cf. Zumpt § 257); Heind. makes it the Abl. agreeing with istoc. For the constr. *aperit de see Herenn.* p 31.

§ 92. **ex aethere igitur**: for resumptive use of igitur see r 44 n.

**multis partibus**: see § 68 n. Epicurus and his disciples held that the sun was really no larger than it looks to us, see Diog. x 91, Lucr. v 565, Cleomedes Π 1. His true diameter is 882,000 miles, i.e. more than 111 times that of the earth (Herschel § 358). For the views of other ancient astronomers cf. Acad. Π 83 (solem) mathematici amplius duodenaviginti partibus confirmant majorem esse quam terram; Macrob. S. Sc. i 20 Eratothenes in libris Dimensionum sic ait, mensura terrae septies et vicies multiplicata mensuram solis efficit. Posidonius dicit multo multoque saepius multiplicatum solis spatium officere. Cleomedes professes to give the calculations of the latter. In r c. 10 p. 52 we have his calculation of the circumference of the earth from the length of the arc between Rhodes and Alexandria, which he finds from observation of the elevation of the star Canopus to be $\frac{1}{8}$ of the circle. The length of this arc is taken as 5000 stades; hence the earth's circumference will be 240,000 stades and its diameter 80,000 stades. Again in Bk Π 1 p. 79 we find the words ὑποθύμενοι μυρωπλασίων εἶναι τῶν ἡλιακὸς κύκλων τοῦ τῆς γῆς κύκλων, ἀπὸ τοῦτον ὁμοίους δείκνυσι διὶ μυριάδων τριακοσίων εἶναι δεὶ τῆς τοῦ ἡλίου διάμετρον, which Delambre paraphrases as follows (1225), 'Posidonius calcule que le diamètre du Soleil doit être de 300 myriades de stades et que ce diamètre est au moins 10,000 fois aussi grand que celui de la terre'. But we have seen that the earth's diameter was calculated by Posidonius at 80,000 stades, therefore the Sun's diameter should be, not 300 myriads (3,000,000), but 80,000 myriads (800,000,000) of stades. Delambre would have been saved from falling into a gross blunder if he had noticed that immediately below (pp. 81, 83) the phrase ἡλιακὸς κύκλος manifestly refers, not to the circumference, but to the orbit of the Sun. It is there stated that the Sun's diameter is $\frac{1}{20}$ of his orbit (Archimedes makes it $\frac{1}{15}$). According to this proportion the Sun's orbit should be 750 x 3,000,000 stades = 2,250,000,000, which is not so far from 10,000 times the supposed circumference of the earth. It would appear therefore that Posidonius made the Sun's diameter 37½ times larger than that of the earth. Cleomedes had heard (φασὶ) that Hipparchus made it 1050 times that of the earth.

**reliqua sidera**: Cleomedes (Π 3 p. 96 foll.), who mostly follows Posidonius, argues that many of the fixed stars must be as large or even larger than the sun.
ita prosunt ut—confagrare terras nesse sit: as Heind. remarks, the thought is very incompletely stated; the main use, to sustain life, is not referred to, and only one alternative consequent on their change of position, the danger of being burnt up, is mentioned (cf. the story of Phaethon Ov. Met. 11), nothing being said of the danger of being frozen, if they were moved further away.

mota: the gender is suited to the sidera in the preceding sentence; 'nempe a metonymia ad proprium vocabulum reuid oratio, quippe cum de loco dicatur' Allen.

confagrare a tantis ardoribus: cf. § 138 calsecit a spiritu, Acad. II 105 a sole collucet, Draeg. § 230.

C c (4). The absurdity of attempting to explain the universe as the result of the fortuitous concourse of atoms. §§ 93, 94.

Ch. xxxvii § 93. hic ego non mirer: 'and here must I not wonder', cf. pro Balbo 9 hic ego nunc cuncter sic agere?

vi et gravitate: hendiadys, as below commissuras et artus § 150.

qui existimaret: most mss have existimat, of which Mu. says 'Indicativo Epicurus contentius demonstratur' praef. p. 9, comparing Madv. Fin. iii 73. I think however that the more general and indefinite Subjunctive suits better with the preceding esse quemquam qui, and with the following isti; and have therefore followed Ba. in reading existimaret.

innumerabiles—formae litterarum: for the comparison of atoms to letters cf. Arist. Gen. et Corr. 1 2 ει των αυτων πραγματι και καιροι γενεται γραμματων 'so Democritus makes opposite qualities arise out of the same atoms'; Lucr. i 196 ut potius multis communia corpora rebus multa putes esse, ut verbis elementa visidemus; ib. 912 'a slight change in the arrangement of atoms may produce a great difference in the compound' quo pacto verba quoque ipsa inter se paulo mutatis sunt elementis, cum ligna aequi ignes distincta voce notemus; II 1013 foll. where see Munro. The illustration suggested by the double use of the terms elementum and stoicixion was due to Plato, of whom Diog. L. (iii 19) tells us, that he first employed the word in a philosophical sense, stoicixion 'having meant nothing else but the letters of the alphabet, till Plato applied it to signify the elements of natural bodies', cf. Bentley Phalaris ii p. 116, and Theaet. 201 E there cited, ἐγὼ γὰρ ἐδόκουν ἀκούειν τινων ὅτι τὰ μὲν πρῶτα οἰκονερεῖ στοιχεῖα, ἐξ ὅν ἡμεῖς τα συγκειμένα καὶ τῶλα, λόγον οὐκ ἔγεν, ib. 202 D τὰ μὲν στοιχεῖα ἀγνωστα, τὰ δὲ τῶν συλλαβῶν γένος γνωστόν, and the discussion which follows; Arist. Metaph. iv 3 p. 1014 a στοιχεῖα λέγεται ἐξ ὅν συνειται...οἷον φωνή στοιχεῖα ἐξ ὅν σύγκειται ᾣ φωνή καὶ εἰς ᾗ διαμείται ἐγχατα...ὁμοίως δέ καὶ τὰ τῶν σωμάτων στοιχεία λέγουσιν οἱ λέγοντες, εἰς ᾗ διαμείται τὰ σώματα ἐγχατα, where see Bonitz; ib. vi 17 p. 1041 b ἰ δὲ συλλαβῇ ὁμί ἐστί τὰ στοιχεῖα, οὐδὲ τὸ βατύ τῷ β καὶ ι, οὐδ’ ἵ σάρξ πῦρ καὶ γῆ· διαλυθέντων γαρ τὰ μὲν οὐκέτι ἐστίν, οἷον ἵ σάρξ καὶ ἵ συλλαβῇ, τὰ δὲ στοιχεῖα ἐστι, καὶ τὸ πῦρ καὶ ἵ γῆ. Sext. i
BOOK II CH. XXXVII § 93.

99 τάξιν δὲ λεγόν ἡμῖν πρῶτον περὶ τῶν στοιχείων ἢς ἐν τὰ πάντα καὶ τοῦ ἀνθρώπου (τοῦ γραμματικοῦ) συνίστηκε, ὡς ἀντίθετα, ὡς τῶν εἰς τὰ πάντα καὶ τοῦ ἀνθρώπου συνάντηκε, των εἰς τὰ πάντα καὶ τοῦ ἀνθρώπου συνάντηκε. ὡς τῶν εἰς τὰ πάντα καὶ τοῦ ἀνθρώπου συνάντηκε. ὡς τῶν εἰς τὰ πάντα καὶ τοῦ ἀνθρώπου συνάντηκε.

Laert. VII 56. There is an argument resembling this, in Div. I 23 asperea temere pigmenta in tabula oris lineamenta effingere possunt: num enim Veneris Coae pulchritudinem effingi posse aspersione fortuita putas? Sus rostro si humi. A letteram impresserit, num propertia suspiciari poteris Andromacham Ennii ads esse posse describi? On the order in which the different nouns and adjectives of the sentence are brought together see Mayor on 2 Phil. 66.

unius et viginti: we generally reckon 23 letters in the Latin alphabet, but Y and Z were considered foreign letters and only used in Greek words. Quintil. I 4 § 9 speaks of X as the last letter of the alphabet. [X is the last letter of one of the graffiti of Pompeii, see Rhein. Mus. N. F. XII 246. J. E. B. M.]

annales Ennii: a history of Rome from its foundation in hexameter verse. In it he not only often succeeds in imitating Hómeric simplicity, but still more frequently makes his lines strikingly echo the solemnity of the Roman character. Mommsen.

quod—valere fortuna: the relative is explained by the following clause, as in I 2 quod...trahimur, and quod continet, I 38 quod quid absurdius, II 7 quod solutis, II 17 § 24 quod Cleanthes docevit...qua sunt vis in vici; in such cases it gets to be used like the Greek σ in Thuc. II 40—'whereas', of Madv. Fin. I 67, III 59.

§ 94. quem ad modum asseverant: most of the edd. put a mark of interrogation at the end of the sentence, understanding quem ad modum to mean 'how absurdly'. I do not know of any exact parallel for this use; and, in any case, it is open to the objection of Heind., that after such sentences as 'hic ego non mirer', 'hoc qui existimet', quibus graviter satis Epicureae sententiae absurditatem expressit, frigide hanc denuo inferri interrogationem. I think therefore that he is right in regarding this as an example of attraction, in which the proper principal verb 'est perfectus' is drawn into the subordinate construction of the relative clause. He illustrates it from Off. I 22 quoniam...ut placet Stoicis, quae in terris gignantur ad usum hominum omnium creari,...in hoc naturam debemus sequi, where creari is similarly put for creantur. Holden in his note cites this passage, and also R. P. I 58 si, ut Graeci dicion, omnes aut Graios esse aut barbaros, vereor &c.; cf. too Verr. IV 40 tum primum, ut opinor, istum absens nomen recepisse (for receptis); Orat. III 3 hic, ut saepe vidit...esse judicatum (for est judicatus); Leg. I 55 quia si, ut Chius Aristó dixit, solum bonum esse quod honestum esset,...valde a Xenocrate disreparet, where bonum esse is put by attraction for b. esset; and in Greek Xen. Anab. VI 2 § 18 εις ἑώς, ἀνὴ τοῦ αὐτοματοῦ χρείας ἔκοινος πλοῖου, ἐκαυστός τόιος, ὅτι κλέανβρος μέλλει ἢ τείνει, where either τοῦ or τοῦ is superfluous. See Heind. on Plato Soph. 263 παντὰς, εἰς τούτης, ἡ τοιαύτη σύνθεσις, το ἐπιμάχος γνώσει καὶ ὑμισάς, δόντος τε καὶ ἀληθεὶς γίγνεσθαι (for γίγνεσθαι) λόγος ψευδής, also Krüger Untersuchungen §§ 164 and 166. [Add Böckh K. Schr. VII 67, Porson and
SCHRÄER ON EUR. OR. 1035, K. F. HERMANN ON LUCIAN HIST. CONSER. 23 P. 149. J. E. B. M.]

non colore, non qualitate: as Lucr. proves II 737 nullus enim color est omnino materia corporis, neque par rebus, neque denique dispar foll., where Munro quotes Epicurus ap. Diog. x 54 τας διάμοοις μοθέλαθι ποιητα τῶν φανομένων προσφέροντα πλην σχήματος καὶ ἑώραν καὶ μεγάλους καὶ δύσι ἦ ἄνθροπος σχήματι συμφόρησε. qualitas invented by Cic. (Acad. i 24), as ποιήσις by Plato (Theat. 182 a).

non sensu praeditis: Lucr. ii 865 nunc ea quaer sentire videntem cumque, necesse est ex insensibus tamen omnio constitare principiis constare.

innumerabilia mundos: cf. i 53 and 67.

in omni puncto: 'within each moment'. The preposition has the effect of dwelling on the thought. Exx. are given by Dumesnil on Leg. i 18.

et multo quidem: the mas add faciliora, on which Madv. says miram orationis formam: was minder schwer ist und zwar weit leichter! 'Faciliora' additum ab alio quin non intellexerat 'et multo quidem' pertinere ad 'minus operosa'. For similar interpolation see i 86 id esse mortale after si quid sit. For et quidem see above §§ 27 and 41.

caeli ornatum = κόσμον, cf. below §§ 115, 118, Acad. ii 119 (no power can cause) ut hic ornatus umquam dilapides occidat.

qui locus est proximus: acc. to the programme in § 75, but Balbus has been engaged upon it for some time.

C c (5). Custom blinds men, or they could not fail to acknowledge that the wonders of nature are the work of God. §§ 95–98.

§ 95. Aristoteles. On this passage see Bywater J. OF Phil. vii p. 82 foll. He considers that C.'s debt to Arist. begins sooner (quodsi mundum &c.) and compares Philo Leg. Al. i 32 p. 107 M. ἐξήρασιν oi πρώτοι πας ἐνοχαμεν τοι θεοι. εἴδοι δε δοκοῦσιν ἄριστα φιλοσοφεῖν ἱδασκαλίαν ἃς ἀπο το κόσμον καὶ τῶν μερῶν αὐτῶν καὶ τῶν ἐναρχιουσών ὑνάμεων ἀνθρεψιν ἐπωφοίμεθα τόν αἰτίον. ἀσπερ γάρ εἰς τις οἷς δεδομομενημένη οἰκίαν ἐπεμελοι προτυλαίος στοιχίῳ ἀνθρώπινοι γυναικεῖαι, τοῖς άλλοις οἰκοδομημένη, έννοιαν λήφτησιν τον τεχνήτα—οὐ γάρ ἄνευ τέχνης καὶ δημομοργίαν νομεί τῇ οἰκίᾳ ἀποτελεθηκαί, τὸν αὐτόν δὲ τρόπον καὶ ἐπὶ πόλεως καὶ νησίς καὶ παντὸς εἰζήτος, ἀμείβοις καὶ κατασκεύασμας—οὗτο δὲ καὶ εἶσιν τοις ἄσπερ εἰς μεγίστην οἰκίαν ἢ πόλιν τόδε τὸν κόσμον καὶ θεσαμόων οὐρανοῦ ἐν κύκλῳ περιπολοῦντα καὶ πάντα ἐντὸς συνεληφότα, πλάνης δὲ καὶ ἀπλανεῖς ἀστέρας κατὰ ταύτα καὶ ἀσάντως κινούμενους ἐμελεῖς τὲ καὶ ἑνορμικὸς καὶ τὸ παντὶ ἀφελίμονος, γών δὲ τὸν μεσαίτατον χάρων λαχωθήν, ἐδατος τε καὶ αἰερός χύσεις ἐν μεθορίᾳ τεταγμένας...Ἀναγίνω δήσειν διήθει ταύτα οὖκ ἄνευ τέχνης παντελοῦς διδομομομημενοῖς, ἀλλὰ καὶ ἣν καὶ ἦτον ὁ τοῦτο τοῦ παντὸς δημομοργῶς ὁ θεός. Bernays Dial. d. Arist. p. 104 foll. compares it with the short abstract in Sext. Emp. ix 20, noticing that the grounds for belief there given are not fear or utility, but on the one side the soul's original presentiment of a
Divine being and on the other the beauty of the external universe: and so here, the cave-dwellers are supposed to have an original belief in God, which is afterwards confirmed by the wonders of nature. On the Dialogue περὶ φιλοσοφίας from which Cic. is quoting, see I 33, II 42, 44.

sub terra: probably suggested by the famous simile in Plato’s Rep. vi, perhaps also by traditions of Troglopytes. So Porphyry, in his de Antiro Nympher, treats Homer’s grotto of the nympha, ἀντρον ἑρωείδως ἧρωειδες ἱπαμ Ἡμωβάν (Od. xiii 103 foll.), as an allegory of the world: διὰ μὲν οὖν τὴν ἐκκόσμον καὶ ἐκτόσιον ὁ κόσμος, διὰ δὲ τὴν του ἑιδον συμπλοκῆν καὶ διακόσμησιν καλὸς τὸ ἐστι καὶ ἑρωείας, adding that caves were therefore regarded as sacred places, and that the descent into a cave was customary in the initiation to certain mysteries.

illustribus: ‘well-lighted’, cf. Columella i 6 balnea occidenti aestivo adventatur, ut sint usque in vesperam illustria. Arist. describes his cave-dwellers as civilized in their habits and therefore fitted to appreciate the beauties of nature; not like the Troglopytes of Herodotus. For the Abl. domiciliis Dumesnil (Leg. iii 22) cites Verr. ii 136 omnibus oppidis regnavisse, ib. iv 117, Ann. vi 673 lucis habitabant opacis. Perhaps however it is better to take it as an Abl. of Attendant Circumstances.

qui beati putantur: ‘who are reckoned well off’. Cf. pro Tullio 19 deinde iate paterfamilias Ariticous beatus, where Beier cites 2 Cat. 20 aedificant, tamquam beati, Off. ii 69 qui se locupletes, honoratos, beatos putant; cf. Hor. Od. iii 7 3, Sat. ii 8 1; so μάκαρ and εὐδαίμων in Greek. Observe the quadruple relative subordination qui—qua—quibus—qui.

fama et auditione: cf. Fam. viii 1 accipere auditum, and above § 89 cantum et auditorum.

exire atque evadere: I have followed Allen in transposing exire: see Critical Notes.

efficientiam: C. uses the same word Fat. 19 causas cohibentes in se efficientiam naturalem.

quod est efficiens: more usual would have been qui efficeret or efficientis.

cognovissent—cognovissent: see Index under ‘Repetition’ and n. on § 145 vidit cognoscat.

τὸ το αὐτὸ: ‘a thing over which motion takes place requires a preposition, or is put in the ablative with totus, the whole over which being conceived as one place at which: the action is performed. Cf. toto corpore 138, 139, 141, and see Roby § 1083.

in omnis aeternitate: cf. above §§ 36 and 51.

qua cum viderent: the construction of the sentence is si essent qui habituissent—neque tamen existisset...accipissent autem...deinde exire potuissent...cum vidissent solem, ejusque cum magnitudinem tum efficientiam cognovissent...cum autem terram nox opacasset, tum caelum cerneissent...qua cum viderent...arbitrarentur. It is plain that the apodosis would regularly have been introduced by a demonstrative clause haec cum vid. instead of quae.
and so Lamb. proposed to read; but Heind. replies that C. has ended the sentence as though he had begun with *fingamus esse hominem*, and Bywater L. c. thinks there may have been a similar anacoluthon in the original Greek, such as we find in Plat. *Rep.* vii 519 B ἦν εἰ διαλαγην περισσότερον.

Ch. xxxviii § 96. *eruptione*: Georges cites from Seneca *o cavernis maris ignium eruptio*. [Add *N. Q.* ii 56 § 2 o nubibus subita lucis eruptionem; ib. 54 § 2 (quicquid in aera sicci fumosique pervenit) si inclusum est, fugam quaerit et cum sono evadit ac modo universam eruptionem facit; modo per partes. J. E. B. M.] Posidonius, as we learn from Seneca’s *Nat. Quaest.*, paid much attention to volcanic phenomena. There was an eruption of Etna about the time when Cic. wrote this book, cf. Liv. ap. Serv. on *Geo.* i 471 tanta flamma ante mortem Caesaris ex Aetna monte defluxit, ut non tantum vicinas urbes, sed etiam Rheginæ civitates afflaretur; and the famous description of an eruption of Vesuvius in Plin. *Ep.* vi 20. For Aetna see Lucr. i 722—725, vi 680 foll., *V. Aen.* iii 570, and the anonymous poem on the subject.

*nemo hominem homo*: instead of the adjective *nullus* the substantive *nemo* is frequently (regularly by Cic. according to Reid *Sulla* 25) joined to other substantives denoting male persons, cf. above § 81, where *nemo opifex* is joined with *nulla ars*, Zumpt § 676, who cites *neminem poemat Tusc. v* 22, *nemo pictor Off. iii 2*, *homo nemo Fam. xiii* 55: for other exx. of the last see *Verr. i* 15, v 65, *Font. 29, Sulla* 25, p. Dom. 107, *Att. iv* i § 5, *Ter. Ad. 259, Heo. 281, Eun. 549, Phorm. 591, Holzæ *Synt. pr. scr. Lat.* i 343, 409, *Sanct. Minerv. iv* 4 n. 37, *N. D.* i 78 (where the note should be modified in accordance with the present). [*Acta Semin. Erlang.* (1880) ii 51. J. E. B. M.]


*quaean species*: exclamatory, ‘how beautiful would it appear’, cf. below § 100 *quaes species universi*

*asiduitate cotidiana*: cf. above § 45 and iii 20, *Tusc. i* 38, *ad Herenn. iii* c. 22 *sola exortus, cursus, occasus nemo admiratur, propterea quod cotidie fiunt, at eclipses solis mirantur quia rare accident...docet ergo se natura volviri et utitata re non essucitarit; novitates vero et insigni quodam negotio commoveri; Seneca N. Q. vii 1 *ita compositi sumus ut nos cotidianae, etiam si admirationes digna sunt, transeant; contra minimarum quoque rerum, si inolita proderint, spectaculum dulce fiat. Hic utaque coetus astrorum, quibus immensi corporis pulchritudo distinguetur, populum non convocat. At cum aliquid ex more mutatum est, omnium vultus in caelo est. Sol spectatorem, nisi cum deficit, non habet. Nemo observat lunaem nisi laborantem...Adeo naturale est magis nova quam magna mirari; Lucr. ii 1030—1039 (of a first sight of the heavens) uta haec species miranda fuisse, quam tibi jam nemo fessus satiante videndi, suspiceris in caeli dignatur lucida
templa; Gregor. Hom. 26 in Evang. quotidiana Dei miracula ex assiduitate viderunt; August. Serm. 242, Enarr. in Psalm. cx 4, Trench Miracles Intr. c. 2. [Philo Vit. Mog. i 38 (v 114 M) says that miracles are θεοῦ παλύρα, while His great marvels are the orderly works of nature, sun moon and stars, air earth water, living creatures and plants; but familiarity has bred contempt: ἀλλὰ ταῦτα μὲν, πρὸς αὐτοῦν ὡσα θαυμάσια, κατα-

§ 97. hominem: in pregnant sense, possessed of human feeling, human understanding, as Att. π 2 Ἡράδης σι homo esset, eum potius legeret; Leg. π 16 quem astrarum ordines...non gratum esse cogunt, hunc hominem omnino numerari qui decet?

conexa et apta: see above 37, 47, and π 4 apta inter se et cohaerentia.

quanto consilio gerantur, nullo consilio assequi possumus: cf. § 115 non modo ut fuerent ratione eguerunt, &c.; Leg. π 16 neminem esse oportere tam stulte arrogantem, ut ea quae vis summa ingenii ratione comprehendant, nulla ratione moveri putet.

an cum—videmus—non dubitamus; cum autem—videamus—
dubitamus? on the form of the sentence see § 17 n. Madv. changed videamus to videmus. I think C. may have preferred the Subj. in order to avoid a hexameter ending, and that there is no objection to it, if we understand it to mean ‘although’.

horas = horologium, see above § 87, and compare Orat. 200 videt oscillantem judicem...mittentem ad horas (i.e. sending a messenger to see the time), Petron. 71, Mayor on Juv. x 216 and Plin. Ep. iii 1 § 8. Nägelsb. § 12 2 cites this as an instance of a concrete plural used to express the science which treats of the things referred to, or the art which uses them, or the instrument of the science or art (cf. above n. on are § 87); e.g. Fin. i 72 (an ìlle) se, ut Plato, in musicia, geometricia, numeris, astrarum conderet? quae et, a falsis rebus profecta, vera esse non possunt, et, si essent vera, nihil afferrent; N. D. iii 74 tum haec cotidiana, sicae, venena (this is the reading of all the mss, peculatus, testamentorum quaestiones, where sicae and venena stand for their employment, ‘assassination’, ‘poisoning’. For the elaborate mechanism of some of the horologia see the account of one made by Ctesibius in Vitru. ix 8.

impetum caeli moveri: ‘the whole sweep (compass) of the heaven revolving’, cf. Lucr. v 200 quantum caeli tegit impetus ingens, which Munro translates ‘all the space, that the vast reach of heaven covers’, and says in his nn. there and on iv 416 (despectum praebet sub terras impete tanto, a terris quantum caeli patet altus hiatus) that impetus denotes size, a meaning ‘which seems to be derived from the primary meaning of force and vehemence’. He compares vi 186, v 913, Caesar B. G. iii 8 in magno impetu maris atque aperto side by side with c. 9 in
vastissimo atque apertissimo Oceano. In Vitr. viii præf. 3 solis impetus seems to mean no more than solis vis: there is a difficult use in the Brutus of Attius quoted Div. i 44, cum jam quieti corpus nocturno impetu dedi, where some take it ‘at nightfall’, others ‘during the nightly revolution’. Moser (ms. n.) cites Manil. 34 quis unquam…tantos cursus conficiere potuit quam celeriter Ca. Pompeio duce tanti belli impetus navigavit?, where C. contrasts the rapid movement of a single vessel with the delays which would naturally attend the sailing of a great fleet: Halm translates ‘Kriegsturm’, but I am not sure that the idea of vastness is not here too the prominent one. In the present passage, if we take impetus in the ordinary sense of ‘the rush of heaven’, there would be an unnecessary repetition in the use of moveri afterwards, as in conjunctio continetur § 84 and R. P. vi 18 caeli stellifer cursus acuto movetur sono.

cum celeritate: cf. § 59 moliendum cum labore, 55 cursus cum admirabili constantia, below § 142 and Madv. § 257. cum summa salute: cum here expresses the result, see above § 80 inesse cum magno usu, and Index.

excellenti: Baiter on Tusc. iii 3 states that the Abl. in i is regularly found in Cic. in the case of adjectives, or participles used as adjectives.


§ 98. remotæ subtilitate: cf. remoto joco Fam. vii 11.

oculis quodam modo: cf. 99 vi, ut animis, sic oculis videre possemus, 161 licet animis, tamquam oculis, lustrare terram.

Ch. xxxix. ac principio: resumès § 91 principio terra sita &c.

locata in media sede: cf. Orat. iii 176, Acad. ii 122, Tusc. i 68, R. P. vi.

ipsa in sese nutibus suis conglobata: ‘gathered into a ball by the natural gravitation of all its parts’; cf. Orat. iii 178 terra ut media sit, eaque sua vi nutuque teneatur, below § 117 astra se et nius suo conglobata continent et forma ipsa sua momenta sustentant; § 116 (of the sea) medium locum expetens conglobatur; Plato Phædo 109 A πέπεισμα…έι ἦσθον ἐν μέσῳ τῶν οὐρανῶν περιφέρης οὐσία (ἡ γῆ) μηδὲν αὐτῷ δεῖν μήτε δέρος πρὸς τὸ μῆ πεσεῖν μήτε ἄλλης ἀνάγκης μηδεμίας τουαίτης, ἀλλ' ἵκαιν εἶναι αὐτὴν σχέσιν τὴν ὑμωνόμητα τοῦ οὐρανοῦ έαντώ πάντω, καί τῆς γῆς αὐτῆς τὴν ισορροπίαν ισορρόπουν γὰρ πρᾶγμα ὀργὸν τινὸς ἐν μέσῳ τεθέν αὐξ ἔξει μᾶλλον οὗτο δέ νυσσωμὲν κληθῆναι, ὁμοίως δ' ἐξανίκησι μενεί, Arist. Cael. ii 14 § 9.

vestita floribus: cf. just below riparium vestitus, and § 132 montes vestiti.

insatiabili varietate: Act. force, ‘ever new’, ‘of which we are never tired’; apparently used in this sense by Cic. alone. It occurs below § 155, and Hort. fr. 45 caeli signorum admirabilem ordinem insatiabilemque pulchritudinem. For the Act. force of Adjectives in -bilis see patibilitis iii 29
penetrabilis, genetabilis (Lucr. i 11 Munro), dissociabilis, terribilis, illudibilis &c., and Nägelsb. § 117.

fontium gelidas perennitates: the Adj. in agreement with the concrete noun is changed into the corresponding abstract governing the Gen. Here the epithet makes the figure very bold, ‘the cool unfaillingness’ for ‘the unfailing coolness’; so below liquores pilucidos for ‘liquid transparency’, cf. above § 26 liquor aquae, and see Nägelsb. § 74. The plural of the abstract denotes a plurality of instances: Draeg. § 7 gives a list of all that occur, the greater number being from Cic., see above § 92 magnitudinibus, iii 46 immortalitatisbus, also Index under ‘Abstract’.

concavas amplitudines: I have followed Ba. in adopting Heind.’s correction of the ms altitudines. However hastily he may have been writing, it is hardly likely that Cic. should have repeated the latter word, where variety is so evidently required. Otherwise alt. is found in this connexion in Div. i 97 cum ad infinitam altitudinem terra deseclisset; 2 Verr. iv 107 spelunca conversa ad Aquilonem infinita altitudine.

argenti venas: so Xen. Vect. i 5 speaks of φλέγ ρυγωρίδος.

vim marmoris: see I 54 and ii 25.

§ 99. qui lapsus: ‘what flights of birds’; cf. Consol. fr. 6 castos leni quodam et facili lapsu ad deos pervolare ‘with an easy gliding movement’, Div. i 106 (of the eagle) praepetibus pennis lapsaque volantem; Phaenom. 480 emergunt alite lapsu e terris volucres; Div. i 17 (of the stars) certo lapsu spatioque foruntur; so labor often as in Æn. v 216, vi 202.

pecudum—silvestrium: opposed as vicures and ferae before.

immanitatem efferari: cf. i 62 n.

stirpium asperitate vastari: ‘to be overrun with weeds’, esp. brambles, thistles &c.; cf. Geor. i 152 subit aspera silva lappaque tribulique. Stirpes used improperly for plants, as above § 36, see Madv. Fin. iv 13. There seems no reason to give it the meaning of ‘shrubs’ here (L. and S. s.v.): it is distinguished from arbores Fin. v 33, Phil. ii 55.

§ 100. quae species universi: ‘how glorious when viewed as a whole!’ (cf. § 96 quae nam species); univ. opposed to partial views of its islands and coasts, just as we have terra universa § 98.

orarum: coasts viewed as bounding the land; litorum: as bounding the sea.

beluarum: not felt to be incongruous with the following inhaerentium (shell-fish); cf. i 101 where it is used of the ibis and the cat.

mare litoribus alludit: it is curious that in almost every passage where the verb alludere is read, the mss waver between alludit, elidit, allidit, sometimes alivit, cludit or claudit, e.g. Topica 33 solebat Aquillius... quaerentibus quid esset litus, its definire ‘qua fluctus alludenter’: hoc est, quasi qui adolescentiam florem actatis; ... translatione utens discededbat a verbis propriis rerum ac suis. The comment here shows that the word must be either alludo or eludo, as the others would not be used metaphorically. The same derivation is given in Quintil. v 14 § 35, where Spalding
reads *litus quae fluctus eludit*. L. and S. support this reading here, in the sense of ‘cease to play’, but the only authority for such a meaning is Donatus speaking of the end of gladiatorial games; Georges gives a more possible sense ‘playfully running out on the shore’. Gesner on Colum. iv 20 prefers the reading *alludit* in these passages, and quotes Isidorus *Etym. dictum* *litus* *qua fluctus eliditur*. For other exx. see Plin. *H. N.* xxvi 22 *Tripolium* in maritimis nascitur saxis ubi alludit unda; *Ov. Met.* iv 342 in adludentibus undis summa pedum taloque tenus vestigia tinguìt; Statius *Theb.* ix 336 extremis alluduntque aequora plantis; *Seneca Oedip.* 266 pater *Neptune, qui fluctu brevi utrimque nostro geminus alludis solo*; *Catull.* lxiv 66 *ipsius ante pedes fluctus salis alludebant*; *Avienus Descr. Orb. T.* 121 *insula qua Cyprian fluctus madet allundent*; and the difficult passage in *Min. F.* 3 (mare) eti non canis spumosisque fluctibus exabit ad terram, tamen crispa torosique. *Ibidem* erroribus delectati perquam sumus, cum in ipso aequoris limine plantas tingeremus, quod vicissim nunc appulsus nostris pedibus alluderet, fluctus nunc, relabens ac vestigia retrahens, in sese resorberet. If we may assume that the same word is used in all these passages, I think there is none so appropriate in all as *alludo*; the metre forbids us to think of *alluo, cludo* or *clavo*; *elido* is too strong, and *eludo* does not suit the quotations from Statius and Minucius. Sch. (*Opusc.* iii 333) thinks the reading *eludit* may have had its origin in the old form of *ludo* (*aludo*): Mu. supposes the reading *eludit* to have arisen from *aludo*, a repeated consonant being frequently dropped, as in *malem* for *mallem* above § 2.

*terrarum appetens*: cf. Plin. *N. H.* xi 103 § 250 *appetere dexterae osculis*; for the thought, *Eurip.* fr. 839 = Dind. (Athen. p. 599 f.) ἥμιν δεῦρον γαία…δραδὶ δ’ ὅ σεμνὸς οὐρανὸς πληροῖμεν δημιουργεῖν εἰς γαῖαν Ἀφροδίτης ὑπὸ. ῶττω δὲ συμμερίζοντο ἐν ταύτιν δῶο, φύσιν ἤμιν πάντα καὶ τρέφοντο ἅμα; *Theod. Procid.* p. 508 Sch. *βιτᾶν* τῆς διάλογου τῆς πρὸς τῆς χίρουν φιλιαν. In such expressions we have a reminiscence of the *philia* and *φίλος* of Empedocles. *Keble* has something like it in the *Christian Year*, 2nd Sunday after Trinity, ‘Still as the surging waves retire, they seem to gasp with strong desire; such signs of love old Ocean gives, we cannot choose but think he lives’.

*una ex duabus conflata*: ‘the two elements seem fused into one’, a metaphor from the smelting of metals, cf. *Lig.* 34 *consensus conspirant et paene conflatum; Invent. ii 8 ex his duabus sicuti familiaris…unum quandam est conflatum genus*; *Cael.* 12 *monstrum ex contrariis cupiditatisibus conflatum*. The reference is to the continuity and interchangeability of the elements, on which see § 84 and § 117 *aer mari continuatus et conjunctus est…aeither cum aeris extremitate conjugitur*.


distinguitur: ‘shows the contrasted hues of day and night’, i.e. part of the atmosphere is in darkness while the other part is illuminated by the sun’s rays; hence as a whole it is parti-coloured. Sch. compares *Ov.*
BOOK II CH. XXXIX § 101.

Met. xv 189 nec color est idem caelo cum lassa quiete cuncta jacent media, cumque albo Lucifer exit clarus aquo.

isque: pleonastic Demonstrative as in § 102, cf. § 27 ea et ipsa n. and Index.

tum fusus—tum concretus—tum effluens: there are thus three metamorphoses of air: it is rarified and becomes ether (cf. § 84), or it thickens and becomes cloud and water, or it is agitated and becomes wind, cf. Div. ii 44 placet Stoicis sos anhelitus terrae qui frigidus sunt, cum fluere coeperint, ventos esse; cum autem se in nubem induerint (they under certain circumstances produce lightning), Tusc. i 43, Sen. N. Q. iii 12 ventus est fluens aer.

sublime fertur: cf. n. on § 44 in sublime ferri.

facit varietates: the Stoic goes too far in saying that the air causes the changing degrees of cold and heat; it only tempers them. annuas is here used in the same sense as anniversariis in § 97.

Ch. xi. a domiciliis altissimus: the preposition is justified by the preceding ultimus which merges with alti in thought.

coercens caeli complexus: cf. above § 58 (mundus) omnia complexu suo coercet.

determinatio: apparently a term borrowed from the art of landsurveying, see Grom. Vet. 244. 14, 202. 16.

cum admirabilitate: cf. cum salute § 97 and Index. On aether see i 37 n.

Cod (2). The sun, moon and planets. §§ 102, 103.

§ 102. cujus magnitudine multis partibus terra superatur: see above § 92 nn.

binas reversiones: cf. § 49, Lucr. v 614.

quarum in intervallo: 'during which', lit. in the interval (between the extreme points) occupied by these returns, 'he is at one time contracting, as it were, the face of the earth in gloom, at another restoring it to gladness'. For the metaphorical use of contraho, suggested by the contracted brow and pinching cold ('makes it peak and pine'), see Leg. ii 38 cantus tum remittit animos, tum contrahit; Lucr. v 1219 cui non animus formidine divum contrahitur ('shrink into itself' Munro). For the positive statement of a negative idea in sol contrahit, see sol opacit § 49 n.

