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LUCRETIVS

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LUCRETIUS

DE RERUM NATURA

WITH AN ENGLISH TRANSLATION BY

W. H. D. ROUSE

REVISED BY

MARTIN FERGUSON SMITH



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PREFACE

I also wish to record my sincere gratitude to the following: to my wife for devoted and skilful secretarial assistance; to my colleague Professor M. L. Clarke for several valuable suggestions relating to Lucretius' life; above all, to Professor D. E. W. Wormell, in whose lecture-room I was first fired with enthusiasm and love for Lucretius and the philosophy of Epicurus, and who supervised my post-graduate thesis *Lucretius: The Man and his Mission*,² from which part of the introduction is adapted.

M. F. SMITH

² M.Litt., Dublin University, 1965.

PREFACE TO NEW VERSION

THE text has been entirely re-edited. The introduction, critical notes, and index are new, as are most of the footnotes. The marginal summaries have been revised. Dr. Rouse's translation has been altered to make it accord with the new text, to take account of recent advances in Lucretian and Epicurean studies, and, occasionally, to meet the requirements of modern English. Other changes have been made in the interests of greater clarity and accuracy, but the aim has been to interfere with the original version as little as possible.¹

This work goes to press exactly five hundred years after the year (1473) in which the first printed edition of the *De Rerum Natura* probably appeared, and I gratefully acknowledge the very heavy debt which I owe to earlier editors and commentators—not only to editors and commentators since 1850, notably Lachmann, Munro, Giussani, Merrill, Ernout, Diels, Ernout-Robin, Martin, Leonard-Smith, Bailey, and Büchner, but also to earlier scholars, especially Pius, Lambinus, Faber, Creech, Havercamp, and Wakefield, whose annotated editions have been constantly consulted, as have the text editions (see Bibliography) of 1495, 1500, 1512, 1515, 1565–66, 1595.

¹ My own translation of Lucretius, with introduction and brief notes, has been published by Sphere Books, London, 1969.

PREFACE TO 1982 PRINTING

I HAVE made a number of corrections and alterations, some on my own initiative, others at the prompting of friends and reviewers, for whose suggestions I am grateful. The Bibliography has been brought up to date. In revising the text and critical and explanatory notes, I have taken some account of work that has appeared since 1973, but it has not been possible to make major alterations or additions. Changes in the text will be found in 3.240, 4.79, 1026, and 5.1036.

September 1982

M. F. SMITH

PREFACE TO 1992 PRINTING

THE account of the manuscripts has been rewritten and the Bibliography updated. Some revision of the critical notes, explanatory notes, and translation has been possible. Changes in the text have been made in 1.294, 309, 384, 716, 2.512, 515, 3.531, 4.284, 418, 419, 1026 (again), 1123, 1124, 1271, 6.49, 266, 972. I wish to thank M. L. Clarke, D. P. Fowler, E. J. Kenney, and M. D. Reeve for information and assistance on various points.

University of Durham
March 1992

M. F. S.

INTRODUCTION

1. THE LIFE AND PERSONALITY OF LUCRETIVS

*Give me, kind heaven, a private station,
A mind serene for contemplation.*

JOHN GAY

WE have so little information about the life of Titus Lucretius Carus that it is hardly an exaggeration to say: "Le biographe de Lucrèce fait figure d'un sauveteur arrivé trop tard: son héros s'est abîmé dans le passé."¹

This lack of biographical information has often been thought remarkable, even sinister. It has been suggested that because Lucretius' philosophy was regarded with disfavour by the Roman ruling class, there was a "conspiracy of silence" against him. But the explanation is not entirely satisfactory, because we know that the *De Rerum Natura* was at once recognized as a literary masterpiece. Nor is the answer likely to be that Lucretius lived the life of a recluse, for his poem shows that he was deeply aware of the troubles and needs of his contemporaries, and deeply concerned to help them. In fact, so far as the meagreness of the external sources of information is concerned, his case is not unique:

¹ L. Leroy, "La personnalité de Lucrèce," *Bull. Assoc. G. Budé* 4 ser., 3 (1955) 20.

the external sources of information about Catullus, who died perhaps a year later than Lucretius, are even more meagre, but because Catullus tells us so much about himself, the deficiency of the external sources is hardly noticed. Certainly the poverty of our information about Lucretius does not justify the suggestion² that he never existed at all, and that his poem was composed as a hoax by one of the Ciceros or Catullus or Atticus!

A discussion of the evidence for Lucretius' life almost inevitably begins with quotation of the famous statement of St. Jerome,³ written towards the end of the fourth century: "The poet Titus Lucretius was born. He was driven mad by a love-potion and, having composed in the intervals of his insanity (*per intervalla insaniae*) several books which Cicero afterwards corrected (*emendavit*), committed suicide in his forty-fourth year."

In most manuscripts the above statement is entered under 94 B.C., but in others under 93 or 96, so that we already have three possible dates for Lucretius' death: 51-50, 50-49, 53-52. Further difficulties arise from the statement of the fourth-century grammarian Donatus,⁴ probably following Suetonius, that Lucretius' death coincided with Virgil's seventeenth birthday (15th October 53) and assumption of the *toga virilis*: not only is the reported coincidence extremely unlikely, but Donatus inconsistently places the event in the second consul-

² A. Gerlo, "Pseudo-Lucretius?," *Ant. Class.* 25 (1956) 41-72.

³ *Chron.* p. 149 Helm.

⁴ *Life of Virgil* 6.

ship of Pompey and Crassus, *i.e.* in 55. More helpful for determining the date of Lucretius' death is a famous comment of Cicero in a letter to his brother Quintus (*QFr.* 2.9) written on the 10th or 11th February 54⁵: "The poetry of Lucretius is, as you say in your letter, rich in brilliant genius, yet highly artistic" (*Lucreti poemata, ut scribis, ita sunt, multis luminibus ingeni, multae tamen artis*). Since the *DRN* is manifestly unfinished, it is evident that it was not published until after the poet's death. So, unless he had shown the Cicero brothers his incomplete poem or possibly sections of it⁶ during his lifetime (which is unlikely), it must be assumed that he was dead by February 54.

It is most probable that he died in the summer or autumn of 55 (perhaps even on 15th October!), and if St. Jerome is right about his age, he will have been born in 99 or 98.

A matter which it is natural to consider in close connexion with the date of Lucretius' death is St. Jerome's statement . . . *aliquot libros . . . , quos postea Cicero emendavit*. There has been much argu-

⁵ Bailey (2, 18), followed by several recent scholars, incorrectly states that Quintus was in Gaul at the time. He was in fact in Rome, so that there is no difficulty about supposing that the *DRN* had been published not long before the letter was written.

⁶ Cf. F. H. Sandbach, "*Lucreti Poemata* and the Poet's Death," *CR* 54 (1940) 72-77, but see U. Pizzani, *Il problema del testo e della composizione del DRN di Lucrezio* 38-40. Sandbach's suggestion that Cicero may be referring to a single, short passage, perhaps the invocation to Venus (1.1-43), is not convincing: *multis luminibus ingeni, multae tamen artis* must be a comment on work of considerable length.

ment as to what these words are supposed to mean. One theory⁷ is that St. Jerome means that Lucretius himself showed his poem (or parts of it) to Cicero, who suggested certain alterations. But this is not the natural meaning, and it is virtually disproved by the very similar phrase which St. Jerome uses of the work which Varius and Tucca did on the incomplete *Aeneid* after Virgil's death: *qui Aeneidum postea libros emendaverunt sub lege ea, ut nihil adderent*.⁸ It is clear that *emendare* was virtually a technical term for making necessary corrections to a work in preparation for publication⁹—for doing a job rather similar to that of a modern proof-reader. So it should not be supposed that St. Jerome means that Cicero made significant alterations to the incomplete *DRN*; and indeed it is clear that whoever prepared the poem for publication cannot have done much more to it than Varius and Tucca did to the *Aeneid*: otherwise he would not (for example) have left alternative prefaces in Book 4 (see note on 4.45). But would Cicero have had anything at all to do with the editing of the *DRN*? In view of his dislike of Epicureanism, it seems unlikely, but it is not im-

⁷ *E.g.* Bailey 20-21.

⁸ *Chron.* p. 166 Helm. Similarly, in the *Life of Virgil* preserved by Donatus, but probably written by Suetonius, the biographer, in a passage which is almost certainly the source of St. Jerome's statement about the *Aeneid*, says (37) in reference to Varius and Tucca: *qui eius Aeneida post obitum iussu Caesaris emendaverunt*; and again (41): *edidit autem auctore Augusto Varius, sed summatim emendata*. It is natural to assume that St. Jerome's statement about Cicero correcting the *DRN* came from the same source.

⁹ To the passages quoted above and in n. 8, add *e.g.* Cicero, *Att.* 2.16.4: *ut me roget Quintus frater ut Annales suos emendem et edem*.

possible: he may have been friendly with Lucretius, perhaps having met him through the Epicurean Atticus, his dearest friend and brother-in-law of Quintus; he was a poet himself, and would no doubt have been pleased that the *DRN* contained some imitations of his own poetry; and he was sometimes prepared to do favours for Epicurean friends, as is evidenced by the letter (*Fam.* 13.1) which he wrote on behalf of Patro, in an effort to dissuade Memmius from building on the site of Epicurus' house. However, if he had prepared the *DRN* for publication, would he not have had more to say about Lucretius' work in his letter to Quintus? It should be noted that he is apparently merely echoing a comment made by his brother. The pity is that we do not have Quintus' letter.

It is most probable, then, that the story of Cicero's connexion with the *DRN* is mere conjecture: Suetonius or whoever else St. Jerome is following saw that the poem is unfinished and, knowing of Cicero's remark to his brother, thought that it would sound plausible if he was made the editor. In this connexion, it may be significant that St. Jerome does not state which Cicero corrected the poem. Of course, plain Cicero would naturally be taken to mean Marcus; but the absence of *praenomen* may reflect the uncertainty of whoever originated the story—uncertainty arising from the knowledge that both Ciceros had read and commented on Lucretius' poetry.

But, although it is improbable that Cicero prepared the *DRN* for publication, it is by no means impossible that he *saw* the poem prior to publication after Lucretius' death. Atticus, as well as being an

Epicurean, had a well-organized publishing business : he published many of Cicero's works, and it is tempting to think that it may have been his slaves who made the first copies of the *DRN*.

Although it has been argued that Lucretius was a Celtic freedman or a Campanian farmer, there can be little doubt that he was a Roman aristocrat. He himself calls Rome his *patria* (1.41). He addresses the aristocratic Memmius as an equal, and, as Sellar¹⁰ says, "the position indicated by the whole tone of the poem is that of a man living in easy circumstances, and of one, who, though repelled by it, was yet familiar with the life of pleasure and luxury." It may be added that he must have received the best education—the sort of education which suggests that he came from a wealthy and probably noble family : evidently a master of Greek, as well as of Latin, he had a broad and deep knowledge of the literature of both languages ; and his frequent use of legal and political words and phrases¹¹ suggests that he may have been trained for a career in politics or the lawcourts. The *gens Lucretia* was aristocratic, and it is natural to assume that our Lucretius was a member of it.

The *DRN* contains evidence that its author was familiar with life at Rome. He had attended the races (2.263-265, 4.990) and the theatre (2.416-417, 4.75-83, 978-983, 6.109-110) ; he had apparently

¹⁰ W. Y. Sellar, *The Roman Poets of the Republic* 288.

¹¹ *E.g.* 1.411, 587, 875, 2.581, 1087, 3.971, 5.58. On his use of legal and political metaphors to describe the working of the atomic system, see especially H. S. Davies, "Notes on Lucretius," *Criterion* 11, no. 42 (1931) 37.

witnessed a military exercise, probably on the Campus Martius (2.40-43, 323-332) ; his account of the man who dashes from his town house to his country villa in an unsuccessful attempt to get rid of his boredom (3.1060-1067) is evidently based on his observation of the behaviour of wealthy Romans ; the prostitutes and mistresses whose ways he describes (4.1121-1191, 1274-1276) are more likely to have been "women of Rome" than provincials ; and his vivid description of wild beasts indiscriminately savaging friend and foe (5.1308-1340) may owe something to his knowledge of Roman *venationes*.¹²

But, although he was almost certainly educated in Rome and probably owned a house there, not all his life was spent in the city. Many passages reveal his familiarity with the countryside and his acute observation and sympathetic appreciation of everything in it. We should perhaps be wary of assuming that he therefore spent all or even most of his time in the country : if nothing was known of the life of A. E. Housman, no one would guess that *A Shropshire Lad* was composed by one who, though brought up in the country, was working in London first as a civil servant, later as a professor. But some of Lucretius' incomparable descriptions of animal behaviour—for example, the account of the cow looking for the calf which has been taken from her (2.352-366)¹³—are so accurate in every detail that they are clearly the work of one who not only was a poet of genius, but also had ample opportunity to observe what he describes. It is probable that he

¹² See note on 5.1309. *Cf.* 4.1015-1018.

¹³ *Cf. e.g.* 1.259-261, 2.317-322, and see note on 2.370.

INTRODUCTION

owned a villa in the country and felt very much more at home there than in Rome.

We cannot be sure how widely he had travelled, although his poem does provide some negative evidence: when, in describing a place, he uses some expression like *fertur* or *fama est*, it is reasonable to suppose that he has not been there himself. And so it may be assumed that he had not visited Sicily (1.726-727), Syria (6.756), the temple of Hammon in the north African desert (6.848-849), and Mount Ida in the Troad (5.663). On the other hand, when he uses *est* in reference to a phenomenon at a certain place, as he does of (for example) Cumae (6.747), Athens (6.749), and Mount Helicon (6.786), that cannot be taken as proof that he has visited that place. It would in fact be very interesting to know whether his love of philosophy took him to Athens or the neighbourhood of Cumae. He may well have made a pilgrimage to the Garden where his beloved master taught, and may even have studied philosophy in Athens. As for Cumae, it is not far distant from Herculaneum and Naples, where the Epicurean teachers Philodemus and Siro lived.

The suggestion has been made that Lucretius accompanied Memmius to Bithynia in 57, but there is no evidence to support it.

Although Epicurus discouraged marriage and having children, that does not mean that Lucretius had no wife and family. Indeed the line

coniugibus quod nil nostris opus esse videtur
(4.1277)

is more likely to have been written by a married man than by a bachelor. He seems to have been fond of

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children,¹⁴ but we cannot tell whether he had any of his own.

The only person whom we know for certain to have been a friend or acquaintance of Lucretius is Memmius, to whom the *DRN* is addressed. This Memmius is undoubtedly the well-known Gaius Memmius, who was son-in-law of Sulla, *tribunus plebis* in 66, praetor in 58, propraetor of Bithynia in 57, and unsuccessful candidate for the consulship in 54. Lucretius' relationship with him will be discussed in § 3. It is a fair assumption that the two men were first brought together by their common interest in poetry; for Memmius, as well as being a politician, was a man of culture who patronized the poets Catullus and Helvius Cinna and wrote erotic poems himself.

Since Lucretius knew Memmius and Memmius was Catullus' patron, it is highly probable that Lucretius and Catullus knew one another. In this connexion, it is interesting that there are similarities of language in Lucretius and Catullus,¹⁵ which seem too numerous to be accidental.¹⁶ Since the verbal similarities are from all six books of the *DRN*, but (with a few exceptions) from one poem of Catullus, *Peleus and Thetis* (Catullus 64), it is probable that Catullus was the imitator. If this is correct, it must be assumed that Catullus wrote or revised *Peleus and Thetis* after the publication of the *DRN* and not long before his own death, or that he saw the *DRN* prior to its publication. A further point of interest is that, as Wormell points out,¹⁷ Catullus

¹⁴ Cf. 1.255, 936-942, 2.55-58, 4.400-403, 1252-1253, 5.1017-1018.

¹⁵ See Munro on *Lucr.* 3.57, Bailey, *Addenda* 1753-1754.

¹⁶ Pace C. J. Fordyce, *Catullus*, Oxford (1961) 276.

¹⁷ In D. R. Dudley (ed.), *Lucretius* 42-43.

sometimes writes in a manner which suggests that he hoped for a permanent relationship with Clodia (Lesbia) similar to that enjoyed by members of an Epicurean circle with one another: for example, *aeternum hoc sanctae foedus amicitiae* (Catullus 109.6) should be compared with Cicero, *Fin.* 1.20.70, 2.26.83, where reference is made to the Epicurean view that *sapientes* make a *foedus* to love their *amicos* no less than themselves. Wormell's tentative suggestion that Catullus and Clodia were on the fringes of the same Epicurean circle as that to which Lucretius belonged, and of which he hoped to make Memmius a member,¹⁸ is attractive.

Next, what of St. Jerome's statement that Lucretius went mad in consequence of drinking a love-potion, wrote the poem in the intervals between fits of insanity, and took his own life? The matter has been much discussed, and the majority opinion now is probably that the story is without foundation. But St. Jerome still has his supporters,¹⁹ and it is undoubtedly the belief or suspicion that his notice contains at least some element of truth which has been responsible for the "discovery" of passages in the *DRN* allegedly reflecting the poet's profound pessimism and unbalanced state of mind. It is desperately important to avoid what Ferrarino²⁰ calls "il circolo vizioso della critica" whereby "il pessimismo spiega con il suicidio e il suicidio con il

¹⁸ Cf. *Lucr.* 1.140-141. See § 3.

¹⁹ E.g. L. Perelli, *Lucrezio poeta dell'angoscia*; D. B. Gain, "The Life and Death of Lucretius," *Latomus* 27 (1969) 545-553.

²⁰ P. Ferrarino, "Struttura e spirito del poema lucreziano," *Studi in onore di G. Funaioli*, Roma (1955) 63.

pessimismo," and therefore it seems necessary to deal with the tradition.

St. Jerome, writing more than four hundred years after Lucretius' death, is the only ancient authority to record the story. Perhaps not too much should be made of this point, because he may have derived his information from Suetonius.²¹ However, even if Suetonius was his source, it certainly does not follow that the information is true. That Suetonius, though far from being the most inefficient and unscrupulous of ancient biographers, frequently used unreliable sources and included information conjectured from authors' works cannot be doubted: the results of these methods can be seen in his biography of Terence, preserved by Donatus, and, if indeed (as is probable) it is his work, in the *Life of Virgil*.

In the case of Lucretius, whose Epicureanism would have made him a natural target for malicious attacks, the whole story of the love-potion, madness, and suicide, like the story of Cicero's connexion with the poem, can be explained as having been inferred from his own work or from what others wrote about him.

The idea of the love-potion may well have been suggested by his vehement and lengthy attack on sexual passion (4.1037-1191), though an attractive alternative is J. Jessen's²² suggestion that the name of Lucretius was confused with that of Lucullus,²³ who died in 56 B.C. allegedly after taking a love-

²¹ Cf. n. 8 above, but see pp. xxi-xxii below.

²² *Zu Lucrez' Leben und Dichtung*, Kiel (1869) 53. The same suggestion is made by L. P. Wilkinson, "Lucretius and the Love-Piltre," *CR* 63 (1949) 47-48.

²³ Wilkinson suggests that the abbreviation *Luc.* may have been mistakenly understood as referring to Lucretius instead of to Lucullus.

potion : a similar confusion between the names of Horatius and Hostius seems to have given rise to the story²⁴ that Horace had mirrors placed round the walls of his bedroom, and it may be significant that the Horatian biography is probably the work of Suetonius.

The story of the madness may have been derived from Statius' phrase *docti furor arduus Lucreti* (*Silv.* 2.7.76), where *furor* certainly refers to poetic inspiration,²⁵ or, as Ziegler²⁶ suggests, from *DRN* 3.828-829, where someone may have taken *furorem* . . . *proprium* as equivalent to *furorem* . . . *meum*.

The story of the suicide may have been suggested by any or all of the following passages : 3.79-82, 940-943, 1039-1041.

One of the most compelling reasons for rejecting the tradition is the fact that Virgil, who was deeply influenced by Lucretius and deeply admired him, refers to him in the famous lines (*G.* 2.490-492) :

felix qui potuit rerum cognoscere causas,
atque metus omnis et inexorabile fatum
subiecit pedibus strepitumque Acherontis avari.

It seems inconceivable that he could have written these lines, if he had known (as he must have done,

²⁴ *Life of Horace.*

²⁵ For the idea that the good poet is inspired or possessed, cf. e.g. Plato, *Ion* 533 E ff., *Phdr.* 245 A, Cicero, *De Or.* 2.46.194, *Div.* 1.37.80. K. Ziegler, "Der Tod des Lucretius," *Hermes* 71 (1936) 427, points out that it is unlikely that Statius would have chosen the word, if he had known that Lucr. suffered from true madness. This is just one of several arguments which Ziegler puts forward against the tradition. Gain (*op. cit.*) is successful in showing that some of his arguments are weak, but his attempt to overthrow all of them is unconvincing.

²⁶ *Op. cit.* 438.

if the story were true) that Lucretius had gone mad and taken his own life. It would have been a sarcastic and cruel comment on a man whose tragic end showed that he was anything but *felix*, and had anything but conquered all fears and fate and death.

In no other writer is there any allusion to the story. And yet, if the story was known, this silence is strange. The Epicurean ideal was tranquillity of mind, and fear of death was regarded as one of the main obstacles to attainment of that ideal. Lucretius makes the strongest attack on fear of death, and in 3.79-82 states that it often drives people to suicide. If he himself had been so disturbed in mind and, according to his own analysis, so obsessed with fear of death that he took his own life, would non-Epicurean writers have failed to point out how unepicurean was the behaviour of Epicureanism's leading Roman exponent? We might have expected this point to have been made by, for example, Seneca, who in fact mentions the criticism made by his contemporaries of an Epicurean named Diodorus, who had just committed suicide : *negant ex decreto Epicuri fecisse quod sibi gulam praesequit* (*Vit. Beat.* 19.1).

Although Suetonius may have been the source of the whole of St. Jerome's statement about Lucretius, this is by no means certain. The fact that St. Jerome's information about the emendation of the poem seems to have been derived from him (see n. 8 above) does not prove that the story of the love-potion, madness, and suicide came from the same source. Moreover, as Ziegler²⁷ argues, if the

²⁷ *Op. cit.* 427-435.

story was recorded by Suetonius, it is strange that there is no mention of it in Arnobius or Lactantius around A.D. 300. Both of these Christian writers strongly attack Epicureanism, and Lactantius, more uncompromising than his master Arnobius in his hostility to paganism, often refers to the "madness" of Epicurus and Lucretius, but without meaning to suggest that they were really mad any more than Lucretius, when he uses *dementia*, *delirium* and *perdelirium* in reference to Heraclitus (1.704, 698, 692), means to suggest that that philosopher was actually insane. At the same time, if Lactantius knew of the story recorded by St. Jerome, it is extraordinary that he did not seize on it and use it as ammunition for attacking Epicureanism. Therefore Ziegler may be right in supposing that the story was a Christian fabrication of the fourth century.

Some scholars find confirmation of St. Jerome's statement in the *DRN*. They consider that certain passages are indicative of profound pessimism and even of mental unbalance. However, as well as being influenced by St. Jerome's notice, the attribution to Lucretius of a morbidly pessimistic temperament and a mentally unbalanced attitude derives largely from three mistakes commonly made by Lucretian critics.

The first mistake is that of arbitrarily isolating passages and examining them apart from their contexts. For example, the grim account of the Athenian plague, with which the poem ends, is often held to be morbidly pessimistic and indicative of the poet's ultimate despair. However, the passage is not a conclusion in the sense of being a final opinion such as one might find at the end of a modern work of

scientific inquiry,²⁸ and it must be viewed not by itself, but in its context—in connexion with the rest of Book 6 and indeed the rest of the poem. In fact (see notes on 6.1-2, 1138), it is closely connected with the joyful and triumphant proem to Book 6 and, when correctly understood, is seen to have been written as an essential part of the poet's endeavour to bring spiritual health and happiness to suffering mankind.

The second mistake is that of confusing pessimism with realism. Although Lucretius had a firm, unwavering faith in the ability of Epicureanism to cure all human ills, he knew that the majority of men had yet to be healed, and above all he knew that contemporary Roman society was sick and corrupt. And let us not forget in what troubled times he lived: the first half of the first century B.C. was marked by fierce and continual social and political strife; there were several severe outbreaks of violence in Italy—the Social War, the battle of the Colline Gate, the rising of Spartacus, the conspiracy of Catiline; and oppression, cruelty, avarice, ambition, bribery, luxury, sexual depravity, restlessness, and suicide were prevalent on a scale which Epicurus can hardly have encountered or visualized. Thus the vehemence of Lucretius' attacks on ambition and avarice (and hence on fear of death which, in the Epicurean view, is largely responsible for these vices²⁹) is fully justified by contemporary conditions.³⁰ The

²⁸ Cf. Ferrarino, *op. cit.* 40; F. Giancotti, *L'ottimismo relativo nel DRN di Lucrezio* xxv. ²⁹ 3.59 ff.

³⁰ It has often been noted that there is a close resemblance between 3.59 ff. and Sallust's account of the disastrous decline in morals which made possible the inauguration of the Catilinarian conspiracy.

important point is that, although he saw that men often make a hell of their lives on earth (3.1023 : *hic Acherusia fit stultorum denique vita*), he believed that it is possible, thanks to Epicurus, to turn that hell into a heaven (3.322 : *ut nil inpediat dignam dis degere vitam*).

The third mistake is that of failing to distinguish between Lucretius' strictly personal outlook and that of the Epicurean school. For example, his statement that fear of death often drives men to suicide (3.79-82) has been taken as indicating that he himself had a tendency to suicide, and Bailey³¹ suggests that he is writing "possibly with a certain presage of his own end." In fact, the statement has perfectly good Epicurean authority.³²

Waltz,³³ who attributes to Lucretius "la complexion nerveuse et mentale d'un demi-malade, d'un anxieux," points out that certain types of insanity are compatible with creative genius, and instances the case of van Gogh, whose masterpieces were conceived and executed sometimes in periods of lucidity, sometimes during an attack of intense mental depression. It is undoubtedly true that certain mental disorders can evoke, stimulate, and enrich certain kinds of creative activity. But, although Lucretius is mentally abnormal in the sense that he has an exceptionally penetrating and sensitive mind and an exceptionally fertile and vivid imagination, he cannot be regarded as mentally unbalanced. It

³¹ "Lucretius," *Proc. of British Academy* 25 (1949) 8. Cf. Perelli, *op. cit.* 85.

³² Usener 497.

³³ R. Waltz, "Lucrèce dans Lucrèce," *Lettres d'humanité* 12 (1953) 45.

is hardly fair to cite the case of van Gogh or (as some have done) of poets like William Blake and William Cowper in support of the view that Lucretius wrote *per intervalla insaniae*: the composition of a poem like *Auguries of Innocence* or the execution of a painting like the "Garden of the Asylum" does not demand the same degree of mental control and steady concentration on the part of the creative worker as does the exposition of a complex philosophical system in a poem of over seven thousand lines, obviously composed over a period of several years. The transmutation of philosophy and science into poetry is an intensely difficult task, and in Lucretius' case it was made even more formidable by the absence of an adequate Latin technical vocabulary (1.138-139). Moreover, he wrote, as we have seen, in disturbed times—in times when, as Wormell³⁴ says, "the tensions between the creative artist and his environment were necessarily extreme," and the poet's awareness of this situation is seen in the first poem, where he asks Venus to obtain peace for the Romans, and continues (1.41-42):

nam neque nos agere hoc patriai tempore iniquo
possumus aequo animo . . .

And yet, in spite of all these difficulties, the *DRN* is from beginning to end a triumph of confident and logical construction and concise and lucid expression. As Lee³⁵ remarks, "there are few productions of the intellect of man of which it can more truly be

³⁴ "Lucretius: the Personality of the Poet," *G and R* ser. 2, 7 (1960) 55.

³⁵ J. H. W. Lee, *T. Lucreti Cari De Rerum Natura Libri I-III* xiii.

said that 'the power of sustained feeling and consistent thought shows sanity of genius and strength of understanding.'” Bailey³⁶ too admits that the poem “with its logical argument and its careful structure, proceeding from point to point, is very unlike the work of a madman,” but shortly afterwards³⁷ expresses the opinion that the poet suffered from a kind of *insania*. However, it seems certain that, if he had been affected by any kind of *insania*, his mental condition not only would have left its indelible impression on certain passages, but also would have destroyed the coherence and balance of the entire work. As a former Regius Professor of Medicine has said, “of insanity of any type that leaves a mind capable in lucid intervals of writing such verses as the *DRN* we know nothing.”³⁸

The certainty that Lucretius has a serious missionary purpose in writing the *DRN* and that his material is related and relevant to the needs of his contemporaries is further proof that he was not mentally sick or melancholic. In the first place, mentally sick people often tend to be out of step with events in the world around them, and out of touch with the problems of their contemporaries. Secondly, the morbid pessimist never concerns himself with bringing a message of hope and salvation to others, teaching that man can live a life worthy of the gods!

Lucretius is an earnest and serious writer, partly by reason of the nature of his subject and partly,

³⁶ 9-10.

³⁸ W. Osler, “The Old Humanities and the New Science,” *British Medical Journal* (5 July 1919) 5.

one suspects, because of his natural temperament. But seriousness need not, and in his case does not, imply dullness. No writer could be dull who, as well as possessing supreme poetic powers, displays such deep love and concern for his fellow-men, believes so passionately in the healing power of his philosophy, and has such a remarkable sympathy with animals and with nature in all her aspects.

It has sometimes been thought that he was a lonely man. Regenbogen,³⁹ for example, ends his essay on Lucretius with the suggestion that, if we had a portrait of the poet, we could place beneath it Wordsworth's verses⁴⁰ concerning the statue of Newton in the antechapel of Trinity College, Cambridge:

The marble index of a mind for ever
Voyaging through strange seas of thought, alone.

It is true that he cannot have taken part in public affairs. It is true, too, that he must have passed much time alone planning and writing the *DRN*: he himself tells us how the hope of converting Memmius led him *noctes vigilare serenas* (1.142), and one suspects that he found this quiet and solitude not ungenial, for his poem gives the impression of a man who derived deep pleasure from reflection and contemplation and preferred the peace of the countryside to the bustle of the city. But loneliness is unlikely to have affected one who attached so much importance to *amicitia*, who was so concerned to help others, and who (see § 3) expressed his love

³⁹ O. Regenbogen, “Lukrez: seine Gestalt in seinem Gedicht,” reprinted in his *Kleine Schriften*, München (1961) 386.

⁴⁰ *The Prelude* 3.62-63.

for Epicurus so generously and sincerely. Let us replace Wordsworth with Shelley ⁴¹ :

I love
 The fresh Earth in new leaves dressed,
 And the starry night ;
 Autumn evening, and the morn
 When the golden mists are born.

I love snow, and all the forms
 Of the radiant frost ;
 I love waves, and winds, and storms,
 Everything almost
 Which is Nature's, and may be
 Untainted by man's misery.

I love tranquil solitude
 And such society
 As is quiet, wise, and good.

If Lucretius had been able to read this passage, he might have remarked : “ This is me.”

2. THE PHILOSOPHY OF EPICURUS

Vain is the word of a philosopher by whom no human suffering is cured.

EPICURUS

EPICURUS (341–270 B.C.) lived in a time of moral and spiritual confusion. This confusion resulted largely from political changes in Greece in the fourth century B.C. : in consequence of the Macedonian conquest the city-states had lost their independence, their inhabitants were no longer masters of their own affairs, and the traditional religion, which had been closely associated with the state, no longer satisfied.

Epicurus spent his childhood in Samos, most of

⁴¹ *Song : Rarely, rarely comest thou* 25-39.

his early manhood in western Asia Minor, and established his school in Athens in 307–306. He chose Athens because it was *the* philosophical centre, and he himself was the son of Athenian parents. Possessing a brilliant intellect, outstanding powers of leadership, and a nature marked by extraordinary gentleness, kindness, sincerity, and serenity, he compelled others not merely to respect and admire him, but also to love and even worship him. He lived a secluded, simple, strictly disciplined life with his disciples, who included women and slaves. He produced a vast quantity of writings, but gave no public lectures and rarely left Athens, and this makes it all the more remarkable that he succeeded in founding a philosophy that was to flourish for almost seven centuries and gain numerous adherents in Greece, Asia Minor, Italy, and lands as far apart as Gaul and Judaea.

The aim of Epicurus' teaching was to give men a new freedom—not political freedom, but an individual freedom : he aimed to liberate them from all fears and disturbances, to make them self-sufficient, and so enable them to attain tranquillity of mind (*ἀραπαγία*).

Although he was primarily a moral philosopher, his definition of philosophy being “ an activity that through discussion and reasoning secures the happy life ” (Usener 219), he believed that it is essential to make a scientific study of the nature of the universe. The purpose of this study is not to acquire scientific knowledge for its own sake, but solely to free oneself from the unnecessary fears and suspicions which disturb the mind and preclude the attainment of happiness, especially fear of the gods

and fear of death.⁴² Thus physics is entirely subordinate to ethics, being merely the necessary means whereby the ethical goal is achieved. This is a point which it is particularly important to remember when reading the *DRN*, for although Lucretius is a perfectly orthodox Epicurean and is not concerned with scientific inquiry for its own sake,⁴³ the great bulk of his subject-matter is scientific and he gives no systematic account of Epicurean ethical theory. His reasons for concentrating on physics will be considered in § 3.

As Diogenes Laertius (10.30) points out, Epicurus' system "is divided into three parts: Canonic, Physics, and Ethics."

The Canonic⁴⁴ is his theory of knowledge. There are three criteria of truth: sensation, preconceptions, and feelings. Sensation (*αἴσθησις*, *sensus*) is the primary standard of truth (Lucr. 1.422-425). If an error is made, that is not because the sensation is not true, but because the reason draws a wrong conclusion from the evidence which the sensation provides (Lucr. 4.379-468). With the repetition of sensations, images of each class of things accumulate in the mind to form a general idea or preconception (*πρόληψις*, *notities*, *anticipatio*, *praenotio*) to which other examples are referred (e.g. Lucr. 5.182, 1046-1049). Without these preconceptions, attainment of scientific

⁴² Cf. Epicurus, *Sent.* 11-12.

⁴³ Just because he devotes most of his poem to physical doctrine, it is not true that "in the *DRN* the traditional subordination of Canonics and Physics to Ethics is reversed" (E. J. Kenney, *Lucretius, DRN Book III* 10, n. 1).

⁴⁴ On the derivation of the word, see note on 4.513.

knowledge would be impossible, for sensation by itself is "irrational and incapable of memory" (Diogenes Laertius 10.31). As for the third criterion of truth, "there are two feelings (*πάθη*), pleasure and pain, which affect every living creature, the former being congenial to it, the latter repugnant; it is through these that choice and avoidance are determined" (Diogenes Laertius 10.34). Thus the feelings of pleasure and pain are the supreme test in matters of morality and conduct, and since they are a part of sensation, it is true to say that Epicurus' ethical theory, like his physical theory, is founded on the validity of sensation.⁴⁵

Epicurus derived his physical theory from Democritus (c. 460-c. 370), who had adopted and elaborated the atomic theory invented by Leucippus. However, he made some important alterations to Democritus' theory, and differed from him in making physics subservient to ethics.

The first principles of Epicurean physics are that "nothing is created out of nothing" (Lucr. 1.150-151, 155-156, 159-214) and "nothing is destroyed into nothing" (Lucr. 1.215-264). In other words, Epicurus shared the belief of other ancient physicists in the conservation of matter. The universe (*τὸ πᾶν*, *omne*) consists of matter (*σῶμα*, *corpus*) and void (*τὸ κενόν*, *inane*). These are the only ultimate realities: nothing that is distinct from them can exist (Lucr. 1.430-448). That matter exists is proved by sensation; and if there were no void, matter would be unable to move (Lucr. 1.335-345, 370-383, 426-428), whereas sensation tells us that it does move.

⁴⁵ Cf. Bailey, *The Greek Atomists and Epicurus* 248-250.

Matter exists in the form of an infinite number of absolutely solid, indivisible, and unchangeable particles (Lucr. 1.483-634). Being indivisible, the particles are called in Greek *atomoi* (*ἄτομοι* = "that cannot be cut").⁴⁶ The indivisible nature of the atom is very important for Epicurus: like the earlier atomists, he believed that unless there are imperishable elements, unless there is a point beyond which further division of matter is impossible, there can be no permanence for the universe; if there were not something indestructible to survive when compound bodies are dissolved, everything would long ago have been destroyed into nothing (Lucr. 1.540-550). The atoms are imperceptibly small (Lucr. 1. 265-328) and therefore must be investigated with the help of analogy. They are homogeneous in substance, but differ in shape, size, and weight, and it is these differences, and also the differences in their movements, positions, and combinations, which account for all the variety of things in the universe. Whereas Democritus believed that the number of atomic shapes and sizes is infinite, Epicurus argued that although the number is inconceivably large, it is finite (Lucr. 2.478-521), for otherwise some of the atoms would be visible and even, as Lucr. (2.498) says, of immeasurable magnitude (*inmani maximitate*). On the other hand, the number of atoms of each shape and size is infinite (Lucr. 2.522-568). Although each atom is minute and physically indivisible, it can be divided mentally into a varying but limited number of smaller parts (*ἐλάχιστα, minimae partes, minima*). Lucretius argues this doctrine in 1.599-634, and the reader is referred to the brief note on 1.608.

⁴⁶ For some of Lucr.'s terms for atoms, see 1.55, 58-61.

The extent of the void, like the number of the atoms, is infinite, and naturally the universe which they compose is infinite (Lucr. 1.951-1051). The number of worlds is also infinite (Lucr. 2.1048-1089).

All atoms are always in motion. First let us deal with the motion of atoms moving freely through the void. Whereas Democritus believed that such atoms move in all directions, their motion being controlled by "natural law" or "necessity" (*ἀνάγκη*), Epicurus supposed that they are drawn downwards by their weight. Now, for atomic compounds to be formed, it is essential for atomic collisions to occur. Democritus obviously had no difficulty in explaining how atoms collide. But what of Epicurus? If all the atoms are moving straight down in the same direction, how do collisions occur? One might suppose that the heavier atoms move faster than the lighter ones and so catch them up, but this answer is unacceptable, for, as Epicurus brilliantly inferred, objects of different weight falling in a vacuum fall with equal velocity (Lucr. 2.225-242). Instead he held that, as the atoms are carried down through the void by their own weight, at unpredictable times and places they swerve slightly from their course (Lucr. 2.216-220). This famous theory of an atomic swerve (*παρέγκλισις, clinamen, declinatio, inclinatio*) was ridiculed by Epicureanism's opponents in antiquity. Cicero (*Fin.* 1.6.19) says that "the whole thing is a childish invention" (*res tota ficta . . . pueriliter*) and adds that the theory is not only childish, but also arbitrary (*ad libidinem fingitur*), for Epicurus maintains that the atoms swerve without a cause, and to maintain that a thing is uncaused is a monstrous crime for a physicist to commit. The

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theory certainly seems unscientific, though it is interesting to note that Bohr, the eminent Danish physicist, had a rather similar conception of atomic movement.⁴⁷ However, it must not be judged only with regard to its scientific merits or demerits, for it was meant to account not only for the formation of compound bodies, but also for free will (Lucr. 2.251-293). This is an extremely important point. Epicurus, as we have already seen, differed from Democritus in regarding physics as subordinate to ethics. And whereas Democritus was a determinist, Epicurus believed—and this belief was derived from Socrates and his followers, especially Plato and Aristotle—that the individual is a free being with moral responsibility for his own actions. That is why he could not accept that all the atoms always move predictably and mechanically in accordance with fixed natural laws: for him the moral fact of free will is proof that the atoms sometimes move unpredictably and spontaneously. The great importance which he attached to the preservation of free will can be judged from the following statement: “It would be better to subscribe to the legends of the gods than to be a slave to the determinism of the physicists” (*Ep. ad Men.* 134). He could hardly have made his point more forcefully than that.

When atoms collide and interlock with one another, so forming compound bodies, their motion does not stop (Lucr. 2.80-141), but ceases to be linear and becomes vibratory: the atoms continually clash together and rebound at intervals which vary according to the density of the substance. Every compound body, even such an apparently solid object

⁴⁷ Cf. Bailey 842.

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as a lump of lead, contains a certain amount of void. The constant motion of the constituent atoms of objects is imperceptible to us, because the atoms themselves are imperceptibly small (Lucr. 2.308-322). The ability or inability of atoms to cohere closely together is determined by their shape (Lucr. 2.381-477): hooked and branchy atoms form dense substances, round and smooth atoms form rare substances. Differences in the size and arrangement of the atoms are other important factors which account for differences in the qualities of compounds.

Every compound object is a temporary atomic *concilium*: it comes into being, grows, reaches maturity, declines, and is resolved into its component atoms. Our world is no exception (Lucr. 2.1105-1174): it had a beginning and will have an end (Lucr. 5.91-109, 235-415). It was not created by the gods for the benefit of man (Lucr. 2.167-183, 5.156-234), but, like every one of the infinite number of worlds in the universe, was the result of a fortuitous concurrence of appropriate atoms in a part containing much void: from the confused, chaotic mass of atoms the different components of the world gradually separated out, like elements joining like, and the world as we know it developed (Lucr. 5.416-508). The earth first produced vegetation, then animals including man. The creation of life and the growth of civilization, including the development of language, the discovery of fire, the institution of laws, and the invention of arts and crafts took place without any help from the gods (Lucr. 5.772-1457).

The constant vibration (*πάλλοις*)⁴⁸ of the constituent atoms of each compound object causes fine

⁴⁸ Epicurus, *Ep. ad Hdt.* 50.

atomic films (*εἰδῶλα, simulacra*), similar in shape to the object, to be discharged at high speed from its surface. When these strike our eyes, they produce vision; when they are received by our mind, they cause thought or, if we are asleep, dreams (Lucr. 4.26-521, 722-822, 877-906, 962-1036). All sensation involves physical contact between the object perceived and the body of the perceiver: in the case of taste (Lucr. 4.615-632) and touch the contact is direct; but in the case of hearing (Lucr. 4.524-614) and smell (Lucr. 4.673-705), as in the case of vision, the contact is indirect, being effected by emanations impinging on the appropriate sense-organ.

The mind and soul are material and therefore mortal. Lucretius demonstrates their nature and composition, and proves that they are born with the body and die with the body, in 3.94-829. The mind (*animus*), which is the seat of emotion as well as of thought, has its fixed place in the breast, and is to be distinguished from the soul or spirit (*anima*), the seat of sensation, which is scattered all through the body. But both are composed of the same kind of very fine, small, round, mobile particles. The proof that mind and soul are corporeal and mortal, and that there is no sensation in death, is extremely important, for fear of death is one of the two great fears which prevent the attainment of tranquillity; and so Lucretius, having completed his long proof, at once launches into that inspired passage (3.830-1094) whose theme is stated in the first line (3.830):

nil igitur mors est ad nos neque pertinet hilum.

Epicureanism's materialistic psychology and denial of an after-life was one of the main reasons why the

philosophy was so fiercely attacked, especially in Christian times. It may also have been one of the main reasons why, after withstanding the challenge of Christianity for nearly four centuries, it eventually lost the battle: Christianity's offer of immortal life probably seemed more appealing and comforting than Epicureanism's promise of a *mors . . . immortalis* (Lucr. 3.869) in which there is no consciousness. Other matters which provoked the hostility of Christianity were Epicurus' theological and ethical doctrines.

Epicurus has often been called an atheist and an enemy of religion. In fact, he was a firm believer in the existence of the gods, and was opposed not to all religion, but only to what he regarded as false religion. The existence of the gods is certain, for our knowledge of them is derived from clear perception (*Ep. ad Men.* 123). But what is their nature, where do they live, and how do we perceive them? They are material beings, but their atomic composition is exceedingly fine and they differ from other compound bodies in that they are immune to destruction. They live not in our world, but in parts which are as tenuous as their bodies (Lucr. 5.146-154)—that is, in the spaces between the worlds (*μετακόσμια, intermundia*), where all is peace and the climate is perfect (Lucr. 3.18-22). Perfectly self-sufficient, tranquil, and happy (Lucr. 1.44-49, 2.646-651), they have neither the inclination nor the power to intervene in the affairs of a world which they did not create. They are never angry (Lucr. 1.49, 2.651, 6.74), and violent and irregular phenomena such as thunder and lightning, earthquakes and volcanoes are certainly not sent by them to punish

men, but have purely natural causes (Lucr. 6.43-702). From the gods, as from all objects, flows an unceasing stream of *simulacra*. *Simulacra* are always of a very fine texture, but, since the gods are of the finest atomic composition, the *simulacra* which emanate from their bodies are surpassingly tenuous—so tenuous, in fact, that they cannot be received by the senses at all, but only by the mind (Lucr. 5.148-149). Even the mind does not easily perceive them, and it is in sleep, when there is less “interference,” that visions of the gods are most often seen (Lucr. 5.1169-1171). The person whose mind is not disturbed by false opinions and fears concerning the gods is best able to receive the *simulacra*, which can transmit to him something of the beauty, tranquillity, and happiness of the gods (Lucr. 6.68-78). And although the wise man will not worship the gods or make sacrifices to them in the hope of influencing them, he will participate in religious ceremonies, for this will make it easier for him to concentrate his attention on the divine *simulacra*. Thus Epicurus, far from being an opponent of religion, was a strong supporter of it: he wanted to reform it, not abolish it.

The identity of the moral end which we should aim to achieve is, according to Epicurus, not a matter for argument. It is a matter of universal experience that pain is bad and pleasure good; therefore pain is to be avoided, and pleasure (*ἡδονή*, *voluptas*) is the end to be sought. However, not every pleasure is to be taken and not every pain avoided, for sometimes temporary pleasure is outweighed by subsequent pain, and sometimes temporary pain is out-

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weighed by subsequent pleasure. In each case we must carefully consider which course will in the long term bring us most pleasure and least pain.

According to Epicurus, pleasure is limited (Lucr. 5.1433), and the limit of pleasure for the body is reached when desire is satisfied and the pain of want is removed.⁴⁹ Two kinds of pleasure are to be distinguished: kinetic pleasure or the pleasure of movement, which is the pleasure derived from the process of satisfying desire, and katastematic pleasure or the pleasure of equilibrium, which is enjoyed when desire is satisfied and pain is absent. Before Epicurus the Cyrenaics, founded by Aristippus, had held that pleasure is the *summum bonum*, but, whereas they regarded kinetic pleasure as the only true pleasure and did not recognize katastematic pleasure as a pleasure at all, Epicurus not only recognized katastematic pleasure as well as kinetic pleasure, but actually regarded it as much superior to kinetic pleasure: katastematic pleasure is more lasting and involves no pain, whereas kinetic pleasure is not lasting and necessarily involves pain, for kinetic pleasure is, as we have seen, derived from the process of satisfying desire and removing the pain of want. It is to be noted that Epicurus did not recognize a neutral state of feeling intermediate between pleasure and pain, but indeed regarded absence of pain (*ἀνομία*) as the highest form of bodily pleasure.

Since unsatisfied desire causes pain, we must distinguish the desires which can be satisfied from those which cannot. There are in fact three classes of desires: natural and necessary, natural but not

⁴⁹ Epicurus, *Sent.* 3, 18.

necessary, and neither natural nor necessary. The desires in the first class, e.g. the desire for necessary food, drink, and clothing, should be satisfied and can be easily and cheaply satisfied. Those in the second class, of which sexual desire is a notable representative, are to be satisfied only in moderation. Those in the third class—the desires for all kinds of luxuries which are in no way necessary for life—must be eliminated, because they cannot be satisfied and unsatisfied desire means pain: they cannot be satisfied, because they are unlimited, so that there is always a gulf between what we want and what we get.

From all this it can be seen that Epicurus was fully justified in claiming that “when we say that pleasure is the end, we do not mean the pleasures of debauchees or the pleasures of sensuality” (*Ep. ad Men.* 131); it can be seen how unjust are the charges, made by Cicero (*Pis.* 16.37) and Horace (*Epist.* 1.4.16), that Epicurus’ school was fit for swine; it can be seen how remote is the Epicurean from the epicure. In fact, Epicurus recommended and lived a life of great simplicity. We learn from Diogenes Laertius (10.11) that he was content with bread and water, and that he once wrote to a friend: “Send me a bit of preserved cheese, so that I may have a sumptuous feast whenever I want.”

As well as holding the view that most bodily pleasure is to be achieved by living frugally and limiting one’s desires, Epicurus regarded mental pleasure as more important than bodily pleasure. The mind not only shares the pleasurable sensations of the body at the time when they are experienced, but also derives pleasure from the memory of past

pleasures and the anticipation of future pleasures; and mental pleasure can always outweigh physical pain. However, as well as experiencing pleasure, the mind suffers pain. Sometimes it suffers pain in sympathy with the body. But it also has its own pains. Like the body, it may be afflicted with unnecessary desires, notably the desire for wealth (avarice) and the desire for power and honour (ambition). Both these desires are unlimited and impossible to satisfy, and therefore involve pain, and therefore must be eliminated. Hence Epicurus’ statement that “poverty, when measured by the natural end of life, is great wealth, and unlimited wealth is great poverty”⁵⁰; hence his advice to Idomeneus concerning a young disciple: “If you wish to make Pythocles rich, do not increase his means, but diminish his desire”⁵¹; hence his insistence that his followers should take no part in politics or public life.

The mind’s ability to anticipate the future means that it may also have unnecessary fears. The most serious of these fears are, as we have seen, fear of the gods and fear of death, and only when they have been eradicated by the study of physics can we achieve the ideal of freedom from disturbance (*ἀραπαξία*), the katastematic pleasure of the mind.

The Epicurean attitude to the virtues is utilitarian. They are not ends themselves, but merely the means to the end: in other words, they are not desirable for their own sake, but only because they are productive of pleasure. But, since it is impossible to live a pleasant life without living virtuously, and to

⁵⁰ *Sent. Vat.* 25. Cf. *Lucr.* 5.1117-1119.

⁵¹ *Usener* 135.

live virtuously without living a pleasant life,⁵² virtue must be practised.

Although Epicurus taught that the individual should try and obtain for himself as much pleasure as possible, he and his followers were not concerned only with their own moral welfare. All Epicureans were expected to do their utmost to enlighten those still in ignorance of the truth. Epicurus himself implied that he was a missionary concerned with the spiritual healing of mankind when he proclaimed (Usener 221): "Vain is the word of a philosopher by whom no human suffering is cured. For just as medicine is of no use, if it fails to banish the diseases of the body, so philosophy is of no use, if it fails to banish the suffering of the mind." And the idea of the Epicurean philosopher as a missionary and healer is prominent elsewhere.⁵³ The usual Epicurean method of gaining converts was by personal contact—conversion of individual by individual; and here again there is an analogy with medicine: just as the doctor must give individual treatment to his patients, so the Epicurean philosopher gives individual attention to his morally sick fellow-men. Hence Epicurean writers, though they want their message to benefit as many people as possible, frequently address individuals: Epicurus addresses letters to individual pupils, Lucretius addresses Memmius, and the inscription of Diogenes of Oenoanda includes letters to Antipater and Dionysius.

Closely connected with the missionary character of Epicurus' philosophy is his attitude to friendship

⁵² Epicurus, *Ep. ad Men.* 132, *Sent.* 5, Cicero, *Fin.* 1.18.57.

⁵³ Cf. Lucr. 1.936 ff., 4.11 ff. (see p. 1 below), Diogenes of Oenoanda fr. 3 Smith.

(*φιλία, amicitia*). He believed that friendship originates in the need for help, but that it is desirable for its own sake (*Sent. Vat.* 23) and the wise man will love his friends as himself. The great importance which he attached to friendship can be judged from his statement that "the chief concerns of the noble man are wisdom and friendship, of which the former is a mortal⁵⁴ blessing, the latter immortal" (*Sent. Vat.* 78). The friendship to which he refers is more than ordinary friendship: it is the friendship and love of fellow-Epicureans, who share the conviction that the most important thing in life is to join together in studying the true philosophy. Thus the seeking of friends and the seeking of converts go together.

3. THE MISSION AND POETRY OF LUCRETIUS

No man was ever yet a great poet, without being at the same time a profound philosopher.

COLERIDGE

ALTHOUGH, as we have seen, Lucretius gives us little information about his life, he tells us much (and this is much more important) about the nature and purpose of his work.

He does not claim to be an original philosopher. His aim is to set out the doctrines of Epicurus as faithfully as he can:

te sequor, o Graiae gentis decus, inque tuis nunc
ficta pedum pono pressis vestigia signis,
non ita certandi cupidus quam propter amorem
quod te imitari aveo. (3.3-6)

⁵⁴ Reading, *pace* N. W. DeWitt and J. Bollack, *θηρών*. Other notable pronouncements on friendship are *Sent.* 27, *Sent. Vat.* 52.

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The above lines are from one of his four splendid passages in praise of Epicurus (3.1-30 ; cf. 1.62-79, 5.1-54, 6.1-42). These eulogies, whose language is joyful, triumphant, sometimes almost mystical, show that he regards Epicurus not as the author of some interesting philosophical ideas, but as the spiritual saviour of mankind. Epicurus is leader, father, and god⁵⁵ ; he revealed the secrets of the universe ; he raised mankind to heaven by his victory over superstition ; he lightened the darkness and stilled the storms of the spirit ; he revealed the truth and the whole truth in his infallible sayings.

Lucretius' complete faith in Epicurus as moral and spiritual leader explains not only why he was not concerned with making philosophical innovations, but also why he had no choice but to take Epicureanism as his theme. It has sometimes been deemed unfortunate that a poet of such brilliant genius should have been a devoted Epicurean : surely, it has been suggested, he would have produced an even greater poem if he had been free to choose a more promising poetic subject than an abstruse system of philosophy. It is true that he himself refers (1.136-139) to the difficulty of illuminating *Graiorum obscura reperta* in Latin verse. It is true, too, that he explains that he values his poetry above all because it makes his philosophy more attractive (see p. 1 below), and that this might be taken as implying that he is a great poet in spite of his Epicureanism rather than because of it. Certainly it must be admitted that he was a natural poet, and that, if he had taken a more

⁵⁵ See notes on 5.8, 3.322.

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traditional theme, the result would have been an artistic poem. But the *DRN* is one of the world's greatest poems not because it is merely artistic, but because it is also full of passion, fervour, and emotion : the poet is inspired with a deep sense of missionary purpose and puts all his heart and soul, as well as all his intellectual power, into his writing, and that is largely why his work still grips our attention, still throbs with life and excitement. If he had not been an Epicurean, this inspiration would have been lacking. Moreover, Epicureanism was far from being a narrow, dull, and trivial subject. Indeed, it would be difficult to think of a subject more broad and inspiring than that of the *DRN*, embracing as it does the nature of the universe, the creation of the world, the origins of life on earth, the phenomena of earth and sky, the life and progress of man, his moral condition, the gods, the soul, and death. Here was " a fit theme for an epic poet, a theme no less rich in content than the *Divina Commedia* or *Paradise Lost*." ⁵⁶ Here was ample scope for Lucretius' extraordinary powers of observation, imagination, and description, especially as the imperceptibility of the atoms necessitated the employment of numerous analogies from the perceptible world to prove their existence and illustrate their nature and movement. Both in its spirit and in the breadth and depth and importance of its theme, the *DRN* differs markedly from the didactic works of the Alexandrian poets and is similar to the *Περὶ Φύσεως* of Empedocles. Lucretius undoubtedly looked upon Empedocles as his model as a philosopher-scientist writing in verse : he imitates

⁵⁶ B. Farrington in D. R. Dudley (ed.), *Lucretius* 20.

him several times, expresses his high admiration for him in 1.729-733, and undoubtedly meant the title *De Rerum Natura* to underline his debt to him as well as to Epicurus.⁵⁷

Although Lucretius wanted his message to benefit as many people as possible both in his own time and in time to come, the *DRN* is addressed to one man, Memmius. As has been pointed out above (p. xvii), Memmius is certainly the well-known Gaius Memmius, the politician, erotic poet, and patron of poets. He is said by Cicero⁵⁸ to have been accomplished in Greek literature, though scornful of Latin literature, and a gifted orator who did not however make the most of his natural talents because he shirked *non modo dicendi verum etiam cogitandi laborem*. His behaviour in both his private and public life left much to be desired: his morals gave scandal in an age not exactly notable for restraint in sexual conduct; he was accused of using bribery in his endeavour to gain the consulship in 54; and during his exile in Athens he went out of his way to upset the Epicureans by obtaining possession of the revered ruins of Epicurus' house and announcing his intention to demolish them and erect a new building on the site. In view of his bad character and subsequent hostility to the Epicurean school, some scholars have doubted whether he is in fact the addressee of the *DRN*. Others, who accept the traditional identification, have thought it strange that Lucretius chose to dedicate his fine poem to such an unprincipled and unworthy man.

⁵⁷ See p. li below.

⁵⁸ *Brut.* 70.247.

That Lucretius' Memmius is the famous Memmius is virtually proved by 1.42-43:

nec Memmi clara propago
talibus in rebus communi desse saluti.

The reference is clearly to a notable politician of aristocratic birth. Moreover, Lucretius' powerful attacks on *ambitio* and *avaritia* (2.1-54, 3.59-86, 995-1002, 5.1120-1135) and sexual passion (4.1037-1191), his constant requests for attention (e.g. 2.66, 3.135, 4.931, 6.920), and his implied doubts about his pupil's readiness to make a serious study of Epicureanism (1.50-53, 410-417), though addressed, through Memmius, to the general reader, are particularly understandable if they are intended first and foremost for a man who was unscrupulously ambitious, licentious, and intellectually lazy. Even the poet's apologies for the poverty of the Latin language (1.139, 832, 3.260) may possibly be seen as reflecting his awareness of Memmius' scorn of Latin literature. Memmius' behaviour with regard to Epicurus' house certainly does not prove that he is not the addressee of the *DRN*. His hostility to Epicureanism during his exile can be plausibly attributed to his annoyance at having been made to look extremely foolish by Lucretius, who had warned him that *honorum caeca cupido* leads only to disappointment, disaster, and disgrace. When Memmius agreed to be the addressee of the *DRN*, he probably had no idea what he was letting himself in for. If indeed he ever did show any real interest in Epicureanism, it was probably because he was attracted by the doctrine that pleasure is the highest good. Once he learnt that Epicurus' and Lucretius' conception of pleasure was very different

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from his own, no doubt his interest evaporated and he resented having been made the recipient of such a severe moral lecture.

Those who think it strange that Lucretius dedicated the *DRN* to such a man as Memmius misunderstand the purpose of the work. It is not merely dedicated to Memmius. Lucretius did not compose his poem and then, like Catullus (1.1-2), wonder

cui dono lepidum novum libellum
arida modo pumice expolitum ?

He tells us in 1.24-27 and 52-55 that the work is composed *for* Memmius. And in 1.140-145, after referring to the difficulties of his task, he says :

sed tua me virtus tamen et sperata voluptas
suavis amicitiae quemvis efferre laborem
suadet, et inducit noctes vigilare serenas
quaerentem dictis quibus et quo carmine demum
clara tuae possim praepandere lumina menti,
res quibus occultas penitus convisere possis.

The words *sperata voluptas suavis amicitiae* are especially important. Lucretius, who was almost certainly a wealthy aristocrat, is not addressing Memmius as his patron or seeking his patronage. The mention of *amicitia* in conjunction with *voluptas*, and the application of the epithet *suavis*, show that the reference is not to ordinary friendship, but to the friendship of fellow-Epicureans,⁵⁹ so that Lucretius is saying that the inspiration of his poem is the hope of converting Memmius to Epicureanism.

⁵⁹ Cf. P. Boyancé, "Lucrèce et son disciple," *Rev. Ét. Anc.* 52 (1950) 230-231; B. Farrington, "Lucretius and Memmius," *Anales de Filología Clásica* 7 fasc. 1 (1959) 15-16.

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This being so, it should cause no surprise that he chose to address a man who was no paragon of virtue and who had little sympathy with Epicureanism; indeed it would have been absurd if he had set out to reform and convert one who was already reformed and converted. The probability is that one of the main reasons why he chose Memmius as his addressee was that Memmius' imperfect character, as well as his prominent position in public life, meant that his conversion would be difficult and, if indeed it could be achieved, a matter of the greatest consequence: if Lucretius could persuade him, surely he could persuade anyone!

But there was another reason why Memmius was especially suited to be Lucretius' addressee. As we have seen, Memmius was a cultured man with a taste for poetry, and the need to convert him gave Lucretius an excuse to write the Epicurean poem which he obviously longed to write. An excuse was needed; for although Parmenides and Empedocles had presented their philosophies in poems, no Epicurean had used verse, and Epicurus himself had stated (Diogenes Laertius 10.121b): "Only the wise man would be able to discuss music and poetry correctly, but he would not actually compose poems." When Epicurus said this, he was no doubt thinking chiefly of poetry which was at best trivial, and at worst morally harmful because it propagated false ideas about the gods. It perhaps never occurred to him that it was possible to write a poem in which the true nature of the universe was explained with the aim of banishing superstitious fears. But it does seem probable that he regarded poetic treatment as incompatible with the clarity of expression on which

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he insisted, but which in fact he himself often failed to achieve. Lucretius is well aware that his own choice of form is unorthodox, but is not ashamed of being an Epicurean poet. In 1.921-950 and 4.1-25 (=1.926-950) he proudly asserts his claim to be a pioneer and explains his motive for writing a poem. He claims originality (1.931-934, 4.6-9)

primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.