§ 103. major quam dimidia pars terrae: the actual diameter of the moon is 2160 miles, rather more than 1/7 that of the earth, and her bulk about 25 of the earth (Herschel § 404). Anaximander and Xenophon are said to have made the moon 19 times larger than the earth (Stob. Eccl. i c. 26, Lact. iii 23); Epicurus of course held that nihilus furtur majore figura quam nostris oculis qua cernimus esse videtur (Lucr. v 577): the Stoics generally made it larger than the earth, Stob. l.c. and Plin. H. N. ii 11 non posset totus sol adimi terris intercedente luna si terra major esset quam luna. Posidonius is said to have shared this view (Stob. l.c.), but Zeller, Hirzel
(p. 193 n.) and Diels (Doxogr. p. 68 n.) are agreed in thinking this a mistake; as Cleomedes, who confesses that he for the most part follows Posidonius (ad fin. τὰ πολλὰ ἐκ τῶν τοῦ Ποσειδωνίου έλεγματα), agrees here with Cic.: 'in the moon's eclipse it is seen that the breadth of the earth's shadow (through which she passes) is twice the moon's diameter,' from which we may infer that her diameter is half that of the earth. We may even find a parallel to major, which looks as if it ought to have had a paulo or aliquanto before it; but in Cleomedes the earth's diameter, which is the measure of that of the moon, is thus given, δῆ τὴν διάμετρον αὐτῆς πλέον ἕκτῳ μισθῶν εἰσι, 'by the calculation of Eratosthenes who made its circumference 250,000 stades.' Cleom. ii 1 p. 80.

isdem spatiis: the zodiac. For the Abl. of Place cf. § 95 toto caelo and Index.

subjecta: 'in conjunction,' έν συνόδε, lit. 'placed under,' i.e. interposed between the earth and the sun.

opposita: 'hiding,' lit. 'put in front of.' Cf. Div. ii 17 solis deflectiones, item lunae praedicuntur in multos annos ab iis qui siderum motus numeris persequuntur...vident ex constantissimo motu lunae, quando illa e regione solis facta incurrat in umbram terrae, quae est meta noctis, ut eam obscurari nesusse sit: quandoque eadem luna, subjecta atque opposita soli, nostris oculis ejus lumen obscuravit; R. P. i 25 solem lunae oppositum solere deficie Thaletem primum vidiisse ferant, et just above, certo illud tempore fieri cum tota se luna sub orbem solis subjicisset; Plin. N. H. ii 11 foll. The Epicurean explanation is given by Lucr. v 751 foll.

e regione: 'in opposition,' lit. 'in a line with,' 'according to the direction of'; cf. force of rego in derigo, surgo, &c.

incitabantur—retardabantur: repeats § 51.

C d (3). The Constellations as described by Aratus. §§ 104—115.

§ 104. maxima multitudo: Plin. H. N. ii 24 Hipparchus...ausus rem etiam deo improbad, adnumerare posteris stellas ac sidera ad nomen expugnere. He is said to have counted 1080: Pliny himself has no scruple in telling us that 1600 had been distinguished by astronomers, when he wrote.

ita descripta distinctio est: 'the grouping of which is so clearly defined,' cf. § 15 siderum omnium distinctionem; and Phaenom. 160 nam quas sideribus claris natura polivi et vario pinxit distinguens lumine formas, has ille astrorum custos (the astronomer) ratione notavit, signaque signavit caelestia nomine vero: these are opposed to the stars which could not be grouped so as to distinguish them.

ex notarum figurarum similitudine nomina invenerint: 'from their resemblance to familiar objects.' So Vitr. ix 5 § 4 quae figurata formataque sunt siderum in mundo simulacra natura divinaque mente designata, ut Democrito placuit, exposui; Plin. N. H. ii 3 esse innúmeras ei (mundo) effigies animalium rerumque cunctarum impressas,...rerum argumentis indicatur; quoniam inde deciduis rerum omnium seminibus
BOOK II CH. XL § 104.

innumeræs in mari præcipue ac plurumque confusis monstrificæs gigántur effigies; praeterea viús probatione, alibi plaustri, alibi ursi, tauri alibi, alibi literæ figura &c. But Manilius i 457 warns against looking for too close resemblance, tu modo corporeis similès ne quaere figuras...linea designat species...satis est si se non omnia celant; and Sext. Emp. v 96, confuting astrology, asks 'Why should one born under Leo be brave or under Virgo beautiful?' These names were merely given for the sake of convenience in teaching. There is no connexion between the things', τι γὰρ δομον ἔχωνον ἄρτηρ οἱ ἐπὶ ἀρτέρες διατότες δε' ἄλληλων, ἣ δρακόντως κεφαλῆς οἱ πίντρα; Ambros. Hex. iv 15.

(§ 110). atque ita dimetata—appareat. I have ventured to transpose this clause, which, as Heind. had observed, is quite inappropriate in the place where it stands in the mss. There is nothing corresponding to it in the passage, which C. is there translating. We may compare it with another passage thus translated by C. (Phaenom. 302 foll.) ut nemo cui sancta manu doctissima Pallas sollertem ipse dedit fabricæ rationibus artem, tam tum dare cætus sortos possit orbes, quam sunt in caelo divino numine flesi &c. dimetata: mss have demetata, a form which appears not to be found elsewhere. The correction was made by Gronov. on Liv. viii 38 locum castris dimetari jussit. In § 155 Orelli's mss all have dimetati (dep.) except V which has demetati.

tantis descriptionibus: 'these grand configurations'.

Ch. xlii. me intuem: cf. i 17.

Arati eis: 'I will make use of the verses of Aratus, those, I mean, which you translated'. The reading of the mss was changed into Arateis by Walker; but, if Cic. had used that form, I think he would simply have said utar Arateis tuis; as he calls his own verses by this name, Div. ii 14 nostra quaedam Aratea a te pronuntiata sunt, and Leg. ii 7 sicut in Arateo carmine orsi sumus. Aratus, a native of Soli in Cilicia, fl. towards the end of the 3rd century B.C., spent the greater part of his life at the court of Antigonus Gonatas, king of Macedonia, who is said to have suggested to him to translate into verse the Φαυνώμενα and Εὔοστρον of the astronomer Eudoxus, a pupil of Plato often cited by Aristotle. We possess two poems, or two parts of one poem, by Aratus, the Φαυνώμενα, which contains a description of the constellations, and the Διοσθεσία, borrowed from Hesiod and Theophrastus, which treats of prognostics of the weather. Both were translated by Cic., who is however by no means extravagant in praise of his author, cf. R. P. i 22 sphaeræ omnem ornatum et descriptionem sumptam ab Eudoxo multis annis post, non astrologiae scientia, sed poetica quaedam facultate versibus Aratus extulit. Yet this mediocre poet had the honour of being quoted by St Paul (Acts xvii 28), translated by Cicero, Germanicus (the adopted son of Tiberius, not, as Sch., Domitian, cf. Teuffel R. L. § 270), and Festus Avienus in the 4th cent. A.D., and commented on by the great astronomer Hipparchus, who wrote a treatise in three books, contained in the Uranologia of Petavius,
pointing out the errors of Eudoxus and Aratus; thus he says p. 173, ἦνρω ὁ πλείστος καὶ χροσμμακτός διαφωνοῦσα τὸν "Ἀρατον πρὸς τὰ φαινόμενα, 'I determined to correct his mistakes', and by a host of others. Ovid (Am. i 15 16) says of him cum sole et luna semper Aratus erit, and Maximus Tyrius considers him equal to Homer. We possess about two-thirds of C.'s translation of the Phaenomena besides the fragments which are given here. Of the Prognostica a few lines are quoted in other parts of C.'s works. The great orator seems to have been somewhat vain of his verses; according to Plutarch (Cic. 53) he boasted of writing 500 lines in one evening; he quotes a long passage from the De Consulatu in Div. i 17, from the Marius in Leg. i 2, a translation from Homer in Div. ii 63, besides shorter quotations elsewhere. Mention is often made of his poems in his letters to his brother; thus in ii 16 he is uncomfortable under Caesar's criticism; in iii 1 we see him vainly trying to work himself up to the effort of a poem on Caesar's conquests, abest ἰδίονοικεύομαι. The greater part of his poetry was written before he was twenty, but two of the most important poems, that on his Consulship and that on his own times, were written between the years 61 and 54 B.C. Though Juvenal (x 120), Quintillian (xi 1 § 24), Tacitus (Dial. 21), and Seneca (Exc. Contr. iii pr. 8) speak slightlying of his poetical faculty, yet Plutarch (l.c. 2) tells us that he enjoyed a high poetical reputation, till it was thrown into the shade by his orations (like Scott's poetry by his novels), and he certainly led the way to the didactic poetry of Lucretius and Virgil, cf. Patin Poésie Latine ii 415—478. The former indeed studied him carefully, as is shown by Munro i p. 99: C.'s translation 'shows much spirit and vivacity of language, though its poetical merits cannot be compared beside those of Lucretius. Yet the latter...moved, it may be, by his general admiration for the man, had made this youthful production one of his models of style, as may be demonstrated, not by one or two, but by twenty manifest imitations of the few hundred lines still existing'. Examples of this are shown, as to rhythm p. 104, alliteration p. 106, and in the notes on i 287, 486, v 619, 692 &c. Those who are interested in the Stoical argument will be apt to complain of C. for foisting in a quantity of his own lines, which to us appear very insignificant; but it must be remembered that the Romans were without any regular catalogue of the stars, and that just at this time there was a growing belief in astrology, i.e. in the possible influence of the celestial groupings on the fortunes of men. The reader should have a celestial globe or map before him in order to understand what follows. We cannot be sure that the outlines given in our maps correspond with those of Aratus, so as to help us, for instance, to determine the meaning of the word obetipus in § 107, but any map will show the relative positions. There is a very interesting illustrated ms of C.'s translation of the Phaenomena in the Harleian Collection (no. 647) of the British Museum, of which a full account is given by Ottley in the Archaeologia, vol. 26. He assigns it to the 2nd or 3rd century, judging
mainly from the illustrations, but Mr E. M. Thompson of the Museum tells me that the ms itself cannot be older than the 9th century, though the illustrations are evidently copied from originals of a very much earlier date. In dealing with this part of my subject, I have continually felt the want of a really learned and philosophical history of the constellations, which should examine the various theories propounded as to their origin. It does not speak well for the present position of English science or scholarship, that it should be possible for a book to appear in 1882, revised by a well-known astronomer and displaying a long list of distinguished names as subscribers, in which it is seriously asked ‘Could anything be more apparent than that this sign (Virgin) was invented by the patriarch Seth to teach the miraculous birth of Christ, and that it was so regarded by all his descendants through the world?’ (Moses and Geology p. 423, ed. 3.)

admodum adulescentulo: probably in his 17th year. assidua:
cf. § 96.

cetera labuntur—feruntur: translated fr. Aratus Phaen. l. 19 foll. o1 μὴν ὀμώς πολέμες τε καὶ ἄλλας ἄλλοις ἄντροι (al. λότες, which suits better C.'s labuntur and Germanicus' vaga) οὐρανοὶ ἔκοντα πάντων ἢμαρτα συνέχεσ αἰτ. These are the ἄντροτα spoken of in l. 17, to which is opposed in l. 21 the unmoving axis, αὐτὸρ ὁ γ’ οὐθ’ ὄλιγον μετανίσσεται ἢλλα μαλ’ αὐτῶς ὄξων αἰνὲν ἄρῃ κεν.

noctesque diesque: Munro remarks on the trochaic rhythm of this line (Catull. p. 153).

§ 105. extremusque adeo—polus: ‘and just the tip from off (i.e. of) the double axis is called the pole’ (i.e. ‘the two ends of the axis are called poles’); Arat. 24 καὶ μὲν πειραίωσι δῶν πόλοι δύο πέτοραθεν. Cardo is strictly the pivot on which a thing swings (κράδαινε), cf. German. Arat. 19 axis at immotus semper servavit librataque tenet terras et cardine firmo orbem agit, Colum. 1 1 § 4 (Hipparchus prodicti) tempus fore cum cardines mundi loco moverentur: here it is used for the axis itself, as in Varro R. R. i 2 § 4 caro caeli; unless we take it ‘the extreme point, starting from the pivot on either side, is called the pole.’

polus: a technical term borrowed from the Greek, cf. pseudo-Arist. Mund. 2 § 4 δὲ δὲν (πόλων) εἰ νοσαμεν ἐπεκενμένην εὔδειαν, ἂν τινας ἄξωνα καλοῦσι, διάμετρος ἐσται τοῦ κόσμου, μέσην μὲν ἔχουσα τὴν γῆν, τοὺς δὲ δύο πόλους πέταρα. It is used by Varro (ap. Gell. 11 10) for the Arctic and Antarctic circles; circulos ait in caelo circum longitudinem axis septem esse, e quibus duos minimos, qui axem extimum turgent, πόλων appellari dicit; and so by Vitruv. 11 1 § 2 caelestem volvitur circa terram per axes cardines extremos...unum in summo mundo ac post ipsas stellas septentrionem, alterum sub terra in meridianis partibus; ibique circum eos cardines orbiculos (whorls) perfectis, qui Graece πόλοι nominantur.

dicitur esse: used for simple dicitur, as below dicitur esse Helice, and § 109 dicitur esse Bootes.

Arctoe: cf. Homer II. xviii 487 (who speaks only of one Bear) "Αρκτών
BOOK II CH. XLI § 105.

θ' ἦν καὶ "Ἀμαξάν ἐπικλῆσθαι καλέουσιν, ἢ τ' αὐτὸν ἐπιβίβασι καὶ τ' Ὄρισσα

Cynosura: 'the dog's tail', probably suggested by the circular sweep of three of the stars and then applied to the whole constellation. This and the following line are quoted in the Acad. II 66, where C. compares probable reasoning to the vaguer guidance of Helice, demonstrative reasoning to Cynosura. For a different application compare Milton's lines 'where perhaps some beauty lies, the Cynosure of neighbouring eyes.' Thales is said to have been the first to introduce the knowledge of the Lesser Bear into Greece from Phoenicia.

altera dicitur esse: for the rhythm cf. § 107 verum tempora sunt, and three consecutive lines in Phaenom. 172—174 Proper Aquarius, Exiguus qui, E multa tamen; also Munro p. 103 'we find in Lucr. hundreds of instances in which the first two feet are marked off from the rest of the verse...with two dactyls, as Omnia denique sancta, Quippe potentia cum, Vertice Palladis ad'.

Helice: the name is explained either from its revolving round the pole or from the screw-like curvature of the line connecting its stars; see Ideler u. d. Ur sprung d. Sternnamen pp. 4—10. For the common myth see 'Callisto' in Dict. of Biog. According to Aratus they were two nymphs who nursed the newborn Zeus in Ida and were rewarded by being translated to heaven.

totis noctibus: so just below § 108 and tota aestate § 130; for the use of the Abl. with totus to express duration of time, see Plin. xviii § 230 (ova gallinis) subjicitus aestate tota, Suet. Claud. 44 exercitatum doloribus nocte tota, Roby § 1184, 1185, and cf. above § 95 n. on toto caelo.

septem triones: thus explained by Varro L. L. vii 74 triones boves appellantur a bubulcis etiam nunc maxime cum arant terram...a terra terriones, unde triones: Gellius ii 21 says Aelius gave the same derivation, but that the word was no longer in use: Naevius, quoted by Isid. Orig. xii 1 § 30 (fr. 1. 66 Ribb.) has trionum hic moderator rusticus. If we accept this explanation, the constellation was compared to seven oxen treading the corn and going round and round the threshing-floor, an entirely distinct conception from that of the wain with four stars representing the wheels and three the pole, called by Ennius temo, by Ovid plaustrum. Varro's etymology is of course absurd. A more probable explanation is that given by Max Müller (Lect. ii 364), who connects trio with the Sanscr. tara, our 'star', and the Homeric rēpea (II. xviii 485); see Curtius Gr. Et. § 205. Supposing the existence of two homonymous words, one meaning 'star' and the other 'ox', the identification of the two would be exactly parallel to the identification of the two meanings of the Sanscr. rikhas, 'bright' and 'bear': the 'seven bright stars' were converted into 'seven
bears; and by the time the word had acquired its Greek form ἀρετός, the older meaning ‘bright’ was entirely forgotten, see M. Mü. l. c. p. 359 foll. The secondary form septentrio may be compared with the sing. quadriga.

§ 106. similiter distinctis: ‘similarly grouped’, lit. ‘dotted about’. Just below magis distincta seems to have another force ‘more marked, clearly defined’.

hac fidunt: the passage in Aratus is as follows (l. 36 foll.): καὶ τὴν μὲν Κυνόσουραν ἐπίκλησιν καλέσαν, τὴν δὲ ἐτέρην Ἑλίκην. Ἑλίκη γε μὲν ἄδρας Ἀχαϊοι ἐν ἀλλ τεκμαίρονται ἵνα χρῆ γνατές ἀγνείν, τῇ δὲ ἀρα Φοῖνικες πίσων περιώσει θάλασσαν. Ἀλλ’ ἂ μὲν καθαρή καὶ ἐπιφράσασθαι ἑτοίμη, πολλῆς φανομένη Ἑλίκη πρότις ἀπὸ νυκτὸς, ἡ δὲ ἐτέρη Ἑλίκη μὲν, ἀπὰρ νυφτῆς ᾠδῶν μεινείρη γὰρ πάσα περιστρέφεται στροφδίκλιγγ.

Phoenices: their practice in navigation taught them that the Lesser Bear was nearer the true north, cf. Arrian Exp. Al. vi 26, Ov. Trist. iv 3 1, Fast. iii 106. Hence Milton calls it ‘Star of Arcady (i.e. Callisto) or Tyrian Cynosure’.

confestim: ‘immediately after night-fall’, before the smaller stars are visible.

Ch. xxxii. haec inter: Aratus 45 τὰς δὲ ἀμφοτέρας, οὕς ποταμοὶ ἀποφλάξι, ἐπέλεγα μέγα βαύμα Δράκων περὶ τ’ ἀμφι τ’ ἐγών μυρίων, which Virgil more closely renders G. i 244 maximus hic flexu sinuoso elabitur Anguis circum perique duas, in morem fluminis, Arctos; cf. Seneca Thyestes 869, Med. 694.

cum gurgite: for this use of cum in place of the simple ablative cf. § 111 cum cornibus, § 112 cum luce, § 113 cum corpore, Phaenom. 215. ib. 146 funestum magnis cum viribus annem, imitated by Lucr. i 287 (where Munro says ‘Cic. in his Aratea quite revels in this use of cum’), see too Lucr. iv 1126.

superaque: noticed by Priscian (xiv 6 52) as an example of the archaic form, which is also found Phaenom. 79, 309, 335, 339, &c. The Dragon was usually identified with the Dragon of the Hesperides: other accounts are given in Hyginus and the Schol. to Aratus.

§ 107. cum totius sit: so Sch. instead of the Indic. of ms, on the ground that the Subj. is preferred in a sentence where prius membrum ampliorem affaret sententiam, sequente mos speciali supra illam quasi eminentem. I prefer this slight change to the insertion of tum with Ba. and Mu.

huic non una: Aratus 54 οὐ μὲν ἔσχιν οἴδον οὐδ’ οἷος κεφαλὴ ἐπιλάπτεται ἄστη, ἄλλ’ δοὺς κροτάφους, δύο δὲ δραμασθεῖσαν, εἰς δ’ υπενερθεὶς ἐσχατὴν ἐπίκειτο γένος δευμοῖ πελάρων: λοξὸν δ’ ἐστὶ κάρη, νεφοτὶ δὲ πάμπαν ὁμοίων ἄρην εἰς Ἑλίκης οὔριν.

modo: for the archaic quantity see Lachmann and Munro on Lucr. ii 1135 plurae modo dispersit et ab se corpora mittit.

obstipum = λοξός, commonly it means ‘bent forward’, as in Hor. Sat. ii 5 92 stes capito obstipo multum similis metuendi, Pers. iii 80 aerumnostique Solones obstipo capite et ligentes lumine terram; but, in Suet. Tvb. 68, where
it is said that Tiberius showed his pride by walking *cervice rigida et obstipa*, Ernesti argues that it must mean ‘bent back’, and that the word does not necessarily imply more than ‘stiffly bent’ in whatever direction. Apparently it has the same force in Lucilius’ line *resupinae obstipe capitudo sibi ventum fecere caniculae*, if I rightly understand it of ladies leaning back and fanning themselves. Lucretius uses it (iv 517) of a building out of the square, Columella (vii 10) of diseased pigs carrying their heads on one side *fabricitantum signa sunt cum obstipae uues transversa capita ferunt*; Wüstemann on Hor. i. c. says it is technically used for a stiff neck in medical writers. I should translate therefore ‘the head is slanted, thrown back from the shapely neck; you would say it fixed its gaze on the tail of the Great Bear’. I see no reason for changing the *a service* of the ms* s either into *ac cervice* with Sch., or (still less) into *at cervice* with Madv.; the head is simply bent away from the line of the neck. The line is imitated by Lucr. i 35 *atque tua suspiciens tereti cervice reposta* (where see Munro on the word *teres*), and by Virg. *Aen.* viii 633 of the wolf licking her cub’s *illam tereti cervice reflexam mucere alternos*. Germanicus and Avienus seem to have mistaken the force of *νειώρι*, the first translating *decive caput* (l. 61), the second in *natum curvata* (l. 156), but there is no reason to suppose these equivalent to C.’s *obstipum*, as Forcellini. We may compare Vitruvius’ description (ix 4) *Serpena intorta replicataque se attollens reflectitur a capitig* *Minoris ad Majorem circa rostrum.*

§ 108. *totis noctibus*: see above § 105. *reliquum quidem corpus*: opp. to the following *hoc caput*.

*hoc caput*: C. is fond of this rather clumsy demonstrative, which is here however justified by the Greek (l. 61) *κείμη που κεφαλή τῇ νῆκται, ἣν περ ἀκραί μίαγονται δύσει τε καὶ ἀνολαί ἀλλήγορου*. Hipparchus explains this to mean that the head, the most southern part of the constellation, being precisely 37° from the pole, just touches the horizon in the latitude of Athens. It thus skims the surface of the ocean (the poetic word for horizon) at the point where its settings and risings meet. If it were further from the pole, the risings and settings would be separated by an interval; if nearer, there would be no setting; but it is ἐν τοῦ ἀεὶ ἀπεριοῦ κόσμου, which among the Greeks was called the Arctic circle, of course varying with the latitude: the Antarctic circle was ὁ ἀεὶ ἀφανῆς κύκλος. Hipp. would not have approved of C.’s translation of *Aratus*, for, in opposition to a commentator named Attalus, he expressly says *οὗ δέων διαρχεῖν* *χρόνον καὶ ἀνατίλλει*: so the pseudo-Eratosthenes speaks of the *Δάκωντος κεφαλῆς* as being on the horizon.

*subito sequore condit*: Grotius’ excellent emendation for the *subitoque recondit* of ms*. The phrase corresponds to *νῆκται* in the original. *Subito* is the Part. of *subire* (cf. *Ov. Fast.* 1 313 (*Cancer*) *occidus subitum aquas*); no other ex. of its use is recorded, but *subiturus, subeundus* are common enough, and we find *Ov. Met.* 1 37 *ambitae terrae*, *Cic. Cornel.* fr. 36 *circumitis rostris*, *Verr.* 1.125 *auctoritatem senatus extare haereditatis aditiae*

partim: for this old Acc. cf. Lucr. vi 88 unde volans ignis pervenerit aut in utram se verterit hinc partim, ib. 384, where Munro quotes Liv. xxi 46 § 8 partim copiarum ad tumulum mittit, partim ipse ad aecom dicit. L. and S. wrongly cite Orat. ii 94, where partim is the adverb.

id autem caput: Aratus continues (l. 63) τῆς δ' ἄγχος μογεντί κυλίν
detai αὖρι ἑοκὸς Εἰδώλων, τὸ μὲν οὖν ἐπίσταται ἅμαδ党风 εἰσίν, οἷδε τίνι κρέμαται κεῖνος πόνη, ἄλλα μὲν αὐτῶ 'Εσωμασιν καλύουσι: τὸ δ' αὐτ' ἐν γούνας κάμνου ἀκάλουντο ἑοκεν...μέσοφ' δ' ἐφύπερθε καρήφι δεξιέρον ποδός ἄκρον ἔχει σκολαίοι Δάκοντος. This figure was known by various names, Eug

osius, found here and in Manil. v 646; Nixus in genidus or genu, as in Ov. Met. viii 182 (of Ariadne's crown) gemmae subitos vertuntur in ignes consistuntique loco, specie remanente coronae, qui medius Nixique genu est Angueque tenentis; Nixus simply, as in Phaenom. 45, 400, 456, 460; Ingenicus

latus in Vitr. ix 6. Usually it was explained of Hercules contending with the Dragon of the Hesperides, but many other stories are told by Hyginus P. A. ii 6; one of which is attributed by him to Aeschylus in the Pro

metheus Solutus, to the effect that Hercules being attacked by the Ligurians and having shot away all his arrows, se ingeniculasse multis jam vulneribus accepit, but Jupiter provided him with stones, by means of which he routed the enemy.

maerentis: Grotius notices this as a mistranslation of μογέων.

qua nix a feratur: 'because (as they say) it is carried along in a kneeling attitude'. For Subj. cf. Roby § 1744.

hic illa—Corona: Aratus continues (l. 71) αὐτοῦ καὶ κεῖνος Ἐσβανος, τοῦ ἄγανδον ἔθηκε σήμι' ἐμέναι Δώμυσις ἀποχωμένης Ἀριάδνης, ματ' ὑποστρέ

φεται κεκμηκότος Εἰδέωλα. νότῳ μὲν Ἐσβανος πελαίει κεφαλὴ γε μὲν ἄκρη σκηντεῖ παρ' κεφαλῆς Ὀφιωύχου εἰ δ' ἄρ' ἐκεῖνη αὐτῶν ὑπεφάρσιμα φαεὺμενον Ὀφιωύχον. The Serpent-holder was generally identified with Aescula

pius, whose symbol was a serpent. After being slain with the thunderbolt for raising the dead, he was placed among the stars at the request of Apollo, Ov. Fast. vii 735, Hyg. P. A. ii 14. Eximio fulgore Abl. qualifying corona.

§ 109. claro lumine: I have ventured to read lumine for the nomine

of mss, as the original has φαευμένον, and there is nothing famous in the name Ophiuchus. Below, claro nomine is rightly used of Arcturus; and so we read of the Pleiades (Phaenom. 37) has tenues parvo labentes lumine lucent; at magnum nomen signi claramque vocatur, propterea quod et aestatis pri

mordia clarat et post hiberni praepandens temporis ortus admonet, ut man

dent mortales semina terris. On the contrary, of other stars we read (Phae. 182) obscurae sine nomine cedunt, and German. 145 vaturus ignot

priscis sine honore feruntur. ib. 338 sine honore Corona i.e. unknown to

song. Probably the corruption arose from a misunderstanding of the abbreviated constr. claro lumine perhibent, which may be compared with

M. C. II.
Fin. iii 63 qui in concha patula pinna dicitur = qui habitat et dicitur, see n. on nominaverunt above § 51.

hic pressi: after three lines Aratus goes on (l. 82), ἀμφώτεροι (i.e. χεῖρες) ὡ τ ὁμοσσυγαί (are busied with) ὡ ἦν τὸ μῆνων διδύμων ὅφοιον ὧ ὁ ἐμμακέν τὸ ἔπαρθη τὸν άθλητην μέγα θηρίον ἀμφώτεροι, ἱκατρίζων, ὑθαλάμφω τε καὶ ἐν ἀθρήτης βεδῆκες, ὀρθός.

eius: monosyllabic, as syus in Lucr. i 149, see Wagner on synizesis (in Plaut. Aud. p. 177).

Nepal: Fost. p. 164 M. nepa Afrorum lingua sidus, quod cancer appellatur, vel, ut quidam volunt, scorpions. In its literal acceptance we find it used of a scorpion by Cic. Fin. v 42, of a crab by Plautus Cas. ii 8 7. Here and in § 114 it is used of the constellation Scorpion, for which we find Scorpiones in § 113; in Ennius ap. Cic. R. P. i 30 it might have either meaning, astrologorum signa in caelo quaerant, observat, Jovis cum capra aut nepa aut exoritur lumen aliquod beluae. This ambiguity gave rise to the absurd belief mentioned by Plin. N. H. ix 51 that, when the Sun passes through Cancer, dead crabs lying on the beach are transformed into scorpions. The story of the Scorpion and Orion is told by Cic. Phaen. 426 foll. Diana to avenge herself on Orion called up the scorpion from the bowels of the earth, hic valido cupride venantem perecit ictu, mortiferum in venas fijens per vulnera virus; ille gravi morioni constravit corpore terram.

Septentriones sequit: C. here omits five lines, in which the constellation Chelae ‘the claws’ is referred to. Aratus then goes on (l. 91) ἔξισθεν ὡ 'Ελλησς ψάρεται δόντων ίσικῶς 'Αρκτοφώλαξ, τὸν ρ' ἀνδρες ἔπικλείοντο δοῦμῃ, ὅν άμαξας ἄμαξαμενος ἐδέσαι 'Ἀρκτον, καὶ μᾶλα πᾶς ἄρηος ὑπὸ ζῷν δὲ ὁ αὐτὸς ἐξ άλλων 'Ἀρκτουρος ἀπεσταὶ ἀμφᾶδων ἀστήρ.

Arctophylax: see Hyg. ii 4 and Dict. of Ant. s. v. Astronomia. The name is merely another form of Arcturus, which is used for the whole constellation by Hesiod (Op. 566, 610) and others. Bootes occurs in Homer Od. v 272 Πλατάνας τ' ἐσορῶντα καὶ ὁψι δύοντα ἄωτην. It is used by Babrius in the sense of ‘ploughman’, and we find the verb bowtew in Hes. Op. 391.

temoni: so Madv. for temone, ‘as though yoked to the pole, i.e. wain’; apparently C. takes ἀμαξαῖος as an adj. agreeing with Ἀρκτον. The Bear would thus consist of the three leading stars.

quatit Arctum: the lex. quote quatit equum in the same sense from V. Geo. iii 132, Sil. xii 254.

§ 110 huc Booti: I have transposed the words dein quae sequuntur, which precede these in the ms, and placed them after Virgo, four lines below. Heind. was the first to observe that they were not justified by the omission of one or two words of the original. This change makes it necessary either to read autem instead of enim or to omit the particle altogether.
nomine claro: this is quite appropriate here. Arcturus is a famous and ancient name; as he says of himself in the Ritudens (prol.) signum sum omnium acerrimum, vehemens sum exortiens; cum ocido, vehementior.

cui subjecta: cuyus in mss probably arose from dittographia of the following sub. Dav. and others retain it, inserting pedibus and so giving a closer rendering of the Gr. (I. 96) ἀμφιθοὶ δὲ ποσᾶν ἐπὶ σκέψαυ Βοτόνε Παρθίνον, ἂν ἕν χείρι φίλει σταύρῳ αἰγλητὰ. Heind. objects to Dav.'s reading on the ground that it is unsuited to the immediate antecedent Arcturus.

spicum: this word is found in all three genders. The neuter is attested in this place by Servius on Geo. i 111, cf. Varro ap. Non. p. 225 neque in bona segete nullum est spicum nequam, neque in mala non aliquod bonum. Voss conjectures the meaning of the ear of corn to be that the harvest commenced under that sign.

Virgo: Aratus describes her at length in words borrowed from Hesiod’s description of Justice (Op. 192, 257 ἤ δὲ τα παρθίνω ἐστὶ Αἰχ δῶς ζικναία foll.), cf. V. Geo. Π 474 extrema per illos Justitiam excedens terris vestigia liquit. Ovid (Met. i 150) and Seneca (Octav. 423 neglecta terras fugit et mores feros, hominum cruenta caede pollutas manus, Astraea virgo siderum magnum decus) call her Astraea, others supposed her to be Erigone or Ceres. Virgil (Ecl. iv 6) makes her return in the new age of gold.

Ch. xlili. dein quae sequuntur: transferred from above, see n. on huius Booti: the phrase seems to imply impatience, a disposition to hurry on, and would be very suitable here, as 47 lines of the Greek are omitted, in which Aratus tells the story of Astraea.

et natos Geminos invisere: Aratus 147 κρατὶ δὲ νὶ Αἰδήμου, μέσῃ δ’ ὑπὸ Καρκίνων ἐστὶ: ποσὶ δ’ ὑπ’ ἀμφιθοὺς δὲν ὑπὸ καλλὰ φαίνει. The Twins were usually identified with Castor and Pollux, sometimes with Amphion and Zethus, or, by Nigidius, with the Samothracian gods.

Cancer: said to have been placed in heaven by Juno for aiding the Hydra in its conflict with Hercules (cf. the story of Orion). Some thought it was selected to mark the summer solstice because after that the Sun moves backwards (Macrob. i 17 § 63).

Leo: the Sun enters this sign in the middle of July, hence it is called by Hor. Od. iv 29 19 stella vesani Leonis. It was identified with the Nemean lion, which was said to be of lunar origin and to have been sent down to earth by Juno. Probably it is a mere symbol of the violent heat of the Sun at that time.

quatiens: referring to the twinkling of the star, as in Phaenom. 51 mediore jacit quatiens e corpore lumen, and below § 111 Equus quatiens jubam.

auriga: Aratus goes on after some ten lines (I. 160) αὐτὸν (Ἡνιοχον) μὲν μιὰ ἄκατα μέγαν Διήδυων ἐπὶ λαιὰ κεκλίμενον δῆμις: Εἰκες δὲ οἱ ἄκρα κάρφων ἀνία δεινεῖς: σκαίρῃ δ’ ἐκπέμπαται ἄμφοι αἷλη: The charioteer was identified with Erichthonius (cf. Virg. G. iii 113 primus Erichthonius currus.
et quattuor auras jungere equos), or with Myrtillus the charioteer of Oenomaus.

obductus: can we take this, with Sch., as equivalent to obversus or objectus? The more natural sense would be 'covered', 'veiled' (cf. below § 120 trunci obducuntur libro), but this would be no translation of κελμενον 'slanting', for which German. and Vitr. (ix 4 § 2) have the more correct transversus.

feretur: the Fut. answers to the Gr. δείξεις 'if you look, you will find him'.

adversum tuetur: 'the head of Helice with fierce aspect confronts him', cf. V. Aen. vi 467 torva tuventem.

Capra: the star called Capra or Capella was supposed to be Amalthea, the she-goat which nursed Jupiter on Ida. It is more frequently mentioned than the constellation Ariga, of which it forms a part, cf. Hor. Od. iii 7 6 insana Caprae sidera, Ov. Fast. v 213 nascitur Oleniae signum pluviales Capellas.

[tum quae sequuntur]: I cannot help thinking these words are misplaced, or accidentally repeated from above, as they break the connexion between haec and Capra; and in the original only two lines are omitted, την μὲν τε λόγον Δί μαζών ὑποσχεῖν, 'Ολενήν δέ μιν Αιγα Δώσ καλέουσιν ὑποφήται, after which Aratus continues (l. 164) θαλ' ἕ μεν πολλῆς τε καὶ ἄγιας, οἴ δὲ οἱ αὐτῶν λεπτὰ φαινομέναι Ἐρυθρὸς καρπῶν κατὰ χεῖρός. There is a gap in § 114 before inde nepae, where they would be useful.

Haedi: described by the poets as rainy, like their mother, because they rise about the time of the autumnal equinox, Hor. Od. iii 1 27 nec saevus Arcturi cadentis impetus aut orientis Haedi, V. Geo. i 205, Aen. ix 668 pluvialibus Haedis.

cujus sub pedibus: Aratus continues (l. 167) πάρ ποιητικόν κεραίν πεττηστά Ταῦρον ραίεσσαι 'search for the crouching Bull near the feet of Ariga', which the Schol. explains πεττηστά, διὰ τὸ κατάστημα, ἄπερ γάρ ὁδόν τε οὐτίν, cf. l. 517 (a sign of the equinox is) Ταῦρον σκέλων ὁστὴν περιφάνεσαι ὄλαξ (= ὁδόσις, not in lex.), which C. translates Phaenom. 290 atque genu flexo Taurus coniiturb ingen. When we compare this with the present line, the question arises whether coniturb may not express a kneeling posture, as we saw that nixus did, both being connected with genu; otherwise we must suppose that C. here wrongly took Tauro as Subj. of the Inf. 'the Bull struggles' (coniiturb), and misunderstood pettnota, which here and in l. 354 (of Andromeda in presence of the sea-monster) we ought probably to connect with πτήσωσ: in l. 323 (of Orion) ύψος πεττηστά, and 317 (four stars) παρθέλασαν δύο πάρ δύο πεττηστά, some other explanation is required, and I should connect it either with πετάωμαι or πτέραμι. Grotilus gives three senses, (1) 'expanded', (2) 'bowed down', and (3) 'threatening' (7). Germanicus here has trus, Avienus late tenduntur pectora Tauei; in speaking of Andromeda C. translates διόπροσι πεττηστά by in tutoque locatam (Phaenom. 139), German. has expositam; of Orion C. has late dispersum (Phaen. 105).
§ 111. caput stellis: Aratus goes on (l. 173) 'Υάδες ταῦ μεν β' ἐν τινες ἔριξεν Ἐννυλίαν.

Hydaspes: mentioned by Homer and Hesiod, and therefore called by Aratus (l. 172) καὶ λίθων κάλλων δρόμοι εἰρηνικοί οὐδὲ τοι αὖτε νῆκονοι. Ovid says of them (Fasti v 165) ora micant Tauri septem radiantia flammis, navita quas Hydaspes Graecos ab imbre vocat. Pars Bacchum nutisse putat, pars credidit esse Tethys has neptes Oceanique sentis; foll. Horace calls them tristes (Od. i 3 14) because their morning setting was in November, and their rising in April was also attended with rain Plin. N. H. xviii 66.

Succulae: the same is said by Plin. l.c. and Tiro ap. Gall. xiii 9 adso veteres Romanii litteras Graecas necicerunt, ut stellas quae in capitae Tauri sunt propter a succulae appellassint, quod eas Graeci uides vocant;...sed uides quae uides, uas ut nostri opici putaverunt, sed ab eo quod est uas appellassint. Gallius defends his countrymen on the ground that succula was the natural Latin for uas as super for uisp. The present opinion is rather that both the Greek and Latin are from the root sus and mean little pigs, as the other names of constellations refer to material objects, chiefly animals (Vaniček Etym. and Nitzsch Odysse v 272). Also the quantity of the vowel is against the derivation of uas (i, like the oblique cases of δι) from δω (ο). The form succula may be compared with bucula, canicula.

Cepheus: Aratus continues (l. 182) αὐτὸς μὲν κατόπωθεν ἵνων Κυνοούριος Ἀρκτος Κηφήνις ἀφοσίας χειρας ταῦν νουκείς. Cf. Tusc. v 8 nec stellatus Cepheus cum uxor (Cassiopeia) genere (Perseus) filia (Andromeda) traderetur, nisi caelestium divina cognitio nomen eorum ad errorem fabulas traxisset (i.e. if they had not been famed as astronomers). For the story see Ov. Met. iv 663 foll. and Pall. Peneserossi 'that starred Ethiop Queen, that strove to set her beauty's prize above the sea-nymphs and their powers offended'.

ipse: as contrasted with his wife and daughter.

Cynosurae: a name in apposition limiting the more general Arcti, unless we may regard it as an Adj. like the cynoaura ova of Plin. H. N. x 167.

hunc antecedit: Aratus continues (l. 187) τοῦ δ' ἄρα δαμονίη προκυλινδεται οὐ μᾶλα πολλὴ νυκτὶ φαινομένη παμμηνίδι Κασσιάνεια.

hunc autem illustri: Aratus (l. 197) αὐτοῦ γὰρ κακινο κυλινδεται αἰών ἀγαλμα Ἀνδρομήδης ἐντὸ μητρὶ κεκαμείνον, i.e. 'arrayed beneath her mother'. One of the scholars however gives olim κεκαμείνον as an explanation of κεκαμείνον, probably reading κεκαμείνον from χάζομαι, which perhaps may be the origin of C.'s au fugiens spectum. For the constr. of au, with Acc. cf. Prop. v 9 30 assimias au fugit, Hyg. Fab. 258 quae sol au fugit, where Muncker gives other instances. Lachmann (in his Lucr. p. 272) argues against the reading here, on the ground that the final α of Greek nouns is long and cannot be elided (ib. p. 405); but Mu. instances Andromeda hic (Phaenom. 257), Andromeda et (ib. 436), and the short a in hydra (ib. 292, 397).
maestae: this hardly gives the aivon σαλμα of the original. It may have been suggested by the words used just before of Cassiopeia ἄνδεικτω πεταλωθέν.

Halic Equus ille: Aratus 205 ἄλλο ὃς οἱ καὶ κρατὶ πέλαρ ἐπελθάσαν ἵππος γαστρί μαλαγῃ, ἐσώδο δ’ ἐπλάϊμεναι ἄστριν, τοῦ μὲν ἐν’ ὀμφαλῷ, τῆς δ’ ἵσχατωντα καρφῆς. The horse is Pegasus with his hoof made Hippocrene. For duplices Sch. cites V. Δεκ. 193 duplices ad sidera palmas, and Cic. Prov. Cons. 13 has duplices pestes sociorum (of the consuls Piso and Gabinius), but both instances refer to pairs. Is there any case in which it means simply two? Perhaps here we should translate twinned. The line aeternum ex astris nodum is an embellishment added by C. We find nodus used of a common star in Phaenom. 17 (translating σύνθηκος), and aeternus similarly used (l. 34 aeterno nomine) without anything corresponding to it in the original: the word was also a favourite with Lucretius, cf. his aeternus devictus volnere amoris, and Munro on ν 409, 476, 514.

contortis cum cornibus: with crinkled horns. Aratus 225 αὐτοῦ καὶ κρατῳ βοσκαται εἰς κελυθον. This was supposed to be the ram which carried Phrixus and Helle. haeret  ἔστημεν Arat. 229, regularly used of fixed stars, as in Phaenom. 169 procul illis Piscibus haerens, where the Gr. has simply ὅλος ἀπὸ προτέρου. For cum see n. on cum gurgite § 112.

Piscem: after describing Delton (the Triangle), Arat. goes on (l. 239) ἡν δ’ ἐν προβολήι Νέστου ἱχθύες, ἄλλας αἰεί προφετὶντερος ἄλλον, καὶ μᾶλλον Βορέα τὸν κατώτατον ἄκουε. Probably the month in which the sun passed through this sign was originally connected with fishing. Afterwards a mythological explanation was found in the Syrian deity Derecto or Atargatis, alias Isis or Venus (Ov. Fast. II 458), whom the two fishes are said to have saved from Typhon.

aquilonis tangitur aulis: this method of describing the quarters of the heaven is imitated by Lucr. ν 689, where see Munro.

Ch. XLIV § 112. ad pedes Andromedae: Aratus 248 ἀμφότεροι δὲ νῆδε γαμβῳ ἐπισημαίνουν Περσῶν, οἵ δὲ αἱ ἐντραμωλίων φορέσται. Ἀνάρ ό γ’ ἐν Βορέα φέρεται περιμέμφεται ἄλλων (the feet of Andromeda may point you towards her spouse, for they pursue their path above his shoulder).

cius propter laeum genu: Arat. 254 ἐχθεὶ δ’ οἱ σχαμὴς ἐπιγούνιος ἡμιά τοῖς Πλημμές φορέσται, δ’ οὔ μᾶλλον ἀπᾶς χάρας ἔχει, καὶ δ’ αὐτῇ ἐπισκέψασθαι ὑπαρά. Hipparchus notices that Aratus is wrong in placing the Pleiads near the knee of Taurus; they are really at his back, near the bright stars in the left foot of Perseus. For the readings see crit. n. In the Phaenom. l. 27 Baehrens reads at propter laeum genus omnis partes locatas parva Vergilias tenui cum luce videbās, where mss have parvas. The four words following genus are omitted here in three of Orelli’s mss; and B, which adds them, has at instead of cius and genus for genu, which certainly suggests that they were inserted from the Phaenom. Sch. however and Mu. give the complete lines, making cius a monosyllable, like ζεῦ in § 109; and the former (Opusc. III 336) illustrates
the alteration of at into cyus, by the change of quam gelidum into tum gelidum just below, quem propter for quam propter, to suit the altered construction; and in § 112 paulo into paulum, horrisnis into horrisferis apparently by slip of memory. The archaic genus for genu, which they read here, is found in Phaenom. 45, 46, 399, 403. The inserted words omnis ex parte locatas parvas do not agree with the original and indeed are hardly intelligible.

Vergilias: Max Müller (Lect. II p. 7) derives the name 'from virga a sprout or twig: the name was given by Italian husbandmen, because in Italy, when they became visible about May, they marked the return of summer'. Others connect it with ver or vergo. The word Πελείδες is usually connected with μάλις, as they marked the safe time for sailing, but Nitzsch (Od. v 272), with whom Vaníček agrees, thinks the form πελείδες (Pind. Nem. II 8) the older, and supposes that they were regarded as a flock of wild doves flying before the hunter Orion, as Hes. Op. 619 Πελείδες οίνες διβρυμον Ὄριωνος βείγουνα. In later times they were believed to be the daughters of Atlas pursued by the love of Orion and saved by being turned into doves. They are among the five constellations mentioned by Homer and Hesiod. It is said in the Dict. of Ant. s. v. that in Arabic and Old English they were spoken of as the Hen and Chickens.

tenui cum luce: see above § 106 cum gurgite; Mr Swainson compares Lucr. iv 1126 viridi cum luce zmaragdi.

inde Fides: Arat. l. 268 καὶ Χίλας ἤδη ἀλίγη. Cic. seems to have filled up his line with otiose epithets for an ordinary lyre, like his contortis cornibus of Aries in § 111, if Mu. and Baehrens are right in reading posita et leviter convexa videtur 'next to this in position and slightly bowed outwards appears the Lyre'. Ba. has leviter posita: could this mean 'slightly sketched' (ἀμφότερα in Theon's Schol.) like Hor. Od. iv 8 8 solders hominem ponere? The fact that there is one splendid star in Lyra is not inconsistent with such a description on the part of C. Sch. (Opusc. III 336) suggested posita leviter convexa = paululum inclinata et obliquata. It is true Manilius (vi 325) speaks of the Lyre as convexit 'up side down', as Cic. has puppis convexa Phaen. 127; but what ground had C. for such a statement? his authority gives no hint of a slanting position. If it be said that this would be apparent in any map or sphere which C. might have before him, as it is in the Harleian ms; yet there would be no force in the adverb leviter; the position is represented as precisely reversed. The Lyre was identified with that first made by Mercury.

inde est ales Avis: for inde we have namque in Phaenom. 47 to explain alices in the previous line: in the original (l. 275) ὧτοι γὰρ καὶ Ζηνὶ παραρέχεσαι αἴδος "Omnis, the Schol. take Ζηνὶ as equivalent to ῥη συγγαφ (C's sub tegmine caeli). I suppose ales is to be taken as an epithet here, though Ba. writes it with a capital. L. and S. seem to think that C. intended it to represent αἴδος, but it occurs also Phaen. 258, without any Greek equivalent. This constellation was identified by later writers with
the Swan of Leda and is therefore called Cygnus by Germanicus, Olor by Manilius.

capiti antem Equi: Arat. l. 283 Ἰπποκ. πάρ δ' ὄρα οἱ κεφαλῇ χείρ ἤθρο-
χόου δεξιερῆς τάνυσαι, δ' ὀπίστερος Ἀλυκόρος τήλεται. Nothing is said
in the original of the body of Aquarius. Probably the name was given to the
Sign, because it was thought that the Sun's passage through it was accom-
panied by rain, so Hor. Sat. i 1 36 contristat Aquarius annum. Later my-
thologers identified him with Ganymede, as the celestial cup-bearer, or
with Deucalion as the witness of the Deluge.

tum gelifum: for tum we read quam in Phaen. 58 after serius. The
four lines which follow are an expansion of Arat. l. 286 κύλιται Ἀλυκόρος
ἐν τῇ τρέπετ' Ἡλέους ἢ, not (as Dav.) a translation of 292 τότε δὴ κρύος ἐκ
Διὸς ἑστι, which is given in Phaen. 67.

semiferó: used properly of one who is half man, half brute, as of Pan
(Lucr. iv 587). Voss in his note on Aratus l. c. cites Eratosth. (Catac.
27) to show that Pan was originally intended by Ἀλυκόρος, and that he
was anciantly represented, like his son Aegipan, as a mixture of man and
goat. He was raised to heaven in gratitude for his aid in the war between
Typhon and the Gods; but when his form became humanized, the fable
placed in heaven his in stead. The story is given in full from Nigidius by
the scholiast on Germanicus. In later times, e.g. on the coins
of Augustus, Capricornus is depicted with a fish's tail. Macrobius (Sat. i
17) says the climbing goat was chosen as the sign of the winter solstice,
because the Sun begins to climb the heaven from that time, as the Crab
with its backward movement represents the retrogression which follows
the summer solstice.


Titan: the sun is so called as being either identified with Hyperion or
the son of Hyperion; the first example seems to be in Empedocles fr.
l. 185, but it is more common in Latin than in Greek poetry, cf. Preller
Gr. M. p. 41 n. 4.

§ 113. ut sese ostendens: Arat. 302 σήμα δὲ τι κεῖσθαι ἄρρη...Σκορ-
píos ἀντέλλων εἰς πυκάτης ἐπὶ νυκτός ἢτοι γὰρ μέγα τάξων ἀνέλκεται ἐγρύθι
κέντρον Τοξενίτης, διόγον δὲ παροίκερος ἵπταται αὐτοῦ Σκορπίος ἀντέλλων ὀδ'
ἀνέρχεται αὐτίκα μάλλον, which are thus turned Phaen. 74 hoc signum
veniens poterunt praeascere nauatae: jam prope praecepitante licebit visere
nocte, ut sese ostendens emergit (ostendens ostendant mss) &c. where ut is
probably to be translated 'when'; 'you have a sign of bad weather
when the Scorpion rises'. Taking the quotation, as it stands, we should
naturally make ut follow aspicitūr in the sense of 'how', the direct
construction being frequently used instead of the indirect in such circum-
stances by the older poets, as in Enn. Ann. l. 215 V. audie ut mittō; Trag.
23 eloquere, res Argivum ut se sustinet; Ter. Hec. III 521 si memorare velim
quam rideli animo...fui, vere postum; Virg. Eol. iv 52 aseipe venturo lae-
tantur ut omnia saeclo. It is possible also to take Scorpiōs as subject to
aspicitur ‘the Scorpion is seen as he rises’. But it may be a question whether the quotation was not at first shorter, and whether the words ut seae ostendens emergit may not have been added, as in a former quotation, from the Phaenomena; see crit. n. The omission of ut in mss is probably accidental owing to the -ur preceding, unless aspicitur is a corruption for aspicio ut, the Imperative being, more naturally than the Ind., followed by ut with Ind.

ostendens emergit: some edd. have emergens ostendit, but it is not uncommon for the more important word to be thus subordinated to the less important, as in § 115 natura omnia conficiens funditum, where we might have expected fusa conficit.

alte: Baehrens and Orelli read alto with Grotius, ‘rising out of the deep’. Alte is common in the older poets, as of the sun in Lucr. iv 404 fubar erigere alte, ν 610 rosea alte lampade lucens.

posteriorum trahens—Arcum: ‘drawing after it a bent bow with its powerful tail’. Cic. here mistakes the force of l. 305 ἀνέλκεται ἐγγόθη κίνητρον, ‘the Archer is drawing the Scorpion’s sting’ (=tendit), and confounds it with the ἀλκεταὶ of l. 342 μὲν κυ好不容易 καὶ οὕρην ἀλκεταῖ Λογίω (=trahitur). Arcus is used for the whole constellation by German. l. 311, 668. The Archer, whom Cic. calls Sagittipotens (Phaen. 73) Sagittarius (l. 279) Arcitenens (l. 405), was supposed to be a centaur. I read flexum here with Sch., as it is found in all the mss of the Phaenom. and there seems no reason why C. should have changed it for the hyperbolical pleum, which means ‘tied in a knot’.

quem propter—Ales: five lines are here omitted containing the antecedent to quem. As it stands, it can only be arcum, which gives a wrong position for the Ales (on which see § 112). The corresponding line 85 in the Phaen. begins with quam referring to the antecedent Sagitta in l. 84, cf. Aratus 311 ἐστι δὲ τού προκρῶ βεβαθμίου ἄλοος Ὡστάς, αὐτὸ δὲ περ τῶνον ὥς ὄι παρπατηταῖ "Ομης δισότερον Βορέως σκεδότεν δὲ οἱ ἄλοος ἀγνη αὐτ τόσον μεγέθει...καὶ μι καλενοῦ Ἀπλοῦν. The solitary arrow was said to be either that with which Apollo slew the Cyclopes or that with which Hercules killed the eagle of Prometheus. convolutur: referring to the rotatory movement of the heaven.

Aquila se portat: cf. Phaen. 24 velator pedes portat. The eagle is called Jovis Ales nuntius (Phaen. 294); it is alluded to by Eur. Rhesus 530. For cum corpore cf. above § 106 cum gurgite.

dinde Delphinus: Aratus continues (l. 316) Δελφίς οὐ μᾶλα πολλὸς ἐπιτρέχει Αἰγοκερῆ. According to Geminus it was raised to heaven by Neptune for revealing the hiding-place of Amphitrite; others identified it with the dolphin of Arion.

exinde Orion: Aratus 322 λοξός μὲν Ταῦρος τομῇ (‘under the section of Taurus’) ὑποκέκληται αὐτὸς Ὄριων. In Homer he appears as a mighty hunter, στίνοις Ὄριωνοι, eyed by the bear he is pursuing (Π. xvi 486), and following the chase even in the lower world (Od. xi 572) Ὄριωνι πελώρων.
§ 114. **Quem subsequens:** Aratus 326 τοῖς οἷς καὶ φρονός ἀμφιθεμένω
υπὸ νάρη φαινεται ἄμφοτεροι Κύων ἔτι ποσοὶ βεβηκός. refugiet is altered from refulgens of Phaen. to suit the context. Sirius rose at the time of the entry of the sun into Leo, which marked the hottest season of the year; hence Horace speaks of rabiem Canis et momenta Leonis, cum semel accepti solem furibundus acutum; Ep. i 10 16. Homer (II. xxii 29) likens Achilles to the baleful star δυνα κόρ' Ὄριονος ἐπικλήσων καλέονσιν. λαμφρότατος μὲν δὲ ἐστι, κακὸν δὲ τε ὀμά τίτυκται.

**Post Lepus subsequitur:** Aratus 338 ποσοὶ δ' ἀρ' Ὄριονος ὑπ' ἀμφοτέρως Λαμψίς ἐμενεις ηματα πάντα διότι: αὐτάρ δ' γάρ αἰεὶ Σειρίος ἐξίσθεν φέρεται μετοίκη εὐκαίρεις. The mythologists were hard put to it to find any story for this constellation, which, like the hound, the doves and others, was simply seen in the sky by the primitive hunters. A moral is attached to it, as to the Hydra, by Hyginus ii 33.

**Curriculum sedans:** this is said of Sirius in Phaen. 125, but it is more like the original to make it refer, as here, to the Hare.

**At Canis—Argo:** the original is cited above on posteriore trahens. On the Argo see § 89. serpens may express the gliding movement either of a ship or of the heavenly bodies, as in Phaen. 45 (Ares) volat et serpens geminis secat aera pinnis, and Lucr. v 690 annua sol in quo concurrunt temporum serpens.

**Hanc Aries tegit:** here, as above ( quem propter), the noun to which the pronoun refers has been omitted, either from a hiatus in the MSS or from carelessness on the part of C., see Arat. 356 Κητος ὑπὸ Κριοῦ τε καὶ Ἰχθύων ἀμφιθεμένω βαῖν ὑπερ Ποταμοῦ βεβηκός ἄστερεόντος: thus turned by C. Phaen. 140 Andromedam explorans fera querere Pistris pergít...hanc Aries &c. As the verse stands here, we are obliged to refer hanc to Argo, which really lies 70º to the west of Cetus or Pistris. This was supposed to be the sea monster sent to devour Andromeda. For Aries and Piscis see above § 111. tegit, for which Sch. conjectures tagit, simply means lies above it, i.e. to the north of it.

**Fluminis—Ripas:** the River is, according to Aratus, the mysterious Eridanus, identified by many with Padus; others supposed it to be the Nile. illustri: Orelli conjectured illustris as nearer the original αὐτερεόντος, but the epithet suits one noun as well as the other, and the Ablative makes a better verse. Sch. reads tangentes without reason; Cetus does touch the River with his breast,—I adopt Heinsius' emendation, pectora for corpore—while Piscis are some distance from it.
BOOK II CH. XLIV § 114.

quem: the Masc. is I think used, not (as Sch.) because C. had to used in his mind (on which see Varro R. R. i 12), but because in the Phaen. he had used for it the name Eridanus, of which he says (I. 149) hunc Orionis sub laeva cernere planta serpentin poteris, proceraque Vincla videbis.

Vincla: Arat. 362 Διαμοι 8' ουράνιοι τοις ἠχθεῖς ἄκροι ἔχοντα, ἄμφω συμφοροίων ἀν' οὐραίων κατάνυσες ('hanging from their tails').

inde Nepae cernes: forty lines are omitted in which the Southern Fish and the Water Stream are treated of; then Aratus goes on l. 402 αὐτάρ ὑπ' αἰλομῖνω κέντρῳ τέρας μεγάλου Σκορπίου ἄγχω νόστου Θυτηρίου αἰσθήται. The Altar was an invention of Eudoxus, which the mythologists made out to be that on which the Gods swore alliance against the Titans.

propterque Centaurus: Arat. 437 τού (Κενταύρου) γάρ τοι τα μὲν ἀδρι ἑνωταν νεῶθη καίται Σκορπίου ἱπποῦραν 8' ὑπὸ σφίς Χελαί ἔχονσιν. αὐτάρ δὲ δεξιερὴν αἰεὶ ταντοτι ἐοκεν ἀντὰ δινωτοῦ Θυτηρίου ἐν δὲ αἱ ἄπρις ἄλλο μᾶλ' εἰσφίκται φαιλαμένον διὰ χειρὸς θηρίου. equi partis = ἱπποῦρα. For subjugere the ms of Phaen. have conjungere.

Chelis: the constellation formerly known as the Claws of the Scorpion was afterwards changed to Libra. In Div. ii 98 it is called Jugum, in jugo cum esse luna. Virgil has both names, Chelae in Geo. i 33 and Libra l. 206 Libra die somnique pares ubi fecerit horas, et medium luci atque umbris jam dividit orbem, referring to the autumnal equinox, when the sun is in Libra. Manilius calls it juga Chelaarum i 609. After the astronomical reform of Jul. Caesar the name Libra is the one in ordinary use, e.g. Hor. Od. ii 17 16 seu Libra, seu me Scorpios adspexit formidolosus; Manil. iv 548 felix aequato genitus sub pondere Librae; judex examen sistet vitaque necisque. Besides denoting the equilibrium of day and night, it was supposed to be the scale of the Virgin Justice.

hic: the centaur, supposed to be Chiron. porgens: the contracted form becomes regular in surgo.

quadrupes: now known as Lupus, but not specially named by the Greeks, as C. says in the line which follows in Phaen. 212 (omitted here) quam nemo certo donavi nomine Graium. Martianus Capella calls it panthera. Germanicus (419) leaves it doubtful seu praedam e silvis portat seu dona proppinguae, placatura deos, cultor Jovis, admoret arae. Though quadr. commonly means a beast of burthen, we find it used of a tortoise Pauv. Ant. fr. 4, of a crocodile Plin. N. H. viii 37.

truculentus caedit: the weight of ms authority is about equal for cedit or caedit, but I think the probability is in favour of the latter, because (1) we should otherwise have cedit—tendit—caedit all meaning the same thing (for tendit can hardly be taken in the sense of 'stretch' with porgens just before), (2) the idea of sacrifice is naturally suggested by the altar, (3) the word truculentus, which does not occur in the original, seems to have been added by Cic. to suit caedit rather than cedit.

hic see Infernis—Hydra: Arat. 442 διὰ θέτι γαρ τε καὶ ἄλλο περαιόθεν ἐλκεται δαστρον. "Υδρην μν καλέουσι, το δὲ ζωοντι ἕωκεν ἤμένεται. In-
aethere aer, inde aqua, ex aqua terra infinita. Zeno (ap. Stob. Ecl. i 19 § 4) does not make it quite clear how the doctrine of the upward movement of air and fire is to be reconciled with the belief in universal gravitation: 'it is correctly said that all the parts of the world, especially those that have weight, seek the centre, and that this is the cause of the stability of the universe and of the earth; air and fire are absolutely without weight, still they have a sort of tendency to the centre of the universal sphere, though they naturally gather around its circumference' (γέγραψα ταύτα πως ἐπὶ τὸ τῆς ἀλης σφαίρας τοῦ κόσμου μίσον, τῷ δὲ σύντασσά πρὸς τὴν περιφέρειαν αὐτοῦ ποιησάτα). Compare also passages cited by Zeller IV pp. 184, 185. The explanation seems to be that the all-pervading ether, while it has a naturally expansive and interpenetrative force, has also a strong cohesive force and thus holds all things together around the centre. See below, on the air, which has in itself a tendency to rise, and yet clings to the element immediately under it, so as to forbid any vacuum; and cf. Plut. Comm. Not. § 45, p. 1086 c γῆν μὲν γὰρ ἱερὰ καὶ ἐδώρ οὗτα αὐτὰ συνέχεις οὗτε ἔτερα, πνευματικὴς δὲ μετοχὴ καὶ παράλοιποι δυνάμεις τὴν ἐνότητα διαμαλάτευσαν. ἀρα δὲ καὶ πῦρ αὐτῶν τε ἐίναι δὲ εὐτοιαν ἐκτάσια (expansive owing to their elasticity) καὶ τοῖς δυναῖς ἐκείνοις ἐγκεκράμενα τόνων παρέχει καὶ τὸ μόνων καὶ οὐσίων: also Def. Or. p. 425 (Chrysippus held) ὅτι ταῖς εἰς τὸ αὐτής μίσον ἡ οὐσία καὶ ταῖς ἀπὸ τοῦ αὐτῆς μίσου διοικεῖται καὶ συνιστάται κυβερνήσως, Nemes. 2 p. 29 (the Stoics say) τοιοῦτον ἐδώρ κίησον περὶ τὸ σῶματα εἰς τὸ ζων ἀμα καὶ τὸ ζων κυνηγὴν; Seneca N. Q. ii 6, and vi 16 non esse terram sine spiritu palam est; non tantum illum dicō, quō se tenet et partes sui jungit, quī inest etiam saxis mortuissquae corporibus et., Vit. Beat. 8 § 4 mundus quoque cuncta complectens rectorque univerii deus in exteriora quidem tendit, sed tamen in totum undique in se reedit. This Stoic doctrine of attraction to a centre was vehemently controverted by the Epicureans, as may be seen in Lucr. i 1052 foll. Even Plut. (Fac. Orb. L. c. 7) denies it.

§ 116. si mundus globosus: we find the converse argument in Cleom. i c. 8, p. 40, the earth being proved round, if it follows that the universe must be so too.

medium infimum: cf. § 64, Arist. Cael. i p. 268 b, λέγω δ' ἄνω μὲν τὴν ἀπὸ τοῦ μέσου κύησαν, κἀτω δὲ τῆν ἐπὶ τὸ μέσον, Plato, Phaed. 112 σ, Cleom. i pp. 9, 12.

nihil interrupset: 'there is nothing to break the continuity,' i.e. no vacuum; cf. Cleom. i p. 4 τὸ κενὸν ἐν τῷ κόσμῳ οὐδὲ ὅλος ἐστί, εἰ γὰρ μὴ δ' ὅλον συμφόρησι υπήρχει ἡ τῶν ὅλων οὐσία, οὔτ' ἂν ὑπὸ φύσεως οἷον τ' ἢν συνεχθαι καὶ διοικεῖσθαι τοῦ κόσμου, οὔτὲ τῶν μερῶν αὐτοῦ συμπάθει τις ἢ ἣν πρὸς ἄλλα, οὔτε μὴ ύψ' ἐνόσ τούπον συνεχομένου αὐτοῦ καὶ τοῦ πνεύματος μὴ δ' ἰδοὺ ἄντοι συμφώνου, οἷον τ' ἢν ἢν ἢν ὡς ὁμοίως. μεταξύ γὰρ οὕτων κενώματων ἐνεποδίζοντο ἄν ὑπ' αὐτῶν αἱ αἰσθήσεις.

§ 117. huic continens aer: cf. § 66 and § 100.

fertur levitate sublimis: the reading subline is unsupported by MSS and forms a weak ending to the clause. For the use of the predicative
Adjective instead of the Adverb see Madv. § 300, Draeg. § 159; for sublimis see Liv. i 16 sublimem rapturn procella, ib. 34 sublimis abit; it is frequent on the gravity of bodies, explaining their apparent lightness as relative, not absolute, cf. Lucr. i 1083 foll., ii 184 foll.

et mari continuatus—et natura furtur ad caelum: the two antagonistic qualities are combined, as in the case of ether below et suum retinet...et conjungitur, answering to furtur ille quidem...sed tamen. So Fin. III 62 negque vero haec inter se congruae possent, ut natura et procreari vellet et diligi procreatos non curaret, and the conjunctionum negantia in Fat. § 15 foll. caelum = aether as often.

tenuitate: cf. tenuum below and tenuissimus § 42. vitalem spiritum: cf. vit. calorem § 27.

cum aeris extremitate conjungitur: cf. § 100 of land and sea.

Ch. XVI. nisi: cf. § 115 nituntur aequaliter; the pressure at the centre is equal and opposite in all directions, therefore it remains at rest.

ante dixisse videor: in § 47 nihil offensionis habere potest. On videor see I 58 videor audisse n.

§ 118. vaporibus aluntur: the Stoics believed that the sun was fed from the sea, the moon from fresh streams, the stars from the moisture of the earth, cf. § 40 n., and § 83.

refundunt: on the moist influence of the moon see § 50 n. Rain was also supposed to come from the stars which were conspicuous during the rainy seasons, see nn. on the Aratean section. Geminus (Uranol. p. 56) sensibly remarks ‘the risings and settings of stars are no more the causes of atmospheric changes than beacons are of a hostile invasion; they are merely signs. The earth being a mere point in comparison with the sphere of the fixed stars’ οὐδεμιά ἀπόρροια διανείρα ἀπὸ τῶν ἀπλανῶν ἐν τὴν γῆν.

eadem: instead of eodem vapore, see n. on § 7 ea portendi, Madv. 214 b.

quod—consumat: I see no reason for changing the Subj.: quod is indefinite, like δ ὅπερ, ‘whatever, if any, portion is consumed’. See nn. on § 44 quaer moveretur, § 72 qui precabantur. [I agree in retaining the Subj. but I should put it on somewhat different ground. Nihil est quod consumat is the regular constr. see Gr. § 1686: admodum paulum est quod consumat is also perfectly admissible (see Madv. § 365 Anim. 1). The edd. write consumit because interest, not sit, has preceded, and therefore the agent causing the loss, not merely the fact of the loss, has to be added. The meaning will then be ‘so that nothing hardly perishes, or only very little, which is consumed &c.’ The subj. on the other hand means ‘only the very little consumable by fire’ R.]

eventurum putant...ut igneseret: the tense of the Subj. is attracted to that of the parenthetic clause (id—dicebant), see Draeg. § 151, 5, 6, R. P. III 4 ratio civilis perfect in bonis ingeniiis id, quod jam persaepe
persecut., ut divina virtus existaret, and above § 2 n. The Stoic doctrine of the cyclic conflagration was borrowed from Heraclitus, see Simpl. in Arist. Cael. p. 132 Karet. (cited in Bywater's Heraclitus fr. 20) ‘Hr. str fi
μεν ἐπικρύοςθαι λέγει τὸν κόσμον, στρ τε ἐκ τοῦ πυρὸς συνισταθαι πάλιν
κατά τινα χρόνων περίδους, ἐν οἷς φησί: Μέτρα ἀντόμενοι καὶ μέτρα σβήνο-
μενοι. Seneca (N. Q. III 27 f. 11.) has a fine passage on the predestined
destruction of the world by water in the cosmic winter, and then again by
fire in the cosmic summer. Afterwards omne ex integro animal generabitur
dabiturque terris homo inicitus scelerum..., sed illis quoque innocencia non
durabit, nisi dum novi sunt; cf. Ov. Met. I 255 esse quoque in fatis remi-
niscitur afferre tempus, quo mare quo tellus correetque rēgū caeli ardeat et
mundi moles operosa laborēt; and my Sketch of Anc. Phil. p. 173. ex
quo: from the using up of water to support the fire of the heavenly bodies.
Boethus, a contemporary and fellow-disciple of Panaetius, made use of a
similar argument to prove the reverse, viz. that the existing cosmos must
be eternal; ‘if the world is changed into fire, there is nothing left for fire
to feed on, and therefore fire itself, the one principle of life, must perish’.

Panaetium addubitare dicebant: ‘they used to say (when I at-
tended lectures).’ On addub. see I 14 n. and Holden on Off. i 83. On
Panaetius see Introd. p. xxx: his Eclectic tendency showed itself in de-
parting from the general doctrines of his school on the question of divi-
nation and of the necessity of drāma, as well as on that of the Conflagration.
We gather from Stob. Eol. i 414 that his view on the last point was only
put forward as a probability (addubitare) πιθανωτέραν εἰρήνη ποιής καὶ μάλ-
λον ἀφικουσαν αὐτῷ τὴν ἀδιάστημα τοῦ κόσμου Ἡ τὴν τῶν διον εἰς πῦρ μετα-
βολὴν. See the discussion on the sources of this book. In like manner
Cleomedes (i p. 3) leaves the question doubtful, and so the authority
followed by C. (probably Posidonius) above § 85 (mundi conjunctio) aut
semipeterna sit necesse est hoc codem ornatu quem videmus, aut certe perdin-
turna, permanens ad longinquum et immensum paene tempus.

ad extremum: in the Magnus Annus § 51 n.

a quo—feret: ‘for the new world to spring from’.

C d (5). Thus there is a harmony and sympathy between the
remotest parts of the universe; and our earth is benefited by a stellar
influence. § 119 (cf. above § 50 foll.).

§ 119. multus videri: from meaning simply ‘copious’, multus
acquires the secondary force of ‘tedious’, cf. Off. II 56 (Theophrastus) est
multus in laudanda magnificentia; Acad. II 17 Antipatrum, qui multus
in eo fuisset, reprehendebant; Orat. II 358 ne in re non multum sim; ib. § 17
qui aut tempus quid postulet non videt aut plura loquitur aut se ostentat... aut
demique in aliquo genere aut inconcinnus aut multus est, est ineptus esse
dicitur, where Wilkins translates ‘officious, troublesome’ . The same idea
of diffuseness and tediousness is found in πολύς e.g. Aeschin. p. 33 πολύς
ην τοῖς ἑπαίνους καὶ ἑπαξής.
concentus: cf. above § 19 omnibus inter se concinentibus mundi partibus.

cum summa Saturni—temperet: 'while the furthest (of the five planets), that of Saturn, has a cooling influence, and the middle planet, that of Mars, has a heating influence, the planet of Jupiter, which is situated between these two, has an illuminating and moderating influence'.

his interjecta Jovis temperet: Plin. N. H. ii 8 Saturni sidus gelidae ac rigentis esse naturae...tertium Martis ignei, ardentis a solis vicinitate...ideoque hujus ardore nimio et rigore Saturni, interjectum duobus ex utroque temperari Jovem salutaremque fieri; Vitruv. ix 1 § 16.

duae Soli oboediant: cf. n. on § 53, and Philo Prov. ii 69 duae cum solo currunt semper Mercurius et Venus...ceterorum impares sunt velocitates periodi.

Luna graviditates afferat: see n. on § 50.

C d (6). Wonders of vegetable life. § 120.

Ch. xlvii § 120. age; cf. i 83 n.

radicibus continentur: 'live by their roots' (lit. are kept together, preserved, that is, from being resolved into their component parts), cf. § 83 and § 127 ea quae a terra stirpibus continentur, and § 29 in radicibus inesse principatus putatur. I think stirps above must have the sense, not of the following truncus, but of radix, as in § 83, where it is said terra stirpes amplesca ait.

quo alantur: 'that thereby they may be nourished'.

libro aut cortice: usually these are distinguished as the inner and outer bark, here as a thinner or thicker bark, cf. Plin. N. H. xvi § 128 cortex aliis tenuis, ut lauro, tiliae; aliis crassus, ut robori; aliis levius, ut mala, fico; idem scaber robori, palmae...carnosus suberi, populo; membranaceus ut vii, harundini; libris similis, ceraso; multiplex tunicis, ut vitibus...quibusdam simplex, ut fico, harundinii; ib. vii 1 truncos etiam arboresque cortice interdum gemino a frigoribus et calore tutato est natura. I take liber here to be Pliny's cortex levius et simplex. The two words are interchangeably used Cato R. R. 45 § 3, Colum. xi 2 § 37, 41, v 6 § 12.

claviculis adminicula: cf. Senect. 52 vitis...ut se erigat, claviculis suis quasi manibus, qui quid est nactus, complexitur. clav. properly a little hook, the simplest form of key being a hook; see Voss on Aratus l. 191.

ut animantes: see this beautifully shown in Darwin's book on Climbing Plants.

a caulibus refugere dicuntur: caulis, which properly means stalk, is used in a narrower sense for brassica (Spafoes) our 'cabbage', hence called 'colewort'; as in Hor. Sat. i 3 116, ii 4 15, Juv. i 133, v 87. The antipathy of the vine to the cabbage is also stated by Pliny N. H. xvi 24 70 (vitis) et caulem et holus onne; XX 34 (brassicam) vino adversari ut inimicam vitibus: antecedente in cibus caveri ebrrietatem, postea sumpta crupulam discuti; Cato R. R. 156; Theophrast. H. P. iv 16, C. P. ii 18, who attri-
butes this dislike to the odour of the cabbage, ὡφραττών γαρ ἐν ἄμπελος; Varro R. R. 16 compares it to the mutual antipathy of the oak and the olive, usque eo est contrarium natura, ut arbores...fugiant, ut visis adissa ad holus facere solet; Philo Animal. 94 (arbores) tangquam osculo salutando ampectuntur se invicem ut...ulnum visis; aliquas tamen non solum aversa- tur visis serum etiam eniit...vitem eniit populus et lauri.


§ 121. ut in suo quaque genere permaneat: ‘what provision is made in each case for the preservation of the species’. animans used in all three genders, like quadrupes: the feminine usually has reference to brutes (bestia). quaeque followed by the Sing. as in § 127 quaeque defendat, cf. Madv. Fin. v 42.

coris tectae: ‘pachyderma’.


effugia pinnarum—pinnas quibus effugiant; for the abstract plural see § 98.

enumerare possum: cf. i 101, ii 10. ‘I might show in detail what a provision has been made in the form of each animal for getting and pre-paring this food, how skilful and exact is the arrangement of the various parts, how marvellous the fashioning of the limbs’. The general question quae discriptio is particularized in the following et quam soleres subtilisque.