This passage not only shows that his philosophy is of first importance, but also implies that his exposition of Epicureanism is the more lucid and effective for being poetic. In the immediately following lines he makes his attitude explicit. He compares himself to a doctor who, trying to administer distasteful medicine to a child, first coats the rim of the cup with honey, to trick the child into taking the beneficial dose: since Epicureanism seems somewhat unattractive to those who have not tried it, he has chosen to coat it with the sweet honey of the Muses, in the hope of holding Memmius' attention and enabling him to comprehend the whole scheme of the universe. Lucretius, the healer of the mind, differs from the doctor in that he does not deceive his patient: with striking frankness he tells Memmius that his poetic art is a bait. He knows that, in setting forth Epicurean doctrines in verse, he is using the form which not only is natural to him, but which also is most likely to be palatable and acceptable to Memmius and other cultured Romans. If anyone had reproved him for defying his master's opinion on poetry, he might well have replied that

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it is only common sense for a physician to try the method of treatment which he is most skilled to give and to which his patients are most likely to respond.

Lucretius' original treatment of Epicureanism is manifested not only in his choice of form, but also in his arrangement of his subject-matter, though so few of his master's numerous writings have survived that we cannot always be sure how closely he is following his sources. His title suggests that one of his chief sources, if not his chief source, was Epicurus' *Περὶ Φύσεως*, but the *DRN* is unlikely to have been modelled closely on it or any single Epicurean work. He follows his master faithfully, but not slavishly. This does not mean that he is occasionally unorthodox. But because he was a poet, because he possessed a brilliantly original and penetrative mind, because he lived in a different age from Epicurus and in a different country, and because Epicureanism was not a dead philosophy, but a philosophy which was alive and aimed and claimed to be relevant to contemporary needs, it was inevitable that he should arrange his master's teachings in a new way, sometimes alter their emphasis, and present them in a Roman context.

As has been mentioned above (p. xxx), he devotes most of his poem to exposition of Epicurus' physical doctrines and, although the purpose of his work is ethical, gives no systematic account of Epicurean ethics. Why is this? Kenney⁶⁰ is one of those who believe that the reason is primarily poetical: he observes that the didactic tradition "did not offer a model for the exposition of ethical doctrine"

⁶⁰ *Op. cit.* 10.

and questions whether a metrical account of Epicurean ethical theory is imaginable. It is true that Lucretius was obviously conscious of following in the steps of earlier didactic poets, notably Empedocles, and it is also true that Epicurean physics was admirably suited to his genius for observation and description, but the suggestion that Epicurean ethical theory is poetically intractable is not true and indeed comes oddly from an editor of Book 3, for the final section of that book (830-1094), which has an ethical theme, is one of the most brilliant and powerful passages in all Latin poetry. The proem to Book 2 (1-61) is another notable example of an ethical passage which is also superb poetry. It may be added that, if Lucretius had not existed, few would have believed that Epicurean *physics* could be transmuted into a poem as great as the *DRN*. The probability is that, although poetic considerations undoubtedly had something, and perhaps much, to do with Lucretius' decision to concentrate on physics, he was influenced partly, and perhaps primarily, by his conviction that a large dose of this particular medicine was what Memmius and a morally diseased Roman society needed. It is likely that many of his contemporaries knew little about Epicureanism except that it taught that pleasure is the highest good, and had little idea how Epicurus believed that it should be attained. And so he may well have wished to clear away popular misconceptions of Epicureanism not only by showing that most pleasure is achieved by living a simple life, but also by emphasizing in the strongest possible way that the moral end can be attained only through deep and serious study of the nature of things.

Lucretius' style is consciously archaic. The Latin poet who influenced him most profoundly was Ennius, whom he praises generously in 1.117-119. He uses archaic words and forms; and, like Ennius, he delights in assonance and alliteration, often introduces compound adjectives, and frequently ends his lines with polysyllabic words. At the same time his command of language and metre is much more subtle, much more complete than Ennius', so that his hexameters share the best qualities of Ennius' verses, namely an impressive weight and vigour, and yet are far more polished, far more artistic, far more beautiful. To be fully appreciated, his poetry must be read aloud, as he intended it to be read.

Other Latin poets imitated by him include Pacuvius, Lucilius, and Cicero. The most important Greek influences on his poetry are Homer, whom he regards as supreme among poets (3.1037-1038), and Empedocles. But although he differed from many of his contemporaries in drawing most of his poetic inspiration from Ennius and early Greek writers rather than from the Alexandrians, he was by no means untouched by the influence of Hellenistic poetry.⁶¹

His style is varied. The *DRN* is both a kind of epic and a didactic poem addressed to an individual, and so "les images les plus éblouissantes et les plus grandioses se mêlent aux formes et au ton de la conversation courante."⁶² Two of Lucretius' most notable qualities as an effective preacher are his command of rhetoric and his considerable power of

⁶¹ Cf. E. J. Kenney, "Doctus Lucretius," *Mnemos.* ser. 4, 23 (1970) 366-392.

⁶² R. Waltz, *Lucreté. De la Nature*, Paris (1954) 12.

satire. There is a marked contrast in style between technical and non-technical passages, but it is a mistake to suppose that the passages of scientific exposition contain no poetry. On the contrary, these passages are rich in metaphor and illustration, and if Aristotle⁶³ was right in thinking that the greatest thing for a poet is to have a genius for metaphor, the *DRN* is a very great poem not just *in partibus*, but *in toto*.

4. THE MANUSCRIPTS OF LUCRETIVS

The oldest Lucretian manuscript, if indeed it is Lucretian, is the newest discovery. 1989 saw the publication by K. Kleve⁶⁴ of sixteen fragments identified, with what the editor calls "a certain degree of plausibility", as belonging to *De Rerum Natura*. The text is preserved on papyri found in the Villa of the Papyri at Herculaneum in the mid-eighteenth century. For a long time after their discovery the papyri had lain abandoned as illegible, but in recent years new techniques for opening, photographing, and deciphering severely carbonized papyri such as these have been developed. The fragments are so minute and bear so few certainly identifiable letters that at this stage some scepticism about their proposed authorship seems pardonable and prudent. However, one would like to believe that they are Lucretian and, if further work confirms that they are, their discovery is of great significance. According to Kleve, they come from four of the six books (1, 3, 4, 5),⁶⁵ and so he concludes that the whole

⁶³ *Poet.* 1459A. ⁶⁴ "Lucretius in Herculaneum", *Cronache Ercolanesi* 19 (1989) 5–27.

⁶⁵ One of the fragments (Pap. fr. H) is, if correctly deciphered and restored, of particular interest for its relevance to the problem posed by l. 873–874. See critical note there.

poem was in the library of the villa, which is undoubtedly that occupied by the first century B.C. Epicurean writer and teacher Philodemus. Since Herculaneum was overwhelmed in the eruption of Vesuvius in A.D. 79, the copy must have been written within not much more than a century of Lucretius' death, and it may well have been made during Philodemus' lifetime, i.e. before c. 40 B.C. Although the presence of *De Rerum Natura* in the Herculaneum library would not prove that Lucretius and Philodemus engaged in philosophical discussion and collaboration, it would suggest that Lucretius was read and seriously regarded in the Neapolitan school. Those who have viewed him as isolated from his Epicurean contemporaries may have to revise their opinion.

The two most important manuscripts of *De Rerum Natura* are O and Q—the Codex Oblongus and Codex Quadratus (so called from their shape⁶⁶) in Leiden. Both are in Carolingian minuscules. O was written early in the ninth century in the Palace School of Charlemagne and "corrected" by the Irish scholar Dungal. Q was written later in the same century in north-east France. We also have fragments (a total of eighteen leaves) of a manuscript, or perhaps of two manuscripts, written in south-west Germany in the middle of the ninth century. These fragments, which are closely related to Q, are referred to by the letters G (Schedae Gottorpienses, in Copenhagen), V (Schedae Vindobonenses priores, in Vienna), and U (Schedae Vindobonenses posteriores, also in Vienna). G and V certainly belong to the same manuscript, and U probably belongs to it too. OQGVU are

⁶⁶ Oblongus measures 31.4 cm × 20.4 cm, Quadratus 21.5 cm × 22.7 cm. There are facsimile editions by E. Chatelain: *Codex Vossianus Oblongus phototypice editus* (Leiden, 1908); *Codex Vossianus Quadratus phototypice editus* (Leiden, 1913).

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derived—QGVU *via* an intervening copy—from an archetype written in minuscules on pages bearing twenty-six lines front and back.⁶⁷ Certain recurrent corruptions suggest that the archetype was copied from another manuscript in minuscules, which in turn was derived from a fourth- or fifth-century manuscript in rustic capitals.

All other Lucretian manuscripts, some fifty in number, date from the fifteenth and sixteenth centuries, and are either wholly or largely derived from a manuscript found in a monastery by Poggio Bracciolini in 1417 while he was attending the Council of Constance. Poggio tells us that the monastery was not near Constance, but he does not reveal its location. His manuscript does not survive, but one written by his friend Niccolò Niccoli and preserved in Florence (Codex Laurentianus 35.30, known as L) is probably a direct copy of it. L is the most important of the Italian manuscripts. Until recently it was generally supposed that Poggio's manuscript was a brother of O and Q. However, most scholars now accept the view, favoured by Diels, Müller,⁶⁸ and Cini,⁶⁹ that it was an offspring of O, from which it was copied after O had been "corrected", so that whatever readings in the Italian manuscripts disagree with those of O have no ancient authority, but

⁶⁷ The archetype suffered physical damage both before and while it was being copied: several leaves became detached and were erroneously replaced, and the consequent dislocation of passages in the surviving manuscripts proves their derivation from a manuscript which had twenty-six lines to a page.

⁶⁸ K. Müller, "De codicum Lucretii Italicorum origine", *Museum Helveticum* 30 (1973) 166–178, reproduced in his edition (Zürich, 1975) 297–319.

⁶⁹ G. F. Cini, "La posizione degli 'Italici' nello stemma lucreziano", *Atti e memorie dell'Accademia Toscana la Colombaria* 41 (1976) 115–169.

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are either scribal errors or conjectures of Italian scholars. Many of the conjectures, especially those in F (Codex Laurentianus 35.31), are accepted by modern editors.⁷⁰

⁷⁰ The textual tradition of Lucretius is admirably summarized by L. D. Reynolds in Reynolds, ed., *Texts and Transmission: a Survey of the Latin Classics* (Oxford, 1983) 218–222. Lachmann's reconstruction of the archetype is elaborated and modified by G. P. Gool, "A Lost Manuscript of Lucretius", *Acta Classica* 1 (1958) 21–30. On the Italian manuscripts, see M. D. Reeve, "The Italian Tradition of Lucretius", *Italia Medioevale e Umanistica* 23 (1980) 27–48.

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CONSPECTUS SIGLORUM

Pap.fr. = papyrus fragment from Herculaneum published by K. Kleve, *Cronache Ercolanesi* 19 (1989) 5–27.

- O = Oblongus (Codex Leidensis Voss. lat. 30).
 - Q = Quadratus (Codex Leidensis Voss. lat. 94).
 - G = Schedae Gottorpienses.
 - V = Schedae Vindobonenses priores.
 - U = Schedae Vindobonenses posteriores.
 - A = Codex Vaticanus lat. 3276.
 - B = Codex Vaticanus Barberinus lat. 154.
 - C = Codex Cantabrigiensis Nn. 2.40.
 - F = Codex Laurentianus 35.31.
 - L = Codex Laurentianus 35.30.
 - M = Codex Monacensis 816a.
 - P = consensus of ABCFL, *i.e.* what may be assumed to have been the reading of Poggio's manuscript.
- corr. = corrected.

Note : Abbreviated references to authors and books are generally those of the *Oxford Classical Dictionary* (2nd ed.). The following abbreviations are used for works of Epicurus :

- Ep. ad Hdt.* = *Epistula ad Herodotum*.
- Ep. ad Pyth.* = *Epistula ad Pythoclem*.
- Ep. ad Men.* = *Epistula ad Menoeceum*.
- Sent.* = *Sententiae* (Principal Doctrines).
- Sent. Vat.* = *Sententiae Vaticanae* (Vatican Sayings).
- Usener = H. Usener, *Epicurea*.

LUCRETIUS

T. LUCRETI CARI
DE RERUM NATURA

LIBER PRIMUS

AENEADUM genetrix, hominum divomque voluptas,
alma Venus, caeli subter labentia signa
quae mare naverum, quae terras frugiferentis
concelebras, per te quoniam genus omne animantum
concipitur visitque exortum lumina solis : 5
te, dea, te fugiunt venti, te nubila caeli
adventumque tuum, tibi suavis daedala tellus
summittit flores, tibi rident aequora ponti
placatumque nitet diffuso lumine caelum.
nam simul ac species patefactast verna diei 10
et reserata viget genitabilis aura favoni,
aeriae primum volucres te, diva, tuumque
significant initum percussae corda tua vi.
15 inde ferae, pecudes persultant pabula laeta
14 et rapidos tranant amnis : ita capta lepore 15

^a Venus in this invocation is a figure of extraordinary complexity : as well as being the goddess of traditional religion and mythology who was mother of Aeneas and the Roman people, who was loved by Mars, and who appears on the coins of the *gens Memmia*, she is the Empedoclean principle of Love (as opposed to Mars = Strife), representing

LUCRETIUS

BOOK I

MOTHER of Aeneas and his race, darling of men and gods, nurturing Venus,^a who beneath the smooth-moving heavenly signs fill with yourself the sea full-laden with ships, the earth that bears the crops, since through you every kind of living thing is conceived and rising up looks on the light of the sun : from you, O goddess, from you the winds flee away, the clouds of heaven from you and your coming ; for you the wonder-working earth puts forth sweet flowers, for you the wide stretches of ocean laugh, and heaven grown peaceful glows with outpoured light. For as soon as the vernal face of day is made manifest, and the breeze of the teeming west wind blows fresh and free, first the fowls of the air proclaim you, divine one, and your advent, pierced to the heart by your might. Next wild creatures and farm animals dance over the rich pastures and swim across rapid rivers : so greedily does each one follow you, held captive by your charm,

the creative forces in the world, and she is the personification of the Epicurean *summum bonum*, pleasure (*voluptas*). Lucr. addresses her not only as the power of physical creation, but also as the giver of charm to his poetry (21-28). Spenser imitates 1-25 in *The Faerie Queene* 4.10.44-47.

te sequitur cupide quo quamque inducere pergis.
denique, per maria ac montis fluviosque rapacis
frondiferasque domos avium camposque virentis,
omnibus incutiens blandum per pectora amorem,
efficis ut cupide generatim saecula propagent. 20

Quae quoniam rerum naturam sola gubernas,
nec sine te quicquam dias in luminis oras
exoritur neque fit laetum neque amabile quicquam,
te sociam studeo scribendis versibus esse
quos ego de rerum natura pangere conor 25
Memmiadae nostro, quem tu, dea, tempore in omni
omnibus ornatum voluisti excellere rebus.
quo magis aeternum da dictis, diva, leporem.

Effice ut interea fera moenera militiai
per maria ac terras omnis sopita quiescant ; 30
nam tu sola potes tranquilla pace iuvare
mortalis, quoniam belli fera moenera Mavors
armipotens regit, in gremium qui saepe tuum se
reiecit aeterno devictus vulnere amoris,
atque ita suspiciens tereti cervice reposta 35
pascit amore avidos inhians in te, dea, visus,
eque tuo pendet resupini spiritus ore.
hunc tu, diva, tuo recubantem corpore sancto
circumfusa super, suavis ex ore loquellas
funde petens placidam Romanis, incluta, pacem ; 40
nam neque nos agere hoc patriai tempore iniquo

34 reiecit *Lactantius Placidius on Statius, Theb. 3.296*
(*manuscripts LP*^b): reiecit *QG, Lact. Plac., loc. cit. (MP*^a):
reficit *O*

^a The title of the poem—a translation of *Περί Φύσεως*, the title both of Epicurus' chief work and of one of the poems of Empedocles, whom Lucr. deeply admired (716-733).

^b It has been suggested (D. E. W. Wormell in *G and R*

whither you go on to lead them. Then throughout seas and mountains and sweeping torrents and the leafy dwellings of birds and verdant plains, striking alluring love into the breasts of all creatures, you cause them greedily to beget their generations after their kind.

²¹ Since therefore you alone govern the nature of things, since without you nothing comes forth into the shining borders of light, nothing joyous and lovely is made, you I crave as partner in writing the verses, which I essay to fashion on the Nature of Things,^a for my friend Memmius, whom you, goddess, have willed at all times to excel, endowed with all gifts. Therefore all the more grant to my speech, goddess, an ever-living charm.

for the benefit of Memmius.

²⁹ Cause meanwhile the savage works of war to sleep and be still over every sea and land. For you alone can delight mortals with quiet peace, since Mars^b mighty in battle rules the savage works of war, who often casts himself upon your lap wholly vanquished by the ever-living wound of love, and thus looking upward, with shapely neck thrown back, feeds his eager eyes with love, gaping upon you, goddess, and, as he lies back, his breath hangs upon your lips.^c There as he reclines, goddess, upon your sacred body, do you, bending around him from above, pour from your lips sweet coaxings, and for your Romans, illustrious one, crave quiet peace. For in this time of our country's troubles neither can I do ser. 2, 7 [1960] 61) that Lucr. uses the archaic form *Mavors* to emphasize the connexion between Mars and *mors*.

Persuade Mars your lover to give us peace.

^c Lucr.'s description, which may owe something to a painting or sculpture, probably had some influence, through Politian, on Botticelli's *Marte e Venere* (cf. note on 5.740). Certainly Byron had it in mind in *Childe Harold* 4.51.

possumus aequo animo nec Memmi clara propago
 talibus in rebus communi desse saluti.
 omnis enim per se divom natura necessest
 immortalis aeo summa cum pace fruatur 45
 semota ab nostris rebus seiunctaque longe ;
 nam privata dolore omni, privata periculis,
 ipsa suis pollens opibus, nil indiga nostri,
 nec bene promeritis capitur neque tangitur ira.

Quod superest, vacuas auris animumque sagacem
 semotum a curis adhibe veram ad rationem, 51
 ne mea dona tibi studio disposta fidei,
 intellecta prius quam sint, contempta relinuas.
 nam tibi de summa caeli ratione deumque
 disserere incipiam, et rerum primordia pandam, 55
 unde omnis natura creet res auctet alatque
 quove eadem rursus natura perempta resolvat,
 quae nos materiem et genitalia corpora rebus
 reddunda in ratione vocare et semina rerum
 appellare suemus et haec eadem usurpare 60
 corpora prima, quod ex illis sunt omnia primis.

Humana ante oculos foede cum vita iaceret
 in terris oppressa gravi sub religione,

44-49, which recur in 2.646-651, are excluded or bracketed by most editors. However, strong arguments for the retention of the lines are summarized by Bailey 601-602, 1750. It is true that the passage comes in abruptly, and it may be assumed that *Lucr.* first wrote it in Book 2, and later inserted it here without adjusting it properly to its new context. In view of this manifest lack of revision, it seems unnecessary and unwise to assume a lacuna either before or after the lines 50 vacuas auris animumque sagacem scholia Veronensia on *Virgil*, *G.* 3.3: ut (deleted by *O corr.*) vacuas auris OQG

my part with untroubled mind, nor can the noble scion of the Memmii at such a season be wanting to the common weal.^a [I pray to you for peace,] for the very nature of divinity must necessarily enjoy immortal life in the deepest peace, far removed and separated from our affairs; for without any pain, without danger, itself mighty by its own resources, needing us not at all, it is neither propitiated with services nor touched by wrath.^b

The gods dwell apart in eternal peace.

⁵⁰ For the rest,^c ears unpreoccupied and keen intelligence detached from cares you should apply to true philosophy, that my gifts, set forth for you with faithful solicitude, may not by you be contemptuously discarded before they have been apprehended. For I shall begin to discourse to you upon the most high system of heaven and of the gods, and I shall disclose the first-beginnings of things,^d from which nature makes all things and increases and nourishes them, and into which the same nature again reduces them when dissolved—which, in discussing philosophy, we are accustomed to call matter, and bodies that generate things, and seeds of things, and to entitle the same first bodies, because from them as first elements all things are.

I have to explain

(1) heaven and the gods, (2) the elements of matter.

⁶² When man's life lay for all to see foully grovelling upon the ground, crushed beneath the weight of

Epicurus first defied Superstition

^a Probably an allusion to Memmius' praetorship of 58 B.C.

^b Cf. Epicurus, *Sent.* 1.

^c The absence of the expected address to Memmius by name is probably due to lack of revision rather than to a textual loss (cf. critical note on 44-49), unless—and this is improbable—the name has dropped out of 50, a defective line in the manuscripts (see critical note).

^d The atoms.

quae caput a caeli regionibus ostendebat
 horribili super aspectu mortalibus instans, 65
 primum Graius homo mortalis tollere contra
 est oculos ausus primusque obsistere contra,
 quem neque fama deum nec fulmina nec munitanti
 murmure compressit caelum, sed eo magis acrem
 inritat animi virtutem, effringere ut arta 70
 naturae primus portarum claustra cupiret.
 ergo vivida vis animi pervicit, et extra
 processit longe flammantia moenia mundi
 atque omne immensum peragravit mente animoque,
 unde refert nobis victor quid possit oriri, 75
 quid nequeat, finita potestas denique cuique
 quam sit ratione atque alte terminus haerens.
 quare religio pedibus subiecta vicissim
 obteritur, nos exaequat victoria caelo.

Illud in his rebus vereor, ne forte rearis 80
 impia te rationis inire elementa viamque
 indugredi sceleris. quod contra saepius illa
 religio peperit scelerosa atque impia facta :

66 tollere *OQGP*: tendere *Nonius p. 662 Lindsay*, which may be right (cf. 4.325, *Virgil, Aen. 2.405*), since *Nonius* quotes the line specifically to illustrate this use of the verb

^a This or "false religion," not "religion," is the meaning of *religio*. The Epicureans were opposed not to religion (cf. 6.68-79), but to the traditional religion which taught that the gods govern the world. That *Lucretius* regarded *religio* as synonymous with *superstitio* is implied by *super . . . instans* in 65. The connexion of superstition with the celestial regions, stated in 64, is emphasized by the fact that the letters of *RELIGIONE* are contained in *caELI REGIONibus* (for further examples of this kind of play upon words in *Lucretius*, see P. Friedländer in *AJPhil.* 62 [1941] 16-34). On

Superstition,^a which displayed her head from the regions of heaven, lowering over mortals with horrible aspect, a man of Greece^b was the first that dared to uplift mortal eyes against her, the first to make stand against her; for neither fables of the gods could quell him, nor thunderbolts, nor heaven with menacing roar, but all the more they goaded the eager courage of his soul, so that he should desire, first of all men, to shatter the confining bars of nature's gates. Therefore the lively power of his mind prevailed, and forth he marched far beyond the flaming walls of the world,^c as he traversed the immeasurable universe in thought and imagination; whence victorious he returns bearing his prize, the knowledge what can come into being, what can not, in a word, how each thing has its powers limited and its deep-set boundary mark.^d Therefore Superstition is now in her turn cast down and trampled underfoot, whilst we by the victory are exalted high as heaven.

and taught us the laws of Nature.

⁸⁰ One thing I fear in this matter, that in this your apprenticeship to philosophy you may perhaps see impiety, and the entering on a path of crime; whereas on the contrary more often it is that very Superstition which has brought forth criminal and

Not philosophy but Superstition is impious,

the imagery in 62-79, see especially D. West, *The Imagery and Poetry of Lucretius* 57-63.

^b Epicurus.

^c Cf. Thomas Gray, *The Progress of Poesy* 3.2 (of Milton): "He pass'd the flaming bounds of space and time." *Lucretius* refers to the fiery belt around our world (cf. 2.1144, 5.454), but also is picturing Epicurus as a general successfully storming the walls and setting them ablaze.

^d 76-77 = 595-596, 5.89-90, 6.65-66.

Aulide quo pacto Triviai virginis aram
 Iphianassai turparunt sanguine foede 85
 ductores Danaum delecti, prima virorum.
 cui simul infula virgineos circumdata comptus
 ex utraque pari malarum parte profusast,
 et maestum simul ante aras adstare parentem
 sensit et hunc propter ferrum celare ministros 90
 aspectuque suo lacrimas effundere civis,
 muta metu terram genibus summissa petebat.
 nec miserae prodesse in tali tempore quibat
 quod patrio princeps donarat nomine regem ;
 nam sublata virum manibus tremibundaque ad aras 95
 deductast, non ut sollemni more sacrorum
 perfecto posset claro comitari Hymenaeo,
 sed casta inceste nubendi tempore in ipso
 hostia concideret mactatu maesta parentis—
 exitus ut classi felix faustusque daretur. 100
 tantum religio potuit suadere malorum.

Tutemet a nobis iam quovis tempore, vatum
 terroloquis victus dictis, desciscere quaeres.
 quippe etenim quam multa tibi iam fingere possunt
 somnia, quae vitae rationes vertere possint 105
 fortunaeque tuas omnis turbare timore !

104 tibi iam *OP*: tibi me *QG*: tibimet (*cf.* 102) *E. Orth, Helmantica 11 (1960) 123-124* possunt *Marullus*:
 possum *OQGP*

^a A port of Boeotia where the Greek ships assembled before sailing to Troy. Artemis, whom Agamemnon had offended, detained the fleet with contrary winds. To appease her, Agamemnon sacrificed his daughter Iphigenia, whom *Lucr.* calls Iphianassa. Iphigenia came to Aulis in the belief that she was to marry Achilles, and in 95-96 *Lucr.* uses terms (*sublata, tremibundata, deducta*) that are appropriate not only to the sacrifice, but also to a wedding ceremony.

impious deeds: as when at Aulis^a the altar of our Lady of the Crossways^b was foully defiled by the blood of Iphianassa, shed by chosen leaders of the Danai, chieftains of the host. So soon as the ribbon^c had bound her maiden tresses falling in equal lengths down either cheek, so soon as she saw her father standing sorrowful before the altar, and by his side attendants hiding the knife, and the people shedding tears at the sight of her, dumb with dread, she sank to the ground upon her knees. Alas, poor girl! no help could it be to her at such a time that the name of father had been bestowed on the king first by her; for uplifted by the hands of men, all trembling she was brought to the altar, not that amidst solemn and sacred ritual she might be escorted by loud hymeneal song, but a clean maiden to fall by unclean hands at the very age of wedlock, a victim sorrowful slain by a father's hand: all in order that a fair and fortunate release might be given to the fleet. So potent was Superstition in persuading to evil deeds.^d

102 You will yourself some day or other seek to fall away from us, overborne by the terrific utterances of priests.^e Yes indeed, for how many dreams can they even now invent for you, enough to upset the principles of life and to confound all your fortunes

^b Diana (*Artemis*).

^c The mark of the victim.

^d Voltaire, an ardent admirer of *Lucr.*, believed that line 101 would last as long as the world.

^e *vatum* (*cf.* 109) refers to all professional supporters of traditional religion and mythology, both priests and poets—including (see E. J. Kenney, *Mnemos.* ser. 4, 23 [1970] 378) Ennius.

et merito ; nam si certam finem esse viderent
 aerumnarum homines, aliqua ratione valerent
 religionibus atque minis obsistere vatum.
 nunc ratio nulla est restandi, nulla facultas, 110
 aeternas quoniam poenas in morte timendum.
 ignoratur enim quae sit natura animai,
 nata sit an contra nascentibus insinuetur,
 et simul intereat nobiscum morte dirempta,
 an tenebras Orci visat vastasque lacunas, 115
 an pecudes alias divinitus insinuet se,
 Ennius ut noster cecinit, qui primus amoeno
 detulit ex Helicone perenni fronde coronam
 per gentis Italas hominum quae clara clueret ;
 etsi praeterea tamen esse Acherusia templa 120
 Ennius aeternis exponit versibus edens,
 quo neque permanent animae neque corpora nostra,
 sed quaedam simulacra modis pallentia miris ;
 unde sibi exortam semper florentis Homeri
 commemorat speciem lacrimas effundere salsas 125
 coepisse et rerum naturam expandere dictis.
 Quapropter bene cum superis de rebus habenda
 nobis est ratio, solis lunaeque meatus
 qua fiant ratione, et qua vi quaeque gerantur
 in terris, tum cum primis ratione sagaci 130
 unde anima atque animi constet natura videndum,
 et quae res nobis vigilantibus obvia mentes

122 permanent *OQGP*: permanent *Politian*, an attractive proposal
 130 tum *BCF*: tunc *OQG*

^a Ennius (239-169 B.C.), Lucr.'s chief poetic model, accepted the Pythagorean doctrine of metempsychosis, and believed that the soul of Homer had passed into himself. *ENNIUS* . . . *perENNI* (117-118) emphasizes the immortality of the poet's work (*cf.* note on 63).

^b Mountain in Boeotia, home of the Muses.

^c One of the rivers of the underworld ; hence the lower

with fear ! And with reason ; for if men saw that a limit has been set to tribulation, somehow they would have strength to defy the superstitions and threatenings of the priests ; but, as it is, there is no way of resistance and no power, because everlasting punishment is to be feared after death. For there is ignorance what is the nature of the soul, whether it be born or on the contrary find its way into men at birth, and whether it perish together with us when broken up by death, or whether it visit the gloom of Orcus and his vasty chasms, or by divine ordinance find its way into animals in our stead, as our own Ennius ^a sang, who first brought down from pleasant Helicon ^b a chaplet of evergreen leafage to win a glorious name through the nations of Italian men ; although nevertheless he also sets forth in everlasting verses that there exist regions of Acheron, ^c which neither our spirits nor our bodies endure to reach, but certain similitudes of them pallid in wondrous wise ; whence he avers that the likeness of ever deathless Homer issued forth, and began to shed salt tears and to unfold the nature of things.

¹²⁷ Therefore not only must we lay down right principles concerning things celestial, how the courses of sun and moon come about, and by what power all is done upon earth, but also most especially we must examine with keen-scented reasoning, of what the spirit is made and the nature of the mind, ^d and what thing it is that meeting us when awake terrifies our

when I explain the truth about Nature
and the structure of Mind and Spirit.

world itself. *templa* (same root as *τέμνω*) is a term of augury for the quarters or houses into which the sky is divided by the augurs. It thus has a solemn tone. The *templum* of a god is his *τέμενος*. Hence the wider sense of regions or realms.

^d On the *animus* and *anima*, see 3.94-416 and Introduction p. xxxvi.

terrificet morbo adfectis somnoque sepultis,
cernere uti videamur eos audireque coram,
morte obita quorum tellus amplectitur ossa. 135

Nec me animi fallit Graiorum obscura reperta
difficile inlustrare Latinis versibus esse,
multa novis verbis praesertim cum sit agendum
propter egestatem linguae et rerum novitatem ;
sed tua me virtus tamen et sperata voluptas 140
suavis amicitiae quemvis efferre laborem
suadet, et inducit noctes vigilare serenas
quaerentem dictis quibus et quo carmine demum
clara tuae possim praepandere lumina menti,
res quibus occultas penitus convisere possis. 145

Hunc igitur terrorem animi tenebrasque necesses
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.
principium cuius hinc nobis exordia sumet,
nullam rem e nilo gigni divinitus umquam. 150
quippe ita formido mortalis continet omnis,
quod multa in terris fieri caeloque tuentur
quorum operum causas nulla ratione videre
possunt, ac fieri divino numine rentur.
156 quas ob res ubi viderimus nil posse creari 155
157 de nilo, tum quod sequimur iam rectius inde

^a For the explanation of such visions, see 4.33-41, 757-767.

^b For the abstruseness of Lucr.'s subject, cf. 922, 933 (=4.8); for the poverty of his native language, cf. 832, 3.260; for his consciousness of being a pioneer, cf. 926-934 (=4.1-9), 5.336-337.

^c See Introduction p. xviii.

^d Lucr. again refers to his laborious (though pleasurable) task in 2.730, 3.419.

minds whilst we are labouring under disease, or buried in sleep, so that we seem to see and to hear in very presence those who have encountered death, whose bones rest in earth's embrace.^a

¹³⁶ Nor do I fail to understand that it is difficult to make clear the dark discoveries of the Greeks in Latin verses, especially since we have often to employ new words because of the poverty of the language and the novelty of the matters ^b; but still it is your merit, and the expected delight of your pleasant friendship,^c that persuades me to undergo any labour,^d and entices me to spend the tranquil nights in wakefulness, seeking by what words and what poetry at last I may be able to display clear lights before your mind, whereby you may see into the heart of things hidden.

My task is difficult,

but the hope of gaining your friendship inspires me to tackle it.

¹⁴⁶ This terror of mind therefore and this gloom must be dispelled, not by the sun's rays or the bright shafts of day, but by the aspect and law of nature.^e The first principle of our study we will derive from this, that no thing is ever by divine power produced from nothing.^f For assuredly a dread holds all mortals thus in bond, because they behold many things happening in heaven and earth whose causes they can by no means see, and they think them to be done by divine power. For which reasons, when we shall perceive that nothing can be created from nothing, then we shall at once more correctly understand from that principle what we are seeking, both

Knowledge of Nature's laws will dispel this fear.
I. Nothing can arise out of nothing,

^e 146-148 = 2.59-61, 3.91-93, 6.39-41.

^f Cf. Epicurus, *Ep. ad Hdt.* 38: *πρώτον μὲν ὅτι οὐδὲν γίνεται ἐκ τοῦ μὴ ὄντος.*

158 perspicemus, et unde queat res quaeque creati
155 et quo quaeque modo fiant opera sine divom.

Nam si de nilo fierent, ex omnibu' rebus
omne genus nasci posset, nil semine egeret. 160
e mare primum homines, e terra posset oriri
squamigerum genus et volucres erumpere caelo ;
armenta atque aliae pecudes, genus omne ferarum,
incerto partu culta ac deserta tenerent ;
nec fructus idem arboribus constare solerent, 165
sed mutarentur : ferre omnes omnia possent.
quippe ubi non essent genitalia corpora cuique,
qui posset mater rebus consistere certa ?
at nunc seminibus quia certis quaeque creantur,
inde enascitur atque oras in luminis exit 170
materies ubi inest cuiusque et corpora prima ;
atque hac re nequeunt ex omnibus omnia gigni,
quod certis in rebus inest secreta facultas.

Praeterea cur vere rosam, frumenta calore,
vites autumnno fundi suadente videmus, 175
si non, certa suo quia tempore semina rerum
cum confluerunt, patefit quodcumque creatur,
dum tempestates adsunt et vivida tellus
tuto res teneras effert in luminis oras ?
quod si de nilo fierent, subito exorerentur 180
incerto spatio atque alienis partibus anni,
quippe ubi nulla forent primordia quae genitali
concilio possent arceri tempore iniquo.

Nec porro augendis rebus spatio foret usus

^a Lucr. is translating Epicurus, *Ep. ad Hdt.* 38.

^b That is, there would be no certainty that a wild animal would be born in the wilds, a farm animal on the farm.

the source from which each thing can be made and the manner in which everything is done without the working of gods.

¹⁵⁹ For if things came out of nothing, all kinds of things could be produced from all things, nothing would want a seed.^a Firstly, men could arise from the sea, from the earth scaly tribes, and birds could hatch from the sky ; cattle and other farm animals and every kind of wild creature would fill desert and cultivated land alike, with no certainty as to birth.^b Nor would trees be constant in bearing the same fruit, but they would interchange : all would be able to bear all. Seeing that there would be no bodies apt to generate each kind, how could there be a constant unchanging mother for things ? But as it is, because every kind is produced from fixed seeds, the source of everything that is born and comes forth into the borders of light is that in which is the material of it and its first bodies ; and therefore it is impossible that all things be born from all things, because in particular things resides a distinct power.

¹⁷⁴ Besides, why do we see the rose put forth in spring, corn in the heat, grapes under persuasion of autumn, unless because each created thing discloses itself when at their own time the fixed seeds of things have streamed together, while the due seasons are present and the lively earth safely brings out things young and tender into the borders of light ? But if they came from nothing, suddenly they would arise at uncertain intervals and at unsuitable times of the year ; naturally, for there would be no first-beginnings to be restrained from generative union by the unfavourable season.

¹⁸⁴ Nor furthermore would time be needed for the

or else (1)
anything
could arise
out of any-
thing.

(2) things
could be
created at
any season.

seminis ad coitum, si e nilo crescere possent ; 185
 nam fierent iuvenes subito ex infantibu' parvis,
 e terraque exorta repente arbusta salirent. ...
 quorum nil fieri manifestum est, omnia quando
 paulatim crescunt, ut par est, semina certo,
 crescentesque genus servant ; ut noscere possis 190
 quidque sua de materie grandescere alicue.

Huc accedit uti sine certis imbris anni
 laetificos nequeat fetus submittere tellus
 nec porro secreta cibo natura animantum
 propagare genus possit vitamque tueri ; 195
 ut potius multis communia corpora rebus
 multa putes esse, ut verbis elementa videmus,
 quam sine principiis ullam rem existere posse.

Denique cur homines tantos natura parare
 non potuit, pedibus qui pontum per vada possent 200
 transire et magnos manibus divellere montis
 multaque vivendo vitalia vincere saecla,
 si non materies quia rebus reddita certast
 gignundis e qua constat quid possit oriri ?
 nil igitur fieri de nilo posse fatendumst, 205
 semine quando opus est rebus quo quaeque creatae
 aeris in teneras possint proferrier auras.

Postremo quoniam incultis praestare videmus
 culta loca et manibus melioris reddere fetus,
 esse videlicet in terris primordia rerum 210
 quae nos, fecundas vertentes vomere glebas
 terraique solum subigentes, cimus ad ortus.

191 materie G, Nonius p. 165 Lindsay: materia OP:
 materiae Q, G corr.

^a A solecism in 190: Lucr. writes *crescentes*, as though not *omnia* (188), but *omnes res*, had preceded (*cf. rebus*, 184).

growth of things, for seeds to collect, if they could would be
needed for
growth,
 grow from nothing ; for youths would be made on a
 sudden from small infants, and trees would leap forth
 suddenly arising out of the earth. But manifestly
 none of these things takes place, since all things grow
 little by little, as is proper, from a fixed seed, and in
 growing ^a preserve their kind ; so that you may infer
 that every kind grows and is nourished from its own
 proper material.

¹⁹² Add to this that without fixed seasons of rain (4) crops
and animals could
be produced
without
rain and
food,
 in the year the earth cannot put forth her cheering
 fruits, nor furthermore can living things kept apart
 from food beget their kind and preserve life ; so
 that you may more readily believe many bodies to
 be common to many things, as we see letters to be
 common to words, than that anything can exist with-
 out first-beginnings.

¹⁹⁹ Again, why could not nature produce men so (5) there
would be
no limit of
size,
 large that they could wade through the deep sea as
 a ford and tear asunder great mountains with their
 hands and outlive many generations of life, if it is
 not because a fixed material is assigned for making
 things, from which what can arise is fixed ? There-
 fore we must confess that nothing can come from
 nothing, since all things must have seed, from which
 each being created may be brought forth into the
 soft breezes of air.

²⁰⁸ Lastly, since we see that cultivated land is (6) there
would be
no need for
cultivation.
 better than uncultivated, and returns better fruit by
 the labour of our hands, it is plain to see that there
 are first-beginnings of things in the ground which we
 bring to birth by turning over the fruitful clods with
 the ploughshare and trenching the soil.^b But if

^b Cf. 5.210-211.

quod si nulla forent, nostro sine quaeque labore
sponte sua multo fieri meliora videres.

Huc accedit uti quidque in sua corpora rursum 215
dissoluat natura neque ad nilum interemat res.
nam si quid mortale e cunctis partibus esset,
ex oculis res quaeque repente erepta periret ;
nulla vi foret usus enim quae partibus eius
discidium parere et nexus exsolvere posset. 220
quod nunc, aeterno quia constant semine quaeque,
donec vis obiit quae res diverberet ictu
aut intus penetret per inania dissoluatque,
nullius exitium patitur natura videri.

Praeterea quaecumque vetustate amovet aetas,
si penitus premit consumens materiem omnem, 226
unde animale genus generatim in lumina vitae
redducit Venus, aut reductum daedala tellus
unde alit atque auget generatim pabula praebens ?
unde mare ingenui fontes externaque longe 230
flumina suppeditant ? unde aether sidera pascit ?
omnia enim debet, mortali corpore quae sunt,
infinita aetas consumpse anteacta diesque.
quod si in eo spatio atque anteacta aetate fuere
e quibus haec rerum consistit summa refecta, 235
immortali sunt natura praedita certe.
haud igitur possunt ad nilum quaeque reverti.

Denique res omnis eadem vis causaque volgo
conficeret, nisi materies aeterna teneret,

^a Cf. Epicurus, *Ep. ad Hdt.* 39.

there were none such, you would see all things with-
out labour of ours, of their own will, grow much
better.

²¹⁵ Add to this that nature resolves everything
again into its elements, and does not reduce things
to nothing.^a For if anything were perishable in all
its parts, each thing would then perish in a moment
snatched away from our sight. For there would be
no need of any force, to cause disruption of its parts
and dissolve their connexions. But as it is, because
the seed of all things is everlasting, nature allows no
destruction of anything to be seen, until a force has
met it, sufficient to shatter it with a blow, or to
penetrate within through the void places and break
it up.

²²⁵ Besides, if time consuming all the material
utterly destroys whatever by lapse of years it re-
moves, whence does Venus restore living creatures
to the light of life each after its kind, or, when they
are restored, whence does the wonder-working earth
nourish them and make them grow, providing food
for each after its kind ? Whence is the sea supplied
by the springs within it, and by the rivers without,
flowing from afar ? Whence does the ether nourish
the stars ? For all things that are of perishable body
must have been consumed by infinite time and ages
past. But if through that space of time past there
have been bodies from which this sum of things
subsists being made again, imperishable indeed must
their nature be ; therefore things cannot severally
return to nothing.

²³⁸ Again, the same force and cause would destroy
all things without distinction, unless everlasting

II. Nothing
can be re-
duced to
nothing, or
else (1)
things
would be
annihilated
suddenly.

(2) there
would be
no supply
of material
for the
creation
and re-
plenish-
ment of
things.

(3) all
things
could be

inter se nexus minus aut magis indupedita ; 240
 tactus enim leti satis esset causa profecto,
 quippe ubi nulla forent aeterno corpore, quorum
 contextum vis deberet dissolvere quaeque.
 at nunc, inter se quia nexus principiorum
 dissimiles constant aeternaque materies est, 245
 incolumi remanent res corpore, dum satis acris
 vis obeat pro textura cuiusque reperta.
 haud igitur redit ad nilum res ulla, sed omnes
 discidio redeunt in corpora materiai.

Postremo pereunt imbres, ubi eos pater aether
 in gremium matris terrai praecipitavit ; 251
 at nitidae surgunt fruges ramique virescunt
 arboribus, crescunt ipsae fetuque gravantur ;
 hinc alitur porro nostrum genus atque ferarum ;
 hinc laetas urbes novis floribus videmus 255
 frondiferasque novis avibus canere undique silvas ;
 hinc fessae pecudes pingui per pabula laeta
 corpora deponunt, et candens lacteus umor
 uberibus manat distentis ; hinc nova proles
 artubus infirmis teneras lasciva per herbas 260
 ludit lacte mero mentes percussa novellas.
 haud igitur penitus pereunt quaecumque videntur,
 quando alid ex alio reficit natura, nec ullam
 rem gigni patitur nisi morte adiuta aliena.

Nunc age, res quoniam docui non posse creari 265
 de nilo neque item genitas ad nil revocari,

240 nexus *OQGFL* (cf. 220, 244) : nexu *Q* corr., *ABM*
 257 pingui *Philargyrius* on *Virgil*, *G.* 3.124 : pinguis *OQ*,
G corr. (*G* omits), *Martin*

^a *mero* suggests wine : the pure milk is strong drink for
 the young animals—hence their frolicsome behaviour
 22

matter held them together entangled more or less destroyed
 closely in their interlacing bonds ; for just a touch by the
 would be cause enough for destruction, inasmuch as same force,
 there would be no particles of everlasting body,
 whose contexture a special force would be needed
 to dissolve. But as it is, since the bonds which com-
 bine the elements are different, and their matter is
 everlasting, things abide with body intact until a
 force meet them that is found vigorous enough to
 affect the texture of each. Therefore no single thing
 returns to nothing, but all by disruption return to
 the elements of matter.

²⁵⁰ Lastly, the raindrops pass away, when father (4) one
 Ether has cast them into the lap of mother Earth ; thing's
 but bright crops arise, the branches upon the trees death
 grow green, the trees also grow and become heavy would not
 with fruit ; hence comes nourishment again for our be another
 kind and for the wild beasts ; hence we behold happy thing's
 cities blooming with children and leafy woods all one birth.
 song with the young birds ; hence flocks and herds,
 weary with their fat, lay their bodies about the rich
 pastures, and the white milky stream flows from their
 swollen udders ; hence the young ones gambol in
 merry play over the delicate grass on their weakly
 limbs, their tender hearts intoxicated with neat milk.^a
 Therefore no visible object utterly passes away, since
 nature makes up again one thing from another, and
 does not permit anything to be born unless aided by
 another's death.

²⁶⁵ Now then, since I have taught that things can- The atoms
 not be created from nothing and, when brought are in-
 (lasciva . . . ludit) and unsteadiness on their legs (artubus visible, but
 infirmis).

ne qua forte tamen coeptes diffidere dictis,
quod nequeunt oculis rerum primordia cerni,
accipe praeterea quae corpora tute necessest
confitare esse in rebus nec posse videri. 270

Principio venti vis verberat incita pontum
ingentisque ruit navis et nubila differt ;
interdum rapido percurrens turbine campos
arboribus magnis sternit montisque supremos
silvifragis vexat flabris : ita perfurit acri 275
cum fremitu saevitque minaci murmure ventus.
sunt igitur venti nimirum corpora caeca
quae mare, quae terras, quae denique nubila caeli
verrunt ac subito vexantia turbine raptant ;
nec ratione fluunt alia stragemque propagant 280
et cum mollis aquae fertur natura repente
flumine abundantanti, quam largis imbribus auget
montibus ex altis magnus decursus aquai,
fragmina coniciens silvarum arbustaque tota,
nec validi possunt pontes venientis aquai 285
vim subitam tolerare : ita magno turbidus imbri
molibus incurrit validis cum viribus amnis.
dat sonitu magno stragem volvitque sub undis
grandia saxa, ruit qua quidquid fluctibus obstat.
sic igitur debent venti quoque flamina ferri, 290
quae veluti validum cum flumen procubere
quamlibet in partem, trudunt res ante ruuntque

271 pontum *Marullus*: cortus *OQG*: tortus *O corr.*:
corpus *Q corr.*: portus *P* 276 ventus *J. Markland* in
a marginal note (see *A. Stachelscheid, Hermathena 4* [1883]
156), also conjectured by a friend of Wakefield: pontus
OQGP: cortus (=coortus) *Faber* (from 271) 282 quam
Lachmann: quem *OQG*: quod *L*: quom *J. Woltjer, Jahrb.*
f. cl. Phil. 119 (1879) 772 auget *O*: uuget *OQ*:
urget *O corr* 289 ruit qua *OQGP*, *O corr.*: ruit *O*

forth, cannot be brought back to nothing, that you
may not by any chance begin nevertheless to dis-
trust my words, because the first-beginnings of things
cannot be distinguished by the eye, learn in addi-
tion of bodies which you must yourself of necessity
confess to be numbered amongst things and yet im-
possible to be seen.

271 First the mighty wind when stirred up beats ^{wind,}
upon the ocean and overwhelms huge ships and
scatters the clouds, and at times sweeping over the
plains with rapid hurricane strews them with great
trees and flogs the topmost mountains with tree-
crashing blasts: so furious and fierce its howling, so
savage and threatening the wind's roar. Therefore
undoubtedly there are unseen bodies of wind that
sweep the sea, that sweep the earth, sweep the clouds
of the sky also, beating them suddenly and catching
them up in a hurricane; and they flow and deal
devastation in the same way as water,^a which, soft
as it is, suddenly rolls in overwelling stream when
a great deluge of water from the high mountains
swells the flood with torrents of rain, dashing to-
gether wreckage of forests and whole trees, nor can
strong bridges withstand the sudden force of the
coming water, with so mighty a force does the river,
boiling with rain-torrents, rush against the piers; it
works devastation with loud uproar and rolls huge
rocks under its waves, and sweeps away whatever
stands in its path. Thus therefore the blasts of the
wind also must be borne along, which, like a strong
river, when they have borne down in any direction,
thrust all before them and sweep all away with fre-

account of wind, see especially *D. West, Philol. 114* (1970)
272-274.

^a For the correspondences between this simile and the
24

impetibus crebris, interdum vertice torto
 corripuiunt rapidoque rotantia turbine portant.
 quare etiam atque etiam sunt venti corpora caeca, 295
 quandoquidem factis et moribus aemula magnis
 amnibus inveniuntur, aperto corpore qui sunt.

Tum porro varios rerum sentimus odores
 nec tamen ad naris venientis cernimus umquam,
 nec calidos aestus tuimur nec frigora quimus 300
 usurpare oculis nec voces cernere suemus ;
 quae tamen omnia corporea constare necessest
 natura, quoniam sensus impellere possunt ;
 tangere enim et tangi, nisi corpus, nulla potest res.

Denique fluctifrago suspensae in litore vestes 305
 uvescunt, eadem dispansae in sole serescunt ;
 at neque quo pacto persederit umor aquai
 visumst nec rursus quo pacto fugerit aestu.
 in parvas igitur partis dispargitur umor,
 quas oculi nulla possunt ratione videre. 310

Quin etiam multis solis redeuntibus annis
 anulus in digito subter tenuatur habendo,
 stillicidi casus lapidem cavat, uncus aratri
 ferreus occulto decrescit vomer in arvis,
 strataque iam volgi pedibus detrita viarum 315
 saxea conspicimus ; tum portas propter aena
 signa manus dexteris ostendunt adtenuari
 saepe salutantum tactu praeterque meantum.

294 rapidoque "ex codicibus fidelioribus" (Pius): rapidique
 O, Q corr., GP: rapidisque Q: rapideque Lachmann rotantia
 Lambinus (1563-64): rotanti OQGP 306 dispansae in
 OQGP: candenti Nontius p. 257 Lindsay 309 dispargitur
 ed. Veronensis and, acc. to Wakefield, three manuscripts, P.
 Friedländer, AJPhil. 62 (1941) 31 314 occulto Q, Servius
 on Virgil, G. 1.46, Isidorus, Orig. 20.14.1: occulte O, Q corr.,
 GP. occulto is quoted from Afranius by Charisius p. 270 Barwick

quent attacks, and at times catch things up in a
 swirling eddy and whirling them round carry them off in a
 swift tornado. Therefore I say again and again, there are
 unseen bodies of wind, since in deeds and ways they are
 found to rival great rivers, which possess a body which can
 be seen.

²⁹⁸ Then further, we smell the various odours of ^{scent,}
 things and yet we never see them approaching our
 nostrils, nor do we behold scorching heat, nor can we ^{heat,}
 set eyes on cold, nor are we accustomed to see ^{cold,}
 sounds ; yet all these must of necessity consist of ^{sound,}
 bodily structure, since they can act upon our senses.
 For nothing can touch or be touched, except body.

³⁰⁵ Again, garments hung up on a surf-beaten
 shore grow damp, the same spread in the sun grow
 dry ; yet none has seen either how the damp of the ^{vapour of}
 water pervaded them, or again how it departed in ^{water,}
 the heat. Therefore the water is dispersed into small
 particles, which the eye cannot in any way see.

³¹¹ Moreover, with many revolutions of the sun's ^{particles of}
 year, a ring on the finger is thinned underneath by ^{worn metal}
 wear, the fall of drippings hollows a stone, the curved ^{or stone,}
 ploughshare of iron imperceptibly dwindles away in
 the fields, and the stony pavement of the roads we
 see already to be rubbed away by men's feet ; again,
 bronze statues set by gateways display the right
 hands thinned away by the frequent touch of greeting
 from those who pass by.^a These therefore we observe

^a Cicero, *Verr.* 4.94, mentions a bronze statue in the temple
 of Hercules at Agrigentum, whose lips and chin had been
 worn away by the kisses of worshippers. However, Lucr. is
 referring to the right hands of statues by city gates, and the
 custom may have been to touch or grasp these (*cf. tactu*, 318,
 though this could refer to the touch of the lips) rather than,
 as is usually supposed, to kiss them. The foot of St. Peter's
 statue in St. Peter's, Rome, is a familiar modern parallel.

haec igitur minui, cum sint detrита, videmus ;
sed quae corpora decedant in tempore quoque, 320
invida praeclusit specimen natura videndi.

Postremo quaecumque dies naturaque rebus
paulatim tribuit, moderatim crescere cogens,
nulla potest oculorum acies contenta tueri ;
nec porro quaecumque aevo macieque senescunt, 325
nec, mare quae independent, vascio sale saxa peresa
quid quoque amittant in tempore cernere possis.
corporibus caecis igitur natura gerit res.

Nec tamen undique corporea stipata tenentur
omnia natura ; namque est in rebus inane. 330
quod tibi cognosse in multis erit utile rebus
nec sinet errantem dubitare et quaerere semper
de summa rerum et nostris diffidere dictis.
quapropter locus est intactus inane vacansque.
quod si non esset, nulla ratione moveri 335
res possent ; namque officium quod corporis exstat,
officere atque obstare, id in omni tempore adesset
omnibus ; haud igitur quicquam procedere posset,
principium quoniam cedendi nulla daret res.
at nunc per maria ac terras sublimaеque caeli 340
multa modis multis varia ratione moveri
cernimus ante oculos, quae, si non esset inane,
non tam sollicito motu privata carerent
quam genita omnino nulla ratione fuissent,
undique materies quoniam stipata quiesset. 345

321 specimen *F. Nencini, Riv. Fil.* 24 (1896) 304, *C. L. Howard, CPhil.* 56 (1961) 145-146 (cf. 4.209, and for the corruption cf. 5.186 where most editors accept Pius' emendation): speciem OQGP

to be growing less because they are rubbed away ; but what particles are separated on each occasion, our nigardly faculty of sight has debarred us from proving.

³²² Lastly, whatever time and nature little by little adds to things, compelling them to grow in due measure, no keenness of sight, however strained, can perceive ; nor further when things grow old by age and wasting, nor when rocks hanging over the sea are eaten away by the gnawing salt, could you discern what they lose upon each occasion. Therefore nature works by means of bodies unseen.

particles of living bodies that grow and decay.

³²⁹ Yet everything is not held close and packed everywhere in one solid mass, for there is void in things : which knowledge will be useful to you in many matters, and will not allow you to wander in doubt and always to be at a loss as regards the universe and to distrust my words. Therefore there is intangible space, void, emptiness.^a But if there were none, things could not in any way move ; for that which is the province of body, to prevent^b and to obstruct, would at all times be present to all things ; therefore nothing would be able to move forward, since nothing could begin to give place. But as it is, we discern before our eyes, throughout seas and lands and the heights of heaven, many things moving in many ways and various manners, which, if there were no void, would not so much lack altogether their restless motion, as never would have been in any way produced at all, since matter would have been everywhere quiescent packed in one solid mass.

There is also Void

or (1) things could not move,

^a Cf. Epicurus, *Ep. ad Hdt.* 40.

^b "Province . . . prevent" (M. F. Smith) is an attempt to reproduce the verbal play *officium* . . . *officere*.

Praeterea quamvis solidae res esse putentur,
 hinc tamen esse licet raro cum corpore cernas :
 in saxis ac speluncis permanat aquarum
 liquidus umor et uberibus flent omnia guttis ;
 dissipat in corpus sese cibus omne animantum ; 350
 crescunt arbusta et fetus in tempore fundunt,
 quod cibus in totas usque ab radicibus imis
 per truncos ac per ramos diffunditur omnis ;
 inter saepta meant voces et clausa domorum
 transvolitant ; rigidum permanat frigus ad ossa. 355
 quod, nisi inania sint qua possent corpora quaeque
 transire, haud ulla fieri ratione videres.

Denique cur alias aliis praestare videmus
 pondere res rebus nilo maiore figura ?
 nam si tantundemst in lanae glomere quantum 360
 corporis in plumbo est, tantundem pendere par est,
 corporis officiumst quoniam premere omnia deorsum,
 contra autem natura manet sine pondere inanis.
 ergo quod magnumst aequae leviusque videtur
 nimirum plus esse sibi declarat inanis ; 365
 at contra gravius plus in se corporis esse
 dedicat et multo vacui minus intus habere.
 est igitur nimirum id quod ratione sagaci
 quaerimus admixtum rebus, quod inane vocamus.

Illud in his rebus ne te deducere vero 370
 possit, quod quidam fingunt, praecurrere cogor.

357 fieri *O corr. by Dungal (9th cent.), P: valerent OQC, and Bernays (not Brieger, as shown by Martin and Bailey) proposed corpora quaeque valerent in 356* 367 vacui *Pontanus:*

³⁴⁶ Besides, however solid things may be thought to be, here is proof that you may discern them to be of less than solid consistency. In rocks and caves the liquid moisture of waters oozes through, and the whole place weeps with plenteous drops. Food is dispersed through all the body in living creatures. Trees grow and at their time put forth their fruits, because their food is distributed all over them ^a from the lowest roots through trunks and through branches. Sounds pass through walls and fly through closed houses, stiffening cold permeates to the bones. But, if there were no void there which bodies might pass through in each case, you could not see this happen in any way.

³⁵⁸ Lastly, why do we see some things surpass others in weight when they are no larger? For if there is as much body in a ball of wool as in lead, it is fitting that they should both weigh the same, since it is the property of body to depress everything downwards, but contrariwise the nature of void remains without weight. Therefore that which is equally great and is seen to be lighter without doubt shows itself to have more void; but contrariwise the heavier makes clear that it has more body in it, and much less of void. There is therefore without doubt, intermingled with things, that which we seek with keenscented reasoning, that which we call void.

³⁷⁰ And here in this matter I am driven to forestall what some imagine, lest it should lead you away

^a *Lucr. writes totas, as though not arbusta (351), but arborea, had preceded. Cf. 190, 6.215.*

vacuum *QC: vacuum O (O corr. by Dungal, according to Büchner) P*

cedere squamigeris latices nitentibus aiunt
 et liquidas aperire vias, quia post loca pisces
 linquant, quo possint cedentes confluere undae ;
 sic alias quoque res inter se posse moveri 375
 et mutare locum, quamvis sint omnia plena.
 scilicet id falsa totum ratione receptumst.
 nam quo squamigeri poterunt procedere tandem,
 ni spatium dederint latices ? concedere porro
 quo poterunt undae, cum pisces ire nequibunt ? 380
 aut igitur motu privandumst corpora quaeque,
 aut esse admixtum dicendumst rebus inane,
 unde initum primum capiat res quaeque movendi.

Postremo duo de concursu corpora late
 si cita dissiliant, nempae aer omne necessest, 385
 inter corpora quod fiat, possidat inane.
 is porro quamvis circum celerantibus auris
 confluat, haud poterit tamen uno tempore totum
 compleri spatium ; nam primum quemque necessest
 occupet ille locum, deinde omnia possideantur. 390
 quod si forte aliquis, cum corpora dissiluerit,
 tum putat id fieri quia se condensat aer,
 errat ; nam vacuum tum fit quod non fuit ante
 et repletur item vacuum quod constitit ante ;
 nec tali ratione potest denserier aer, 395
 nec, si iam posset, sine inani posset, opinor,
 ipse in se trahere et partis conducere in unum.

Quapropter, quamvis causando multa moreris,
 esse in rebus inane tamen fateare necessest.

384 late *Cod. Vat. Ottob. lat. 1954*, variant in *Cod. Vat. lat.*
 3275: lata *OQGP*

^a The theory to which *Lucr.* refers is mentioned first in *Plato, Ti. 79 B*, but is attributed by a later source to *Empedocles* and *Anaxagoras*. It was adopted by *Aristotle (Ph.*

from the truth. They say ^a that water yields to the pressure of scaly creatures and opens liquid ways, because fish leave room behind them for the yielding waves to run together ; that so other things also are able to move in and out and to change place, although all is full. You must know that this has been accepted on reasons wholly false. For whither, I ask, will the scaly fish be able to move forward, unless the water shall give place ? Into what place, again, will the water be able to move back, when the fish will be unable to go ? Either then all bodies must be deprived of movement, or we must say that void is intermingled in things, as a result of which each thing may begin to move.

³⁸⁴ Lastly, if two bodies set in motion leap far apart after contact, of course it is necessary that air take possession of all the void which is made between the bodies. Further, however swiftly this air may run together with currents hurrying all around, yet the space will not be able to be filled all at one time ; for the air must occupy each point of space in succession before the whole is occupied. But if by chance anyone thinks that this happens at the moment when the bodies have leapt asunder because the air becomes compressed, he goes astray ; for in that case a void is made which was not there before, and a void also is filled which was there before ; nor can air be compressed in such a way, nor, granting that it could, could it, I think, without void withdraw into itself and condense its parts together.