§ 122. beluis: evidently not distinguished from animal or bestia used below, cf. i 77 n.

sensum et appetitum: cf. above § 34 n., iii 33 and Diog. L. vii 85.

altero sectererent = sc. sensu.

dentibus ipsis: the teeth themselves (as opposed to such instrumentality as the ungium tenacitae) not only cut and chew the food, but catch and hold it.

sugunt: suck, as the bat or leech; carpunt: bite or tear off, as the grazing ox; vorant: swallow whole, as the boa constrictor; mandunt: chew, most commonly used of the horse; here perhaps to be understood of carnivorous animals.

clibum terrestrem: cf. Plaut. Capt. i 2 86 terrestiris cena est...multis holteribus.


manus data elephanto: cf. Arist. P. A. iv 12 p. 693 b τοῖς ἰδέασιν δῶμαι ἐν τῷ πουλίῳ, ib. ii 16 p. 658 b, Curt. viii 14 § 27 terribilis illa facies erat cum manu arma virosque corripserent elephanti; Plin. N. H. viii 10 spirant et bibunt odoranturque haud impropris appellata manu (but in c. 7 he uses the Aristotelian term proboscis): the same writer uses manus of
the fore-paw of the bear (ib. c. 36). Hence Lucr. v 1303 speaks of the elephant as boves Lucas turrito corpore, taetras, anguimanus.

**habebat ad pastum**: the tense would suggest that the elephant was first created without his trunk, and then that this was developed to meet a practical difficulty: so in the following sentence, the natural diet of each creature is supposed to be determined first (erat is cibus) and afterwards nature provides the means for obtaining this. See n. on **deberet** § 141.

Ch. XLVIII. **quibus bestiis...**(is) **dedit**: for exx. of the omission of the Demonstrative, where the Subject is attracted into the Relative clause, see Madv. § 321, Draeg. § 472, Krüger **Unters.** § 81.

C d (7) β. **Special adaptations of animal nature for the preservation of the individual.** §§ 123—127.

**alii generis bestiis**: Mu. objects to the form alius read by most edd. and says that we either find alterius generis, as in Vitruv. viii 4 § 1, or alii generis, as in Varro L. L. ix 67 alii generis vinum, R. R. i 2 § 19 alii dei ara; and that alius (Gen.) is not found in Cic. except in **Invent.** ii 6 § 21, but aliae pecudis in Div. ii 30 and aliae rei Lucr. iii 918; some mss have altero Dat. in § 66. He omits **generis** on the ground that multae bestiae sui quoque generis bestis vescentur, but the general belief of antiquity was to the contrary effect, see Juv. xv 159 with Mayor's n., Quintil. **Decl.** 12 § 27, Sen. **Contr.** 9 § 10.

**ut in araneolis aliae texunt**: an abbreviated expression for ‘ut in araneolis fit: aliae texunt’, cf. Fœn. iv 75 ut in fidibus pluribus, si nulla earum ita contenta nervis sit, ut concentrum servare possit, omnes aequo incontentae sint, sic peocacta...aequo discrepant; where Madv. compares iii 63 ut enim in membris alia sunt tamquam sibi nata...aliaque etiam ceterorum membrorum usum adjuvante,...sic &c. **araneola** is **sp. leg.** here, as the Masc. **araneolus** in Oulex 2. Aristotle describes different kinds of spiders H. A. ix 39 (τὸν λεγομένων λύκων) τὸ μικρὸν ὑφάνει τράχην, τὸ δὲ μεῖζον τραχῦ καὶ φαίλον πρὸς τῇ γῇ καὶ ταῖς αἰμασιαῖς ἐπὶ τοῖς στομαῖς δὲ δὲ τουεῖ τὸ τράχην καὶ ἔνθον ἐχει τὰς ἀρχαίς τυρεί, ἐφι σὲ ἐμπαιείν τι κυνηγή (σι φυϊδ ἐπι- σίδι), ἔπειτα προσέρχεται. This is contrasted with the more cunning weaver, who spreads a large net to entangle her prey: cf. Plin. N. H. xi 28, Aelian N. A. vi 57 ὁ μόνον δὲ ἄρα ἤσαν ψαρικὰ καὶ φάλαγγες...πεψυ- κεσαν δὲ καὶ γεωμετρίαν δειναὶ τὸ γονὺς κέντρων φυλάττοντε καὶ τὴν περιφέρειαν ἀκροβούνων λυχνώς καὶ θυόληδου δέοντας οὐδέν. Cic. seems to draw a distinction between those which make large nets, in the midst of which they lie in wait, and those that hide themselves in holes, such as the trapdoor spiders (aranea saccata of Linnaeus); but the latter are not very clearly described. We want more information as to the place in which the spider hides and into which the victim falls (incidit as opposed to inhaeret), and ex inopinato is plainly unsuited to the word **observant** with which it is joined in the mss. In the text I have adopted Allen's emendation, but I think it
probable that there has been further loss in the mss, and that the original
may have been something like *ut ex fovea observant et ex inopinato, si quid
incidit, &c.*, or *ex insidiis observant, ut ex inopinato, si quid incidisset, arri-
piant*. It is possible however to take *observant et arripiunt* as a sort of
hendiadys, so as to allow the force of *ex inop.* to extend to the 2nd word.
See crit. nn.

*iique consumunt* : on the pleonastic Demonstrative see § 27, and
Index.

*pina* : cf. *Fin.* iii 63 (some beasts are solitary) at *illa quae in concha
patula pina dicitur, iaque qui enat e concha, qui, quod eam custodit, pino-
teres vocatur, in eandemque cum se recepit includitur, ut videatur monnisse ut
caveret...altiorum causa quaedam faciunt*. Aristotle says that the pea-crab
(*squilla, πινυτήρης*) finds a lodging in the shell of the ‘naker’ or mussel
(πίνυς) and that the latter dies, if separated from the former (*H. A. v 15*).
So Chrysippus (ap. *Athen. iii c. 36) ἐν τῷ πέμπτῳ περὶ τοῦ καλοῦ καὶ τῆς
ἡδονῆς, ἡ πίνυς, φιοσί, καὶ ὁ πινυτήρης συνεργά ἀλλήλωι, κατ’ ὅδιναν οὖν δυνα-
μένα συμμάχους...ἡ πίνυς διαστήσασα τὸ δοτρακὸν ἰσχυράς τηροῦσα τὰ ἐπε-
σιώτα ἵχθυδα, ὃς πινυτήρης παραιστᾷ, ὅταν εἰσίλθη τι, δακνεί αὐτῷ ἄσπερ
σημαίνων, ἡ δὲ δηθεία συμμάχους καὶ ὅταν τὸ ἀπολυφθὲν ἐνδὸν κατασβοῦνε κοινῇ*; Oppian *Hal.* ii 186 foll., also *Plin.* N. H. ix 42, *Philo de Anim.* § 60.

In the *English Cyclopaedia* there is a letter to Linnaeus from a corre-
spondent at Smyrna dated 1749, in which the latter says ‘the *Pinna muri-
cata* or Great Silk Mussel is here found at the bottom of the sea in large
quantities, being a foot long. The *Octopoda* or Cuttle-fish with eight
arms watches the opportunity, when the mussel opens her shell, to creep
in and devour her; but a little crab, which has scarcely any shell, lodges
constantly in this shell-fish; she pays a good rent by saving the life of her
landlady, for she keeps a constant look-out through the apertures of the
shell, and on seeing the enemy approach she begins to stir, when the
*pīna* (for so the Greeks call the shell) shuts up her house, and the rapacious
animal is excluded. I saw this shell-fish first at the island of Milo and
found such a little crab in all I opened. I wondered not a little what was
her business there, but when I came here, I was first informed of it by the
secretary of our consul, a curious and ingenious man, who has lived long
in this place. This was afterwards confirmed by several Greeks, who daily
catch and eat both these animals’.

*societatem coit* : a technical phrase = euvendo societatem efficit, see
*perd. reo* § 21 fum. Also in the Digest. *J. E. B. M.*]

§ 124. *bestiolis cibus quaeritur* : on the Dat. used for the Abl. of
Agent after Passives see Madv. § 250.

*congregatae* : used of two, as in *pro Quint. 52 is quicum te voluntas con-
gregasset*. I cannot think the word *congressu* correct; *conventu* or *con-
sensu* would better express a compact, as opposed to an instinctive habit:
cf. Tusc. 1 30 *omnes esse vim divinam arbitratur.* nec vero id collocutio
hominum aut consensus effect. . . lex naturae putanda est. We know that consensus and consensus are easily confused, as in I 61, and the gre may have come from congregatae below. Athenaeus I. c. asserts that the association was instinctive.

natura: Abl. of Cause. At one time I was disposed to retain the reading of the ms naturae ipsae, understanding by it 'their very natures are associated' i.e. 'they are associated by their natural constitution', but the harshness of the zeugma involved in congressun aliquo leads me to prefer Walker's reading, which would be easily corrupted by the assimilation of ipsa to the following word.

est admiratio in bestis: 'there is a wondering (i.e. ground for wonder) in the case of beasts' = in quo admirandum est above, cf. Pliny N. H. x 55 cited below on anitum ova. [Cf. similitudo Madvig Finn. v § 42. J. E. B. M.]

veluti: 'for instance', cf. I 101 velut ibes. crocodili: three of the best ms read crocodili here. It is the form used by Phaedr. i 25 4 a crocodilis ne rapiantur traditum est, also l. 6, and Mart. III 93 7. Ritschl (Opusc. II 536) holds it to be the original Latin form, like Cortona for Κρότων, Tarracina for Τραχίνιον, Assculapius for Ασσκληπιος, and that it was displaced by the regular Greek form as that language became better known in Rome. niti: 'to move a limb'.

anitum ova: Plin. x 55 super omnia est anatum ovis subditis atque exclusis admiratio (gallinæ), primo non plane agnoscentis fetum, max insertos incubitus sollicite convocantis, postremo lamenta circa piscinæ stagna mergentibus se pullis natura duce.

exclusi fotique: 'hatched and reared (lit. kept warm in the nest)'; cf. § 129, where excudo is used with similar meaning; Lucr. v 802 volucre ova relinquebant exclusae tempore verno, Colum. viii 14 (of the hens) si prohibantur fetus suos excludere; used of the eggs by Pliny Lc.

conservandi sui: see Madv. § 417, who cites Catil. I 9 principes civitatis non tam sui conservandi...causa Romam fugerunt, for se conservandi, the Neut. Gen. sui being used if the gerundive is used, whether se be Sing. or Pl, according to the rule given in § 297 b ('when a personal or reflexive pronoun ought to be joined to a word as an object in the genitive, the genitive neuter singular of the corresponding possessive pronoun is used', e.g. studium nostri 'devotion to us', lit. 'to our interest'), cf. Caesar B. G. III 6 neque sui colligendi hostibus facultatem relinquunt; Div. II 39 doleo Stoicos nostros Epicureis irridendi sui facultatem dedisse. For exx. of the use of suus in reference to a word which is not the subject of the sentence see Roby § 2365. There is something of pleonasm in the phrase custodiam cons. sui: it would have been more regular to have custodiam salutis or curam conservandi.

Ch. xlix. legi scriptum: 'I have read in a book', cf. Deiot. 19 ut scriptum legimus. nominaretur: for Imp. Subj. after proper Perf. Ind. see I 3 n. and Index.
plataea: Plin. *N. H.* x 40 copies this, slightly altering the name, *platea nominatur advolans ad eas quae se in mari mergunt, et capita illarum morus corripiens donec capturam extorqueat, eadem cum decoratis se implavit conchis calore ventris coctas evomit, atque ita eis esculenta legit, testas escernens.* No earlier or independent authority is cited for this characteristic, but it agrees with the accounts given of the Frigate or Man-of-War Bird (*Pelicanus aquila* Linn.) and also of the *Skuva stercoraria* (*Engl. Cycl.*), ‘they pursue the Sea-mews and Terns, which may be termed their purveyors, and sometimes even Boobies and Cormorants, their only aim being to deprive these birds of the prey they have caught. They pursue, harass and beat them, until they have forced them to disgorge and drop their booty, which they catch before it falls into the sea.’ See also *Engl. Cycl.* under *Pelicanus* and *Booby.* The word *platea* is the regular name for the Spoonbill, which has no such propensity: *Philo de Animal.* § 31 calls the bird *poelotes.*

*quae se in mari mergent:* ‘divers’, which the pelican is not.

*cum emersissent plicemque cepissent:* ‘had come to the surface with a fish’, a sort of *hysteron-proteron.*

*captum amitterent:* Allen cites Curt. iv 6 *praetervolans corvus globam, quam unguibus ferebat, subito amissit,* cf. also 2 Verr. iv 44 *praedia de manibus amissa.*

*in quod ipsa invaderet:* ‘for the other to pounce upon for itself’. This is the usual construction in Cio., cf. 2 *Phil.* 77 *in collum invasit,* and Sch. *Opusc.* iii 337.

*conchis comploere:* taken from Arist. *H. A.* ix 10 *ol pelekèves ol en tois potamoides ginómeoun katastrínounti tas megálas kóyxhas kai leias,* ótan dé en tò pro tis koilias topor tephsoin, éksemouin iwa xasoukounon tis kria éxarofíntes éndi- wosin. Aelian *H. A.* v 35, and Plut. *Sol. An.* p. 967, state the same thing about the heron (*érōdios ardea*). By *pro* tis koilias Arist. probably means the pouch (*propogreipos* Ael. l. c.), as he uses much the same language of the ‘crop’ of fowls, *H. A.* ii 17 *ol *mén *gar ékous pro tis koilias proloóboun ónou eléktrooun...ol *pro* proloóboun mé ouk ékousin, állo *ánnt* toúton tòm stoíxhia (the gullet) *épinoi kai patai y de* ñkoun (as the láros kai katafráktos),...*énoi dé tis koilias autis té ékousin ómou proloób (translated by Pliny xi 79). Cf. *Part. An.* iii 14 *owing to the absence of teeth birds have to nous kaluménon proloóboun ánnt sotto stoíxhia érgasia...* *pro* tis koilias méros tò oýkades en *phi* prosthensauríson tòn ákatergastos trophiín.* Pliny tells a similar tale of the onocrotalus, which is evidently the pelican, (x 66) *olorum similitudinem onocrotali habent,* nec distare existinarentur omnino nisi faucibus ipse inisset alterius uteri genus. *Huo omne inceptile animal congerit. Mox perfecta rapina senitim inde in os reddita in veram alvum ruminantis more refert.* We need not suppose that C. meant the pouch by his *stomachus,* on which see below § 135, any more than Pliny did by his *verter* (c. 40 cited above), still less Aelian (iii 20) by his *en miúph the yasputon.*

§ 125. *ranae marinae:* the Angler or Fishing Frog, *Lophius piscato-
rius, is usually about three feet long, lives at the bottom of the sea, by means of its fins stirs up the mud in such a manner as to conceal itself from other fishes, has three long filaments on the upper part of the head: the glittering appendages at the end of these filaments are said to attract the smaller fishes, like a bait. See *Eng. Cycl.* Aristotle mentions it in speaking of the stratagems of animals, *(H. A. ix 37)* ὁ μὲν γὰρ βάραχος τοῖς πρὸ τῶν ὀφθαλμῶν ἀποκρεμαμένος (sc. θηρεύει, 'ensnares the fish with the filaments which hang in front of his eyes'), ὃν τὸ μὲν μῆκος ἆτι τρισδεκάες, ἕπ' ἄκρων δὲ στρογγύλων ἄσπερ προσκέιμενον ἐκατέρω δελιάτας χάρων ἄταν ὃν ἐν τοῖς ἀμμώδεσιν ἢ θαλερώδεσιν ἀναταραξας κρύψῃ ἑαυτόν, ἐπάρει τὰ τρικώδη, κοπτοῦσαν δὲ τῶν ἱχθυδίων συγκατάγει μέχρι περ ἄν πρὸς τὰ στόμα προσαγαγῇ. He calls it βάραχον τὸν ἀλεά καλούμενον, and so Plin. *H. N.* ix 42 piscatrix. Schneider in his note on Arist. l.c. says of this passage of Cic. *quaedam excidisse videntur*, and certainly we should have expected the antecedent to *ad qua* to have some reference to the filaments described by Arist.: if the reading is correct, C. seems to have supposed the rana to have concealed itself in the sand by the sea (*prope aquam*), not actually in the sea.

*Miluo bellum cum corvo*: this is described by Arist. *H. N.* ix 1 ὑφαινεται τοῦ κόρακος ὁ ἱετίνος ὃ τι ἄν ἔχῃ, διὰ τὸ κρείττων εἶναι τοῖς δυντὶ καὶ τῇ πτόχει, but it is of other birds, especially the κορώνη and γλάζη, that he says τὰ γὰρ κατατίθεναι ἀλήθων. Plin. ix 25 says the *aesalon* and *chloreus* destroy the eggs of the *corvus*.

*Grues trianguli efficere formam*: Aristotle *(H. A. ix 10)* says a good deal about cranes, but does not give the particulars mentioned by C. which are probably taken from the dialogue *De philosophia* (see above §§ 42, 44, 95). Pliny *(N. H.* x 23 § 63) tells the same with reference to wild geese and swans *liburnicarum modo rostrato impetu feruntur, facilius ita findentes aera quam si recta fronte impellerent: a tergo sensim dilatante se cuneo porrigitur agmen, largeque impellenti praebetur auro.* Colla impomunt praecestibus; fessos duces ad terga recipiunt; but in Aelian *N. A.* iii 13 and Plutarch *Sol. An.* p. 967 it is related of cranes. Allusions are made to the order of their flight in Lucan v 710, Mart. ix 14 and xii 75, where it is compared to the letter Δ; others compare it to *V* or *Y*. [AISON. *Id. xii de litteris monosyll. 25, Philostr. Heroic. c. 11 § 4, Hyg. Fab. 277, Hieron. Ep. 125 15, Claud. *Gild. 477*, Cassiod. Var. 8 ep. 12, Hemsterh. on Lucian p. 305, G. J. Voss *de Arte Grammatica* i 25, Bochart *Hieros. Pt. ii 11. *J. E. B. M.*] On the change from the Indirect to the Direct Construction (*efficere—pellitur*) see above § 39 *est autem mundo n.*

*Summo angulo*: 'the apex of the triangle'.

*aer adversus*: not necessarily an adverse wind, as Sch. and Plut. l.c. *(ἄραν ὃ πνεύμα πολύ*), but the air which meets them as they cleave their way through it.

*sensim*: this is scarcely intelligible by itself: probably *dilatante se cuneo* (Plin. l.c.) has been lost.
ea: see Index under Pleonastic Demonstrative.

a puppi ventis: 'by stern winds'; cf. § 14 praeter naturam portentis, § 87 solarium ex aqua: the plural means 'whenever they occur'.

non habet ubi mitatur: 'has nothing to rest on'; cf. 2 Verr. i 155 quo confugies? ubi nitere? and Matt. viii 20 ó viós τοῦ ἀνθρώπου οὐκ ἵκει ποῦ τήν κεφαλήν κλίνῃ. The frequent change of leader is an observed fact: the resting of the head is doubtful.

succedit ex ipsis: cf. R. P. i 34 si e vectoribus sorte ductus ad gubernaculum successerit; Sall. Jug. 93 § 7 Marius cum Ligures promissa ejus cognitum ex praesentibus misit; Tac. Ann. i 77 e plebe.

§ 126. proferre possum: cf. § 121. genus ipsum: the general idea is contrasted with particular exx., as in i 97 ipsa simulatio, cf. i 45-46 orum deorum.

Ch. L illa: in reference to the further instances of intelligence which follow. We have it repeated four times within a few lines, ulla § 125, jam vero illa, atque illa § 126, jam illa § 127.

nuper: contrasting the recent date of science with the instinctive knowledge of brutes, cf. Div. i 86 necque ante philosophiam patefactam, quae nuper invenit, haec de re communis vita dubitavit. If the explanatory clause which follows is genuine, we must understand it as a jocose addition on the part of Cic.

ea quae nuper...ibes se curant: Sch. is, I think, right in regarding this as an abbreviated expression for a bestis fieri videmus; nam vomitio canes &c. It would become regular if the parenthetic clause were put in apposition at the end. For the subject matter see Arist. H. A. ix 6 αἱ κόνες ὅταν τι πόσον, ἵππον ποιοῦσι φαγώσας τίνα πόνον, Plut. Solert. An. p. 974 τῆς ἱδρος τῶν ὑποκλυμένων ἀθώ καθαρόμενης λιγόττιοι σωμαίνει καὶ μιμήσασθαι λέγοντα (cf. Herod. ii 77); Plin. viii 27 § 97 mentions the use of the cyster as one of the lessons which have been taught by animals (on which see Dict. of Ant. under Medicina), so Philo (Anim. 38) 'men have to call in a physician, but animals know by instinct what treatment is required, as the goat the dictamus'. Bacon (De Augm. v 2) cites these and similar instances as showing how the arts had sprung up. Hippocrates seems to have been the first to maintain this view, cf. the quotation from him in Pattison's n. on Pope's Essay on Man iii 169 'see him from nature rising slow to art', and nn. on inventa animo below § 150.

pantheras: Arist. H. A. l.c. cont. η δὲ πάρδαλις ὅταν φάγη τὸ φάρμακον τὸ παρθαλαγχής ἵππει τήν τοῦ ἀνθρώπου κόπρον βοσθεῖ γὰρ αὐτῇ, Plin. viii 27 § 100 pantheras perficata carnis aconito...barbari venerant. barbaria: used of a particular barbarous region, as in § 88.

quo cum essent usae non mororentur: 'a remedy of such a kind that, after using it, they did not die.'

The wound of Aeneas is healed with it Αὐεν. xii 411. I have adopted Allen's emendation venantia for venenatis, which was no doubt repeated from the preceding venenata. Nowhere else is there allusion to poisoned arrows in reference to the dictaum: its power was supposed to be that of stanching the blood and causing the arrow to fall out; also it was used πρὸς τὰς δυστοκίας τῶν γυναικῶν ἢ γὰρ εὐτοκεῖν φαίνει ἢ παῖνες γε τοὺς πάθους (Theophr. l. c.). Again we never read of poisoned arrows being used in Crete, but only among barbarous races, such as the Scythians (see Dict. of Ant. under sagitta): indeed there could be no use for them in Crete, as we are expressly told that the island was free from all wild beasts and noxious animals (see reff. in the art. on Creta in Dict. of Geog.), and we can hardly suppose that poisoned arrows would have been employed against animals which were hunted for food, and that by a race of men who were famed for their skill in archery.

§ 127. cervae: Arist. gives a somewhat different account (l. c. ix 5) τῶν ᾠρίων ἡ ἕλαφος σύν σταῦτα δοκεῖ εἶναι φρόνιμον τῷ τῇ τίκτων παρὰ τὰς ὀδοὺς...καὶ ὅταν τῇ ἐσθέει τῷ χόρῳ πρῶτον καὶ ἐπὶ τὴν σέσελιν δὲ τρέχουσι καὶ φαγοῦσιν οὖν ἔρχονται ἐπὶ τὰ τέκνα πάλιν. Pliny combines this with Cicero's (N. H. viii 32 § 112) feminae ante partum purgantur herba quam quae seselis dicitur, faciliore ita utentes utero. A partu duas habent herbas quae arios et seselis apellantur. Pastae redunt ad fetum.

dentibus: 'tusks' ἡ morsu, where the whole jaw is employed, often used of the lion, e.g. Seneca Agam. 740, Herc. F. 946, Troad. 797.

sepiæ: Arist. l. c. ix 37 § 19 τῶν μαλακίων πανυργότατοι μὲν ἡ σημία καὶ μόνον χρήται τῷ βυλῷ κρύψεως χάριν καὶ οὐ μόνον φαβορισμένη, Plin. N. H. ix 29. Plutarch (Sol. An. 978 α) compares it to the Homeric Gods, who disappeared in a cloud, when hard-pressed. The liquor was used for ink (Pers. iii 13).

torpedines: Arist. l. c. § 3 ἡ τῇ κάρκυν ποιοῦσα δὲν ἃν κρατήσεις μέλη ἐχθών...λαμβάνει τὰ ἔπιστα...φανερὰ ἐστι καὶ τοῖς αὐθόποις ποιοῦσα πορκάν, cf. Plin. N. H. xxxii 1, Plato Meno 80 (the famous comparison of Socrates to the torpedo), Plut. l. c., Claudian Id. 3, Philo Anim. 30.

odoris fœditate: Arist. Part. An. iii 2 p. 663 a δοῖος δ' ἄχρηστος πέμφειν ἡ τῶν κεράτων ἐξοχή, τούτοις προστέθεικεν ἐγέραν βοσθειαν ἡ φύσις, οἷον τοῖς μὲν ἀλαφίως τάχος...τοῖς δὲ βοσάναις (the bison) τῇ τοῦ περιτόματος ἀφεσιν τοῖς γὰρ ἀμύνεται φοβηθεῖα καὶ ταύτῃ δὲ τῇ προσεῖ διασώσεται ἔτερα, Plin. N. H. viii 16 § 40 tradunt in Paonia feram esse quae bonaeus vocatur equina juda, oetera tauro similem, cornibus ita in se flexis ut non sint utilia pugnaeae: quaspropter fuga iibi auxiliari, reddentem in ea femur, interdum et trium fujerum longitudiné; cusus contactus sequentes ut ignis alicius amburat (translated from Arist. H. A. ix 45); Aelian N. A. vii 3 gives it the name μύοψ. Since the discovery of America, the skunk has supplied a less doubtful example.
Adaptations of animal nature for the preservation of the species.

Ch. ii. a providentia: cf. a natura sustinentur § 133.
a terra stirpibus continerentur: the same phrase occurs in § 83.
bacarum: includes all fruits which have a stone inside, and is frequently used by C. for the produce of trees in opposition to fruges of plants, cf. Div. i 116, and Senect. 5, fruges terrae bacarum arbore; Tusc. i 31 arbores seret agricola quamar aspiciet bacan ipsum nuncum; Leg. ii 19 certasque fruges, certasque bacas sacerdules publico libando; Tusc. v 37 neque est ululum quod non ita vigat...ut aut flores aut fruges fundat aut bacas; above § 37 we have fruges atque fructus.
stirpe: used here in the wide sense of 'plant', as in § 36 and § 99.

commiscendorum: cf. Homer's φιλότητι μεγήσαι, Div. i 60 ut cum mater corpus miscere videatur, Virg. G. ii 327 Aether conjugis in greminum descendit...magno commixtus corpore.
locis: cf. Plin. xi 84 uteru, quod alio nomine locos appellant; like τότος Arist. H. A. vi 18, vii 3; it is used also of the male by Lucr. iv 1034.

eaque saeptum fingit animal: these words, which Sch. translates 'with the food gives shape to the embryo inclosed', present several difficulties: (1) the Abl. with fingo naturally denotes the instrument; the material out of which anything is formed is properly expressed by the prep. ex: (2) it seems strange to speak of the semen as something external to the animal: (3) are we to take saeptum with semen or with animal? If we take saeptum animal as a periphrasis for fetus, we should have expected (as Heind. says) in utero saeptum, omitting the ex utero following. For the general meaning compare Favorinus ap. Gell. xii 1 nonne hac quoque in re solertia naturae evidens est, quod, postquam sanguis ille opifex in penetralibus suis omne corpus hominis fenixit, adventante jam partus tempore, in supernas se partes perfert? Arist. Gen. An. iv 4 p. 771 b το σπέρμα το ἄρρενο, εἶτε συμβάλλεται πρὸς τὴν ὅλην μόριον γνώμου τοῦ κυνοτατος καὶ τῷ τοῦ ὅλου σπέρματι μεγάλου, εἶτε...ωσπερ φαμέν, συνάγον καὶ δημουργόν τὴν ὅλην τῆν ἐν τῷ ὅλει, ib. i 21 τὸ μὲν ἄρρεν ἀρχὴν κυνής ὡς (συμβάλλεται), τὸ δὲ ἀρχὴν ὅλην, 22 ἢ μορφή καὶ τὸ εἶδος ἀπ' ἐκεῖνον (the male) ἐγγίνεται διὰ τῆς κυνής ἐν τῇ ὅλῃ (this clears up the second difficulty raised above, since the semen supplies only the formal and efficient, not the material cause); Arios ap. Euseb. P. E. xv 20 τὸ δὲ σπέρμα φησιν ὃ Ζήνων εἶναι πνεύμα μεθ' ύγρών, ψυχής μέρος καὶ ἀπόσπασμα. Its mode of operation is described in a passage quoted from Simplicius on § 81, where it is regarded as a type of the creative energy of nature, cf. Diog. vii 136 ὡσπέρ ἐν τῇ γονῇ τὸ σπέρμα περιέχεται, οὕτω καὶ τούτων (τῶν θεῶν) σπερματικῶν λόγων ὥσπερ τοῦ κόσμου τούτου ὑπολείπεθαι ἐν τῷ ύγρῷ, εὐεργόν αὐτῷ ποιοῦσα τὴν ὅλην πρὸς τὴν τῶν ἔξης γένεσιν (viz. the four elements). The
last passage might suggest that C. has confounded *cibus* (the food taken by the mother) with *materia*, in which case *saeptum* might refer to *semen* (= Gr. περικεφαλαί). Certainly, according to strict Stoic view, the *fetus* should not have been called *saept. animal*, as they answered the question *et tò ἐμβρύων ἔσων* in the negative, *μέρος εἶναι αὐτῷ τῆς γαστρὸς, οὐ τοῦ ἔσων* Plac. Phil. v 15. If we keep the reading, I should understand it as follows, 'the seed draws all the nourishment, i.e. the *μανης*, to itself and being inclosed in it moulds the embryo'. [Cf. Coleridge *Aids* (conclusion p. 328 ed. 6), 'herein consists the essential difference...of an organ from a machine, that not only the characteristic shape is evolved from the invisible central power, but the material mass itself is acquired by assimilation. The germinal power of the plant transmutes the fixed air and the elementary base of water into grass and leaves; and on these the organic principle in the ox or elephant exercises an alchemy still more stupendous. As the unseen agency weaves its magic eddies, the foliage becomes indifferently the bone and its marrow, the pulpy brain or the solid ivory. That what you see is blood, is flesh, is itself the work, or shall I say, the transluence of the invisible energy' &c. R.] But I am rather disposed to read *ex eoque conceptum* (or *cooptum*) *fingit animal*, 'out of the *μανης* moulds the rudimentary animal'.

*ut intellegamus*: depends not on the principal verb *data est*, but on an unexpressed idea, as in § 17.

*quae easdem*: 'while', cf. § 62.

§ 129. *ad eum finem*: of time, as in Verr. i. 16 *ex mansit usque ad eum finem dum judices reject sunt*, ib. v 75, Caes. 11.

*aqua et sustinentur et fetum fundunt*: 'a kind of zeugma for *et in ea. f. f.*' Sch.

Ch. lili. *nascentur ipsa*: by a natural confusion C. here predicates of the *nna* what is properly true of the young. For the fact see Plut. *Sol. An.* p. 982, Aelian *V. H.* i 6, Herod. ii 68. In Arist. however (*H. A.* v 33) and Plin. *H. N.* ix 10, x 62 tortoises and crocodiles are said to incubate.

*excuderunt*: the common word for hatching in the *Scriptores R.* R., *e.g. excudis ansaelcus* Col. viii 14 § 7; properly it refers to the breaking of the shell by the parent bird. Compare *εἰδέρειν* Herod. ii 68, *εκκόλαπτειν* Arist. *Hist. Anim.* vi 3 § 16.

Cd (7) 8. *Adaptations of external nature to meet the wants of plants and animals.* §§ 130—132.

§ 130. *accedit etiam*: I see no reason for omitting *etiam*. It is frequently joined with *accedit* in Cic. *e.g. Senect.* 16, *Harusp. Resp.* 6, 1 *Verr.* 29, *Balb.* 65; and the recurrence of the word with *hominum* is a very natural carelessness.

*rerum quas terra gignit*: a striking example of this awkward periphrasis, on which see 1 4.
sine procurat|ione hominum: cf. below § 158 (where we have also an
ex. of the Subjective Gen. sine cultu hominum) and Luor. v 860.
ad cultum hominum atque abundantiam: hendiadys 'for profitable
cultivation'.
tota aestate: it begins to rise in June and is at its height in Septem-
ber, see Rawlinson on Herod. II 19. For the Abl. of duration see totis
noctibus 105. oppletam: 'soaked'.
Euphrates: so Herod. I 193 'Babylonia is like Egypt intersected with
canals for the purpose of irrigation: the river does not overflow of its own
accord, but is spread over the land by the hand or by machinery. When
thus watered, the soil is incredibly fruitful'; Plin. N. H. v 26 increcit
autem et ipse Nili modo statis diebus paulum diffusus, ac Mesopotamian
inundat. When Herodotus says it does not overflow of itself, he must
refer to the artificial lakes and canals in which the water was stored up,
for the volume of water is swollen regularly by the melting of snows, like
the Nile.

quot annis: as there is no parallel to quot annos (reading of the mss)
before Apuleius Met. xi 22 sedulum quot dies obibam sacrorum ministerium,
I have followed Lamb. in reading the Abl. Davies cites Tusc. i 119 quot
dies erimus in Tusculano, but that is the ordinary Acc. of Duration; here
the inundation is not regarded as lasting through the year, but merely as
recurring every year. No doubt the eye of the scribe ran on to the follow-
ing accusatives.

qua|si novos agros: Strabo (xv 1 § 16) says this generally of all rivers
τούτων ἐν ἀν γεννήματι ὑπάρχειν τὰ πεδία, καὶ εὗ λέγοντα ὅτι τούτων ἐστὶ τὰ
πεδία: so the Delta of the Nile was called δῷ ῥο ἕος ποταμοῦ, Herod. II 5.

Indus: Arrian Anab. v 4 and 6 says it is the greatest river in Europe
and Asia except the Ganges, which surpasses all even the Nile. As a
matter of fact the Indus is a good deal longer than the Ganges, but not
nearly the length of the Volga or of some of the Chinese and Siberian
rivers, not to mention the Nile.

lae|tificat: similarly used by Pliny xvii 8 apud Homerus regius senex
agrum ita (fino) suis manibus laetificans reperitur. Hence laetamen used
for manure by Plin. xviii 16; see above § 102.

mitigat: softens hard soil, cf. Hor. Ep. ii 2 ferro mitigat agrum, and
below § 151 mitigat album.

frumenti similium: Strabo (xv 1 § 22) mentions a σῖνον αἰθροφυὴ πυρῷ
παραπλῆσθαι as growing in India, and Theophrastus (H. P. iv 5) says that
India bears καὶ σπέρματα ὅτα τὰ μὲν τῶν χειδροποιὸς δροια τὰ δὲ τῶν πυρῶν καὶ
τάς κρίθαις, but neither of them connects this with the overflowing of the
Indus.

Ch. LIII § 131. Etesias: the Nom. S. Etesias is used by Plin. N. H.
XVIII 34: they may be described as trade winds blowing periodically (τρός)
from N.W., cf. Seneca N. Q. v 10 a solstitio illis initium est ultraque ortum
Caniculae non valent. Sic ille Etesiarum flatus aestatem frangit et a men-
sium ferventissimorum gravitate defendit; ib. a. 18 Etiasae non patiuntur apud nos nubes consistere: idem totam Indiam et Aethiopiam continebat per id tempus aquis irrigant; Lucr. v 742 etesia flabra Aquilonum; Caesar (B. C. III 107) speaks of being detained in Alexandria by the Etesians qui navigantibus Alexandriam sunt adversissimi venti; cf. Herod. ii 20, Cic. Fam. ii 15, Att. vi 7. The word is also used for periodical winds blowing from other quarters Gell. ii 22, Diod. i 39, Arist. Meteor. ii 6, Ideler Meteorol. p. 114 foll.

§ 132. [st tamen multa dicuntur]: I agree with Ba. and Mu. in regarding this as an interpolation due to a reader whose patience was becoming exhausted by C.’s list of wonders. It is weak in itself and it breaks the connexion between praeterunda and enumerari enim.

opportunitates: ‘conveniences’, explained above in regard to agriculture § 130.

aestus maritimae: see § 19 n. The reading multum of the mss is probably to be explained by a dittography of the final syllables of maritimae, mitum getting corrupted into multum. Mutuo, read by Sch. with one inferior ms., has no meaning here: it cannot be used for victissim. The best of the other emendations is that of Lambinus, see crit. nn.


medicamentorum: Plin. N. H. xxiv 1 ne silvae quidem horridiorque naturae facies medicinis carent, sacra illa parente rerum omnium nusquam non remedia disponente homini.

artes denique: I think this reading may be defended on the ground that artes repertae sunt docente natura, Leg. i 26 (compare the whole passage and Bake’s n.), and that cum omni utilitate, quam di hominibus dederunt, ars aliqua conjuncta est, per quam illa utilitas percipi posse, Div. i 116; the medicamenta just mentioned would remind him of the remedial arts mentioned above § 126, which the animals had received from nature. If a change were needed I should prefer utilitates read by Mü. after H. A. Koch Progr. Port. 1868 p. 39, to the res of Moser, or dotes of Sch. (Opusc. iii 339, Fleck. Jahrb. 1875 p. 692).

victum—vitam: constantly found in conjunction, see Lexx. and Nizol.


Cad (8). The hand of Providence is most plainly visible in man. §§ 133—153 (C. appears to confound this section with the 4th general division of his subject, treated of in §§ 154—167).