³⁹⁸ Therefore, however you may demur by making many objections, confess you must, nevertheless, that there is void in things. Many another proof be-

213 B—216 B) and *Epicurus' contemporary Strato of Lam-psacus*, and is mentioned by *Cicero, Acad. 2.40.125*.

out Void,
by changing
places ;

but how
could the
motion be-
gin without
room ?

If two
bodies leap
apart, there
is a void
at first ;

nor indeed
could air be
condensed
between
them with-
out Void.

Follow up
the other
proofs for
yourself.

multaque praeterea tibi possum commemorando 400
 argumenta fidem dictis conradere nostris.
 verum animo satis haec vestigia parva sagaci
 sunt, per quae possis cognoscere cetera tute.
 namque canes ut montivagae persaepe ferai
 naribus inveniunt intactas fronde quietes, 405
 cum semel institerunt vestigia certa viai,
 sic alid ex alio per te tute ipse videre
 talibus in rebus poteris caecasque latebras
 insinuare omnis et verum protrahere inde.
 quod si pigraris paulumve recesseris ab re, 410
 hoc tibi de plano possum promittere, Memmi :
 usque adeo largos haustus e fontibu' magnis
 lingua meo suavis diti de pectore fundet,
 ut verear ne tarda prius per membra senectus
 serpat et in nobis vitai claustra resolvat, 415
 quam tibi de quavis una re versibus omnis
 argumentorum sit copia missa per auris.

Sed nunc ut repetam coeptum pertexere dictis,
 omnis ut est igitur per se natura duabus
 constitit in rebus ; nam corpora sunt et inane, 420

404 ferai *Q* corr., *P* : ferare *OQG* : ferarum *O* corr.
 412 magnis *P* : magnes *O* : amnes *QG* : amnis *O* corr. :
perhaps altis (it is just possible that in 5.446 altum is a
corruption of magnum, which is recorded by Macrobius)

^a On the correspondences between simile and context, see especially D. West, *The Imagery and Poetry of Lucretius* 74-75. Socrates, in the Platonic dialogues, frequently uses hunting metaphors when referring to arguments : e.g. *Phd.* 63 A, 66 B-C, 79 E, 88 D.

^b Cf. Lord Vaux, *The Aged Lover Renounceth Love* : " For Age, with stealing steps, | Hath clawed me with his clutch."

^c Notice again (cf. 140-145) *Lucr.*'s readiness *quemvis*

sides I can mention to scrape together credit for my doctrines. But for a keen-scented mind, these little tracks are enough to enable you to recognize the others for yourself. For as hounds very often find by their scent the leaf-hidden resting-place of the mountain-ranging quarry, when once they have hit upon certain traces of its path, so will you be able for yourself to see one thing after another in such matters as these, and to penetrate all unseen hiding-places, and draw forth the truth from them.^a But should you be sluggish or draw back a little from the task, this I can promise you, Memmius, without more ado : so bounteous draughts out of plenteous springs will my melodious speech pour forth from my richly stored mind, that I fear lest laggard age may creep over our limbs^b and break down the barriers of life within us, before the whole store of demonstrations on any one matter has been poured in my verses through your ears.^c

⁴¹⁸ But now to resume my task begun of weaving the web of this discourse : the nature of the universe,^d therefore, as it is in itself, is made up of two things ; for there are bodies, and there is void, in which these

efferre laborem in his attempt to convert Memmius to Epicureanism. Notice too that he is prepared to make fun of his own missionary fervour and enthusiasm for philosophy : cf. 4.969-970, where he confesses that, just as lawyers dream of legal cases, generals of battles, and sailors of the sea, so he himself dreams of studying Epicureanism and expounding it in Latin.

^d *omnis* (419) is best taken as genitive of *omne* = τὸ πᾶν. Cf. Plutarch, *adv. Col.* 1112 F (of Epicurus) : τὸ πᾶν παντῶς φύσιν (cf. *omnis* . . . *natura*) ὀνομάζειν εἰωθε. Cf. *natura* . . . *inanis* (363), corresponding to Epicurus' ἡ . . . τοῦ κενοῦ φύσιν (*Ep. ad Hdt.* 44 ; cf. Plutarch, *loc. cit.*).

haec in quo sita sunt et qua diversa moventur.
 corpus enim per se communis dedicat esse
 sensus ; cui nisi prima fides fundata valebit,
 haud erit occultis de rebus quo referentes
 confirmare animi quicquam ratione queamus. 425
 tum porro locus ac spatium, quod inane vocamus,
 si nullum foret, haud usquam sita corpora possent
 esse neque omnino quoquam diversa meare ;
 id quod iam supera tibi paulo ostendimus ante.

Praeterea nil est quod possis dicere ab omni 430
 corpore seiunctum secretumque esse ab inani,
 quod quasi tertia sit numero natura reperta.
 nam quodcumque erit, esse aliquid debet id ipsum :
 435 cui si tactus erit quamvis levis exiguusque,
 434 augmine vel grandi vel parvo denique, dum sit, 435
 corporis augebit numerum summamque sequetur ;
 sin intactile erit, nulla de parte quod ullam
 rem prohibere queat per se transire meantem,
 scilicet hoc id erit, vacuum quod inane vocamus.
 praeterea per se quodcumque erit, aut faciet quid 440
 aut aliis fungi debet agentibus ipsum
 aut erit ut possint in eo res esse gerique.
 at facere et fungi sine corpore nulla potest res,
 nec praebere locum porro nisi inane vacansque.

435-434 transposed, as suggested in *Codex Laurentianus* 35.32. Order of lines in the manuscripts is retained, perhaps rightly, by *Martin and Büchner*

^a In 422, *per se* may be taken either with *corpus . . . esse*, or with *sensus* "sensation of itself" : the former interpretation is supported by 419, 445, 479, the latter by Epicurus, *Ep. ad Hdt.* 39 : ἀντὴ ἢ αἰσθησις ἐπὶ πάντων μαρτυρεῖ.

^b According to Epicurus, sensation is the primary standard of truth, and there is no other criterion by which it can be refuted : cf. e.g. *Ep. ad Hdt.* 38-39, *Sent.* 23, Diogenes Laertius 10.31-32, Lucr. 1.699-700, 4.478-521, Cicero, *Fin.* 1.7.22, 1.19.64.

bodies are and through which they move this way and that. For sensation common to men declares that body has its separate existence ^a; and unless our belief in sensation is first firmly established, there will be no principle of appeal in hidden matters, according to which we may establish anything by the reason.^b Then further, if there were no place and space which we call void, bodies could not be situated anywhere nor could they move anywhere at all in different directions, as I have already shown you above a little while ago.^c

430 Besides, there is nothing which you can call wholly distinct from body and separate from void, to be discovered as a kind of third nature.^d For whatever is to be, that must be something in itself ; and if it shall be sensible to touch however light and small, it will increase the quantity of body by some increment either great or small if you will, provided it do exist, and will go to make up the sum. But if it shall be intangible, being unable to forbid anything to pass through it in motion at any point, undoubtedly this will be that which we call empty void. Besides, whatever shall exist of itself will either act upon something, or will necessarily be passive itself while other things act upon it, or it will be possible that things be and be done in it. But nothing can act or be acted upon without body, nothing can afford space but the void and the empty.^e

^c 335-345, 370-383.

^d 419-432 and 445-448 are closely related to Epicurus, *Ep. ad Hdt.* 39-40, but the argument of 433-444 is not found in *Ep. ad Hdt.*, and the whole passage may be based on Epicurus' lost *Μεγάλη Ἐπιτρομή* or even on his *Περὶ Φύσεως* (see Bailey 666).

^e Cf. Epicurus, *Ep. ad Hdt.* 67.

ergo, praeter inane et corpora, tertia per se 445
 nulla potest rerum in numero natura relinqui,
 nec quae sub sensus cadat ullo tempore nostros
 nec ratione animi quam quisquam possit apisci.

Nam quaecumque cluent, aut his coniuncta duabus
 rebus ea invenies aut horum eventa videbis. 450
 coniunctum est id quod nusquam sine permittali
 discidio potis est seiungi seque gregari,
 pondus uti saxi, calor igni, liquor aquai,
 tactus corporibus cunctis, intactus inani.
 servitium contra paupertas divitiaequae, 455
 libertas bellum concordia, cetera quorum
 adventu manet incolumis natura abituque,
 haec soliti sumus, ut par est, eventa vocare.
 tempus item per se non est, sed rebus ab ipsis
 consequitur sensus, transactum quid sit in aevo, 460
 tum quae res instet, quid porro deinde sequatur ;
 nec per se quemquam tempus sentire fatendumst
 semotum ab rerum motu placidaque quiete.

Denique Tyndaridem raptam belloque subactas
 Troiugiengas gentis cum dicunt esse, videndumst 465
 ne forte haec per se cogant nos esse fateri,
 quando ea saecula hominum, quorum haec eventa
 fuerunt,
 inrevocabilis abstulerit iam praeterita aetas ;
 namque aliud terris, aliud regionibus ipsis

453 *saxi OQGP*: *saxist Wakefield igni J. P. Post-*
gate, Journ. Phil. 24 (1896) 131 (but reading aquae stat for
aquai): *ignis OQG*: *ignist Bockemüller aquai QG,*
O corr.: *aque O*

^a For properties (*coniuncta* = *συμβεβηκότα*) and accidents (*eventa* = *συμπυρόματα*), cf. Epicurus, *Ep. ad Hdt.* 40, 68-73.

^b On the thesis *se ... gregari* in 452, see note on 3.860 and 5. Hinds, *CQ N.S.* 37 (1987) 450-453.

^c It has been generally supposed that in 459-482 *Lucr.* is refuting the Stoics, but see D. J. Furley in *BICS* 13 (1966) 38

Therefore besides void and bodies no third nature can be left self-existing in the sum of things—neither one that can ever at any time come within our senses, nor one that any man can grasp by the reasoning of the mind.

449 For whatsoever things have a name, either you will find to be properties of these two or you will see them to be accidents of the same.^a A property is that which without destructive dissolution can never be separated and disjoined,^b as weight is to stone, heat to fire, liquidity to water, touch to all bodies, intangibility to void. Slavery, on the other hand, poverty and riches, freedom, war, concord, all else which may come and go while the nature of things remains intact, these, as is right, we are accustomed to call accidents. Time also exists not of itself,^c but from things themselves is derived the sense of what has been done in the past, then what thing is present with us, further what is to follow after. Nor may we admit that anyone has a sense of time by itself separated from the movement of things and their quiet calm.

464 Moreover, when they say that the rape of Tyndareus' daughter^d and the conquest by war of the Trojan tribes *are* facts,^e we must see to it that they do not compel us to admit that these things *are* of themselves, on the ground that those generations of men, of whom these were accidents, the irrevocable ages past have already carried away ; for whatever has been done may be called an accident

13-14.

^d Helen of Troy.

^e *esse*, the auxiliary of the pf. inf. pass., is capable of being understood as an assertion of existence. This ambiguity is not found in English, hence the paraphrase "*are* facts."

eventum dici poterit quodcumque erit actum. 470
 denique materies si rerum nulla fuisset
 nec locus ac spatium, res in quo quaeque geruntur,
 numquam Tyndaridis forma conflatus amore
 ignis, Alexandri Phrygio sub pectore gliscens,
 clara accendisset saevi certamina belli, 475
 nec clam durateus Troiiianis Pergama partu
 inflammasset equos nocturno Graiiugenarum ;
 perspicere ut possis res gestas funditus omnis
 non ita uti corpus per se constare neque esse,
 nec ratione cluere eadem qua constet inane, 480
 sed magis ut merito possis eventa vocare
 corporis atque loci, res in quo quaeque gerantur.

Corpora sunt porro partim primordia rerum,
 partim concilio quae constant principiorum.
 sed quae sunt rerum primordia, nulla potest vis 485
 stinguere ; nam solido vincunt ea corpore demum.
 etsi difficile esse videtur credere quicquam
 in rebus solido reperiri corpore posse.
 transit enim fulmen caeli per saepa domorum,
 clamor ut ac voces ; ferrum candescit in igni 490
 dissiliuntque fero ferventi saxa vapore ;
 cum labefactatus rigor auri solvitur aestu,

473 forma OQG: formae O corr., P, perhaps rightly
 amore OQGP: amoris Wakefield tentatively in notes
 477 equos OQG: equus O corr., P: equo Q corr.
 491 fero OQG: fere B (according to Büchner), first printed
 by Pius, not (as the editors say) Wakefield 492 cum
 OQG: tum F (according to Martin), ed. Brixiensis

^a For this interpretation of 469-470, see R. L. Dunbabin,
 CQ 11 (1917) 135-136, K. Wellesley, CR N.S. 13 (1963) 16-17.

^b Paris. The epithet *Phrygio* is probably intended to sug-

either of the whole earth or of the actual regions in
 which it occurred.^a Again, if there had been no
 material for things, and no place and space in which
 each thing is done, no fire fanned to flame by love
 through the beauty of Tyndareus' daughter, and
 glowing beneath the breast of Phrygian Alexander,^b
 would ever have set alight blazing battles of savage
 war ; no wooden horse,^c unmarked by the sons of
 Troy, would ever have set Pergama in flames by its
 night-born brood of Grecians^d ; so that you may
 perceive that things done never at all consist or exist
 in themselves as body does, nor are said to exist in
 the same way as void ; but rather you may properly
 call them accidents of body, and of the place in which
 the things are severally done.

⁴⁸³ Furthermore, bodies are partly the first-begin-
 nings of things, partly those which are formed by
 union of the first-beginnings. But those which are
 the first-beginnings of things no power can quench :
 they conquer after all^e by their solid body.^f And
 yet it seems difficult to believe that anything with
 solid body can be found in creation. For heaven's
 thunderbolt passes through walled houses, as sound
 does and voices^g ; iron grows white-hot in fire, and
 stones split with fierce fervent heat ; the hardness
 of gold is softened and dissolved by heat, and the ice

The first-
 beginnings
 are solid
 and inde-
 structible.

gest the *frigus* in Paris' heart before he was " fired " with
 love for Helen. Cf. 2.611, 613 *Phrygias* . . . *fruges*.

^c *equos* (477) = *equus*.

^d For the " pregnant " Trojan Horse, cf. Aeschylus, *Ag.*
 825, Euripides, *Tro.* 11, Ennius, *Sc.* 76-77, Virgil, *Aen.* 2.20,
 237-238, 6.516.

^e That is, after all assaults.

^f Cf. Epicurus, *Ep. ad Hdt.* 40-41.

^g Cf. 6.228-229.

tum glacies aeris flamma devicta liquescit ;
 permanat calor argentum penetrabileque frigus,
 quando utrumque manu retinentes pocula rite 495
 sensimus, infuso lympharum rore superne.
 usque adeo in rebus solidi nil esse videtur.
 sed quia vera tamen ratio naturaque rerum
 cogit, ades, paucis dum versibus expediamus
 esse ea quae solido atque aeterno corpore constant,
 semina quae rerum primordiaque esse docemus, 501
 unde omnis rerum nunc constet summa creata.

Principio quoniam duplex natura duarum
 dissimilis rerum longe constare reperit,
 corporis atque loci, res in quo quaeque geruntur, 505
 esse utramque sibi per se puramque necessesse.
 nam quacumque vacat spatium, quod inane vocamus,
 corpus ea non est ; qua porro cumque tenet se
 corpus, ea vacuum nequaquam constat inane.
 sunt igitur solida ac sine inani corpora prima. 510

Praeterea quoniam genitis in rebus inanest,
 materiem circum solidam constare necessesse,
 nec res ulla potest vera ratione probari
 corpore inane suo celare atque intus habere,
 si non, quod cohibet, solidum constare relinquant. 515
 id porro nil esse potest nisi materiai
 concilium, quod inane queat rerum cohibere.
 materies igitur, solido quae corpore constat,
 esse aeterna potest, cum cetera dissolvantur.

^a For the possibility that this striking metaphor was inspired or influenced by Empedocles, see J. Longrigg, *CR* N.S. 20 (1970) 8-9. The metaphor, though bold, is extremely apt, because bronze, like ice, is solidified, smooth, shiny,

of bronze ^a is overcome by fire and liquefies ; warmth oozes through silver and so does penetrating cold, seeing that we have felt both, as we duly grasp the goblet, when dewy ^b water is poured in from above. So true is it that there seems to be nothing solid in the world. But because nevertheless true reason and the nature of things compels, be with me, until in a few verses I make it clear that there are such things as consist of body solid and everlasting, which we teach to be seeds of things and their first-beginnings, out of which now all the sum of things has been built up.

⁵⁰³ First, since there has been found to exist a twofold and widely dissimilar nature of two things—of body, that is, and space in which all things are done—it is necessary that each exist by itself and for itself unmixed. For wherever is empty space, which we call void, there no body is ; further, where body maintains itself, there by no means exists empty space. The first bodies therefore are solid and without void.

⁵¹¹ Besides, since there is void in created things, there must be solid matter round about it, nor can anything by true reasoning be proved to conceal void in its body and to hold it within, unless you grant that which holds to be solid. Further, that can be nothing but a union of matter, which can hold the emptiness of things within it. Matter therefore, which consists of solid body, may be everlasting, though all else ^c be dissolved.

cold (cf. Homer, *Il.* 5.75, ψυχρόν . . . χαλκόν, quoted by Wakefield), and melts (cf. *liquescit*).

^b *rore* suggests the purity, and especially the sparkle, of the water : cf. 771, 777, 4.438.

^c That is, all compound bodies.

For (1)
 Body and
 Void are
 mutually
 exclusive;

(2) compound objects contain Void, and this Void must be enclosed by Body that contains no Void (i.e. atoms) ;

Tum porro si nil esset quod inane vacaret, 520
 omne foret solidum; nisi contra corpora certa
 essent quae loca complerent quaecumque tenerent,
 omne quod est, spatium vacuum constaret inane.
 alternis igitur nimirum corpus inani
 distinctum, quoniam nec plenum naviter extat 525
 nec porro vacuum. sunt ergo corpora certa
 quae spatium pleno possint distinguere inane.
 haec neque dissolui plagis extrinsecus icta
 possunt nec porro penitus penetrata retexi
 nec ratione queunt alia temptata labare; 530
 id quod iam supra tibi paulo ostendimus ante.
 nam neque concludi sine inani posse videtur
 quicquam nec frangi nec findi in bina secando
 nec capere umorem neque item manabile frigus
 nec penetralem ignem, quibus omnia conficiuntur.
 et quo quaeque magis cohibet res intus inane, 536
 tam magis his rebus penitus temptata labascit.
 ergo si solida ac sine inani corpora prima
 sunt ita uti docui, sint haec aeterna necessest.

Praeterea nisi materies aeterna fuisset, 540
 antehac ad nilum penitus res quaeque redissent,
 de niloque renata forent quaecumque videmus.
 at quoniam supra docui nil posse creari
 de nilo neque quod genitum est ad nil revocari,
 esse immortalia primordia corpore debent, 545
 dissolui quo quaeque supremo tempore possint,
 materies ut suppeditet rebus reparandis.
 sunt igitur solida primordia simplicitate,

520 vacaret *O* corr., *P*: vocaret *QG*: vcaret *O*. *It is possible that Lucr. wrote vocaret = vacaret (see Munro), but the form occurs nowhere else in the poem, and a scribe easily could have written quod inane vocaret in error, influenced by the common quod inane vocamus (369, 426, 439, 507); in any case, it seems unwise to risk confusing the modern reader*

520 Then further, if there were nothing void and (3) the universe consists of both Body and Void, and so there must be definite bodies,
 empty, the universe would be solid; unless on the other hand there were definite bodies to fill up the places they held, then the existing universe would be vacant and empty space. Therefore without doubt body is marked off from void alternately, since the universe is not completely full nor yet empty. There are therefore definite bodies to mark off empty space from full. These can neither be dissolved by blows when struck from without, nor again be pierced inwardly and decomposed, nor can they be assailed and shaken in any other way, as I have shown you above a little while ago.^a For it is seen that without void nothing can be crushed, or broken, or split in two by cutting, nothing can admit liquid or again percolating cold or penetrating fire, by which all things are destroyed. And the more each thing holds void within it, so much the more thoroughly it is shaken when these things attack it. Therefore, if the first bodies are solid and without void, as I have taught, these must be everlasting.

540 Besides, unless matter had been everlasting, (4) if not, all things would have come to nothing, and been renewed from nothing;
 before this all things would have returned utterly to nothing, and whatever we see would have been born again from nothing. But since I have shown above^b that nothing can be produced from nothing and what has been made cannot be brought back to nothing, there must be first-beginnings of immortal body, into which each thing can be resolved at its last moment, that matter may be forthcoming for the renewal of things. The first-beginnings are therefore of solid singleness, nor can they in any other way be pre-

^a 215-264, 485-502.

^b 149-264.

nec ratione queunt alia servata per aevom
ex infinito iam tempore res reparare. 550

Denique si nullam finem natura parasset
frangendis rebus, iam corpora materiai
usque redacta forent aevo frangente priore,
ut nil ex illis a certo tempore posset
conceptum summum aetatis pervadere finem. 555

nam quidvis citius dissolvi posse videmus
quam rursus refici; quapropter longa diei
infinita aetas anteacti temporis omnis
quod fregisset adhuc disturbans dissoluensque,
numquam relicuo reparari tempore posset. 560
at nunc nimirum frangendi reddita finis
certa manet, quoniam refici rem quamque videmus
et finita simul generatim tempora rebus
stare, quibus possint aevi contingere florem.

Huc accedit uti, solidissima materiai 565
corpora cum constant, possint tamen omnia reddi
mollia quae fiunt—aer aqua terra vapores—
quo pacto fiant et qua vi quaeque gerantur,
admixtum quoniam semel est in rebus inane.
at contra si mollia sint primordia rerum, 570
unde queant validi silices ferrumque creari
non poterit ratio reddi; nam funditus omnis
principio fundamenti natura carebit.

sunt igitur solida pollentia simplicitate,
quorum condenseo magis omnia conciliatu 575
artari possunt validasque ostendere viris.

Porro si nullast frangendis reddita finis
corporibus, tamen ex aeterno tempore quaeque

555 finem *Q* corr., *BL* (for the masculine gender, cf. 2.1116): fine *QG*: finis *OAF*: florem *Marullus*

^a The four elements of Empedocles, with whose theory *Lucr.* deals in 716-829.

served through the ages from infinite time past and
make things anew.

⁵⁵¹ Moreover, if nature had provided no limit to (5) if there were no limit to breaking up, destruction would be quicker than renewal; the breaking-up of things, by this time the bodies of matter would have been so reduced by the breakings of ages past, that from them nothing could within any fixed time be conceived and attain the full maturity of its life. For we see that anything can more quickly be dissolved than it can be remade again; therefore what all the long ages of infinite time past, disturbing and dissolving, had broken up before now, could never be made new in the time remaining. But as it is, in fact there remains appointed a fixed limit for the breaking, since we see each thing being remade, and at the same time definite periods fixed for things after their kind, in which they may attain the flower of life.

⁵⁶⁵ Add, moreover, that while the elements of (6) solid bodies can make soft things, but not soft bodies hard things; matter are perfectly solid, yet it is possible to give an explanation how all those things which are soft—air, water, earth, fire^a—are formed, and by what force each is directed, when once void is intermingled in things. But contrariwise, if the first-beginnings of things were soft, no explanation will be possible to say out of what hard flints and iron could be produced; for all nature will utterly lack a foundation to begin upon. Therefore they are mighty by their solid singleness, and, by a denser combination of these, all things can be more closely packed and show hard strength.

⁵⁷⁷ Further, if no limit has been set to the breaking-up of bodies,^b you must nevertheless admit that even (7) if there is no limit to breaking

^b *Lucr.* is arguing here primarily against Anaxagoras (cf. 847-858), who held that matter is infinitely divisible.

nunc etiam superare necessest corpora rebus,
 quae nondum clueant ullo temptata periclo. 580
 at quoniam fragili natura praedita constant,
 discrepat aeternum tempus potuisse manere
 innumerabilibus plagis vexata per aevom.

Denique iam quoniam generatim reddita finis
 crescendi rebus constat vitamque tenendi, 585
 et quid quaeque queant per foedera naturai,
 quid porro nequeant, sancitum quandoquidem extat,
 nec commutatur quicquam, quin omnia constant
 usque adeo variae volucres ut in ordine cunctae
 ostendant maculas generalis corpore inesse, 590
 immutabili materiae quoque corpus habere
 debent nimirum; nam si primordia rerum
 commutari aliqua possent ratione revicta,
 incertum quoque iam constet quid possit oriri,
 quid nequeat, finita potestas denique cuique 595
 quam sit ratione atque alte terminus haerens,
 nec totiens possent generatim saecula referre
 naturam mores victum motusque parentum.

Tum porro quoniam est extremum quodque cacumen
 corporis illius quod nostri cernere sensus 600
 iam nequeunt, id nimirum sine partibus extat
 et minima constat natura, nec fuit unquam

599-600 Munro assumes a lacuna between these two lines and supplies e.g.: corporibus, quod iam nobis minimum esse videtur, | debet item ratione pari minimum esse cacumen—thus introducing an analogy from perceptible objects, such as is found in 749-752 and Epicurus, Ep. ad Hdt. 58-59. This solution, rejected by recent editors, is strongly supported by D. J. Furley, *Two Studies in the Greek Atomists* 31-33, and may well be correct. However, as Furley admits later in

now after infinite time there are left bodies of every kind of thing, bodies never yet attacked by any danger. But, since they are endowed with a dissoluble nature, it is inconsistent to say that they could have remained through time everlasting, exposed to innumerable assaults throughout the ages.

⁵⁸⁴ Again, since a limit has been fixed for the growth of things after their kind and for their tenure of life, and since it stands decreed what each can do by the ordinances of nature, and also what each cannot do, and since nothing changes,^a but all things are constant to such a degree that all the different birds show in succession marks upon their bodies to distinguish their kind, they must also have beyond a doubt a body of immutable matter. For if the first-beginnings of things could be changed, being in any way overmastered, it would also now remain uncertain what could arise and what could not, in a word in what way each thing has its power limited and its deep-set boundary mark,^b nor could the generations so often repeat after their kind the nature, manners, living, and movements of their parents.

⁵⁹⁹ Then further, since there is always an extreme point on that body which our senses are no longer able to perceive, that point undoubtedly is without parts, and is the smallest possible existence, and it

^a The types persist.

^b 595-596 = 76-77, 5.89-90, 6.65-66.

his detailed discussion of 599-634, "Lucretius' argument is not very clear" and "the whole section is messily put together," and the cause of the difficulty in the opening lines may be lack of revision rather than a textual loss. Therefore the text of the manuscripts is retained, though with much hesitation

up, there must be permanent particles corresponding to each kind of thing—an impossibility, if there is no limit to division;

(8) the constancy of species proves the existence of unchangeable elements;

(9) the atom consists of smallest parts inseparably cohering;

per se secretum neque posthac esse valebit,
 alterius quoniamst ipsum pars primaque et una,
 inde aliae atque aliae similes ex ordine partes 605
 agmine condenso naturam corporis explent,
 quae, quoniam per se nequeunt constare, necessesst
 haerere unde queant nulla ratione revelli.
 sunt igitur solida primordia simplicitate,
 quae minimis stipata cohaerent partibus arte, 610
 non ex illorum conventu conciliata,
 sed magis aeterna pollentia simplicitate,
 unde neque avelli quicquam neque deminui iam
 concedit natura reservans semina rebus.

Praeterea nisi erit minimum, parvissima quaeque
 corpora constabunt ex partibus infinitis, 616
 quippe ubi dimidiae partis pars semper habebit
 dimidiam partem nec res praefiniet ulla.
 ergo rerum inter summam minimamque quid escit ?
 nil erit ut distet ; nam quamvis funditus omnis 620
 summa sit infinita, tamen, parvissima quae sunt,
 ex infinitis constabunt partibus aequae.
 quod quoniam ratio reclamat vera negatque
 credere posse animum, victus fateare necessesst
 esse ea quae nullis iam praedita partibus extent 625

611 illorum (*i.e.* cacuminum or minimorum = minima-
 rum partium ; *cf.* 450) *OQGP* ; illarum *Preiger* (*see Haver-*
camp)

^a For the subtle and difficult doctrine of minimal parts (*minimae partes*, *minima* = ἐλάχιστα), *cf.* Epicurus, *Ep. ad Hdt.* 56-59. Epicurus could not accept that matter is infinitely divisible and so postulated the existence of minute, physically indivisible particles, *i.e.* atoms, but at the same time believed that each atom, since it has magnitude, must also have parts which, though they are physically inseparable from the atom, can be distinguished in thought. *Lucr.*

has never existed apart by itself nor will ever have force to do so, since it is essentially a part of something else, a first part with unity of its own, and then other and other like parts, each in its own place, in close formation fill up the nature of the atom ; and since these cannot exist separately, they must necessarily so adhere to the whole that they cannot by any means be torn away.^a The first-beginnings, therefore, are of solid singleness, made of these smallest parts closely packed and cohering together, not compounded by the gathering of these parts, but strong rather by their eternal singleness, and from these nature allows nothing to be torn away or diminished any longer, but keeps them as seeds for things.

⁶¹⁵ Besides, unless there is to be a smallest some- (10) if there were infinite division, the smallest thing would be equal to the sum of things ;
 thing, each littlest ^b body will consist of infinite parts, since of course a half of the half of anything will always have a half of its own, and there will be no limit to the division. Then what difference will there be between the sum of things and the least of things ? There will be no difference ; for although the whole sum of things be absolutely infinite, yet the bodies which are littlest will equally consist of infinite parts.^c But since true reasoning protests against this, and denies that the mind can believe it, you must yield and confess that there are things which no longer consist of any parts and are of the smallest possible

returns to the doctrine in 2.478-499 in connexion with atomic shapes.

^b *parvissima* is used here to avoid confusion with *minimum*.

^c The fallacious assumption that all infinities are equal is refuted by Newton in a passage quoted by Munro. *Lucr.*'s argument is probably aimed chiefly at Anaxagoras, perhaps also at the Stoics.

et minima constant natura. quae quoniam sunt,
illa quoque esse tibi solida atque aeterna fatendum.

Denique si minimas in partibus cuncta resolvi
cogere consuesset rerum natura creatrix,
iam nil ex illis eadem reparare valeret 630
propterea quia, quae nullis sunt partibus aucta,
non possunt ea quae debet genitalis habere
materies, varios conexus pondera plagas
concursum motus, per quae res quaeque geruntur.

Quapropter qui materiem rerum esse putarunt
ignem atque ex igni summam consistere solo, 636
magno opere a vera lapsi ratione videntur.
Heraclitus init quorum dux proelia primus,
clarus ob obscuram linguam magis inter inanis
quamde gravis inter Graios qui vera requirunt. 640
omnia enim stolidi magis admirantur amantque
inversis quae sub verbis latitantia cernunt,
veraque constituunt quae belle tangere possunt
auris et lepido quae sunt fucata sonore.

634 quae *Marullus*: quas *QG*, *O corr. by Dungal*: quos
Codex Musaei Britannici (Harleian 2612), according to
Wakefield: omitted by *O*, which also omits res quaeque
geruntur

^a *varios* (633) is emphatic: see D. J. Furley, *Two Studies in the Greek Atomists* 39-40 (cf. next note).

^b *Quapropter* refers back to *propterea quia* in 631, as shown by Furley (see last note) 40. Heraclitus' fire (cf. 645-646), like the minimal parts, would lack the variety which generative matter must have.

^c Refutations of rival physicists were traditional in the Epicurean school: cf. Diogenes of Oenoanda fr. 6 Smith. Diogenes, like Lucr., begins with Heraclitus of Ephesus (c. 540-c. 480 B.C.), who taught that everything is in constant flux, that balance in the world is maintained by a continual

nature. And since these exist, you must also confess that the first-beginnings are solid and everlasting.

⁶²⁸ Lastly, if nature the maker had been accustomed to compel all things to be resolved into their smallest parts, that same nature would no longer be able to make anything again out of them, because things which are not augmented by any parts cannot have what generative matter must have—the variety ^a of connexions, weights, blows, concurrences, motions, by which all things are brought to pass.

(11) if things could be resolved into minimal parts, these would not have the varied qualities needed for creating things.

⁶³⁵ Therefore ^b those who have thought that fire is the original substance of things, and that the whole sum consists of fire alone, are seen to have fallen far away from true reasoning. Of these Heraclitus ^c opens the fray as first champion, one illustrious for his dark speech rather amongst the frivolous part of the Greeks than amongst the serious who seek the truth. For dolts admire and love everything more which they see hidden amid distorted words, and set down as true whatever can prettily tickle the ears and all that is varnished over with fine-sounding phrases.^d

Fire is not the original substance, as Heraclitus holds.

struggle of opposites, and that fire, which exemplifies these fundamental doctrines, is the controlling element in the world. It is usually thought that Lucr.'s harsh attack on H. is aimed also at the Stoics, whom he influenced. This view has been challenged by D. J. Furley in *BICS* 13 (1966) 15-16, but, though it would be a mistake to suppose that the Stoics are Lucr.'s main target, it is most improbable that he did not have them in mind at all.

^d Lucr.'s mockery of Heraclitus' famous oracular and paradoxical pronouncements reaches its climax with the outrageous metaphor in 644 (literally "died with an attractive sound")—a clear parody of H.'s style. Moreover, *init* . . . *dux proelia* (638) ironically hints at H.'s contention that "strife is right" and "war is the father of all and king of all." In 641 *stolidi* may be intended to suggest *Stoici*.

Nam cur tam variae res possent esse requiro, 645
 ex uno si sunt igni puroque creatae.
 nil prodesset enim calidum denserier ignem
 nec rareferi, si partes ignis eandem
 naturam quam totus habet super ignis haberent ;
 acrior ardor enim conductis partibus esset, 650
 languidior porro disiectis disque supatis.
 amplius hoc fieri nil est quod posse rearis
 talibus in causis, nedum variantia rerum
 tanta queat densis rarisque ex ignibus esse.

Id quoque, si faciant admixtum rebus inane, 655
 denseri poterunt ignes rarique relinqui.
 sed quia multa sibi cernunt contraria quae sint
 et fugitant in rebus inane relinquere purum,
 ardua dum metuunt, amittunt vera viai,
 nec rursum cernunt exempto rebus inani 660
 omnia denseri fierique ex omnibus unum
 corpus, nil ab se quod possit mittere raptim,
 aestifer ignis uti lumen iacit atque vaporem,
 ut videas non e stipatis partibus esse.

Quod si forte alia credunt ratione potesse 665
 ignis in coetu stingui mutareque corpus,
 scilicet ex nulla facere id si parte reparcent,
 occidet ad nilum nimirum funditus ardor
 omnis et e nilo fient quaecumque creantur.
 nam quodcumque suis mutatum finibus exit, 670
 continuo hoc mors est illius quod fuit ante.

657 quae sint *Merrill*; cf. 4.510: muse O: mu QG:
 mussant CF: musae ed. *Brixianis*: adesse *Lachmann*: niti
A. MacGregor, AJPhil. 101 (1980) 399-400 662 raptim
Pontanus: raptis QQG: partis (= partes) *N. H. Romanes*,
Further Notes on Lucretius (1935) (= "in no way able to
 emit particles from itself")

^a Any other than closer or looser union.

^b If fire can somehow form such a union that it loses the

645 For I want to know why things could be so
 various, if they are made of fire pure and simple ; for
 it would be of no use that the hot fire should become
 denser or rarefied, if the particles of fire still had
 the same nature as the whole fire has also ; for the
 heat would be more intense with the particles com-
 pressed, but more faint if they were thrust apart
 and scattered apart : there is nothing else but this
 that you can suppose to be possible in such conditions,
 much less could there be all this variety of things
 produced from density or rarity of fire.

655 There is this also : if they should grant that
 void be mixed within things, fire will then be able
 to grow dense and be left rare ; but because they
 see many things that fight against them, and they
 shrink from leaving pure void in things, while they
 fear the steep they lose the true path ; nor again
 do they perceive that, if void be taken from things,
 all are condensed together and all become one mass,
 unable to emit anything briskly from itself, as burn-
 ing fire throws off light and heat, so that you may
 see that it does not consist of closely crowded parts.

665 But if by chance they believe that there is any
 other way ^a by which fires can in their union be
 quenched and change their substance, assuredly if
 they shall not in any way spare so to do, then mani-
 festly all heat will perish utterly into nothing, and
 from nothing will be fashioned all that is made ^b ;
 for whatever by being changed passes outside its own
 boundaries, at once this is the death of that which

quality of fire, then, if the process is continued, you get an
 end of heat or fire entirely, and so come to the conclusion that
 " everything can come from nothing " ; for by changing fire
 into something that is not fire you have " killed " fire.

For (1) it
 could not
 produce
 anything
 but fire ;

(2) he
 denies Void,
 without
 which his
 fire could
 not change
 at all ;

(3) if fire
 changes
 into some-
 thing else,
 it is de-
 stroyed ;

proinde aliquid superare necesse est incolume ollis,
 ne tibi res redeant ad nilum funditus omnes
 de niloque renata vigescat copia rerum.
 nunc igitur, quoniam certissima corpora quaedam 675
 sunt, quae conservant naturam semper eandem,
 quorum habitu aut aditu mutatoque ordine mutant
 naturam res et convertunt corpora sese,
 scire licet non esse haec ignea corpora rerum.
 nil referret enim quaedam discedere abire, 680
 atque alia adtribui, mutarique ordine quaedam,
 si tamen ardoris naturam cuncta tenerent ;
 ignis enim foret omnimodis quodcumque crearent.
 verum, ut opinor, itast : sunt quaedam corpora quorum
 concursus motus ordo positura figurae 685
 efficiunt ignis, mutatoque ordine mutant
 naturam neque sunt igni simulata neque ulli
 praeterea rei quae corpora mittere possit
 sensibus et nostros adiectu tangere tactus.

Dicere porro ignem res omnis esse neque ullam 690
 rem veram in numero rerum constare nisi ignem,
 quod facit hic idem, perdelirum esse videtur.
 nam contra sensus ab sensibus ipse repugnat
 et labefactat eos, unde omnia credita pendent,
 unde hic cognitus est ipsi quem nominat ignem ; 695
 credit enim sensus ignem cognoscere vere,
 cetera non credit, quae nilo clara minus sunt.
 quod mihi cum vanum tum delirum esse videtur ;
 quo referemus enim ? quid nobis certius ipsis
 sensibus esse potest, qui vera ac falsa notemus ? 700

674 vigescat *Heinsius* from 757 : vivescat *OQG* : virescat
P 680 discedere *O corr.*, *L* : descendere *OQGABF* :
 decedere *Lambinus*, which may well be right

^a 670-671 = 792-793, 2.753-754, 3.519-520.

^b *ollis* = *illis*, referring either to *ignis* (666) or to *quae-
 cumque creantur* (669).

was before.^a Therefore something must remain safe and sound in those fires of theirs,^b or you will find that all things return utterly into nothing, and that from nothing the supply of things is born again and lives. Now therefore, since there are certain most definite bodies which preserve their nature always the same, by the going and coming of which and their changed order things change their nature and bodies transform themselves, we may be sure that these elements of things are not made of fire. For it will be of no use that some should separate and depart, and others be added, and some change place, if nevertheless all retained the nature of fire ; for whatever they should make would be altogether fire. But, as I think, the truth is this : there are certain bodies which by their concurrences, motions, order, positions, shapes, produce fire, and which, when their order is changed, change the nature of the thing, and are not like fire, nor like any other thing that can emit particles to the senses and by impact touch our sense of touch.

⁶⁹⁰ Further, to say that all things are fire, and that there exists no true thing in the number of things except fire, as this same man does, appears to be raving madness. For on the basis of the senses he himself fights against the senses, and shakes the credit of that upon which all belief depends, by which this very fire as he names it is known to himself ; for he believes that the senses can truly perceive fire, but not the other things which are no less clear : which seems to me to be at once folly and raving. For to what shall we appeal ? What can we find more certain than the senses themselves, to mark for us truth and falsehood ? ^c

^c *Cf.* 422-425 (see note there), 4.478-521.

Praeterea quare quisquam magis omnia tollat
et velit ardoris naturam linquere solam,
quam neget esse ignis, aliud tamen esse relinquit ?
aequa videtur enim dementia dicere utrumque.

Quapropter qui materiem rerum esse putarunt 705
ignem atque ex igni summam consistere posse,
et qui principium gignundis aera rebus
constituere, aut umorem quicumque putarunt
fingere res ipsum per se, terramve creare
omnia et in rerum naturas vertier omnis, 710
magno opere a vero longe derrasse videntur.
adde etiam qui conduplicant primordia rerum,
aera iungentes igni terramque liquori,
et qui quattuor ex rebus posse omnia rentur
ex igni terra atque anima procreare et imbr. 715
quorum Agragantinus cum primis Empedocles est,
insula quem triquetris terrarum gessit in oris,
quam fluitans circum magnis anfractibus aequor
Ionium glaucis aspargit virus ab undis,
angustoque fretu rapidum mare dividit undis 720

703 aliud *M. F. Smith: omitted by OGG: aliam Q corr.:
summam P: quidvis Lachmann* 716 Agragantinus *QG:
Agragantinus O: Agragantinus ed. Veronensis*

^a Anaximenes and Diogenes of Apollonia.

^b Thales. ^c Pherecydes (?).

^d Oenopides (?). ^e Xenophanes.

^f Empedocles.

^g Empedocles (c. 493-c. 433 B.C.) of Agragans (Agrigento) in Sicily was not only an influential philosopher, scientist, and physician, but also a hexameter poet of distinction—hence Lucr.'s great admiration for him. In his *Περὶ Φύσεως*, of which about 350 lines are extant, he explained the universe as a spherical plenum (cf. 742-745) containing four elements

701 Besides, why should one take away everything and choose to leave only the nature of fire, rather than deny that fire exists and still allow that something else exists? It seems equal madness to assert either. (5) why choose fire rather than something else?

705 Therefore those who have thought that fire is the material of things and that the universe can consist of fire, and those who have laid down that air ^a is the prime element for producing things, or whoever have thought that water ^b moulds things by itself, or that earth ^c produces all things and changes itself into the natures of all things, are seen to have gone far astray from the truth. Add, moreover, those who take the first-beginnings of things in couples, joining air to fire ^d and earth to water, ^e and those who think that all can grow forth out of four things, ^f from fire, earth, air, and water. Foremost among whom is Empedocles of Agragans ^g: who was born within the triangular coasts of that island, around which the Ionian deep, flowing with its vast windings, sprinkles the salt brine from its green waves, and the swift-moving sea in its narrow strait divides with its waves the shores of the Aeolian ^h land Empedocles or two of these elements, or all four.

(fire, air, water, earth) which unite and separate under the influence of Love and Strife. A second poem, entitled *Καθάρσις* ("Purifications"), of which about 100 lines survive, was strongly influenced by Orphic and Pythagorean beliefs, and shows that E. was a remarkable mixture of rationalist and mystic. In 731-733 Lucr. perhaps has in mind E.'s claim to be a god (fr. 112).

^h If the text printed is correct (see critical note), the reference is to that part of southern Italy closest to Sicily. Although that region is not elsewhere called Aeolia, it is close to the Aeolian islands, and there was a legend that Rhegium had been founded by Aeolus' son, Iocastus.

Aeoliae terrarum oras a finibus eius.
 hic est vasta Charybdis et hic Aetnaea minantur
 murmura flammurarum rursus se colligere iras,
 faucibus eruptos iterum vis ut vomat ignis
 ad caelumque ferat flammae fulgura rursus. 725
 quae cum magna modis multis miranda videtur
 gentibus humanis regio visendaque fertur,
 rebus opima bonis, multa munita virum vi,
 nil tamen hoc habuisse viro praeclarius in se
 nec sanctum magis et mirum carumque videtur. 730
 carmina quin etiam divini pectoris eius
 vociferantur et exponunt praeclara reperta,
 ut vix humana videatur stirpe creatus.

Hic tamen et supra quos diximus inferiores
 partibus egregie multis multoque minores, 735
 quamquam multa bene ac divinitus inveniunt
 ex adyto tamquam cordis responsa dedere
 sanctius et multo certa ratione magis quam
 Pythia quae tripodi a Phoebi lauroque profatur,
 principiis tamen in rerum fecere ruinas 740
 et graviter magni magno cecidere ibi casu ;
 primum quod motus exempto rebus inani
 constituunt, et res mollis rarasque relinquunt—

721 Aeoliae *Heimsius*, probably rightly (see *Bailey*), despite the objections of *F. H. Sandbach*, *CR N.S.* 13 (1963) 13 : *Haeliae OQGB* : *Haeoliae O* corr. : *Italiae AFL* : *Aeolidae Sandbach* very tentatively (he prefers *Italiae*) 724 *faucibus eruptos F. Solmsen*, *CPhil.* 52 (1957) 251, but the traditional reading is both more natural and more forceful. *Aetna I*, ruptique cavis *fornacibus ignes*, which *Solmsen* quotes in support of his reading, could be taken as evidence against his preposition

^a The priestess of the oracle at Delphi.

^b 738-739 = 5.111-112, where *Lucr.* is referring to his own oracular pronouncements. It is interesting that *Epicurus* compares himself to an oracle in *Sent. Vat.* 29. Cf. *Cicero*,

from the boundaries of that isle. Here is wasteful Charybdis, and here *Etna's* rumblings threaten that the angry flames are gathering again, that once more its violence may belch fires bursting forth from its throat, and once more shoot to the sky the lightnings of its flame : which mighty region, while it seems wonderful in many ways to the nations of mankind and is famed as a place to see, fat with good things, fortified with mighty store of men, yet it seems to have contained in it nothing more illustrious than this man, nor more sacred and wonderful and dear. Moreover, the poems of his divine mind utter a loud voice and declare illustrious discoveries, so that he seems hardly to be born of mortal stock.

734 Nevertheless he and those whom I mentioned before, men very much below him by many degrees and far less than he, although in making many excellent and inspired discoveries they have given responses as it were from the holy place of the heart, with more sanctity and far more certainty than the Pythia^a who speaks forth from *Apollo's* tripod and laurel,^b nevertheless I say these have come to a crash about the beginnings of things ; great they were, and herein great was their fall^c : first because they assume motion after taking away void from things, and allow things to be soft and rarefied, air,

is a philosopher-poet of divine genius,

but he and others who hold similar views

are wrong, for

(1) they deny Void

Fin. 2.7.20 (of *Epicurus*): in alio vero libro, in quo breviter comprehensis gravissimis sententiis quasi oracula edidisse sapientiae dicitur ; *Fin.* 2.32.102 ; *Nat.D.* 1.24.66 : haec ego nunc physicorum oracula fundo. With the *Lucretian* passages *Wakefield* well compares lines from *Athenaeus'* epigram on *Epicurus* (*Diogenes Laertius* 10.12) : " This the wise son of *Neocles* heard from the *Muses* or from the sacred tripod at *Delphi* " (ἡ Πυθούς ἐξ ἱερῶν tripodῶν).

^c 741 was perhaps influenced by *Homer*, *Il.* 16.776.

aera solem imbrem terras animalia fruges—
 nec tamen admiscunt in eorum corpus inane ; 745
 deinde quod omnino finem non esse secandis
 corporibus faciunt neque pausam stare fragori
 nec prorsum in rebus minimum consistere quicquam,
 cum videamus id extremum cuiusque cacumen
 esse quod ad sensus nostros minimum esse videtur, 750
 conicere ut possis ex hoc, quae cernere non quis
 extremum quod habent, minimum consistere in illis.
 huc accedit item, quoniam primordia rerum
 mollia constituunt, quae nos nativa videmus
 esse et mortali cum corpore funditus, utqui 755
 debeat ad nilum iam rerum summa reverti
 de niloque renata vigescere copia rerum ;
 quorum utrumque quid a vero iam distet habebis.
 deinde inimica modis multis sunt atque veneno
 ipsa sibi inter se ; quare aut congressa peribunt 760
 aut ita diffugiant ut tempestate coacta
 fulmina diffugere atque imbris ventosque videmus.

Denique quattuor ex rebus si cuncta creantur
 atque in eas rursum res omnia dissoluuntur,
 qui magis illa queunt rerum primordia dici 765
 quam contra res illorum retroque putari ?
 alternis gignuntur enim mutantque colorem
 et totam inter se naturam tempore ab omni. 768

744 imbrem *C. Bailey and P. Maas CR 57 (1943) 14* :
 ignem *OQU.P.* A reference to the four elements is needed :
cf. 567, 713, 715, 733-786. For the corruption, *cf. 784-785*
(probably), Catullus 62.7. 747 faciunt *F* : faciunt
OQU.ABL, Merrill (1917), Diels, Martin, Büchner, perhaps
rightly 748 quicquam *Marullus* : qui *OQU* : quire *F*
 752 in illis *Munro* : omitted by *OQU* : rebus *P* : et illis
J. P. Postgate, Journ. Phil. 24 (1896) 132 : menti *D. J.*
Furley, Two Studies in the Greek Atomists 28-29 758
 habebis *O corr., P* : habes *OQU* 759 veneno (*cf. Varro,*
Rust. 1.2.18) Wakefield in notes : veneni *QU* : vene *OAL* :

sun, water, earth, animals, crops, yet do not mingle
 void in their body ; secondly because they place no
 limit at all to the cutting-up of bodies or fixed pause
 to their breaking, and deny that there exists in
 things any least part at all, although we see that in
 each thing there exists that extremest point which
 according to our senses is seen to be least, so that
 you may deduce from this that in those things which
 you cannot perceive a least exists which they have as
 their extreme.^a Moreover, since they make the
 first-beginnings of things to be soft, things which we
 see to be generated and to be wholly of perishable
 body, the sum of things must by this time return to
 nothing, and the store of things be reborn from
 nothing to grow vigorous ; and how far both these
 views are from the truth you will know already. Then
 again, these elements are at war together in many
 ways, and poison to one another ; therefore when
 they meet they will either perish, or will fly apart,
 as when a tempest has gathered we see lightnings
 and rain and winds fly apart.

763 Moreover, if all things are made from four
 things, and all are dissolved again into these things,
 how can these be called the first-beginnings of things,
 rather than things the first-beginnings of these, the
 thought being reversed? For they are born from
 one another, and change their colour and their whole
 nature amongst themselves from everlasting. But if

^a *Cf. 599-634* and see note on 608. The argument here is
 that, just as visible objects have a visible minimum, so there
 must be a minimum in the invisible atoms.

venena *O corr., CF* : venenum *J. S. Reid, Harv. Stud. 22*
(1911) 13, perhaps rightly (cf. 6.974) 769 = 762 rightly
 deleted by *O corr. and omitted by BF*

sin ita forte putas ignis terraeque coire 770
 corpus et aërias auras roremque liquoris,
 nil in concilio naturam ut mutet eorum,
 nulla tibi ex illis poterit res esse creata,
 non animans, non ex animo cum corpore, ut arbor;
 quippe suam quidque in coetu variantis acervi 775
 naturam ostendet mixtusque videbitur aër
 cum terra simul atque ardor cum rore manere.
 at primordia gignundis in rebus oportet
 naturam clandestinam caecamque adhibere,
 emineat nequid quod contra pugnet et obstet 780
 quominus esse queat proprie quodcumque creatur.
 Quin etiam repetunt a caelo atque ignibus eius
 et primum faciunt ignem se vertere in auras
 aëris, hinc imbrem gigni terramque creari
 ex imbri retroque a terra cuncta reverti, 785
 umorem primum, post aëra, deinde calorem,
 nec cessare haec inter se mutare, meare
 a caelo ad terram, de terra ad sidera mundi.
 quod facere haud ullo debent primordia pacto;
 immutabile enim quiddam superare necessest, 790
 ne res ad nilum redigantur funditus omnes.
 nam quodcumque suis mutatum finibus exit,
 continuo hoc mors est illius quod fuit ante.
 quapropter quoniam quae paulo diximus ante

777 atque ardor *Lambinus*: et quodam *OQUP*: atque vapor *Merrill* (1917) tentatively: atque calor *W. Clausen*, *AJPhil.* 70 (1949) 309-310 784-785 imbrem . . . imbri . . . a terra *Marullus*: ignem . . . igni . . . in terram *OQUP*. See critical note on 744. Here ignem . . . igni can be retained only if we suppose that *Lucr.* is again arguing against *Heraclitus* and his followers. This supposition is in fact made by *Pascal* and by *M. Bollack* in *Assoc. G. Budé, Actes du VIII^e Congrès* 386-387, and it may be correct. The reading of the manuscripts is also retained by *Merrill* (1917)

by chance you think fire and the substance of earth and airy wind and liquid water so come together as to change nothing of their nature in the union, you will find that nothing will be able to be made from them, no animal, nothing with inanimate body as a tree; for each element in the combination of this discordant heap will show its own nature, and air will be seen commingled together with earth, fire abiding with water. But the first-beginnings in begetting things ought to bring with them a nature secret and unseen, that nothing may be prominent to thwart and hinder from its proper being each thing which is being made.

(6) if the four elements retain their character in union, they cannot produce anything;

782 Moreover, they^a go back to heaven and its fires for a beginning, and lay down that first fire changes into the winds of the air, from this water is produced, and earth made from water, and back all returns again from earth, water first, then air, lastly fire, and that these change about incessantly, passing from heaven to earth, from earth to the stars of the skies. But this the first-beginnings on no account ought to do; for something unchangeable must survive, that all things may not return utterly to nothing. For whatever by being changed passes outside its own boundaries, at once this is the death of that which was before.^b Therefore, since these things^c which we mentioned a little while ago pass

(7) if the four elements change into one another,

they are not imperishable

^a The reference may be not only to the Stoics (*cf.* *Cicero, Nat.D.* 2.33.84, 3.12.30-31), but also to the Peripatetics. For the view that *Lucr.* has returned to *Heraclitus* and his followers, see critical note on 784-785.

^b 789-793 = 2.750-754. 792-793 occur also at 670-671, 3.519-520.

^c The four elements.

in commutatam veniunt, constare necessessest 795
 ex aliis ea, quae nequeant convertier usquam,
 ne tibi res redeant ad nilum funditus omnes.
 quin potius tali natura praedita quaedam
 corpora constituas, ignem si forte crearint,
 posse eadem, demptis paucis paucisque tributis, 800
 ordine mutato et motu, facere aeris auras,
 sic alias aliis rebus mutarier omnis ?

“ At manifesta palam res indicat,” inquis, “ in auras
 aeris e terra res omnis crescere alicue ;
 et nisi tempestas indulget tempore fausto 805
 imbribus, ut tabe nimborum arbusta vacillent,
 solque sua pro parte fovet tributique calorem,
 crescere non possint fruges arbusta animantes.”
 scilicet, et nisi nos cibus aridus et tener umor
 adiuvet, amisso iam corpore vita quoque omnis 810
 omnibus e nervis atque ossibus exsoluatur ;
 adiutamur enim dubio procul atque alimur nos
 certis ab rebus, certis aliae atque aliae res.
 nimirum quia multa modis communia multis
 multarum rerum in rebus primordia mixta 815
 sunt, ideo variis variae res rebus aluntur.
 atque eadem magni refert primordia saepe
 cum quibus et quali positura contineantur
 et quos inter se dent motus accipiantque ;
 namque eadem caelum mare terras flumina solem 820
 constituunt, eadem fruges arbusta animantis,

806 ut *Priscian* 7.72 : et *OQGP* 814 multa modis
Lambinus, who comments “ ita scriptum est in duobus cod.
manuscriptis ” : multimodis *OQGP, Wakefield, Ernout*

into change, they must of necessity consist of other things which can nowhere change at all, or you will find that all things return utterly to nothing. Why not rather assume some bodies endowed with such a nature that, if they happen to have produced fire, the same, when a few have been taken away and a few added, and their arrangement and motion have been altered, are able to make the winds of the air, and in this way all other things can interchange with others ?

⁸⁰³ “ But,” you say, “ manifest fact shows openly (8) although the four elements are needed for growth, that into the winds of the air out of the earth all things grow and are nourished ; and unless the season lets the rain have its way at a favourable time, so that the trees shake under the melting of the clouds, unless the sun fosters them on his part and grants his heat, crops, trees, and animals cannot grow.” True : and unless we also were helped by solid food and soft water, we should lose our flesh at once, and all life also would be dissolved out of all our sinews and bones ; for we ourselves are helped without doubt and nourished by certain fixed things ; other things and others again by other fixed things ; undoubtedly because many first-beginnings common to many things in many ways are commingled in things, therefore different things are nourished by different things. And it is often of great importance with what and in what position these same first-beginnings are held together, and what motions they impart and receive mutually ^a ; for the same beginnings constitute sky, sea, earth, rivers, sun, the same make crops, trees, animals,^b but they move differ-

^a Cf. 908-910, 2.760-762, 1007-1009.

^b Cf. 2.1015-1016.

verum aliis alioque modo commixta moventur.
 quin etiam passim nostris in versibus ipsis
 multa elementa vides multis communia verbis,
 cum tamen inter se versus ac verba necessest 825
 confiteare et re et sonitu distare sonanti.
 tantum elementa queunt permutato ordine solo ;
 at rerum quae sunt primordia, plura adhibere
 possunt unde queant variae res quaeque creari.

Nunc et Anaxagorae scrutemur homoeomerian 830
 quam Grai memorant nec nostra dicere lingua
 concedit nobis patrii sermonis egestas,
 sed tamen ipsam rem facilest exponere verbis.

Principio, rerum quam dicit homoeomerian,
 ossa videlicet e pauxillis atque minutis 835
 ossibus hic et de pauxillis atque minutis
 visceribus viscus gigni sanguenque creari
 sanguinis inter se multis coeuntibu' guttis
 ex auri que putat micis consistere posse
 aurum et de terris terram concrecere parvis, 840
 ignibus ex ignis, umorem umoribus esse,

834 quam *OQGP* : quom *Lachmann*

^a 823-825 = 2,688-690. Comparison between the disposition of letters in words and the arrangement of atoms in compound bodies is made also in 196-197, 912-914, 2,1013-1018. Both the Latin *elementa* and the Greek *στοιχεῖα* can mean both physical elements and the letters of the alphabet.

^b Anaxagoras (c. 500-c. 428 B.C.) of Clazomenae, near Smyrna, resided in Athens from c. 456 until c. 432 B.C., when he was prosecuted and banished for impiously maintaining that the sun is not a divinity, but a red-hot mass of stone larger than the Peloponnese. Like the atomists, whom he preceded and influenced, he supposed that matter exists in

ently mixed with different elements and in different ways. Moreover, all through these very lines of mine you see many elements common to many words, although you must confess that lines and words ^a differ one from another both in meaning and in the sound of their soundings. So much can elements do, when nothing is changed but order ; but the elements that are the beginnings of things can bring with them more kinds of variety, from which all the various things can be produced.

⁸³⁰ Now let us also examine the *homoeomeria* of Anaxagoras,^b as the Greeks call it, which cannot be named in our language because of the poverty of our mother speech,^c but yet it is easy to explain the thing itself in words.

⁸³⁴ First, as to what he calls the *homoeomeria* in things, he clearly holds that bones are made of very small and minute bones,^d flesh of very small and minute particles of flesh, and blood is composed by many drops of blood coming together into union, and he thinks gold may consist of grains of gold, and earth to be a concretion of small earths, fire of

the form of an infinite number of separate particles ; but his particles differed from atoms in that they were heterogeneous in substance ; moreover, unlike the atomists, he believed in the infinite divisibility of matter and denied the existence of void. The term *homoeomeria*, which means "similarity of parts," was probably not used by A. himself (see C. S. Kirk, J. E. Raven and M. Schofield, *The Presocratic Philosophers*, 2nd ed., 376-378, W. K. C. Guthrie, *A History of Greek Philosophy II* 325-326).

^c Cf. 139, 3,260.

^d It is probable that all the examples in 835-841 are taken from Anaxagoras himself. See Munro, Ernout-Robin, Bailey.

cetera consimili fingit ratione putatque.
 nec tamen esse ulla idem parte in rebus inane
 concedit neque corporibus finem esse secandis.
 quare in utraque mihi pariter ratione videtur 845
 errare atque illi supra quos diximus ante.

Adde quod inbecilla nimis primordia fingit,
 si primordia sunt, simili quae praedita constant
 natura atque ipsae res sunt, aequaeque laborant
 et pereunt, neque ab exitio res ulla refrenat. 850
 nam quid in oppressu valido durabit eorum,
 ut mortem effugiat leti sub dentibus ipsis?
 ignis an umor an aura? quid horum? sanguen an
 ossa?

nil, ut opinor, ubi ex aequo res funditus omnis
 tam mortalis erit quam quae manifesta videmus 855
 ex oculis nostris aliqua vi victa perire.
 at neque recidere ad nilum res posse neque autem
 crescere de nilo testor res ante probatas.

Praeterea quoniam cibus auget corpus alitque,
 scire licet nobis venas et sanguen et ossa 860

sive cibos omnis commixto corpore dicent
 esse et habere in se nervorum corpora parva
 ossaque et omnino venas partisque cruoris,

843 idem (*but after parte*) *P*: idem *OQG*: de (*cf.* 235)
Diels 853 sanguen an ossa *Codex Laurentianus* 35.32
in margin: sanguis an os *OQFL*: sagnis an os *G* 860-
 861 *Lambinus* saw that there is a lacuna between these lines and
 supplied et nervos alienigenis ex partibus esse. (*In his 1570*
edition he complains: "alii nuper exorti, improbissimi et
 immantissimi barbari, hanc meam emendationem sibi arro-
 gant, ut alias fere omnes"—the reference being chiefly to
Gifanius, on whose thefts from Lambinus see Munro I 15-16)

fires, water of waters; he fancies and imagines the
 rest in the same way. But he refuses to allow void
 anywhere in things, or to place any limit to the
 cutting-up of bodies. Therefore he seems to me
 wrong in both these views equally with those whom
 we have already mentioned above.^a

He denies
 Void, does
 not limit
 division,

⁸⁴⁷ Add that he supposes first-beginnings which
 are too weak, if indeed those are first-beginnings
 which are endowed with a nature similar to the
 things themselves, and equally suffer and pass away,
 nor does anything curb them back from destruction.
 For which of these will endure under crushing pres-
 sure, so as to escape death between the very teeth
 of destruction?^b Fire or water or air? Which of
 these? Blood or bones? Nothing, as I think, when
 everything alike will be in its essence as perishable
 as what we see manifestly pass away from our sight
 overcome by some violence. But I appeal to what
 has been already demonstrated,^c to prove that things
 can neither fall back into nothing, nor again grow
 out of nothing.

makes ele-
 ments soft.

⁸⁵⁹ Besides, since food increases the body and
 nourishes it, we may know that veins and blood and
 bones [and sinews are made of parts not like them-
 selves^d;] or if they say that all foods are made of
 miscellaneous substance, and contain within them
 small bodies of sinews and bones and also veins and
 particles of blood, it will follow that all food itself,

A dilemma.

^a That is, Heraclitus, Empedocles, and their followers (*cf.*
 658, 742-752).

^b *Cf.* Dante, *Purgatorio* 7.32 "dai denti morsi della
 morte," but the resemblance must be fortuitous, for in
 Dante's time *Lucr.* was unknown in Italy (see *Munro I 2*).

^c 149-264.

^d See critical note for *Lambinus'* supplement.

fiet uti cibus omnis, et aridus et liquor, ipse
 ex alienigenis rebus constare putetur, 865
 ossibus et nervis sanieque et sanguine mixto.
 praeterea quaecumque e terra corpora crescunt
 si sunt in terris, terram constare necessest
 ex alienigenis, quae terris exoriuntur.
 transfer item, totidem verbis utare licebit : 870
 in lignis si flamma latet fumusque cinisque,
 ex alienigenis constant ligna necessest,
 874 ex alienigenis, quae lignis exoriuntur.
 873 praeterea tellus quae corpora cumque alit auget

Linquntur hic quaedam latitandi copia tenuis, 875
 id quod Anaxagoras sibi sumit, ut omnibus omnis
 res putet inmixtas rebus latitare, sed illud
 apparere unum cuius sint plurima mixta
 et magis in promptu primaque in fronte locata.
 quod tamen a vera longe ratione repulsumst. 880
 conveniebat enim fruges quoque saepe, minaci
 robore cum saxi franguntur, mittere signum
 sanguinis aut aliquid, nostro quae corpore aluntur ;
 cum lapidi in lapidem terimus, manare cruorem.
 consimili ratione herbas quoque saepe decebat 885
 et latices dulcis guttas similique sapore

864 *Some editors place a comma after ipse instead of after liquor, perhaps rightly* 866 *misto (= mixto) ed. Aldina: mixta OQGP: mixtum Politian: mixtus Büchner 873-874 transposed by Diels. Whether or not the transposition is accepted, a lacuna must be assumed after 874 (873 in manuscripts) unless 874 is to be explained as an alternative version of 867 (cf. E. Susemihl, Philol. 44 [1885] 78). Both transposition and lacuna are confirmed by Pap. fr. H, according to Kleve, who reads x vj̄ (= [e]x vj̄[ibus] Kleve) in 874a under the 13th-16th letters of 874 873 exoriuntur ABF: oriuntur OQGL 884-885 are transposed by many editors, following N.P. Howard, Journ. Phil. 1 (1868) 122. But, if 884 is thought intolerably*

both solid food and liquid, is held to consist of things unlike itself, bones and sinews, pus and blood commingled. Besides, whatever bodies grow out of the earth, if they are in the earth, then the earth must consist of things unlike itself which arise out of the earth. Apply this reasoning to other cases, and you may use the very same words. If flame, if smoke and ashes, are hidden in wood, the wood must necessarily consist of things unlike itself, of unlike things, which arise out of the wood. Besides, whatever bodies the earth nourishes and increases [must consist of things unlike themselves, which in their turn must contain things unlike themselves].^a

⁸⁷⁵ Here is left some slight opportunity for evasion, which Anaxagoras turns to advantage in supposing that all things are hidden immingled in all things, but that alone appears which preponderates in the mixture and is more to be seen and placed right in the front. But this is far removed from true reasoning. For then it were proper that corn also, when it is being ground by the crushing strength of the mill-stone, should show often a sign of blood or something of those substances which are nourished in our bodies ; and when we rub with stone upon stone the blood should trickle. In the same way it were fitting that herbage also and water should often emit drops

He supposes that all things are hidden in all things ;

if so, why are no traces ever seen ?

^a The passage within brackets gives what is, according to Bailey, the likely sense of the missing argument.

awkward after 882-883 (and it is difficult to see why it should be), a better solution is that of H. Jacobson, CPhil. 61 (1966) 151-153, who suggests that 882-883 and 884 are alternative versions (cf. 4.26-44 and 45-53, 5.1359 and 1360), both written by the poet, and that Lucr. intended to omit one of them, probably 884 885 herbas Marullus: herbis OQP

mittere, lanigeræ quali sunt ubere lactis,
 scilicet et glebis terrarum saepe friatis
 herbarum genera et fruges frondesque videri
 dispersita inter terram latitare minute, 890
 postremo in lignis cinerem fumumque videri,
 cum prae fracta forent, ignisque latere minutos.
 quorum nil fieri quoniam manifesta docet res,
 scire licet non esse in rebus res ita mixtas,
 verum semina multimodis inmixta latere 895
 multarum rerum in rebus communia debent.

“ At saepe in magnis fit montibus,” inquis, “ ut altis
 arboribus vicina cacumina summa terantur
 inter se, validis facere id cogentibus austris,
 donec flammai fulserunt flore coorto.” 900
 scilicet, et non est lignis tamen insitus ignis,
 verum semina sunt ardoris multa, terendo
 quae cum confluxere, creant incendia silvis.
 quod si facta foret silvis abscondita flamma,
 non possent ullum tempus celarier ignes, 905
 conficerent volgo silvas, arbusta cremarent.
 iamne vides igitur, paulo quod diximus ante,
 permagni referre eadem primordia saepe
 cum quibus et quali positura contineantur
 et quos inter se dent motus accipiantque, 910
 atque eadem paulo inter se mutata creare
 ignes et lignum? quo pacto verba quoque ipsa

887 ubere *OQGP*: ubera (cf. 2.370) first printed by Lambinus, who states that he found the reading quales sunt ubera in a manuscript

^a For the metaphor *flammai . . . flore*, cf. 4.450, Homer, *Il.* 9.212 (πυρὸς ἄνθος) quoted by Plutarch, *Mor.* 934 B,

sweet and of like flavour to the milk from the udders of fleecy ewes; and assuredly, when clods of earth have been crumbled, various kinds of herbage ought often to be seen, and corn, and leaves, scattered about and lurking amid the earth in small portions; lastly, when wood is broken, smoke and ashes and fire should be seen lurking in small portions. But since plain matter of fact teaches that nothing of all this is to be seen, we may know that things are not thus mixed up in things, but seeds common to many things must in many ways lurk immingled in things.

⁸⁹⁷ “ But,” you say, “ often on great mountains it happens that the topmost branches of tall trees being close together are rubbed one against another when the strong south winds compel them so to do, until the flower of flame ^a breaks out and they blaze.” Assuredly, and yet fire is not implanted in the wood,^b but there are many seeds of heat which stream together by rubbing and make a conflagration among the forests; whereas if the flame were hidden in the forests ready made, the fires could not be concealed for a moment, they would consume the forests everywhere, burn up the trees. Do you see now, as I said a little while ago,^c that it is often of very great importance with what and in what position these same first-beginnings are held in union, and what motions they impart and receive mutually, and how the same elements a little changed in their relations create fires and firs? Just as the words themselves too Aeschylus, *PV* 7, Naevius 48 (Ribbeck *TRF*) *ut videam volcani opera haec flammis fieri flora*. With 897-900 cf. Thucydides 2.77.4. With 897-903 cf. 5. 1094-1100.

^b Anaxagoras' view that fire is present in wood is effectively emphasized by the presence of the letters of *ignis* in *lignis*. Cf. 912-914. ^c 817-819.

When fire breaks out in a forest, not fire but seeds able to create fire were hidden in the wood.

inter se paulo mutatis sunt elementis,
cum ligna atque ignes distincta voce notemus.

Denique iam quaecumque in rebus cernis apertis
si fieri non posse putas, quin materiai 916
corpora consimili natura praedita fingas,
hac ratione tibi pereunt primordia rerum :
fiet uti risu tremulo concussa cachinnent
et lacrimis salsis umectent ora genasque. 920

Nunc age quod superest cognosce et clarius audi.
nec me animi fallit quam sint obscura ; sed acri
percussit thyrso laudis spes magna meum cor,
et simul incussit suavem mi in pectus amorem
Musarum, quo nunc instinctus mente vigenti 925
avia Pieridum peragro loca nullius ante
trita solo. iuvat integros accedere fontis
atque haurire, iuvatque novos decerpere flores
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora Musae : 930
primum quod magnis doceo de rebus et artis

^a The translation of Munro, adopted by Rouse. "*Beams . . . flames*" (Bailey) and "*fires . . . conifers*" (M. F. Smith) are perhaps preferable in that, being partly anagrammatic, they represent more accurately the reshuffling of the same elements (911). Lucr.'s own example, though ingenious, is not perfect in this respect.

^b Cf. 2.973-990. Lucr. is fond of concluding an argument with a *reductio ad absurdum* : cf. e.g. 3.367-369, 775-783.

^c For the obscurity of Lucr.'s subject, cf. 136, 933.

^d The *thyrsus* is the wand carried by Dionysus and his votaries. For the idea that the poet is divinely inspired and possessed, like a bacchant, see Plato, *Ion* 533 E—534 E.

consist of elements a little changed, when we mark
fires and firs ^a with a distinct name.

⁹¹⁵ Lastly, if you think that whatever you see amongst visible things cannot be brought about without supposing that the elements of matter are endowed with a like nature, on this reasoning there is an end of your first-beginnings of things : it will follow that they guffaw shaken with quivering laughter, and bedew face and cheeks with salt tears.^b

Absurd conclusion of the argument.

⁹²¹ Come now, mark and learn what remains, and hear a clearer strain. Nor am I unaware how obscure ^c these matters are ; but the high hope of renown has struck my mind sharply with holy wand,^d and at the same time has struck into my heart sweet love of the Muses,^e thrilled by which now in lively thought I traverse pathless tracts of the Pierides never yet trodden by any foot.^f I love to approach virgin springs and there to drink ; I love to pluck new flowers, and to seek an illustrious chaplet for my head from fields whence before this the Muses have crowned the brows of none : first because my teaching is of high matters, and I proceed to un-

Listen to my doctrine, which I commend to you by the charm of poesy.

^a With *incussit suavem mi in pectus amorem Musarum* (924-925) cf. *omnibus incutiens blandum per pectora amorem* (19). The parallelism shows that Lucr. feels that his creative urge (to write poetry) is comparable to, though of course on a higher level than, the creative urge given to animals by Venus. In this connexion, it is relevant to recall that Venus is invoked in the first proem not only as the power of physical creation, but also (24-28) as the giver of grace to Lucr.'s verses.

^f The Pierides are the Muses. For the probable influence of Callimachus on 926-928, see E. J. Kenney, *Mnemos.* ser. 4, 23 (1970) 370.

religionum animum nodis exsolvere pergo,
 deinde quod obscura de re tam lucida pango
 carmina, musaeo contingens cuncta lepore.
 id quoque enim non ab nulla ratione videtur ; 935
 sed veluti pueris absinthia taetra medentes
 cum dare conantur, prius oras pocula circum
 contingunt mellis dulci flavoque liquore,
 ut puerorum aetas improvida ludificetur
 laborum tenuis, interea perpotet amarum 940
 absinthii laticem deceptaque non capiatur,
 sed potius tali pacto recreata valescat,
 sic ego nunc, quoniam haec ratio plerumque videtur
 tristior esse quibus non est tractata, retroque
 vulgus abhorret ab hac, volui tibi suaviloquenti 945
 carmine Pierio rationem exponere nostram
 et quasi musaeo dulci contingere melle,
 si tibi forte animum tali ratione tenere
 versibus in nostris possem, dum perspicis omnem
 naturam rerum qua constet compta figura. 950

Sed quoniam docui solidissima materiai
 corpora perpetuo volitare invicta per aevom,
 nunc age, summai quaedam sit finis eorum
 necne sit, evolvamus ; item quod inane repertumst
 seu locus ac spatium, res in quo quaeque gerantur, 955
 pervideamus utrum finitum funditus omne
 constet an immensum pateat vasteque profundum.

942 pacto *Heinsius, Lachmann* : facto *OQGP*

^a The metaphor in 932 shows that Lucr. connects *religio* with *religare* "to bind fast."

^b *conantur* not only adds a pleasingly realistic touch to the illustration by suggesting that the doctor's trick may not succeed, but also corresponds to *si . . . forte . . . possem* in 948-949 where Lucr. shows that he is not fully confident of his ability to hold Memmius' attention and convert him. For the

loose the mind from the close knots of superstition ^a ; next because the subject is so dark and the lines I write so clear, as I touch all with the Muses' grace. For even this seems not to be out of place ; but as with children, when physicians try ^b to administer rank wormwood, they first touch the rims about the cups with the sweet yellow fluid of honey, that unthinking childhood be deluded as far as the lips, and meanwhile may drink up the bitter juice of wormwood, and though beguiled be not betrayed, but rather by such means be restored and regain health, so now do I : since this doctrine commonly seems somewhat harsh to those who have not used it, and the people shrink back from it, I have chosen to set forth my doctrine to you in sweet-speaking Pierian song, and as it were to touch it with the Muses' delicious honey, if by chance in such a way I might engage your mind in my verses, while you are learning to see in what shape is framed the whole nature of things.^c

⁹⁵¹ But since I have taught that the bodies of matter are perfectly solid, and that they fly about continually unimpaired for ever, come now, let us unfold whether there be any limit to their sum or not ; likewise as regards the void which has been found to exist, or place and space for all things to be done, let us see clearly whether it be limited in its essence or spread to breadth immeasurable and vasty depth.

Epicurean philosopher as missionary and spiritual healer, see Introduction p. xlii.

^c 926-950 are repeated, with a few minor alterations, in 4.1-25.

Are matter and space infinite ?

Omne quod est igitur nulla regione viarum
 finitumst; namque extremum debebat habere.
 extremum porro nullius posse videtur 960
 esse, nisi ultra sit quod finiat; ut videatur
 quo non longius haec sensus natura sequatur.
 nunc extra summam quoniam nil esse fatendum,
 non habet extremum, caret ergo fine modoque.
 nec refert quibus adsistas regionibus eius: 965
 usque adeo, quem quisque locum possedit, in omnis
 tantundem partis infinitum omne relinquit.

Praeterea si iam finitum constituatur
 omne quod est spatium, si quis procurrat ad oras
 ultimus extremas iaciatque volatile telum, 970
 id validis utrum contortum viribus ire
 quo fuerit missum mavis longue volare,
 an prohibere aliquid censes obstareque posse?
 alterutrum fatearis enim sumasque necessest;
 quorum utrumque tibi effugium praecludit et omne
 cogit ut exempta concedas fine patere. 976
 nam sive est aliquid quod probeat officiatque
 quominu' quo missum est veniat finique locet se,
 sive foras fertur, non est a fine profectum.
 hoc pacto sequar atque, oras ubicumque locaris 980
 extremas, quaeram quid telo denique fiat.

966 omnis *P*: omnis *OQG*: omneis *ed. Aldina, Pius, ed. Juntina, Naugerius, Lambinus, Creech, Havercamp, and other editors before Wakefield, to whom Diels and Büchner attribute it* 971 id validis *Lambinus*: invalidis *OQGP* 977 officiat *Gryphius, Lambinus*: efficiat *OQGABL*, retained by recent editors, but, though quominus is possible after efficere (*cf. G. B. A. Fletcher, Latomus 27 [1968] 885*), *o* and *e* are frequently confused in minuscules, and officiat is strongly supported by 337, 2.784-786 981 fiat *P*: fiet *OQG*, retained by *Merrill (1917) and Martin, who make* quid . . . fiet a direct question

⁹⁵⁸ The universe then is not limited along any of its paths; for if so it ought to have an extremity. Again, clearly nothing can have an extremity unless there be something beyond to bound it, so that something can be seen, beyond which our sense can follow the object no further. Now since we must confess that there is nothing beyond the sum of things, it has no extremity, and therefore it is without end or limit.^a Nor does it matter in which of its quarters you stand: so true is it that, whatever place anyone occupies, he leaves the whole equally infinite in every direction.

⁹⁶⁸ Besides, if all the existing space be granted for the moment to be finite, suppose someone proceeded to the very extremest edge and cast a flying lance, do you prefer that the lance forcibly thrown goes whither it was sent and flies afar, or do you think that anything can hinder and obstruct it? For you must confess and accept one of the two; but each of them shuts you off from all escape, and compels you to own that the universe stretches without end. For whether there is something to hinder and keep it from going whither it is sent and from fixing itself at its mark, or whether it passes out, that was no boundary whence it was sped.^b In this way I shall go after you, and wherever you place your extremest edge, I shall ask what at last happens to the lance.

^a For the argument of 958-964, *cf. Epicurus, Ep. ad Hdt. 41, Cicero, Div. 2.50.103-104.*

^b If it goes on, there is space beyond; if not, there is matter. In either case it is not the end of the universe. The illustration may have been suggested by the practice of the Roman fetial hurling a spear over the enemy's border as a declaration of war.

fiet uti nusquam possit consistere finis
effugiumque fugae prolatet copia semper.

Praeterea spatium summam totius omne
undique si inclusum certis consisteret oris 985
finitumque foret, iam copia materiai
undique ponderibus solidis confluet ad imum,
nec res ulla geri sub caeli tegmine posset,
nec foret omnino caelum neque lumina solis,
quippe ubi materies omnis cumulata iaceret 990
ex infinito iam tempore subsidendo.

at nunc nimirum requies data principiorum
corporibus nullast, quia nil est funditus imum
quo quasi confluere et sedes ubi ponere possint.
semper in adsiduo motu res quaeque geruntur 995
partibus e cunctis infernaeque suppeditantur
ex infinito cita corpora materiai.

Postremo ante oculos res rem finire videtur ;
aer dissaepit collis atque aera montes,
terra mare et contra mare terras terminat omnis ;
omne quidem vero nil est quod finiat extra. 1001

Est igitur natura loci spatiumque profundi,
quod neque clara suo percurrere fulmina cursu
perpetuo possint aevi labentia tractu
nec prorsum facere ut restet minus ire meando : 1005
usque adeo passim patet ingens copia rebus
finibus exemptis in cunctas undique partis.

Ipsa modum porro sibi rerum summa parare
ne possit, natura tenet, quae corpus inani

996 e *M* : in *P* : omitted by *OQG*

The effect will be that no boundary can exist anywhere and the possibility of flight will ever put off escape.

⁹⁸⁴ Besides, if all the space in the universe stood (3) if space contained within fixed boundaries on all sides and were limited, by this time the store of matter would be collected at the bottom ; by its solid weight have run together from all sides to the bottom, nor could anything be done under the canopy of heaven, nor would heaven exist at all or the sun's light, because assuredly all matter would be lying in a heap from sinking down through infinite ages past. But as it is, sure enough no rest is given to the bodies of the first-beginnings, because there is no bottom whatsoever, for them to run together as it were into it and fix their abode there. Always the business of the universe is going on with incessant motion in every part, and the elements of matter are being supplied from beneath, rushing from infinite space.

⁹⁹⁸ Lastly, one thing is seen before our eyes to be the limit of another : air separates hills and mountains air, earth bounds sea and contrariwise the sea is the boundary of all lands ; the universe, however, has nothing outside to be its limit.

¹⁰⁰² Therefore the nature of space and the extent of the deep is so great that neither bright lightnings can traverse it in their course, though they glide onwards through endless tracts of time ; nor can they by all their travelling make their journey any the less to go : so widely spreads the great store of space in the universe all around without limit in every direction.

¹⁰⁰⁸ Furthermore, nature withholds the sum of existing things from providing a limit for itself, be- Matter, too, is infinite :

et quod inane autem est finiri corpore cogit, 1010
 ut sic alternis infinita omnia reddat,
 aut etiam alterutrum, nisi terminet alterum eorum,
 simplice natura pateat tamen inmoderatum.

nec mare nec tellus neque caeli lucida templa
 nec mortale genus nec divum corpora sancta 1015
 exiguum possent horai sistere tempus ;
 nam dispulsa suo de coetu materiai
 copia ferretur magnum per inane soluta,
 sive adeo potius numquam concreta creasset
 ullam rem, quoniam cogi disiecta nequisset. 1020

Nam certe neque consilio primordia rerum
 ordine se quo quaeque sagaci mente locarunt
 nec quos quaeque darent motus pepigere profecto,
 sed quia multa modis multis mutata per omne
 ex infinito vexantur percita plagis, 1025
 omne genus motus et coetus experiundo
 tandem deveniunt in talis disposituras,
 qualibus haec rerum consistit summa creata,
 et multos etiam magnos servata per annos
 ut semel in motus coniectast convenientis, 1030
 efficit ut largis avidum mare fluminis undis

1013-1014 *Lacuna between these lines assumed by Marcellus (marginal note in Codex Laurentianus 35.32) and all recent editors except Merrill (1917) and Martin. Diels supplies: nam si finitum vacuum constaret inane, | innumera haut [=haud] caperet cita corpora material; | sin finita essent immenso corpora inani, | nec mare etc. Cf. Epicurus, Ep. ad Hdt. 42. 1023 darent motus pepigere profecto Marullus (from 5.421): sagaci mente locarunt (from 1022) O corr. by Dungal, Q, G corr., P*

cause she compels body to be bounded by void and that again which is void to be bounded by body, so that by this alternation she renders the universe infinite, or else either one of these two, if the other did not bound it, would yet by itself spread abroad without limit. [But if space were finite, it could not contain an infinite amount of matter; and if matter were finite], neither sea nor land nor the gleaming regions of the sky nor the race of men nor the holy bodies of gods could stand fast for the fraction of an hour; for the store of matter, driven abroad from its union, would be rushing dissolved through the great void, or rather would never have been compacted to form anything, since when scattered abroad it could never have been brought together.^a

¹⁰²¹ For certainly neither did the first-beginnings place themselves by design each in its own order with keen intelligence, nor assuredly did they make agreement what motions each should produce^b; but because, being many and shifted in many ways, they are harried and set in motion with blows throughout the universe from infinity, thus by trying every kind of motion and combination, at length they fall into such arrangements as this sum of things consists of^c; and this being also preserved through many great cycles of years,^d when once it has been cast together into convenient motions, brings it about that rivers refill the greedy sea with generous waves

^a Cf. Diogenes of Oenoanda fr. 67 Smith

^b 1021-1023 = 5.419-421.

^c With 1024-1028 cf. 5.187-194, 422-431.

^d *magnus annus* meant a long cycle of years, to which philosophers assigned various lengths. Cf. 5.644, Cicero, *Arat.* 232-233: *hae faciunt magnos longinqui temporis annos, cum redeunt ad idem caeli sub tegmine signum.*

integrent amnes et solis terra vapore
 fota novet fetus summissaque gens animantum
 floreat et vivant labentes aetheris ignes ;
 quod nullo facerent pacto, nisi materiai 1035
 ex infinito suboriri copia posset,
 unde amissa solent reparare in tempore quaeque.
 nam veluti privata cibo natura animantum
 diffluit amittens corpus, sic omnia debent
 dissolui simul ac deficit suppetitare 1040
 materies aliqua ratione aversa viai.
 nec plagae possunt extrinsecus undique summam
 conservare omnem quaeconque est conciliata.
 cudere enim crebro possunt partemque morare,
 dum veniant aliae ac suppleri summa queatur ; 1045
 interdum resilire tamen coguntur et una
 principiis rerum spatium tempusque fugai
 largiri, ut possint a coetu libera ferri.
 quare etiam atque etiam suboriri multa necessest,
 et tamen ut plagae quoque possint suppetere ipsae,
 infinita opus est vis undique materiai. 1051

Illud in his rebus longe fuge credere, Memmi,

1044 morare OQ probably should be retained. Diomedes (H. Keil, *Grammatici Latini* I p. 400, 15-28) mentions the active form and quotes examples from Naevius, Ennius, and Pacuvius. Cf. 3.628, where the reading of OQ points to vagare: morari O corr., Q corr., GP seems to have been unanimously adopted by the editors

^a The atoms that cause the blows.

^b It has been generally assumed that the theory which Lucr. attacks is, as Lambinus thought, "Peripateticorum et veterum Academicorum et Stoicorum," and that the Stoics are his main target. However, D. J. Furley, *BICS* 13 (1966) 16-23, following E. Bignone, has argued that Lucr. does not have the Stoics in mind at all, but only the Peripatetics. Since

of their streams, and earth, cherished by the sun's heat, renews its produce, and the generation of living things springs up and flourishes, and the gliding fires of heaven do live ; which they would by no means do, unless a store of matter could arise up out of the infinite, from which they are accustomed to replace in season all that has been lost. For as the nature of animals, deprived of food, wastes away, losing its body, so all things must be dissolved away as soon as matter, turned somehow from its course, has ceased to be supplied. Nor can blows from without on all sides conserve the whole of every world which has been formed by the union of atoms. They can indeed batter it frequently, and delay one part until others shall come and the sum can be filled up ; yet they ^a are compelled sometimes to rebound and thereby to give the first-beginnings of things ample time and space to escape, so that they can fly clear away from their combination. Therefore again and again I say, it is necessary that they should arise up in large numbers ; indeed, in order that even the blows themselves be supplied, there is need of an infinite quantity of matter on all sides.

¹⁰⁵² One belief concerning these matters, Memmius, you must avoid and keep afar: that, as some say, ^b ~~Some suppose falsely that all~~

Lucr.'s argument is no doubt derived from Epicurus, who probably was arguing chiefly against Aristotle (so far as we know, Epicurus himself did not attack the Stoics), it is natural that it should be most applicable to the Peripatetic form of the theory, but it is hard to believe that Lucr., writing at a time when Stoicism was his school's chief rival, did not aim it at the Stoics at all, even if it was not relevant to the Stoic view in every detail. Epicurean writers did not always present the views of their opponents fully and fairly.

in medium summae quod dicunt omnia niti,
 atque ideo mundi naturam stare sine ullis
 ictibus externis neque quoquam posse resolvi 1055
 summa atque ima, quod in medium sint omnia nixa—
 ipsum si quicquam posse in se sistere credis—
 et quae pondera sunt sub terris omnia sursum
 nitier in terraque retro requiescere posta,
 ut per aquas quae nunc rerum simulacra videmus.
 et simili ratione animalia suppa vagari 1061
 contendunt neque posse e terris in loca caeli
 recedere inferiora magis quam corpora nostra
 sponte sua possint in caeli templa volare ;
 illi cum videant solem, nos sidera noctis 1065
 cernere, et alternis nobiscum tempora caeli
 dividere et noctes parilis agitare diebus.
 sed vanus stolidis haec
 amplexi quod habent perv
 nam medium nil esse potest 1070
 infinita ; neque omnino, si iam medium sit,
 possit ibi quicquam consistere
 quam quavis alia longe ratione
 omnis enim locus ac spatium, quod inane vocamus,
 per medium, per non medium, concedere debet 1075
 aequae ponderibus, motus quacumque feruntur.

1058 et *OP*: at *QG* 1068-1075 *defectively preserved*
 by *O*: omitted by *QG*, which mark the omission with the
 number VIII and a cross above. Evidently the top right corner
 of a leaf of the archetype was torn, so that the end of each line
 is lost and more text is missing in the first lines than in the last,
 and the same tear was responsible for the disappearance of
 1094-1101. Of the restorations printed in the text, medium

all things press towards the centre of the whole, matter
 and that for this reason the nature of the world tends to the
 stands firm without any external blows, and the middle ;
 highest and lowest parts cannot be set loose in any
 direction, because all presses towards the centre—
 if you believe that anything can stand upon itself—
 and that the weights that are beneath the earth all
 press upwards and come to rest on the earth upside
 down, like the images which we now see reflected by
 water. And likewise they maintain that the animals
 there move about head downwards, and cannot fall
 back from the earth into the space of sky any more
 than our bodies of themselves can fly into the regions
 of the sky ; that when they see the sun, we behold
 the stars of night, and they share the seasons of the
 heavens with us alternately, and pass nights which
 are equal to our days. But it is empty [error that
 approves]^a these [fallacies] to the stupid, because
 they have embraced [them with twisted reasoning].
 For there can be no middle, [since the universe is] in-
 finite. Nor indeed, if middle there really were, could
 anything at all stand still there [on that account
 rather] than [be driven] far [away] for some differ-
 ent reason. For all place and space, which we call
 void, must yield a passage through middle or not-
 middle equally to weights, wherever their movements
^a The words in square brackets here and in the following
 lines translate Munro's restorations. See critical note.

sit (1071) and -ane vocamus (1074) were added by *Marullus*,
 debet (1075) by *Wakefield* (tentatively in notes). *Munro* sug-
 gested the following supplements for the other lines: 1068
 error falsa probavit (or error somnia finxit); 1069 perversa
 rem ratione; 1070 quando omnia constant (or, with *Lach-*
mann, ubi summa profundist); 1072 eam magis ob rem:
 1073 repelli

nec quisquam locus est, quo corpora cum venere,
ponderis amissa vi possint stare in inani ;
nec quod inane autem est ulli subsistere debet,
quin, sua quod natura petit, concedere pergat. 1080
haud igitur possunt tali ratione teneri
res in concilium medii cuppedine victae.

Praeterea quoniam non omnia corpora fingunt
in medium niti, sed terrarum atque liquoris—
1086 umorem ponti magnasque e montibus undas, 1085
1085 et quasi terreno quae corpore contineantur—,
at contra tenuis exponunt aeris auras
et calidos simul a medio differrier ignis,
atque ideo totum circum tremere aethera signis
et solis flammam per caeli caerula pasci, 1090
quod calor a medio fugiens se ibi conligat omnis,
nec prorsum arboribus summos frondescere ramos
posse, nisi a terris paulatim cuique cibatum

. 1095
.
.
.
.
. 1100
.

ne volucri ritu flammaram moenia mundi
diffugiant subito magnum per inane soluta,
et ne cetera consimili ratione sequantur,

1077 cum venere *L*(?) (according to Büchner), ed. Aldina :
cum venerunt *F*: comveneri (with *i* erased) *O*: covenir *Q*:
comvenirt *G* 1085-1086 transposed by Marullus 1094-
1101 After 1093 a space of eight lines is left by *O*, and *QG*

tend. Nor is there any place in which bodies, when they have come thither, can lose the force of weight and stand still in the void ; nor again must that which is void ever give support for anything, but, as its nature craves, it must proceed to give place. Therefore, things cannot be held in combination together in any such way, overcome by a yearning for the middle.

¹⁰⁸³ Besides, inasmuch as they do not suppose all bodies to press towards the middle, but only those of earth and water—the liquid of the sea and great waters that descend from the mountains, and such things as are contained as it were in earthly frame—, but on the other hand explain that the thin breezes of air and hot fires are at the same time carried away from the middle ; and that the whole firmament all about twinkles with constellations and the sun's flame feeds through the blue sky, because all the heat fleeing from the middle gathers itself together there ; and that the topmost branches of trees could not even produce leaves, if food were not [distributed] to each from the earth, gradually [supplied by an internal fire, their reasoning is inconsistent. ^a . . . If fire and air have a natural tendency to move upwards, there is danger] lest the walls of the world suddenly be dissolved and flee apart after the fashion of flying flames through the void, and the rest follow

^a The lacuna must have contained the apodosis to the *quoniam* clause that begins in 1083. But there is much disagreement about the argument of the lost passage, and the interpretation offered here (within square brackets), which is that favoured by Bailey, cannot be regarded as certain.

indicate the lacuna with a cross. The loss was caused by the same tear that mutilated 1068-1075. One of the missing lines may have begun with *quondam* (Pap. fr. *L*)

neve ruant caeli tonitralia templa superne, 1105
 terraque se pedibus raptim subducat et omnis
 inter permixtas rerum caelique ruinas
 corpora solventes abeat per inane profundum,
 temporis ut puncto nil extet reliquiarum
 desertum praeter spatium et primordia caeca. 1110
 nam quacumque prius de parti corpora desse
 constitues, haec rebus erit pars ianua leti,
 hac se turba foras dabit omnis materiai.

Haec sic pernosces parva perductus opella ;
 namque alid ex alio clarescet, nec tibi caeca 1115
 nox iter eripiet quin ultima naturai
 pervideas : ita res accendent lumina rebus.

1105 tonitralia first printed by Lambinus, who notes " sic habent quattuor libri manuscripti, quos secutus sum " : tonitralia OQGF (and B, according to Büchner) : penetralia AL (and B, according to Martin)

in like manner, the thundering regions of the sky were right, rush upwards, the earth swiftly slip from under our the world feet, and amidst the commingled ruin of sky and all would be things, letting their elements go free, utterly depart destroyed. through the empty profound, so that in one moment of time not a wrack be left behind except desert space and invisible elements. For in whatsoever part you shall assume that particles shall first be lacking, that part will be the gate of death for things : by that way the whole mass of matter will disperse abroad.

1114 So you will gain a thorough understanding ^a of these matters, led on with very little effort ; for one thing will become clear by another, and blind night will not steal your path and prevent you from seeing all the uttermost recesses of nature : so clearly will truths kindle light for truths. Truth will throw light on truth for you.

^a The completeness of the mastery which Memmius should attain is emphasized by the triple *per-* in 1114, 1117 : *pernosces, perductus, pervideas*.

LIBER SECUNDUS

BOOK 2

SUAVE, mari magno turbantibus aequora ventis,
 e terra magnum alterius spectare laborem ;
 non quia vexari quemquamst iucunda voluptas,
 sed quibus ipse malis careas quia cernere suave est.
 6 suave etiam belli certamina magna tueri 5
 5 per campos instructa tua sine parte pericli.
 sed nil dulcius est bene quam munita tenere
 edita doctrina sapientum templa serena,
 despiciere unde queas alios passimque videre
 errare atque viam palantis quaerere vitae, 10
 certare ingenio, contendere nobilitate,
 noctes atque dies niti praestante labore
 ad summas emergere opes rerumque potiri.
 o miseris hominum mentes, o pectora caeca !
 qualibus in tenebris vitae quantisque periclis 15
 degitur hoc aevi quodcumquest ! nonne videre
 nil aliud sibi naturam latrare, nisi utqui
 corpore seiunctus dolor absit, mensque fruatur
 iucundo sensu cura semota metuque ?

5-6 transposed by *Avancius* and all recent editors except *Büchner*, who, like *Merrill* and *Bailey*, overlooks the fact that the transposition was rejected by ed. *Juntina*, *Naugerius*, and *Wakefield* 18 mensque *Marullus* : mente OQG

PLEASANT it is, when on the great sea the winds trouble the waters, to gaze from shore upon another's great tribulation : not because any man's troubles are a delectable joy, but because to perceive what ills you are free from yourself is pleasant. Pleasant is it also to behold great encounters of warfare arrayed over the plains, with no part of yours in the peril. But nothing is more delightful than to possess lofty sanctuaries serene, well fortified by the teachings of the wise, whence you may look down upon others and behold them all astray,^a wandering abroad and seeking the path of life :—the strife of wits, the fight for precedence, all labouring night and day with surpassing toil to mount upon the pinnacle of riches^b and to lay hold on power. O pitiable minds of men, O blind intelligences ! In what gloom of life,^c in how great perils is passed all your poor span of time ! not to see that all nature barks for is this, that pain be removed away out of the body, and that the mind, kept away from care and fear, enjoy a feeling of delight !

The serene sanctuaries of philosophy.

^a Cf. Cicero, *Fin.* 1.19.62 (of the wise man as represented by Epicurus) : *cum stultorum vitam cum sua comparat, magna afficitur voluptate.*

^b 12-13 (*noctes . . . opes*) = 3.62-63.

^c For the darkness of ignorance from which Epicurus rescued mankind, cf. e.g. 3.1-2, 5.11-12.

Ergo corpoream ad naturam pauca videmus 20
 esse opus omnino, quae demant cumque dolorem,
 delicias quoque uti multas substernere possint ;
 gratius interdum neque natura ipsa requirit,
 si non aurea sunt iuvenum simulacra per aedes
 lampadas igniferas manibus retinentia dextris, 25
 lumina nocturnis epulis ut suppeditentur,
 nec domus argento fulget auroque renidet
 nec citharae reboant laqueata aurataque templa,
 cum tamen inter se prostrati in gramine molli
 propter aquae rivum sub ramis arboris altae 30
 non magnis opibus iucunde corpora curant,
 praesertim cum tempestas adridet et anni
 tempora conspergunt viridantis floribus herbas.
 nec calidae citius decedunt corpore febres,
 textilibus si in picturis ostroque rubenti 35
 iaeteris, quam si in plebeia veste cubandum est.

Quapropter quoniam nil nostro in corpore gazae
 proficiunt neque nobilitas nec gloria regni,
 quod superest, animo quoque nil prodesse putandum ;
 si non forte, tuas legiones per loca campi 40
 fervere cum videas belli simulacra cientis,

41 *Nonius, p. 808 Lindsay, quotes from Lucr. 2 fervere cum videas classem lateque vagari. Some editors insert this line after 43 ; Munro, following A. G. Roos, places it after 46 ; others, probably rightly, regard it as a misquotation of 41*

^a According to Epicurus, pleasure is limited, and the limit of pleasure for the body is reached when the natural and necessary desires are satisfied and the pain caused by want is removed. Cf. e.g. Epicurus, *Ep. ad Men.* 130-131, *Sent.* 3, 18, Cicero, *Fin.* 1.11.38.

²⁰ Therefore we see that few things altogether are necessary for the bodily nature, only such in each case as take pain away,^a and can also spread for our use many delights ; nor does nature herself ever crave anything more pleasurable, if there be no golden images of youths about the house, upholding fiery torches in their right hands that light may be provided for nightly revellings,^b if the hall does not shine with silver and glitter with gold, if no cross-beams panelled and gilded echo the lyre, when all the same^c stretched forth in groups upon the soft grass beside a rill of water under the branches of a tall tree men merrily refresh themselves at no great cost, especially when the weather smiles, and the season of the year besprinkles the green herbage with flowers.^d And no quicker do hot fevers fly away from your body, if you have pictured tapestry and blushing purple to toss upon, than if you must lie sick under the poor man's blanket.

³⁷ Therefore, since treasures profit nothing for our body, nor noble birth nor the glory of royalty, we must further think that for the mind also they are unprofitable ; unless by any chance, when you behold your legions seething over the spacious Plain^e as they evoke war in mimicry, established firm with

^b 24-26 are in imitation of Homer, *Od.* 7.100-102.

^c That is, despite the lack of the luxuries listed in 24-28. The desire for such luxuries is neither natural nor necessary, and therefore must be banished. For Epicurus' classification of desires, see *Ep. ad Men.* 127, *Sent.* 29, Cicero, *Fin.* 1.13.45.

^d 29-33 are repeated, with minor alterations, in 5.1392-1396. For the significance of the repetition, see B. Farrington in *Hermathena* 81 (1953) 59-62.

^e *campi* (40) probably refers to the Campus Martius at Rome. Cf. 323-332.

subsidiis magnis et equum vi constabilitas,
 ornatas armis pariter pariterque animatas,
 his tibi tum rebus timefactae religiones
 effugiunt animo pavidae, mortisque timores 45
 tum vacuum pectus linquunt curaque solutum.
 quod si ridicula haec ludibriaque esse videmus,
 re veraque metus hominum curaque sequaces
 nec metuunt sonitus armorum nec fera tela
 audacterque inter reges rerumque potentis 50
 versantur neque fulgorem reverentur ab auro
 nec clarum vestis splendorem purpureai,
 quid dubitas quin omni' sit haec rationi' potestas,
 omnis cum in tenebris praesertim vita laboret ?
 nam veluti pueri trepidant atque omnia caecis 55
 in tenebris metuunt, sic nos in luce timemus
 interdum nilo quae sunt metuenda magis quam
 quae pueri in tenebris pavitant finguntque futura.
 hunc igitur terrorem animi tenebrasque necessest
 non radii solis neque lucida tela diei 60
 discutiant, sed naturae species ratioque.

Nunc age, quo motu genitalia materialia
 corpora res varias gignant genitasque resolvant,
 et qua vi facere id cogantur, quaeque sit ollis

42-43 omitted by Q which indicates a lacuna of three lines :
 written in uncials by OG : transposed by Bailey 42
 et eum (=equum) vi Munro (the form eum has manu-
 script authority in 4.420) : epicuri OGABF : et opum vi
 Büchner, comparing Ennius, Ann. 161, 412 43 pariter
 (after armis) Bernays (pariter pariterque occurs 3.457, and
 here the first pariter may have been omitted by haplography
 (cf. 4.653), or there may have been a blot in the middle of 43
 and 42) : itastatuas O, with dots under at, to indicate that
 the letters should be omitted : itasiuas (itastuas, according to

mighty supports and a mass of cavalry, marshalled
 all in arms cap-à-pie and all full of one spirit, then
 these things scare your superstitious fears and drive
 them in panic flight from your mind, and death's
 terrors then leave your heart unpossessed and free
 from care. But if we see these things to be ridiculous
 and a mere mockery, if in truth men's fears and
 haunting cares fear neither the clang of arms nor
 wild weapons, if they boldly mingle with kings and
 sovereigns of the world, if they respect not the sheen
 of gold nor the glowing light of crimson raiment, why
 doubt you that this power wholly belongs to reason,
 especially since life is one long struggle in the dark ?
 For just as children tremble and fear all things in
 blind darkness, so we in the light fear, at times, things
 that are no more to be feared than what children
 shiver at in the dark and imagine to be at hand.^a
 This terror of the mind, therefore, and this gloom
 must be dispelled, not by the sun's rays nor the bright
 shafts of day, but by the aspect and law of nature.^b

only philo-
 sophy can
 help us.

⁶² Listen now, and I will set forth by what motion
 the generative bodies of matter beget the various
 things and dissolve them once begotten, and by what
 force they are compelled to do it, and what swiftness

I. Atomic
 motion
 (62-332).
 Atoms are
 in constant
 motion,

^a Cf. the opening words of Francis Bacon's essay *Of Death* : " Men fear death as children fear to go into the dark ; and as that natural fear in children is increased with tales, so is the other."

^b 55-61 = 3.87-93, 6.35-41. 59-61 = 1.146-148.

some recent editors) G : statuas Itali (according to recent
 editors, but ita statuas is the reading of the ed. Veronensis and
 ed. Veneta) 46 pectus Lambinus : tempus OQGP, Wake-
 field (comparing Terence, Haut. 90)

reddita mobilitas magnum per inane meandi, 65
expediam ; tu te dictis praeberere memento.

Nam certe non inter se stipata cohaeret
materies, quoniam minui rem quamque videmus
et quasi longinquo fluere omnia cernimus aevo
ex oculisque vetustatem subducere nostris, 70
cum tamen incolumis videatur summa manere
propterea quia, quae decedunt corpora cuique,
unde abeunt minuunt, quo venere augmine donant,
illa senescere, at haec contra florescere cogunt,
nec remorantur ibi. sic rerum summa novatur 75
semper, et inter se mortales mutua vivunt :
augescunt aliae gentes, aliae minuuntur,
inque brevi spatio mutantur saecula animantum
et quasi cursores vitae lampada tradunt.

Si cessare putas rerum primordia posse 80
cessandoque novos rerum progignere motus,
avius a vera longe ratione vagaris.
nam quoniam per inane vagantur, cuncta necessest
aut gravitate sua ferri primordia rerum
aut ictu forte alterius. nam cum cita saepe 85
obvia confligere, fit ut diversa repente
dissiliant ; neque enim mirum, durissima quae sint
ponderibus solidis neque quicquam a tergo ibus obstet.

85 quom (=cum *Lachmann*) cita *Wakefield* (in his notes,
but not in his text) : cita *OQGAB* 86 confligere *F*
(*Lambinus*, to whom some modern editors attribute the reading,
found it " in quibusdam libris manuscriptis " and did not
print it in his text, though he thought it a " scriptura proba-
bilis " : confluxere *OQG* : confluxere *BL* 88 tergo ibus
Isaac Voss : tergibus *OQGP*, *Diels*, *Martin*, *Büchner*

^a The metaphor is from the Athenian lampadedromy
(relay torch-race), as in Plato, *Leg.* 776 B (quoted by *Lam-
binus*) : γεννώνας τε καὶ ἐκτρέφοντας παῖδας, καθάπερ λαμπάδα
100

has been given them to travel through the great
void ; do you remember to give heed to my words.

⁶⁷ For certainly matter is not one packed and
coherent mass, since we see each thing decreasing,
and we perceive all things as it were ebbing through
length of time, and age withdrawing them from our
eyes ; although nevertheless the sum is seen to re-
main unimpaired for this reason, that whenever
bodies pass away from a thing, they diminish that
from which they pass and increase that to which they
have come, they compel the first to fade and the
second on the contrary to bloom, yet do not linger
there. Thus the sum of things is ever being re-
newed, and mortal creatures live dependent one upon
another. Some species increase, others diminish, and
in a short space the generations of living creatures
are changed and, like runners, pass on the torch of
life.^a

⁸⁰ If you think the first-beginnings of things can
stand still, and by standing still can beget new
motions amongst things, you are astray and wander
far from true reasoning.^b For since the first-begin-
nings of things wander through the void, they must
all be carried on either by their own weight or by a
chance blow from another atom. For when in quick
motion they have often met and collided, it follows
that they leap apart suddenly in different directions ;
and no wonder, since they are perfectly hard in their
solid weight and nothing obstructs them from behind.
τὸν βίον παραδιδόντας ἄλλοις ἐξ ἄλλων = " begetting and rearing
children, and so handing on life, like a torch, to successive
generations." Pius compares Varro, *Rust.* 3.16.9, Persius
6.61.

^b Epicurus deals briefly with atomic motion in *Ep. ad Hdt.*
43-44, 61-62.

et quo iactari magis omnia materiai
 corpora pervideas, reminiscere totius imum 90
 nil esse in summa, neque habere ubi corpora prima
 consistant, quoniam spatium sine fine modoquest,
 immensumque patere in cunctas undique partis
 pluribus ostendi et certa ratione probatumst.
 quod quoniam constat, nimirum nulla quies est 95
 reddita corporibus primis per inane profundum,
 sed magis adsiduo varioque exercita motu
 partim intervallis magnis confulta resultant,
 pars etiam brevibus spatiis vexantur ab ictu.
 et quaecumque magis condense conciliatu 100
 exiguis intervallis convecta resultant,
 indupedita suis perplexis ipsa figuris,
 haec validas saxi radices et fera ferri
 corpora constituunt et cetera de genere horum.
 cetera, quae porro magnum per inane vagantur, 105
 paucula dissiliunt longe longeque recursant
 in magnis intervallis; haec aera rarum
 sufficiunt nobis et splendida lumina solis.
 multaque praeterea magnum per inane vagantur,
 conciliis rerum quae sunt reiecta nec usquam 110
 consociare etiam motus potuere recepta.

Cuius, uti memoror, rei simulacrum et imago
 ante oculos semper nobis versatur et instat.
 contemplator enim, cum solis lumina cumque

105-106 *Merrill's (1917 ed.) transposition of paucula (paucula OQG) and cetera is adopted with much hesitation. It is adopted as being somewhat less drastic than Purmann's exclusion of 105 as a variant for 109; however, paucula is surprising, and magnum per inane vagantur seems a strange description of atoms in compounds, however loose the compounds may be, and Purmann may be right* 112 *memoror OQGP: memoro Codex Vaticanus Reg. lat. 1706 simulacrum Itali: simulacra OQG, Merrill (1917), Diels, Büchner*
 102

And to show you more clearly that all the bodies of matter are constantly being tossed about, remember that there is no bottom in the sum of things and the first bodies have nowhere to rest, since space is without end or limit, and I have shown at large and proved by irrefragable reasoning that it extends immeasurable from all sides in all directions.^a Since this stands firm, beyond doubt no rest is granted to the first bodies throughout the profound void, but rather driven by incessant and varied motions, some after being pressed together then leap back with wide intervals, some again after the blow are tossed about within a narrow compass. And all those which being held in combination more closely condensed collide and leap back through tiny intervals, caught fast in the complexity of their own shapes, these constitute the strong roots of stone and the bulk of fierce iron and the others of their kind. Of the rest, which go on wandering through the great void, a very few leap far apart and pass far back with long intervals between: these supply thin air for us and the gleaming light of the sun. And many besides wander through the great void which have been rejected from combination with things, and have nowhere been able to obtain admittance and also harmonize their motions.^b

¹¹² Of this fact there is, I recall, an image and similitude always moving and present before our eyes. Do but apply your scrutiny whenever the The motion of

^a See 1.958-1007.

^b The point is that an atom cannot join a compound body, unless (as well as being of suitable size and shape) it can move in harmony with the other component atoms of the object.

inserti fundunt radii per opaca domorum : 115
 multa minuta modis multis per inane videbis
 corpora misceri radiorum lumine in ipso
 et velut aeterno certamine proelia pugnas
 edere turmatim certantia nec dare pausam,
 conciliis et discidiis exercita crebris ; 120
 conicere ut possis ex hoc, primordia rerum
 quale sit in magno iactari semper inani.
 dumtaxat rerum magnarum parva potest res
 exemplare dare et vestigia notitiae.

Hoc etiam magis haec animum te advertere par est
 corpora quae in solis radiis turbare videntur, 126
 quod tales turbae motus quoque materiai
 significant clandestinos caecosque subesse.
 multa videbis enim plagis ibi percita caecis
 commutare viam retroque repulsa reverti, 130
 nunc huc nunc illuc, in cunctas undique partis.
 scilicet hic a principiis est omnibus error :
 prima moventur enim per se primordia rerum ;
 inde ea quae parvo sunt corpora conciliatu
 et quasi proxima sunt ad viris principiorum, 135
 ictibus illorum caecis impulsa cientur,
 ipsaque porro paulo maiora lacessunt.
 sic a principiis ascendit motus et exit
 paulatim nostros ad sensus, ut moveantur
 illa quoque in solis quae lumine cernere quimus, 140
 nec quibus id faciant plagis apparet aperte.

^a *inane* (116) refers to the air (*cf.* Virgil, *Aen.* 12.906) through which the motes move, not to void in the strict scientific sense. But, like *corpora* in 117, the word is carefully chosen in order to emphasize the parallel with the behaviour of the atoms.

sun's rays are let in and pour their light through a dark room : you will see many minute particles mingling in many ways throughout the void ^a in the light itself of the rays, and as it were in everlasting conflict struggling, fighting, battling in troops without any pause, driven about with frequent meetings and partings ; so that you may conjecture from this what it is for the first-beginnings of things to be ever tossed about in the great void. So far as it goes, a small thing may give an analogy of great things, and show the tracks of knowledge.

motes in a sunbeam illustrates atomic motion,

¹²⁵ Even more for another reason it is proper that you give attention to these bodies which are seen to be in turmoil within the sun's rays, because such turmoil indicates that there are secret and unseen motions also hidden in matter. For there you will see how many things set in motion by unseen blows change their course and beaten back return back again, now this way, now that way, in all directions. You may be sure that all take their restlessness from the first-beginnings. For first the first-beginnings of things move of themselves ; then the bodies that form a small combination ^b and, as one may say, are nearest to the powers of the first-beginnings, are set moving, driven by the unseen blows of these, while they in their turn attack those that are a little larger. Thus the movement ascends from the first-beginnings and by successive degrees emerges upon our senses, ^c so that those bodies also are moved which we are able to perceive in the sun's light, yet it does not openly appear by what blows they are made to do so.

and indeed the motes derive their motion from the atoms.

^b Small atomic aggregates.

^c For the imperceptibility of the motions of the atoms, see 308-332.

Nunc quae mobilitas sit reddita materiai
 corporibus, paucis licet hinc cognoscere, Memmi.
 primum aurora novo cum spargit lumine terras, 145
 et variae volucres nemora avia pervolitant
 aera per tenerum liquidis loca vocibus opplent,
 quam subito soleat sol ortus tempore tali
 convestire sua perfundens omnia luce,
 omnibus in promptu manifestumque esse videmus.
 at vapor is quem sol mittit lumenque serenum 150
 non per inane meat vacuum; quo tardius ire
 cogitur, aeras quasi dum diverberat undas.
 nec singillatim corpuscula quaeque vaporis
 sed complexa meant inter se conque globata;
 quapropter simul inter se retrahuntur et extra 155
 efficiuntur, uti cogantur tardius ire.
 at quae sunt solida primordia simplicitate,
 cum per inane meant vacuum nec res remoratur
 ulla foris, atque ipsa, suis e partibus unum,
 unum in quem coepere locum conixa feruntur, 160
 debent nimirum praecellere mobilitate
 et multo citius ferri quam lumina solis
 multiplexque loci spatium transcurrere eodem
 tempore quo solis pervolgant fulgura caelum.

nec persectari primordia singula quaeque, 165
 ut videant qua quidque geratur cum ratione.

152 undas OQG: umbras F. H. Sandbach, *CR N.S.* 13 (1963) 13-14 164-165 A lacuna between these lines noted by Pontanus. The lost passage was probably of considerable length (fifty-two lines, if, as is likely, a leaf of the archetype was missing). In view of primum (144), there must have been at least one further argument for the speed of the atoms, and the opening of the next paragraph (167 ff.) suggests that *Lucr.* may have gone on to explain how the atoms, by their movements, formed and form the world and everything in it 166 videant FL: deant OQG: omitted and space left by AB

¹⁴² Now Memmius, what swiftness is granted to the bodies of matter, you may understand from what follows in a few words. First, when the dawn diffuses new light over the earth, and the different birds flitting about through pathless woods through the soft air fill every part with their liquid notes, how suddenly at such time the sun arising is accustomed to envelop and flood the whole world with his light, we see to be plain and manifest to all. But that heat and that light serene which the sun sends, does not pass through empty void; therefore it is forced to go more slowly, while it beats its way so to speak through waves of air. Nor do the particles of heat move alone and singly, but linked together and massed together; therefore they are at the same time retarded by one another and obstructed from without, so that they are forced to go more slowly. But the first-beginnings, which are of solid singleness, when they pass through the empty void, are not delayed by anything from without, and being themselves units composed of their own parts,^a when they are carried each to that one point to which their first efforts tend, most certainly they must be of exceeding swiftness and must be carried far more quickly than the light of the sun, and traverse a space many times as wide in the same time that the sun's lightnings take to pervade the heavens.

¹⁶⁵ . . . nor^b to follow up the first-beginnings separately one by one, that they may see in what way everything is done.

^a Although each atom has a number of minimal parts, it is uncompounded, for the minimal parts are physically inseparable (*cf.* 1.599-634).

^b For comments on the lacuna, see critical note on 164-165.

The speed of the atoms is greater than that of light,

which is hindered by the air and because it is a compound,

whereas the atoms are unchecked.

At quidam contra haec, ignari materiai,
 naturam non posse deum sine numine credunt
 tanto opere humanis rationibus admoderate
 tempora mutare annorum frugesque creare, 170
 et iam cetera, mortalis quae suadet adire
 ipsaque deducit dux vitae dia voluptas
 et res per Veneris blanditur saecula propagent,
 ne genus occidat humanum. quorum omnia causa
 constituisse deos cum fingunt, omnibu' rebus 175
 magno opere a vera lapsi ratione videntur.
 nam quamvis rerum ignorem primordia quae sint,
 hoc tamen ex ipsis caeli rationibus ausim
 confirmare aliisque ex rebus reddere multis,
 nequaquam nobis divinitus esse creatam 180
 naturam mundi : tanta stat praedita culpa.
 quae tibi posterius, Memmi, faciemus aperta.
 nunc id quod superest de motibus expediemus.

Nunc locus est, ut opinor, in his illud quoque rebus
 confirmare tibi, nullam rem posse sua vi 185
 corpoream sursum ferri sursumque meare.
 ne tibi dent in eo flammaram corpora fraudem ;
 sursum enim versus gignuntur et augmina sumunt,
 et sursum nitidae fruges arbustaque crescunt,
 pondera, quantum in se est, cum deorsum cuncta
 ferantur. 190
 nec cum subsiliunt ignes ad tecta domorum
 et celeri flamma degustant tigna trabesque,

168 credunt *Pontanus* : reddi *OQGP*, *Wakefield*, *Büchner* :
 reddunt (cf. 179) *Brieger* : rentur (cf. 1.154, 6.91) *Marullus*
 181 tanta stat (cf. 5.199) *Lachmann* : quamquam *OQG* : quae
 tanta est *Pontanus* : quanta stat *J. P. Postgate*, *Journ. Phil.*
16 (1888) 127

¹⁶⁷ But some ^a in opposition to this, knowing nothing
 of matter, believe that without the gods' power
 nature cannot with so exact conformity to the plans
 of mankind change the seasons of the year, and pro-
 duce crops, and in a word all else which divine
 pleasure, the guide of life, persuades men to ap-
 proach, herself leading them and coaxing them,
 through the ways of Venus, to beget their genera-
 tions, that the human race may not come to an end.
 But when they imagine the gods to have arranged all
 for the sake of men, they are seen to have departed
 widely from true reasoning in every way. For
 although I might not know what first-beginnings of
 things are, this nevertheless I would make bold to
 maintain from the ways of heaven itself, and to de-
 monstrate from many another source, that the nature
 of the universe has by no means been made for us
 through divine power : so great are the faults it
 stands endowed with. All this, Memmius, I will
 make clear to you later ^b ; now I will explain what
 remains to be said about motion.

But some
 believe that
 the gods
 made the
 world for
 man ;

now it is
 too faulty
 for that.

¹⁸⁴ This is now the place, as I think, in my theme
 to establish for you another principle : that no bodily
 thing can of its own power be carried upwards and
 move upwards. The particles of fire should not lead
 you into a mistake ; for in an upward direction flames
 are born and win increase, upwards grow trees and
 the bright crops, although all weights tend down-
 wards as far as in them lies. And when fires leap up
 to the roofs of houses and with swift flame devour

No bodily
 thing can
 move up-
 wards un-
 less driven
 by some
 force.

^a " Haec disputantur in Platonem, et in Stoicos " (*Lam-
 binus*).

^b 5.195-234.

sponte sua facere id sine vi subiecta putandum est.
 quod genus e nostro cum missus corpore sanguis
 emicat exultans alte spargitque cruorem. 195
 nonne vides etiam quanta vi tigna trabesque
 respuat umor aquae? nam quo magis ursimus altum
 derecta et magna vi multi pressimus aegre,
 tam cupide sursum revomit magis atque remittit,
 plus ut parte foras remergant exiliantque. 200
 nec tamen haec, quantum est in se, dubitamus, opinor,
 quin vacuum per inane deorsum cuncta ferantur.
 sic igitur debent quoque flammae posse per auras
 aeris expressae sursum succedere, quamquam
 pondera, quantum in sest, deorsum deducere pugnent.
 nocturnasque faces caeli sublime volantis 206
 nonne vides longos flammaram ducere tractus
 in quascumque dedit partis natura meatum?
 non cadere in terras stellae et sidera cernis?
 sol etiam caeli de vertice dissipat omnis 210
 ardorem in partis et lumine conserit arva;
 in terras igitur quoque solis vergitur ardor.
 transversosque volare per imbris fulmina cernis:

193 sine OQGP: nisi D. A. West, *CQ N.S. 14* (1964) 96
 subiecta (sc. flammaram corpora 187) OQGP (cf. *Virgil, G.*
4.385): subigente Lambinus, who notes "sic restitui ab uno
 codice manuscripto adiutus" 197 altum seemingly first
 printed in ed. Juntina (notes): altu OQG: alte F: alta
 ABL 199 revomit Pontanus: removet OQGP, Bocke-
 müller, Merrill (1917), Martin, D. A. West, *CQ N.S. 14*
(1964) 97, but the more violent and vivid word seems more
 probable, and for the corruption cf. 6.828, where QU have
 movenda for vomenda, and (e.g.) *Lucan 6.24* 203
 debent quoque flammae Wakefield (notes only). It seems
 preferable to the readings of ed. Aldina and Q corr. because
 the transposition affects only two words instead of three:
 quoque debent flammae OQG: debent flammae quoque ed.
 Aldina (cf. 1.290, but 6.317 shows that a different order is
 possible): flammae quoque debent Q corr., D. A. West, *Rh.*

timbers and beams, we must not think they do this
 of themselves, being shot up without a force. Even
 so when blood is let out from our body, out it spurts,
 leaping forth on high and sprinkling its red drops.
 Do you not see also with what force liquid water
 spits out timbers and beams? For the deeper we
 have thrust them and pushed them right down, press-
 ing laboriously with full force and many together,
 the more eagerly does the water vomit them back
 and shoot them back up, so that they issue forth and
 leap out more than half their length. Yet we do not
 doubt, I think, that, as far as in them lies, these are
 all carried downwards through an empty void. In
 this way, therefore, flames also must be able to rise
 up, squeezed out upwards through the breezes of the
 air, although, as far as lies in them, their weights
 fight to draw them down; and do you not see how
 the nightly torches of the sky fly up aloft and draw
 their long trails of flame in whatever direction nature
 has given them a way? how stars and luminaries
 fall to the earth? The sun also from the pinnacle of
 heaven disperses his heat abroad in all directions and
 sows the fields with light^a; therefore the sun's heat
 tends towards the earth also. And you perceive
 lightnings to fly crosswise along the rain clouds:

^a Wakefield quotes Milton, *Paradise Lost* 5.1-2: "Now
 Morn, her rosy steps in th' eastern clime | Advancing, sow'd
 the earth with orient pearl."