§ 133. sed quaeret quispiam: I have followed the reading of Cod. Glog. here, rather than that of C. (with Mü.) or of Cod. Reg. with Sch. and Ba., because the simil of mss. would more naturally spring from an original sed than from hic; and the Subj. (of Cod. Reg.) is a far less usual construction than the Ind. of the mss., see Roby Gr. vol. ii p. ci.

at id quidem absurdum: Tusc. i 61 absurdum id quidem.
muterum: so I read with Dav. and Sch. for mutarum of mss. The neuter is the more general expression and therefore better suited for this place; but it would naturally be altered by scribes to make it agree with bestiarum. Cf. Verr. v 171 omnia muta atque inanima (including not only bestias but saxa), Juv. xv 143 with Mayor's n. For the argument cf. below § 157.

tantum laborasse: this is merely a rhetorical expression and not the Stoical belief, cf. i 22 n., III 92 dicere soletis nihil esse quod deus efficere non possit, et quidem sine labore ullo.


di et homines: not men alone, as is more loosely stated in §§ 37 and 154, where see n. and cf. Sen. Ira II 27 non enim nos causa mundo sumus hiemem aestatemque referendi: suas ista leges habent quibus divina exercentur. Nimis nos suspicimus, si digni nobis videmur propter quos tanta moveantur; Benef. vi 20 foll. The Gods alluded to are the heavenly bodies and all the various manifestations of the mundane Deity, cf. above § 59 foll., and Varro ap. Aug. C. D. vii 6.

ratio est quae praestet: 'it is reason that (not 'which') surpasses all'; on the Subj. see FIN. 1 43 sapientia est una quae pellat, where Madv. says 'conjectifus potestatem rei, non ipsum rem directo significat.'

quaeque in eo sint: I think the edd. right in omitting mundo after eo; as also in omitting cognoscunt § 145 and perhaps diligunt § 165: it is not wanted for clearness, as in the passages cited by Allen.

C d (8). a. in the provision made for the support of life by means of air and food. §§ 134—138.

In entering on the anatomical section I must warn the reader against expecting any assistance from two books which he might be tempted to consult, Cicero Medicus by Birkholtz 1806, and Cicéron Médecin by Menière 1862.

Ch. LIV § 134. cibo potione spiritu: cf. Arist. de Respir. c. 11 ἐπεὶ πρὸς μὲν τὸ ἐλαιότροφος δεῖται τὰν ἰσον ἑκατόν, πρὸς δὲ τὴν σωτηρίαν τῆς καταψύξεως, τῷ αὐτῷ όργάνῳ χρήσαι πρὸς ἄμφω ταῦτα ἡ φύσις. tenetur: 'depends upon', cf. § 31 tenetur calore.

adjunctis naribus spiritu augetur: 'the mouth receives abundant supplies of breath through the assistance of the nose'. Cf. Lucr. v 722 (tunae pars) ignibus aucta, III 630 animas sensibus auctas.

dentibus in ore constictis: 'by the compression of the teeth'. Most mss have constictis which I think always implies something of 'piling up'. I have followed V, which suits well with the following verbs manditūr &c. The clause must be considered to continue the description of the mouth, not to treat of the teeth as a separate subject, in which case constictis would be brought in too abruptly, and I should be inclined to read constictis with some inferior mss.
ab iis: the latest edd. treat these words as an interpolation. It seems to me more difficult to explain their insertion, if they did not form part of the original text, than to justify their use. If a general word, such as constitutis referring to the first creation of man, had preceded, some such phrase as this would have been required with the Passive verbs following; but even when a word of particular application like constrictis appears in the Abl. Abs. its subject may be repeated with a different government afterwards, see Sch. Opusc. III 373, who cites among other exx. Caes. B. G. III 14 turres excitatis tamen has altitudo puppium superabat, instead of turres excitatas. It is more remarkable to find the Abl. of the Agent, not of the Instrument, used in regard to the teeth, but this sort of personification may be paralleled by a lingua in the next sentence, and by § 139 nervos a quibus artus continentur, § 144 auditus a quo cum sonus est exceptus. Sch. would transpose ab iis before atque, so as to connect them with manditur; but the reading constrictis sufficiently explains the action of manditur, and I think they come in more naturally introducing extenuatur &c. as a sort of second thought.


eorum adversi [acuti]: I think acuti should either be expelled as a gloss or be altered into acuto. The double epithet would imply that some front teeth were not sharp. They are called prósthan by Arist. H. A. ii 1 § 50, and Part. An. iii 1 ó δ' ἄνθρωπος ἔχει τοὺς μὲν πρόσθεν ὀξεῖς ὡς διαφόρα, τοὺς δὲ γνομφίους πλατεῖς ὡς λειῶσαν, primores by Plin. N. H. vii 16; cf. Cels. viii 1 quaterni primi, quia secant, τομεῖς a Graecis nominantur.

genuini: (gena, γένυς, 'chin'), called also maxillares and molares. Cf. Xen. Mem. i 4 § 6 τοὺς μὲν πρόσθεν δδότας πάσι ζῴοις οὖσας τέμνειν εἰναι, τοὺς δὲ γνομφίους οὖσας παρὰ τούτων δεξαμένους λειῶνει. confectio: 'mastication'.

§ 135. stomachus: here used like στόμαχος, which from Homer (II. 392 &c.) downwards means the gut, cf. Ar. H. A. 11 12 α' χ' τὸ μεταξὺ προσάπου καὶ θάρακος καὶ τούτῳ τὸ μὲν πρόσθεν μέρος λάρυγγις, τὸ δ' ὅποιον στόμαχος, ib. 16 ó δὲ στόμαχος ἐρτηται μὲν ἄνωθεν ἀπὸ τοῦ στόματος ἑξέμενος τῆς ἀρτηρίας (the trachea), τελευτᾷ δὲ διὰ τοῦ διαζώματος (the diaphragm) εἰς τὴν κολλίαν, i.e. it is the oesophagus or alimentary canal. Hippocrates often uses it for the neck or upper portion of any organ: in later times, as by Meletius. Nat. Hom. c. 18, it is used for the stomach in our sense (ἡ ἀνω κολλία) as distinguished from the oesophagus on the one hand, and the intestines (ἡ κάτω κολλία) on the other. Cf. Theophilus Corp. Hum. ii 2 with Greenhill's note.

tonsillae: apparently so called from impeding the passage of food, tonsilla being used for the stake to which a boat was fastened, see Festus. In Greek they were known as παρίσθμα or, when swollen, as dvtistées.

atque agitatione: I omit is after atque with Kayser and Forchhammer,
thinking that it was a marginal correction of *oris* for *ore* is above, and has been wrongly inserted here. Cf. for similar errors *defectus* § 49.

*delapsum*: so I venture to read for *depulsum*, which it is impossible to believe that Cic. wrote with *depellit* afterwards. The order of the words is curious, the Ablatives *agitatione et motu* being placed outside the clause to which they belong.

*quasi detrusum*: why *quasi*? the word is used in its literal sense. Is it to denote that C. was not quite satisfied with it as a translation of some Greek word? *depellit*: so § 138 *reliquiae depellantur*; *Div. i* 57 (of fowls) *depulso de pectore et in omnne corpus diviso et mitificato cibo*.

*ipsius autem*: the action of the oesophagus is contrasted with that of the tongue.

§ 136. *aspera arteria*: τραχεία ἀρτηρία 'the windpipe'; called 'rough', not because it is 'rough in the interior' (L. and S. s. v. *arteria*), for Arist. *Part. An. iii* 3 assigns, as a reason for its being composed ἐκ χορδώνων σάματος, that δεὶ τὸ ψυφήσεων μέλλων λείων εἰναὶ καὶ στερεώσει ἐχεῖν; but because 'it is strengthened by a series of from 16 to 20 horizontal cartilaginous rings', which can be felt in the throat, and is thus distinguished from the smooth tube which constitutes a common artery. Erasistratus (fl. 280 B.C.) is said to have been the first to use the distinctive epithet. The word ἀρτηρία (connected with ἄδιπο, ἀδρητή) properly means 'suited for suspending', and is fitly used for that from which the lungs and other vital parts are suspended, and by which they are held up when the animal is opened after death: hence Sophocles calls it πνεύμωνος ἀρτηρίας *Trach. 1054* 'suspenders of the lungs' (the plural is used for the two bronchial tubes). In like manner the tube or cord from which the heart is suspended is called ἀδρητή, cf. Arist. *H. A. i* 16 ἐξεργηται (το μεσοντέρεων) ἐκ τῆς μεγάλης φλέβος καὶ τῆς ἀδρητῆς, &c. In Aristotle's genuine writings we find ἀρτηρία used only of the windpipe, but by later writers it is also employed (sometimes with the distinctive epithet μια) for the artery in our sense. This extension of meaning was probably due to the idea that the artery was an air-tube like the windpipe, but by later writers it is also employed (sometimes with the distinctive epithet μια) for the artery in our sense. For the subject matter we may compare Gell. *xvii* 11 § 2 giving the doctrine of Erasistratus *duas esse quasi canaliculas quasdam vel fistulas, easque ab oris faucibus proficiisci deorsum, per earumque alteram deduci delabique in stomachum esculenta omnia et potulenta ex eoque deferri in ventriculum, quae Graece appellatur η κάρτο κολλα...§ 3 Per alteram autem fistulam, quae Graece nominatur τραχεία ἀρτηρία, spiritum a summō ore in pulmonem atque inde rursum in os et in nares commecerat; Lactant. *Opif. c. 11* gurgulio constat ex ossibus flexuosis ac mollibus, quasi ex annulis in cicatiae modum inveniēm compactis.

pertineat ad: 'reaches to', so often in § 137.


alvi natura: for the periphrasis cf. natura animi i 23, caloris naturam ii 24, so in Plato Tim. 45 τὴν τῶν βλεφάρων φώσιν, 74 τὴν τῶν νευρῶν φώσιν, Phaedr. 44 ἢ τοῦ πτερού φώσις, Arist. Part. An. iii 1 ἢ τῶν ὀδόντων φώσις. The word alvis is used here for venter or alvis superior of Cato R. R. 156, from which it is distinguished by Pliny N. H. xi 79; but it has the same force in Lactant. Opif. c. 11 ubi maceratos ex se cibos alvis emiserit, paululatim per illos intestinorum anfractus extruduntur.

pulmones autem et cor extrinsecus spiritum addant: I read addant instead of ducent (read by the editors with three of Orelli's ms) because the latter has no direct reference to alvis, the principal subject of the sentence; whereas the reason of the clause is to show how alvis gains the spiritus spoken of below. Also it seems to me easier to explain addcant in Orelli's PV, if we suppose ducent, the ordinary verb with spiritum, to have been written by mistake, and to have been corrected by the superscription of ad. For exx. of errors arising from such corrections in the archetype, see above § 100 n. on sāvē natīvis, and others mentioned by Mü. in Fleck. Jahrb. 1864 p. 127 foll. The mention of cor is explained by the ancient belief that it was the function of the left ventricle of the heart to supply the arteries with air, see below § 138.

constat e nervis: nervus, like the Gr. νεῦρον (which properly means 'a string', hence νευρόςτατον 'a puppet') is ordinarily used in earlier writers for sinew, tendon, ligature; but it included also the white tissues of the body generally, e.g. the nerves proper, some of which were known to Aristotle under the name of πόροι (H. A. 1 16), though he wrongly asserted that they centre in the heart and not in the brain (see Sprengel Gesch. d. Arzneikunde i 4572). Herophilus of Alexandria (fl. b.c. 300) gave a full account of the nerves, but even he did not clearly distinguish them from the tendons (see Sprengel l.c. p. 534); Galen (b. 130 A.D.) was the first to discriminate the three meanings which had been confused under the word νεῦρον, and to confine it to its present use, see Plac. Hipp. et Plat. p. 204 Κ. τριαγω ἐστιν ὄργανα παραπλήσια μὲν ἀλλὰ λοις τὴν μορφὴν τοῦ σώματος, οὐκ ὁλίγον δὲ ἐνεργείας τε καὶ χρείας διαλαλτοῦτα προσαγορευόμεται δὲ τὸ μὲν νεῦρον, τὸ δὲ συνδέσμος, τὸ δὲ τένων. τὸ μὲν δὴ νεῦρον ἐξ ἐγκέφαλον πάντως ἡ νοητικὴ πέρφινην, αὐθενθῇ ἢ κύμης ἢ τὸ συναμφέτερον οἷς ἐν ἐμφυτής παράγων ὁ συνδέσμος δὲ ἀναίσθητος μὲν ἐστιν, ἡ χρεία δὲ αὐτοῦ κατὰ τοῦνομα λοιπὸς δὲ τὸ τένων πέρας ἐστὶν νευρὶδες μῦδε ἐκ συνδέσμου καὶ νεῦρον γεννώμενος. Us. Part. i 16, 17, v 9, xv 1, 6. From this old meaning arose the metaphorical use of nervus, nervosus for 'vigor', 'vigorous', and our English 'a nervous style', 'hardly as the Nemean lion's nerve'. For the fact see Mivart Elem. Anat. p. 446 'the intestines like the stomach are formed of muscular fibres with a mucous lining'; hence the peristaltic action of the bowels described below; Arist. Part. An. iii 3 § 4 ἢτοι θ' ὁ μὲν οὐσιφόρος
multiplex et tortuosa: describing the smaller intestines. The same words are found combined in a metaphorical sense Lael. 65.

arcetque et continet: conjoined in R. P. vi 17 orbis caelestis arcens et continens oteros, the former word brings into greater prominence the idea of a restraining and limiting force from the outside.

calore quem multum habet: cf. above § 24. Theophilus Corp. Hum. ii 4 says that 'since the stomach needed abundant heat, the Creator placed near it the liver' δεσπέρ λίθνα διάπυυον. On the attraction of the epithet into the relative clause, see Draeg. § 474.

et terendo cibo: Madv. omitted cibo; but, clumsy as the phrase is, we could hardly dispense with the object here, and the gerund by itself would come in a little awkwardly between the substantives calore and spiritu. Heind. reads ex terendo, 'heat arising from the crushing of food'; but calor and tritura are two distinct causes of digestion, which were opposed to one another by rival medical schools, as we learn from Celsus i proem., ducu alii. Erasistrato, teri cibum in ventre contendunt;...alii credunt Hippocrati per calorem cibos concoqui.

Ch. lv. raritas quaedam—mollitudo: 'of a loose and spongy consistency'. Quaedam is added, because raritas was an unusual word, perhaps first employed by C.: even rarus is generally used of distinct objects rather than of one loosely constituted whole. The word spongiosus is used by Celsus iv 1 pulmo spongiosus ideoque spiritus capax, instead of C.'s periphrasis; cf. Plato Tim. 70 the lung has inside σπράγγα (cavities) οιν σπόγγον κατατερημένα, Arist. Part. Αν. iii 6 σομόφες ο πλεύσθοι καὶ κύσιν ἀφρος.

spirantes: properly used of blowing upon some external object, as above § 83 aspiratio aeris 'ventilation', here absolute, of an expiration, which would be more properly expressed by a reference to the terminus a quo, but the word espirare is not found in Caesar or Cic.: perhaps its later connotation unfitted it for use in the literal sense.

tum in respiratu: Lamb.'s emend. for tum in re spiritu. The word respirare is used for the general process of breathing, like αναπνευ, but also specially for the return of breath in either direction; as just above we had respirare et reddat opposed to animam quae ducta est spiritu, and again below § 138 redditur respirando; but here (as in Juv. xiv 28 ut non ter decies respirare) of drawing in breath, in response to the outgoing breath of aspirantes. So αναπνογ is opposed to ἐκπνογ in Plato Tim. 79 ε, Arist. Part. Αν. iii 3. The corruption of the mss was hardly to be avoided, when once re had got separated from the rest of the word, not to mention that respiratus is very rare, apparently only found elsewhere in Apuleius. Madv.'s emend. intrante spiritu is unsatisfactory, because it represents the organ as passively influenced by the breath coming in of itself. The
reading of some mss tum se spiritu is a later correction, and though spiritus is often used for inhalation, yet it is unsuitable here where a distinctive word is needed.

cibus animalis—animantes: 'that aerial nutriment which is the chief support of animal life', cf. Hippoc. de Flat. 4 'the body is sustained by three kinds of nutriment σίτα πολλά πνεύμα, of which the last is by far the most important'. Arist. denies this (Resp. 6) ἀλλὰ μὴν οὐδὲ τροφῆς γε χάριν ὑπολειπέντες γίνεσθαι τὴν ἀναπνοὴν αὐτὶ τρεφομένου τῷ πνεύματι τοῦ ἐντός πυρᾶς...μᾶλλον γαρ ἐκ τῆς τροφῆς (ordinary food) τοῦτο γυνόμενον ὀρἀμεν: its only use is to cool the heart. Galen (Us. Part. vii 9) on the other hand considers that the chief function of respiration is to keep up the vital heat by constant supplies of fresh air, and 2ndly to feed the vital spirit (τὸ ψυχικόν πνεῦμα). The word cibus is used below iii 37 of the exhalations on which the stars feed, and we find the metaphorical cibus humanitatis Fin. v 54.

§ 137. Cicero's account of the process of digestion is very incorrect. The following is a summary of what is said in Huxley's Physiology on the subject. The food when it has passed into the stomach is changed by continual rolling about with constant additions of gastric juice, into a fluid called chyme, of which a considerable portion is absorbed through the walls of the vessels of the stomach into the current of the blood, which is rushing through the gastric veins to the vena portae. The remainder of the chyme passes into the duodenum, where it is mixed with bile and pancreatic juice and becomes chyle. In its passage through the smaller intestines the greater portion of this is again carried off through the capillaries into the blood vessels: the remainder is absorbed by the lacteal vessels, and conveyed through these to the mesenteric glands, and thence to the thoracic duct, where it is compounded with lymph. It is then carried to the subclavian vein, which sends the blood into the right side of the heart. From thence it is conveyed by the pulmonary artery to the lungs, where it is converted into arterial blood. See diagrams in Huxley or elsewhere.

a medio intestino: a mistranslation of the Gr. μεσατέρων, which is not properly an intestine at all, but a membrane interposed between the intestines (ὑπὲρ τῶν ἐντέρων, Arist. says H. A. 1 16), 'a fold of the peritoneum which suspends the small intestines to the back walls of the abdomen', Huxley l. c. p. 36. It is however classed among the intestines by Macrobi. S. Sc. i 6 § 77 intestina principalia tria sunt, unum disseptatum vocatur (the diaphragm), alterum medium, Graeci μεσατέρων vocant, &c.

portas jecoris: the 'portal fissure' where the vena portae, the hepatic artery and the great nerves enter the liver. Galen (Us. Part. iv 1) tells us that after the stomach has cleared away the grosser particles, it sends the chyle to the liver (κοῖνον διόν τοῦ ζύον πέψεως χεριῶν), the entrance to which, being divided into many narrow passages, has received the name πυλας, originally given by ἀνήρ τις παλαιὸς δεινός, οἷς, περὶ τὴν φύσιν, and approved by Hippocrates and the sect of the Asclepiads. (It is used
by Eurip. El. 828, Plato Tim. 71 c, Arist. H. A. i 71, vii 8.) In the liver the chyle is further purified by depositing certain secretions; that which is light and yellow is drawn off to the gall bladder, that which is heavy and thick is carried to the spleen by a vein connecting it with the portae. The blood thus purified is then passed into the vena cava where it gets rid of its superfluous watery particles through the kidneys adjoining. Thus the liver is τὸ πρῶτον τῆς αλματίας δρύαυον (c. 12). The numerous veins which convey the chyle to the liver all unite into a single trunk at the portae and then again subdivide into a vast number of small veins in order to imbibe the substance of the liver and to thoroughly clarify the blood (see Ideler Phys. Min. vol. ii p. 6). This was the generally accepted theory among the ancients, as we may see from Theodoret Prov. p. 517 Schulze, 'the liver having received the chyle from the stomach proceeds to pass it through further strainers, the dregs being drawn off by the spleen, that which is overdone (τὸ πέρα τοῦ μεταυ τοῦ πεφθαί) being drawn off into the gall bladder, and that which is too thin into the receptacle for the watery secretions. When the chyle has in this way been turned into pure blood it enters into the vena cava and is carried by it to the heart.'

quae pertinent ad iecur: but these viae ('channels', used in the same general way as ρόπος by Arist.) do not really extend to the liver; they unite, as before said, in the vena portae and then divide again.

alias pertinentes: the terminus ad quem is required with the word pertinentes, and edd. are probably right in inserting alio with Heind. but, in the general doubtfulness as to what C.'s ideas on the subject were, it is difficult to speak with confidence as to the particular reading required. We should have expected to hear something of the distribution of the chyle through the liver itself, but are only told of its arrival at the portae and then of its being carried off elsewhere. Comparing the account taken from Galen above, we might suppose the viae to signify certain ducts by which the secretions are carried to the gall bladder and the spleen; but C.'s words seem to imply that he is still following the course of the main stream of the chyle, which he apparently imagines to visit successively the liver, the spleen and the kidneys, depositing in each the ingredient which belongs to it, yellow and black bile and serum, the principle of urine (see quotations from Galen in next note), and thence returning to the portae and discharging itself into the vena cava. The true account seems to be as follows: the blood in the vena portae receives an accession from the spleen through the splenic vein, but does not part with any of its own ingredients either to the spleen or to the kidneys until it has passed through the heart and returned as arterial blood, from which the secretions are made. In its passage through the liver it secretes bile and extracts glucose. The liver itself is not an excretory organ.

bilis tique umores qui e renibus profunduntur: cf. Galen Us. Part. v 10 τὸ δὲ ἅπαρ ὑπὸ τῶν τετάρων ὅργῶν ἐκκαθαίρεται, δυὸν μὲν νεφρῶν, τρίτον δὲ σωλήνας, τετάρτων δὲ τῆς ἐκκαθαίρετος αὐτῷ κύστεως (the bile duct), ib.
c. 6 ὅλματον μὲν γὰρ τὸ μελαχυλικὸν περίτεσμα, πλέον δ' αὐτοῦ τὸ χολάδες, πολλαπλάσιον δ' ἁμφῶν τὸ υδατάδες, ib. και 13 οἱ χοληδόχων πόροι τὴν χολήν, οἱ νεφροὶ τὸ ὀσρόν ἐπιστῶν ib. Hipp. et Plat. p. 536 K. Again speaking of the chyle, he says that, after its arrival in the liver, it throws off two secretions, yellow and black bile, and ascends, having now attained its ruddy hue, to the upper part of the liver, Us. Part. iv 4.

ad easdem que portas jecoris confinunt: this, taken by itself, would agree with Huxley's account of the 'portal system,' p. 56, 'the blood is distributed throughout the liver from the vena portae, and thence it is conveyed by small veins which unite into a large trunk (the hepatic vein) opening into the inferior vena cava near the portal fissure.'

ejus: sanguinis, hence Hippocrates called the liver ῥίζωσις φλεβῶν (Galen Hipp. et Plat. p. 200 K.).

vena cava: φλεβὴ κοιλῆ, called ἡ μεγάλη by Arist., the great trunk vein, divided into superior and inferior as it runs into the heart from above or from below. Hippocrates ap. Gal. Hipp. et Plat. p. 532 K. compares it to the trunk of a tree which has its root in the liver and intestines.

confectus jam coctusque: Madv. Fin. ii 64 proposed concoctus, but Sch. (Opusc. iii 785) proved the correctness of the old reading by many exx. as above § 136 cocta atque confecta, Cels. iv 5 qui nihil aliud concoquere possunt, tubulam coquent, Plin. N. H. xxix i. He remarks that it is not uncommon with C. to omit the preposition in the second of a pair of compounds into which the same preposition enters, cf. Madv. Fin. iii 36.

a corde distribuitur: The heart was the origin of the veins and blood according to Plato Tim. 70 ἁμα τῶν φλεβῶν καὶ πυγῆ τῶν περιφερείων κατὰ πάντα τὰ μέλη σφοδρῶς αἴματος, and Arist. Part. An. ii 9 ἀρχῆ τῶν φλεβῶν ἡ καρδία, ib. ii 1 § 22 ἔχει ἐν αὐτῇ τὴν δύναμιν τὴν δημιουργίαν τὸ αἷμα προέρχεται. The followers of Hippocrates on the contrary asserted that the blood originated in the liver and was only distributed from the heart. Galen argues in favour of this view Hipp. et Plat. p. 531.

§ 138. illa explicitur fabrica—nam: so γὰρ is used to explain the Demonstrative, Thuc. i 3 δηλοὶ δὲ μοι καὶ τόδε τῶν πολλῶν ἁρθείων...πρὸ γὰρ τῶν Τρωικῶν οὐδὲν φαίνεται κοινὴ ἐργασίας. [Cf. Aes. ii 107, Div. i 80 cited in Madv. Gr. § 439 obs. 2. R.]

ab spiritu: 'the mere act of inspiration'; for constr. cf. above § 92 conflagrare ab ardoribus.

contagione: cf. Div. ii 58 fluivium fluixisse sanguine (nuntiatum est)... sed decoloratio quaedam ex aliqua contagione terrena potest sanguinis similis esse.

ventriculum cordis: κολλαὶ τῆς καρδίας of Arist. The functions of the ventricles are thus described by Huxley p. 55: the contraction of the right auricle drives the blood which it contains into the right ventricle; the ventricle then contracts and forces it into the pulmonary artery; from hence it passes into the capillaries of the lungs. After being thus aerated it returns by the four pulmonary veins to the left auricle; and the contraction
of the left auricle drives it into the left ventricle, from whence it passes into the aorta, and is carried through its branches into all parts of the body. The ancients believed that the right ventricle, called by them *alunarkh*, supplied the veins with the blood which it received from the *vena cava*; and that the left ventricle, called *pnevomarkh*, supplied the arteries with the air received from the lungs (Galen *Us. Part. vii 7*). The course of the air is thus described by Theodoret *Prov.* p. 514 Sch. ὁ πνεῦμα διὰ τῆς τραχείας ἀρτηρίας (cf. above § 136) τὸ καθαρὸν ἔξωθεν διέχειν πνεῦμα, διὰ δὲ τῆς λείας (the pulmonary artery) τοῦτο παραπέμπει τῇ εὐνούμῳ τῇ καρδίᾳ κολιά κ.τ.λ.

*spritus per arterias*: see nn. on §§ 24 and 136. According to Sprengel (p. 491) Praxagoras (fl. 300 B.C.) first noticed the distinction between arteries and veins; in the genuine works of Arist. both are confounded under the name *φλάσκα*ς. The reason why it was thought that they contained air was that after death they were found empty while the veins were filled with the returning blood. Galen, while explaining the stronger texture of the arteries as compared with the veins, from the supposed fact that the former were intended as channels for varying amounts of air, while the latter had only to convey a uniform amount of blood, still held that there was a certain proportion of highly rarefied blood in the arteries, and of condensed air in the veins (*Us. Part. vii 10, and 16*). It was not till 1680 A.D. that the true doctrine of the circulation of the blood was discovered by Harvey.

[utraqueque: 'each set'; i.e. *venae* and *arteriae*, cf. quasque i 78 n. and utrorumque below § 154. R.]

*artificiosi*: cf. § 57 and § 145.

C d (8). **β. in the framework and erect position of the body.**

§§ 139, 140.

§ 139. *subjecta corpori—actionem*: 'the bones, which are the framework of the body, are wonderfully connected in a manner which is both fitted to secure stability, and suitable for ending the joints and for allowing of movement and all kinds of bodily action.' We find *artus* joined with *accommodatus* in *Fin.* iv 46 *initia opta et accommodata ad naturam*, *Off.* i 100, 142. I was disposed to follow Heind. in reading *fingendos* ('for shaping the joints'), but the passage cited below from Celsus seems to show that *finiendos* is right. Mr Roby adds 'properly it ought to be said that the bones are shaped at the ends to make good joints; Cicero says the joints are suited to end the bones'.

*commisuras*: 'articulations' cf. below § 150 *digerorum commisuras* [and Celsus *viii* 1 (p. 327 Teub.) *ignorari non oportet plurima ossa in cartilaginem desinere, nullo articulum non sic finiri*. *Neque enim aut moveri posset, nisi laevi inniteretur, aut cum carne nervisque conjungi, nisi ex media quaedam materia committeret*. From this it would appear that commissura must mean the cartilaginous covering of the joint. R.]
nervos eorumque implicationem: 'the ramification of the nerves' (including no doubt both tendons and nerves properly so called). For constr. cf. I 29 imaginee eorumque circumbus.

a quibus continentur: cf. Draeg. 230 and above § 134 ab ipsis extendatur. [There is here a special reason for the preposition: quibus continentur might mean 'of which they are composed'; a quibus is 'by which they are kept in place'. Celsus however l.c. has the simple ablative with this meaning, nervis et cartilagine continentur. R.]

nervi...sicut venae a corde tractae: for the attraction of the Part. into the gender of the subordinate subject, cf. Brut. 262 omni ornatu orationis tamquam veste detracta, Nep. Them. 7 illorum utrum ut propugnacula cum oppositum esse barbaris, Liv. i 21 castra, non urbem posita in medio crediderant; and the Gr. use with οὐχ ὅσπερ, as in Gorg. 522 πολλα υμᾶς κακά δὲ εἰργαστα...δυνὴν ἀναγκάζων, οὐχ ὅσπερ ἐγὼ...ὑμᾶς εὐώχουν. For the subject matter see Arist. H. A. III 5 p. 515 ἢ μὲν ἄρχῃ τῶν νεύρων ἐστὶν ἢ τῆς καρδίας καὶ γὰρ ἐν αὐτῇ ἡ καρδία ἔχει νεῦρα ἐν τῇ μεγίστῃ κοιλίᾳ, καὶ ἡ καλομένη δορθὴ νεῦροθῆ ἑστὶ φλέβ, especially its extremities, ἀκολούθη γὰρ ἑστὶ καὶ τῶν ἔχει τοιαύτην οἷαν περ τὰ νεῦρα ἢ τελευτά πρὸς τὰς καραμά τῶν ὀστων, and again a little below πάντα τὰ ὀστά συνδέωται νεῦροι. It is plain that Aristotle here means sinews by νεῦρα, but in Gen. Αν. ν 2 we read οἱ πόροι τῶν αἰσθητικῶν άπαντῶν (i.e. the proper nerves) τείνουσι πρὸς τὴν καρδιάν, Justin. c. 3 cited by Trend. Anim. p. 397 n. Galen is therefore not 'guilty of error' (as Lewes says Arist. p. 168) 'in attributing to Aristotle the absurdity of deriving all the nerves from the heart'. Sprengel I 534 speaks of Herophilus (fl. about 300 B.C.) as the first who derived the nerves from the brain and spinal marrow, and distinguished between nerves of motion and sensation, see above § 128 n. Galen (Hipp. et Plat. p. 187 K.) attributes to Hippocrates right views as to the origin of the nerves and severely condemns Arist. and Praxagoras for deserting his opinions. It seems this question was connected with that of the seat of the ἡγεμόνικων, thus in p. 649 Galen states as axiomatic principles (1) ὅποι τῶν νεύρων ἢ ἄρχῃ, ἐντόθι καὶ τὸ τῆς ψυχῆς ἡγεμόνικον, and (2) ἢ ἄρχῃ τῶν νεύρων ἐν τῷ ἐγκέφαλῳ. The Stoics maintained that the heart was the seat of the ἡγεμόνικων (Zeller IV p. 197 foll.).

in corpus omne ducuntur: this was denied by Arist. H. A. III 5 οὐκ ἐστι συνεχῆς ἢ τῶν νεύρων φύσις ἀπὸ μᾶς ἄρχῃ ὅσπερ αἱ φλέβες. A general view of the true nervous system is given in Mivart's Anatomy p. 400.

Ch. LVI § 140. ad hanc providentiam=ad haec quae de providentia dixi Sch.

a dis: these words are considered spurious by recent edd. but, I think, they are almost required with tributae sint. Keeping these, I retain the ms reading qui at the beginning of the following clause and adopt Heind.'s emendation constitutionem (corresponding to διάτησιν in the passage cited from Xenophon below) for constituit. The abbreviation of the Plur. would
be easily mistaken for the Sing, and the Sing, deus might naturally suggest itself to the Christian scribe. Perhaps also the awkward use of deorum, instead of sui, may have facilitated the corruption.

primum: this prepares the way for sensus autem below.

erectos: cf. Xen. Mem. i 4 § 11 ετελ ουκ όντοι φρονήσεως (θεούς ἁρμότοις); οἱ πρῶτοι μὲν μόνοι τῶν (ζώων ἁρμότοις ὄρθως ἀνώτητον) ἤ δὲ ἀρχής καὶ προοράξ πλείονοι ποιεῖ δύνασθαι καὶ τὰ ἀνείπων μᾶλλον διασάβει, Plat. Tim. 90 πρὸς τὴν ἐν οὐρανῷ ξύγγενεσι νηρὸς ἐν τῷ μὲν ἰδίῳ ἢ μὲν ἥπειρος ἢ δὲ σκέφτω τινὲς οὐκ ἔγγεζον ὅλλ' οὐράνων, Arist. P. Δ. iv 10 (ὁ ἁρμότος) ὄρθος ἐστι μόνον τῶν ζῴων διὰ τὸ τῆν φύσιν αὐτοῦ καὶ τῆς ὕποτασσας θείας θέους ἐστι τοῦ θεοτόκου τοῦ νουν καὶ φρονεῖν τούτο δ' οὐ μίν πολλοῦ τοῦ ἀνέκειμενόν σέμαρισ foll., ib. ii 10, Cic. Leg. i 26 nam cum cereris animantes abscissa ad pastum, solum hominem erexit (natura) ad caelestique quasi cognitionis domicilium pristinae coniectura excita vtrum speciem ita formatit oris ut in ea penitus reconditos mores effingeret, Ov. Met. i 85 os homini subito dedixit caelestium tueri iussit et erectos ad sidera tollere vultus, Seneca Ep. 94 § 56 (natura) vultus nostror erexit in caelum et quicquid magnificum mirumque fecerat videri a suspicatibus voluit, Epict. Dis. i 6 § 19 τῶν ἁρμότων θεών ἔμπροσθεν εἰσὶν αὐτοῦ τα καὶ τῶν ἔργων αὐτοῦ, καὶ οὐ μόνον θεών ἀλλὰ καὶ ἔγγεζον αὐτοῦ, Plut. S. N. V. p. 550 with Wytenbach’s n., Min. F. c. 17, Lact. vii 5, Mayor on Juv. xv 147, Sen. Ep. 65 § 20, N. Q. v 15 § 3. Galen on the contrary says (Us. Part. iii 3) ‘those who believe man to have been made erect in order that he might look up to heaven and say ἄντων πρὸς ὁμομονοι ἀνθρώπων προσώπουs can never have seen the fish called ἔνταρποθυρίς, not to mention various birds, which are much better adapted for looking up than man. The true upward looking, as Plato said, is to fix the mental eye on that which really exists’.

ut deorum cognitionem capere possent: so Lact. Inst. ii 3, iii 9 solus sapientia instructus est (homo) ut religionem solus intellegat: et haec est hominum atque mortorum vel praecipua vel sola dignatio: but this is denied by Celsus, ap. Orig. iv 88 ‘birds are able to foretell the future, which is a sign that they are dearer to the Gods, αἱ ἄρεταιν δ' οὐδεν εὐρυκοτέρον οὐδὲ πρὸς τα θεῖα πινοτέρον εἶναι δοκεῖ, πάντως δέπω δήμω διότι γρῶσι αὐτοῦ ἔχουσι, ib. 9, 96 πολλά τῶν ζῴων ἀντιποιοῦσι θείας ἐνσίας, οὐ μόνον σοφότερα ἀλλὰ καὶ θεοφιλώτερα, 98 εὐσεβεστέρους εἶναι τούς πελαγίους τῶν ἁρμότων.

sunt enim ex terra: I explain this by Tusc. i 42 corpora nostra terreno principiorum genere confecta, not, as Sch., by a reference to spectatores following.

Cd (8). γ. Providence shown in the organs of sense. §§ 140—146.

nuntii rerum: cf. Tusc. i 46 quae numquam quinque nuntiis animus cognosceret, nisi is omnium judes solus esset, and above i 70.

tamquam in arce: so Plato (Tim. 70 A) speaks of the head as the acropolis of the body, in which the sovereign reason has its seat. On the
other hand Galen (Hipp. et Plat. p. 230 K.), arguing against fanciful a priori assumptions, ‘we are not to assume that the ruling principle must reside in the heart because it is in the centre of the chest, nor οἵ θεοί καθάπερ ἐν ἀκροθραύλῃ τῇ κεφαλῇ δίκειν μεγάλου βασιλέως ὁ ἐγκέφαλος ἱδρυεται, διὰ τούτῳ ἐξ ἀπόγνωσης ἢ τῆς ψυχῆς ἀρχὴ κατὰ αὐτῶν ἐτοί’ foll. cf. Tusc. i 20.

tamquam speculatores: Theodoret elaborates the comparison Prov. ππ. 525 Sch. ἐπεδή μείζον τῷ φρουράρχῳ τῷ καθαυτόν τὰ τε πολέμια καὶ τὰ φίλια προορών την κ.τ.λ.