Mus. 110 (1967) 195 209 terras (cf. 212, 215) *Havet,*
Martin: terra OQG: terram P 210 caeli (cf. *Cicero,*
Arat. 297) *Bernays*: omitted by OQG: summo FL: mundi
Stürenberg, W. Hörschelmann (according to *Merrill*), *E.*
Orth, Helmantica 11 (1960) 128-129, *C. L. Howard, CPhil.*
56 (1961) 149

nunc hinc nunc illinc abrupti nubibus ignes
concurant ; cadit in terras vis flammea volgo. 215

Illud in his quoque te rebus cognoscere avemus,
corpora cum deorsum rectum per inane feruntur
ponderibus propriis, incerto tempore ferme
incertisque locis spatio depellere paulum,
tantum quod momen mutatum dicere possis. 220
quod nisi declinare solerent, omnia deorsum,
imbris uti guttae, caderent per inane profundum,
nec foret offensus natus nec plaga creata
principiis : ita nil unquam natura creasset.

Quod si forte aliquis credit graviora potesse 225
corpora, quo citius credit graviora potesse
incidere ex supero levioribus atque ita plagas
gignere quae possint genitalis reddere motus,
avius a vera longe ratione recedit.
nam per aquas quaecumque cadunt atque aera rarum,
haec pro ponderibus casus celerare necessest, 231
propterea quia corpus aquae naturaque tenvis
aeris haud possunt aequae rem quamque morari,
sed citius cedunt gravioribus exsuperata ;
at contra nulli de nulla parte neque ullo 235
tempore inane potest vacuum subsistere rei,
quin, sua quod natura petit, concedere pergat ;

214 abrupti *OQGP* : abruptis *Macrobius, Sat. 6.1.27 (cf. Virgil, Aen. 3.199), D. A. West, CQ N.S. 14 (1964) 97, n. 1, perhaps rightly, but see Statius, Theb. 1.353-354 quoted by Wakefield*

^a For a detailed discussion of 184-215, see D. A. West, *CQ N.S. 14 (1964) 94-99*.

^b The theory of the swerve (*παρέγκλισις, clinamen, declinatio, inclinatio*) of atoms is not described by Epicurus in his extant writings, but is mentioned by Cicero, Philodemus, Plutarch, Diogenes of Oenoanda, and others.

now from this part, now from that, burst the fires
out of the clouds and rush along ; it is a common
thing for the fiery bolt to fall on the earth.^a

216 One further point in this matter I desire you
to understand : that while the first bodies are being
carried downwards by their own weight in a straight
line through the void, at times quite uncertain and
uncertain places, they swerve a little from their
course, just so much as you might call a change of
motion.^b For if they were not apt to incline, all
would fall downwards like raindrops through the pro-
found void, no collision would take place and no blow
would be caused amongst the first-beginnings : thus
nature would never have produced anything.

The atoms
move
downwards,
but have a
slight
swerve at
uncertain
times,
which is the
cause of
their
meeting.

225 But if by chance anyone believes it to be
possible that heavier elements, being carried more
quickly straight through the void, fall from above on
the lighter, and so deal blows which can produce
generative motions, he is astray and departs far from
true reasoning. For whatever things fall through
water and through fine air, these must speed their
fall in accordance with their weights, because the
body of water and the thin nature of air cannot
delay each thing equally, but yield sooner overcome
by the heavier ; but contrariwise empty void cannot
offer any support to anything anywhere or at any
time, but it must give way continually, as its nature

All atoms
fall at the
same speed
through
the void ;

Lucr.'s account (216-293) is the fullest which we have. Epicurus, influenced above all by Aristotle, rejected the determinism of Democritus and believed in the freedom of the individual will, and the theory of the atomic swerve was designed to explain free will (see 251-293) as well as to account for collisions between atoms moving through the void. See Introduction pp. xxxiii-xxxiv.

omnia quapropter debent per inane quietum
 aequae ponderibus non aequis concita ferri.
 haud igitur poterunt levioribus incidere umquam 240
 ex supero graviora, neque ictus gignere per se
 qui variant motus per quos natura gerat res.
 quare etiam atque etiam paulum inclinare necessest
 corpora; nec plus quam minimum, ne fingere motus
 obliquos videamur et id res vera refutet. 245
 namque hoc in promptu manifestumque esse videmus,
 pondera, quantum in sest, non posse obliqua meare,
 ex supero cum praecipitant, quod cernere possis;
 sed nil omnino recta regione viai
 declinare quis est qui possit cernere sese? 250

Denique si semper motus conecitur omnis
 et vetere exoritur motu novus ordine certo,
 nec declinando faciunt primordia motus
 principium quoddam quod fatis foedera rumpat,
 ex infinito ne causam causa sequatur, 255
 libera per terras unde haec animantibus exstat,
 unde est haec, inquam, fatis avolsa voluntas,
 per quam progredimur quo ducit quemque voluptas,
 declinamus item motus nec tempore certo
 nec regione loci certa, sed ubi ipsa tulit mens? 260
 nam dubio procul his rebus sua cuique voluntas
 principium dat et hinc motus per membra rigantur.

Nonne vides etiam patefactis tempore puncto

249 recta *FL*: omitted by *OQG* 250 sese *OQGP*:
 sensu *Giussani*: posse *L. A. MacKay, CPhil. 56 (1961) 103-104*
 251 motus *ABCF*: motu *OQGL, Martin* 252
 motu *Havet, Bailey*: omitted by *OQG*: semper *CFL*:
 motus *Bockemüller, Martin* 257 voluntas *Lambinus*:
 voluptas *OQUP, L. A. MacKay, CPhil. 56 (1961) 104*:
 potestas *Lachmann* 258 voluptas (*cf. Virgil, Ecl. 2.65*)
ABF, Lambinus: voluntas *OQU*

demands: therefore they must all be carried with equal speed, although not of equal weight, through the unresisting void. So the heavier bodies will never be able to fall from above on the lighter, nor deal blows of themselves so as to produce the various motions by which nature carries on her processes. Therefore again and again I say, the bodies must incline a little; and not more than the least possible, or we shall seem to assume oblique movements, and thus be refuted by the facts. For this we see to be manifest and plain, that weights, as far as in them lies, cannot travel obliquely, when they drop straight from above, as far as one can perceive; but who is there who can perceive that they never swerve ever so little from the straight undeviating course?

thus the swerve is necessary,

and it is possible.

²⁵¹ Again, if all motion is always one long chain, and new motion arises out of the old in order invariable, and if the first-beginnings do not make by swerving a beginning of motion such as to break the decrees of fate, that cause may not follow cause from infinity, whence comes this free will in living creatures all over the earth, whence I say is this will wrested from the fates by which we proceed whither pleasure leads each, swerving also our motions not at fixed times and fixed places, but just where our mind has taken us? ^a For undoubtedly it is his own will in each that begins these things, and from the will movements go rippling through the limbs.

This swerve is the cause of free will in living beings.

Motion begins in the will or mind, which acts on the limbs.

²⁶³ Do you not see also, when the cells ^b are thrown

^a For a detailed discussion of the Epicurean theory of voluntary action, often very critical of the traditional view, see D. J. Furley, *Two Studies in the Greek Atomists* 161-237. Furley devotes a chapter to Lucr. 2.251-293.

^b *carceres* are the cells in which horses and chariots were confined at the start of a race. *Cf.* 4.990.

carceribus non posse tamen prorumpere equorum
 vim cupidam tam de subito quam mens avet ipsa? 265
 omnis enim totum per corpus material
 copia conciri debet, concita per artus
 omnis ut studium mentis conixa sequatur ;
 ut videas initum motus a corde creari
 ex animique voluntate id procedere primum, 270
 inde dari porro per totum corpus et artus.

Nec similest ut cum impulsi procedimus ictu
 viribus alterius magnis magnoque coactu ;
 nam tum materiem totius corporis omnem
 perspicuumst nobis invitis ire rapique, 275
 donec eam refrenavit per membra voluntas.
 iamne vides igitur, quamquam vis externa multos
 pellat et invitos cogat procedere saepe
 praecipitesque rapi, tamen esse in pectore nostro
 quiddam quod contra pugnare obstareque possit? 280
 cuius ad arbitrium quoque copia material
 cogitur interdum flecti per membra per artus
 et projecta refrenatur retroque residit.

Quare in seminibus quoque idem fateare necessesst,
 esse aliam praeter plagas et pondera causam 285
 motibus, unde haec est nobis innata potestas,
 de nilo quoniam fieri nil posse videmus.
 pondus enim prohibet ne plagis omnia fiant
 externa quasi vi ; sed ne mens ipsa necessum

268 conixa (= conixa *Lachmann*) ascribed to certain mss
 by *Lambinus*: conixa *OQU* 279 pectore nostro *AF*:
 iectore no *QU*: iector *OBL*: perhaps pectore nobis
 289 mens *Lambinus*: res *OQUP*, recently defended by
 several scholars, including *I. Avotins*, *CQ N.S.* 29 (1979)
 95-100, *M. Pope*, *Symb. Osl.* 61 (1986) 96 n.57

* The metaphor here (*refrenavit*) and in 282 (*flecti*) and
 283 (*refrenatur*) was probably suggested to *Lucr.* by the race-
 course illustration in 263-265. A further link between 263-

open at a given moment, that nevertheless the eager
 force of the horses cannot burst forth so suddenly as
 the mind itself craves? For all the mass of matter
 must be stirred up together through the whole body,
 in order that thus stirred up together it may all with
 one combined effort follow the passion of the mind ;
 thus you may see that the beginning of motion is
 made by the intelligence, and the action moves on
 first from the will of the mind, then to be passed
 onwards through the whole body and limbs.

²⁷² Nor is this the same as when we move for-
 wards impelled by a blow from the strength and
 mighty effort of another ; for then it is clear that all
 the matter of the whole body moves and is hurried
 against our will, until the will has curbed^a it back
 through the limbs. In this case do you see then
 that, although an external force propels many men
 and forces them often to move on against their will
 and to be hurried headlong, yet there is in our
 breast something strong enough to fight against it
 and to resist? by the arbitrament of which, also, the
 mass of matter is compelled at times to be turned
 throughout body and limbs, and, when thrust for-
 ward, is curbed back and settles back steadily.

²⁸⁴ Therefore you must admit that the same exists
 in the seeds also, that motions have some cause other
 than blows and weights, from which this power is
 born in us, since we see that nothing can be produced
 from nothing. For it is weight that prevents all
 things from being caused through blows by a sort of
 external force ; but what keeps the mind itself

265 and the present passage is that in 277-279 *Lucr.* is prob-
 ably thinking of a crowd at the races. See *M. F. Smith* in
Hermathena 102 (1966) 76-77, and notes on 5.1290, 1436.

Very differ-
 ent is the
 process
 when force
 from with-
 out causes
 motion.

intestinum habeat cunctis in rebus agendis 290
 et devicta quasi cogatur ferre patique,
 id facit exiguum clinamen principiorum
 nec regione loci certa nec tempore certo.

Nec stipata magis fuit umquam materiali
 copia nec porro maioribus intervallis ; 295
 nam neque adaugescit quicquam neque deperit inde.
 quapropter quo nunc in motu principiorum
 corpora sunt, in eodem anteacta aetate fuere
 et post haec semper simili ratione ferentur,
 et quae consuerint gigni gignentur eadem 300
 condicione et erunt et crescent vique valebunt,
 quantum cuique datum est per foedera naturai.
 nec rerum summam commutare ulla potest vis ;
 nam neque, quo possit genus ulla materiali
 effugere ex omni, quicquam est extra, neque in omne
 unde coorta queat nova vis intrumpere et omnem 306
 naturam rerum mutare et vertere motus.

Illud in his rebus non est mirabile quare,
 omnia cum rerum primordia sint in motu,
 summa tamen summa videatur stare quiete, 310
 praeterquam siquid proprio dat corpore motus.
 omnis enim longe nostris ab sensibus infra
 primorum natura iacet ; quapropter, ubi ipsa
 cernere iam nequeas, motus quoque surpere debent,

305 extra (cf. 1.963, 3.816 = 5.361) Munro : omitted by
 OQGP 313 ipsa Gifanius : ipsum OQ, G (?), P : ipsam
 (sc. primorum naturam), the reading of G, according to Haver-
 camp, and also of C, according to Wakefield, may well be right.
 It is adopted in the ed. Juntina and by Naugerius, but is ignored
 by modern editors, according to whom G reads ipsum (on the
 carelessness of Havercamp and Wakefield, see Munro I 18-19)

from having necessity within it in all actions, and
 from being as it were mastered and forced to endure
 and to suffer, is the minute swerving of the first-
 beginnings at no fixed place and at no fixed time.

294 Nor was the mass of matter ever more closely
 packed nor again set at wider intervals, for nothing
 increases it nor does anything perish from it. There-
 fore in whatsoever motion the bodies of first-begin-
 nings are now, in that same motion they were in
 ages gone by, and hereafter they will always be
 carried along in the same way, and the things which
 have been accustomed to be born will be born under
 the same conditions ; they will be and will grow and
 will be strong with their strength as much as is
 granted to each by the laws of nature. Nor can any
 power change the sum total of things ; for there is
 no place without into which any kind of matter could
 flee away from the all ; and there is no place whence
 a new power could arise to burst into the all, and to
 change the whole nature of things and turn their
 motions.^a

308 One point in these matters need cause no
 wonder, why, though all the first-beginnings of things
 are in motion, the sum total seems nevertheless to
 abide in supreme quietude, except for anything that
 may show movement with its own body. For the
 nature of the first things lies all hidden far beneath
 our senses ; therefore, since you cannot get so far as
 to see the things themselves, they must necessarily
 steal their motions too from your sight, especially

^a The doctrine that the universe is unchanging is stated
 briefly by Epicurus, *Ep. ad Hdt.* 39.

praesertim cum, quae possimus cernere, celent 315
 saepe tamen motus spatio diducta locorum.
 nam saepe in colli ton dentes pabula laeta
 lanigeræ reptant pecudes quo quamque vocantes
 invitant herbae gemmantes rore recenti,
 et satiati agni ludunt blandeque coruscant ; 320
 omnia quae nobis longe confusa videntur
 et velut in viridi candor consistere colli.
 praeterea magnae legiones cum loca cursu
 camporum complent belli simulacra cientes,
 fulgor ubi ad caelum se tollit totaque circum 325
 aere renidescit tellus subterque virum vi
 excitur pedibus sonitus clamoreque montes
 icti reiectant voces ad sidera mundi
 et circumvolitant equites mediosque repente
 tramittunt valido quatientes impete campos— 330
 et tamen est quidam locus altis montibus unde
 stare videntur et in campis consistere fulgor.

Nunc age iam deinceps cunctarum exordia rerum
 qualia sint et quam longe distantia formis
 percipe, multigenis quam sint variata figuris ; 335
 non quo multa parum simili sint praedita forma,
 sed quia non volgo paria omnibus omnia constant.
 nec mirum ; nam cum sit eorum copia tanta
 ut neque finis, uti docui, neque summa sit ulla,
 debent nimirum non omnibus omnia prorsum 340
 esse pari filo similique adfecta figura.

325 ubi *OQG* : *ibi Marullus*

^a Cf. e.g. Drayton, *Sonnets* 53 : " Amongst the dainty dew-impearled flowers " ; Milton, *Paradise Lost* 5.743-744 : " Or stars of morning, dew drops which the sun | Impearls on every leaf and every flower " ; Joanna Baillie, *Poems* 228 : " Dew-gemmed in the morning ray." ^b Cf. 40-43.

when things that we can perceive do yet often conceal their motions if they be withdrawn at a great distance. For often on a hill, cropping the rich pasture, woolly sheep go creeping whither the herbage all gemmed with fresh dew ^a tempts and invites each, and full-fed the lambs play and butt heads in fun ; all which things are seen by us blurred together in the distance, as a kind of whiteness at rest on a green hill. Besides, when great legions cover the outspread plains in their manœuvres, evoking war in mimicry,^b and the sheen rises to the sky and all the country around flashes back the brilliancy of bronze, and beneath, the ground quakes, resounding with the mighty tramp of men's feet,^c and the mountains, stricken by the clamour, throw back the sounds to the stars of heaven, and horsemen gallop around and suddenly course through the midst of the plains, shaking them with their mighty rush, yet ^d there is a place on the high mountains, from which they seem to stand still, and to be a brightness at rest upon a plain.

³³³ Mark now and learn in the next place of what kinds are the beginnings of all things, how far they differ in shape, how varied they are in their manifold figures : not that there are only a few endowed with similar shape, but because commonly they are not all like all. And no wonder : for since there is so great a store that there is no end to them, as I have taught, and no sum, they must assuredly not be all of like frame with all and marked by the same shape.

Analogy.

II. Shape (333-729). There are many varieties of atoms,

^c 325-327 are in imitation of Homer. See *Il.* 2.457-458, 19.362-363, *Od.* 14.267-268.

^d Strictly " and yet "—an anacoluthon, unless the alteration of *ubi* to *ibi* in 325 is accepted. Cf. 342-347.

Praeterea genus humanum mutaeque natantes
 squamigerum pecudes et laeta armenta feraeque
 et variae volucres, laetantia quae loca aquarum
 concelebrant circum ripas fontisque lacusque, 345
 et quae pervolgant nemora avia pervolitantes—
 quorum unum quidvis generatim sumere perge :
 invenies tamen inter se differre figuris.
 nec ratione alia proles cognoscere matrem
 nec mater posset prolem ; quod posse videmus 350
 nec minus atque homines inter se nota cluere.
 nam saepe ante deum vitulus delubra decora
 turicremas propter mactatus concidit aras,
 sanguinis expirans calidum de pectore flumen ;
 at mater viridis saltus orbata peragrans 355
 quaerit humi pedibus vestigia pressa bisulcis,
 omnia convisens oculis si queat usquam
 conspicere amissum fetum, completque querellis
 frondiferum nemus adsistens et crebra revisit
 ad stabulum desiderio perfixa iuveni ; 360
 nec tenerae salices atque herbae rore vigentes
 fluminaque illa queunt summis labentia ripis
 oblectare animum subitumque avertere curam,
 nec vitulorum aliae species per pabula laeta
 derivare queunt animum curaque levare : 365
 usque adeo quiddam proprium notumque requirit.
 praeterea teneri tremulis cum vocibus haedi
 cornigeras norunt matres agnique petulei

343 armenta first printed in the edition of J. Tonson (1712),
 but also conjectured by Bentley in a manuscript note (see
 Wakefield) : arbusta OQGP 356 quaerit Bailey : non
 quit O : inquit Q : oinquit G : linquit Q corr. : noscit
 Lachmann : cingit W. Schmid 362 illa OQG : ulla
 Macrobius, Sat. 6.2.6, O corr., P

^a Cf. Shakespeare, *Henry VI*, Pt. 2, Act 3, Sc. 1, 210,

³⁴² Moreover, the race of men, and the dumb as there are
 swimming tribes of scaly fish, fat cattle, and wild in the units
 beasts, the different birds which throng the joyous of any
 regions of water around bank and spring and lake, species
 and which crowd the pathless woods through and which are
 through as they flit about—of these go on to take superficially
 any one in any kind, and you will find nevertheless alike.
 that each differs from each in shape. Nor is there Examples
 any other way by which the young could recognize from
 the mother or the mother her young ; and this animals,
 we see they can do, and that they are known clearly to
 each other no less than men are. For often in front
 of the noble shrines of the gods a calf falls slain
 beside the incense-burning altars, breathing up a
 hot stream of blood from his breast ; but the mother
 bereaved wanders through the green glens, and seeks
 on the ground the prints marked by the cloven
 hooves, as she surveys all the regions if she may
 espy somewhere her lost offspring, and coming to a
 stand fills the leafy woods with her moaning,^a and
 often revisits the stall, pierced with yearning for her
 calf ; nor can tender willow-growths, and herbage
 growing rich in the dew, and those rivers flowing
 level with their banks, give delight to her mind and
 rebuff her sudden care, nor can the sight of other
 calves in the happy pastures divert her mind and
 lighten her load of care : so persistently she seeks
 for something of her own that she knows well. Beside,
 tender kids with trembling voices know their
 horned mothers, and mischievous lambs the flocks

214-216 : " And as the butcher takes away the calf, | . . . And
 as the dam runs lowing up and down, | Looking the way her
 harmless young one went, | And can do nought but wail her
 darling's loss."

balantum pecudes : ita, quod natura reposit,
ad sua quisque fere decurrunt ubera lactis. 370

Postremo quodvis frumentum non tamen omne
quidque suo genere inter se simile esse videbis,
quin intercurrat quaedam distantia formis.
concharumque genus parili ratione videmus
pingere telluris gremium, qua mollibus undis 375
litoris incurvi bibulam pavit aequor harenam.

Quare etiam atque etiam simili ratione necessest,
natura quoniam constant neque facta manu sunt
unius ad certam formam primordia rerum,
dissimili inter se quaedam volitare figura. 380

Perfacile est animi ratione exsolvere nobis
quare fulmineus multo penetratior ignis
quam noster fluat e taedis terrestribus ortus ;
dicere enim possis caelestem fulminis ignem
subtilem magis e parvis constare figuris 385
atque ideo transire foramina quae nequit ignis
noster hic e lignis ortus taedaque creatus.
praeterea lumen per cornum transit, at imber
respuitur. quare ? nisi luminis illa minora
corpora sunt quam de quibus est liquor almus
aquarum. 390

et quamvis subito per colum vina videmus
perfluere, at contra tardum cunctatur olivom,
aut quia nimirum maioribus est elementis

383 fluat *OQGP* : fluat *Faber*, who however rejects his own
suggestion: "sed nil mutandum; est enim illustris trans-
latio"

^a Some editors and translators, evidently *homines ab agro remotissimi*, take *fere* to mean "without fail," "without exception." In fact, lambs and kids sometimes run to the

of bleating sheep : so, as nature demands, they usually ^a run down each to its own udder of milk.

³⁷¹ Lastly, take any kind of corn, you will see that ^{grains of corn,} the grains are nevertheless not all so alike by their common species, but that there is a certain difference of shape between them. And in the same way we ^{shells.} see the multitude of shells painting the lap of the earth, where with soft waves the sea beats on the thirsty sand of the curving shore.

³⁷⁷ Therefore again and again I say that the first-beginnings of things in the same way, since they exist by nature and are not made by hand after the fixed model of one single atom, must necessarily have some of them different shapes as they fly about.^b

³⁸¹ It is very easy for us to explain by reasoning of the mind why the fire of lightning has a far more penetrating flow than our fire that arises from terrestrial torches ; for you could say that lightning, the heavenly fire, is finer and made of smaller shapes, and therefore passes through openings through which this fire of ours, sprung from wood and made from a torch, cannot pass. Besides, light passes through horn, but rain is rejected ^c : why ? unless those bodies of light are smaller than those which make up the nourishing liquid of water. And we see wine, as quickly as you will, strain through a colander ; but contrariwise olive oil lags and lingers, either to be sure because its elements are larger, or because they wrong udder of milk, and *Lucr.*, always an accurate observer of animal behaviour, was undoubtedly aware of this.

^b *quaedam*, because there are some similar as well as others different.

^c *Lucr.* is thinking of a horn lantern carried on a wet night. Cf. Empedocles fr. 84, lines 1-6.

aut magis hamatis inter se perque plicatis,
atque ideo fit uti non tam diducta repente 395
inter se possint primordia singula quaeque
singula per cuiusque foramina permanere.

Huc accedit uti mellis lactisque liquores
iucundo sensu linguae tractentur in ore ;
at contra taetra absinthi natura ferique 400
centauri foedo pertorquent ora sapore ;
ut facile agnoscas e levibus atque rutundis
esse ea quae sensus iucunde tangere possunt,
at contra quae amara atque aspera cumque videntur,
haec magis hamatis inter se nexa teneri 405
proptereaque solere vias rescindere nostris
sensus introituque suo perrumpere corpus.

Omnia postremo bona sensibus et mala tactu
dissimili inter se pugnant perfecta figura ;
ne tu forte putes serrae stridentis acerbum 410
horrorem constare elementis levibus aequae
ac musaea mele, per chordas organici quae
mobilibus digitis expergefata figurant ;
neu simili penetrare putes primordia forma
in nares hominum, cum taetra cadavera torrent 415
et cum scena croco Cilici perfusa recens est
araque Panchaeos exhalat propter odores ;

^a Although *primordia* (396), like *elementis* (393), must refer to atoms, it seems inconceivable that Epicurus, who believed that all atoms are so small as to be invisible, supposed that the passage of oil through a colander is delayed by the inability of each constituent atom to pass through a separate opening ; probably the reference should have been to atomic nuclei, particles, or molecules. See Giussani and Bailey.

^b Lucr. discusses taste in more detail in 4.615-672.

^c In Book 4 Lucr. explains that hearing, sight, and smell are caused by emanations impinging on the appropriate sense-organ.

are more hooked and entangled more closely, and therefore it happens that the separate first-beginnings ^a cannot be so suddenly detached and ooze one by one each through its own opening.

³⁹⁸ Moreover, the liquids of honey and of milk have a pleasant taste as they are moved about in the mouth ^b ; but contrariwise the loathsome nature of wormwood and of harsh centaury twists up the mouth with a noisome flavour ; so that you may readily recognize that those bodies which can touch our senses pleasantly are made of smooth and round atoms, but contrariwise all that seem to be bitter and rough are held in connexion by atoms more hooked, and are therefore accustomed to tear open their way into our senses and to break the texture by their intrusion.

⁴⁰⁸ Lastly, all things that are agreeable to our senses in touch and all that are disagreeable are in conflict, being made of dissimilar shapes : so that you must never think the harsh grating of a strident saw consists of elements ^c as smooth as the melodies of music which harpers awaken ^d and shape on the strings with nimble fingers ; never think that first-beginnings of similar shape penetrate men's nostrils, when noisome corpses are roasting, and when the stage is freshly sprinkled with Cilician saffron, ^e and the altar near by breathes Panchaeian scents ^f ;

^d Cf. Thomas Gray, *Elegy Written in a Country Churchyard* 48 : " Or waked to ecstasy the living lyre."

^e Corycus in Cilicia was famous for its saffron. The sprinkling of the stage with a solution of saffron is mentioned by several other Roman writers.

^f Panchaea, a mythical island east of Arabia, was reputedly rich in incense : cf. Virgil, *G.* 2.139, 4.379.

neve bonos rerum simili constare colores
 semine constituas, oculos qui pascere possunt,
 et qui compungunt aciem lacrimareque cogunt 420
 aut foeda specie diri turpesque videntur.
 omnis enim, sensus quae mulcet cumque, figura
 haud sine principali aliquo levore creatast ;
 at contra quaecumque molesta atque aspera constat,
 non aliquo sine materiae squalore repertast. 425
 sunt etiam quae iam nec levia iure putantur
 esse neque omnino flexis mucronibus unca,
 sed magis angellis paulum prostantibus, utqui
 titillare magis sensus quam laedere possint ;
 fecula iam quo de genere est inulaeque sapes. 430
 denique iam calidos ignis gelidamque pruinam
 dissimili dentata modo compungere sensus
 corporis, indicio nobis est tactus uterque.
 tactus enim, tactus, pro divum numina sancta,
 corporis est sensus, vel cum res externa sese 435
 insinuat, vel cum laedit quae in corpore natata
 aut iuvat egrediens genitalis per Veneris res,
 aut ex offensu cum turbant corpore in ipso
 semina confunduntque inter se concita sensum ;
 ut si forte manu quamvis iam corporis ipse 440
 tute tibi partem ferias atque experiare.
 quapropter longe formas distare necessent
 principiis, varios quae possint edere sensus.

Denique quae nobis durata ac spissa videntur,
 haec magis hamatis inter sese esse necessent 445
 et quasi ramosis alte compacta teneri.

421 diri *Lachmann* : di *OQG* : fedi *Q* *corr.* 422
 figura *W. Schneidewin, Philol.* 3 (1848) 538 : videntur (from
 421) *OQGP* 428 utqui *N. P. Howard, Munro*
omitted by OQG : et quae *CF* : ut quae *Martin* 439
 confunduntque *Marullus* : confundunt *OQGP* 446 alte
OQGP : arte *M. F. Smith (cf. 1.610, 6.1010; and for the*
 128

never suppose that agreeable colours fit to feed our
 sight consist of seed like those which make the eye sight :
 tingle and force it to weep, or such as by their ugly
 aspect seem terrible and vile. For nothing whatso-
 ever that soothes the senses is made without some
 smoothness in the first-beginnings ; but contrariwise
 all comes from the shapes of the atoms,
 whatever is offensive and harsh has been found to be
 not without some roughness in its material. There
 are also in the series those first-beginnings which are
 rightly thought to be neither smooth nor altogether
 hooked with curved points, but rather to have small
 angles a little projecting, so that they can rather
 tickle our senses than hurt them ; of which kind we
 have now tartar of wine and the flavour of elecam-
 pane. Again, here are hot fire and cold frost toothed
 in different fashion to prick our bodily senses, as the
 touch in either case proves to us. For touch, so help
 for touch is sensation.
 me the holy power of the gods, it is touch that is the
 bodily sense, whether when a thing penetrates from
 without, or when hurt comes from something within
 the body, or when it gives pleasure in issuing forth
 by the creative acts of Venus, or when from a blow
 the seeds make riot in the body itself and confuse
 the sense by their turmoil ; as you might try for
 yourself now if you strike any part of your body
 with a hand. Therefore it is necessary that the first-
 beginnings have widely different shapes, since they
 can produce varying sensations.

⁴⁴⁴ Again, whatever seems to us hardened and
 close set must consist of elements more closely
 hooked and held knit deeply together by branch-like
 Examples :
 hard things,

corruption cf. 6.277), but alte makes sense and is probably
 right

in quo iam genere in primis adamantina saxa
 prima acie constant ictus contemnere sueta,
 et validi silices ac duri robora ferri,
 aeraque quae claustris restantia vociferantur. 450
 illa quidem debent e levibus atque rutundis
 esse magis, fluvido quae corpore liquida constant ;
 namque papaveris haustus itemst facilis quod
 aquarum :

nec retinentur enim inter se glomeramina quaeque,
 et percussus item proclive volubilis exstat. 455
 omnia postremo quae puncto tempore cernis
 diffugere, ut fumum nebulas flammasque, necessest,
 si minus omnia sunt e levibus atque rutundis,
 at non esse tamen perplexis indupedita,
 pungere uti possint corpus penetrareque saxa 460
 nec tamen haerere inter se ; quodcumque videmus
 sensibu' dentatum, facile ut cognoscere possis
 non e perplexis sed acutis esse elementis.
 sed quod amara vides eadem quae fluvida constant,
 sudor uti maris est, minime mirabile debet ; 465
 nam quod fluvidus est, e levibus atque rutundis
 est, et squalida sunt illis admixta doloris
 corpora ; nec tamen haec retineri hamata necessum :
 scilicet esse globosa tamen, cum squalida constent,
 provolvi simul ut possint et laedere sensus. 470
 et quo mixta putes magis aspera levibus esse

453 quod OQGP : quasi M. Haupt 462 dentatum
 (cf. 432) L. Grasberger, Martin : sedatum OQ : esse datum F
 465 A lacuna after this line assumed by Bernays and many
 modern editors. But, though esse would be expected with
 debet (cf. 5.666-667), Merrill (1917) and Ernout may be right
 in thinking that it can be understood 467 et squalida
 sunt illis Bernays : e levibus atque rutundi (from 466) OQ
 468 necessum ABL : necessu OQ : necessumst, attributed
 by Munro and many modern editors to Lachmann, is read by

shapes. Amongst the first in this class, diamond
 stones, for example, stand in the front rank, accus-
 tomed to despise blows ; and stout stone and the
 strength of hard iron, and bronze sockets that shriek
 out as they resist the bolts. Those others, the fluids ^{liquids,}
 which consist of liquid body, must be of elements
 smoother and rounder. Indeed you may scoop up
 poppy seed as easily as water, for the individual
 round particles are no hindrance to each other ; and
 when poppy seed is knocked over, it runs downhill
 just as readily.^a Lastly, all that you see dispersing
 in a moment of time, as smoke and clouds and flame, ^{smoke,}
 if not wholly made of smooth and round elements,
 must at least necessarily not be hampered by ele-
 ments entangled, that they may be able to sting the
 body and penetrate stones^b without clinging to-
 gether ; so that you may easily recognize that what-
 ever we see to be spiky to the senses consists of ele-
 ments sharp but not entangled. But it should be no
 marvel that you see the same things both bitter and
 fluid, as the brine of the sea ; for being fluid it ^{sea water} consists
 of smooth and round elements, and many rough
 bodies that cause pain are intermingled with them ;
 and yet it is not necessary that these be held to-
 gether by hooks : you must know that they are
 round although they are rough, so that they can roll
 on and at the same time hurt the senses. And to
 show you more clearly that there are rough elements ^{indeed the}

^a i.e. just as readily as water. On the interpretation of
 453-455 see especially D. A. West in *CR* N.S. 14 (1964) 4-6.

^b Smoke stings the eyes, fire (cf. 1.491) penetrates stones
 and splits them.

*Lambinus in his 1570 edition (in his 1563-64 edition he reads
 necessum)*

principiis, unde est Neptuni corpus acerbum,
 est ratio secernendi, seorsumque videndi
 umor dulcis, ubi per terras crebrius idem
 percolatur, ut in foveam fluat ac mansuescat ; 475
 linquit enim supera taetri primordia viri,
 aspera quom magis in terris haerescere possint.

Quod quoniam docui, pergam conectere rem quae
 ex hoc apta fidem ducat, primordia rerum
 finita variare figurarum ratione. 480
 quod si non ita sit, rursus iam semina quaedam
 esse infinito debebunt corporis auctu.
 namque in eadem una cuiusvis iam brevitate
 corporis inter se multum variare figurae
 non possunt. fac enim minimis e partibus esse 485
 corpora prima tribus, vel paulo pluribus auge :
 nempe ubi eas partis unius corporis omnis,
 summa atque ima locans, transmutans dextera laevis,
 omnimodis expertus eris, quam quisque det ordo
 formai speciem totius corporis eius, 490
 quod superest, si forte voles variare figuras,
 addendum partis alias erit ; inde sequetur,
 adsimili ratione alias ut postulet ordo,
 si tu forte voles etiam variare figuras.
 ergo formarum novitatem corporis augmen 495
 477 quom *A. G. Roos* : quo *OQP* 483 iam *Brieger* :
 in *OQ*

^a For Lucr.'s attitude to the use of such names, see 655-660.

^b Here, in 481 (*rursus*), and in 498-499 the reference may be to a non-existent proof that the size of the atoms is limited. Brieger and Giussani assume a lacuna between 477 and 478, but Bailey is more cautious : " In the unfinished state of the poem it is rash to assume that a passage has been

mixed with smooth which produce Neptune's ^a bitter brine can be separated.
 body, there is a way to separate them, and to see how the sweet water, when the same is filtered through earth several times, runs separately into a pit and loses its saltness ; for it leaves above the elements of the nauseous brine, since the rough ones can more easily stick in the earth.

478 Now that I have explained this, I will proceed to link with it another truth which depending on this draws its proof from it ^b : that the first-beginnings have a finite number of differing shapes.^c If that were not so, it would once more follow that some of the seeds will necessarily be of infinite size.^d For within the same small measure of one given body ^e the shapes cannot differ much from one another : suppose, for instance, the first bodies to consist of three smallest parts, or increase that number by a few more ; naturally, when you take all those parts of one body, and by placing them top or bottom, and transposing right and left, you have tried in all possible ways what shape of that whole body each order gives, if after all you wish perhaps to vary the shapes, other parts must be added ; and it will follow that in like manner the arrangement will demand other parts, if you perhaps wish to vary the shapes yet further. Therefore novelty of shapes implies in-

lost ; . . . it is safer merely to say that the argument requires it."

^c Cf. Epicurus, *Ep. ad Hdt.* 42. Democritus, however, had supposed that the number of atomic shapes is infinite.

^d In 481-499, which should be compared with Epicurus, *Ep. ad Hdt.* 55-56, Lucr. returns to the doctrine of minimal parts expounded in 1.599-634 (cf. *Ep. ad Hdt.* 56-59).

^e " Body " here = " first body," *i.e.* " atom."

subsequitur. quare non est ut credere possis
esse infinitis distantia semina formis,
ne quaedam cogas inmani maximitate
esse, supra quod iam docui non posse probari.

Iam tibi barbaricae vestes Meliboeaque fulgens 500
purpura Thessalico concharum tacta colore,
aurea pavonum ridenti imbuta lepore
saecla, novo rerum superata colore iacerent
et contemptus odor smyrnae mellisque saporis, 505
et cynea mele Phoebeaque daedala chordis
carmina consimili ratione oppressa silerent ;
namque aliis aliud praestantius exoreretur.
cedere item retro possent in deteriores
omnia sic partis, ut diximus in melioris ;
namque aliis aliud retro quoque taetrius esset 510
naribus auribus atque oculis orisque saporis.
quae quoniam non sunt, sed rebus reddita certa
finis utrimque tenet summam, fateare necessest
materiem quoque finitis differre figuris.

Denique ab ignibus ad gelidas iter usque
pruinis 515
finitumst retroque pari ratione remensumst ;
omnis enim calor ac frigus mediiue tepores
intrintrasque iacent expientes ordine summam.
ergo finita distant ratione creata,

501 tacta (cf. 6.1138) *F. Oudendorp (on Lucan 10.491) :*
tecta OQP : tincta ed. Juntina (cf. 736, 747, 776) 512
sed Lachmann (Wakefield had already tentatively suggested in
rebus, sed data certa) : omitted by OQ 515 iter usque
Lachmann : hiemisque OQP : hiemum usque Munro tentatively,
but the gen. pl. does not occur elsewhere : brumae usque (cf.
5.640) W. A. Merrill, Univ. of Calif. Publ. in Class. Phil. 3 (1916)
20 : rigidisque W. Clausen, CR N.S. 41 (1991) 544-545

crease of size. And so it is impossible for you to believe that the seeds have an infinite number of differing shapes, or you must compel some to be of immeasurable magnitude, which I have already shown to be impossible to prove.

⁵⁰⁰ Then, I tell you, barbaric vestments, and blazing Meliboean^a purple, dyed in the colour from Thessalian shells, and the golden generations of peacocks steeped in laughing grace, all would sink, outdone by some new colour in the world ; the odour of myrrh and the savour of honey would be despised ; the swan's melody and Apollo's music set to the wonder-working art of strings would in like manner be vanquished and silent ; for one thing more splendid than another would continually arise. All things might also change back for the worse, as we have said they might do for the better : for in the backwards way also one thing would be more loathsome than another to nose, ears, and eyes, and the taste of the mouth. Since this is not so, but a certain limit is set for things, which shuts in the sum from both sides,^b it must be confessed that matter also has a limited number of different shapes.

⁵¹⁵ Again, limited is the path that extends from fiery heat to the icy frosts, and it is measured backwards in the same way, for all the heat and cold and middle warmth lies between these extremes, filling up the sum^c in succession. Therefore things produced differ by limited degrees, since they

^a Meliboea, a town on the coast of Thessaly, where dye was obtained from the shell-fish called *κόχλος* in Greek, *murex* in Latin.

^b The two extremes of goodness and badness.

^c That is, all the possible degrees of heat and cold.

ancipiti quoniam mucroni utrimque notantur, 520
hinc flammis illinc rigidis infesta pruinis.

Quod quoniam docui, pergam conectere rem quae
ex hoc apta fidem ducat, primordia rerum,
inter se simili quae sunt perfecta figura,
infinita cluere. etenim distantia cum sit 525
formarum finita, necesse est quae similes sint
esse infinitas aut summam materiai
finitam constare, id quod non esse probavi,
versibus ostendens corpuscula materiai
ex infinito summam rerum usque tenere, 530
undique protelo plagarum continuato.

Nam quod rara vides magis esse animalia quaedam
fecundamque minus naturam cernis in illis,
at regione locoque alio terrisque remotis
multa licet genere esse in eo numerumque repleri; 535
sicut quadripedum cum primis esse videmus
in genere anguimanus elephantos, India quorum
milibus e multis vallo munitur eburno,
ut penitus nequeat penetrari: tanta ferarum
vis est, quarum nos perpauca exempla videmus. 540

Sed tamen id quoque uti concedam, quam lubet esto
unica res quaedam nativo corpore sola,

521 infesta *Lambinus (notes only)*: infessa *OQ*: insessa
Marullus, Lambinus (text), perhaps rightly 529
ostendens *Munro*: ostendam *OQP* 533 minus *Lam-*
binus: magis *OQP, Wakefield, Merrill (1917), Martin,*
Büchner

^a 522-523 = 478-479.

^b Cf. Epicurus, *Ep. ad Hdt.* 42.

^c 1.1008-1051.

^d *protelum* is literally a row of draught-oxen or mules
harnessed together. The metaphor is used again in 4.190.

^e For the Epicurean doctrine of *ισονομία* or "equili-

are marked at both extremes by two points, one at
either end, beset on the one side by flame, on the
other by stiff frost.

⁵²² Now that I have explained this, I will proceed
to link with it another truth which depending on this
draws its proof from it ^a: that the first-beginnings of
things which are made of similar shape are infinite
in number.^b Indeed, since the difference of shapes
is finite, it is necessary that the shapes which are
alike be infinite, or else that the sum of matter be
finite, which I have proved ^c not to be so, while showing
in my verses that the small bodies of matter hold
together the sum of things from infinity with an un-
interrupted succession ^d of blows from all sides.

⁵³² For although you see certain animals to be
rarer and nature to be less fertile in them, yet in
another place and climate and in distant lands there
may be many of that kind, and so the number be
filled up ^e: as in the race of quadrupeds we see
especially snake-handed elephants, which in their
many thousands provide an ivory palisade ^f about
India, so that none may penetrate within: so great
is the quantity of those beasts, of which we see very
few specimens.

⁵⁴¹ But to grant this also—let there be, if you will,
some one thing unique and sole of its kind with a
indeed, one
unique
specimen

brium," which is introduced also in 569-580, cf. Cicero,
Nat. D. 1.19.50.

^f Bailey thinks that the allusion is to a legend, but this
view is disputed by A. Ernout in *Rev. Phil.* 44 (1970) 203-
205. See also E. K. Borthwick, *CQ N.S.* 23 (1973) 291-292,
who quotes a passage from Dio Chrysostom (*Or.* 79.4) which
refers to the Indian practice of building the skulls of
elephants, tusks and all, into the walls of houses.

cui similis toto terrarum non sit in orbi ;
 infinita tamen nisi erit vis materiai
 unde ea progigni possit concepta, creari 545
 non poterit neque, quod superest, procreescere alique.
 quippe etenim sumam hoc quoque uti finita per omne
 corpora iactari unius genitalia rei,
 unde, ubi, qua vi et quo pacto congressa coibunt
 materiae tanto in pelago turbaque aliena ? 550
 non, ut opinor, habent rationem conciliandi ;
 sed quasi naufragiis magnis multisque coortis
 disiectare solet magnum mare transtra cavernas
 antemnas proram malos tonsasque natantis,
 per terrarum omnis oras fluitantia aplustra 555
 ut videantur et indicium mortalibus edant,
 infidi maris insidias virisque dolumque
 ut vitare velint, neve ullo tempore credant,
 subdola cum ridet placidi pellacia ponti,
 sic tibi si finita semel primordia quaedam 560
 constitues, aevom debebunt sparsa per omnem
 disiectare aestus diversi materiai,
 numquam in concilium ut possint compulsa coire
 nec remorari in concilio nec crescere adaucta ;
 quorum utrumque palam fieri manifesta docet res, 565
 et res progigni et genitas procreescere posse.
 esse igitur genere in quovis primordia rerum
 infinita palam est unde omnia suppeditantur.
 Nec superare queunt motus itaque exitiales

543 non sit in orbi *Q corr.*, *P*: sit orbi *O*: orbi *Q*: nulla sit orbi *Lachmann* 547 sumam hoc quoque uti (*cf.* 541, 4.473) *Munro*: sumant oculi *OQP*: sumant ollei (= olli = illi) *Wakefield tentatively, in his notes only*

body that had birth, and let there be nothing like it in the whole world ; yet, unless the sum of matter be infinite from which it may be conceived and brought forth, it cannot be made, nor, moreover, can it grow and be nourished. Indeed, if I should go so far as to assume that the bodies generative of this one thing were finite in number, tossed about through the universe, whence, where, by what force, in what manner will they meet and combine amidst such an ocean of matter, such an alien crowd ? They have no way, I think, to combine ; but as when many great shipwrecks have come about, the high sea is accustomed to toss asunder transoms, ribs, yards, prow, masts, and oars all swimming, so that the poop-fittings are seen floating around all the shores, and provide a warning for mortals, that they eschew the treacherous deep, with her snares, her violence, and her fraud, and never trust her at any time when the calm sea shows her false alluring smile ^a : so if you once lay down that certain first-beginnings are finite in number, they must be scattered through all time and tossed asunder on the sundering tides of matter, so that never can they be driven together and come into combination together, nor remain in combination, nor grow by increase ; both which things are openly shown by manifest facts to be done, namely that things can be brought forth and when produced can grow forth. It is therefore obvious that in each kind there is an infinity of the first-beginnings of things from which a supply of all things is brought up.

⁵⁶⁹ And therefore, neither can death-dealing mo-

^a The treachery of the sea is frequently mentioned in classical literature: *cf. e.g.* 5.1004-1005, Plautus, *Rudens* 485-486, Virgil, *G.* 1.254, Propertius 3.7.37.

The balanced

would need an infinite store of suitable atoms to produce it:

for if finite they could no more combine

than the pieces of wrecked ships.

perpetuo neque in aeternum sepelire salutem, 570
 nec porro rerum genitales auctificique
 motus perpetuo possunt servare creata.
 sic aequo geritur certamine principiorum
 ex infinito contractum tempore bellum :
 nunc hic nunc illic superant vitalia rerum 575
 et superantur item. miscetur funere vagor
 quem pueri tollunt visentes luminis oras ;
 nec nox ulla diem neque noctem aurora secutast
 quae non audierit mixtos vagitibus aegris
 ploratus mortis comites et funeris atri. 580

Illud in his obsignatum quoque rebus habere
 convenit et memori mandatum mente tenere,
 nil esse, in promptu quorum natura videtur,
 quod genere ex uno consistat principiorum,
 nec quicquam quod non permixto semine constet. 585
 et quodcumque magis vis multas possidet in se
 atque potestates, ita plurima principiorum
 in sese genera ac varias docet esse figuras.

Principio tellus habet in se corpora prima
 unde mare inmensum volventes frigora fontes 590
 adsidue renovent, habet ignes unde oriantur ;
 nam multis succensa locis ardent sola terrae,
 ex imis vero furit ignibus impetus Aetnae.
 tum porro nitidas fruges arbustaque laeta
 gentibus humanis habet unde extollere possit, 595
 unde etiam fluvios frondes et pabula laeta
 montivago generi possit praebere ferarum.

593 ex imis *OQP* : eximiis *Avancius*

^a Cf. Tennyson, *The Vision of Sin* 97-98 : " Every moment dies a man, | Every moment one is born."

tions lord it for ever and for ever bury existence, warfare o
 nor further can motions that generate and give increa- creation
 tion to things for ever preserve them when made. and de-
 Thus the war of first-beginnings waged from infin- struction.
 ity is carried on with doubtful issue : now here,
 now there the vital elements gain the mastery, and
 in like manner are mastered. With the funeral dirge
 is mingled the wail that children raise when they
 first see the borders of light ; and no night ever
 followed day, or dawn followed night, that has not
 heard mingled with their sickly wailings the lamen-
 tations that attend upon death and the black
 funeral.^a

⁵⁸¹ This also herewith you would do well to guard
 sealed and treasured in memory, that there is none
 of those things which are in plain view before us
 which consists only of one kind of element, nothing
 which does not consist of various seeds commingled ;
 and the more a thing has in itself many powers ^b and
 faculties, so it shows that there are within it most
 kinds of elements and varied shapes.

⁵⁸⁹ First, the earth contains the first bodies from
 which the springs, rolling coolness along, industri- Earth con-
 ously renew the illimitable sea, and she contains the tains all
 source of fires. For in many places the crust of the kinds.
 earth burns aflame, while from the depths come the
 fiery eruptions of Etna. Then further, she contains
 the means to raise up bright corn and fruitful trees
 for the races of mankind, the means to produce rivers
 and leaves and fruitful pastures for the mountain-
 ranging brood of wild beasts. Therefore she alone Therefore

^b For *vis* as accusative or nominative plural, cf. 3.265,
 5.1033.

quare Magna deum Mater Materque ferarum
et nostri genetrix haec dicta est corporis una.

Hanc veteres Graium docti cecinerunt poetae 600
sedibus in curru biuugos agitare leones,
aeris in spatio magnam pendere docentes
tellurem neque posse in terra sistere terram.
adiunxere feras, quia quamvis effera proles
officiis debet molliri victa parentum. 605
muralique caput summum cinxere corona,
eximiis munita locis quia sustinet urbes ;
quo nunc insigni per magnas praedita terras
horrifice fertur divinae Matris imago.
hanc variae gentes antiquo more sacrorum 610
Idaeam vocitant Matrem Phrygiasque catervas
dant comites, quia primum ex illis finibus edunt
per terrarum orbem fruges coepisse creari.
Gallos attribuunt, quia, numen qui violarint
Matris et ingrati genitoribus inventi sint, 615
significare volunt indignos esse putandos,
vivam progeniem qui in oras luminis edant.
tympana tenta tonant palmis et cymbala circum

600-601 *Between these lines Q leaves a space of two lines, and many editors assume a lacuna. But the space in Q was almost certainly left for a title (see Bailey 901-902)*

^a The cult of the *Magna Mater*, Cybele, whom Lucr. identifies with Rhea (633-639), was brought to Rome from Phrygia in 205-204 B.C. She was represented with a mural crown (606) and a team of lions (601). She had eunuch priests (614) called Corybantes, who worshipped her with loud, wild music (618-620) and frenzied armed dances (629-632). The similarity between her cult and that of Rhea caused them to be confused, and the Corybantes came to be identified with the Cretan Curetes (629, 633). The fact that both Phrygia and Crete possessed a Mt. Ida (611) contributed to the confusion.

is called Great Mother of the gods,^a and Mother of the wild beasts, and maker of our bodies. she is rightly called Mother. Mother Earth as Cybele : her attributes explained : wild beasts,
600 She it is of whom the ancient and learned poets of the Greeks have sung, that seated in a chariot she drives a pair of lions, thus teaching that the great world is poised in the spacious air, and that earth cannot rest on earth. They have yoked in wild beasts, because any offspring however wild ought to be softened and vanquished by the kindly acts of the parents.^b And they have surrounded the top of her head with a mural crown, because embattled in excellent positions she sustains cities ; which emblem now adorns the divine Mother's image as she is carried over the great earth in awful state. She it is whom different nations in their ancient ritual acclaim as the Idaean Mother, and give her troops of Phrygians to escort her, because men declare that first from that realm came the corn,^c which then spread over the round world. They give her eunuchs, as wishing eunuchs, to indicate that those who have violated the majesty of the Mother, and have been found ungrateful to their parents, should be thought unworthy to bring living offspring into the regions of light. The taut music, tomtoms thunder under the open palm, the hollow

^b Varro, in his description of the Great Mother (Augustine, *De civ. D.* 7.24), says : *leonem adiungunt solutum ac mansuetum, ut ostendant nullum genus esse terrae tam remotum ac vehementer ferum quod non subigi colique conueniat.*

^c Herodotus 2.2 relates how the Egyptian king Psammetichus discovered that the Phrygian word for "bread" was the original one. As D. West, *The Imagery and Poetry of Lucretius* 106, has noticed, Lucr. emphasizes the origin of corn in Phrygia with the verbal play *Phrygias . . . fruges.* Cf. note on 1.474.

concava, raucisonoque minantur cornua cantu,
 et Phrygio stimulat numero cava tibia mentis, 620
 telaque praeportant violenti signa furoris,
 ingratos animos atque impia pectora volgi
 conterrere metu quae possint numine divae.
 ergo cum primum magnas invecta per urbis
 munificat tacita mortalis muta salute, 625
 aere atque argento sternunt iter omne viarum,
 largifica stipe ditantes, ninguntque rosarum
 floribus umbrantes Matrem comitumque catervam.
 hic armata manus, Curetas nomine Grai
 quos memorant, Phrygias inter si forte catervas 630
 ludunt in numerumque exultant sanguine laeti,
 terrificas capitum quatientes numine cristas,
 Dictaeos referunt Curetas qui Iovis illum
 vagitum in Creta quondam occultasse feruntur,
 cum pueri circum puerum pernice chorea 635
 armati in numerum pulsarent aeribus aera,
 ne Saturnus eum malis mandaret adeptus
 aeternumque daret Matri sub pectore volnus.
 propterea Magnam armati Matrem comitantur, 640
 aut quia significant divam praedicere ut armis
 ac virtute velint patriam defendere terram
 praesidioque parent decorique parentibus esse.

Quae bene et eximie quamvis disposta ferantur,
 longe sunt tamen a vera ratione repulsa. 645

628 catervam *Q*, Wakefield, Martin, is probably right (cf. *Ciris* 142), despite 611, 630: catervas *F*: caterva *OABL*
 630 Phrygias *Frerichs*: Phrygios *OQP* sei (=si)
Diels: se *OQP* catervas *OP*: catenas *Q*: quod armis
Lachmann 631 laeti *Pontanus*: faeti *OQ*: fleti *BF*,
 Wakefield, N. P. Howard, *Journ. Phil.* 1 (1868) 126, Merrill
 (1917), M. Mund-Dopchie, *Ant. Class.* 40 (1971) 210-214,
 perhaps rightly: freti *AL* 636 armat et in numerum
 pernice chorea, a conflation of 635 and 637, deleted by
Pontanus

cymbals sound around, horns with hoarse-echoing
 blare affright, hollow pipes prick up the spirits with
 their Phrygian cadences, martial arms show a front weapons,
 of violent fury, that they may amaze the ungrateful
 minds and impious hearts of the vulgar with fear
 through the goddess's majesty. Therefore as soon
 as she rides through mighty cities, silently blessing
 mankind with unspoken benediction, they bestrew
 the whole path of her progress with silver and copper,
 enriching it with bounteous largess, and snow down
 rose-flowers in a shower, over-shadowing the Mother
 and her escorting troop. Here an armed group,
 whom the Greeks name the Curetes, whenever they the
 Curetes,
 sport among the Phrygian bands and leap up rhyth-
 mically, joyful with blood, shaking their awful crests
 with the nodding of their heads, recall the Dictaeon
 Curetes, who are said once upon a time to have con-
 cealed that infant wailing of Jupiter in Crete ^a;
 when, boys round a boy in rapid dance, clad in
 armour, they clashed bronze upon bronze to a
 measure, that Saturn might not catch him and cast
 him into his jaws and plant an everlasting wound in
 the Mother's heart. For this reason they escort the
 Great Mother armed; or else because they indicate the command of the goddess that with arms the armed
 escort.
 and valour they be ready to defend their native
 land, and to be both protection and pride to their
 parents.^b

⁶⁴⁴ But well and excellently as all this is set forth
 and told, yet it is far removed from true reasoning.

^a Rhea concealed Jupiter, her son, in a cave on Mt. Dicte
 in Crete, to save him from his father Saturn, who knew that
 he was destined to be overthrown by one of his children.

^b Note the pun *parent . . . parentibus*.

omnis enim per se divom natura necessest
 immortalis aeo summa cum pace fruatur
 semota ab nostris rebus seiunctaque longe ;
 nam privata dolore omni, privata periculis,
 ipsa suis pollens opibus, nil indiga nostri, 650
 nec bene promeritis capitur neque tangitur ira.
 terra quidem vero caret omni tempore sensu,
 et quia multarum potitur primordia rerum,
 multa modis multis effert in lumina solis.
 hic siquis mare Neptunum Cereremque vocare 655
 constituet fruges et Bacchi nomine abuti
 mavolt quam laticis proprium proferre vocamen,
 concedamus ut hic terrarum dictitet orbem
 esse deum Matrem, dum vera re tamen ipse
 660 religione animum turpi contingere parcat. 660

660 Saepe itaque ex uno tondentes gramina campo
 lanigeras pecudes et equorum dvellica proles
 buceriaeque greges eodem sub tegmine caeli
 ex unoque sitim sedantes flumine aquai
 dissimili vivont specie retinentque parentum 665
 665 naturam et mores generatim quaeque imitantur.
 tanta est in quovis genere herbae material
 dissimilis ratio, tanta est in flumine quoque.
 Hinc porro quamvis animantem ex omnibus unam
 ossa cruor venae calor umor viscera nervi 670
 670 constituunt ; quae sunt porro distantia longe,
 dissimili perfecta figura principiorum.

^a 646-651 = 1.44-49.

^b Note the emphatic wording of this important qualification. Lucr. himself calls the sea *Neptunus* (472) and wine *Bacchus* (3.221). According to Cicero, *Nat.D.* 1.15.40, the Stoic Chrysippus *disputat aethera esse eum quem homines*

For the very nature of divinity must necessarily enjoy immortal life in the deepest peace, far removed and separated from our affairs ; for without any pain, without danger, itself mighty by its own resources, needing us not at all, it is neither propitiated with services nor touched by wrath.^a The earth indeed lacks sensation at all times, and only because it receives into itself the first-beginnings of many things does it bring forth many in many ways into the sun's light. Here if anyone decides to call the sea Neptune, and corn Ceres, and to misapply the name of Bacchus rather than to use the title that is proper to that liquor, let us grant him to dub the round world Mother of the Gods, provided that he forbears in reality himself to infect his mind with base superstition.^b

⁶⁶¹ Often therefore cropping grass from one field, are woolly sheep and the warrior breed of horses and horned herds of cattle, beneath the same canopy of heaven, and quenching thirst from one river of water, which live each in a different shape and each race keeps its parents' nature and imitates their ways after its kind : so great a diversity of matter is there in each kind of herbage, so great in each river.

⁶⁶⁹ Hence also any animal of them all is made up of bones, blood, veins, warmth, fluid, flesh, sinews ; which are also things very different, made of first-beginnings that have dissimilar shapes.

Iovem appellarent, quique aer per maria manaret eum esse Neptunum, terramque eam esse quae Ceres diceretur, similique ratione persequitur vocabula reliquorum deorum, and Lucr. may well have the Stoics in mind (see Munro and especially Ernout-Robin).

Tum porro quaecumque igni flammata cremantur,
 si nil praeterea, tamen haec in corpore condunt
 unde ignem iacere et lumen summittere possint 675
 675 scintillasque agere ac late differre favillam.

Cetera consimili mentis ratione peragrans,
 invenies igitur multarum semina rerum
 corpore celare et varias cohibere figuras. 679
 679 Denique multa vides quibus et color et sapor una
 reddita sunt cum odore ; in primis pleraque dona

haec igitur variis debent constare figuris ;
 nidor enim penetrat qua fucus non ite in artus,
 fucus item sorsum, sorsum sapor insinuatur
 sensibus ; ut noscas primis differre figuris. 685
 dissimiles igitur formae glomeramen in unum
 conveniunt, et res permixto semine constant.

Quin etiam passim nostris in versibus ipsis
 multa elementa vides multis communia verbis,
 cum tamen inter se versus ac verba necesse est 690
 confiteare alia ex aliis constare elementis ;
 non quo multa parum communis littera currat
 aut nulla inter se duo sint ex omnibus isdem,
 sed quia non volgo paria omnibus omnia constant.
 sic aliis in rebus item, communia multa 695
 multarum rerum cum sint primordia, verum

674 condunt *Munro* : traduntur *OQ* : tradunt *Q corr.*, *P* :
 cludunt *Bernays* : aluntur *Isaac Voss* 681 dona
OQVP : poma *Bruno*, followed by *Bockemüller*, *Merrill*
(1917), *Diels*, *Martin*, *Bailey*, *Büchner*, but *dona*, which will
 refer to offerings burnt upon altars (as in 4.1237, 6.752), is
 strongly supported by *nidor* (683), a word especially used of a
 burning smell. A lacuna after 681 assumed by *Bernays*.
Munro suggests (e.g.) *quis accensa solent fumore altaria*
divom

673 Then further whatever things are kindled and
 burnt up with fire, if nothing else, yet hide in their
 substance those bodies, which enable them to throw
 out fire and shoot up light and scintillate sparks and
 scatter embers all around.