§ 141. in sublime: cf. n. on § 44.

sursum: used in the rare sense, of position distinguished from motion, cf. Varro R. R. i 6 § 3 qui colunt sursum magis hieme laborant.

potionis judicium magnum eurum est: ‘they are greatly concerned in testing foods’. For the combination of the Objective and Subjective Genitives see § 145 quorum judicium est ocularum, § 156 omnium rurum hominum est usus: for the thought § 146 aurium est judicium, Orator 60, 150 aurium superbum judicium, 164, Orat. ππ. 221 foll. in ore dominatus est omnis ocularum...quae ocularum est magna moderatio.

vicinitatem oris securae sunt: ‘been placed near’, drawn to the neighbourhood of the mouth’, cf. Leg. ππ. 3 amoenitatem hanc sequor ‘I am attracted to’.

gustatus: here used for the organ, below § 158 for the actual taste. The palate was commonly supposed to be the organ of taste, see above § 48; Lactantius on the contrary says (Opif. 10) fallitur quisquis hunc sensum palato inesse arbitraturs: lingua est enim qua sapores sensuntur, nec tamen tota, but only where it gets thinner towards the sides. Xenophon also makes the tongue the organ Mem. i 4. Aristotle goes into further refinements H. Ἀ. i 11 τὸ αἰσθητικὸν χυμὸν γλώσσα ἢ δ’ αἰσθησιν ἐν τῷ ἀκρῷ, and he distinguishes between the more intellectual pleasure of the connoisseur and the grosser pleasure which the glutton finds in the mere act of swallowing, ἢ μὲν γὰρ γλώττα τῶν χυμῶν ποιεῖ τῇν αἰσθήσει, τῶν δὲ ἐδεστῶν ἐν τῷ καθάδῳ ἢ ἡδονή, καταποιημένων γὰρ αἰσθάνεται τῶν λιπαρῶν καὶ βερμῶν καὶ τῶν ἄλλων τῶν τοιῶν. Compare the wish of Philoxenus (Eth. Ευδ. ππ. 2) τῶν περὶ τὸ γευτύνν οὐ περὶ πᾶσαν ἡδονὴν ἐπτόηται τὰ θηρία, οὐδ’ ὅσον τῷ ἀκρῷ τῆς γλώσσας ἡ αἰσθήσις, ἀλλ’ ὅσον τῷ φάρυγγα καὶ τοικεν ἄφθιν μάλλον ἡ γεύση τὸ πάθος· διὰ οἱ ἀνοφήγοι οὐκ ἐχοῦσιν τὴν γλώσσαν ἤκει μικράν ἅλλα τὸν φάρυγγα γερώνο, ἀπερ Φιλόξενος. Pliny seems to have misunderstood this N. H. xi 65. Huxley’s account of the matter is as follows ‘the organ of the sense of taste is the mucous membrane which covers the tongue, especially its back part, and the hinder part of the palate’.

qui sentire deberet: I follow the mss with Allen, translating since it was intended to distinguish flavours. The tense refers to the first creation of man, like securae in the previous sentence and habebat above § 123.

esculentis: cf. Scaevola's definition of *penus* ap. Gell. iv 1 § 17 *penus est quod esculentum aut potulentum est.*

aquabiliter: uniformly, as opposed to special organs, but not of course to the same degree; so Arist. P. A. ii 8 the *aοδηγρημων ἄφης* is the καρπ itself.

omnes minimos: cf. n. on i 67 omnibus minimis, Fin. v 88 nec ullo minimo momento, Q. Fr. iii 1 § 3 omnia minima maxima ad Caesarem mitti sciebam.

appulsus: cf. i 24 solis appuleu, Div. i 64 deorum appuleus hominis somniare. I should have expected possemus to follow rather than *possimus.*

qua profluentia taetri essent aliquid habitura: 'the drains which (lit. that which as it drained away) must otherwise have been somewhat offensive'. Cf. Xen. Mem. i 4 § 6 ἐνεὶ τα ἀποχρεώσαντα ἀναιρήσα, ἀποστρέψαι τοὺς τοῖς ὀψην καὶ ἀνασκεψαν ἵ δυνανὶ προσναται ἀπὸ τῶν αλθήσεων (οὐ δοξεί σοι καὶ τῷ φυσικὸν ἴργον).

amandavit: 'banished them' cf. pro Soauro 42 Sardi non deducti in Sardinia nam amandati. Allen cites Varro Prom. (fr. 430 Bücheler) retrimenta cibi quæ exirent per posticum vallem feci.

Ch. lvii § 142. sollertiam persequi: we find perseguor often used with an accusative expressio of quality in the sense 'to imitate' or 'aim at', e.g. Orator 57, 67 poeta virtutes oratoris persequitur, ib. 102 (in the speech pro Leg. Manil.) ornandi copiam persecuti sumus, Ac. ii 74 ironiam alterius persequi, Fin. v 64; here apparently it means 'to carry through', 'to exhibit in detail'.

qua primum...qua primum: the first opposition is that of the eye to the other senses (auditus autem in § 144), the second that of the transparency to the firmness of the cornea (firmas autem). That the first opposition is as I have stated, and not that of membranis to lubricos (as Sch.), is probable both from the position of oculos and from the parallel in § 145. As we have there primum enim oculi...auriumque item...nariumque item, so here primum oculos...auditus autem...similiter nares...gustatus, cf. Madv. on Fin. i 17. On the eye see Galen Us. Part. bk. x, Ambros. Hae. vi 58 foll., Lact. Op. 8.

ut continerentur: sc. oculi understood from the agent of the Passive cornei. The humours and the crystalline lens are kept in their place by the cornea, cf. Cels. vii 7 (oculus) summas habet duas tunicas, ex quibus superior a Graecis κεραυνής vocatur, Plin. N. H. xi 54 tenuibus multisque membranis eos natura composuit, calloso contra frigora calóresque in estimo tunicis, quas subinde purificant lacrimationum salivis, lubricos propter incursantia et mobilis ut media eorum cornua fenestravit pupilla; Serv. ad Aen. vi 894 oculi cornei sunt et duorum ceteris membris; nam frigus non sentient, sicut etiam Cicero dixit in libris de Natura Deorum.

sed lubricos: cf. for use of sed § 66 sed Junonem.

declinarent: neut. as in i 69.
aciesque: the que here has the force of porro, as in § 145 omnisque sensu. Acies the point of the eye is used for pupula by Lucr. iii 408—414:

pupula: from pypa = κόρη. Cf. Plat. Alc. i p. 133 ἐπενήθηκας οὖν ὅτι τοῦ ἐμφάστοντος εἰς τὸν ὀφθαλμὸν τὸ πρόσωπον ἐμφαίνεται ἐν τῇ τοῦ καταντικρὸ δόξῃ, ὡσπερ ἐν κατόπτρῳ, ὅ δέ καὶ κόρην καλούμενη, οἶδαν οὖν τοῦ ἐμφάστοντος;

mollissimae tactu—aptissime factae sunt: Heind.'s addition sunt seems to me necessary. Even then the sentence is awkward, as well as inharmonious from the recurrence of sounds.

providit: sc. natura, understood with some difficulty after the intervening clauses, [but assisted by factae in the line before. R.]

§ 143. palpebrae: cf. Xen. Mem. i 4 (Is not this also a sign of providential care) τὸ ἐπεὶ ἀσθενῆς μὲν ἕστω ἡ ὄψις, ἐμφάροις αὐτὴς θυρώσας, ἀν οὖν μὲν αὐτής ἐκεῖνης τῇ ὑπερ, ἀνασταναίρεται, ἐν δὲ τῷ ὑπέρ συγκλίεται; οἷς δ' ἐν μεθε ἄκροιώς ἐμφάσσωσί, ἡδονῶς ἐμφάροις (eyelashes) ἐμφαίνονται ὑφέρουσι τῷ ἀπογνωσώτατῳ (fr. γείσου 'penthouse') τὰ ὑπὲρ τῶν ὄμματων, ὡς μηδ' ὅ ἐκ τῆς κεφαλῆς ἱδρός κακουργή, Arist. P. A. ii 15 al δ' ὑφέρους καὶ ἐμφάροις ἀμφότερα βοηθεῖες χάρων εἶναι, αἱ μὲν ὑφέροις τῶν καταμανώντων ὑγρῶν, ὅπως ἀποστέγωσιν ὅλων ἀπογνωσίας τῶν ἀπὸ τῆς κεφαλῆς ὑγρῶν, αἱ δὲ ἐμφάροις τῶν πρὸς τὰ ὄμματα προσπίπτοντων ἐνεκεν, ὅλων τὰ χαρακτῆρα (cf. vallo pilorum) ποιοῦσι τινες πρὸ τῶν ἐρυμάτων.

vallo: 'a palisade made by the stocks of young trees with their lateral branches shortened and sharpened at the point so as to form a sort of chevaux de frise, usually planted by the Greeks and Romans on the outer edge of the mound of earth (agger) thrown up as a rampart round their camps' Rich Companion &c.; cf. Senect. 51 (the corn) contra avium mornus munitor vallo aristatum. Similarly Theodoret (Prov. iii p. 526 Schulze) compares the eyelashes to δόρατα καὶ βᾶλλα and shortly afterwards to stakes (σκόλοπας), and illustrates their use by the bearded wheat which is protected from the birds by its bristles.

quibus—quiescerent: the general sense is as follows, 'the eyelids are guarded with a chevaux de frise of hairs, both to repel anything which might impinge upon the eyes when open, and as it were to tuck them in when closed in sleep', but this is expressed with extreme awkwardness. Even assuming with Brieger (Beiträge zur Kritik d. Cicero, Posen 1873) that ut qui is a corruption arising out of the repetition of the last syllable of involutus and the first of quiescerent, we have still the ablatives coniventibus and oculis, where we ought to have the subject of the verb quiescerent. Sch. thinks an original coniventies has been assimilated to apertis by the scribes, and that oculis is repeated instead of ous, as we have in terris § 25; Brieger supposes that the original had nobis coniventibus; and, if we are required to make sense of the passage, as it stands, (after omitting ut qui) I think we must, at any rate in thought, supply nobis.
tamquam involuti: ‘as though muffled up’ (with brackets), cf. *capit involuto*.

Latent utilitier: the adverb is equivalent to *quod utile est*, cf. § 70 *creduntur stultissime*.

ab inferiore parte tutantur subjectae: ‘protect it on the under side, lying below it’.

leniterque eminentes: this reading is confirmed by Lact. *Opif.* 10 inferius quoque genarum non indecens tumor in similitudinem collium leniter exsurgens ab omni parte oculos effici tutores, but I see no objection to the leviter of mss, for which we may compare Div. 1 30 leviter a summo in- flexum bacillum. The latter adverb would refer to the total height, the former to the gradual slope.


§ 144. ne quid intrare possit, si simplex pateret: an abbreviated expression for *possit, quod fieri possit, si*: cf. below § 149 increpabile est si, Tusc. 1 116 *ne posset agnosci, si esset regio ornatus; R. P.* 11 32 quod erat in Romulo probatum, Romani vulgare noluerunt, si hoc et alteri facile tribueretur; *Invent.* 1 123 auxilia quaedam in oppidum recepist ne ab hostibus opprimerentur, si foris essent; and the singular confusion in Thuc. 1 40 δος μη τοις δεξαμενοις, ει συφρανοοις, πολεμον αντ’ ειρήνης ποιεσι where the meaning, to be fully stated requires the insertion of διερ ποιησι before e, see Arnold’s n.

bestiola: so Pliny of a spider (*N. H.* 28 144), but his generic word for insects is *insecta* (*Erroma*), cf. *x 1 jure omnia insecta appellata ab incertiis, quae nunc cervicum loco, nunc pectorum atque alvi, separat membra.*

sordibus aurium: the first use of the wax is to lubricate the inner passages of the ear. The *Eng. Cycl.* however gives the same reason for it as C. Celsus says (*vi 7 § 9*) that nevertheless animals find their way into the ear, and describes how they may be extracted. Ambrose (*Hex. vii 62*) supposed that the wax made the ear more tenacious of sound.

visco: Pliny (*N. H.* xvi 94 § 248) after describing how this is made from the berries of the misletoe, adds *hoc est viscum peniss avium tactu ligandis; olio subactum cum libeat insidias moliri.*

ne adjectae voces laborentur atque errarent: ‘lest the sounds that strike the ear should slip off and be lost’.

introitus cum flexibus = *flexuoso*, cf. *§ 14 praeter naturam portentis n.*

his naturis: ‘substances of this nature’, viz. hairy and sinuous; Tusc. 1 60 after umidum, stabile, igneum we read *his enim in naturis*, see Madv. on *omnium naturarum Fin. iv 32.*

in fidibus testudinem resonatur: *rides* is a general term for any stringed instrument; that referred to here is the *chelys* or *testudo*, which is a lyre with a sounding board added (*magyadon Luc. Dial. Deor. vii 4*, where see Hemsterhuis). It was called *testudo*, because Mercury was fabled to
have made the first instrument out of the shell of a tortoise, and the form of the sounding board was frequently imitated from this, but the material was commonly of horn, cf. notes and Schol. on Arist. Ran. 233 (δόνακος) ὑπολόφωρον τρέφον, where Eustathius says τὸ παλαιὸν ἄρτι τοῦ κέρατος ὑπετίθεντο κάλαμον ταῖς λύραις: Schneider Ed. Phys. p. 175 cites Aristot. Λαυδία. 22 τὰ χαλκεία καὶ τὰ κέρατα συμφούντα ποιεῖ τοὺς ἄλλο τῶν ὄργανων φθόγγους σαφεστέρους, ib. 31,32,36 πολὺ δὲ καὶ ἡ διπτησία (boiling) τῶν κεράτων συμβάλλεται πρὸς εὐφωνίαν: Vitru. v 3 organa in aeneis laminis aut corneis echise ad chordarum sonitus claritatem perfectur. In Tibull. iii 4 1. 37 (lyra) fulgens testudine et aurō, it is probable that tortoiseshell was used only for the purpose of ornament. In Arist. de Anim. ii 8 § 6 we find the ear compared to horn, σημειῶν τοῦ ακούειν ἢ μη, τὸ ἕχειν αἰεὶ τὸ ὅσα ὅσπερ τὸ κέρατον. See further on § 149 nares cornibus similès τίς qui ad nervos resonant in canibus.

ex tortuosis locis et inclusis: Arist. An. ii 8 ψόφον ποιεῖ σως λεία καὶ κοιλά, ὃ μὲν χαλκός, δε′ λεῖον: τὰ δὲ κοιλά τῇ ἀνακλάσει πολλάς ποιεῖ πληγάς μετὰ τὴν πρώτην, ἀδυνατούσας ἔξελεθι τῷ κινήσεως. C.'s account agrees with Müller's (Phys. of the Senses p. 1276 tr.) as far as the outer ear is concerned, 'which partly reflects and partly condenses the sonorous vibrations and conducts them to the auditory passage; this latter transmits them by the air in the tube immediately to the membrana tympani, and prevents them from being dispersed; and lastly the air inclosed in the tube, like all insulated masses of air, increases the intensity of sounds by resonance' (abbreviated). But Cicero has nothing to say as to the inner mechanism of the ear.

§ 145. umorum: a more sensible account than that of Lactantius (Opif. 10) and Ambrose (Hex. vi 68), ut per ejus (nasi) cavernas purgamina cerebrī defluant.

omnisque sensus hominum antecellit: on que cf. § 142 aecisque. Aristotle gives a comparative view of the impression of the senses of different animals (Anim. ii 9) e.g. of smell, τὴν αἰσθησιν ταύτην οὐκ ἔχουσιν ἄκριβη ἀλλὰ χείρω πολλῶν ζῴων, φαίνει γὰρ ἄνθρωπος ὁμάτα, and again ἐν μὲν ταῖς ἄλλαις (αισθήσεις) λείπεται πολλῶν τῶν ζῴων, κατὰ δὲ τὴν ἄφιν (including taste) πολλῷ τῶν ἄλλων διαφερόντως ἄκριβοι διὸ καὶ φρονιμώτατοι ἐστὶ τῶν ζῴων, cf. Plin. N. H. x § 191 ex sensitibus ante cetera homini tactus, dein gustatus: reliquis superatur a multis. Aquilae clarius cernunt, vultures sagaciōs odorantur, liquidius audiant talpae obrutae terra; Sen. Ep. 76 § 9.

antecellit: used with the Dat. by Cic., with the Acc. by Plin. Tac. Seneca. For the Abl. of measure multo see Madv. § 270 obs. 2.

Ch. lviii. quarum judicium est: cf. above § 141.

fictis caelatisque formis: 'in moulded and graven forms'. On fingo see i 71 n. It was also used vaguely to include the art of statuary in general (as in Orat. iii 26 una fingendi est ars in qua praestantes fuerunt Myro-Polydectus Lynippos), for which the more exact term was scalpo (see below § 150) or sculpo (Acad. i 101). Caelatura is the Greek τοπονυμία,
on which see Müller's Anc. Art § 311. [According to Marquardt Priv. Alt. p. 665, it included the embossing and beating as well as the engraving of metals, cf. Quintil. ii 21 § 9 caelatura auro argento aëre ferro operis efficit: nam sculptura etiam lignum, ebur, marmor, vitrum, gemmas complectitur. R.]

cernunt subtilius: have a finer perception than animals.

colorum enim et figurarum venustatem: I read enim instead of the etiam of MSS. Cicero has just been speaking of painting and statuary as arts which come within the province of the eye, and he now proceeds to explain how this is, because form and colour are the natural objects of sight. With etiam we have merely an inane repetition. The corruption would easily arise from the preceding etiam. I also omit tum after figurarum in common with most edd.; Mu., who retains tum, supposes some words lost before it. By ordinem in reference to colour, we must probably understand the arrangement and gradation of colours, what Pliny calls 'harmoge', N. H. xxxv 11 § 29.

decentiam: 'propriety', a translation of εἰσπέρευα (Sch.). It is used with a reference to graceful movements, Orat. iii 200 quem ad modum qui utuntur palaestra non solum sibi vitandi aut feriendi rationem esse habendum putant, sed etiam ut cum venustate moveantur; sic verbi quidem ad aptam compositionem et decentiam, sententiar vero ad gravitatem orationis utatur; cf. Orator 238.

iratum propitium: on the grouping of adjectives see Draeger § 359, 1 b β.

timidumque: I think que is intended to close the sentence, and that Ba. is right in bracketing cognoscunt, which was probably repeated from above. We have however not unfrequent exx. of awkward repetition in C. Cf. Madv. Fin. i 41 accedit—accedere, Divin. i 129 sensunt quod quisque sentiat, Off. i 8 sic definiunt ut definiant, Acad. ii 102 scripsit poëtam cum scripsisset...scripsit...scriptum est; so diligient below § 165, lit. bat Leg. ii 65, videmus Fin. ii 110, diceret ib. iv 47, dixerim Acad. i 44.

§ 146. artificiosum judicium: compare on the trained judgment of the connoisseur Acad. ii 20 adhibita vero exercitazione et arte, ut oculi pictura teneantur, aures cantibus, quis est quin cognat quanta vis sit in sensibus? quam multa vident pictores in umbriis et in eminentia ('chiaroscuro') quae nos non videmus! quam multa quae nos fugiunt in cantu, exaudiunt in eo genero exercitati! qui primo inflatu tibicinis Antipam esse aient aut Andromacham, cum id nos non suspicemur quidem! nihil neesse est de gustatu et odoratu loqui, in quibus intellegentia, eti visiosa, est quaedam tamen. In both passages C. omits to state that it is the action of reason which gives the human senses their superiority.

vocis—tibiarum nervorumque cantibus: 'vocal and instrumental music', cf. below § 149 and Tusc. i 4 in nervorum vocumque cantibus, Leg. ii 38 in cavea (ludi) cantuificant ac fidibus ac tibis, R. P. ii 69 ut in fidibus aut tibiis atque ut in cantu ipso ac vocalibus concentus est quidam
tenendus ex distinctis sonis, quem immutatum aut discrepantem aures erudite ferre non possunt; above § 89, and § 22 where cano is used of instrumental music.

intervalla: differences of pitch (διάστημα), as in Tusc. i 41 harmoniam ex intervallis sonorum nosse possimus.

distinctio: Sch. translates ‘tonfarbe’, ‘timbre’. In Quintilian (see Bonnell’s Index) it is used for a break or pause, and so Hottinger. (Cic. Ecl. p. 61) takes it here. Is it not rather ‘contrast’, the light and shade produced by varying loudness?

canorum—durum: Olivet translates ‘les claires, les sourdes, les douces, les aigres, les basses, les hautes, les flexibles, les rudes’; Kühner ‘das Klangreiche und Dumpe, das Weiche und Rauhe, das Tiefe und Hohe, das Geschmeidige und Harte’.

canorum: clear, ringing, bell-like. It is used for blame Off. i 134 (in conversation the voice should be) nec languens nec canora, which Holden translates ‘neither monotonous nor too much modulated’ (?) ; cf. Cato 28 canorum illud in voce splendescit etiam in senectute, translated by Reid ‘that resonance which the voice possesses actually gains brilliance in old age’. It is possible however that we ought to read candidum here, that being the technical opposite to fuscum, as is shown in the next note.

fuscum: ‘a thick, muffled voice’. So Sextus Emp. vi 41 speaking of the metaphorical terms employed in music, mentions some borrowed from the eye, ὀπέρ φαίνει των (dun-coloured) καὶ μέλαναν καὶ λευκὸς φωνή, and Arist. Top. 115 p. 106 b, Audib. 27 p. 702 a parò καὶ δοκοῦσαν οὐ χείρων εἶναι τῶν λευκῶν αἱ καλούμεναι φωνai' πρὸς γὰρ τὰ πᾶθη καὶ τὰς προσβείτερας ἡλικίας μᾶλλον ἀμφότεροι καὶ μερῶν ύποσύγκεχομέναι καὶ μὴ λαμβάνεσθαι τὸ λαμπρὸν ἐκφαντάζεται, Galen Hipp. et Plat. p. 833 K. κάκοσιν των ἑνδείκνυται τῆς φωνῆς τοῦ ἀνθρώπου ἦ γὰρ συμκρόφων, ἦ τραχύφων ἢ μελάμφωνον κ.τ.λ., Quint. xi 3 § 15 the voice differs in quantity or quality; in quantity it may be either grandis or exigua or intermediate; qualitates magis varia est, nam est et candida et fusca, et plena et exilis, et levēs et aspera, et contracta et fusae, et dura et flexibilis, et clara et obtusa. Other epithets are given ib. §§ 32, 40. Speaking of the tone suited for pathos, he says (§ 170) orbos viduasque videas in ipsis funeribus canoro quodam modo proclamantes (showing the natural expression of grief). Hic etiam fusca illa vox qualen Cicero fuisse in Antonio dicit, mire faciet (the passage referred to is Brutus 141 vox permanens verum subravca natura); Suet. Nero 20 quamquam exiguae vocis et fuscæ, expressed by Xiphil. cited in note καὶ βραχύ καὶ μέλαν φωνή: Plin. N. H. xxviii 16 (6) (Venere) vox revocatur cum e candida declinat in fuscum; cf. Dem. Phal. Eloc. 87, Suidas s.n. λευκόν, λευκῆ φωνῆ ἢ ἠνίκος, also under μέγα, Pollux Onom. ii 4. 117, Camerarius Comm. Uttr. Ling. pp. 168—170.

naronumque et gustandi magna judicia sunt: I have omitted et partes tangendi after gustandi with Orelli’s Cod. C. Ears, eyes, nose, taste, are the organs of connoisseurs and therefore naturally mentioned; see the
parallel passage in *Acad.* II 20 foll., where feeling is brought in after the other senses, as the connecting link between the body and the mind § 21 *animo jam haec tenemus comprehensa, non sensibus*, and no allusion is made to the educated touch, say, of the *fidicen*. But a reader might think proper to add the 5th sense: if illiterate, he might write in the margin *et parte tangendi* ‘and with the organ of touch’, or as Sch. and Allen read after Dav. *et pariter tangendi* ‘and, no less, of touch’. Ba.’s reading *arte tangendi* in the sense of ‘pressing’ is certainly wrong. The only difficulty in omitting the words is that *corporum lenocinia* below might at first sight appear to correspond to touch, as *unguenta* and *conditiones* to smell and taste, but I think C. is not there confining himself to this clause, but giving general exx. of the misuse of the senses through luxury, and that it is the *judicium oculorum* which is solicited by these *lenocinia*.

*gustandi*: is a remarkable instance of the Gerund used in the Subjective Gen. (*gustatus judicat*) and joined with a substantive.

*ad sensum perfruendos*: *utor, fruor, fungor, potior* were transitives in the older Latin, and could therefore be used in the Gerundive, see Madv. § 421 obs. 2, Roby § 1374, and Cato 57 ad quem *fruendum*, *Off.* I 25 *ad perfruendas voluptates*, ib. II 41 *justitiae fruendae causa*, ib. § 87 de *utenda pecunia*, *Tusc.* III 15 *ad suum munus fungendum*.

*quae processerint*: ‘to what lengths they have run’, cf. Sall. *Jug.* 5 *eo vecordiae processit ut*.

*conditiones*: ‘sauces’. *lenocinia*: ‘meretricious adornments of the person’; sometimes used in a good sense by later writers, of that which sets off anything, e.g. Sen. *Ben.* I 11 13 *lenocinium est munere antecedens metus*. The three instances of luxury here named would all come under the Platonic *kolaxeneij*.


Ch. LXIX § 147. *dum disputarem—vellem*: ‘I could have wished that, during my argument, your eloquence were given me’. The correction *vellem* is I think absolutely needed: the mood and tense of *disputarem* must be explained as attracted to it, cf. § 2 n.

*illa*: as usual, of what follows. *quanta intellegentia—comprehensio*: ‘what keen perception, what a power of bringing together and seeing in one view premisses and consequences!’ Cf. *Fin.* V 26 *ut jam liceat una comprehensione omnia complecti, non dubitatemque dicere omnem naturam esse conservatricem sui*; ib. IV 55 *consequentibus vestris sublatis, prima tolluntur*. *Comprehendo* means not only to grasp one thing firmly (= *καταλαμβάνω*), but to hold together a number of things at once (= *συλλαμβάνω*).

*rerum*: used here of abstract ideas, as above *ipseis rebus*, and below *qui busque rebus, singulas res*. That this was its original force is probable from its connexion with *reor*, cf. the Eng. *thing* and *think*.
ex quo: this refers generally to what precedes, the greatness of man’s understanding. The second ex quo refers to reasoning by definitions and syllogisms.

videlicet: if the text is correct, I think we must take this in its original sense—videre licet, as in Plautus and Lucretius (so we find scilicet followed by Acc. c. Inf. in Sallust Jug. 102 § 9, Hist. fr. 51 § 5), or it would be easy to make this slight correction. Otherwise I should prefer to insert some word like judicamus before it, with Vahlen: I do not think conclusimus suits efficiatur, and there is no justification here for idque in the sense of καὶ ῥᾳδα.

ex quibusque: pl. because a single conclusion may depend on many arguments.

circumscripse: cf. Orat. 1 189 est enim definitio rerum earum quae sunt ejus rei propriae, quam definire volumus, brevis et circumscripta quaedam explicatio, where Wilkins translates it ‘strictly limited’. This sense is not to be confused (as by L. and S.) with that in which it is applied to a rounded period, as in Orator 204, 221.

ex quo scientia: Acad. 1 32 (the Old Academy) scientiam nusquam esse sensibat nisi in animi notionibus atque rationibus, qua de causa definitiones rerum probabant; ib. § 41 ad haec quae visu sunt et quasi accepta sensibus assensionem fungit animorum;...quod autem erat sensu comprehensum,...si iva erat comprehensum, ut convelli ratione non possit, scientiam (appellant Zeno).

quam vim habeat: followed in mss by qualis sit. Allen inserts et, comparing Divin. 1 9 id, si placet, videamus, quam habeat vim et quale sit.

illa sunt: for the Pl. see 1 20 illa palmaria n.

ea quae extra sunt: ‘the external world’, here almost equivalent to ‘objective truth’, cf. Ac. 1 76 Cyrenaici negant esse quicumquid cerni possit extrinsecus, ea se sola percipere quae tactu intimo sentiant. Not only ratiocination is trustworthy, but also the combination of sensation and reason, by which we apprehend the outer world, cf. Ac. 1 19 foll., where each is proved separately: the Academic disputant attacks sensation in 1 79, dialectic in 1 91 foll.

§ 148. ex quibus collatis inter se arces efficimus: cf. Ac. 1 22 ars vero quae potest esse nisi quae non ex una aut duabus, sed ex multis animi perceptionibus constat? Fin. 11 18 (artes constant) ex cognitionibus, where Madv. cites the Stoic definition τέκμην εἶναι σύστημα ἐκ καταλήψεων συγγυρωσμένων (Sext. P. H. 11 188).

partim ad usum...partim ad oblationem: see below § 150, Bywater J. of Phil. vii p. 85, who refers to the Aristotelian distinction between artes ἀρτος χρῆσιν and πρὸς διαγωγήν, cf. Metaph. 1 1 p. 981 a γίνεται τέκμην ὅταν ἐν πολλῶν τῆς ἐμπειρίας ἐννομάτων μία καθόλου γίνεται περὶ τῶν ἰσομερῶν ὑπόληψις, and a little below πλειώνων εὐρουσκομένων τεχνῶν καὶ τῶν μὲν πρὸς τάφαγκαι τῶν δὲ πρὸς διαγωγὴν οὖσῶν with Bonitz’s n.

M. C. 11.
C d (8). a. Providence shown in the gift of speech (λόγος προφορικός) and the wondrous mechanism of the vocal organs. §§ 148, 149.


ut vos soletis dicere: cf. §§ 1 and 163, where Cotta is described as Academic and Orator in one.

quae ignoram: on the Ind. after Rel. in Ininitival subordination, see Madv. § 369 obs. 1.

fractundias: 'outbursts of passion', see on Pl. of Abstracts § 98 n.

a vita immani segregavit: cf. Orat. i 33 quae vis alia (than eloquence) potuit aut dispersos homines unum in locum congregare aut a fera agrestique vita ad hunc humanum cultum deducere? Leg. i 62. In Tusc. v 5 the beginning of civilization is attributed to philosophy instead of eloquence, tu (philosophia) dissipatos homines in societatem vitae convocoasti: cf. Sext. 91 where this is assumed to be the general belief: but in De Invent. i 2 it is argued that both eloquence and wisdom were needed to effect the change; either by itself would have been useless, if not mischievous. A comparison with Seneca Ep. 90 shows that this theory of civilization was maintained by Posidonius. See below § 150.

§ 149. incredibile est si addenderis: the correction si for nisi was proposed first by Kindervater and then by Madv. and has been generally adopted. With it the meaning is 'if you closely attend, it is wonderful how great is the skill displayed by nature'. The other reading assigns to incredibilitis its literal force of vix credas, a sense in which it is never used by C., thus 'you would never believe, unless you paid close attention to the subject, the skill shown by nature'. As si is a little obscure and elliptical, it was easily liable to corruption; we have to supply some such phrase as ut tibi videbitur before it (cf. the use of si § 144 n., and § 167 n.).

arteria: cf. § 136 n.

principium a mente ducens: cf. Plac. Phil. iv 19 Πλάτων τὴν φωνὴν δόξα (τα πνεύμα διά άυματος διά διανοιας γχμάνοις (see the Sophistia 163 e); ib. 21 'the Stoics distinguish seven faculties of the soul or ἄγγελοι, viz. the five senses, τὸ σπέρμα καὶ τὴν φωνήν, which last they define as πνεύμα διάτεινον ἀπὸ τοῦ ἄγγελον ἀγαμήρας καὶ γχλώττης'. Galen (Hipp. Plat. p. 241, 251, 354 K.) finds fault with Zeno and Chrysippus for maintaining that the heart, not the brain, is the seat of reason, on the ground that the voice is sent from the heart. The word in the breast was called λόγος ενδέκατος, the word in the mouth λόγος προφορικός, cf. Zeller iv p. 57, 195 foll., Nemesius c. 14, and Philodemus cited above i 41.

percipitur et funditur: 'through which the voice is caught (from the heart) and uttered': for percipitur cf. § 141 aures sonum percipere; for funditur Tusc. ii 56 latera fauces linguam, e quibus elicem vocem et fundi videmus.

finita dentibus: Sch. reads munita comparing the Homeric ἐπος ἄνων, vallum dentium in Gell. i 15, Apul. Doctr. Plat. c. 14, also Lact.
Opif. c. 10 linguaum dentium saeptis deus quasi muro circumvallavit, where Bünemann cites Apul. Flor. ii 15 verba intra murum cantendium dentium premere, Apol. 7 sermo e dentium muro proficiscitur. I think however that finita may be defended in reference to the immoderate profusam which follows. The tongue is confined by the teeth and so is able to confine the sounds.

immoderate profusam: 'spoken of inarticulate sound, as Leg. i 27 moderationem vocis of articulate' Sch.; cf. Orat. iii 40 etiam lingua et spiritus et vocis sonus est moderandus.

pressos: we have had the word premo in the sense 'to condense' § 20; here it is used of sound which is sharply and clearly articulated by the pressure of the lips and tongue; so in Orat. iii 43 Cic. speaks of the pure Roman pronunciation as marked by lenitate vocis atque ipso oris pressu, and in § 45, after saying that women are the best witnesses to the old pronunciation, he describes Laelia as speaking non aspere, non vaste, non rustice, non hiude, sed presset et aequabiliter et leniter. It is the mean between the faulty extremes mentioned in Orat. iii 41 nolo exprimi litteras putidius, nolo obscurari neglegentius. Quintil. uses expressus in the sense of C.'s pressus (i 11 § 4) imprinimis vivia, si quae sunt oris, emendet, ut expressa sint verba, ut suis quaeque litterae sonis enuntientur, cf. xi 3 § 33. The word was further used in regard to written language, apart from pronunciation, in the sense 'distinct', 'exact', as in Orat. ii 56; cf. Ernesti Lex. Techn. s. v., and Holden on Off. i 133.

plectri similem: cf. Nemes. c. 14 in the mouth diaplettet eti kai skhmatizeitai kal oioi kai mophountai h dialektos ti mèn ghar gloutos kal to go gugreowos (varula) pléxtroan lógon éntékhontos, ti di theófora h xheiai (sounding board), tov di de boulaton kai ti toui to stómatos diávoísoim ou en lúri tiw chródon anapleprotwvan xreias, sartelousis ti kai ti prono proe énérphía, k.t.l. Hieron. de Spiritu Sancto 35 linguae organum commovemus et quasi quoddam plectrum chordis dentium collidentes vocum sonum emittimus, Ambr. Hex. vi 67 lingua plectrum loquentis. Theodoret even maintains that musical instruments were invented in imitation of the mechanism of the mouth (Proo. iii p. 515 Sch.), see also ib. p. 513, where it is compared to an organ, órgano gar toiken apó xalików svkgemínê kalamów kai ùn áskos ekphugémên kai kai súmêmê ùpò tov têxhini diktylôn. Prudent. (Rom. Mart. Suppl.) qui fecit ut vis vocis expressa intimo pulmone et oris torta sub testudine (sounding board) nunc ex palato det repercussus sonos, nunc temperatur dentium de pectine, sitque his agenda lingua plectrum mobile. In the same poem we find plectrum used as a name for the tongue, plectrum palati et faucium saevus tibi tortor revulsit, cf. Pollux Onom. ii 104, 105. The metaphor of the plectrum was applied to the Sun by Cleanthes, because when he strikes the world with his rays eis tìn énarmónon poriian tò phos ágei: cf. Varro Menip. 351 Büch. quam nobilém divum lyram sol harmoge quadam gubernans motibus diis veget (Hirzel Unters. ii p. 181).

nares cornibus: for the combination of different cases after similitis, cf. 18—2
above 190 hominum similis...illud huic; Lucr. iv 1211 tum similis matrum
terno semine scint, ut patribus patrio. The Gen. is by far the commoner
construction in Cic. in reference to persons, see Madv. Fin. v 13. In later
writers the Dat. is chiefly used, see Madv. Gr. 219 obs. 2. We find a
similar combination after expera, Sall. Cat. 33 plerique patriae, omnes fama
atque fortunis expertes sumus. On cornibus cf. above § 144; probably the
plural here refers to the so-called horns of the lyre, which being hollow
would tend to deepen the sound, cf. Greg. Nyss. c. Eunom. Gr. 12 ἡ δ'
ὑπέρφερ διὰ τοῦ ὑπερεμάκαιον κενάματος τοῦ κατὰ τοὺς μυκτῆρας διήκοντος,
kαθάπερ τις μαγάς ἀνθεδῶν ἐπιτηδεύει τῷ ἑκεῖ τὸν φθόγγον. The Msc. cornus
occurs in Varro Sat. Men. Eum. 36 (p. 173 Büch.) Phrygiius per ossa cornum
liquida canit anima [taken from Nonius pp. 233 and 334, the readings
being very doubtful in both places. R.]: we find the Acc. cornum in
Lucr. ii 388, Od. Met. i 874; the Lexx. cite Scribonius for cornorum.

cantibus: cf. § 146 n.

C d (8). Providence shown in man’s capacity for action, and
in the wonderful mechanism of the hand. §§ 150—152.