677 Then go through all the rest in a like mode of
 reasoning, and you will find them to conceal within
 them seeds of many things and to contain various
 shapes.

680 Again, you see many things which are pos-
 sessed of colour and taste together with smell :
 amongst the chief, those many offerings [which en-
 kindled are accustomed to make the altars of the
 gods smoke] ^a ; these therefore must be made of
 various shapes ; for the rank smell penetrates into
 the body, where colour cannot ; colour again in one
 way, flavour in another way, creeps into our senses ;
 so that you may recognize that they differ in the
 shapes of their first elements. Unlike shapes there-
 fore come together into one lump, and things consist
 of mixed seed.

688 Moreover, throughout my own verses you see
 many elements common to many words, although
 you must confess that both verses and words ^b are
 different and consist of different elements ; I do not
 say that there are very few common letters running
 through all, or that no two words, if compared, are
 made up of elements all the same, but that com-
 monly they are not all like all. ^c So in other things
 also, although many first-beginnings are common to

^a The words in square brackets are a translation of *Munro's*
exempli gratia restoration (see critical note).

^b 688-690 = 1.823-825. See note there.

^c Cf. 336-337, 723-724.

dissimili tamen inter se consistere summa
possunt ; ut merito ex aliis constare feratur
humanum genus et fruges arbustaque laeta.

Nec tamen omnimodis coniecti posse putandum est
omnia ; nam volgo fieri portenta videres, 701
semiferas hominum species existere, et altos
interdum ramos eigni corpore vivo,
multaque coniecti terrestria membra marinis,
tum flammam taetro spirantis ore Chimaeras 705
pascere naturam per terras omniparentis.
quorum nil fieri manifestum est, omnia quando
seminibus certis certa genetrice creata
conservare genus crescentia posse videmus.
scilicet id certa fieri ratione necessust. 710
nam sua cuique cibis ex omnibus intus in artus
corpora discedunt conexaque convenientis
efficiunt motus ; at contra aliena videmus
reicere in terras naturam, multaque caecis
corporibus fugiunt e corpore percita plagis, 715
quae neque coniecti quoquam potuere neque intus
vitalis motus consentire atque imitari.

Sed ne forte putes animalia sola teneri
legibus hisce, eadem ratio disterminat omnia.
nam veluti tota natura dissimiles sunt 720
inter se genitae res quaeque, ita quamque necessesit

719 hisce *Bernays*: his *OQVP* eadem *Lambinus* (but
found by him in four manuscripts): quaedam *OP*: quaedam
V: quidam *Q* disterminat *OQVP* (cf. *Cicero, Arat. 94*):
res terminat *Lambinus* omnia (with *synizesis*) ed.
Juntina: omnis *OQVP*

^a Centaurs. Cf. 5.878-891. For the explanation of mental pictures of such creatures, see 4.722-748.

^b Scylla. Cf. 5.892-893.

many things, yet taken one with another they can
make up a whole quite unlike ; so that different
elements may rightly be held to compose the human
race and corn and luxuriant trees.

700 However, it must not be thought that all can be
conjoined in all ways : for then you would commonly
see monstrosities come into being, shapes of men
arising that would be half beasts,^a lofty branches at
times sprouting from a living body, parts of terrestrial
creatures often conjoined with creatures of the sea,^b
Chimaeras^c again, breathing flame from noisome
throats, pastured by nature over the lands that pro-
duce everything. But that none of these things
happen is manifest, since we see that all things bred
from fixed seeds by a fixed mother are able to con-
serve their kind as they grow.^d Assuredly this must
come about in a fixed way. For in each thing, its
own proper bodies are spread abroad through the
frame within from all its foods, and being combined
produce the appropriate motions ; but contrariwise
we see alien elements to be thrown back by nature
upon the earth, and many, beaten by blows, escape
from the body with their invisible bodies,^e which
were not able to combine with any part nor within
the body to feel the life-giving motions with it and
imitate them.

718 But do not think that animals only are held by
these laws, for the same principle holds all things
apart by their limits. For just as all things made
are in their whole nature different one from another,

^a Cf. 5.901-906.

^d Cf. 1.189-190.

^e *Lucr.* refers to expiration, perspiration, etc.

dissimili constare figura principiorum ;
 non quo multa parum simili sint praedita forma,
 sed quia non volgo paria omnibus omnia constant.
 semina cum porro distent, differre necessust 725
 intervalla vias conexus pondera plagas
 concursus motus, quae non animalia solum
 corpora seiungunt, sed terras ac mare totum
 secernunt caelumque a terris omne retentant.

Nunc age dicta meo dulci quaesita labore 730
 percipe, ne forte haec albis ex alba rearis
 principiiis esse, ante oculos quae candida cernis,
 aut ea quae nigrant nigro de semine nata ;
 nive alium quemvis quae sunt imbuta colorem,
 propterea gerere hunc credas, quod materiai 735
 corpora consimili sint eius tincta colore.
 nullus enim color est omnino materiai
 corporibus, neque par rebus neque denique dispar.
 in quae corpora si nullus tibi forte videtur
 posse animi iniectus fieri, procul avius erras. 740
 nam cum caecigeni, solis qui lumina numquam
 dispexere, tamen cognoscant corpora tactu
 ex ineunte aevo nullo coniuncta colore,
 scire licet nostrae quoque menti corpora posse

734 imbuta *OVV* : inbuta *Q* : induta *Lambinus* colo-
 rem *FL* : colore *OQV*

^a Cf. 692-694, 336-337.

^b Cf. 3.419-420 and see note there.

^c Epicurus, *Ep. ad Hdt.* 54, states that the atoms have the properties of shape, size, and weight, but no other qualities ;

so each must consist of first-beginnings differently shaped ; I do not say that very few are endowed with the same shape, but that commonly they are not all like all.^a Since, further, the seeds are different, different must be their intervals, passages, connexions, weights, blows, meetings, motions, which not only separate animal bodies asunder, but keep asunder the earth and the whole sea, and hold back all heaven away from the earth.

⁷³⁰ Now then, mark my words, which with sweet III.
 toil I have gathered,^b lest by chance you suppose Secondary
 these white things which you see bright before your qualities
 eyes to be made of white first-beginnings, or those (730-864).
 that are black to be born of seed that is black, or Atoms have
 that the reason why they show any other colour no colour.
 which they may be imbued with is that the elements of matter ^c are dyed with like colour. For there is no colour at all in the elements of matter, neither like the colour of things nor again unlike. But if by chance you think that the mind cannot project itself ^d into the nature of these bodies, you are wandering far astray. For since men born blind, who have never beheld the sun's light, nevertheless recognize bodies by touch which they have not associated with any colour since the day of their birth, you may be sure that bodies not painted about with any hue are

and a scholium on *Ep. ad Hdt.* 44 informs us that Epicurus believed that colour changes according to the position of the atoms.

^d *animi iniectus* (740) is a translation of Epicurus' ἐπιβολὴ τῆς διανοίας, the act by which the mind concentrates its attention on an image or idea and apprehends it. Cf. Diogenes Laertius 10.31, Epicurus, *Ep. ad Hdt.* 38, 51, *Sent.* 24, *Lucr.* 2.1047, Cicero, *Nat.D.* 1.20.54.

vorti in notitiam nullo circumlita fuco. 745
denique nos ipsi caecis quaecumque tenebris
tangimus, haud ullo sentimus tincta colore.

Quod quoniam vinco fieri, nunc esse docebo

omnis enim color omnino mutatur et omnis
quod facere haud ullo debent primordia pacto ; 750
immutabile enim quiddam superare necessest,
ne res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
proinde colore cave contingas semina rerum, 755
ne tibi res redeant ad nilum funditus omnes.

Praeterea si nulla coloris principiis est
reddita natura et variis sunt praedita formis,
e quibus omne genus gignunt variantque colores
propterea, magni quod refert semina quaeque 760
cum quibus et quali posita contineantur
et quos inter se dent motus accipiantque,
perfacile extemplo rationem reddere possis
cur ea quae nigro fuerint paulo ante colore,
marmoreo fieri possint candore repente : 765

748 *A lacuna after this line noted by Munro. Bailey suggests e.g. corpora prima omni semper privata colore. Bentley, Lachmann, Merrill (1917), Büchner transfer 743 after 748, but see Bailey on 743* 749 et *OQVAB*: in *CFL* *A lacuna after 749 noted by Brieger. Bailey suggests e.g. res sese mutat, mutat quaecumque colorem* 759 omne genus (*cf. 1.1026*) *Lachmann*: omnigenus (*a manuscript reading also in 821, 4.735, 5.428, 437, Varro, Rust. 3.5.11, 14*) *OQU*: omnigenos *O corr., P.* *Any of these readings could be right*

able to become a concept^a for our mind. Again, when we ourselves touch anything in blind darkness, we do not feel it to be steeped in any colour.

748 And since I prove that this is so, I will now explain [that the first bodies] are [deprived of all colour]. For all colours altogether change, and all [things that change colour change themselves]^b; which first-beginnings ought not to do on any terms, for something unchangeable must survive, that all things may not be brought back utterly to nothing. For whatever by being changed passes outside its own boundaries, at once this is the death of that which was before.^c Forbear therefore to steep in colour the seeds of things, lest you find that all things come back utterly to nothing.^d

(1) For all colours change, but the atoms cannot change.

757 Besides, if no quality of colour has been given to the first-beginnings, and they are endowed with various shapes, from which they beget all sorts of various colours for this reason, because it is of great moment with what and in what position they are held together, and what motions they impart and receive mutually,^e then you could very easily explain on the spot why those things which were black a little while before can suddenly become a shining

(2) Colour can be produced by variety of shapes and arrangements;

^a The mind, receiving impressions through the senses, forms a general idea or *πρόληψις* of a class, to which it refers other examples; then by projecting itself, it forms an idea of abstract things, or things of which it has no experience, such as atoms without colour. *notitia* (or *notities*) is used of both these concepts: 4.476, 479, 5.124, 182, 1047.

^b The words in square brackets translate the lines supplied *exempli gratia* by Bailey. See critical notes on 748, 749.

^c 750-754 = 1.789-793. 753-754 also = 1.670-671, 3.519-520.

^d 756 = 864, 1.673.

^e *Cf. 1.908-910, 2.1007-1009.*

ut mare, cum magni commorunt aequora venti,
 vertitur in canos candenti marmore fluctus ;
 dicere enim possis, nigrum quod saepe videmus,
 materies ubi permixta est illius et ordo
 principii mutatus et addita demptaque quaedam, 770
 continuo id fieri ut candens videatur et album.
 quod si caeruleis constarent aequora ponti
 seminibus, nullo possent albescere pacto ;
 nam quocumque modo perturbes caerulea quae sint,
 numquam in marmoreum possunt migrare colorem.
 sin alio atque alio sunt semina tincta colore 776
 quae maris efficiunt unum purumque nitorem,
 ut saepe ex aliis formis variisque figuris
 efficitur quiddam quadratum unaque figura,
 conveniebat, ut in quadrato cernimus esse 780
 dissimiles formas, ita cernere in aequore ponti
 aut alio in quovis uno puroque nitore
 dissimiles longe inter se variosque colores.
 praeterea nil officiant obstantque figurae
 dissimiles quo quadratum minus omne sit extra ; 785
 at varii rerum impediunt prohibentque colores
 quominus esse uno possit res tota nitore.

Tum porro quae ducit et inlicit ut tribuamus
 principii rerum nonnumquam causa colores,
 occidit, ex albis quoniam non alba creantur, 790
 nec quae nigra cluent de nigris sed variis ex.
 quippe etenim multo proclivius exorientur
 candida de nullo quam nigro nata colore
 aut alio quovis qui contra pugnet et obstet.
 Praeterea quoniam nequeunt sine luce colores 795

white ; as the sea, when great winds have stirred up the surface, turns into hoary waves with a white sheen ; for you could say that often what we see as black, when its matter is mixed up and the order of its first-beginnings changed, some being added and taken away, immediately thereafter seems to be bright and white. But if the surface of the deep were made of blue seeds, it could not in any way become white ; for however you may jumble up things that are blue, they can never change into a shining white colour. Or if different seeds that make up the sea's uniform and pure brightness are steeped in different colours, just as often from different shapes and various figures something square is composed with a uniform figure, then it were fitting that, as in the square we perceive unlike forms to be contained,^a so on the surface of the deep or in any other pure and uniform brightness we should perceive various colours very different from one another. Besides, there is nothing in the unlike figures to hinder and debar the whole thing from being square on the outside ; but the various colours of things do thwart and forbid the whole thing to be of one brightness.

⁷⁸⁸ Then further, the reason that leads and attracts us sometimes to attribute colours to the first-beginnings of things falls to the ground, since white things are not made from white, nor what are black from black, but from diverse colours. The fact is that white things will arise much more easily from no colour than from black or from any other colour that fights against it and thwarts it.

⁷⁹⁵ Besides, since colours cannot be without light (3) Colour a square, in other words with the *stomachion* on which Archimedes wrote a treatise."

^a H. J. Rose in *CR N.S.* 6 (1956) 6-7 suggests that Lucr. "was acquainted with some tangram or 'Chinese puzzle' in which the triangles when properly fitted together could make

esse neque in lucem existunt primordia rerum,
 scire licet quam sint nullo velata colore.
 qualis enim caecis poterit color esse tenebris ?
 lumine quin ipso mutatur propterea quod
 reŕta aut obliqua percussus luce refulget ; 800
 pluma columbarum quo pacto in sole videtur,
 quae sita cervices circum collumque coronat ;
 namque alias fit uti claro sit rubra pyropo,
 interdum quodam sensu fit uti videatur
 inter caeruleum viridis miscere zmaragdus. 805
 caudaque pavonis, largo cum luce repleta est,
 consimili mutat ratione obversa colores ;
 qui quoniam quodam gignuntur luminis ictu,
 scire licet, sine eo fieri non posse putandum est.

Et quoniam plagae quoddam genus excipit in se 810
 pupula, cum sentire colorem dicitur album,
 atque aliud porro, nigrum cum et cetera sentit,
 nec refert ea quae tangas quo forte colore
 praedita sint, verum quali magis apta figura,
 scire licet nil principiis opus esse colores, 815
 sed variis formis variantes edere tactus.

Praeterea quoniam non certis certa figuris
 est natura coloris, et omnia principiorum
 formamenta queunt in quovis esse nitore,
 cur ea quae constant ex illis non pariter sunt 820
 omne genus perfusa coloribus in genere omni ?
 conveniebat enim corvos quoque saepe volantis
 ex albis album pinnis iactare colorem,

805 caeruleum *OQP* (caeruleam *F*): curalium (= "coral")
Wakefield, perhaps rightly (cf. *Q. Serenus Sammonicus, Liber Medicinalis* 942-943 [ed. *E. Baehrens, PLM III*]) 806
 largo *OQ*, *Ernout, Leonard-Smith*: larga *Q corr.*, *P*, but
lux is sometimes masculine in early Latin 815 colores
Nonius p. 773 Lindsay: colore *OQVP*, perhaps rightly
 158

and the first-beginnings of things do not come out
 into the light, you may be sure that they are covered
 with no colour. For what colour can there be in
 blind darkness? Why, a colour is changed by the
 light itself, according as the brightness responds to
 a direct or oblique impact of light; in this way
 the dove's plumage shows itself in the sun, lying
 about the nape and encircling the neck; for at times
 it is red as the blazing carbuncle, again view it in a
 certain way and it comes to appear a fusion of
 emerald green with blue. And the peacock's tail,
 when it is suffused with plenteous light, in like man-
 ner changes the colours as it turns; and since these
 colours are caused by a certain impact of light, as-
 suredly you must not think that they can be produced
 without it.

⁸¹⁰ And since the pupil of the eye receives one
 kind of blow when it is said to perceive a white
 colour, and quite another when it perceives black
 and all the rest, and since when you touch anything
 it matters nothing what chance colour the thing is of,
 but rather what shape it has, you may be sure that
 the first-beginnings have no need of colours, but that
 they give forth various kinds of touch with their
 various shapes.

⁸¹⁷ Besides, since no fixed colour is allotted to each
 fixed shape, and all configurations of first-beginnings
 may be found in any given hue, why are the things
 that consist of those shapes not likewise dyed in
 colours of all kinds in every kind of thing? For it
 were fitting that crows also as they fly should often
 throw off a white colour from white feathers, and

821 omne genus *Lachmann*: omnigenus *OQV*: omnigenis
Q corr., *P*. See critical note on 759

et nigros fieri nigro de semine cycnos
aut alio quovis uno varioque colore. 825

Quin etiam quanto in partes res quaeque minutas
distrahitur magis, hoc magis est ut cernere possis
evanescere paulatim stinguique colorem ;
ut fit ubi in parvas partis discerpitur austrum :
purpura poeniceusque color clarissimu' multo, 830
filatim cum distractum est, disperditur omnis ;
noscere ut hinc possis prius omnem efflare colorem
particulas quam discedant ad semina rerum.

Postremo quoniam non omnia corpora vocem
mittere concedis neque odorem, propterea fit 835
ut non omnibus adtribuas sonitus et odores.
sic oculis quoniam non omnia cernere quimus,
scire licet quaedam tam constare orba colore
quam sine odore ullo quaedam sonituque remota,
nec minus haec animum cognoscere posse sagacem
quam quae sunt aliis rebus privata notare. 841

Sed ne forte putes solo spoliata colore
corpora prima manere, etiam secreta teporis
sunt ac frigoris omnino calidique vaporis,
et sonitu sterila et suco ieiuna feruntur, 845
nec iaciunt ullum proprium de corpore odorem.
sicut amaracini blandum stactaeque liquorem
et nardi florem, nectar qui naribus halat,
cum facere instituas, cum primis quaerere par est,
quod licet ac possis reperire, inolentis olivi 850
naturam, nullam quae mittat naribus auram,

829 ostrum (= austrum *P. E. Goebel*) *Wakefield* who, though
calling his emendation "certissima" and "verissima,"
strangely does not print it in his text : aurum OQVP

swans be made black from black seed, or indeed of
any other colour single or variegated.

⁸²⁶ Moreover, the more minute the particles into
which anything is pulled apart, the more readily it
is perceived that the colour gradually fades away
and is extinguished ; as happens when purple wool
is torn up into small parts : the purple and the scarlet
colour, brightest of all, is wholly destroyed when the
wool has been pulled apart threadwise ; so that you
may learn from this that the particles breathe away
all their colour before they are dispersed apart into
the seeds of things.

⁸³⁴ Lastly, since you grant that some bodies do
not emit sound or smell, for that reason it follows
that you do not attribute sound and smell to all
bodies. So, since we cannot perceive all things with
our eyes, you may be sure that certain things exist
as much deprived of colour as without any smell and
empty of sound, and that the intelligent mind can
recognize these no less than it can mark things that
are devoid of other qualities.

⁸⁴² But that you may not think by some chance
that the first bodies remain without colour only,
they are also destitute altogether of warmth and
cold and strong heat, they move along barren of
sound and dry of juice, nor do they throw off any
smell of their own from their bodies. Just as when
you set about to prepare the balmy tincture of mar-
joram and of myrrh, and the flower of spikenard
which breathes nectar to the nostrils, amongst the
first things you have to seek is olive oil as scentless as
may be and as you can find it, emitting no breath
to the nostrils, so that it may as little as possible

quam minime ut possit mixtos in corpore odores
 concoctosque suo contractans perdere viro,
 propter eandem rem debent primordia rerum
 non adhibere suum gignundis rebus odorem 855
 nec sonitum, quoniam nil ab se mittere possunt,
 nec simili ratione saporem denique quemquam
 nec frigus neque item calidum tepidumque vaporem,
 cetera ; quae cum ita sunt tamen ut mortalia constent,
 molli lenta, fragosa putri, cava corpore raro, 860
 omnia sint a principiis seiuncta necessesit,
 immortalia si volumus subiungere rebus
 fundamenta quibus nitatur summa salutis,
 ne tibi res redeant ad nilum funditus omnes.

Nunc ea quae sentire videmus cumque necessesit
 ex insensilibus tamen omnia confiteare 866
 principiis constare. neque id manifesta refutant
 nec contra pugnant, in promptu cognita quae sunt,
 sed magis ipsa manu ducunt et credere cogunt
 ex insensilibus, quod dico, animalia gigni. 870
 quippe videre licet vivos existere vermes
 stercore de taetro, putorem cum sibi nacta est
 intempestivis ex imbribus umida tellus ;
 praeterea cunctas itidem res vertere sese :
 vertunt se fluvii, frondes et pabula laeta 875
 in pecudes, vertunt pecudes in corpora nostra

854 rem *Lachmann*: omitted by *OQVP* 858 *A lacuna*
after this line assumed by Giussani 875 frondes
Lambinus: in frondes *OQVP*, *Wakefield* (in frundeis),
Martin, but cf. 596-597

^a For this would imply diminution and therefore destructibility.

^b That is, smell, sound, etc. But *Lucr.* seems to have identified the qualities with the emanations to which they belong.

^c 864 = 756, 1.673.

with any pungency of its own touch and destroy the scents that will be mixed and boiled up with its substance : for the same reason the first-beginnings of things must not contribute any odour of their own to the making of things, nor any sound, since they can emit nothing from themselves,^a and similarly no taste at all, nor cold, nor heat again and moderate warmth, and the rest : all these,^b since their nature is such that after all they are perishable—the pliant of soft body, the fragile of crumbling body, the spongy of rarefied body—all these must be kept apart from the first-beginnings, if we wish to lay an imperishable foundation for things upon which the sum of existence may rest : or else you will find all things passing back utterly to nothing.^c

since they can emit nothing from themselves.

865 Now you must of necessity confess that all we perceive to have feeling consists nevertheless of first-beginnings that have no feeling. Nor do manifest facts refute this, things plainly known to us, nor do they contradict, but rather they lead us themselves by the hand and compel us to believe that living creatures are born from beginnings that have no feeling, as I say. Why, you may see worms arise all alive from stinking dung,^d when the drenched earth becomes rotten from excessive rains, and besides, you may see all things changing in the same way. Rivers, leaves, luxuriant pastures change into animals, animals change their substance into our

IV. Feeling (865-990). Nor have they feeling.

(1) For we see things with feeling produced from things without feeling.

(2) and food

^d The theory of the spontaneous generation of certain plants and creatures, including worms, from putrefied matter, dung, etc. was held by several ancient philosophers, including Aristotle (see *Ernout-Robin* on 871). Cf. 898-901, 928-929, 3.719-736, 5.797-798. The theory was finally disproved as late as the 19th century, by *Louis Pasteur*.

naturam, et nostro de corpore saepe ferarum
 augesunt vires et corpora pennipotentum.
 ergo omnes natura cibos in corpora viva
 vertit et hinc sensus animantium procreat omnes 880
 non alia longe ratione atque arida ligna
 explicat in flammis et in ignis omnia versat.
 iamne vides igitur magni primordia rerum
 referre in quali sint ordine quaeque locata
 et commixta quibus dent motus accipiantque ? 885

Tum porro quid id est, animum quod percudit
 ipsum,
 quod movet et varios sensus expromere cogit,
 ex insensilibus ne credas sensibile gigni ?
 nimirum lapides et ligna et terra quod una
 mixta tamen nequeunt vitalem reddere sensum. 890
 illud in his igitur rebus meminisse decebit,
 non ex omnibus omnino, quaecumque creant res
 sensilia, extemplo me gigni dicere sensus,
 sed magni referre ea primum quantula constant,
 sensibile quae faciunt, et qua sint praedita forma, 895
 motibus ordinibus posituris denique quae sint.
 quarum nil rerum in lignis glaeisque videmus ;
 et tamen haec, cum sunt quasi putrefacta per imbres,
 vermiculos pariunt, quia corpora materiali
 antiquis ex ordinibus permota nova re 900
 conciliantur ita ut debent animalia gigni.

Deinde ex insensilibus qui sensibile posse creari
 constituunt porro ex aliis sentire suētis,

903 suētis *Lambinus* : sueti *OQVP*. *A lacuna after 903*
noted by W. Christ

^a Cf. 1.907-910. There *Lucr.* was arguing against *Anaxagoras*, and there can be little doubt that much of the argu-
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bodies, often from our bodies the strength of wild changing
into living
creatures.
 beasts and the bodies of strong-winged birds increase. Therefore nature changes all foods into living bodies, and from them brings forth all the feelings of animals, very much in the same way as she expands dry sticks into flames and turns them all into fire. Now do you see then that it is of great moment in what order all the first-beginnings of things are placed, and with what commingled they cause and receive motions ? ^a

⁸⁸⁶ Then further, what is that which strikes on your very mind, which moves it and compels it to express diverse feelings, forbidding you to believe that the sensible is born from the insensible ? Surely that stones and sticks and earth though mingled together yet cannot produce the vital sense. But in this matter you will do well to remember that I do not say that without exception sensations are produced forthwith from all the substances that make sensible things, but that it is of great moment, first how small those elements are that make a sensible thing, and what shape they are endowed with, what lastly are their motions, arrangements, positions. And in the sticks and clods these conditions escape our vision ; yet these, when they have become rotten as it were ^b by rain, bring forth little worms, because the bodies of matter, being moved from their ancient arrangements by a new condition, are combined together in the way by which living things must be produced.

⁹⁰² Again, those who maintain that the sensible (3) If this
does not
always
happen, the
reason is
that it de-
pends on
size, shape,
arrange-
ment, and
motion.
 can be created out of sensible elements, which would furthermore be accustomed to derive their own sensa- (4) More-
over, if
atoms had
feeling,

ment of the present section (865-930, 973-990) is directed primarily at the same opponent.

^b *quasi* apologizes for the word *putrefacta*

mollia cum faciunt ; nam sensus iungitur omnis
visceribus nervis venis, quaecumque videmus 905
mollia mortali consistere corpore creta.

Sed tamen esto iam posse haec aeterna manere :
nempe tamen debent aut sensum partis habere
aut similis totis animalibus esse putari.

at nequeant per se partes sentire necesse est ; 910
namque alio sensus membrorum respicit omnis,
nec manus a nobis potis est secreta neque ulla
corporis omnino sensum pars sola tenere.

linquitur ut totis animantibus adsimulentur.

923 sic itidem quae sentimus sentire necessest, 915

vitali ut possint consentire undique sensu.

916 qui poterunt igitur rerum primordia dici

917 et leti vitare vias, animalia cum sint,

918 atque animalia sint mortalibus una eademque ?

919 quod tamen ut possint, at coetu concilioque 920

920 nil facient praeter volgum turbamque animantum,

921 scilicet ut nequeant homines armenta feraeque

922 inter sese ullam rem gignere conveniundo.

quod si forte suum dimittunt corpore sensum
atque alium capiunt, quid opus fuit adtribui id quod
detrahitur ? tum praeterea, quo fugimus ante, 926
quatenus in pullos animalis vertier ova
cernimus alituum vermisque effervere terra,

909 similis (*sc. partes*) *ABL* : similes *QVF* : simili (*sc.*
sensu) *Lachmann*, but *cf.* 914 911 alio *Lachmann* : alios
O, *Q* *corr.*, *P* : alius *QV* : ad nos *Bailey* respicit
Lachmann : respuit *OQVP* 919 animalia *Lachmann* :
animalibus *OQVP* sint *Marullus* : omitted by *OQVP*
926 quo fugimus *Wakefield* : quod fugimus *OQVP* : quod
videmus *Munro* (*editio minor*), but already suggested by
Havercamp in notes : quod vidimus *H. Purmann, Jahrb. f. cl.*

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tion from other [sensible elements, make the seeds they must
mortal] in making them soft. For all sensation is be soft,
bound up with flesh, sinews, veins, all of which we therefore
see to be soft, and therefore to be concretions mortal.
consisting of mortal substance.

⁹⁰⁷ However, let it even be granted that these (5) Grant-
can abide for ever : assuredly they must yet either ing that
have the sensation of a part, or be thought to be like they were
whole animals. But it cannot be that parts have immortal,
independent sensation ; for every sensation in the they must
frame has relation to something else : neither hand feel as parts
nor any part of the body at all, separated from us, of the body
can keep sensation alone. It remains that they be or as whole
like whole animals. So they must have sensation animals :
in the same way that we have sensation, in order that
they may be able to feel with us the life-giving
sensations everywhere. How then will it be possible
for them to be called first-beginnings of things, and
to avoid the paths of death, when they are living
things, and living things are one and the same as
things mortal ? And even supposing they could be
so, yet by conjunction and combination they will
produce nothing but a throng and crowd of living
things, exactly as men, cattle, and wild beasts could
not produce a new thing amongst themselves by
coming together. But if by any chance they re-
linquish their own sensation from their body and
receive another, of what use was it to attribute that
which is taken away ? Then besides, to return to an
earlier example, inasmuch as we perceive birds' eggs
to turn into living chicks, and worms to seethe from

Phil. 115 (1876) 276 : quod diximus *Giussani* : quod fudimus
Martin 928 terra *Lambinus (1570)* in notes (*Martin*
attributes the suggestion to himself) : terram *OQVP*

intempestivos quam putor cepit ob imbris,
scire licet gigni posse ex non sensibu' sensus. 930

Quod si forte aliquis dicet dumtaxat oriri
posse a non sensu sensum mutabilitate,
aut aliquo tamquam partu quo proditur extra,
huic satis illud erit planum facere atque probare
non fieri partum nisi concilio ante coacto, 935
nec quicquam commutari sine conciliatu.

Principio nequeunt ullius corporis esse
sensus ante ipsam genitam naturam animantis,
nimirum quia materies disiecta tenetur
aere fluminibus terris terraque creatis, 940
nec congressa modo vitalis convenientes
contulit inter se motus, quibus omnituentes
accensi sensus animantem quamque tumentur.

Praeterea quamvis animantem grandior ictus
quam patitur natura repente adfligit, et omnis 945
corporis atque animi pergit confundere sensus.
dissoluuntur enim positurae principiorum
et penitus motus vitales impediuntur,
donec materies, omnis concussa per artus, 950
vitalis animae nodos a corpore solvit
dispersamque foras per caulas eiecit omnis.
nam quid praeterea facere ictum posse reamur
oblatum, nisi discutere ac dissolvere quaeque ?
fit quoque uti soleant minus oblato acriter ictu
relicui motus vitales vincere saepe, 955

929 quam *OQV*: quom (cum) *Marullus* 932 a *Q corr.*
(cf. 4.484, 521): ea *OQP* (the error, if a is correct, being one
of dittography): ex *Lambinus* 933 quo *Brieger*: quod
OQVP proditur *ABF, Pontanus*: proditum *OQV*

* It is usually thought that *Lucr.* is refuting a Stoic theory, but this view is challenged by D. J. Furley in *BICS* 168

the earth which putrefaction has affected after excessive rains, we may be sure that sensation can be produced from not-sensation.

⁹³¹ But if by any chance someone shall say ^a that (6) Sensible cannot arise from not-sensation can at all events arise from not-sensation by a process of change or by some process like a birth by which it is brought forth, here is something sensible by change or by birth. that will be enough to make clear to him and to prove that birth does not take place unless there has been combination before, and that nothing changes except by combination.

⁹³⁷ In the first place, there can be no sensation in any body before the living being has been actually formed, because of course the matter is held dispersed abroad in air, rivers, earth, and what grows from the earth, and not having come together yet, it has not formed that combination of appropriate vital motions by which all-perceiving sensations being kindled protect each living thing. For without combination there is no sensation.

⁹⁴⁴ Besides, in any living being a blow greater than nature can endure suddenly strikes it prostrate, and proceeds to confuse all sensations of body and mind. (7) A blow breaks up the combination and puts an end to sensation. For the arrangements of the first-beginnings are broken up and the vital motions are utterly hindered, until the shock, diffused through all the substance of the frame, loosens from the body the vital knots of the soul, and ejects the soul scattered abroad through all the pores. For what else do we think the inflicted blow able to do, unless to strike all apart and to break it apart? It happens also that when the inflicted blow is less violent, the remaining vital

13 (1966) 24-25. *Lucr.*'s reply to his opponent is that change or birth implies the existence of a union of particles, and that without a union of particles sensation is impossible.

vincere, et ingentis plagae sedare tumultus
 inque suos quicquid rursus revocare meatus
 et quasi iam leti dominantem in corpore motum
 discutere ac paene amissos accendere sensus.
 nam qua re potius leti iam limine ab ipso 960
 ad vitam possint conlecta mente reverti
 quam quo decursum prope iam siet ire et abire ?

Praeterea quoniam dolor est, ubi materiai
 corpora vi quadam per viscera viva per artus
 sollicitata suis trepidant in sedibus intus, 965
 inque locum quando remigrant, fit blanda voluptas,
 scire licet nullo primordia posse dolore
 temptari nullamque voluptatem capere ex se,
 quandoquidem non sunt ex ullis principiorum
 corporibus, quorum motus novitate laborent 970
 aut aliquem fructum capiant dulcedinis almae.
 haud igitur debent esse ullo praedita sensu.

Denique uti possint sentire animalia quaeque,
 principiis si iam est sensus tribuendus eorum,
 quid, genus humanum propritim de quibus auctumst ?
 scilicet et risu tremulo concussa cachinnant 976
 et lacrimis spargunt rorantibus ora genasque,
 multaque de rerum mixtura dicere callent,
 et sibi propono quae sint primordia quaerunt ;
 quandoquidem totis mortalibus adsimulata 980
 ipsa quoque ex aliis debent constare elementis,
 inde alia ex aliis, nusquam consistere ut ausis :
 quippe sequar, quodcumque loqui ridereque dices
 et sapere, ex aliis eadem haec facientibus ut sit.

^a 976-977 are very similar to 1.919-920, the concluding lines of a lengthy argument against Anaxagoras. The repetition confirms that Lucr. is refuting Anaxagoras here too (see note on 885).

motions often prevail, they prevail and quiet the vast tumult of the blow, and call everything back again into its accustomed channels, and shake off the movement of death which already, as one may say, was lording it in the body, and once more kindle the sensations which were almost lost. For in what other way can living things come back from the very threshold of death into life, their minds collected again, rather than pass on to that goal whither their course was almost run, and pass away ?

⁹⁶³ Besides, since there is pain when the bodies of matter, attacked by some force through the living flesh and limbs, tremble in their secret habitations within, and when they move back to their place comes soothing delight, you may be sure that the first-beginnings cannot be assailed by any pain, and from themselves can take no delight, since they are not composed of any bodies of elements, so as to be troubled by any strangeness in their motions or to take any enjoyment of life-giving delight ; therefore they are bound not to be endowed with any sensation.

⁹⁷³ Again, if sensation must really be attributed to their atoms, so that all living things may be able to feel, what of those from which the human race is grown in its proper way ? Doubtless they shake trembling with laughter, they guffaw, they bedew face and cheeks with tears,^a they can discourse wisely at large on the composition of things, they go so far as to examine what their own first-beginnings are ; since they resemble the whole mortal, they also must consist of other elements, then those of others, so that you dare not make a stand anywhere : for indeed I will follow you up ; whatever you shall affirm to speak and laugh and be wise, shall be composed

strong enough to hold the combination together.

(8) Atoms feel no pain and no pleasure because they are not combinations and have no motions within them.

(9) If atoms could feel, they would also laugh, weep, and argue.

quod si delira haec furiosaque cernimus esse, 985
 et ridere potest non ex identibus auctus,
 et sapere et doctis rationem reddere dictis
 non ex seminibus sapientibus atque disertis,
 qui minus esse queant ea quae sentire videmus
 seminibus permixta carentibus undique sensu? 990

Denique caelesti sumus omnes semine oriundi;
 omnibus ille idem pater est, unde alma liquentis
 umoris guttas mater cum terra recepit,
 feta parit nitidas fruges arbustaque laeta
 et genus humanum, parit omnia saecula ferarum, 995
 pabula cum praebet quibus omnes corpora pascunt
 et dulcem ducunt vitam prolemque propagant;
 quapropter merito maternum nomen adepta est.
 cedit item retro, de terra quod fuit ante,
 in terras, et quod missumst ex aetheris oris, 1000
 id rursum caeli rellatum templa receptant.
 nec sic interemit mors res ut materiai
 corpora conficiat, sed coetum dissopat ollis;
 inde aliis aliud coniungit, et efficit omnes
 res ita convertant formae mutantque colores 1005
 et capiant sensus et puncto tempore reddant;
 ut noscas referre eadem primordia rerum
 cum quibus et quali positura contineantur
 et quos inter se dent motus accipiantque,
 neve putes aeterna penes residere potesse 1010

1000 terras et *OQV*: terram sed *Laetantius*, *Div. Inst.* 7.12.5, perhaps, as *Wakefield* thinks, "memoriae fidens nimium," for he has fulgentia for rellatum in 1001, but nevertheless followed by *Diels* (terram, set)

^a 991-1022 conclude the argument that the atoms lack secondary qualities and sensation. The first part of the passage is almost certainly in imitation of lines from the *Chrysiptus* of Euripides (fr. 839 Nauck) which were influenced by the doctrines of Empedocles and Anaxagoras. For

of other things doing the same. But if we perceive all this to be delirium and lunacy, and if one can laugh although not grown from laughing things, and can be wise and reason with learned sentences although not made of seeds that are wise and eloquent, why should not all we see capable of sensation be composed of seeds which altogether lack sensation?

⁹⁹¹ Lastly, we are all sprung from celestial seed ^a; all have that same father, from whom our fostering mother earth receives liquid drops of water, and then teeming brings forth bright corn and luxuriant trees and the race of mankind, brings forth all the generations of wild beasts, providing food with which all nourish their bodies and lead a sweet life and beget their offspring; therefore she has with reason obtained the name of mother.^b That also which once came from earth, to earth returns back again, and what fell from the borders of ether, that is again brought back, and the regions of heaven again receive it. Nor does death so destroy things as to annihilate the bodies of matter, but it disperses their combination abroad; then it conjoins others with others, and brings it about that thus all things alter their shapes and change their colours and receive sensation and in a moment of time yield it up again; so that you may recognize how important it is with what and in what arrangement the same first-beginnings are held together, and what motions they give and receive mutually,^c and that you may not believe it possible that the first bodies for ever hold

The heaven is our father, the earth our mother.

Death disperses the atoms, to be united again.

the idea of the Sky-Father and Earth-Mother, cf. 1.250-261.

^b Cf. 5.795, 821-822.

^c Cf. 760-762, 1.817-819, 908-910.

corpora prima quod in summis fluitare videmus
 rebus et interdum nasci subitoque perire.
 quin etiam refert nostris in versibus ipsis
 cum quibus et quali sint ordine quaeque locata ;
 namque eadem caelum mare terras flumina solem
 significant, eadem fruges arbusta animantis ; 1016
 si non omnia sunt, at multo maxima pars est
 consimilis ; verum positura discrepant res.
 sic ipsis in rebus item iam materiai 1019
 concursus motus ordo positura figurae 1021
 cum permutantur, mutari res quoque debent.

Nunc animum nobis adhibe veram ad rationem.
 nam tibi vehementer nova res molitur ad auris
 accidere et nova se species ostendere rerum. 1025
 sed neque tam facilis res ulla est quin ea primum
 difficilis magis ad credendum constet, itemque
 nil adeo magnum neque tam mirabile quicquam,
 quod non paulatim minuant mirarier omnes.
 principio caeli clarum purumque colorem, 1030
 quaeque in se cohibet, palantia sidera passim,
 lunamque et solis praeclara luce nitorem—
 omnia quae nunc si primum mortalibus essent,
 ex improvise si sint obiecta repente,
 quid magis his rebus poterat mirabile dici 1035
 aut minus ante quod auderent fore credere gentes ?
 nil, ut opinor : ita haec species miranda fuisset.
 quam tibi iam nemo, fessus satiate videndi,
 suspicere in caeli dignatur lucida templa !

1020 intervalla vias conexus pondera plagas (= 726, 5.441)
 deleted by Lachmann

^a Lucr. refers to the secondary qualities, especially to colour : with 1011 *cf.* 4.80 *coguntque suo fluitare colore*, 4.74 *de summis ipsum quoque saepe colorem*.

possession of that which we see floating upon the surface of things and sometimes being born and perishing on a sudden.^a Moreover, it is important in my own verses with what and in what order the various elements are placed. For the same letters denote sky, sea, earth, rivers, sun, the same denote crops, trees, animals.^b If they are not all alike, yet by far the most part are so ; but position marks the difference in what results.^c So also when we turn to real things : when the combinations of matter, when its motions, order, position, shapes are changed, the thing also must be changed.

1023 Now, I beg, apply your mind to true reason-
 ing. For a mightily new thing is labouring to fall
 upon your ears, a new aspect of creation to show
 itself. But nothing is there so easy that at first it is
 not more difficult to believe, nothing again so great
 or so wonderful that all men do not by degrees abate
 their wonder at it. In the first place, consider the
 clear and pure colour of the sky, and all that it con-
 tains—the travelling constellations, the moon, and
 the bright light of the dazzling sun ; if all these were
 now revealed for the first time to mortals, if they
 were thrown before them suddenly without prepara-
 tion, what more wonderful than these things could
 be named, or such as the nations would have less
 dared to believe beforehand ? Nothing, as I think :
 so wondrous this spectacle would have been. Yet
 think how all are so wearied with satiety of seeing
 it that no one now thinks it worth while to look up

^b *Cf.* 1.820-821.

^c For the comparison between letters and atoms, *cf. e.g.*
 1.823-827 and see note on 1.825.

desine quapropter novitate exterritus ipsa 1040
 expuere ex animo rationem, sed magis acri
 iudicio perpende, et, si tibi vera videntur,
 dede manus, aut, si falsum est, accingere contra.
 quaerit enim rationem animus, cum summa loci sit
 infinita foris haec extra moenia mundi, 1045
 quid sit ibi porro quo prospicere usque velit mens
 atque animi iactus liber quo pervolet ipse.

Principio nobis in cunctas undique partis
 et latere ex utroque supra subterque per omne
 nulla est finis; uti docui, res ipsaque per se 1050
 vociferatur, et elucet natura profundi.
 nullo iam pacto veri simile esse putandumst,
 undique cum vorsum spatium vacet infinitum
 seminaque innumero numero summaque profunda
 multimodis volitent aeterno percita motu, 1055
 hunc unum terrarum orbem caelumque creatum,
 nil agere illa foris tot corpora materiai;
 cum praesertim hic sit natura factus, et ipsa
 sponte sua forte offensando semina rerum
 multimodis temere incassum frustra coacta 1060
 tandem coluerunt ea quae coniecta repente
 magnarum rerum fierent exordia semper,
 terrai maris et caeli generisque animantum.
 quare etiam atque etiam talis fateare necesse est

1049 supra superque *Lachmann*: superque *OQVP*: super
 superque *E. Orth, Helmantica 11 (1960) 131* 1061
 coluerunt (=coaluerunt) *Lachmann*: colerunt *OQV*: co-
 luerunt *Q corr., CF*: colarunt *ABLM*

^a Cf. 740 and see note there.

^b 1.958-1001.

^c For the Epicurean theory that the number of worlds is

towards the bright vault of heaven! Forbear then to be dismayed by mere novelty and to spew out reason from your mind, but rather ponder it with keen judgement; and if it seems to be true, own yourself vanquished, or, if it is false, gird up your loins to fight. For, since the sum of space is infinite abroad beyond the walls of the world, the mind seeks to understand what is there in the distance whither the intelligence continually desires to look forth, and whither the mind's projection ^a flies free of itself.

¹⁰⁴⁸ In the first place, all around us in every direction and on both sides and above and below through the universe there is no limit: as I have shown,^b and truth of itself cries aloud, and the nature of the unfathomable deep gives forth light. Now since there is illimitable space empty in every direction, and since seeds innumerable in number in the unfathomable universe are flying about in many ways driven in everlasting movement, it cannot by any means be thought likely that this is the only round earth and sky that has been made,^c that all those bodies of matter without do nothing: especially since this world was made by nature, and the seeds of things themselves of their own accord, knocking together by chance, clashed in all sorts of ways, heedless, without aim, without intention, until at length those combined which, suddenly thrown together, could become in each case the beginnings of mighty things, of earth and sea and sky and the generation of living creatures. Therefore again and again I say, you

There are other worlds than this of ours,

for both space and matter are infinite,

and our world was formed naturally by a chance combination of atoms.

infinite, cf. Epicurus, *Ep. ad Hdt.* 45, 73-74, *Ep. ad Pyth.* 88-90, Cicero, *Nat.D.* 1.20.53, Diogenes of Oenoanda fr. 63 Smith. See also Usener 301-307.

esse alios alibi congressus materiai, 1065
qualis hic est, avido complexu quem tenet aether.

Praeterea cum materies est multa parata,
cum locus est praesto, nec res nec causa moratur
ulla, geri debent nimirum et confieri res.
nunc et seminibus si tanta est copia quantam 1070
enumerare aetas animantum non queat omnis,
visque eadem et natura manet, quae semina rerum
conicere in loca quaeque queat simili ratione
atque huc sunt coniecta, necesse est confiteare
esse alios aliis terrarum in partibus orbis 1075
et varias hominum gentis et saecula ferarum.

Huc accedit ut in summa res nulla sit una,
unica quae gignatur et unica solaque crescat,
quin aliquoiv' siet saeculi permultaque eodem 1079
sint genere. in primis animalibus inice mentem :
invenies sic montivagum genus esse ferarum,
sic hominum geminam prolem, sic denique mutas
squamigerum pecudes et corpora cuncta volantum.
quapropter caelum simili ratione fatendumst
terramque et solem lunam mare, cetera quae sunt,
non esse unica, sed numero magis innumerali, 1086
quandoquidem vitae depactus terminus alte
tam manet haec, et tam nativo corpore constant,
quam genus omne quod hic generatimst rebus
abundans.

Quae bene cognita si teneas, natura videtur 1090

1072 visque eadem et *Marullus* : vis eadem *OQVP* : quis eadem *Lachmann* 1080 inice mentem (*cf.* 740, 1047) *Lipsius* : indice mente *OQVP*, *Wakefield*, *Martin*, perhaps rightly (*cf.* 677-678) : include *Memmi Gronovius* 1082 geminam *OQVP* : genitam *Marullus* 1089 hic (*Bernays*; for the corruption *cf.* 1120) generatimst *Munro* : his generatim *QV*, *Büchner* : his generat in *OP*

must confess that there are other assemblages of matter in other places, such as this is which the ether holds in greedy embrace.

¹⁰⁶⁷ Besides, when abundant matter is ready, when space is to hand, and no thing and no cause hinders, things must assuredly be done and completed. And if there is at this moment both so great store of seeds as all the time of living existence could not suffice to tell, and if the same power and the same nature abides, able to throw the seeds of things together in any place in the same way as they have been thrown together into this place, then you are bound to confess that there are other worlds in other regions and different races of men and generations of wild beasts.^a

¹⁰⁷⁷ Moreover, there is no one thing in the whole sum which is produced unique, and grows up unique and alone, so as not to belong to some kind and to be one of many like it. To begin with, cast your mind to the animals : you will find that this is so with the mountain-ranging generation of wild beasts, this is so with the double breed ^b of men, so also with the dumb scaly fish and all creatures that fly. Therefore you must in like manner confess for sky and earth, for sun, moon, sea and all else that exists, that they are not unique, but rather of number innumerable ; since there is a deepset limit of life equally awaiting them, and they are as much made of a perishable body as any kind here on earth which has so many specimens of its kind.

¹⁰⁹⁰ If you hold fast to these convictions, nature is Nature

^a *Cf.* Epicurus, *Ep. ad Hdt.* 74.

^b Male and female. Virgil, *Aen.* 1.274 has *geminam . . . prolem*, and, though he is referring to Ilia's twin sons Romulus and Remus, he may have recalled the present passage.

libera continuo, dominis privata superbis,
 ipsa sua per se sponte omnia dis agere expers.
 nam pro sancta deum tranquilla pectora pace,
 quae placidum degunt aevom vitamque serenam,
 quis regere immensi summam, quis habere profundi
 indu manu validas potis est moderanter habenas, 1096
 quis pariter caelos omnis convertere et omnis
 ignibus aetheriis terras suffire feracis,
 omnibus inve locis esse omni tempore praesto,
 nubibus ut tenebras faciat caelique serena 1100
 concutiat sonitu, tum fulmina mittat et aedis
 saepe suas disturbet et in deserta recedens
 saeviat exercens telum quod saepe nocentes
 praeterit exanimatque indignos inque merentes ?

Multaque post mundi tempus genitale diemque
 primigenum maris et terrae solisque coortum 1106
 addita corpora sunt extrinsecus, addita circum
 semina quae magnum iaculando contulit omne,
 unde mare et terrae possent augescere, et unde
 apparet spatium caeli domus altaque tecta 1110
 tolleret a terris procul et consurgeret aer.
 nam sua cuique locis ex omnibus omnia plagis
 corpora distribuuntur et ad sua saecla recedunt,
 umor ad umorem, terreno corpore terra
 crescit, et ignem ignes prociunt aetheraque aether,
 donique ad extremum crescendi perfica finem 1116
 omnia perduxit rerum natura creatrix ;
 ut fit ubi nilo iam plus est quod datur intra
 vitalis venas quam quod fluit atque recedit.

^a Cf. 6.417-420.

^b Cf. 6.390-395.

^c Lucr. resumes the argument interrupted at 1089.

seen to be free at once and rid of proud masters, herself doing all by herself of her own accord, without the help of the gods. For I appeal to the holy hearts of the gods, which in tranquil peace pass untroubled days and a life serene : who is strong enough to rule the sum of the immeasurable, who to hold in hand and control the mighty bridle of the unfathomable ? who to turn about all the heavens at one time and warm the fruitful worlds with ethereal fires, or to be present in all places and at all times, so as to make darkness with his clouds and to shake the serene sky with thunder, then to launch lightnings and often to shatter his own temples,^a and as he passes away into the wilds to cast that bolt in his wrath which often passes the guilty by and slays the innocent and undeserving ? ^b

works of herself, without the gods.

What god indeed could suffice for the task ?

Would a god strike his own temple ?

¹¹⁰⁵ And ^c since the time when the world came into being, since the first birthday of sea and earth and since the arising of the sun, many bodies have been added from without, many seeds have been added around, which the great all has brought together in its tossing ; that from these sea and land might increase, and the habitation of the sky might amplify its expanse and uplift its dwellings high over the earth, and the air might rise up. For all bodies are distributed abroad by blows from all places each to its own thing and pass back to their own kinds : liquid goes to liquid, earth grows by earthy elements, fires forge out fires and air air, until up to the extreme limit of growth, nature, the maker of all things, has brought them through with finishing touch ; as happens when no more is now given into the arteries of life than what flows out and passes away. At this

Bodies added from without first produced our earth,

omnibus hic aetas debet consistere rebus, 1120
 hic natura suis refrenat viribus auctum.
 nam quaecumque vides hilaro grandescere adauctu
 paulatimque gradus aetatis scandere adultae,
 plura sibi adsumunt quam de se corpora mittunt,
 dum facile in venas cibus omnis inditur, et dum 1125
 non ita sunt late dispessa ut multa remittant
 et plus dispendi faciant quam vescitur aetas.
 nam certe fluere atque recedere corpora rebus
 multa manus dandum est; sed plura accedere debent,
 donec alescendi summum tetigere cacumen. 1130
 inde minutatim vires et robor adultum
 frangit et in partem peiorem liquitur aetas.
 quippe etenim quanto est res amplior, augmine
 adempto,
 et quo latior est, in cunctas undique partis
 plura modo dispargit et ab se corpora mittit, 1135
 nec facile in venas cibus omnis diditur ei
 nec satis est, proquam largos exaestuat aestus,
 unde queat tantum suboriri ac subpeditare.
 iure igitur pereunt, cum rarefacta fluendo
 sunt et cum externis succumbunt omnia plagis, 1140
 quandoquidem grandi cibus aevo denique deficit,
 nec tuditantia rem cessant extrinsecus ullam
 corpora conficere et plagis infesta domare.
 Sic igitur magni quoque circum moenia mundi
 expugnata dabunt labem putrisque ruinas. 1145
 omnia debet enim cibus integrare novando
 et fulcire cibus, cibus omnia sustentare—
 nequiquam, quoniam nec venae perpetiuntur

1120 hic attributed by recent editors to *W. Christ*, but stated by *Creech* to be a manuscript reading. Certainly, so far as printed texts are concerned, it goes back at least as far as *Jansson's* edition of 1620: his *OQV* 1126 dis-

point the life of all things must come to a stand, at this point nature by her power curbs back growth. For whatever you see growing with merry increase, and gradually climbing the steps of mature life, assimilates to itself more bodies than it discharges, so long as food is easily absorbed into all the veins, and so long as the things are not so widely spread open as to let go many elements and to spend away more than their age feeds on. For certainly we must own ourselves convinced that many elements flow out and pass away from things; but still more must be passed in, until they have touched the pinnacle of growth. After that by minute degrees age breaks the strength and mature vigour, and melts into decay. And indeed when growth ceases, the larger a thing is and the wider it is, the more particles it now scatters abroad on all sides and lets go from itself, nor is food easily sent abroad into all its veins, nor is this enough, in proportion to the abundant streams that it streams out, to enable as much to spring up and to be brought up in its place. With good reason therefore the things pass away, when by the flowing off they have become thinned, and all fall by blows from without, inasmuch as by great age food fails at last, nor is there anything which bodies buffeting from without cease to break up and to subdue with fatal blows.

¹¹⁴⁴ So therefore the walls of the mighty world in like manner shall be stormed all around, and shall collapse into crumbling ruin. For it is food that must repair all by renewing, food must support, food sustain everything, but in vain, since the veins cannot

pessa Munro: dispersa *OQVP*, *Leonard-Smith*, *Büchner* 1146-1149 transferred to follow 1133 by *P. E. Goebel*

quod satis est neque quantum opus est natura
ministrat.

iamque adeo fracta est aetas, effetaque tellus 1150
vix animalia parva creat, quae cuncta creavit
saecla deditque ferarum ingentia corpora partu.
haud, ut opinor, enim mortalia saecla superne
aurea de caelo demisit funis in arva,
nec mare nec fluctus plangentes saxa crearunt, 1155
sed genuit tellus eadem quae nunc alit ex se.
praeterea nitidas fruges vinetaque laeta
sponte sua primum mortalibus ipsa creavit,
ipsa dedit dulcis fetus et pabula laeta ;
quae nunc vix nostro grandescunt aucta labore, 1160
conterimusque boves et viris agricolarum,
conficimus ferrum vix arvis suppeditati :
usque adeo parcunt fetus augentque laborem.
iamque caput quassans grandis suspirat arator
crebrius, incassum magnum cecidisse laborem, 1165
et cum tempora temporibus praesentia confert
praeteritis, laudat fortunas saepe parentis.
tristis item vetulae vitis sator atque vietae

1163 laborem *CF, Pius (notes)*: labore *QQ VABL* 1165
magnum *OQVP*: magnos *Q corr.*: manuum *Isaac Voss*
laborem *P*: labores *OQV* 1168 vietae *Heinsius*: fatigat
(from 1169) *OQVP*

^a 1146-1149 certainly come in rather strangely here, but, as Merrill remarks, "the necessity for transposition does not seem to have been proved." See also Ernout-Robin and Bailey. It is probable that Lucr. would have made an alteration in revision.

^b In 5.783-825 Lucr. explains that the earth in her youth

contain enough and nature does not supply as much as is necessary.^a Even now indeed the power of life is broken, and the earth exhausted scarce produces tiny creatures, she who once produced all kinds and gave birth to the huge bodies of wild beasts.^b For it is not true, as I think, that the races of mortal creatures were let down from high heaven by some golden chain^c upon the fields, nor were they sprung from sea or waves beating upon the rocks,^d but the same earth generated them which feeds them now from herself. Besides, she of her own accord first made for mortals the bright corn and the luxuriant vineyards, of herself she gave forth sweet fruits and luxuriant pasturage, which now scarce grow great when increased by our toil; and we exhaust our oxen and the strength of our farmers, we wear out the ploughshare, and then are scarce fed by our fields: so do they grudge their fruits and increase our toil. Now the ancient ploughman shaking his head sighs many a time that his great labour has all come to nothing, and comparing times present with times past often praises the fortunes of his father. Sadly also the cultivator of the degenerate and shrivelled vine rails at the progress of time and continually herself produced not only plants, but also all kinds of birds and animals, but that later (see 5.826-836), like a woman, she became effete, so that now she can only produce *animalia parva* (2.1151) such as worms (cf. 2.871-872, 898-901, 928-929, 3.719-736, 5.797-798).

^c In Homer, *Il.* 8.19 Zeus says that, if the gods were to suspend a golden rope from heaven, they could not pull him down. This *σειρή χρυσείη* was allegorized by philosophers, including Plato (*Th.* 153 c) and (see Munro) the Stoics. In 5.793 Lucr. again denies that animals came from the sky.

^d Here and in 5.794 Lucr. probably alludes to the theory of Anaximander.

Even so
our earth
has begun
its decay.

temporis incusat momen saeculumque fatigat,
 et crepat antiquum genus ut pietate repletum 1170
 perfacile angustis tolerarit finibus aevom,
 cum minor esset agri multo modus ante viritim ;
 nec tenet omnia paulatim tabescere et ire
 ad scopulum, spatio aetatis defessa vetusto.

1169 omitted by *P* momen noted by *Pius* ("quidam
 momen scribunt pro momento"): nomen *OQV* sae-
 culumque *O*: saeculumque *Q*: insaeculumque *V*: caelumque
Wakefield 1174 scopulum *O*, *Q* corr., *P*: scopullum *V*:
 copulum *Q*: capulum *Isaac Voss*

criticizes the age, and grumbles how the old world,
 full of piety, supported life with great ease on a
 narrow domain, though the man's portion of land was
 formerly much smaller than it is now ; nor does he
 comprehend that all things gradually decay, and go
 to the reef of destruction,^a outworn by the ancient
 lapse of years.

^a *ad scopulum*: "ad interitum. translatum a navi, quae
 infligitur scopulo" (Lambinus). The phrase is discussed and
 defended by M. Possanza, *CQ* N.S. 40 (1990) 459-464.

BOOK 3

LIBER TERTIUS

O TENEBRIS tantis tam clarum extollere lumen
 qui primus potuisti inlustrans commoda vitae,
 te sequor, o Graiae gentis decus, inque tuis nunc
 ficta pedum pono pressis vestigia signis,
 non ita certandi cupidus quam propter amorem 5
 quod te imitari aveo : quid enim contendat hirundo
 cycnis, aut quidnam tremulis facere artubus haedi
 consimile in cursu possint et fortis equi vis ?
 tu pater es, rerum inventor, tu patria nobis
 suppeditas praecepta, tuisque ex, inclute, chartis, 10
 floriferis ut apes in saltibus omnia libant,
 omnia nos itidem depascimur aurea dicta,
 aurea, perpetua semper dignissima vita.
 nam simul ac ratio tua coepit vociferari
 naturam rerum, divina mente coortam, 15
 diffugiunt animi terrores, moenia mundi
 discedunt, totum video per inane geri res.
 apparet divum numen sedesque quietae

I O OVA, "ad propensissimos poetae in praeceptorem
 suum affectus convenientissime" (Wakefield): omitted by Q:
 E BM: Te R. J. Shackle: A Q corr., CF 11 libant
 Avancius: libant OQVP, Merrill (1917), literally "file
 away," may well be right. The Latin word carries with
 it the idea of thoroughness and industry, and Lucr. may have
 in mind the file-like appearance of the ligula with which the
 bee collects nectar or the way in which it brushes and scrapes
 away pollen. Wakefield quotes the parallel of Zonas'
 188

O you who first amid so great a darkness were able to
 raise aloft a light so clear, illumining the blessings
 of life, you I follow, O glory of the Grecian race,^a
 and now on the marks you have left I plant my own
 footsteps firm, not so much desiring to be your rival,
 as for love, because I yearn to copy you : for why
 should a swallow vie with swans, or what could a kid
 with its shaking limbs do in running to match him-
 self with the strong horse's vigour? You are our
 father, the discoverer of truths, you supply us with
 a father's precepts, from your pages, illustrious man,
 as bees in the flowery glades sip all the sweets,
 so we likewise feed on all your golden words, your
 words of gold, ever most worthy of life eternal. For
 as soon as your reasoning begins to proclaim the
 nature of things revealed by your divine mind, away
 flee the mind's terrors, the walls of the world open
 out, I see action going on throughout the whole
 void : before me appear the gods in their majesty,
^a Epicurus.
 who has driven away the terrors of our minds.

exhortation to honeybees (Anth. Pal. 9.226) : πάντα περικυ-
 ξασθε, literally "scratch round them all," where πάντα refers
 to the thyme, poppy-petals etc. on which the bees are to feed.
 It is arguable that libant is inappropriate here, because,
 through the simile, it might imply that Lucr. studied Epi-
 curus' sayings in a casual and superficial manner. See M. F.
 Smith in Studi in onore di A. Barigazzi, Roma (1986) II 220-
 223 15 coortam O: coortam QV: coorta Orelli

quas neque concutiunt venti nec nubila nimbis
 aspergunt neque nix acri concreta pruina 20
 cana cadens violat semperque innubilis aether
 integit, et large diffuso lumine ridet.
 omnia suppeditat porro natura neque ulla
 res animi pacem delibat tempore in ullo.
 at contra nusquam apparent Acherusia templa, 25
 nec tellus obstat quin omnia dispiciantur,
 sub pedibus quaecumque infra per inane geruntur.
 his ibi me rebus quaedam divina voluptas
 percipit atque horror, quod sic natura tua vi
 tam manifesta patens ex omni parte relecta est. 30

Et quoniam docui cunctarum exordia rerum
 qualia sint et quam variis distantia formis
 sponte sua volitent aeterno percita motu
 quove modo possint res ex his quaeque creari,
 hasce secundum res animi natura videtur 35
 atque animae claranda meis iam versibus esse
 et metus ille foras praecipit Acheruntis agendus,
 funditus humanam qui vitam turbat ab imo,
 omnia suffundens mortis nigrore, neque ullam
 esse voluptatem liquidam puramque relinquit. 40
 nam quod saepe homines morbos magis esse timendos
 infamemque ferunt vitam quam Tartara leti
 et se scire animi naturam sanguinis esse

* 18-22 are in imitation of Homer, *Od.* 6.42-46, and 18-24 are imitated by Tennyson in *Lucretius* 104-110: "The Gods, who haunt | The lucid interspace of world and world, | Where never creeps a cloud, or moves a wind, | Nor ever falls the least white star of snow, | Nor ever lowest roll of thunder moans, | Nor sound of human sorrow mounts to mar

and their peaceful abodes, which no winds ever shake nor clouds besprinkle with rain, which no snow congealed by the bitter frost mars with its white fall, but the air ever cloudless encompasses them and laughs with its light spread wide abroad.⁴ There moreover nature supplies everything, and nothing at any time impairs their peace of mind. But contrariwise nowhere appear the regions of Acheron; yet the earth is no hindrance to all being clearly seen, whatsoever goes on below under our feet throughout the void. Thereupon from all these things a sort of divine delight gets hold upon me and a shuddering, because nature thus by your power has been so manifestly laid open and uncovered in every part.

³¹ And since I have shown of what kind are the The mind and spirit. beginnings of all things, and in how varying and different shapes they fly of their own accord driven in everlasting motion, and how all things can be produced from these, following next upon this the nature of mind and spirit ^b must now clearly be explained in my verses, and that fear of Acheron be sent packing which troubles the life of man from its Evil works of the fear of Acheron. deepest depths, suffuses all with the blackness of death, and leaves no delight clean and pure. For when men often declare that disease and a life of infamy are more to be feared than the bottomless Pit of death, and that they know the nature of the

| Their sacred everlasting calm!" Cf. *The Passing of Arthur* 427-429.

^b The relationship between the *animus* and *anima*, the two constituents of the complete soul, is explained in 136-160. See also Introduction p. xxxvi. The structural identity of *animus* and *anima* is well emphasized by the use of similar words.

46 aut etiam venti, si fert ita forte voluntas,
 44 nec prorsum quicquam nostrae rationis egere, 45
 45 hinc licet advertas animum magis omnia laudis
 iactari causa quam quod res ipsa probetur :
 extorres idem patria longeuque fugati
 conspectu ex hominum, foedati crimine turpi,
 omnibus aerumnis adfecti denique vivunt, 50
 et quocumque tamen miseri venere parentant
 et nigras mactant pecudes et manibu' divis
 inferias mittunt multoque in rebus acerbis
 acrius advertunt animos ad religionem.
 quo magis in dubiis hominem spectare periclis 55
 convenit adversisque in rebus noscere qui sit ;
 nam verae voces tum demum pectore ab imo
 eliciuntur et eripitur persona, manet res.

Denique avarities et honorum caeca cupido,
 quae miseros homines cogunt transcendere fines 60
 iuris et interdum socios scelerum atque ministros
 noctes atque dies niti praestante labore
 ad summas emergere opes, haec vulnera vitae
 non minimam partem mortis formidine aluntur.
 turpis enim ferme contemptus et acris egestas 65
 semota ab dulci vita stabilique videtur
 et quasi iam leti portas cunctarier ante ;
 unde homines dum se falso terrore coacti
 effugisse volunt longe longeuque remosse,
 sanguine civili rem conflant divitiasque 70
 conduplicant avidi, caedem caede accumulantes,

58 manet res *CF*: manare *OQVBL*

^a Empedocles regarded the blood around the heart as the seat of thought ; Anaximenes and Diogenes of Apollonia identified the soul with air. But, as the context shows, Lucr. is referring not to these philosophers, but to those of his

soul to be that of blood or even air ^a if their whim so direct, and that they have no need of our reasoning, what follows will show you that they make all these boasts in vainglory rather than because the fact itself is established. These same men, driven from their native land and banished far from the sight of men, stained with some disgraceful charge, in short afflicted with all tribulations, yet live ; and in spite of all, wherever the wretches go they sacrifice to their ancestors, and slay black cattle, and send down oblations to the departed ghosts, and in their bitter days direct their minds far more eagerly to superstition. Thus it is more useful to scrutinize a man in danger or peril, and to discern in adversity what manner of man he is : for only then are the words of truth drawn up from the very heart, the mask is torn off, the reality remains.

⁵⁹ Moreover, avarice and the blind lust of distinction, which drive wretched men to transgress the bounds of law, and sometimes by sharing and scheming crime to strive night and day with exceeding toil to climb the pinnacle of power,^b these sores of life in no small degree are fed by the fear of death. For in general degrading scorn and bitter need are seen to be far removed from sweetness and stability of life, and a lingering as it were before the gates of death ; from which men desiring to escape afar and to remove themselves far away, driven by false terror, amass wealth by civil bloodshed and greedily multiply riches, piling murder upon murder^c ; cruelly and cruelty. contemporaries who arbitrarily adopt one of the popular materialistic conceptions of the soul.

^b 62-63 (*noctes . . . opes*) = 2.12-13.

^c For the troubled times in which Lucr. lived, see Introduction p. xxiii.

crudeles gaudent in tristi funere fratris
et consanguineum mensas odere timentque.

Consimili ratione ab eodem saepe timore
macerat invidia ante oculos illum esse potentem, 75
illum aspectari, claro qui incedit honore,
ipsi se in tenebris volvi caenoque queruntur.
intereunt partim statuarum et nominis ergo.
et saepe usque adeo, mortis formidine, vitae
percipit humanos odium lucisque videndae, 80
ut sibi consciscant maerenti pectore letum
obliti fontem curarum hunc esse timorem :
hunc vexare pudorem, hunc vincula amicitiai
rumpere et in summa pietatem evertere suadet ;
nam iam saepe homines patriam carosque parentis 85
prodiderunt, vitare Acherusia templa petentes.
nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura. 90
hunc igitur terrorem animi tenebrasque necessesit
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.

Primum animum dico, mentem quam saepe vocamus,
in quo consilium vitae regimenque locatum est, 95
esse hominis partem nilo minus ac manus et pes
atque oculi partes animantis totius extant.

sensum animi certa non esse in parte locatum,

94 quam *Charisius p. 272 Barwick* : quem *OQVP* 97
After this at least one line has been lost. Bailey suggests
(e.g.) at quidam contra haec (already supplied by Diels) falsa
ratione putarunt (putarunt supplied by Marullus). The fact
that the first letters of this line and 97 are identical might
account for the scribe's omission

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they rejoice at the mournful death of a brother, they
hate and they fear a kinsman's hospitality.^a

⁷⁴ In like manner and through the same fear, they
are often consumed with envy that before their very
eyes he is clothed in power, he is the sight of the
town, who parades in shining pomp, while they com-
plain that they themselves are wallowing in darkness
and mire. Some wear out their lives for the sake of a
statue and a name. And often it goes so far, that
for fear of death men are seized by hatred of life and
of seeing the light, so that with sorrowing heart they
devise their own death, forgetting that this fear is
the fountain of their cares : it induces one man to
violate honour, another to break the bonds of friend-
ship, and in a word to overthrow all natural feeling ;
for often before now men have betrayed fatherland
or beloved parents in seeking to avoid the regions of
Acheron. For as children tremble and fear every-
thing in the blind darkness, so we in the light some-
times fear what is no more to be feared than the
things that children in the dark hold in terror and
imagine will come true. This terror, therefore, and
darkness of the mind must be dispersed, not by rays
of the sun nor the bright shafts of daylight, but by
the aspect and law of nature.^b

Knowledge
of nature
alone can
dispel it.

⁹⁴ First I say that the mind, which we often call
the intelligence, in which is situated the understand-
ing and the government of life, is a part of man, no
less than hands and feet and eyes are parts of the
whole living being.

I. Nature
of the
mind and
spirit.
(1) The
mind is a
part of man
as much as
feet or eyes,

⁹⁸ [However, some philosophers have thought] that

^a In case they are poisoned.

^b 87-93 = 2.55-61, 6.35-41. 91-93 = 1.146-148.

verum habitum quandam vitalem corporis esse,
 harmoniam Grai quam dicunt, quod faciat nos 100
 vivere cum sensu, nulla cum in parte siet mens ;
 ut bona saepe valetudo cum dicitur esse
 corporis, et non est tamen haec pars ulla valentis.
 sic animi sensum non certa parte reponunt ;
 magno opere in quo mi diversi errare videntur. 105
 saepe itaque in promptu corpus quod cernitur aegret,
 cum tamen ex alia laetatur parte latenti ;
 et retro fit uti contra sit saepe vicissim,
 cum miser ex animo laetatur corpore toto ;
 non alio pacto quam si, pes cum dolet aegri, 110
 in nullo caput interea sit forte dolore.
 praeterea molli cum somno dedita membra
 effusumque iacet sine sensu corpus onustum,
 est aliud tamen in nobis quod tempore in illo
 multimodis agitatur et omnis accipit in se 115
 laetitiae motus et curas cordis inanis.

Nunc animam quoque ut in membris cognoscere
 possis
 esse neque harmonia corpus sentire solere,
 principio fit uti detracto corpore multo
 saepe tamen nobis in membris vita moretur ; 120
 atque eadem rursum, cum corpora pauca calor
 diffugere forasque per os est editus aer,
 deserit extemplo venas atque ossa relinquit ;
 noscere ut hinc possis non aequas omnia partis

" By "harmony" is meant a proper adjustment or "attunement" of the bodily constituents. The doctrine, which was probably influenced by both Pythagoreanism and Sicilian medical theory, is expounded in Plato's *Phaedo* (85 E—86 D) by Simmias and refuted there (91 C—95 A) by Socrates. In the fourth century B.C. it was developed by Aristoxenus and Dicaearchus. Aristoxenus was a musician, and

the feeling of the mind is not situated in any fixed part, but that it is a sort of vital condition of the body, called harmony ^a by the Greeks, which makes us live not a harmony.
 endowed with feeling, although the intelligence is not situated in any part ; as when the body is often said to have good health, and yet this health is no part of the healthy creature. Thus they do not place the feeling of the mind in any fixed part ; and in this they seem to me to wander very far astray. For Body may be sick while mind is well, or the opposite.
 indeed the body which we can see plain before us is often sick, although we are yet happy in the other part which lies hidden ; and again it often happens that the contrary is true in its turn, when one wretched in mind is happy in all his body, not otherwise than if the sick man's foot gives him pain when there is no pain meanwhile in the head. Besides, Body is without feeling in sleep ; while mind is active.
 when the frame is given over to soft sleep, and the body lies outspread heavy and without sensation, there is yet something in us which at that time is agitated in many ways, and admits into itself all the motions of joy and cares of the heart, which have no meaning.

¹¹⁷ Next, that you may recognize that the spirit (2) The spirit also is a part, lying within in the body, not a harmony ; for it remains when much of the body is lost, and the body dies when it departs.
 also lies within the frame and that it is not harmony that causes the body to feel, firstly it happens that if a great part of the body be taken away, yet life often remains in our frame ; and again when a few particles of heat have dispersed abroad and air is driven out through the mouth, the same life in a moment deserts the veins and leaves the bones ; so that from this you may recognize that not all particles

Lucr.'s reference to musicians in 132 suggests that he is thinking chiefly of him (*cf.* Cicero, *Tusc. Disp.* 1.10.19). See also note on 132.

corpora habere neque ex aequo fulcire salutem, 125
sed magis haec, venti quae sunt calidique vaporis
semina, curare in membris ut vita moretur.
est igitur calor ac ventus vitalis in ipso
corpore qui nobis moribundos deserit artus.

Quapropter quoniam est animi natura reperta 130
atque animae quasi pars hominis, redde harmoniai
nomen, ad organicos alto delatum Heliconi,
sive aliunde ipsi porro traxere et in illam
transtulerunt, proprio quae tum res nomine egebat.
quidquid id est, habeant; tu cetera percipe dicta. 135

Nunc animum atque animam dico coniuncta teneri
inter se atque unam naturam conficere ex se,
sed caput esse quasi et dominari in corpore toto
consilium quod nos animum mentemque vocamus.
idque situm media regione in pectoris haeret. 140
hic exultat enim pavor ac metus, haec loca circum
laetitiae mulcent: hic ergo mens animusquest.
cetera pars animae per totum dissita corpus
paret et ad numen mentis momenque movetur.
idque sibi solum per se sapit, id sibi gaudet, 145
cum neque res animam neque corpus commovet una.
et quasi, cum caput aut oculus temptante dolore
laeditur in nobis, non omni conruciamur
corpore, sic animus nonnumquam laeditur ipse
laetitiaque viget, cum cetera pars animai 150
per membra atque artus nulla novitate cietur.

146 una *OQV*: ulla *F* (according to Büchner), attributed
by many modern editors to Havercamp, but already read by
ed. Juntina, Naugerius, Lambinus, Gifanius, and others

^a It should be noted that in Greek music ἀρμονία meant
not the combination of *simultaneous* notes so as to form
chords, but rather the tuning of an instrument in a particular
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have a like function or support life equally, but
rather that those which are seeds of wind and warm-
ing heat see to it that life lingers in the frame. There
is therefore within the body itself a heat and a vital
wind which deserts our frame on the point of death.

¹³⁰ Therefore, since the nature of the mind and spirit
has been found to be in some way a part of the man,
give back the name of harmony, brought down to
musicians from high Helicon,^a or perhaps the mu-
sicians themselves drew it from some other source
and applied it to that which then lacked a name of
its own. Be that how it may, let them keep it; do
you now learn what else I have to say.

Therefore
neither is a
harmony.

¹³⁶ Next, I say that mind and spirit are held in
conjunction together and compound one nature in
common, but that the head so to speak and lord over
the whole body is the understanding which we call
mind and intelligence. And this has its abiding-
place in the middle region of the breast. For in this
place throbs terror and fear, hereabouts is melting
joy: here therefore is the intelligence and the mind.
The rest of the spirit, dispersed abroad through the
whole body, obeys and is moved according to the will
and working of the intelligence. This alone by itself
has sense, alone for itself rejoices, when nothing
affects either spirit or body at the same time. And
just as when head or eye is hurt by an attack of pain
in us we are not tormented in the whole of our body,
so the mind sometimes is hurt by itself, and is eager
with joy, when the rest of the spirit throughout the
limbs and frame is not stirred by any new sensation.

Mind and
spirit form
one com-
pound
nature.

the mind
dominat-
ing: it
abides in
the breast.

the spirit is
dispersed
through the
limbs.

Mind can
feel by
itself;

key or mode, and hence a scale or tune of *successive* notes.
This is not what we call a "harmony."

verum ubi vementi magis est commota metu mens,
 consentire animam totam per membra videmus
 sudoresque ita palloremque existere toto
 corpore et infringi linguam vocemque aboriri, 155
 caligare oculos, sonere auris, succidere artus,
 denique concidere ex animi terrore videmus
 saepe homines ; facile ut quisvis hinc noscere possit
 esse animam cum animo coniunctam, quae cum animi
 vi
 percussast, exim corpus propellit et icit. 160

Haec eadem ratio naturam animi atque animai
 corpoream docet esse ; ubi enim propellere membra,
 corripere ex somno corpus mutareque vultum
 atque hominem totum regere ac versare videtur,
 quorum nil fieri sine tactu posse videmus 165
 nec tactum porro sine corpore, nonne fatendumst
 corporea natura animum constare animamque ?
 praeterea pariter fungi cum corpore et una
 consentire animum nobis in corpore cernis.
 si minus offendit vitam vis horrida teli 170
 ossibus ac nervis disclusis intus adacta,
 at tamen insequitur languor terraeque petitus
 suavis, et in terra mentis qui gignitur aestus,
 interdumque quasi exurgendi incerta voluntas.
 ergo corpoream naturam animi esse necessessest, 175
 corporeis quoniam telis ictuque laborat.

^a 154-156 were probably influenced by lines in the same ode of Sappho (fr. 31 Lobel-Page) that inspired Catullus 51.

^b For the nautical metaphor cf. 4.896-904.

^c The epithet *suavis*, rejected by some editors, will surprise only those who have never fainted. Cf. Seneca, *Ep.* 77.9, describing the death of Marcellinus ; Montaigne, *Essais* 2.6, 200

But when the intelligence is moved by more vehement fear, we see the whole spirit throughout the frame share in the feeling : sweatings and pallor hence arise over the whole body, the speech falters, the voice dies away, blackness comes before the eyes, a sounding is in the ears, the limbs give way beneath ^a ; in a word we often see men fall to the ground for mental terror ; so that everyone may easily recognize from this that the spirit is conjoined with the mind, and when this has been smitten by the mind's power, straightway it strikes and drives forward the body.

but when deeply moved, it affects the spirit, and through this the body.

¹⁶¹ This same reasoning teaches that the nature of mind and spirit is bodily ; for when it is seen to drive forward the limbs, to arouse the body from sleep, to change the countenance, to guide and steer ^b the whole man, and we see that none of these things can be done without touch, and further that there is no touch without body, must we not confess that mind and spirit have a bodily nature ? Besides you perceive the mind to suffer along with the body, and to share our feeling in the body. If the grim force of a weapon driven deep to the dividing of bones and sinews fails to hit the life, yet a languor follows and a blissful ^c fall to the ground, and upon the ground a turmoil that comes about in the mind, and sometimes a kind of hesitating desire to rise. Therefore the nature of the mind must be bodily, since it suffers by bodily weapons and blows.

Mind and spirit are bodily, since they act upon the body, which can be done only by touch,

and the body acts upon the mind.

describing his fall from a horse : " je fermy les yeux pour ayder, ce me sembloit, à la poulser hors, et prenoy plaisir à m'alanguir et à me laisser aller " ; Wakefield describing his experience as a small boy " vi lapidis capiti impacta."

Is tibi nunc animus quali sit corpore et unde
 constiterit pergam rationem reddere dictis.
 principio esse aio persubtilem atque minutis
 perquam corporibus factum constare. id ita esse 180
 hinc licet advertas animum ut pernoscere possis :
 nil adeo fieri celeri ratione videtur
 quam sibi mens fieri proponit et inchoat ipsa ;
 ocius ergo animus quam res se perciet ulla,
 ante oculos quorum in promptu natura videtur. 185
 at quod mobile tanto operest, constare rutundis
 perquam seminibus debet perquamque minutis,
 momine uti parvo possint impulsa moveri.
 namque movetur aqua et tantillo momine flutat,
 quippe volubilibus parvisque creata figuris. 190
 at contra mellis constantior est natura
 et pigri latices magis et cunctantior actus ;
 haeret enim inter se magis omnis material
 copia, nimirum quia non tam levibus extat
 corporibus neque tam subtilibus atque rutundis. 195
 namque papaveris aura potest suspensa levisque
 cogere ut ab summo tibi diffluat altus acervus,
 at contra lapidum coniectum spicarumque
 noenu potest. igitur parvissima corpora proquam
 et levissima sunt, ita mobilitate fruuntur ; 200
 at contra quaecumque magis cum pondere magno
 asperaque inveniuntur, eo stabilita magis sunt.
 nunc igitur quoniam est animi natura reperta
 mobilis egregie, perquam constare necesseset
 corporibus parvis et levibus atque rutundis. 205

183 sibi *Wakefield*: si *OQVP*, *Martin* 198 con-
 iectum *OQVP*: conlectum *Muretus*

177 Now I shall go on to explain to you, of what
 kind of body this mind is, and of what it is formed.
 First I say that it is exceedingly delicate and formed
 of exceedingly minute particles. That this is so, you
 may consider the following points to convince you.
 Nothing is seen to be done so swiftly as the mind
 determines it to be done and does its own first act ^a ;
 therefore the mind bestirs itself more quickly than
 any of these things which are seen plain before our
 eyes. But that which is so readily moved must consist
 of seeds exceedingly rounded and exceedingly
 minute, that they may be moved when touched by a
 small moving power. For water moves and flows
 with so very small a moving power because it is made
 of small rolling shapes. But on the other hand the
 nature of honey has more cohesion, its fluid is more
 sluggish, and its movement more tardy ; for the
 whole mass of its matter coheres more closely, as-
 suredly because it is not made of bodies so smooth
 or so delicate and round. For a checked and light
 breath of air can make, as you may see, a high heap
 of poppy-seed slip down from the top ; but contrari-
 wise it cannot stir a pile of stones or wheat-ears.^b So,
 according as bodies are extremely small and smooth,
 they have power of motion ; but contrariwise, what-
 ever is found to be more weighty and rough is by so
 much the more stable. Now, therefore, since the
 nature of the mind has been found to be moved with
 unusual ease, it must consist of bodies exceedingly

^a For the way in which mental visualization activates the
 body, see 4.877-906.

^b The reason being that, whereas poppy seeds are smooth,
 round, small, and light, stones are heavy and ears of corn
 spiky. The immovability of the objects in 198 is emphasized
 by the heavy spondees (contrast 196-197).

quae tibi cognita res in multis, o bone, rebus
utilis invenietur et opportuna cluebit.

Haec quoque res etiam naturam dedicat eius,
quam tenui constet textura quamque loco se
contineat parvo, si possit conglomerari, 210
quod simul atque hominem leti segura quies est
indepta atque animi natura animaeque recessit,
nil ibi libatum de toto corpore cernas
ad speciem, nil ad pondus : mors omnia praestat
vitalem praeter sensum calidumque vaporem. 215
ergo animam totam perparvis esse necessest
seminibus, nexam per venas viscera nervos,
quatenus, omnis ubi e toto iam corpore cessit,
extima membrorum circumcaesura tamen se
incolumem praestat nec deficit ponderis hilum. 220
quod genus est Bacchi cum flos evanuit, aut cum
spiritus unguenti suavis diffugit in auras,
aut aliquo cum iam sucus de corpore cessit :
nil oculis tamen esse minor res ipsa videtur
propterea neque detractum de pondere quicquam,
nimirum quia multa minutaque semina sucos 226
efficiunt et odorem in toto corpore rerum.
quare etiam atque etiam mentis naturam animaeque
scire licet perquam paucis esse creatam
seminibus, quoniam fugiens nil ponderis aufert. 230

Nec tamen haec simplex nobis natura putanda est.
tenuis enim quaedam moribundos deserit aura
mixta vapore, vapor porro trahit aera secum.
nec calor est quisquam, cui non sit mixtus et aer ;
rara quod eius enim constat natura, necessest 235

²²⁴ nil *AF* : nihil *OQV* : nilo *Heinsius*, but *Lucret.* never
elides nilo, and for nil with comparative *cf.* 5.569

small and smooth and round. If this be known to
you, my good friend, it will be found of advantage in
many ways, and you will call it useful.

²⁰⁸ Another thing also makes clear of how fine a (2) because
texture it is, and in how small a space it might be when it
contained if it could be gathered together ; namely, departs at
that as soon as death's peaceful calm has taken death there
possession of a man, when mind and spirit have is no change
departed, you could not perceive any jot or tittle to in look or
be diminished from the body whether in look or in in weight.
weight : death presents all, except vital sense and
warming heat. Accordingly the whole spirit must
consist of very small seeds, being interlaced through
veins, flesh, and sinews, since, when the whole has
already departed from all the body, nevertheless the
outward contour of the limbs presents itself un-
diminished, nor is one jot of the weight lacking ; just
as happens when the bouquet of wine has vanished, Such is the
or when the sweet breath of ointment has dispersed aroma of
into the air, or when the flavour has passed from a wine or the
substance, and yet the thing itself does not seem smell of
any smaller to the eye for all that, nor is anything ointment,
lost in the weight, because assuredly many minute or flavour.
seeds compose the flavour and the smell in the whole
substance of the things. Therefore again and again
I say, we may understand the substance of mind and
spirit to be made of very minute seeds, since in de-
parting it takes nothing from the weight.

²³¹ But we must not believe this nature to be The soul is
single. For a kind of thin breath mixed with heat composite,
leaves the dying, and the heat, moreover, draws air being made
with it. Nor is there any heat which is not mixed of breath,
with air ; for since its nature is rarefied, many first- heat, air,

aeris inter eum primordia multa moveri.
 iam triplex animi est igitur natura reperta ;
 nec tamen haec sat sunt ad sensum cuncta creandum,
 nil horum quoniam recipit mens posse creare
 sensiferos motus et quaecumque ipsa volutat. 240
 quarta quoque his igitur quaedam natura necessest
 adtribuatur. east omnino nominis expers ;
 qua neque mobilius quicquam neque tenuius exstat,
 nec magis e parvis et levibus ex elementis ;
 sensiferos motus quae didit prima per artus. 245
 prima cietur enim, parvis perfecta figuris ;
 inde calor motus et venti caeca potestas
 accipit, inde aer ; inde omnia mobilitantur :
 concutitur sanguis, tum viscera persentiscunt
 omnia, postremis datur ossibus atque medullis 250
 sive voluptas est sive est contrarius ardor.
 nec temere huc dolor usque potest penetrare neque
 acre
 permanare malum, quin omnia perturbentur
 usque adeo ut vitae desit locus atque animai
 diffugiant partes per caulas corporis omnis. 255
 sed plerumque fit in summo quasi corpore finis
 motibus ; hanc ob rem vitam retinere valemus.

Nunc ea quo pacto inter sese mixta quibusque

240 et quaecumque ipsa *T. J. Saunders, Mnem. ser. iv, 28 (1975) 296-298*: quaedam (or quodam) quae (or que) mente *OQVP* (quaedam presumably from 241); aut quae quis mente *Purmann*: nedum quae mente *Polle*: et mens quaecumque *Frerichs* 244 ex *OQVP*: est *Wakefield* (notes only ; in his text he retains ex and adopts C's est for e) is paralleled by 6.330, but see also 6.353-354

^a Cf. Aëtius 4.3.11 (Usener 315): "Epicurus regards the soul as a mixture of four things—something fiery, something

beginnings of air must be moving through it. Already, therefore, the nature of the mind is found to be threefold ; yet all these three together are not enough to produce feeling, since the mind cannot admit that any of these can produce sense-bringing motions and the thoughts which it itself revolves. A fourth nature must therefore be added to these ; and this is entirely without name^a ; nothing exists more easily moved and more thin than this, or made of elements smaller and smoother ; and this first distributes the sense-giving motions through the limbs. For this is first set in motion, being composed of small shapes ; after that, heat takes on the movement, and the unseen power of wind, then the air ; after which all is set in movement, the blood is agitated, the flesh is all thrilled through with feeling, last is communicated to bone and marrow it may be the pleasure, it may be the opposite excitement. Nor is it easy for pain to soak through thus far, or any violent mischief, without throwing all into so great a riot that no place is left for life, and the particles of spirit flee abroad through all the pores of the body. But usually there is an end to the movement almost at the surface of the body ; on this account we are strong enough to retain life.

²⁵⁸ Now when I long to explain how these things ^b

airy, something windy, and a fourth nameless element" ('Επίκουρος [sc. τὴν ψυχὴν] κρᾶμα ἐκ τεττάρων, ἐκ ποιοῦ πυρώδους, ἐκ ποιοῦ ἀερώδους, ἐκ ποιοῦ πνευματικοῦ, ἐκ τετάρτου τινὸς ἀκατονομάστου). Also Plutarch, *adv. Coloten* 1118 D-E (Usener 314). The Epicureans felt that the fourth unnamed element, an element of unsurpassed subtlety, was needed to initiate the subtle processes of sensation and thought.

^b The four elements in the soul.

compta modis vigeant rationem reddere aventem
 abstrahit invitum patrii sermonis egestas ; 260
 sed tamen, ut potero summatim attingere, tangam.

Inter enim cursant primordia principiorum
 motibus inter se, nil ut secernier unum
 possit nec spatio fieri divisa potestas,
 sed quasi multae vis unius corporis extant. 265

quod genus in quovis animantium viscere volgo
 est odor et quidam calor et sapor, et tamen ex his
 omnibus est unum perfectum corporis augmen,
 sic calor atque aer et venti caeca potestas
 mixta creant unam naturam et mobilis illa 270
 vis, initum motus ab se quae dividit ollis,

sensifer unde oritur primum per viscera motus.
 nam penitus prorsum latet haec natura subestque,
 nec magis hac infra quicquam est in corpore nostro,
 atque anima est animae proporro totius ipsa. 275

quod genus in nostris membris et corpore toto
 mixta latens animi vis est animaeque potestas,
 corporibus quia de parvis paucisque creatast,
 sic tibi nominis haec expers vis facta minutis
 corporibus latet atque animae quasi totius ipsa 280
 proporrost anima et dominatur corpore toto.
 consimili ratione necessest ventus et aer
 et calor inter se vigeant commixta per artus
 atque aliis aliud subsit magis emineatque,

267 calor *OQVP* : color *Lambinus* (in his notes, but not in his text). For color cf. 2.680-681, but see *Giussani* and *Bailey*

^a Cf. 1.136-139, 832.

^b On the interpretation of 262-263, see G. B. Kerferd, *Phronesis* 16, no. 1 (1971) 90-91.

^c See note on 2.586.

^d That is, among the other three elements.

^e Although *Lucr.* has found it necessary to use local terms

are intermingled and in what ways they are arranged so as to be active, I am drawn away against my will by the poverty of our mother tongue ^a ; but notwithstanding I will touch upon the chief points, so far as I can.

These four form one connected whole ;

²⁶² The first-beginnings of the elements so interpenetrate one another in their motions ^b that no single element can be separated off nor can its power act divided from the rest by space, but they are, as it were, the many forces ^c of a single body. Just as in the flesh of any living creature there is a scent and a certain heat and flavour, and yet from all these is made one body grown complete : so heat and air and the unseen power of wind commingled form one nature along with that quickly moving force, which from itself distributes amongst them ^d the beginning of motion, whence first the sense-bringing motion arises spreading through the flesh. For this nature lies deep down, hidden in the most secret recess, and there is nothing in our body more deeply seated than this ^e ; and it is itself furthermore the spirit of the whole spirit. Just as commingled in our frame and in all our body the force of mind and the power of spirit lies hidden, because it is composed of small and scanty elements : so, I tell you, this force without name composed of minute particles lies hid, and is furthermore itself as it were spirit of the whole spirit and lords it in all the body. In like manner it is necessary that wind and air and heat interact commingled throughout the frame, one element yielding place to another or rising pre-eminent in

no part acts separately,

but the fourth substance is spirit of the spirit ;

in this description (273-274), he does not mean that the fourth element is situated furthest within the body, but rather that it is more impalpable than anything else in the body.

ut quiddam fieri videatur ab omnibus unum, 285
 ni calor ac ventus seorsum seorsumque potestas
 aeris interemant sensum diductaque solvant.

Est etiam calor ille animo, quem sumit, in ira
 cum fervercit et ex oculis micat acrius ardor ;
 est et frigida multa comes formidinis aura, 290
 quae ciet horrorem membris et concitat artus ;
 est etiam quoque pacati status aeris ille,
 pectore tranquillo qui fit voltuque sereno.
 sed calidi plus est illis quibus acria corda
 iracundaque mens facile effervescit in ira. 295
 quo genere in primis vis est violenta leonum,
 pectora qui fremitu rumpunt plerumque gementes
 nec capere irarum fluctus in pectore possunt.
 at ventosa magis cervorum frigida mens est
 et gelidas citius per viscera concitat auras, 300
 quae tremulum faciunt membris existere motum.
 at natura boum placido magis aere vivit,
 nec nimis irai fax umquam subdita percit
 fumida, suffundens caecae caliginis umbram,
 nec gelidis torpet telis prefixa pavoris : 305
 interutrasque sitast cervos saevosque leones.

Sic hominum genus est : quamvis doctrina politos
 constituat pariter quosdam, tamen illa relinquit
 naturae cuiusque animi vestigia prima.
 nec radicitus evelli mala posse putandumst, 310
 quin proclivius hic iras decurrat ad acris,
 ille metu citius paulo temptetur, at ille

289 acrius *OQVP* : acribus *Lambinus* (1565, 1570), comparing *Virgil, Aen. 12.102* 304 umbram *OVCF* :
 umbra *Q* : umbras *ABL* 306 interutrasque *OQVP* :
 inter utrosque *Avancius*

^a Lucr. has been arguing that temporary emotional changes in individuals are caused by the temporary promi-
 210

such a way that a unity be seen to be made of all, or if separated there could be no feeling. else heat and wind apart and the power of air apart would destroy and dissipate the sensation by being separated.

²⁸⁸ The mind has also that heat, which it takes on when it boils in wrath and fire flashes more fiercely from the eyes ; it has also abundance of that cold wind, fear's comrade, which makes the limbs shiver and stirs the frame ; it has too that quietude of calm air which comes about when the heart is tranquil and the countenance serene.^a But there is more of the hot in those creatures whose bitter hearts and angry minds easily boil up in wrath. A notable instance of this is the violent fury of the lion, which so often bursts his breast with roaring and growling, nor can he find room in his heart for the storm of passion. But the cold mind of the stag has more of wind, and more speedily sends currents of cold breath through his flesh, which cause a tremulous movement to pervade the limbs. But the nature of the cow lives more by the peaceful air ; never overmuch excited by the smoky torch of wrath which when applied spreads a shade of blinding darkness around, never pierced and frozen with cold shafts of fear : she stands between the two, stags and wild lions.

³⁰⁷ So also is it in the race of men : although training may bring some to an equal outside polish, yet it leaves there those original traces of the character of each mind. And we must not suppose that faults can be torn up by the roots, so that one man will not too readily run into bitter anger, another be attacked

nence of a particular element in the mind. In the following passage (294-322) he deals with permanent differences of character among species of animals and human beings.

tertius accipiat quaedam clementius aequo.
 inque aliis rebus multis differre necesses
 naturas hominum varias moresque sequacis ; 315
 quorum ego nunc nequeo caecas exponere causas,
 nec reperire figurarum tot nomina quot sunt
 principiis, unde haec oritur variantia rerum.
 illud in his rebus video firmare potesse,
 usque adeo naturarum vestigia linqui 320
 parvula quae nequeat ratio depellere nobis,
 ut nil impediatur dignam dis degere vitam.

Haec igitur natura tenetur corpore ab omni,
 ipsaque corporis est custos et causa salutis ;
 nam communibus inter se radicibus haerent 325
 nec sine pernicie divelli posse videntur.
 quod genus e thuris glaebris evellere odorem
 haud facile est, quin intereat natura quoque eius,
 sic animi atque animae naturam corpore toto
 extrahere haud facile est, quin omnia dissoluantur :
 inplexis ita principiis ab origine prima 331
 inter se fiunt consorti praedita vita ;
 nec sibi quaeque sine alterius vi posse videtur
 corporis atque animi seorsum sentire potestas,
 sed communibus inter eas conflatur utrimque 335
 motibus accensus nobis per viscera sensus.

Praeterea corpus per se nec gignitur umquam

321 nobis *Lachmann* : noctis *O* : noctes *QV* : dictis
Marullus : mentis *E. L. B. Meurig Davies, CR 64 (1950)*
 94-95

^a Cf. Epicurus, *Ep. ad Men.* 135 : "you shall live as a god among men" (*ζήσεις δὲ ὡς θεὸς ἐν ἀνθρώποις*). Also Diogenes of Oenoanda fr. 125.III-IV Smith, part of a letter from Epicurus to his mother, in which the writer asserts that his condition is godlike, despite his mortality. Since the gods enjoy perfect peace of mind, anyone who achieves 212

somewhat too soon by fear, a third put up with an affront more meekly than he should. And in many other respects the various natures of men must differ, and the habits that follow from them ; I cannot now set forth the hidden causes of these, nor find names enough to fit the shapes assumed by the first-beginnings from which arises this variety in things. One thing I see that I can affirm in this regard is this : so trivial are the traces of different natures that remain, beyond reason's power to expel, that nothing hinders our living a life worthy of gods.^a But reason can overcome our faults.

³²³ This nature ^b then is contained by the whole body, and is itself the body's guardian and source of its existence ; for they cling together with common roots, and manifestly they cannot be torn asunder without destruction.^c Just as it is not easy to tear out the scent from lumps of frankincense, without its very nature being destroyed : so it is not easy to draw out mind and spirit from the whole body, without the dissolution of all. So interwoven are their elements from their first origin in the life which they live together ; and we see that neither body nor mind has the power to feel singly without the other's help, but by common motions proceeding from both conjointly sensation is kindled for us in our flesh. but separated both die.

³³⁷ Besides, a body is never born by itself, nor perfect peace of mind can be compared to a god—above all Epicurus himself (*cf.* 5.8, 51), who not only attained perfect happiness, but also enabled others to obtain it. A body cannot be born

^b The soul.
^c Cf. Diogenes of Oenoanda fr. 37.I.7-12 Smith : "yet it (*i.e.* the soul) girdles the whole man and, while being itself confined, binds him in its turn, just as the minutest quantity of acid juice binds a huge quantity of milk."

nec crescit neque post mortem durare videtur.
 non enim, ut umor aquae dimittit saepe vaporem
 qui datus est, neque ea causa convellitur ipse, 340
 sed manet incolumis, non, inquam, sic animai
 discidium possunt artus perferre relictii,
 sed penitus pereunt convulsi conque putrescunt.
 ex ineunte aevo sic corporis atque animai
 mutua vitalis discunt contagia motus, 345
 maternis etiam membris alvoque reposta,
 discidium ut nequeat fieri sine peste maloque ;
 ut videas, quoniam coniunctast causa salutis,
 coniunctam quoque naturam consistere eorum.
 Quod superest, siquis corpus sentire refutat 350
 atque animam credit permixtam corpore toto
 suscipere hunc motum quem sensum nominamus,
 vel manifestas res contra verasque repugnat.
 quid sit enim corpus sentire quis adferet umquam,
 si non ipsa palam quod res dedit ac docuit nos ? 355
 " at dimissa anima corpus caret undique sensu."'
 perdit enim quod non proprium fuit eius in aevo ;
 multaue praeterea perdit cum expellitur aevo.
 Dicere porro oculos nullam rem cernere posse,
 sed per eos animum ut foribus spectare reclusis, 360
 difficilist, contra cum sensus ducat eorum ;
 sensus enim trahit atque acies detrudit ad ipsas,
 fulgida praesertim cum cernere saepe nequimus,

^a Whereas scent is an essential attribute of frankincense (cf. 327-328), heat is an accident, not a property, of water.

^b e.g. heat, colour, motion.

^c For the history of the theory that the sense-organs themselves do not perceive, but are "doors" or "windows" through which the mind perceives, see Ernout-Robin on 359 ff. The theory, which may have originated with Hera-

grows by itself, nor is it seen to last long after death. For it is not as when the liquid of water often throws off the heat which has been given to it,^a and yet is not itself torn to pieces for that reason, but remains uninjured ; not thus, I say, can the frame endure disruption apart from the spirit which has left it ; but it is utterly undone, torn to pieces, and rots away. From the first moment of life, the interdependent contacts of body and spirit, while yet laid away in the mother's body and womb, so learn the vital motions, that disruption apart cannot be without their ruin and damage ; so that you may see that, since conjunction is necessary to their existence, so also theirs must be a joint nature.

³⁵⁰ Furthermore, if anyone denies that body can feel, and believes that it is the spirit mingled throughout with the body that takes on that motion which we name feeling, he fights against things that are quite manifest and true. For who will ever explain what it is for the body to feel, unless it be what experience has openly shown and taught us ? " But the spirit gone, the body lacks feeling in every part." Yes, for it loses that which in life was not its own property ; as there are many other things that it loses ^b when it is driven from life.

³⁵⁹ Moreover, to say that the eyes can discern nothing, but that the mind looks out through them as through open portals,^c is difficult, when their own feeling leads us to the opposite conclusion ; for it is their feeling that draws us and pushes us on to the very eyeballs ; especially since we are often unable to perceive glaring objects because our bright eyes
 clitus, was adopted by the Stoics. It is expounded by Cicero, *Tusc. Disp.* 1.20.46.

without
soul, nor
can it last
long with-
out.

The body
itself has
sensation.

Example of
the eyes,
which are
organs of
feeling and
not mere
doors for
the mind to
see through.

lumina luminibus quia nobis praepediuntur.
 quod foribus non fit ; neque enim, qua cernimus ipsi,
 ostia suscipiunt ullum reclusa laborem. 366
 praeterea si pro foribus sunt lumina nostra,
 iam magis exemptis oculis debere videtur
 cernere res animus sublati postibus ipsis.

Illud in his rebus nequaquam sumere possis, 370
 Democriti quod sancta viri sententia ponit,
 corporis atque animi primordia singula privis
 adposita alternis variare, ac nectere membra.
 nam cum multo sunt animae elementa minora
 quam quibus e corpus nobis et viscera constant, 375
 tum numero quoque concedunt et rara per artus
 dissita sunt ; dumtaxat ut hoc promittere possis,
 quantula prima queant nobis iniecta ciere
 corpora sensiferos motus in corpore, tanta
 intervalla tenere exordia prima animai. 380
 nam neque pulveris interdum sentimus adhaesum
 corpore nec membris incussam sidere cretam,
 nec nebulam noctu neque aranei tenvia fila
 obvia sentimus, quando obretimur euntes,
 nec supra caput eiusdem cecidisse vietam 385
 vestem, nec plumas avium papposque volantis,
 qui nimia levitate cadunt plerumque gravatim,

^a 371 is repeated at 5.622. Lucr.'s great respect for Democritus is implied also in 1039-1041. Epicurus himself, despite his great debt to the earlier atomist, was not always so polite about him : cf. Cicero, *Fin.* 1.6.21, *Nat.D.* 1.33.93.

^b Cf. Diogenes of Oenoanda fr. 37.I.2-5 Smith.

^c An object that impinges on us and is not felt is smaller than the interval between two soul-particles. However, there is a problem below ; for, among the examples of objects whose impingement we do not feel, Lucr. mentions cobwebs, feathers, and thistle-down—all of which obviously extend

are hindered by the brightness, which never happens with portals ; for an open door through which we look out ourselves never receives any annoyance. Besides, if our eyes act as portals, why then take the eyes away, and it is obvious that the mind should perceive things all the better with doors, posts and all, removed.

³⁷⁰ There is another thing, laid down by the revered judgement of the great Democritus,^a to which you could never assent : that the first-beginnings of body and of soul are placed one beside one alternately in pairs, and so link the frame together. For, as the elements of spirit are much smaller than those which compose our body and flesh, so they are fewer also in number^b and are dispersed at rare intervals through the frame ; so that at least you may safely say that the first-beginnings of spirit lie at such intervals apart as equal the smallest things which falling upon us are able to awaken sense-bringing motions in our body.^c For sometimes we do not feel dust clinging to the body, or chalk^d shaken on us settling on our limbs, nor do we feel the impact of a mist by night, or a spider's gossamer threads when we are caught in their net as we go along, nor the withered vesture of the same creature falling on our head, nor birds' feathers or flying thistle-down, which are so exceeding light that they usually find it a

over more space than the interval between two soul-particles, and are not felt because of their lightness rather than because of their smallness. Either, as Bailey suggests, Lucr. failed to see any difference between his examples ; or, as Giussani thinks, he may have believed that there are no soul-particles on the absolute surface of the body.

^d Chalk was used as a cosmetic and for bleaching clothes.

Soul and body do not correspond atom for atom ;

the atoms of the spirit are smaller and fewer.

Certain things, too small to be felt, measure this distance between.

nec repentis itum cuiusviscumque animantis
sentimus, nec priva pedum vestigia quaeque,
corpore quae in nostro culices et cetera ponunt. 390
usque adeo prius est in nobis multa ciendum
quam primordia sentiscant concussa animai
semina corporibus nostris inmixta per artus,
et tantis intervallis tuditantia possint
concurrere coire et dissultare vicissim. 395

Et magis est animus vitae claustra coercens
et dominantior ad vitam quam vis animai.
nam sine mente animoque nequit residere per artus
temporis exiguam partem pars ulla animai.
sed comes insequitur facile et discedit in auras 400
et gelidos artus in leti frigore linquit.
at manet in vita cui mens animusque remansit ;
quamvis est circum caesis lacer undique membris
truncus, adempta anima circum membrisque remota,
vivit et aetherias vitalis suscipit auras. 405
si non omnimodis, at magna parte animai
privatus, tamen in vita cunctatur et haeret ;
ut, lacerato oculo circum si pupula mansit
incolumis, stat cernundi vivata potestas,
dummodo ne totum corruptas luminis orbem 410
et circum caedas aciem solamque relinquo ;
id quoque enim sine pernicie non fiet eorum.
at si tantula pars oculi media illa peresa est,
occidit extemplo lumen tenebraeque sequuntur,

394 tantis *Wakefield* (tantis intervallis in his notes, but quam, intervallis tantis in his text) : quantis *OQVP* : quam in his *Lachmann* : quam illis *M. F. Smith*, but tantis is *palaeographically* closest to quantis, and its sense is acceptable, for, as *Kennedy* points out, the intervals between the soul-atoms are great compared with those between the body-atoms

heavy task to fall, nor the progress of every creeping thing, nor each of the footsteps that gnats and such-like place on our body : so true is it that many particles must be moved in us, before the seeds of spirit mingled with our bodies throughout our frame begin to feel that the first-beginnings ^a have been struck, and before they can go buffeting over such great intervals, run together, meet together, and leap apart in turn.

396 And the mind is more potent in holding fast the barriers of life, and has more dominance over life, than the spirit's force. For without the mind and intelligence no particle of the spirit can abide in the frame for an instant, but readily follows after it, and departs into the air, and leaves the limbs cold in the chill of death. But he remains in life to whom the mind and intelligence remains. He may be a mutilated trunk dismembered all about, the spirit removed all around and separated from the limbs, yet he lives and breathes the vital air. Deprived of a great part of the spirit, if not of all, yet he lingers and clings to life ; just as when the eye is lacerated all round, if the pupil remains unhurt, there abides the lively power of seeing, provided you do not mangle the whole eyeball and cut round the pupil and leave that isolated ; for that will not be done without destroying them both.^b But if that tiny spot in the middle of the eye is eaten through, in a trice the light is out and darkness follows, even though

^a That is, the body-atoms.

^b That is, both pupil and eyeball.

(cf. 376-377) 404 remota *Q* corr. : remot *Q* : remotus *OV* : remotis *P*

incolumis quamvis alioqui splendidus orbis. 415
hoc anima atque animus vincti sunt foedere semper.

Nunc age, natos animantibus et mortalis
esse animos animasque levis ut noscere possis,
conquisita diu dulcique reperta labore
digna tua pergam disponere carmina vita. 420
tu fac utrumque uno sub iungas nomine eorum,
atque animam verbi causa cum dicere pergam,
mortalem esse docens, animum quoque dicere credas,
quatenus est unum inter se coniunctaque res est.

Principio quoniam tenuem constare minutis 425
corporibus docui multoque minoribus esse
principiis factam quam liquidus umor aquai
aut nebula aut fumus—nam longe mobilitate
praestat et a tenui causa magis icta movetur,
quippe ubi imaginibus fumi nebulaeque movetur: 430
quod genus in somnis sopiti ubi cernimus alte
exhalare vaporem altaria ferreque fumum ;
nam procul haec dubio nobis simulacra geruntur—
nunc igitur quoniam quassatis undique vasis
diffluere umorem et laticem discedere cernis, 435
et nebula ac fumus quoniam discedit in auras,
crede animam quoque diffundi multoque perire

431 alte *Lachmann* : alta *OQVP*. The emendation is probably right, but not certain. C. L. Howard, *CPhil.* 56 (1961) 150, defends alta = "piled high." More probably the meaning would be "lofty," "stately"; cf. *Virgil, G. 4.541*, alta . . . delubra 432 vaporem *O corr.* : vapore *OQVP*, which *Wakefield* defends by reference to *Virgil, Aen. 1.417* 433 geruntur *OQV* : genuntur *Lambinus* : feruntur *Creech* (in his notes)

* The image in 414-415 is from the sun and its setting.

^b Cf. 2.730-731. William Cowper, *The Task* 2.285-286 :

the radiant orb is otherwise unharmed.^a Such is the alliance by which spirit and mind are for ever bound.

⁴¹⁷ Listen now : that you may be able to recognize that the minds and light spirits of living creatures are born and are mortal, I shall proceed to set forth verses worthy of your calling, long sought out and found with delightful toil.^b Be so good as to apply both these names to one thing ; and when for example I speak of spirit, showing it to be mortal, believe me to speak also of mind, inasmuch as it is one thing and a combined nature.

⁴²⁵ First of all, since I have shown ^c it to be delicate and composed of minute particles and elements much smaller than the flowing liquid of water or cloud or smoke—for it surpasses these far in quickness, and moves if touched by a more delicate cause, inasmuch as it is moved by images of smoke and mist, as for example when sunk in sleep we perceive altars exhale their steam ^d on high and send up smoke (for without doubt these are images borne to us ^e)—now, therefore, since, when vessels are shattered, you perceive the water flowing out on all sides and the liquid dispersing, and since mist and smoke disperse abroad into the air, believe that the spirit also is "There is a pleasure in poetic pains | Which only poets know."

^c 177-230.

^d This translation of *vaporem* is preferable to "heat," for the word surely corresponds to *nebula* in 430, 436.

^e In 4.26 ff. *Lucr.* explains how vision, thought, and dreams are caused by the impingement on our eyes or mind of "images," i.e. the fine atomic films which all objects constantly discharge from their surfaces. The examples of steam and smoke are chosen, because such fine substances would discharge exceptionally fine "images."

II. Mind and spirit are mortal.

(1) The particles of soul are very small and mobile,

ocius et citius dissolvi in corpora prima,
 cum semel ex hominis membris ablata recessit.
 quippe etenim corpus, quod vas quasi constitit eius,
 cum cohibere nequit conquassatum ex aliqua re 441
 ac rarefactum detracto sanguine venis,
 aere qui credas posse hanc cohiberier ullo,
 corpore qui nostro rarus magis incohibescit ?

Praeterea gigni pariter cum corpore et una 445
 crescere sentimus pariterque senescere mentem.
 nam velut infirmo pueri teneroque vagantur
 corpore, sic animi sequitur sententia tenvis ;
 inde ubi robustis adolevit viribus aetas,
 consilium quoque maius et auctior est animi vis ; 450
 post ubi iam validis quassatum est viribus aevi
 corpus et obtusis ceciderunt viribus artus,
 claudicat ingenium, delirat lingua, labat mens,
 omnia deficiunt atque uno tempore desunt.
 ergo dissolui quoque convenit omnem animai 455
 naturam, ceu fumus, in altis aeris auras,
 quandoquidem gigni pariter pariterque videmus
 crescere et, ut docui, simul aevo fessa fatisci.

Huc accedit uti videamus, corpus ut ipsum
 suscipere inmanis morbos durumque dolorem, 460
 sic animum curas aeris luctumque metumque ;
 quare participem leti quoque convenit esse.

Quin etiam morbis in corporis avius errat

444 incohibescit *OQVP*, rightly retained by Ernout. *Inceptive forms are common in Lucr. (see Ernout-Robin on 1.252), the inceptive force sometimes hardly being felt, as in 890: incohibens sit J. Woltjer: incohibessit attributed by the editors to Wakefield, but already recorded by Havercamp, who seems however to mean incohibescit: incohibentist P. T. Eden, CPhil. 72 (1977) 248*

^a This same argument had been employed in the second

spread abroad and passes away far more quickly, and is more speedily dissolved into its first bodies, as soon as it has departed withdrawn from the limbs of a man. In fact if the body, which is in a way its vessel, cannot contain it, when once broken up by any cause and rarefied by the withdrawal of blood from the veins, how could you believe that it could be contained by any air, which is a more porous container than our body ?

and disperse when the soul leaves the body.

445 Besides, we feel that the mind is begotten along with the body, and grows up with it, and with it grows old. For as toddling children have a body infirm and tender, so a weak intelligence goes with it. Next, when their age has grown up into robust strength, the understanding too and the power of the mind is enlarged. Afterwards, when the body is now wrecked with the mighty strength of time, and the frame has succumbed with blunted strength, the intellect limps, the tongue babbles, the intelligence totters, all is wanting and fails at the same time. It follows therefore that the whole nature of the spirit is dissolved abroad, like smoke, into the high winds of the air, since we see it begotten along with the body, and growing up along with it, and as I have shown, falling to pieces at the same time worn out with age.

(2) Mind is born, grows, and ages with the body ;

it is natural then that it should die with the body.

459 Add to this that, just as the body itself is liable to awful diseases and harsh pain, so we see the mind liable to carking care and grief and fear ; therefore it follows that the mind also partakes of death.^a

(3) As the body has disease, so the mind has care and pain.

463 Moreover, in bodily diseases the mind often (4) When century b.c. by the Stoic philosopher Panaetius : cf. Cicero, *Tusc. Disp.* 1.32.79.

saepe animus ; dementit enim deliraque fatur,
interdumque gravi lethargo fertur in altum 465
aeternumque soporem oculis nutuque cadenti,
unde neque exaudit voces nec noscere voltus
illorum potis est, ad vitam qui revocantes
circumstant lacrimis rorantes ora genasque.
quare animum quoque dissolui fateare necessest, 470
quandoquidem penetrant in eum contagia morbi ;
nam dolor ac morbus leti fabricator uterquest,
multorum exitio perdocti quod sumus ante. 473

Denique cur, hominem cum vini vis penetravit 476
acris et in venas discessit deditus ardor,
consequitur gravitas membrorum, praepediuntur
crura vacillanti, tardescit lingua, madet mens,
nant oculi, clamor singultus iurgia gliscunt, 480
et iam cetera de genere hoc quaecumque sequuntur,
cur ea sunt, nisi quod vemens violentia vini
conturbare animam consuevit corpore in ipso ?
at quaecumque queunt conturbari inque pediri,
significant, paulo si durior insinuarit 485
causa, fore ut pereant aevo privata futuro.

Quin etiam subito vi morbi saepe coactus
ante oculos aliquis nostros, ut fulminis ictu,
concidit et spumas agit, ingemit et tremit artus,

474 (= 510), 475 et pariter mentem sanari corpus inani *are rightly excluded by Naugerius, Lambinus, and all modern editors except Diels, who alters mentem . . . inani (475) to mentei . . . sinapi and explains "incohata est carminis pars, quam postquam 510 aliter continuavit poeta, hic delere oblitus est"*

^a *aeternum* . . . *soporem* refers to the state of unconsciousness that *seems* everlasting to the patient's relatives and friends (for this use of *aeternus* cf. 907, 911). But the use of the epithet here may be influenced by the thought that the

wanders astray ; for it is demented and talks deliriously, and at times is carried by heavy lethargy into the deep everlasting sleep ^a with eyes drooping and dejected head, from which it can neither catch the voices nor recognize the looks of those who stand round calling it back to life, their faces and cheeks bedewed with tears. Therefore you must confess that the mind also is dissolved, since the contagion of disease penetrates within it ; for both pain and disease are makers of death, as we have been well taught by the perishing of many before now.

⁴⁷⁶ Moreover, when the piercing power of wine has penetrated into a man, and its fire has been dispersed abroad, spreading through the veins, why does heaviness come upon the limbs, why are his legs impeded, why does he stagger, his tongue grow tardy, his mind soaked, his eyes swim, noise and hiccups and brawls burst out, and all the rest of such things follow, why is this, I say, unless it be that the vehement fury of wine is accustomed to confuse the spirit while yet in the body ? But if anything can be confused and impeded, this indicates that, if some cause a little more compelling should penetrate, the thing would perish, and be robbed of its future life.

⁴⁸⁷ Moreover, we have often seen someone constrained on a sudden by the violence of disease, ^b who, as if struck by a thunderbolt, falls to the ground, foams at the mouth, groans and shudders,

patient will often pass on into the truly eternal sleep of death (to which *aeternum* . . . *soporem* in 921 refers) without regaining consciousness.

^b Epilepsy. Cf. Celsus 3.23 : *inter notissimos morbos est etiam is qui comitialis vel maior nominatur. homo subito concidit, ex ore spumae moventur; deinde interposito tempore ad se redit et per se ipsum consurgit.*

the body
ails, the
mind often
suffers.

(5) Wine
affects the
soul.

(6) An epi
leptic fit
shakes the
mind and
soul within
the body.

desipit, extentat nervos, torquetur, anhelat 490
 inconstanter, et in iactando membra fatigat ;
 nimirum quia vi morbi distracta per artus
 turbat agens anima spumas, ut in aequore salso
 ventorum validis fervescent viribus undae.
 exprimitur porro gemitus, quia membra dolore 495
 adficiuntur, et omnino quod semina vocis
 eiiciuntur et ore foras glomerata feruntur
 qua quasi consuerunt et sunt munita viai.
 desipientia fit, quia vis animi atque animai
 conturbatur et, ut docui, divisa seorsum 500
 disiectatur eodem illo distracta veneno.
 inde ubi iam morbi reflexit causa, reditque
 in latebras acer corrupti corporis umor,
 tum quasi vacillans primum consurgit et omnis
 paulatim redit in sensus animamque receptat. 505
 haec igitur tantis ubi morbis corpore in ipso
 iacentur miserisque modis distracta laborent,
 cur eadem credis sine corpore in aere aperto
 cum validis ventis aetatem degere posse ?

Et quoniam mentem sanari, corpus ut aegrum, 510
 cernimus et flecti medicina posse videmus,
 id quoque praesagit mortalem vivere mentem.
 addere enim partis aut ordine traiecere aequumst
 aut aliquid prorsum de summa detrahere hilum,
 commutare animum quicumque adoritur et infit 515

492 vi *Brieger* : vis *OQVP*, but *distracta* must refer to the
 anima : cf. especially 499-501, also 507, 590, 799, 4.946
 morbi *OQVP* : animi *C. D. Gilbert, CQ N.S. 23 (1973) 293*,
 retaining *vis* in 492 and *animam* in 493, but his reading and
 interpretation involve taking *per artus* not with *distracta* but
 with *turbat*, and, especially in view of 4.916, 946, this can
 hardly be right

493 anima spumas *T. Tohte* : animam
 spumans *OQV* 497 eiiciuntur *Lambinus* (" sic doctissimi
 viri legi volunt : quibus assentior ") : eliciuntur *OQVP*,
Wakefield, Martin, perhaps rightly

raves, grows rigid, twists, pants irregularly, out-
 wearies himself with contortions ; assuredly because
 the spirit, torn asunder by the violence of the disease
 throughout the frame, is in turmoil and foams, just
 as in the salt sea the waves boil under the mighty
 strength of the winds. Further, groans are forced
 out, because the limbs are afflicted with pain, and in
 general because seeds of voice are ejected and rush
 forth from the mouth in a mass, where they have
 been, as it were, accustomed to pass, where is the
 established highroad. There is raving, because the
 strength of mind and spirit is set in a turmoil and, as
 I have shown,^a divided apart and separated up and
 drawn asunder by that same poison. Next, when
 the cause of the disease has already turned back,
 and the corroding humour of the diseased body has
 returned to its secret haunts,^b then first, staggering
 as it were, the man rises, and by degrees comes back
 to his full senses and receives back his spirit. Since,
 therefore, the mind and spirit are tossed about by so
 great diseases in the very body itself, and are miser-
 ably torn asunder and distressed, why do you believe
 that the same without body, in the open air, amidst
 mighty winds, are able to live ?

Then how
 could they
 exist in the
 air ?

⁵¹⁰ And since we see that the mind, like a sick
 body, can be healed and changed by medicine, this
 also foreshows that the mind has a mortal life. For
 it is necessary to add parts or transpose them or
 draw away at least some tittle from the whole, when-
 ever anyone attempts and begins to alter the mind

(7) Medi-
 cine can
 heal mind
 as well as
 body.

^a 492-494.