Ch. lx § 150. manus: cf. Arist. P. A. iv 10 § 19 Ἀναστάγωρας μὲν οὖν
φοί διὰ τὸ χείρας ἔχειν φρονεμότατον εἶναι τῶν ζων ἀνθρώπων: εὐλογον δὲ
διὰ τὸ φρονεμότατον εἶναι χείρας λαμβάνει. οἱ μὲν γὰρ χεῖρες ὅργανων ἔτι,
ὅτε φύσις δὲ διανείμει, καθάπερ ἀνθρώπος φύσιμος, ἐκατόν τῷ δυνάμει
χρήσατο: ὁ γὰρ φρονεμότατος πλείστως ἐν ὁργάνωσιν ἐχρήσατο καλός, ὡς
χεῖρ ὑπεκ ἔχει σῶς ἐν ὁργάνων ἀλλὰ πολλὰ: ἐκεῖ γὰρ ἐστερεῖ ὁργανόν πρὸ
ὁργάνων...Ἡ γὰρ χεῖρ καὶ δυνατή καὶ χρήσις καὶ κέρας γίνεται καὶ δόρυ καὶ ἕφας
καὶ ἀλλ’ ὀστομονοῦ ὄξυν καὶ ὁργανόν. See the whole passage. Lucretius
(iv 830) argues against the Stoic doctrine, ‘beware of thinking that arms
and hands were given utraque ex parte ministras, ut facere ad vitam pos-
semus quae foret unus...quod natum est id procreat usum’. The subject is
fully treated by Galen Us. Part. i, Theodoret Prov. iv.

molles commissurae et artus: hendiadys ‘the flexibility of the
joints’. Perhaps we may distinguish commissurae as denoting particularly
the cartilaginous lining of the joint [and artus as the joints of the fingers,
i.e. the three small bones of which each finger is made up. R.].

admotiones digitorum: no other ex. of this word is cited before 400 A.D.,
but in Brut. 200 we read animis judicum admoveo orationem tamquam
fidibus manum, which might suggest that it was a technical word for
musical ‘fingering’.

haec oblectationis: the fine arts just mentioned, painting, modelling,
carving, music.

suta: made of some natural material which only wanted fastening
together; cf. Lucr. v 1350 nexilis ante fuit vestis quam textile tegmen.

ad inventa animo, percepts sensibus adhibitis opificum manibus:
‘when the inventions and observations of the philosopher were applied to
practice by means of the skilled hand of the workman’, lit. ‘when the
hand was employed upon the inventions &c.’ On the history of Civilization see Orat. 9 neque te fugit omnium laudatorum artium procreatricem quandam et quasi parentem eam, quam ϕιλοσοφίαν Graeci vocant, ab hominibus doctis
simis judicari, and (C’s authority) Posidionius ap. Seneca Ep. xc where all arts are traced to philosophers; narrat quem ad modum rerum naturam imitatus panem coeperit facere &c. (§ 22). Compare also Lucr. v 1100 on the use of fire; 1241 foll. of metals; ‘something which men saw and admired (percepta sensibus) suggested effort to produce a similar result by artificial means’ 1255 foll.; musical instruments 1379 foll.; ‘these suggestions were caught up by men of genius (inventa animo), 1105—1107. See generally on the ideas of the ancients as to the origin of civilization Lewis Methods of Observation &c., c. xxii § 20 with the reff., and, on inventions, ib. c. x § 6.

opificum: Walker corrected opificibus after Arnob. II 17 quamvis sint nobis opifices manus. It is possible that operibus may have been a correction by a reader who took opera for the plural.

quaee mandentur vetustati: ‘for keeping’, a singular phrase; it is common enough to say mandare aliquid memoriae or monumentis; but we do not think of vetustas as having any existence apart from the things of which it is a quality: we may compare mandare vitam solitudini ‘to give over one’s life to solitude’. For exx. of vetustas used of duration in the future, cf. Att. xiv 9 quae mihi videntur habitura etiam vetustatem ‘likely to last’, Milo 98 nulla obnutescit vetustas; it was especially used of eatables which would ‘keep’, e.g. Colum. xii 46 poma in vetustatem reponere, ib. c. 11 mella in vetustatem reponere, Cato R. R. 114 vinum servare in vetustatem, Col. iii 2 vetustatem vinum patitur et ad bonitatem aliquam per annos venit; hence the word vetustesco used of wine Col. i 6, and the metaphorical use in Quintil. x 1 § 40 auctores qui vetustatem pertulerunt.

condita: see below § 156 condendi ac reponendi, 157 frumentum condunt.

terrenis et aquatilibus: see above § 42 and 103.

vescinur...capiendo, alendo: a careless expression for quas capimus, aimus. Sch.

vectiones: &c. lac. a curious abstract expression for ut vehant.

onera—fuga: see below § 159.

elephantorum: cf. i 97. Aristotle (H. A. ix 46) calls it εὐαίσθητον καὶ σωνερη τῇ ἄλην ὑπερβάλλον.

abutimur: ‘turn from its natural use to our own’, cf. Quint. 99 ne
ornamentis ejus omnibus Naevius pro spoliis abutatur; Invent. ii 24 quas ad
defensionem reo dabimus, iis accusator ad alios ex culpa eximendos abutetur;
Orator 94 Aristoteles tralationi subjungit abusionem, quam κατάχρησιν vo-
cant, ut cum abutimur verbis propinquis, si opus est. Like ἀποχράσιαι and
καταχράσιαι it has also the sense of ‘to use to the full’ as in Verr. i 9
§ 25 nisi omni tempore, quod mihi lege concessum est, abunus ero.

e terrae cavernis ferrum elicimus: Mu. reads eligimus, comparing
§ 161, where the reading of all the better mss is ex earum corportibus
remedia morbis eligamus; Div. ii 149, where the mss have ejicienda, but
Mu. and Ba. adopt Madv.’s conjecture (in his Emend. Liv. p. 155 (183) n.
and Advers. ii 205) and read superstitionis stirpes omnes eligendae; Fin. ii
119 eligerem ex te cogere corque ut responderes, where however Madv. and Mu.
both read, by conjecture, elicerm, and Ba. exigerem; Tusc. iii 83 stirpes
aegritudinis omnes eligendae sunt (on which see Mu.’s n. in Praef. p. xxxix
foll.) and ib. 84 fībrae stirpium persequentae et eligendae sunt. There is no
doubt that eligeris is the natural word to use of pulling up weeds, as in
Colum. iv 5, Varro R. R. i 47, Curtius iv 4; but we could hardly talk of
picking or pulling out iron, we want a word to express the educing of iron
concealed in the ore, and this is just the force of elicis, as above § 25 lapidum
tritus elici ignem, § 150 ad nervorum eligendos sonos, Cato 51 (terra) elicis
herbescentem ad semine viriditatem by means of heat and pressure (just as
in the case of the iron).

cavernis = fodinis.

venas penitus abditas: cf. Div. i 116 aurum et argentum, aes, ferrum
frustra natura divina genuisset nisi eadem docuisset, quem ad modum ad
ecorum venas perveniretur, and the parallel passage Off. ii 13 nec ferrum,
aes, aurum, argentum effoderetur penitus abditum, which Ribbeck gives as
fr. 85 Incertorum in his Trag. Lat. suggesting (p. 301) that it may be
taken from the Prometheus of Attius, as the words nearly resemble Aesch.
Prom. 508 ἑρεθε δε χεινος τερπμεν ιαυβότωσιν ἀφελήματα χαλκόν,
σιδηρόν, ἄργυρον; χρυσόν τε τίς φότειν ἐν πάραθεν ἔξωρεν ἐμοῦ; For in-
stance of similar half-conscious unavowed quotation see above § 25.
venas: cf. § 98.

conceptione: cf. Divin. i 116 materia quid juvaret nisi conceptionis ejus
fabricam haberemus?

materiā: cf. aedes male materiatae ‘built of bad timber’ Off. iii 54,
faber materiarius ‘carpenter’.

mitigandum: rarely used in the literal sense, cf. Ov. Met. xv 78
sunt quae militecre flamma mollirique queant, and above § 130 mitigat
agros.

§ 152. affer: sc. materia.

quorum curibus: in English we should say more generally ‘by
means of which’, while on the other hand we should have certainly used
more definite terms instead of res below; which stands (1) for the un-
controllable forces of nature, (2) for navigation, (3) for marine products.
Compare for (2) Caes. B. G. iii 8 scientia atque usu nauticarum rerum.
propter scientiam gives the reason why we are able both to control the winds and to obtain (3).


[nos flumina arcemus, derigimus, avertimus: 'we confine rivers, we straighten their course, we divert them altogether'. Arceere refers to strengthening and raising the banks to prevent overflow; derigere to the improvement of the river for navigation by dressing the banks and substituting short cuts for the natural bends; avertere to making a new channel for the river where the old was inconvenient or dangerous or occupied too large a bed. The first and third operations at least are noticed by Ulpian in Dig. xliii 13 § 7 Qui quid in flumine publico fecit (pone enim grandum damnun flumen ei dare solutum, praedia ejus de popollaris), si forte aggeres vel quam aliam munitionem adhucuit, ut agrum suum tueresur, saeque res cursum fluminis ad alienum immutavit, cur ei non consuletur? pleoerque scio prorsus flumina avertisse alveosque mutasse, dum praedii suis consulunt. The rapid and excessive rise of the streams in Italy occasioned many legal difficulties, which are discussed in the Digest and in the writings of the Agrimensores. R.]

alteram naturam: so we speak in a somewhat different application of 'use being a second nature'; cf. Fin. v 74 (suluptatem) consuetudine quasi alteram quandam naturam effici: Seneca Prov. 4 § 15 nihil miserum est quod in natura consuetudo perduxit: Quintil. II 4 § 17 hujus rei naturam sibi faciat 'let him make a nature of it' i.e. habituate himself to it; Macrobr. Sat. vii 9 § 7 consuetudinem secundam naturam prouintiavit usus. [Add Clementin. p. 7 23 Lagarde devirta phusis i ψωφεις, Chrys. II 509ט, x 61א, 490א. J. E. B. M.]

C d (8). η. Providence shown in man's capacity for contemplation and worship. § 153.

Ch. lxi § 153. finitus est dies: 'the day, month and year have been determined' (had their limits assigned). For this use of finio cf. Leg. II 20 cursus annuus sacerdotes finiunt, Fam. xv 9 (tempus) quod tu mihi et senatus consulto et lege finisti, Fat. 30 finitus est mortiendi dies, Caes. B. G. vi 18 spatia omnis temporis numero noctium finiunt.


quae contuens—e qua—cui—e quibus—quae: a remarkable ex. of the compound relative construction, see Index.

accedit ad cognitionem decrur: supposing this to be the right reading, it is rather an unusual expression for 'attaining to'.
cui conjuncta justitia: cf. I 4, and 116 with nn., Fin. v 65 justitia cui sunt adjunctae pietas, bonitas, liberalitas, benignitas, Seneca Ep. xc 3
philosophiae opus unum est de divinis humanisque rebus verum invenire; ab hac summum recedat religio justitia pietas et omnis alius comitatus virtutum consensurum et inter se oohaerentium. It was a Stoic maxim that he who had one virtue must have all virtues, in the words of Chrysippus (Plut. Sto. Rep. 27) τὰς ἀρετὰς ἀντακουσθείν ἀλλήλαις, οὐ μόνον τῷ τῶν μιᾶν ἑχοντα πάσας ἔχων ἀλλὰ καὶ τῷ τῶν κατὰ μιᾶν ὁποῖου ἐνεγρίφτα κατὰ τῶν ἐνεγρίψ; see Eun. v 67; and on the connexion between physics and ethics, the observation of nature and a virtuous life, see above § 37 n. and Beier's exc. ix on Off. l.

similis deorum: an abbreviation for s. vitae d., so just below cedens caelestibus, anteier animantes; cf. Juv. III 74 sermo promptus et Iasae torrentior with Mayor's n.; Orat. i 15 ingienia nostrorum hominum celeri hominibus praestiterunt; II. xvii 51 κοίμα Χαρίσσου εὐμοία. Sch. cites Flacc. c. 28 cujus ego civitatis disciplinam non solum Graeciae sed haud scio an cunctis gentibus anteponam; R. P. ii 1 praestare nostrae civitatis statum caeteris civitatis.

nulla re nisi immortalitate—cedens caelestibus: so Polyxena says in happier days she was ἵνα τὴν θείας πληθὺ καθαρεύιν μόνον Eurip. Hec. 356. This paradox seems to have been put forward in its most offensive form by Chrysippus, cf. Plut. Comm. Not. 33 p. 1076 ἀρετὴ οὐ υπερχειν τῶν Δία τοῦ Διόνυσ... ἀρετὴ δὲ μὴ ἀπολειπόμενον ἀνθρώπους οὐδὲν ἀποδεῖν εὐδαιμονίας, ἀλλ’ έπιστης εἶναι μακάρων τῷ Δίλ τῷ σωτηρί τῶν αὐτός, Sto. Rep. 13 p. 1038 ἀπερ τῷ Δίλ προσθήκας σεμνύνεσθαι ἐκ’ αὐτό...οὐν τοῖς ἀγαθοῖς πᾶσιν τοῖς προσθήκας καὶ οὐδὲν προσχεμόνοι ὑπὸ τοῦ Δίσω, Stob. Ecl. ii 198, Seneca Ep. 73 § 13 Jupiter quo antecedit virum bonum? diutius bonus est. Sapiens nihil se minoris aestimet quod virtutes ejus spatio breviore clauduntur. Seneca even goes so far as to say (Ep. 53 § 11) est aliquid quo sapiens antecedat devum; ille naturae beneficio, non quo sapiens est. Ecce res magna, habere imbecillitatem hominis, securitatem dei; and again Const. Sep. 3 § 2, Prov. 6 § 6 hoc est quo devum antecedatis: ille extra patientiam malorum est, vos supra patientiam. In §§ 17, 34, 36, 37, 39, 70 we have seen the other side of Stoic teaching: man is imperfect, situated in the lowest region of the universe, yet he has received the gift of reason and is capable of wisdom and virtue: therefore in those divine and perfect beings which inhabit the higher parts of the universe and breathe a purer air, these qualities must exist in greater measure and be used for higher ends. Further it is only the perfectly wise man in whom the perfection of virtue, and therefore of happiness, is to be found, but this perfectly wise man does not exist on earth. In the end the Stoic doctrine on this point merges into the Christian; the ideal man is God; see my Sketch of Ancient Philosophy p. 165 foll.

quae nihil ad bene vivendum pertinet: the question of the relation of duration to happiness had been moored by the Cyrenaics and by Aristotle with reference to the famous dictum of Solon (Eth. i 10). Epicurus, seeking as usual to diminish the terrors of death, maintained that happi-
ness was independent of duration, Diog. x 145 ὁ ἄπειρος χρόνος ἦτον ἦχος τῆς ἡδονῆς καὶ ὁ πεπρασμένος, ἐν τοῖς αἰτίας τὰ πέρατα καταμετρήθη τῷ λογισμῷ, Fin. i 63, π. 87 negat Epicurus nec diuturnitatem quidem temporis ad beate vivendum aliquid offerre, nec minorem voluptatem percipi in brevitate temporis, quam si illa sit sempiterna. The opponent objects that this may be all very well in a Stoic; qui bonum omne in virtute ponit, is potest dicere perfectam beatam vitam perfectione virtutis; negat enim summo bono offerre incrementum diem; but it is altogether inconsistent in an Epicurean, who makes happiness consist in pleasure, to deny that happiness would be increased by a longer continuance of pleasure. Cf. Plut. Sto. Rep. 26 p. 1046 (Chrysippus affirms) παρὰ τὸν πλείονα χρόνον οὐδὲν μᾶλλον εὐδαιμονίαν, ἀλλὰ ὁμοίως καὶ ἐπὶ τοῖς τῶν ἀμερί χρόνων εὐδαιμονίας μετασχημάζεται, Seneca Ep. 85 § 22 nec sunt beatam vitam umam esse. In optimo illam statu ponit qualitatem sua, non magnitudinem: itaque in aequo est longa et brevis, ib. ep. 78 § 27, 101 §§ 9, 10, Benef. v 17 § 6, Prov. 1 § 5, Plut. Comm. Not. 8 p. 1062, Gataker on M. Ant. iii 7.

omnes anteirent: the transitive force is shown in the Pass. se abs te anteiri putant (Sulla 23), but we also find the Dat. constr. as in Off. ii 37 ii qui anteire ceteris virtute putantur. On the Imp. Subj. cf. i 8 n.

D. PROVIDENTIAL CARE FOR MAN. §§ 154—167.

(a) Whatever is found to be useful to man was originally designed for his benefit. (b) The universe exists for the sake of its rational inhabitants, viz. Gods and men. § 154.

§ 154. atque aliquando perorem: a parenthesis, added as a second thought.


quaeque in eo sunt—inventa sunt: Heind. is certainly right in objecting to this as pleonastic and confusing the treatment of the subject, but I am not satisfied that it is un-Ciceronian. Inventa is not confined to the discoveries of man (as Sch. says), for we read of inventa deorum in i 38, cf. ii 60, and Tim. 9 mente divina curriculum inventum est solis et lunae, cf. Lewis Methods of Observation &c. i p. 411.


Athenas: cf. Antonin. IV 3 ἐκεῖνος μὲν φήσῃ Πλ.ι φίλη Κέρανος, σὺ δὲ οὐκ ἐρεῖς Ἡ πόλις φίλη Διός;

D c. The heavenly bodies, besides their general use for the preservation of the world, afford also a beautiful and instructive spectacle to man and man alone of animals. § 155.

§ 155. mundi cohaerentiam: cf. above § 82, and n. on § 19, also Ac. I 28 omni natura cohaerente et continuata cum omnibus suis partibus effectum esse mundum, Leg. fr. sicut una eademque natura mundus omnibus partibus inter se cohaeret ac nittit, sic omnes homines inter se natura confusi. As the heaven is the chief seat of the ethereal spirit which permeates and incloses and binds together the world, it may well be said pertinent ad cohaerentiam. Even eclipses contribute ad universi firmitatem Philo Prov. II 79. See the striking passage in Seneca Ben. vi 20 (sol et luna) cum in hoc moveantur ut universa conservent, et pro me moventur; universi enim pars sum. He then describes what would be the effect of a sudden pause in the revolutions of the heaven, omnia ista ingentibus intervallis diducta et in custodiem universi disposita stationes suas deserant, subita confusione rerum sidera sideribus incurrant et rupta rerum concordia in ruinam divina labantur, contextusque velocitatis citatissimae in tot saecula promissas vices in medio iuventis destitut, et quae nunc sunt alternis reeduntque opportunis librarentis, mundum ex aequo temperantia, repentino concrescuntur incendio ...Prosent tibi eunteque ista tua causa etiam major illis alia ac prior causa est. [Compare Hooker I 3 § 2. Clem. Rom. Ep. I 20. J. E. B. M.]

et spectaculum praebent: Sch. explains et on the principle of Ana-culthon (cf. Madv. Fim. exc. 1) and thinks C. meant to add some such phrase as et magnam hominum vitas utilitatem aferunt before eorum enim, but that he changed his mind and introduced the latter clause as an evidence of the reason exhibited in the movement of the stars. If we take et to mean ‘also’, as in I 72 and 83, where see nn., the preceding etiam becomes pleonastic.

insatiabilior: see § 98 n. species: cf. § 96 and § 100. ad rationem praestantior: cf. I 1, P 77; Sch. cites Leg. I 33, Font. 15.

maturitates temporum: ‘when the times will be ripe’, e.g. when to expect an eclipse or transit of Venus.
D d. The products of the earth exist for man's sake, as plainly as a musical instrument for the sake of the performer; often they require his skill to make them of use, and their qualities can only be appreciated by his finer senses. §§ 156—158.

§ 156. feta frugibus: 'teeming', cf. Lucr. ii 994 feta partit nütidas fruges, and Ov. F. i 662 seminibus factus est ubi fetus ager.

leguminum: 'all that grows in pods'. Sch. cites Varro R. R. i 32 § 2 (leguminia) dicta a legendo, quod ea non secantur sed vellendo leguntur, and compares χέδροπα = χιμέδροπα.

cum maxima largitate fundit: cf. § 59 molientes cum labore operoso and Index under cum.

ferarumne: cf. n. on seminane i 91.

laetissimique: cf. Ps. 65 n. 13 'the valleys are covered over with corn, they shout for joy', but in the writers Rer. Rust. the word had quite lost its poetical colouring, see n. on laetificat § 130.

perciendi: so in Cato 24 we have serendis percipiendis condendis fructibus, ib. 70 reliqua tempore demetendis fructibus et percipiendis accommodata sunt, cf. above § 13. [It is the regular technical term used in legal writings for getting in fruit or produce of any kind, e.g. Dig. vii 1 60 quidquid in fundo nascitur vel quidquid inde percipitur, fructuarii est. R.]

condendi nulla pecundum scientia est: for the combination of the Objective and Subjective Gen. see § 140. As to the fact cf. Geo. iv 56 (of bees) aseae laborem experientur et in medium quaesita repromunt; so of ants Aen. iv 402. The Psalmist takes a much wider view (Ps. 104) 'these wait all upon thee and thou givest them their meat in due season'. What Seneca says of the stars is true also of beasts and plants; they exist for us in part only.

Ch. lxiii § 157. bestiae furantur: Orig. c. Cels. iv 74 ὁπερ ἐν ταῖς πόλεσιν οἱ προαυδόμενοι τῶν ὤνων καὶ τῆς ἄγορᾶς δὴ οὖθεν ἄλλο προαυδόμενος διὰ τῶν ἀνθρώπων, παραπλανοῦσι δὲ τῆς δαπεδείας καὶ κύνες καὶ ἄλλα τῶν ἀλόγων οὕτως ἡ πρόων τῶν μὲν λογικῶν προαυδομένως προοιμεί, ἐπηρεαθότες δὲ τὰ ἄλογα ἀπολαυόντων τῶν δὴ ἀνθρώπων γνωριμένων. Celsus turns this the other way § 76 ἡμεῖς μὲν κάμνοντες καὶ προσταλαμαποῦντες μᾶλλος καὶ ἐπιτόνων τρεφόμεθα τοῖς δὲ ὀσταρτα καὶ ἀνθρώπου πάντα φύονται (to which Origen replies it was to exercise the mind and the muscles); again (77) εἰ δὲ καὶ τὸ Ἐορπίδειον ἐρείς, ὅτι Ἡλιός μὲν νῦν τε δουλεύει βροτοῖς, τὸ μάλλον ἡμῖν ἢ τοῖς μύρμηξι καὶ ταῖς μυίαις; καὶ γὰρ ἐκεῖνος ἢ μὲν νῦν γίνεται πρὸς ἀνάπαυσιν ἢ δὲ ἡμέρα πρὸς τὸ ἐνεργεῖν, and (78) εἰ τὰς ἡμᾶς λέγει ἀρχοντες τῶν ἕμων, ἐπεὶ ἡμεῖς τὰ ἄλλα ἐγαίνει καὶ δανύει μενος φήσομεν ὅτι, τί δ′ οὐχὶ μᾶλλον ἡμῖς δ′ ἐκείνα γεγονόμεν, ἐπεὶ εκεῖνα θηράται ἡμᾶς καὶ καθίσσω; especially as man needs nets and weapons, while nature has supplied the beasts with all they need for attack or defence.

§ 158. nisi forte—dubitationem affect quin: ironical 'unless the
flavour and scent and look lead you to doubt their being intended for man alone', cf. i 99. The negative force justifies the use of quin.

ipseas bestias hominum gratias: cf. above §§ 37, 140, 151, Fin. ii 40, Tusc. i 69 and ref. in Zeller iv p. 172 n.

De e. Even animals were created for the sake of man, to clothe him, guard him, feed him, carry him, draw for him, and finally to call forth his strength and courage. §§ 158—161.

quid oves aliuad afferunt: it is singular that C. makes no mention of the flesh of sheep; but mutton has never been a favorite article of diet with Italians. Horace speaks of vilis agnina (Ep. i 15 35); Ovid (Met. xv 119) says vita magis quam morte juvatis: Varro, Columella and Virgil, in treating of the farming of sheep, refer to their milk, but not to their flesh. In fact the word ovina is never used in the sense of 'mutton', though bubula 'beef' is common enough. For the usual Roman dishes see Becker Galtus tr. pp. 458 foll.

villis: used of wool by Varro R. R. ii 2 ovem esse oportet corpore amplo, quae lana multa sit et molli, villis altis et densis toto corpore; Col. vi 3 § 7, Plin. viii 73 Apuleae breves villo.


canum—dominorum adulatio: for the combination of the Objective and Subjective Gen. see § 145 and Index.

se esse generatos: as the formal Subject is canum alacritas, not canes alaces, it would have been more regular to have used eos instead of se: for laxity in the use of the Reflexive Pron. see Roby § 2265 foll.

§ 159. ad aratra extrahenda: Sch. and Mū. read trahenda after Ernesti. I think the compound may have been preferred by Cic. partly to prevent the juxtaposition of tra tra, and partly to express the action of the oxen in pulling the ploughshare through deep clay; but apparently no parallel has been found for this use. There is something rather harsh in the omission of sunt with natae.

quibus cum terrae subjigerentur fissione glebarum: I agree with Ba. in taking quibus as Abl. of Instrument, and fissione as Abl. of Manner after subjigerentur. Other edd. put a comma after quibus, thus making it a Dat. governed by afferebatur. But the important thing is to state that the oxen were the instruments employed to break up the land; 'since the lands were ploughed by them, no violence was used towards them'. It is easy to supply the Dat. of the Demonstrative after aff. (see n. on i 12); or possibly, as Wytt. suggests, the ambiguous form quibus may have been intended to do double duty.

ab illo aureo genere: Dicaearchus and Posidonius rationalized the poetical belief in a Golden Age, cf. for the latter Seneca Ep. 90 § 3 foll. primi mortalium quique ex his geniti naturam incorrupti sequebantur
eundem habebant et ducem et legem commissi melioris arbitrio... Illo ergo saeculo quaude aureum perhibent, penes sapientes fuisse regnum Pisonidius judicat...

ferrae tum vero: C.'s translation from Aratus Phaen. 129 foll. ἄλλα δὴ κακεῖον έξάνθασαν, οἱ δ' εγκυόντα χαλκείη γενεὴ προτέρων ὀλοστερος ἀνδρες, οἱ πρώτοι κακοεργαν έχαλκεύσαντο μάχαιραν εἰναδιν, πρώτοι δὲ βοῶν ἔποσαρν' ἀφοφήρων. Cf. V. Gec. II 536 ante impia quam caseis gens est epulata juvenis, aureum hanc vitam in terris Saturnus agebat; necundum etiam auctor inanth inflari classicare necundum impositus duris crepitare incudibus enese, Ovid on Pythagoras (Met. xv 120); and Pope's artificial imitation (Essay on Man III 147 foll.) describing the man of nature when 'man walked with beast joint tenant of the shade; no murder clothed him and no murder fed'; Ah! how unlike the man of times to come, of half that live the butcher and the tomb'. The original of these descriptions is Hesiod Op. 109 foll. and I. 145 (of the brazen age) οὐδὲ τι σίνων ἱσθίων. Empedocles followed (1. 420 Mull.) ταῖρον δ’ ἀκρίσθοι φῶνοι οὐ δεύτερο βωμός (in the golden 'age'), ἄλλα μνός τούτος ἢκεν ἐν ἀνθρόπων μέγιστον, θεῶν ἀπορραίωται ἠδύνατα ηδονά γνῶν, and Plato Leg. vi 782 c σαρκῶν ἀπείχοντο οὐ σιχ ὅσον ὃν ἔσθιεν νικεὶ τούτων θεῶν βωμοὺς αὔματι μείνειν, ἄλλ’ Ὀρφικοὶ τινες λεγόμενοι βιοί ἐγκύνοντο ἠμῶν τοῖς τότε. On the other hand it was maintained that this early vegetarianism was owing simply to ignorance of fire, and that the proverb ἄλις ὅριος originated in their expression of delight on escaping to a superior diet. On the Pythagorean practice see Zeller I p. 292 n., and cf. Sext. Emp. I. 127 οἱ μὲν οὖν περί τῶν θυσιαγόν καὶ τῶν ἕμπεδων...φασι μὴ μόνον ἠμῶν πρὸς ἄλληνς καὶ πρὸς τοὺς θεοὺς ἐναί των κοινώνας, ἄλλα καὶ πρὸς τὰ θεοὺς τῶν ἔργων. In γὰρ ὑπάρχει πνεῦμα τὸ δία πάντος τοῦ κόσμου διόντι ψυχῆς τρόπον...διοίκοι καὶ κτείνοντες αὐτὰ καὶ τοῖς σαβείν αὐτῶν τρεφομένους ἀδίκησομεν τι καὶ ἀσεβήσομεν, οὐ συγγενεῖς ἀναραΐσθεν folly. Aelian (V. H. v 14) mentions an Athenian law which forbade the sacrifice of the labouring ox (see Hermann Gr. Alt. II 26 § 20). See also Juv. xv 173, 174 mn., the account of the βοῦβανα in Smith's Dict. of Ant. under Diipoleia and Bernays' ed. of the fragments of Theophrastus Ueber Frommitigkeit, preserved by Porphyrius Abst. II 27 foll.

ut eorum visceribus vesel scelus haberetur; cf. Varro R. R. II 5 boi socius hominum in rustico operae et Ceresis minister. ἄδ hoc antiqui manus ita abstineri voluerunt ut capite sanxerint si quis occidisset; Colum. vi praef. apud antiquos tam capitale erat bovem ne cessare quam civem; Plin. N. H. viii 48 damnatus a populo Romano qui...occiderant bovem, actusque in exilium, tamquam colono suo interempto. For visceribus 'flesh' cf. above § 18 n.

Ch. lxxiv. longum est: cf. I 19 and Index.

asiniorum: so Epict. II 8 § 7 'the ass was not created for its own sake (προγονομίων) but because we had need of a back fitted to bear burdens'.

BOOK II CH. LXXXI § 159. 285
irridet Epicurus; cf. i 55, Div. ii 39 doleo tantam Stoicos nostros Epicureis irridendi sui facultatem dedisse, and Diog. L. x 135 Epicurus martich deivor

divinatio: here too, as in so much of this treatise, the authority whom
C. follows treads in the steps of Xen. Mem. i 4 § 15, iv 3 § 12.

§ 163. multa provident: simply 'foresee' as in Div. ii 16 medicus
morbum ingrascentem ratione providet, tempesates gubernatur, and § 25.

ex sententia atque utilitate: cf. Tusc. iv 14 ex usu esse; Invent. i
68 ex utilitate interpretari; Fin. ii 34 e virtute, id est honeste, vivere; v 26
aliud equo est e natura, aliud bovi.

sive vis sive ars sive natura: two kinds of divination were
distinguished by the ancients; see above i 55 n., and Div. i 11 duo sunt
divinandi genera, quorum alterum artis est, alterum naturae; the 1st is
that practised by haruspices &c., the 2nd is subdivided into prophetic
frenzy (vis, cf. Div. i 80 illa consecratio declarat vim in animis esse divinam,
also §§ 34, 66 and 79) and vision (ib. 4) cum duobus modis animi sine
ratione et scientia, motu ipsi suo soluto ac libero, incitantur, uno furente,
altero somniante...haec enim duo naturalia putantur. The division seems
to be as old as Chrysippus (Diog. L. vii 149); the Stoics themselves traced

nec alli cuiquam data: this was not conceded by all the opponents
of the Stoics. Plutarch (Sol. A. n. p. 976) mentions a crocodile which pre-
signified the death of King Ptolemy, ήττά δε τῆς πολυτυμήτου μαστίχης
ξύμωρον εἶναι τοῦ τῶν ἐνδρών γίνος.

D h. Cumulative force of these proofs. § 163.

debenant: the Imp. is more forcible than the Fut. read by some edd.,
'if the arguments taken separately do not impress you, still they ought
to have done so from their collective weight'.

D i. The care of the Gods extends not merely to mankind in
general, or to particular nations, but to individual men. No man
was ever wise or virtuous without the Divine help. §§ 164—167.

§ 164. singulis provideri: see above § 75 dico providentia deorum
mundum et omnes mundi partes et initio constitutam esse et omni tempore
administrari; and Plato's argument (Leg. x 900 foll.) to prove οὐς ἐνυμελεῖς
σομκρόν εἰσὶ θεοὶ οὐχ ἦττον ἢ τῶν μεγεθίας διαφαρέοντων: Epictetus (Disc. i 12)
distinguishes three classes of believers in Providence, (1) those who believe
that the Gods take thought for τῶν μεγαλῶν καὶ οὐρανῶν, τῶν δ' ἐπὶ γῆς
μηδενῶς, (2) those who believe they take thought both for earth and heaven
εἰς κοινὸν δὲ μόνον, καὶ οὐξὶ δὲ καὶ ἔδαυ ἐκάστου, (3) those who like Ulysses
and Socrates can say οὐδὲ τε οὐδ' ἐλθὼ κινύμενος (Il. x 279, cf. Xen. Mem. i 4
§ 14); so Justin Martyr (Dialog. c. Tryph. p. 218) 'most philosophers try to
persuade us οὐ τῶν μὲν σύμμαχος καὶ αὐτῶν τῶν γεγονέν καὶ εἰδὼν ἐνυμελεῖται
θεός, ἐμοὶ δὲ καὶ σοὶ οὐκ ἐνι καθ' ἐκατοτ'. M. Aurelius, while he
records in grateful terms the special providences of his own life (1 17), will not allow that even the more general view of Providence is incompatible with religious hope (vi 44) εἰ δὲ μὴ ἐβουλευσαντο κατ’ ἵδιαν περὶ ἐμοῦ, περὶ γε τῶν κοινῶν πάντως ἐβουλευσαντο, οἷς καὶ ἐπακολούθησαν καὶ ταῦτα συμβαίνοντα ἀπαξέσθαι καὶ στέργων ὀφείλω.

contrahere universitatem generis humani: 'we may narrow the scope of our argument in regard to humanity at large', lit. 'we may bring within a narrower compass the whole (i.e. what affects the whole) of mankind'.

Ch. lxvi. ab hujusce terrae continuatione: Abstr. for Conc. 'from the continent which we inhabit'.

§ 165. sin autem his consultum: sin autem, like quod si, introduces a further step in the sorites, as in Off. iii 55, and below iii 46 quo modo potes, si Latonam deam putas, Hecatam non putaret? sin haec dea est, cur non Eumenides? ib. § 52 si est Ceres a gerendo, terra ipsa dea est: sin terra, mare etiam. For the inverse sorites see iii 93.

magnam quandam insulam: cf. R. P. vi 21 omnis enim terra quae coluitur a vobis angusta verticibus (i.e. in longitude), lateribus latior (i.e. in latitude), parva quaedam insula est, circumfusa illo mari, quod Atlanticum, quod magnum, quem Oceanum appellatis. The idea was first started by Plato Phaedo p. 109 B, 'the earth πάμεγις τι εἶναι, καὶ ἡμᾶς οἰκεῖν, τοὺς μέχρι Ἡρακλείων στρήλων ἀπὸ Φάειδος, ἐν σμικρῷ τυπί μορίῳ, καὶ ἄλλους ἄλλοις πολλοῖς ἐν πολλοῖς τοιούτοις τόποις οἰκεῖν'. In the pseudo-Aristotelian de Mundo the theory is much more developed; thus in 3 § 2 we read η σύμπασα οἰκουμένη μια νήσος ἐστιν ὑπὸ τῆς Ἡ Ατλαντικῆς καλουμένης θαλάσσης περιμε有色金属, ib. § 13 πλάτος μὲν ἐστὶ κατὰ τὸ βαθύτατον τῆς ἡπείρου βραχύ ἄποδων τετρακατακρονίων σταδίων...μῆκος δὲ περὶ ἐπτακατακρονίους μάλιστα. διαμείνει δὲ εἰς τε Εύρυστην καὶ Ἁσίαν καὶ Διήθνην: ib. § 3 'it is probable that there are many other continents washed by other seas'. Cleomedes (1 2), no doubt following Posidonius, says 'there are four oikouμέναι in the earth, two in the northern temperate zone and two in the southern; those who live in that which is opposite to ours, in the northern hemisphere, are called our περίουκοι, those who are diametrically opposite to us are the ἀντίποδες, those who lie directly to the south of us are the άντωνοι. Their existence is probable from reason, but not demonstrated by science'. See also Strabo i 4 § 6, ii 3 § 5, Plin. N. H. ii 66, Bunbury Anc. Geog. i p. 625.

[Rhodum: the collocation of this by the side of Rome, Athens and Sparta is noticeable. Rhodes was famous and resembled Athens in three ways, (1) as having a free constitution, cf. R. P. i 47 εἰ liberum autem populo, ut Rhodi, ut Athenis, ib. iii 48, (2) as a great naval power, Manil. 54 non Atheniensium...non Karthaginiensium...non Rhodiae, quorum usque ad nostrum memoriam disciplina navalis et gloria remanerit, (3) as a university town especially famed for the study of oratory, Brut. 316, Fam. ii 17 § 1, Suet. Tib. 11 cum circa scholas et auditoria professorum assiduus esset. Panactius was a native of Rhodes, and Posidonius long resided there as head of the Stoic school. R.]
earum urbiit—singularis diligunt: I take this to be an Inclusive ('partitive') Gen. depending on the idea of 'citizen' involved in the sentence, not on the word singularis by itself.

Curium: a similar list of Roman worthies is given in the pro Plancio 60, Tusc. i 110.

juvenis deo: cf. Plato Meno fin. Dea moira flamina paragynomene ἡ ἀργυρή οἱ paragynomene, and n. on § 167 nemo vir magnum. For the opposite view see iii 86 n.

§ 166. deos periculum comites: Sext. Emp. ix 63 πάραστι τὴν πονηρίαν ὥσπερ μηδὲν μήγα μηδὲ λαμπρὸν ἐκφέροντα, εἰ δὲ μὴ θεός ἔστιν οὐ τὴν ξονιάν καὶ τὸ κρατίος τῶν γυναιμένων πραγμάτων ἐνεμένος ('who has made dependent on himself'), ὡσπερ καὶ τῷ ποιήθη Ὁμήρῳ κατὰ τὸν ἀναγραφέα τῶν Ἑλλήνων καὶ βασιλέων τόλμων. The adventures of Odysseus and Diomed are full of the intervention of Athene, see on the special providences in Homer, Nigelaub. H. T. i § 26 p. 29 foll.

saepe praesentiam: see § 14 n. on praeter naturam portentis, and cf. Ter. Andr. 175 eri semper lenitas, Plaut. Pers. 385 non tū nunc hominum mores vide, 2 Cat. 27 mea lenitas adhuc. quales supra: in § 5.

usus ita notavit ut artem effecerit: see the account of the origin of divination in C.'s treatise on the subject (i § 109) affert varustas omnibus in rebus longinquas observatione incredibilem scientiam foll.

§ 167. nemo vir magnum sine affatu. All this latter part of the Stoic argument is cruelly cut down. The present sentence does not join on well with what precedes (in which we are told of one of the ways in which God assists men, but not of this particular way), nor with what follows (if we keep the ms order), which refers rather to the general subject of divine government. That genius is owing to divine inspiration was the doctrine of all the Platonic schools, as well as of Democritus, see Tusc. i 64 mihi vero ne haec quidem notiora et illustriora carere vi divina videntur, ut ego aut poetam grave plenumque carmen sine coelesti aliquo mentis instinctu putem fundere, aut eloquentiam sine majore quodam vi fluere; Divin. i 80 negat sine furore Democritus quemquam poetam magnum esse posse; Orat. ii 194 saepe audivi poetam bonum neminem (vid quod a Democrito et Platone in scriptis relic tum esse dicit) sine inflammatione animorum existere posse et sine quodam affectu furoris; cf. Plato Phaedr. 244 λ ἡ μέγιστα τῶν ἀγαθῶν ἡμῶν γίγνεται διὰ μανίας θεία μεν τοις δόξαις διδομένης, 245 λ, Meno 99 c, Ion 533 ε. Seneca utters a larger truth when he says (Ep. 41) bonus vir sine deo nemo est: an potest aliquis supra fortunam nisi ab illo adjutus exurgere? ûte dat consilia magnifica et erecta; in unoquaque virorum bonorum, quis deus incertum est, habitat deus; see also Ep. 73 § 15, cited by Zeller iv p. 727. But magnus here and below is probably synonymous with bonus, both being used for the Stoic 'sage'.

D k. External misfortune is no sign of the Divine displeasure or indifference: it is altogether insignificant, and to the sage all things turn out for good. § 167.
magnis...coplis: I have transposed this sentence from the end of the paragraph, not only because it is itself better placed so, continuing the proofs of divine favour shown to the good; but mainly because it is impossible to find a reference for refellendum, if we follow the ms order, by which the sentence beginning nec vero comes immediately after unquam fuit. Madvig considers that something has been lost. For the argument cf. III 79 foll.

magnis viris prosperae res: the Stoics held that all things must work together for good to those who were dear to God. The only real good was virtue, and whatever might be a man’s outward circumstances, they must always afford scope for virtuous action to the good and wise. See Seneca’s treatise on Providence, and Epist. 66 § 15 virtutem materia non mutat: nec pejorem facit dura ac difficilia, nec meliorem hilaris ac laeta.

siquidem satis...dictum est: we have here a subjective condition joined to an objective statement. It would have been more correct to have introduced the former clause with fataeum necesse est or some such phrase; cf. § 149 incredibile est si attenderis. Examples of similar conditions will be found in Roby, Gr. § 1573.

a Socrate: as, for instance, in the Apol. 41 D oik. ζητον ἄνδρι ἄγαθῳ κακῷ oudiante oint. ζητεῖ τελευτήσαι, oúthi αμελεῖται ὑπὸ θεῶν τά τούτου πράγματα, and in the encomium on Justice in the Republic.

principe philosophiae: cf. § 51 princeps investigandae veritatis, Orat. III 63 eloquentiae principem, Quint. Fr. I § 10 princeps ingenii et doctrinae Plato.

magna di curant, parva neglegunt: so Eurip. fr. 9453 Dind. (cited by Plut. Mor. p. 811) τῶν ἰδίων γὰρ ἀπέτειν θεός, τὰ μικρά δ’ εἰς τὰς ἔνδον ἀνίκη, and the Ovidian non vacat evenuis rebus addesse Jovi (Trist. II 216); so too Chrysippus (ap. Plut. Sto. Rep. 37 p. 1051) ἐν γούν τῷ τρίτῳ περὶ Ὀσίας μυθισθεὶς διὰ συμβαίνει τινὰ τοῖς καλοῖς καὶ ἄγαθοῖς τοιαύτῃ (i.e. evil), πότερον, φησιν, ἀμελουμένων τινῶν, καθάπερ ἐν ἀλλαῖς μείζοις παραπταίτε τινὰ πίνυρα καὶ ποσοὶ πυρὸι τινες, τῶν ἰδίων εἰς ὀκονομομενῶν; But how is this to be reconciled with the previous doctrine of God cares for the individual, that none are neglected by him, or, as it is more generally stated by Chrysippus (ib. c. 34), τῇς κοινῆς φύσεως εἰς πάντα διατειχοῖς δεῖσει τῶν τὸ ὑποσοῦν γεγονόμενον ἐν τῷ ἄλοχο καὶ τῶν μορίων ὑπόφοι τῇ ἐκείνῃ γεγένσαι καὶ τοῦ ἐκείνης λόγον κατὰ τό ἔξης ἀκαλλίτον, διὰ τοῦ μητ᾿ ἡξοθεῖν εἰναι τὸ ἐνσήμονον τῆς οἰκονομίας, μήτε τῶν μερῶν μηδὲν ἐχειν ὅπως κυριότεται ἢ σχημαίνης ἄλοχος ἢ κατὰ τὴν κοινὴν φύσιν;? The two doctrines are correlated by Philo Prov. 99 (cited by Euseb. P. E. viii 14 § 35), ‘God does not send storms in order to cause shipwreck, but for the general good, to purify the air; so the praetor who adds to the luxury of the games by showering the arena with perfumes, may make the ground slippery and dirty, but that is not his object, it is an ἔπακολούθημα, an incidental result.’ Compare Zeller IV p. 174 foll. and the remarks in Butler’s Analogy on the government of the world by general laws and the individual hardships which may arise therefrom. There is no neglect therefore; the best possible course is chosen, but that
involves apparent evil, cf. Chrysippus (ap. Plut. St. Rep. 35) γίνεται γὰρ ἀντί πως (ὁ κακία) κατὰ τὸν τῆς φύσεως λόγον, καὶ ἡς οὕτως εἶναι οὐκ ἄρχονται γίνεται πρὸς τὰ ἄλλα, οὔτε γὰρ ἂν τὰς ἤν, ἀλλὰ γὰρ ἂν τὰς ἤν, but even this evil itself is changed to good, in the words of Cleanthes (Hymn. 18) ἀλλὰ σὺ καὶ τὰ περισσότερα ἑώταται ήρα δεῖναι. Cic. here confines himself to the easier problem of physical evil, which the Stoics regarded as in itself indifferent, but capable of becoming good according to its use; see above on magnis viris prosperae res. Socrates pronounced strongly against the idea of any negligence on the part of God, Xen. Mem. i 4 § 13 γιγαντοὺς καὶ τοιούτους ἑτοιμὰ μὲν αἱ πάντα ἀράν καὶ πάντα ἀκόνια καὶ παντάχοι σαράνται καὶ ἀράν πάντων ἐπιμελεύσῃ, and so Plato Leg. x 902: ἐν χρόνος τῶν γα θεῶν ἐξύσωσαμεν ποτε θαντών διαμοιρώγονε ὑπάλλελον, οἱ τὰ προσήκοντα αὐτοῖς ἔχοντα, δόσαντες τὶς ἕμενους δοὺς, τὸσοι ἐρήμωσεν καὶ τελεσίζεε καὶ τελεσίζεε μὲ τῇχεν συμμαρα καὶ μεγάλα ἐπιρεγγόνται, τοις δὲ θεοῖς δεῖτο τὶ σοφάτασις βουλήματος τʼ ἐπιμελεύσῃ καὶ δυνάμεις, ἐν μὲν ρόιν ἄν ἐνεμηθήθης, συμποιήν ἄτοι, μεσάρι ἐπιμελεύσῃ, καθάπερ ἀράν νὴ δειλῶν τιμα διὰ πάνως ῥάθυμοι, τῶν δὲ μεγάλων. Compare the words of Christ ‘the hairs of your head are all numbered,’ ‘not a sparrow falleth to the ground without your Father’; and Augustine Conf. iii 11 Bonus Omnipotens sic curat universos tamquam singulos, sic singulos tamquam universos. On the other hand Jerome ad Habak. i approaches to the doctrine of the text absurdum esse ad hoc Dei deducere majestatem ut sciat per momenta singula quod nascentur culices...nec enim aquila capiit muscas, nec elephantus mures venatur, nec de minimis curat praetor.

Conclusion. § 168.

Ch. lxvii § 168. si me audias—agas: a less sanguine form of expression than the Fut. si me audies (in familiar colloquy sodes as in Att. vii 3 § 11) vitabis inimicicias Fam. ii 18.

et principem civem et pontificem: see above § 2 et pontificis et Cotta, iii 5, Brut. 80 L. Paulus personam principis civis facile dicendo tuebatur.

in utramque partem disputare: Divin. ii 150 cum proprium sit Academiae judicium quum nullum interponere, ea probare quae simillima veri videantur, conferre causas, et quid in quamque sententiam dici possit exprimere, cf. nn. on i 4, 5, 6, 11, 13.

amplificavit Academia: cf. Orat. i 53, 60, 87, Tusc. ii 9, Orator 12, Parad. praef., Fat. 3 orator sublicitatem ab Academia mutuatur et et vi- cissim reddit ubertatem orationis.

mala consuetudo est contra deos disputandi: consuetudo has a double use, being understood as Subject with disputandi, as in Off. iii 6 discendi labor est potius quam voluptas, Quintil. iv 5 § 3 aliuique quae tam manifesta et lucida est ratio quam rectae partitionis? Sometimes the Inf. is used instead of the Gerund, as in Ac. ii 17 nec esse ullam rationem disputare cum his.

[ex animo: cf. Munro on Lucr. iii 914, Cic. Phil. xi 34, Fam. xii 27, Sen. ep. 78 § 19, 96 § 2, Qu. Cic. proxv. cons. § 18, Gell. xiv i § 36. J. E. B. M.]
MR. SWAINSON'S COLLATIONS OF ENGLISH MSS.
As in my former volume, I have printed in full Mr Swainson's collation of the Burney ms (B), but have only given selected readings from his other collations, with occasional additions from my own inspection of the Museum mss. I have also given the more important readings for O U and Y collated by myself, and a full collation of the Merton ms (called 'Oxf. o' in the former volume, here simply 'Oxf.'). I have further compared any readings of Orelli's or Heindorf's mss which, without being of sufficient importance to print under the text, were yet of interest as throwing light on the relation between different mss, e.g. between B and Orelli's C, between Cod. Glog. (G) and H, Cod. Red. and N, above all between Oxf. and Orelli's V. In all such cases I have printed the reference to the foreign ms in square brackets. For the sake of convenience I subjoin an explanation of symbols.

B. Burney ms no. 148, of the 13th century.
H. Harleian ms 2465, late 15th cent.
L. Harl. ms 2511, 15th cent.
L. Harl. ms 4662, late 15th cent.
M. Harl. ms 5114, latter part of 15th cent.
N. Additional mss 11932, middle of 15th cent.
O. Additional ms 19586, end of 14th cent.
C. Cambridge ms 790 Dd. xiii. 2, 15th cent.
R. Roman edition of 1471.
U. Codex Uffenbachianus, 15th cent. belonging to S. Allen, Esq.
Y. Another 15th century codex belonging to Mr Allen.
Oxf. The Merton ms of the 12th cent.
COLLATIONS OF ENGLISH MSS.

BOOK II.

I. Quae] Haec HN. similis H. sum ILMNCVTO. indisertum] 1
indesertum BN [Or.'s A]. rhetorem] rehetorem B, et pectorem N. corona—
defuerunt] coronam—deferunt N. audiamus] adeadus LT. equidem] 2
Oxf., ab eo O. Cotta] om. V. quid] OB, quod MCRV Oxf. initiis]
OB+, ini iniini HN. dixerim] Oxf. OB+, dixerimus HL. liqueret] liceret H. tam]
tum B. ab iis] L, ab his BHV Oxf., ab his O. hoc] in hoc I.
et iis] HL et his B Oxf., etiam U, et hiis O. anteponenae] V, antepo-
nenda Z Oxf.

II. Lucilius] balbus C. oratione] orationem B. qui] quid H, 4
quem] quod H. nutu] VY, motu Oxf. UO others, "al. motu" V. haud]
aut BH [Or.'s B]. sol] solus B. dubitare] qui d. TUR text V. Quii 5
quid Oxf. UZ, except quod N. animis] animos HMV. saeclis] BM, sedis C.
potet T. quaevae] quaevae vero C. quondam] condam L [Or.'s C].
opinionis] opiniones B. opinione H, opinionum Oxf. UO others. itaque] idque U.
confirmat] confirmant B, sanctitates] sanitates B. nec] non HC. et 6
praesentes] H, praesentiam MCRV Oxf., et praesentiam B, etiam praesentiam
TUOL. saepe dii uim saepe didi iium H, saepe divi suam Oxf. B, saepe
divi suav MCV, saepe diti H, suam saepe divi LCT, saepe divi U, suam divinitatem O.
et apud] Oxf. O, est apud UB [Or.'s CE], et om. O'HV, rest. V. bellon] bellum V.
A.] autem H, auleus C. Persen] Persem HNCV. P. Publius B [Or.'s AB, Publius Or.'s C], popilius HI, Pompilius L. Vatinius BLO.
patientus H, lucienuus I, uacienus MCV. cum] in ILT, cum in U [EL of Dav.].
Persen] Persem B. die captum] captum die Oxf. senatusque munitivis-
set] senatus munitisset BLO, sen. munitiaisset H, senati munitavit et Oxf. TM,
senati denuntiavit U. Crotoniatae] Crotoniates H, Codro matres L. eam]
COLLATIONS OF ENGLISH MSS.

proditum] traditum LT. non aut] Davies, aut non U Oxf. BNBCEV, aut om.
HN. praesenter esse] esse praesentes U. coegerunt] coegerent O.

7 III. Praedictiones] predictiones B cf. § 162, transposes with praesensiones C.
quae sunt futura] C, quae sunt Oxf. TOBIM, quae sunt NN, quae sunt sint L.
dicuntur] dicunt B. [fabularum, fabulosorum asc.] repudiaret] Oxf. TOBIM,
repudiaret N, Bai. exemplis] om. Oxf. docti] doctum B [docti in Or.'s C],
edocti C. comprobabimus] B, comprobabamus Oxf. UOBHLMNCEV. Claudii O,
aquam] quam B. After ut biberent Oxf. inserts from § 10 commemorare—

Trasimenum] V, transumen B, Transimenum H, Transimennum M, Transime-
mium C, Thrasiumen B. scribit] scripsit T. et si conferre] L goes on
§ 98 earum rerum quae—§ 156 quae cum maxima, then returns to § 16 etemim si
di—§ 86 efferant aliquem, then again § 156 largitate—end of book. §§ 8–16
volmens nostra—illa conficiuntur are inserted in r 108 after altissima ora reddat-
darum, then come a few words from r 156 ea ferarumne—videtur, and then
r 116 ex se perfectiores habere naturas—§ 98 pulcritudinem, after which r 108—

atti nati B, ad tinavi Oxf., Antimani H, actii natiu OBF. Navi litus]
om. L, Navi. lucius L, Nav. litus N. quo] de quo O, investigandum] O0°,
investigandum Oxf. C° others, except investiganda N. suem] suez O, suum L,
sit M, uosm Davis in note. regiones] religions Oxf. BC, in regiones LNO.
vinae] uinea LNO. in his bella] in its bellis MNEB, et in his bella C.
peremnia] perennia OBF, peremia H, perennia C Oxf. nulla cum viri

10 Bohom., nulli uiri Oxf. Z, except nulls uiri V. gerere] gere B. fuit]
fuerit B [Or.'s C], re publica] publica P. R. B. deuoverent] Oxf. BNB, deu-
tarent LCO. Sibyllinis] sibillum B Oxf., sublimis N, sibilinis C, sybillinis B,
sibyllinis V. haruspicum] hausruspicum B [hausruspicum Or.'s C], aruspicum
CRBV text V1, et haruspicum O. commodare—Scipione] om. Oxf. con-
firmantur] confirmantur BTV text V1.

IV. Eturscorum] etruscorum et TBCBO, etruscorum et H, etruscorum V.
hausruspicum] [haur. Or.'s A], aur. BC [Or.'s C], ar. B. Ti. Gracchus] to-
gracere Oxf. Ti.] tiberiwi HCT, Ty. R. Gracchus] gracob B, grac-
cus V. consul] consil M, quos BC, om. LNCQ, cos V Oxf., cosz V1. crearet]
recrearet Oxf. TOBIMLNEV, text V1, rogatorum] MBV, rogator BV1, recreator
HN, rog. recreator (with at written above recreator) O, regrator L. mortuos
Gracchus] gracob mortuos B, quos ad soleret O, quos ad soleret Oxf., quos
absolueret N, ad quos C, quos absolueret V. Haruspices] haur. B [Or.'s C].

11 incensum] impeditus O, impeditus incensum L. vero ego] ego uero H, uero
inquit ego C. auspico] auspicator N Oxf. TO. populi Romani] publi-
cae rei N, R. p. O. jus] om. Oxf. ac] hac B. in hortis] Lambi-
nus, ortus H, in horto C, in ortus V, ortos O, hortos others. Scipionis] scipio-


COLLATIONS OF ENGLISH MSS.


X. concipial] concipit [Or.'s A'] HV, text V. ipsa] terra U. in-

monocov] egemonicon B [Or.'s C], egemonon H, gyemonicon M, egemonicon C, egemon-
optimun omniumque] omnium omniumque optimum omniumque OxF. potestate
dominategue] p. donatue B, text B, potestatique dominatu M, dominatu et po-
nutrit M, nutritus C. nota nobis] nobis nota LOUT. reinitur] contin-
entur N. itigur est] est itigur ILMU, est enim N. cum] OxF. HLO, 31
quin B. mundum esse] esse mundum Oxf. et liber et puro BM, et puro et libero IL Oxf., puro et libero M, libero et puro C, et libero puro [Or.'s E]. mobilissimo Oxf., nob. MNEV. exterino—tenatur] extrinsecus ab aliquo hoc accipiat movetur. Nam moveri necesse est multo valentiui qui pellat atque motum efficiat quam quo ille tenatur H. [So Or.'s V in marg. extrinsecus hoc ab aliquo accipiat neque.]

XII. enim] nunc HV [Or.'s V]. duo] B, duos BU OxF. [Or.'s CV] and 32
others. externum] extremum N, eternum Oxf. autem divinium] auditius
mus H, suum autem dicimus N. ex se sua] ex sua Oxf. tisque] hisque
HV Oxf., hiis quia C. intellegi poterit] intellegi Oxf. in eo inesse] in
eo esse H, inesse eo C, by ocorr. from in eo vim esse Oxf. ulla] illa MV, text
V. minoris sit] Cod. M of Moser, minor sit BMNOCRV Oxf., sit minor HILUT,
sit minoris Ursinus. After pluris esse Oxf. om. necesse est—pluris esse.
gui est] M, qui esset BHO. est MO, esset BHU. omnem oporteret] oporteret
omnem Oxf. ad deorum] ad eorum Oxf. Primo] HLO, prima BM Oxf., 33
primum B, text V. gignuntur] Oxf., gignuntur LO Manutius. e terra]
om. H, ex t. V, text V, a terra U. augendo] agendo B, text B. rege-
XIII. gradus est et altissimus] est gradus et alt. BV, U, est om. MEV Oxf.
gradus et alt. est C. natura boni] supra hominem Oxf. from below. sa-
35 pientesque] sapientesque B [Or.'s BC]. ulla] Oxf. LM, nulla OBETU, illa V,
text V1. extremum] aeternum C, so aeterna for externa below. quae]
cui HV. obstitit B, obigit MV, obstitit MV1, optiget C Oxf. [Or.'s
V marg.]. quendam] solitum adds H. omni] omnium C. etiam
magis] magis etiam U. ab soli — perfecti esse absoluti — perfecti V1, absoluti
—perfecti U. ac] atque etiam UT. possunt] possint H. omnes na-
turae] omnis natura Oxf. et altissimum gradum] gradum et altissimum U.
36 est gradus] gradus Oxf. et praestit] et om. LMCRV, rest. V1, posit for praesit
L. inscientius] incipientis HN. Qui] Quid C. After sit deterior
37 Oxf. om. mundi—deterior. insipiens] insipienti B. est quicquam] quic-
quam Oxf. cui] quo OBHCRVU Oxf. quodque—expletumque sit om. B.
quodque] quod T. expletumque sit] sit atque expletum H.

H Oxf. inicit in eo] in eo sit H, sit in eo cut. Qui] quid H Oxf. id
quod] BH, quod MOOV Oxf. est optimum] optimum H. est autem] NO.
autem est BCR, est om. V. mente et ratione melius] optimum (corr. melius)
m. e. r. Oxf. in quorum in eceleo] neq qm in eque Oxf. [neququam in
eceleo Or.'s V1]. eceleo] II, equulo BEHV, equulo MB, equulo CO. id in
igitur Oxf.

XV. quae] qua M, quia N. mobiliissima] mollissima B, nobilissima
30 HLNEVVU, text V1, U3. purissimaque] puraque U. ea quidem] equidem MR.
et candor] Klotz, color et candor Oxf. BV, arder et candor H, candor et color
LNGO, candor MEVT. ulitius] Oxf. O, ulius BEHCRUV. faceret]
facer est C, pastu partu Oxf. pastu aliquo posit perm anandre] al. pastu
ignis B. ad victum] MBV, ad om. Oxf. BEHILNO, auctum C. eti etus B.
41 continetur] continuum T. Atqui] MN, atque BHOICRVU Oxf. est
que] sensus Oxf. is] Oxf. HM, his BO [Or.'s B'C']. quaeque] quoque
42 MN. qui aether] Oxf., quia ether B [Or.'s V1]. igitur] BEHMBV,
emin others. in aère aliorum] om. H. videtur] visum Oxf. id et
idemque MCRVU Oxf, idem BLO, id est H. celeberrima] celeberrima Oxf.
in aetherae] Oxf., in etherae B, mobilitate N. iiis] his BEHMUT Oxf., his 0.

43 XVI. incolam] incolunt H. After intellegetiam Oxf. om. in sideribus—
atque intellegetiam. et aetheriam] M, et om. OBHU [Or.'s P], et eam C.
alantur] utantur LCU. omni] omnia B. amica varietatis] a nulla variet
44 tate H, amica varietatis N [am. varietate Or.'s F]. laudandum] Oxf. BMO +,
laudandum est Bailer from his Cod. A. sublime] in sublime Z Oxf. UT.
f0. circumquaque fertur N. sit] sic U. procreatione] procreatione L [Or.'s


COLLATIONS OF ENGLISH MSS.


52 definitam] diff. HYTV. Saturni] Oxf. HMO +, Saturnia B. Fabwaeque


55 inerrantes] V, errantes H, quinque errantes N. perennes] perhennes BC Oxf., perennes B.


COLLATIONS OF ENGLISH MSS. 303


CLOTTATIUS OF ENGLISH MSS.

fugentem tonante] M. s. et t. Oxf. EMOEV, fugement et tonantem
HOLIT. Euriptides Oxf., Euriptides B, Euri pedes N. fusiun
circumictu] circumictum B, circuitu HLN, circumictu B, circumicto Oxf. V,
text V, ampletitutur] ampletatur V, compleititur T. Hune—Jovem
om. H.

Oxf. ERRMOEV, effeminauerunt I, effeminauerunt LMO [Or.'s B].
autem cum
eum autem T. Junonique] iononique B. tribuerunt] tribuent T. est eo
est om. B [Or.'s C], est e E. mollius LN. altero] SO Oxf. T,
except alterum B, alteri O'T. volunt] volumus M Oxf. [Or.'s V], volitmus C.
recidant E Oxf. terras et T Oxf., terras sed B, terras sed TOL
[Or.'s CP, terris et Or.'s E]. orientur] BLOM Oxf., orientant others.
Proserpinam] Oxf. BMO +, Proserpina NH. quod] quidem BN. est
others. nominatur] nominant B, nominatis est H. nupiam dicunt] C
here. So Cod. Regius of Davies, for Baiter is wrong in stating that it places
the places after nomen est, om. all others. volunt] volunt deae filiam esse N.

67 abeconditamque] que om. C. itidem immutata] Oxf. B, itidem mutata MBV,
identidem imm. M, immutata itidem C, inde mutata O. ut] om. U. Δι-
προ] clemente L, demeret N, demetera V, demeter others. quasi Γ' μχρ]
quasi gemmentur L, quasi gemet N, quasi gemetera V, quasi gemeter others.
vorteret] Heind., vorteret Z, except vortetur H. vel] vel quae BN. min-
aretur] minueretur L.

XXVII. haberent] habere M Oxf. [Or.'s V], haberet C. est ductum
ductum est Oxf. ductum] ductum B [Or.'s C] NC. liminibus] limitibus B,
liminibus OV, text V, ianuea] ianae B [Or.'s C]. a Graecis] a Graecis
est NC, est a Graecis U. ea est] ea est est T. 'Eoria] hostia Z, except
hostia N, hostia Oxf. ad aras] et aras Oxf. quod] Oxf., quae IV.

M Oxf., dicti N [ductu Or.'s PV']. vsccuntur] Oxf. BMO, uscunt B [Or.'s
APV']. Jam] Nam LNT. Dianam—putant om. N. putant] vo-
lunt C. cum est exortus] eius ortus BN. omnibus] omn. alii
H. apparat] appareat V, T. sit] est UT. eamque Luciferam] eam
quam lucifera T. nostros] nostras B [Or.'s C]. omninuaga] noiti-
ua] venando vucando HNV, U. numeratur] Oxf., numeratur [Or.'s
V] HLV, text U', sideribus examinatur C. dicit] dicit est BN, dictus T.
autem] om. H. ti matrescunt] imatrescunt B, hi m. HO, dui m. L.
non numquam] HMO, non umquam B [Or.'s CE]. aut ut plerumque UT
Probos. aut ut plurimum C. Timaeus] rimirus H, Thimeus V,
Timeus V. Ephesiae] Oxf., ephesiae B [Or.'s O]. ephesiae C [ephesiaeae Or.'s A].
templum] templo HN. desagravisse] BH, deam migrasse M, deam migrasse


mata M Oxf. U [Or. 'a V'], in animata MCV, in anima V, natura] om. HT.


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postemius] Ox. HM, posteminus ELO, postemem U. ac litorum additorum B, 100


pectora] Oxif, pectorum HLMCR. Nepali] Nepum B [nepe Or.'s AB, nepii Or.'s C]. Septem triones] Or.'s CE, s. tronem B, Septentriones Oxif. MCR [Or.'s ABV].


the verse B. Nepae] HO Oxfr., Nempe BLV [nepe' Or.'s AC], Nepam B, text V1.
cernens] Oxfr. MO, cernens BBL. permutet] promiserat Oxfr. properaque
propter quam T. Cedit] Caeedit V, reedit Oxfr. subbiungere] submergere MBVU
(by corr.). Chelis] cetis Oxfr. UBLMOCOV, coeis H, tectis N. hic H, hunc U.
porgens] BM, porrigens Oxfr. TULHOV, pungens N. qua] qui B. vasta
austa B,usta HOLT, iusta Oxfr. UMCOV, iuta N, text V1. truculentus] truculentus
EHO, inferni MNGE, ex inferni Oxfr. BEHNOV, de Oxfr. others. Hydra
ydra Oxfr. Cratera] cratera HB, cetera L [cretera Or.'s V Nonius].
Procyon B, prochion UHCOV, prochyon MV1, ex et U. cursantibus] cons.
talia quae] Oxfr. EHO, quae alia UMCOV. sint] sunt LU. possunt
possint N.

quasi quodam] quodam quasi UTG[Q].
circumdata] circumdata LV [Anc.
Heind.]. natura] om. Oxfr. per] per naturam Oxfr. ad medium
rapit et convertit] vertitur L. partibus] pubus Oxfr. id] idem H[Q]. medium
Oxfr., medium et H [G Or.'s W7]. infinitum] Oxfr., infinitum LN [Or.'s
ipse fundit] effundit T. uinctus] junctus B, conjunctus U. aetheria] BO5,
aethera OUMCOV, aether BE, aetheria V1.

XLVI. se et inisu] se et inisu N, se om. C, et se inisu BV. globata] Oxfr.,
sustentant] sustentat B, sustentat V. formis] fortuna MR. natura]
118
naturae BU [Or.'s C]. flammeae quocirca terrae] om. B [Or.'s C]. Forflammea,
flammeae LV, flammeae U; for quocirca, quo cuncta N. his] his Oxfr. TUV
[Or.'s X]. ex et ex U. aliae] aliae HNU, allotae V1. refundunt]
refundat BBLMOCOV Oxfr. eadem) eodem V1. rursum trahat indidem B,
rursum trahat in diem H, rursum trahunt in idem MLV Oxfr. TU, r. t. inde Q,
cursum trahunt in diem N, in idem trahunt rursum C, rursum trahat in Idiem B.
aut] HOL, ut BM Oxfr. [Or.'s GV], nisi GV. paulum MBV, paululum
UT. nec remarer] negue r. UT Ernesti. exhausta] extusa B. re-
inguis] relinguit LU. renovatio] reuocatio HV1, Probus.  oreretur] oriretur
119
incendat] incedat B. his] interiecta] is intercta B, his interiecta BV Oxfr.
obediant] obediebat H, obedieunt Oxfr. omnem] om. T. ab eoque] Ha-
beoque B. adferat] auferat LU. gigendi] gigniti B. incomumitatem
move] commouit UTMCOV, [Med. Asc.], commouetur C, commouet V. horum]
chorum] Oxfr. certo] certos B.

XLVII. rebus] om. LT. terrestres] terrestria LNT [Bed.]. quid est] 120
quidem B. non] om. B. his] Oxfr. sustinentur] Oxfr. TBEOL,


122 LIIT, non necessarium] nonecessarium B. pastus] partus OXII. aliorum ea est] aliarum ea est E, eorum alia T, eas aliorum et H, aliorum alias LO, aliorum eas et OXII. MBV, alia se C. humilitatis] humilitatæ LOV, humilitara T, humi-


al. corneolos marg. B, corneos <sup>HN</sup> [G El. Bed.]. cum <i>flexibus</i> <i>HN</i> [Or.'s A]. quocirca et quicirca E [quocirca Or.'s O]. sunt re-
145 feruntur] referuntur sunt O, soni om. <i>Ox.</i> <i>UTO</i> others. pervadere euadere <i>BC</i>. inutili[en] <i>Ox.</i> <i>OM</i>, utilis B, inutilis <i>HN</i>, inutili locum L. omnisque] <i>Ox.</i> <i>HM</i>, omnis qui B, omnesque O.

LVIII. <i>ii</i> [his <i>BXVT</i> <i>Ox.</i>. <i>corporum etiam</i> c. et <i>Ox.</i> <i>decetiam</i>]
148 <i>decentia</i> B, om. <i>0</i>. <i>timidumque</i> tumidumque B. <i>indicare</i> indicatur <i>H[G]</i>. <i>varietaes</i> varietates <i>HL[G]</i>. <i>fuscum</i> furum <i>BT</i>. <i>levi</i> <i>Ox.</i> <i>BOM</i>, lene <i>HELV</i> et parte tangendi <i>UTHI</i> in ras. <i>Q</i>, om. B. For et parte, et partes O<sup>1</sup>, et partim L, arte et <i>MR</i> <i>Ox.</i>, et aperte <i>V</i>, et apte <i>V</i>.

147 <i>LIX.</i> prudentiam qui] prudentiamque T. is his] <i>Ox.</i>, is om. <i>TBEV</i>, is <i>suis</i> <i>HE</i> U, i.e. [i.e.] <i>HE</i> <i>U</i>. <i>ipse</i> [i.e.] <i>HE</i> <i>U</i>. <i>sum</i> [cum] <i>TT</i>. disputarem <i>Ox.</i> <i>HOLM</i>, spicuarem B [Or.'s Q], al. speculare marg. B. vellem] H, velim <i>Ox.</i> B others. illa modo] modo illa <i>UT</i>. illa illam B. esset] esse H <i>Ox.</i> videlicet <i>Ox.</i> <i>BO</i>, videlis B, videlicet V, text <i>V</i>, idicamus videlicet Vahlen. efficaciar <i>Ox.</i>, conspicatur <i>LD</i>, text <i>U</i>, dictum addo <i>O</i>. idque idque et <i>UTO</i> ratione rationem <i>H</i> <i>Ox.</i>. definitum] dif. B, dif. <i>HGVUT</i> et qualis] Sabim, et om. Z. ne nec U. quae B. atque] et <i>V</i>.


149 ubi] NE, nisi <i>Ox.</i> <i>TRILEMOV</i>. machinata] after natura <i>UT</i>. a] om. <i>Ox.</i> in <i>OR</i> infera <i>B</i>. fingit et terminat] LM, fingitur et terminatur H, f. e. terminaque O. atque sosos] quae <i>BCR</i>, sosos <i>O</i>. cum] qui H. ad dentes] <i>Ox.</i> <i>THO</i> [Or.'s C]. addentem <i>B</i>, et ad dentes <i.CV</i>, et ad dentes <i>B</i> [dentes Or.'s <i>AVB</i>]. ad alias] alias <i>U</i> [Or.'s B]. plectri] plectro <i>H[G]</i>, plicerque N. <i>ii</i> [his <i>Ox.</i> <i>TUBV</i> [Or.'s X].


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gestaré Orb [Or.'s B G (which has supersc. al. tractare)].
vinctum domi-
tumque] om. que Orb., domitum vincitumque G. iuvenem] iumentum B
ex T. habetur] putaretur UT.

pereoqui] om. HT [pereo quar Orb.'s B F], prosequi M. hominem] hominem
sunt] esse H[G]. quidem] quid M, quid quidem G. putres-
ceret] HLMNB, putrescerat Orb. BNV [Or.'s MSS]. ‘al. Nonius in Putidum legit ne

potu-
mus] putemus UT. venando] uenantes N [Red.]. iis] his EVT. exer-
ceamur] eiciamur Orb. et conducivefactis ut elephantis MO, om. ut Orb., et
elephantis N [Red.], ut conducivefacti sunt elephantes C et conducivefacti sint el.
Orb. UTO others. percepimus] EM, percipimus CHV Orb. U, percipimus O.
cerneti] BL, cernere HMBCHV Orb. T, cernens O [Or.'s V], cerneres V]. pec-
cursus C.

before Davies except Victorius. irredier] arrediet Orb. praedictionem
L, predicationem Orb. BHMV, text V1, praelectionem G. confirmande] confir-
mat Orb. providentiam] M Orb., prudentia BEHL. consulibus rebus] consulibus
text V1. in publicis] HLM, in om. Orb. B others. haruspices] aur-
spices BV [haur. Orb.'s G], auruspice Orb. providentiam V [Manut.
et T. vis sine ars] ars sine uis B [Or.'s G]. scientiam] scientia B.
alti cuiquam] HNB, alciu quam B, ab aliqua quam IOT, ab aliqua alciu quam
U, ab alto alciu quam Orb. MV, alto alciu quam C. ei] om. HNB.
a

LXVI. ab] ad Orb. consulere] collere LT. eas] has E Orb. U.
NC, illis consulunt H, consulunt illis UBV11, iis om. T Orb. BLMOV.
Pyrrhi N [Red.], pirri C Orb. Coruncanum] Coruncanum BV, Coruncanum
Orb. Lutatium] Lutacium CBEV [Or.'s AB]. secundo] om. T. Paulum
166 Paulum BOV Orb. patrumve] Orb., patrum TV. maximeque] Orb. BEO,
maxime MRB, text V1. Homerum] Horatium Orb. adiungent Orb. HLM,
adiungent UTBOV1, ascriberet uel adiungent before discriminum G.
quales] quale B. ab iis] et ab his C, ab his U others. extis] NE, in
COLLATIONS OF ENGLISH MSS.

cetis B, in extis Oxf. UTHMOCV, inertis IL, etiam extis Moser. admonemur
Heindorf, om. Z Oxf. refellendum] refellendus IL. cui quid] cum quid
MB, quid quid C. prosperae] BHO, prospere ILMN Oxf. U. semper] OT,
semper eveniunt N, eveniunt semper CRV Oxf. U. philosophiae] philosophorum
T [G Red. Mars. Asc.].

LXVII. cive] vites adds V [Or.'s P]. utramque partem] utraque 188
parte B. vobis] BOL, nobis H, quouis Oxf. UMC, cuiuis Vi. disputare]
BHO, disputari M Oxf. [Or.'s V²]. sumas] assumas N [Red.]. tibi] Oxf.,
fit] om. IL, sit T. sive] om. H.
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