^b The humour is compared to a venomous snake: cf.
veneno (501), *reflexit* (502), *latebras* (503).

aut aliam quamvis naturam flectere quaerit.
 at neque transferri sibi partis nec tribui vult
 immortale quod est quicquam neque defluere hilum ;
 nam quodcumque suis mutatum finibus exit, 520
 continuo hoc mors est illius quod fuit ante.
 ergo animus sive aegrescit, mortalia signa
 mittit, uti docui, seu flectitur a medicina :
 usque adeo falsae rationi vera videtur
 res occurrere et effugium praeccludere eunti,
 anceps itaque refutatu convincere falsum. 525

Denique saepe hominem paulatim cernimus ire
 et membratim vitalem deperdere sensum :
 in pedibus primum digitos livescere et unguis,
 inde pedes et crura mori, post inde per artus
 ire alios tractim gelidi vestigia leti. 530
 scinditur haec animae quoniam natura, nec uno
 tempore sincera existit, mortalis habendast.
 quod si forte putas ipsam se posse per artus
 introrsum trahere et partis conducere in unum,
 atque ideo cunctis sensum deducere membris, 535
 at locus ille tamen, quo copia tanta animai
 cogitur, in sensu debet maiore videri ;
 qui quoniam nusquamst, nimirum ut diximus ante,
 dilaniata foras dispargitur, interit ergo.
 quin etiam si iam libeat concedere falsum, 540
 et dare posse animam glomerari in corpore eorum
 lumina qui linquunt moribundi particulatim,

531 haec animae *W. Clausen, CR N.S. 41 (1991) 545-546*:
 atque animo haec (hec V) *OQVP*: atqui animae *Lambinus*: itque
 animae hoc *Munro*: itque animae haec *Bailey (1947)*

^a 519-520 = 1.670-671, 792-793, 2.753-754.

or indeed to change any other nature whatever. But that which is immortal does not permit its parts to be transposed, or anything to be added, or one jot to ebb away ; for whatever by being changed passes outside its own boundaries, at once that is death for that which was before.^a Therefore, if the mind is sick, it gives indications of mortality, as I have shown, or if it is changed by medicine : so completely is the truth seen to combat false reasoning, and to cut off its retreat as it flies, and to convict falsehood by a double refutation.

526 Furthermore, we often see a man pass away (8) When a man dies by degrees, and limb by limb lose the sensation of life: first the toes of the feet grow livid, and the piecemeal, the soul does the like, the nails, next die feet and legs, afterwards over the other limbs go creeping the cold footsteps of death.^b Since in this case the substance of the spirit is divided and does not issue forth whole at one time, it must be considered to be mortal. But if by any chance you think that it can of its own accord pull for it is not gathered into one place, itself inwards through the limbs and draw together its portions into one place, and that is how it withdraws sensation from all the limbs, then the place into which all that quantity of spirit is gathered together ought to seem more sensitive ; but since this place is nowhere to be found, undoubtedly, as I said before,^c the spirit is torn to pieces and dispersed abroad, perishes therefore. Moreover, if I had the whim after all to concede a falsehood, and to grant you that the spirit might be concentrated in the body of those who are leaving the daylight by dying and if it were, it would still be mortal,

^b *Lambinus* compares *Plato's* account of the death of *Socrates* (*Phd.* 117 E—118 A).
^c 531-532.

mortalem tamen esse animam fateare necesse,
 nec refert utrum pereat dispersa per auras
 an contracta suis e partibus obrutescat, 545
 quando hominem totum magis ac magis undique sensus
 deficit et vitae minus et minus undique restat.

Et quoniam mens est hominis pars una, loco quae
 fixa manet certo, velut aures atque oculi sunt
 atque alii sensus qui vitam cumque gubernant, 550
 et veluti manus atque oculus naresve seorsum
 secreta ab nobis nequeunt sentire neque esse,
 sed tamen in parvo liquuntur tempore tabe,
 sic animus per se non quit sine corpore et ipso
 esse homine, illius quasi quod vas esse videtur, 555
 sive aliud quid vis potius coniunctus ei
 fingere, quandoquidem conexu corpus adhaeret.

Denique corporis atque animi vivata potestas
 inter se coniuncta valent vitaque fruuntur ;
 nec sine corpore enim vitalis edere motus 560
 sola potest animi per se natura nec autem
 cassum anima corpus durare et sensibus uti.
 scilicet avolsus radicibus ut nequit ullam
 dispicere ipse oculus rem seorsum corpore toto,
 sic anima atque animus per se nil posse videtur. 565
 nimirum quia per venas et viscera mixtim,
 per nervos atque ossa, tenentur corpore ab omni,

553 liquuntur ("quidam doctus," according to Lambinus)
 . . . tabe Isaac Voss (except that Voss suggested tabi; Munro
 and subsequent editors attribute licuntur . . . tabe, read by
 Munro himself, to Creech, but in all the editions which the
 reviser of the present work has seen Creech suggests the same
 reading as Voss): linguntur . . . tali (tale V) OQV: lin-
 cuntur (Lachmann) . . . labi E. Orth, *Helmantica* 11 (1960)
 312

566 mixtim (not, as Bailey claims, a hapax lego-
 menon: see Merrill's note and G. B. A. Fletcher, *Latomus*
 27 [1968] 887) AL: mixti O V, Q corr., F: mixta Q

piecemeal, yet you must confess the spirit to be mortal, for it does not matter whether it passes away dispersed abroad through the air, or draws in its parts upon itself and grows dull, seeing that more and more sensation leaves the whole man on all sides, and on all sides less and less of life remains.

548 And since the mind is one part of a man, which abides planted in a fixed place, just as eyes and ears are and all the other organs of sense that govern life; and just as a hand or eye or nose separated from us can neither feel nor be, but rather are soon dissolved in putrefaction, so the mind cannot be by itself without body or without the man himself, which body seems to be a kind of vessel for it or any other similitude you may choose for a closer conjunction, since in fact the body does cling closely to it.^b

558 Furthermore, the quickened power of body and mind have vigour and enjoy life only in close conjunction together; for neither can the nature of the mind show vital motions alone by itself without the body, nor again deprived of the spirit can the body endure and use the senses. To be sure, just as the eye torn from its roots cannot by itself distinguish anything apart from the whole body, so it is seen that mind and spirit can do nothing alone. Undoubtedly because their first-beginnings are held in by the whole body, commingled throughout veins

^a An anacoluthon. The *quoniam* clause has no apodosis, and Lucr. writes *et veluti*, as though *quoniam* had not been written.

^b Lucr. suggests that his comparison (for which cf. 440) is inadequate, because, whereas body and soul are intimately interconnected (cf. 323-349), the vessel and its contents are not intermingled.

nec magnis intervallis primordia possunt
 libera dissultare, ideo conclusa moventur
 sensiferos motus quos extra corpus in auras 570
 aeris haud possunt post mortem eiecta moveri,
 propterea quia non simili ratione tenentur.
 corpus enim atque animans erit aer, si cohibere
 sese anima atque in eos poterit concludere motus
 quos ante in nervis et in ipso corpore agebat. 575
 quare etiam atque etiam, resoluta corporis omni
 tegmine et eiectis extra vitalibus auris,
 dissolui sensus animi fateare necessest
 atque animam, quoniam coniunctast causa duobus.

Denique cum corpus nequeat perferre animai 580
 discidium, quin in teatro tabescat odore,
 quid dubitas quin ex imo penitusque coorta
 emanarit uti fumus diffusa animae vis,
 atque ideo tanta mutatum putre ruina
 conciderit corpus, penitus quia mota loco sunt 585
 fundamenta, foras manante anima usque per artus,
 perque viarum omnis flexus in corpore qui sunt,
 atque foramina ? multimodis ut noscere possis
 dispertitam animae naturam exisse per artus
 et prius esse sibi distractam corpore in ipso, 590
 quam prolapsa foras enaret in aeris auras.

Quin etiam finis dum vitae vertitur intra,

574 sese anima *OP*: esse anima *Q*: esse animam *V*: in
 se animam *Wakefield* (notes only) eos *OQV*: eo *Faber*
 586 manante anima usque *Lachmann*: manant animaeque
 (animeque *QV*) *OQVP*: anima emanante *Wakefield*, a more
 considerable change than *Lachmann's*, and emanante is not
 necessarily supported by emanarit in 583, for foras manante
 =emanante

^a causa = causa salutis, the cause of existence: cf. 348,
 559.

and flesh, sinews and bones, and cannot leap freely
 apart through wide intervals: for this reason, when
 shut in together, they make those sense-giving
 motions, which they cannot make outside the body
 when cast forth into the winds of the air after death,
 because they are not held in as before. For air will
 be a body and a living creature, if the spirit shall be
 able to keep itself together, and to confine itself to
 those motions which before it used to make in the
 sinews and in the body itself. Therefore again and
 again I say, when all the covering of the body is
 broken up, and the breath of life is cast forth with-
 out, you must confess that the sensations of the mind
 are dissolved, and the spirit too, since the two exist
 by union.^a

the open air
 cannot hold
 the mind
 together so
 that it
 might
 function.

580 Again, since the body cannot endure tearing (11) The
 apart from the spirit without putrefying with a body rots
 loathsome stench, why do you doubt that the when the
 strength of the spirit, after gathering together from spirit leaves
 its depths and inmost recesses, has oozed out already it; because
 dispersed abroad like smoke, and that the reason its founda-
 why the body changing and crumbling in such ruin tions have
 has collapsed altogether, is that its foundations been broken
 to their inmost recesses have been moved from their up by the
 place while the spirit was oozing out all through the dispersing of
 limbs and through all the meandering passages and the spirit.
 pores that are in the body ?^b So that in many ways
 you may learn that the spirit was scattered abroad
 when it went out through the limbs, and had been
 torn all apart within the body itself, before it glided
 out and swam into the winds of the air.

592 Moreover, while the spirit still moves about (12) A

^b That is why it was already *diffusa* when it passed out.
 Cf. 4.90-94. shock

saepe aliqua tamen e causa labefacta videtur
 ire anima ac toto solui de corpore velle,
 et quasi supremo languescere tempore voltus, 595
 molliaque exsanguis cadere omnia corpore membra.
 quod genus est, animo male factum cum perhibetur
 aut animam liquisse: ubi iam trepidatur et omnes
 extremum cupiunt vitae reprehendere vinclum;
 conquassatur enim tum mens animaeque potestas 600
 omnis, et haec ipso cum corpore conlabefiunt,
 ut gravior paulo possit dissolvere causa.
 quid dubitas tandem quin extra prodita corpus
 inbecilla foras in aperto, tegmine dempto,
 non modo non omnem possit durare per aevom, 605
 sed minimum quodvis nequeat consistere tempus?
 Nec sibi enim quisquam moriens sentire videtur
 ire foras animam incolumem de corpore toto,
 nec prius ad iugulum et supera succedere fauces,
 verum deficere in certa regione locatam, 610
 ut sensus alios in parti quemque sua scit
 dissolui. quod si immortalis nostra foret mens,
 non tam se moriens dissolvi conquereretur,
 sed magis ire foras vestemque relinquere, ut anguis.

Denique cur animi numquam mens consiliumque
 gignitur in capite aut pedibus manibusve, sed unis
 sedibus et certis regionibus omnibus haeret, 617
 si non certa loca ad nascendum reddita cuique

596 cadere omnia corpore *F* (Bailey's objection to the
 reading is answered by Büchner): cadere omnia *OQV*: trunco
 cadere omnia *Lachmann*

^a *animo male factum* and *animam* (or *animam*) *liquisse* are
 colloquial expressions for fainting.

^b That is, like a snake sloughing its skin (*cf.* 4.60-61). In

within the bounds of life, nevertheless, when weak-
 ened by some cause or other, it often appears to wish
 to depart and to be released from the whole body,
 and the countenance appears to grow languid as at
 the last hour, and all the limbs to relax and droop
 from the bloodless body. This is what happens
 when the phrase is used "the mind fails" or "the
 spirit faints"^a: when all is trepidation, and all those
 present desire to pull back again the last bond of
 life. For at that time the intelligence and all the
 power of the spirit are shaken altogether, and these
 fail together with the body itself, so that a slightly
 more serious cause could dissolve them. Why then
 after all do you doubt that, when driven without the
 body, weak, outside, in the open, without a covering,
 the spirit could not only not endure through all time,
 but could not last even for the smallest space?
 therefore the spirit could not possibly exist outside the body.

⁶⁰⁷ It is evident that no one in dying feels his soul
 go forth from the whole body intact, nor rise first to
 the throat and then pass up to the gullet; rather
 he feels it fail in the particular region where it is
 located, as he knows his other senses to be dispers-
 ing abroad each in its own part. But if our intelli-
 gence were immortal, in dying it would not so much
 complain of dispersing abroad, but rather of passing
 out and quitting its vesture, like a snake.^b (13) No one
 feels his soul issuing forth as a whole from his throat.

⁶¹⁵ Again, why are the mind's intelligence and un-
 derstanding never produced in the head or feet or
 hands, but abide in one sole position and fixed
 region in all men, if not because fixed positions are
 (14) The mind has a fixed place, where alone it can exist.

614 it seems necessary to assume the ellipse of some verb like
gauderet: "but rather would be glad that it was passing
 out . . ."

sunt, et ubi quicquid possit durare creatum,
 atque ita multimodis partitis artibus esse, 620
 membrorum ut numquam existat praeposterus ordo?
 usque adeo sequitur res rem, neque flamma creari
 fluminibus solitast neque in igni gignier algor.

Praeterea si immortalis natura animaist
 et sentire potest secreta a corpore nostro, 625
 quinque, ut opinor, eam faciendum est sensibus auc-
 tam ;
 nec ratione alia nosmet proponere nobis
 possumus infernas animas Acherunte vagare.
 pictores itaque et scriptorum saecula priora
 sic animas introduxerunt sensibus auctas. 630
 at neque sorsum oculi neque nares nec manus ipsa
 esse potest animae neque sorsum lingua neque aures ;
 haud igitur per se possunt sentire neque esse.

Et quoniam toto sentimus corpore inesse
 vitalem sensum et totum esse animale videmus, 635
 si subito medium celeri praeciderit ictu
 vis aliqua ut sorsum partem secernat utramque,
 dispertita procul dubio quoque vis animai
 et discissa simul cum corpore dissocietur.
 at quod scinditur et partis discedit in ulla, 640
 scilicet aeternam sibi naturam abnuit esse.

620 partitis (*cf.* 710) *Bernays* : pertotis *OQV* 628
 vagare *Q corr.* : vacare *OQ* : vagari *Gifanius* (*not Lachmann,*
as stated by Munro and subsequent editors) 633 *haud*
igitur Lachmann : auditum *OQ* : haud ita tum *Merrill* (1917)

^a Notably Polynotus at Delphi and Nicias at Athens.

assigned to each thing for its birth and a place where
 it may endure when made, with its manifold limbs
 being arranged in such a way that their order is
 never reversed? So surely one thing follows another;
 neither is flame accustomed to be produced from
 streams, nor frost in fire.

624 Besides, if the nature of the spirit is immortal (15) If the
 and can feel when separated from our body, we must, mortal, it
 I think, assume that it is endowed with the five must have
 senses; in no other way can we imagine the spirits the five
 below to be wandering in Acheron. Painters^a there- senses.
 fore, and the earlier generations of writers,^b have
 introduced the spirits thus provided with senses.
 But apart from the body there can never be either
 eyes or nose or hand by itself for the spirit, nor
 tongue apart from the body, nor ears; therefore
 spirits by themselves cannot either have sensation
 or exist.

634 And since we feel that vital sense inheres in (16) If the
 the whole body, and see that it is the whole that is body is
 animated, if suddenly some force with a swift blow suddenly
 shall cut the body through the middle so as to sever divided, the
 the two parts asunder, there is no doubt that the spirit is
 spirit also will be sundered apart and cleft apart and divided too;
 cut apart with the body.^c But that which is cleft but that
 and divided into parts assuredly renounces all claim which can
 to be everlasting. is not im-
 mortal.

^b *e.g.* Homer, Ennius. With this passage of *Lucr. cf.*
Cicero, Tusc. Disp. 1.16.37.

^c In 638-639 *Lucr.* uses three verbs with the prefix *dis-* to
 emphasize the parting of the soul. Plato in the same way
 uses three verbs with the prefix *δια-* in *Phd.* 80 c 4-5, 84 b
 6-7, and it is possible that *Lucr.* was influenced by him.

Falciferos memorant currus abscidere membra
 saepe ita de subito permixta caede calentis,
 ut tremere in terra videatur ab artubus id quod
 decidit abscisum, cum mens tamen atque hominis vis
 mobilitate mali non quit sentire dolorem 646
 et simul in pugnae studio quod dedita mens est ;
 corpore relicuo pugnam caedesque petessit,
 nec tenet amissam laevam cum tegmine saepe
 inter equos abstraxe rotas falcesque rapaces, 650
 nec cecidisse alius dextram, cum scandit et instat.
 inde alius conatur adempto surgere crure,
 cum digitos agit propter moribundus humi pes ;
 et caput abscisum calido viventeque trunco
 servat humi voltum vitalem oculosque patentis, 655
 donec reliquias animai reddidit omnes.

Quin etiam tibi si lingua vibrante minanti
 serpentis cauda procero corpore utrumque
 sit libitum in multas partis discidere ferro,
 omnia iam sorsum cernes ancisa recenti 660
 vulnere tortari et terram conspargere tabo,
 ipsam seque retro partem petere ore priorem,
 vulneris ardenti ut morsu premat icta dolore.
 omnibus esse igitur totas dicemus in illis

^a War-chariots equipped with scythes were an oriental invention, and were never adopted by the Greeks or Romans (hence *memorant*, 642). They are first mentioned by Xenophon, *An.* 1.8.10 ; Livy, 37.41.7, mentions their use in the war with Antiochus III ; and they and their effectiveness are described by the first century A.D. historian Q. Curtius Rufus, *Hist. Alex.* 4.9.5 and 4.15.17.

^b *i.e.* the soldier, who has lost his arm in climbing up to attack the driver of a scythed chariot, continues his attack.

^c The meaning of *utrumque* is uncertain. Does it refer to both the front and back part of the snake's body ? Or does it mean, as supposed by Diels (in his translation) and W. S. M. Nicoll, *CR N.S.* 20 (1970) 140-141, both body and soul of the

⁶⁴² They tell how scythed chariots,^a reeking with indiscriminate slaughter, often shear off a limb so suddenly that it is seen to quiver on the ground when it falls shorn from the trunk, although the man's mind and strength can feel no pain, from the swiftness of the blow, and at the same time because the mind is absorbed in the ardour of battle ; with what is left of his body he pursues battle and blood, and does not observe that his left arm, it may be, with its shield has been carried off amidst the horses by the wheels and their ravening scythes, or another that his right arm has fallen while he climbs and presses on.^b Then another essays to rise with a leg lost, while the dying foot hard by on the ground twitches its toes. Even the head shorn off from the hot and living trunk retains on the ground the look of life and its open eyes, until it has rendered up all that is left of the spirit.

⁶⁵⁷ Moreover, when you see a serpent with flickering tongue, menacing tail, long body, if it please you to cut up both parts^c with your steel into many pieces, you will see all the parts cut away writhing separately while the wound is fresh, and bespattering the earth with gore, and the fore part turning back and seeking to gnaw itself, that by its bite it may assuage the burning pain of the wound which struck it. Shall we say then that there is a whole spirit in snake ? The former interpretation derives support from 637, 657-658 (where Lucr. stresses head and tail as well as body) and 662 ; the latter from 668-669, for there *utrumque* certainly refers to body and soul, and the parallelism between *in multas . . . partis disciditur* (669) and *in multas partis discidere* (658) might be taken as indicating that *utrumque* has the same reference in both places. In any case, no emendation of the text is necessary.

particulis animas ? at ea ratione sequetur 665
 unam animantem animas habuisse in corpore multas.
 ergo divisast ea quae fuit una simul cum
 corpore ; quapropter mortale utrumque putandumst,
 in multas quoniam partis disciditur aequae.

Praeterea si immortalis natura animai 670
 constat et in corpus nascentibus insinuat,
 cur super anteactam aetatem meminisse nequimus
 nec vestigia gestarum rerum ulla tenemus ?
 nam si tanto operest animi mutata potestas,
 omnis ut actarum exciderit retinentia rerum, 675
 non, ut opinor, id ab leto iam longiter errat ;
 quapropter fateare necessesst quae fuit ante
 interiisse et quae nunc est nunc esse creatam.

Praeterea si iam perfecto corpore nobis
 inferri solitast animi vivata potestas 680
 tum cum gignimur et vitae cum limen inimus,
 haud ita conveniebat uti cum corpore et una
 cum membris videatur in ipso sanguine cresse,
 sed velut in cavea per se sibi vivere solam
 convenit, ut sensu corpus tamen affluat omne. 685
 quare etiam atque etiam neque originis esse putan-
 dumst
 expertis animas nec leti lege solutas ;
 nam neque tanto opere adnecti potuisse putandumst
 corporibus nostris extrinsecus insinuatas—
 quod fieri totum contra manifesta docet res ; 690
 namque ita conexa est per venas viscera nervos

676 ab *OQP* : a *Nonius p. 328 Lindsay, Charisius p. 265 Barwick* longiter *Nonius, Charisius l.c.* : longius *OQP*.
The 4th cent. grammarians, who quote this line alone as containing longiter, can hardly have invented the form, defended by S. Timpanaro, Maia 22 (1970) 355-357

each of these fractions ? But in that way it will follow that one living creature had many spirits in its body. Therefore that spirit which was one has been divided apart together with the body ; and so each must be considered mortal, since each alike is cut asunder into many parts.

670 Besides, if the nature of the spirit is immortal (17) If the spirit is immortal, why do we not remember also the time that has passed before, and why do we keep no traces of things done ? For if the power of the mind has been so greatly changed that it has lost all recollection of things done, that, I think, is not far removed from death. Therefore you must confess that the spirit that was before has perished, and that which now is has now been made.

679 Besides, if the body is already complete when the quickened power of the mind is accustomed to be introduced into us, at the moment when we are born and when we enter the threshold of life, it ought not so to live that it should be seen to grow with the body and together with the frame in the very blood, but it should live alone by itself as it might be in a cage, while nevertheless all the body should be full of streams of sensation. Therefore again and again I say that spirits must not be considered to be without beginning or free from the law of death. For we must not believe that they could have been so closely connected with our bodies if they had been introduced from without, when experience manifestly proves the clean contrary ; for the spirit is so closely connected with the body through all the veins, flesh, sinews, and bones that (18) If the spirit were introduced at birth into the already completed body, it would not permeate it and grow with it ; whereas in fact it interpenetrates every part of the body.

ossaque, uti dentes quoque sensu participentur,
 morbus ut indicat et gelidai stringor aquai
 et lapis oppressus, subiit si e frugibus, asper—
 nec, tam contextae cum sint, exire videntur 695
 incolumes posse et salvas exsolvere sese
 omnibus e nervis atque ossibus articulisque.

Quod si forte putas extrinsecus insinuatam
 permanare animam nobis per membra solere,
 tanto quique magis cum corpore fusa peribit ; 700
 quod permanat enim dissolvitur, interit ergo.
 dispertitur enim per caulas corporis omnis ;
 ut cibus, in membra atque artus cum diditur omnis,
 disperit atque aliam naturam sufficit ex se,
 sic anima atque animus, quamvis integra recens in
 corpus eunt, tamen in manando dissoluntur, 706
 dum quasi per caulas omnis diduntur in artus
 particulae quibus haec animi natura creatur,
 quae nunc in nostro dominatur corpore nata
 ex illa quae tunc periit partita per artus. 710
 quapropter neque natali privata videtur
 esse die natura animae nec funeris expers.

Semina praeterea linquuntur necne animai
 corpore in exanimo ? quod si linquuntur et insunt,
 haud erit ut merito immortalis possit haberi, 715
 partibus amissis quoniam libata recessit.
 sin ita sinceris membris ablata profugit

694 subiit si e *Bernays* : subitis e *OQP* : subit si *A. C.*
Clark, CR 25 (1911) 74 702 dispertitur *OQ* : disper-
 titita *F* : dispertitus *Lachmann* (not *Pius*, as stated by recent
 editors) enim *AB* : ergo (from 701 ?) *OQ*

even the teeth feel like the rest, as their aching
 proves, and the twinge of cold water, and the crunch-
 ing of rough grit, when it has got into them out of
 bread ; and since they are so closely connected,^a it
 is clear that they are not able to emerge intact and
 loosen themselves away whole from all the sinews
 and bones and joints.

⁶⁹⁸ But if by any chance you think that the spirit (19) If the
 is accustomed to creep in from without and so to spirit intro-
 ooze through our frame, so much the more will it duced from
 perish, being interfused with the body ; for that without
 which permeates is dissolved, perishes therefore. were able to
 The spirit is distributed through all the pores of the permeate
 body ; just as food, while it is being dispersed into the body,
 all the members and limbs, perishes and supplies it would
 another nature from its substance, so spirit and mind, still be
 even though they enter whole into a new body, yet mortal, for
 in permeating it are dissolved, while the particles that which
 are being dispersed through all the pores, as we may permeates
 call them, into the limbs, those particles that com- is dis-
 pose this mind which now lords it in our body, born solved.
 of that mind which perished at the time when it was
 distributed through the limbs. Therefore the spirit
 is seen to be neither without a birthday nor without
 death.

⁷¹³ Again, do any seeds of spirit remain or not in (20) If
 the lifeless body ? Now if any are left and are in it, seeds of
 it will be impossible rightly to consider the spirit spirit re-
 immortal, since it has gone away diminished by the main in the
 loss of some parts. But if it has departed and fled body, it is
 forth with its component parts so intact that it has dissolved
 and there-
 fore mortal ;
 if not,

^a That is, since spirits are so closely connected with bodies
 (cf. 691).

ut nullas partis in corpore liquerit ex se,
unde cadavera rancenti iam viscere vermes
expirant, atque unde animantum copia tanta 720
exos et exanguis tumidos perfluctuat artus ?
quod si forte animas extrinsecus insinuari
vermibus et privas in corpora posse venire
credis, nec reputas cur milia multa animarum
convenient unde una recesserit, hoc tamen est ut 725
quaerendum videatur et in discrimen agendum,
utrum tandem animae venentur semina quaeque
vermiculorum ipsaeque sibi fabricentur ubi sint,
an quasi corporibus perfectis insinuentur.
at neque cur faciant ipsae quareve laborent 730
dicere suppeditat. neque enim, sine corpore cum sunt,
sollicitae volitant morbis alique fameque ;
corpus enim magis his vitiis adfne laborat,
et mala multa animus contage fungitur eius.
sed tamen his esto quamvis facere utile corpus, 735
cui subeant ; at qua possint via nulla videtur.
haud igitur faciunt animae sibi corpora et artus.
nec tamen est utqui perfectis insinuentur
corporibus ; neque enim poterunt subtiliter esse
conexae neque consensu contagia fient. 740

Denique cur acris violentia triste leonum
seminium sequitur, volpes dolus, et fuga cervis
a patribus datur et patrius pavor incitat artus ?

736 cui *Bernays* : cum *OQP* qua *Marullus* : que
OQ : qui *BF* may be right 740 consensu *OQ* : con-
sensus *Lachmann* 742 cervis *ed. Veneta*, though
strangely with a stop after it : cervos *OQP*

* For the belief in the spontaneous generation of worms, see
note on 2.872.

left in the body no particles of itself, how do corpses
exhale worms from flesh already grown putrid,^a
whence comes all the great mass of living creatures,
boneless and bloodless, that surge through the swell-
ing limbs ? Now if you believe by any chance that
spirits can creep into the worms from without and
come one by one into the bodies, if you do not ponder
why many thousands of spirits gather together where
one has gone away, here is a question that it seems
worth while to ask and to bring under examination,
whether in fact the spirits go a-hunting for all the
seeds of little worms and themselves make them a
habitation, or whether they creep as it were into
bodies already formed. But there is no answer to
the question why they should make bodies them-
selves, or why they should take that trouble. For,
when they are without bodies, they are not plagued
with disease as they fly about, or with cold and
hunger ; for it is the body rather that is troubled
through susceptibility to these infirmities, and the
mind suffers many maladies by contact with it. Grant,
however, that it be as useful as you will that these
make them a body to enter : but how they can, there
is no way to be seen. Spirits therefore do not make
themselves bodies and limbs. Nor is there any pos-
sibility that they creep into bodies already made ;
for they will not be able to conjoin themselves closely
together with these, nor will harmony be established
through community of sensation.

741 Furthermore, why does bitter fury go with the
sullen breed of lions, why craft with foxes, why is the
instinct of flight transmitted to deer from their
fathers, the father's timidity impelling their limbs,
(21) Here-
dity is a
proof that
mind is
transmitted
with body :

et iam cetera de genere hoc cur omnia membris
 ex ineunte aevo generascunt ingenioque, 745
 si non certa suo quia semine seminioque
 vis animi pariter crescit cum corpore quoque?
 quod si immortalis foret et mutare soleret
 corpora, permixtis animantes moribus essent :
 effugeret canis Hyrcano de semine saepe 750
 cornigeri incursum cervi, tremereque per auras
 aeris accipiter fugiens veniente columba ;
 desiperent homines, saperent fera saecula ferarum.

Illud enim falsa fertur ratione, quod aiunt
 immortalem animam mutato corpore flecti ; 755
 quod mutatur enim dissolvitur, interit ergo.
 traiciuntur enim partes atque ordine migrant ;
 quare dissolui quoque debent posse per artus,
 denique ut intereant una cum corpore cunctae.

Sin animas hominum dicent in corpora semper 760
 ire humana, tamen quaeram cur e sapienti
 stulta queat fieri, nec prudens sit puer ullus 762
 nec tam doctus equae pullus quam fortis equi vis. 764
 scilicet in tenero tenerascere corpore mentem 765
 confugient. quod si iam fit, fateare necessest
 mortalem esse animam, quoniam mutata per artus
 tanto opere amittit vitam sensumque priorem.

Quove modo poterit pariter cum corpore quoque
 confirmata cupitum aetatis tangere florem 770
 vis animi, nisi erit consors in origine prima ?

747 quoque *OP* (cf. 769) : toto *Q* 763 (=746) *deleted*
 by *Lachmann*

^a The dogs of Hyrcania, on the south-east shore of the Caspian Sea, were noted for their ferocity. According to Cicero (*Tusc. Disp.* 1.45.108), the Hyrcanians thought that the best method of burial was to be torn to pieces by their dogs, and kept them especially for this purpose.

why are all other qualities of this sort generated in the body and the character from the beginnings of life, if not because in each seed and breed its own fixed power of mind grows along with each body? But if it were immortal, and accustomed to pass from body to body, living creatures would show confused habits: the dog of Hyrcanian breed ^a would often flee before the horned stag's onset; the hawk would tremble, flying through the air from the advancing dove; men would lack reason, the wild generations of wild beasts would have it.

⁷⁵⁴ For it is based on false reasoning to say that an immortal spirit is altered by a change of body; for that which changes is dissolved, therefore perishes. The parts of the spirit are transposed, and move from their position; therefore they must be capable of being dissolved also through the frame, to perish at last one and all with the body.

⁷⁶⁰ But if they say that the spirits of men always pass into men's bodies, I will still ask why a foolish spirit can be made of a wise one, why no child is ever prudent, and no foal ever so accomplished as the horse of powerful strength.^b No doubt they will take refuge in saying that in a tender body the mind becomes tender. But even if this is so, you must confess that the spirit is mortal, since being changed so completely throughout the body it loses its former life and feeling.

⁷⁶⁹ Or how will the power of the mind be able to grow strong together with any given body and attain the longed-for flowering of life, unless it shall be

^b The mention of the horse shows that the supposition with which Lucr. is dealing is that souls of all animals, and not only human souls, remain constant to the same species.

quidve foras sibi vult membris exire senectis ?
 an metuit conclusa manere in corpore putri
 et domus aetatis spatio ne fessa vetusto
 obruat ? at non sunt immortalis ulla pericla. 775

Denique conubia ad Veneris partusque ferarum
 esse animas praesto deridiculum esse videtur,
 expectare immortalis mortalia membra
 innumero numero certareque praeproperanter
 inter se quae prima potissimaque insinuetur ; 780
 si non forte ita sunt animarum foedera pacta
 ut quae prima volans advenerit insinuetur
 prima neque inter se contendant viribus hilum.

Denique in aethere non arbor, non aequore in alto
 nubes esse queunt nec pisces vivere in arvis 785
 nec cruor in lignis neque saxis sucus inesse :
 certum ac dispositumst ubi quicquid crescat et insit.
 sic animi natura nequit sine corpore oriri
 sola neque a nervis et sanguine longius esse.
 quod si posset enim, multo prius ipsa animi vis 790
 in capite aut umeris aut imis calcibus esse
 posset et innasci quavis in parte soleret,
 tandem in eodem homine atque in eodem vase
 manere.

quod quoniam nostro quoque constat corpore certum
 dispositumque videtur ubi esse et crescere possit 795
 sorsum anima atque animus, tanto magis infitiandum
 totum posse extra corpus durare genique.
 quare, corpus ubi interiit, periisse necessest
 confiteare animam distractam in corpore toto.

^a 784-797 are repeated, with slight alterations, in 5.128-141, where Lucr. is arguing that the earth, sea, sky, sun, moon, and stars are not animate, let alone divine.

^b The argument of 790-793 is this : if the mind could exist

its partner in the first origin ? Or why does it wish less they are born together. (25) And why should a soul wish to leave an old body ?
 to issue forth from a frame grown old ? Does it fear to remain imprisoned in a putrefying corpse, fear lest its house, worn out with the long lapse of years, fall in upon it ? But there are no dangers for the immortal.

776 Again, to suppose that spirits stand ready for the amours and the parturition of wild beasts is plainly too ridiculous—immortal spirits awaiting mortal frames in number numberless, and struggling together in hot haste which first and foremost shall creep in ; unless perhaps the spirits have contracts so arranged, that the spirit which comes flying up first may creep in first, and they need not come to blows one whit. (26) It is absurd to suppose a crowd of souls waiting for bodies.

784 Again, a tree cannot grow in the sky,^a nor clouds be in the deep sea, nor fish live in the fields, nor can blood be in sticks nor sap in rocks. It is fixed and arranged where each thing is to grow and have its being. So the nature of the mind cannot arise alone without body, nor exist far from sinews and blood. But if it could do this, the power of the mind itself could much more easily be in head or shoulders or the heels of the feet, and be born in any part, and at least remain in the same man, the same vessel.^b But since even in our body there is seen to be a fixed rule and ordinance in what place mind and spirit may exist and grow apart, so much the more must we deny that they can endure and be produced wholly outside the body. Therefore, when the body has perished, you must confess that the spirit has passed away, torn to pieces throughout the body. (27) Each thing has its appointed place, and mind cannot exist out of the body.

outside the body, then, rather than do this, it would be more likely to be found in some part of the body where in fact it cannot exist ; in fact, it can only exist in the breast.

Quippe etenim mortale aeterno iungere et una
consentire putare et fungi mutua posse 801
desiperest ; quid enim diversius esse putandumst
aut magis inter se disiunctum discrepitansque,
quam mortale quod est immortalis atque perenni
iunctum in concilio saevas tolerare procellas ? 805

Praeterea quaecumque manent aeterna necessest
aut, quia sunt solido cum corpore, respuere ictus
nec penetrare pati sibi quicquam quod queat artas
dissociare intus partis, ut materialia
corpora sunt quorum naturam ostendimus ante ; 810
aut ideo durare aetatem posse per omnem,
plagarum quia sunt expertia, sicut inanest,
quod manet intactum neque ab ictu fungitur hilum ;
aut etiam quia nulla loci sit copia circum,
quo quasi res possint discedere dissoluique, 815
sicut summarum summast aeterna, neque extra
quis locus est quo diffugiant, neque corpora sunt quae
possunt incidere et valida dissolvere plaga.

Quod si forte ideo magis immortalis habendast,
quod vitalibus ab rebus munita tenetur, 820
aut quia non veniunt omnino aliena salutis,

814 sit *OQP* : fit *Lachmann*

^a The universe.

^b 806-818 recur, with a few minor alterations, in 5.351-363, where *Lucr.* is arguing that the world is not eternal. Since the lines are better adjusted to their context in Book 5, it is reasonable to assume that *Lucr.* first wrote them there, and later inserted them here when it struck him that they were relevant to his argument for the mortality of the soul. It is probable that, if he had lived to complete the revision of his work, he would have incorporated the passage in its new

⁸⁰⁰ In fact, to yoke mortal with immortal, and to think that they can be partners in feeling and act upon each other, is folly ; for what can be considered more discordant, more contradictory or inconsistent, than that what is mortal can be yoked together in combination with immortal and imperishable, to weather furious storms !

(28) The union of mortal and immortal is impossible.

⁸⁰⁶ Besides, whatever bodies abide everlasting must either, being of solid structure, reject blows and allow nothing to penetrate them that could dis sever asunder the close-joined parts within, as the particles of matter are, the nature of which we have shown before ; or else the reason why they can endure through all time must be that they are free from assaults, as the void is, which remains untouched and is not a whit affected by blows ; or again because there is no extent of space around into which things can as it were disperse and dissolve, as the sum of all sums ^a is eternal, and there is no place without it into which its elements may escape, nor bodies to fall upon it and dissolve it asunder with a strong blow.^b

(29) What is everlasting must be solid and impenetrable (like the atoms),

or intangible (like the void),

or have no space around it (like the universe).

⁸¹⁹ But if possibly the reason why the spirit is to be held immortal is rather this,^c that it is sheltered and protected by the forces of life, either because nothing comes at all that is hostile to its existence,

(30) The soul is subject to disease, therefore to death.

context more satisfactorily, pointing out that since the soul does not satisfy any of the three conditions of immortality, it must be mortal.

^c It is probable that in 819-823 *Lucr.* is alluding, as *Giussani* suggests, to the condition of the immortality of the gods, who continually gain new atoms to replace those which they lose, and who survive a constant atomic bombardment in the *intermundia*.

aut quia quae veniunt aliqua ratione recedunt
pulsata prius quam quid noceant sentire queamus,

praeter enim quam quod morbis cum corporis aegret,
advenit id quod eam de rebus saepe futuris 825
macerat inque metu male habet curisque fatigat,
praeteritisque male admissis peccata remordent.
adde furorem animi proprium atque obliviam rerum,
adde quod in nigras lethargi mergitur undas.

Nil igitur mors est ad nos neque pertinet hilum, 830
quandoquidem natura animi mortalis habetur ;
et, velut anteacto nil tempore sensimus aegri,
ad confligendum venientibus undique Poenis,
omnia cum belli trepido concussa tumultu
horrida contremuere sub altis aetheris auris, 835
in dubioque fuere utrorum ad regna cadendum
omnibus humanis esset terraque marique,
sic, ubi non erimus, cum corporis atque animae
discidium fuerit, quibus e sumus uniter apti,
scilicet haud nobis quicquam, qui non erimus tum, 840
accidere omnino poterit sensumque movere,
non si terra mari misceretur et mare caelo.

Et si iam nostro sentit de corpore postquam
distractast animi natura animaeque potestas,

823 *Lambinus is almost certainly right in assuming a lacuna after this line. He inserts scilicet a vera longe ratione remotumst, which Marullus had supplied after 820. Bailey suggests e.g. hoc fieri totum contra manifesta docet res (cf. 690), already adopted by Munro in his translation. Büchner, who assumes an ellipse instead of a lacuna, overlooks the fact that Wakefield and Heinze take the same view* 835 auris OP :
auras Q : oris, *Giffanius, is supported by 5.143, but auris should be retained in view of aetherias . . . auris (405) and altas aeris auris (456) ; see also Virgil, Aen. 4.445-446*

or because all that does come goes back, in some way repulsed before we can perceive what harm it does, [experience manifestly shows that this cannot be true.] For not to mention that it sickens along with bodily disease, something often comes that torments it about the future, keeps it miserable in fear, wearies it with anxiety, and, when there has been evil done in the past, its sins bring remorse. Add madness which is peculiar to the mind, and forgetfulness of all things, add that it is drowned in the black waters of lethargy.

830 Therefore death is nothing to us,^a it matters not one jot, since the nature of the mind is understood to be mortal ; and as in time past we felt no distress, while from all quarters the Carthaginians were coming to the conflict, when the whole world, shaken by the terrifying tumult of war, shivered and quaked under the lofty and breezy heaven, and was in doubt under which domination all men were destined to fall by land and sea^b ; so, when we shall no longer be, when the parting shall have come about between body and spirit from which we are compacted into one whole, then sure enough nothing at all will be able to happen to us, who will then no longer be, or to make us feel, not if earth be commingled with sea and sea with sky.

843 And grant for the moment that the nature of mind and power of spirit does feel after it has been torn away from our body, yet that is nothing to us,^c

Then death is nothing to us. We felt nothing before our birth, we shall feel nothing after death.

Even if the soul were to have sensation after

^a *nil . . . mors est ad nos (cf. 845, 850, 852, 926, 972) = ὁ θάνατος οὐδέν πρὸς ἡμᾶς (Epicurus, Sent. 2).*

^b The reference is chiefly to the Second Punic War (218-201 B.C.).

nil tamen est ad nos, qui compectu coniugioque 845
 corporis atque animae consistimus uniter apti.
 nec, si materiem nostram collegerit aetas
 post obitum rursusque redegerit ut sita nunc est,
 atque iterum nobis fuerint data lumina vitae,
 pertineat quicquam tamen ad nos id quoque factum,
 interrupta semel cum sit repetentia nostri. 851
 et nunc nil ad nos de nobis attinet, ante
 qui fuimus, neque iam de illis nos adficit angor.
 nam cum respicias inmensi temporis omne
 praeteritum spatium, tum motus materiai 855
 multimodi quam sint, facile hoc adcredere possis,
 semina saepe in eodem, ut nunc sunt, ordine posta
 865 haec eadem, quibus e nunc nos sumus, ante fuisse.
 868 nec memori tamen id quimus reprehendere mente ;
 869 inter enim iectast vitae pausa, vageque 860
 860 deerrarunt passim motus ab sensibus omnes.
 861 Debet enim, misere si forte aegreque futurumst,
 862 ipse quoque esse in eo tum tempore, cui male possit
 863 accidere. id quoniam mors eximit, esseque probet
 864 illum cui possint incommoda conciliari, 865
 scire licet nobis nil esse in morte timendum,
 nec miserum fieri qui non est posse, neque hilum
 differre an nullo fuerit iam tempore natus,
 mortalem vitam mors cum immortalis ademit.

853 neque *Lachmann* : omitted by *OQ* : nec *Marullus* : nil
Merrill (1917) 856 multimodi *OQACFL* : multimodis
B, *Codex Musaei Britannici Butl.* 11912

^a The tmesis *inter . . . iectast* (860) well emphasizes the interruption of life which *Lucr.* is describing. Cf. e.g. 5.287, where the interruption of the sun's light is reflected and emphasized in *radios inter quasi rumpere lucis*. And the tmesis is similarly appropriate to the sense in e.g. 1.452, 651, 3.262, 5.299, 1374, 6.332.

^b The atoms may be the same, but their motions have lost all connexion with the earlier sensations.

who by the welding and wedding together of body and spirit exist compacted into one whole. Even if time should gather together our matter after death and bring it back again as it is now placed, and if once more the light of life should be given to us, yet it would not matter one bit to us that even this had been done, when the recollection of ourselves has once been broken asunder. And even now we are not concerned at all about any self which we have been before, nor does any anguish about it now touch us. For when you look back upon all the past expanse of measureless time, and think how various are the motions of matter, you may easily come to believe that these same seeds of which now we consist have been often before placed in the same arrangement they now are in. And yet we cannot call that back by memory ; for in between has been cast a stoppage of life,^a and all the motions have wandered and scattered afar from those sensations.^b

⁸⁶² For,^c if by chance anyone is to have misery and pain in the future, he must himself also exist then in that time to be miserable. Since death takes away this possibility, and forbids him to exist for whom these inconveniences may be gathered together, we may be sure that there is nothing to be feared after death, that he who is not cannot be miserable, that it makes not one jot of difference whether or not ^a he has ever been born, when death the immortal has taken away his mortal life.

^c *Lucr.* abruptly resumes his main argument, which he interrupted at 843. The intervening passage (843-861) is parenthetical, though relevant to the contention that death is nothing to us.

^d In 868, between *differre* and *an*, supply *utrum aliquo tempore natus fuerit*.

Proinde ubi se videas hominem indignarier ipsum,
 post mortem fore ut aut putescat corpore posto 871
 aut flammis interfiat malisve ferarum,
 scire licet non sincerum sonere atque subesse
 caecum aliquem cordi stimulum, quamvis neget ipse
 credere se quemquam sibi sensum in morte futurum;
 non, ut opinor, enim dat quod promittit et unde, 876
 nec radicitus e vita se tollit et eicit,
 sed facit esse sui quiddam super inscius ipse.
 vivus enim sibi cum proponit quisque futurum,
 corpus uti volucres lacerent in morte feraeque, 880
 ipse sui miseret; neque enim se dividit illum
 nec removet satis a proiecto corpore, et illum
 se fingit sensuque suo contaminat astans.
 hinc indignatur se mortalem esse creatum,
 nec videt in vera nullum fore morte alium se 885
 qui possit vivus sibi se lugere peremptum
 stansque iacentem se lacerari urive dolere.
 nam si in morte malumst malis morsuque ferarum
 tractari, non invenio qui non sit acerbum
 ignibus inpositum calidis torrescere flammis 890
 aut in melle situm suffocari atque rigere

^a Perhaps an allusion to the custom of the Magi. Cf. Cicero, *Tusc. Disp.* 1.45.108: *Magorum mos est non humare corpora suorum, nisi a feris sint ante laniata.* And see note on 750 for the custom of the Hyrcanians.

^b What he professes to admit is that there is no feeling after death; the premise is that the soul does not survive after death. For the attitude of the Epicurean, cf. Diogenes 256

⁸⁷⁰ Accordingly, when you see a man resenting his fate, that after death he must either rot with his body laid in the tomb, or perish by fire or the jaws of wild beasts,^a you may know that he rings false, and that deep in his heart is some hidden sting, although himself he deny the belief in any sensation after death. He does not, I think, admit what he professes to admit, nor the premise from which his profession is derived^b; he does not wholly uproot and eject himself from life, but unknown to himself he makes something of himself to survive. For when anyone in life anticipates that birds and beasts will mangle his body after death, he pities himself; for he does not distinguish himself from that thing,^c he does not separate himself sufficiently from the body there cast out, he imagines himself to be that and, standing beside it, infects it with his own feeling. Hence he resents that he was born mortal, and does not see that in real death there will be no other self that could live to bewail his perished self, or stand by to feel pain that he lay there lacerated or burning. For^d if after death it is an evil to be mauled by the jaws and teeth of wild beasts, I do not see how it should not be unpleasant to be laid upon the fire and to shrivel in the hot flames, or to be packed in honey

If a man resents the fate of his body after death,

he imagines something of himself to survive.

of Oenoanda fr. 73.I. Smith: "[I follow you (Epicurus)] when you make [these] statements about death, and you have persuaded me to laugh at it. For I have no fear on account of the Tityoses and Tantaluses whom some describe in Hades, nor do I shudder [when I reflect upon] the decomposition of the body, [being convinced that we have no feeling, once the] soul [is without sensation,] or anything else."

^c That is, from his own dead body.

^d *nam* (888) refers to *uri* (887), its full force being: "I mention being burnt, for . . ."

frigore, cum summo gelidi cubat aequore saxi,
urgerive superne obtritum pondere terrae.

“ Iam iam non domus accipiet te laeta neque uxor
optima, nec dulces occurrent oscula nati 895
praeripere et tacita pectus dulcedine tangent.
non poteris factis florentibus esse, tuisque
praesidium. misero misere,” aiunt, “ omnia ademit
una dies infesta tibi tot praemia vitae.”
illud in his rebus non addunt : “ nec tibi earum 900
iam desiderium rerum super insidet una.”
quod bene si videant animo dictisque sequantur,
dissoluant animi magno se angore metuque.

“ Tu quidem ut es leto sopitus, sic eris aevi
quod superest cunctis privati doloribus aegris ; 905
at nos horrido cinerum factum te prope busto
insatiabiliter deflevimus, aeternumque
nulla dies nobis maerorem e pectore demet.”
illud ab hoc igitur quaerendum est, quid sit amari
tanto opere, ad somnum si res redit atque quietem,
cur quisquam aeterno possit tabescere luctu. 911

Hoc etiam faciunt ubi discubuere tenentque

893 obtritum *Marullus* : obrutum *OQP*, *Martin* : obruptum *Codex Bodleianus Auct. F.1.13* : operitum (=operatum) *Wakefield* 907 deflevimus *OQ* : deflebimus *ed. Brixiensis*

^a “ The chilly discomfort of this situation, in which the body has no covering (*summo . . . aequore*), is ironically contrasted with that of the buried body, which has too much ” (Kenney).

^b 894-896 are imitated by Virgil, *G.* 2.523-524, and almost certainly influenced Thomas Gray, *Elegy Written in a Country Churchyard* 21-24 : “ For them no more the blazing

and stifled, and to be stiff with cold lying upon a slab of cold marble,^a or to be buried and crushed under a weight of superimposed earth.

894 “ No longer now will your happy home give you welcome, no longer will your best of wives ; no longer will your sweet children race to win the first kisses, and thrill your heart to its depths with sweetness.^b You will no longer be able to live in prosperity, and to protect your own. Poor man, poor man ! ” they say, “ one fatal day has robbed you of all these prizes of life.”^c But they do not go on to add : “ No longer too does any craving possess you for these things.” If they could see this clearly in mind and so conform their speech, they would free themselves from great anguish and fear of mind.

904 “ Yes, you, as you now lie in death’s quiet sleep, so you will be for all time that is to come, removed from all distressing pains ; but we beside you, as you lay burnt to ashes on the horrible pyre, have bewailed you inconsolably, and that everlasting grief no time shall take from our hearts.” Of such a speaker then we may well ask, if all ends in sleep and quiet rest, what bitterness there is in it so great that one could pine with everlasting sorrow.

912 This also is the way among men, when they Men

hearth shall burn, | Or busy housewife ply her evening care : | No children run to lisp their sire’s return, | Or climb his knees the envied kiss to share.”

^c It is important to realize that in 894-899 and 904-908 *Lucr.* is parodying the conventional utterances of the bereaved, with whose sentiments he disagrees (*cf.* 900-903, 909-911). See D. West, *The Imagery and Poetry of Lucretius* 28-29, and Kenney’s commentary.

pocula saepe homines et inumbrant ora coronis,
 ex animo ut dicant : " brevis hic est fructus homullis ;
 iam fuerit neque post umquam revocare licebit." 915
 tamquam in morte mali cum primis hoc sit eorum,
 quod sitis exurat miseros atque arida torrat,
 aut aliae cuius desiderium insideat rei.
 nec sibi enim quisquam tum se vitamque requirit,
 cum pariter mens et corpus sopita quiescunt ; 920
 nam licet aeternum per nos sic esse soporem,
 nec desiderium nostri nos adfcit ullum.
 et tamen haudquaquam nostros tunc illa per artus
 longe ab sensiferis primordia motibus errant,
 cum correptus homo ex somno se colligit ipse. 925
 multo igitur mortem minus ad nos esse putandumst,
 si minus esse potest quam quod nil esse videmus ;
 maior enim turbae disiectus materiai
 consequitur leto, nec quisquam expergitus exstat,
 frigida quem semel est vitae pausa secuta. 930

Denique si vocem rerum natura repente
 mittat et hoc alicui nostrum sic increpet ipsa :
 " quid tibi tanto operest, mortalis, quod nimis aegris
 luctibus indulges ? quid mortem condemis ac fles ?
 nam si grata fuit tibi vita anteacta priorque 935

917 torrat *Q*, *O corr.*, *BL*: torret *OA*: torreat (with
synizesis) *Giffanius*: tortet *N. H. Romanes*, *Notes on the Text*
of Lucretius (1934), anticipating *M. L. West*, *CR N.S.* 11
 (1961) 203-204 928 turbac *OQ*: turba et *Goebel*,
 accepted by some editors to avoid the double genitive and
 awkward word order. 935 si grata attributed by
Lachmann and later editors to *Naugerius*, but *Pius* had
 already noted " alii. Nam si grata fuit ": gratis *OQ*

^a Cf. 4.916-918.

have laid themselves down at table and hold goblets in their hands and shade their brows with garlands, that they often say from their hearts : " Short enjoyment is given to poor mankind ; soon it will be gone, and none will ever be able to recall it." As if after death their chief trouble will be to be miserably consumed and parched by a burning thirst, or a craving possess them for some other thing ! In fact, no one feels the want of himself and his life when both mind and body alike are quiet in sleep ; for all we care that sleep might be everlasting, and no craving for ourselves touches us at all ; and yet those first-beginnings dispersed through our body are not straying far from sense-giving motions at the time when a man, startled from sleep, gathers himself together.^a Death therefore must be thought of much less moment to us, if there can be anything less than what we see to be nothing ; for a greater dispersion of the disturbed matter takes place at death, and no one awakens and rises whom the cold stoppage of life has once overtaken.

⁹³¹ Besides, suppose that nature should suddenly utter a voice, and thus take her turn to upbraid one of us^b : " What ails you so, O mortal, to indulge overmuch in sickly lamentations ? Why do you groan aloud and weep at death ? For if your former life now past has been to your liking, if it is not true

^b By the skilful rhetorical device of personifying Nature and making her deliver the sharp rebukes that follow (933-949, 955-962), *Lucr.* tactfully avoids offending *Memmius* and his other readers. Later (1024-1052) he puts a harsh rebuke into the mouth of *Memmius* himself—another effective device whereby he avoids giving offence. Cf. *B. Farrington*, *Anales de Filologia Clásica* 7 (1959) 29-30.

lament the loss of sensual pleasures after death, forgetting that in death there is no longing for such pleasures or anything else.

Death is of less concern to us than sleep.

Nature might thus reproach the discontented :

" If you have been happy, why

et non omnia pertusum congesta quasi in vas
 commoda perfluxere atque ingrata interiere,
 cur non ut plenus vitae conviva recedis
 aequo animoque capis securam, stulte, quietem ?
 sin ea quae fructus cumque es periere profusa 940
 vitaeque in offensost, cur amplius addere quaeris,
 rursum quod pereat male et ingratum occidat omne,
 non potius vitae finem facis atque laboris ?
 nam tibi praeterea quod machiner inveniamque,
 quod placeat, nil est : eadem sunt omnia semper. 945
 si tibi non annis corpus iam marcet et artus
 confecti languent, eadem tamen omnia restant,
 omnia si perges vivendo vincere saecla,
 atque etiam potius, si numquam sis moriturus ” ;
 quid respondemus, nisi iustam intendere litem 950
 naturam et veram verbis exponere causam ?

955 Grandior hic vero si iam seniorque queratur
 952 atque obitum lamentetur miser amplius aequo,
 953 non merito inclamet magis et voce increpet acri ?
 954 “ aufer abhinc lacrimas, baratre, et compece que-
 rellass ! 955

omnia perfunctus vitae praemia marces ;
 sed quia semper aves quod abest, praesentia temnis,
 imperfecta tibi elapsast ingrataque vita,
 et nec opinanti mors ad caput adstitit ante
 quam satur ac plenus possis discedere rerum. 960

941 offensost *Q*, *O corr. by Dungal*, *P*: offensast *Codex Musaei Britannici (Harleian 2554) (cf. Cicero, Att. 9.2a.2)*: offensust *Lambinus* 948 perges *OQP*: pergas *Lambinus (1570)* 955 baratre *OQ*: balatro *anonymous critics in Turnebus, Adversaria 20.26, Heinsius on Ovid, Am. 3.3.1*

^a An allusion to the story of the Danaids. *Cf.* 1003-1010 ; also 6.20-21.

^b *Cf.* Diogenes of Oenoanda fr. 47.III.10-IV.2 Smith: “How 262

that all your blessings have been gathered as it were into a riddled jar,^a and have run through and been lost without gratification, why not, like a banqueter fed full of life, withdraw with contentment and rest in peace, you fool ? But if all that you have enjoyed has been spilt out and lost, and if you have a grudge at life, why seek to add more, only to be miserably lost again and to perish wholly without gratification ? Why not rather make an end of life and trouble ? For there is nothing else I can devise and invent to please you : everything is always the same. If your body is not already withering with years and your limbs worn out and languid, yet everything remains the same, even if you shall go on to outlive all generations, and even more if you should be destined never to die.” What have we to answer, but that nature urges against us a just charge and in her plea sets forth a true case ?

⁹⁵² But if in this regard some older man, well stricken in years, should make complaint, wretchedly bewailing his death more than he ought, would she not have reason to cry more loudly still and to upbraid in bitter words ? ^b “ Away, away with your tears, ruffian, check your lamentations ! All life’s prizes you have enjoyed and now you wither. But because you always crave what you have not, and contemn what you have, life has slipped by for you incomplete and ungratifying, and death stands by your head unexpected, before you can retire glutted and full of the feast. But now in any case dismiss

not depart with contentment ?

If not, why seek to prolong life ?

Nothing new awaits you.”

An old man lamenting is still more ugly.

can we justly bring a complaint against nature, if someone who has lived for so many years and months and days [comes to his last day] ?”

nunc aliena tua tamen aetate omnia mitte
aequo animoque agedum iam annis concede : neces-
sest."

iure, ut opinor, agat, iure increpet inciletque ;
cedit enim rerum novitate extrusa vetustas
semper, et ex aliis aliud reparare necessest ; 965
nec quisquam in barathrum nec Tartara deditur atra :
materies opus est ut crescant postera saecula,
quae tamen omnia te vita perfuncta sequentur ;
nec minus ergo ante haec quam tu cecidere, cadent-
que.

sic aliud ex alio numquam desistet oriri 970
vitaque mancipio nulli datur, omnibus usu.
respice item quam nil ad nos anteacta vetustas
temporis aeterni fuerit, quam nascimur ante.
hoc igitur speculum nobis natura futuri
temporis exponit post mortem denique nostram. 975
numquid ibi horribile apparet ? num triste videtur
quicquam ? non omni somno securius exstat ?

Atque ea nimirum quaecumque Acherunte pro-
fundo
prodita sunt esse, in vita sunt omnia nobis.
nec miser impendens magnum timet aere saxum 980
Tantalus, ut famast, cassa formidine torpens ;

962 agedum *ABF*: agerum *OQ*: age nunc *Merrill* (1917)
tentatively iam annis (annis *Merrill*) *A. Krokiewicz*,
Lucr. III, *Lublin* (1921), *A. Traina*, *Maia* 5 (1952) 283-287
(cf. *M. F. Smith*, *CR N.S.* 16 [1966] 264): magnis *OQP*:
iam aliis *Marullus*: gnatis *Bernays*

^a Cf. 1.263-264, 2.71-79.

^b *mancipium* is the legal process by which the full ownership of real property and slaves or animals is transferred: *usus*, the right of use, usufruct.

all that does not befit your age, and with equanimity, come now, yield to your years : thus it must be." She would be right, I think, to bring her charge, right to upbraid and reproach. For the old order always passes, thrust out by the new, and one thing has to be made afresh from others ; but no one is delivered into the pit of black Tartarus : matter is wanted, that coming generations may grow ^a; and yet they all, when their life is done, will follow you, and so, no less than you, these generations have passed away before now, and will continue to pass away. So one thing will never cease to arise from another, and no man possesses life in freehold—all as tenants.^b Look back also and see how the ages of everlasting time past before we were born have been to us nothing. This therefore is a mirror which nature holds up to us, showing the time to come after we at length shall die. Is there anything horrible in that ? Is there anything gloomy ? Is it not more peaceful than any sleep ?

He should depart

and make room for others.

There is no fear in the thought of death.

⁹⁷⁸ And assuredly whatsoever things are fabled to exist in deep Acheron, these all exist for us in this life. There is no wretched Tantalus,^c as the story goes, fearing the great rock that hangs over him in

No Tantalus is tormented

^c According to Homer, Tantalus' punishment was to stand up to his chin in water which receded whenever he stooped to drink, and to be surrounded by fruit-laden branches which, whenever he tried to pluck the fruit, the wind blew out of reach. However, because it better suits his allegorizing purpose (see especially D. West, *The Imagery and Poetry of Lucretius* 98), *Lucr.* adopts the version of Tantalus' punishment favoured by the Greek lyric and tragic poets (cf. Cicero, *Fin.* 1.18.60, *Tusc. Disp.* 4.16.35). For Diogenes of Oenoanda's scorn for the Tityoses and Tantaluses in Hades, see on 876.

sed magis in vita divom metus urget inanis
mortalis, casumque timent quem cuique ferat fors.

Nec Tityon volucres ineunt Acherunte iacentem
nec quod sub magno scrutentur pectore quicquam 985
perpetuam aetatem possunt reperire profecto.
quamlibet immani proiectu corporis exstet,
qui non sola novem dispessis iugera membris
obtineat, sed qui terrai totius orbem,
non tamen aeternum poterit perferre dolorem 990
nec praebere cibum proprio de corpore semper.
sed Tityos nobis hic est, in amore iacentem
quem volucres lacerant atque exest anxius angor
aut alia quavis scindunt cuppedine curae.

Sisyphus in vita quoque nobis ante oculos est, 995
qui petere a populo fasces saevaeque secures
imbibit et semper victus tristisque recedit.
nam petere imperium quod inanest nec datur um-
quam,
atque in eo semper durum sufferre laborem,
hoc est adverso nixantem trudere monte 1000
saxum quod tamen e summo iam vertice rursum
volvitur et plani raptim petit aequora campi.

Deinde animi ingratham naturam pascere semper
atque explere bonis rebus satiareque numquam—

^a Lucr. exploits the double meaning of *casum* = "mis-
chance" (figurative) and "fall" (literal, in reference to the
stone threatening Tantalus). Cf. 992-994, 1002.

^b A giant who tried to rape Leto. His punishment was to
have two vultures eternally feeding on his liver. Lucr.
follows the account of Homer, *Od.* 11.576-581.

^c The repetition of *iacentem* from 984 is deliberate.

^d Kenney has rightly argued that *volucres*, which in 984
is "birds," here (993) refers to the *Cupidines* or "Loves."
See his commentary and, for a fuller discussion, *PCPS* N.S.
16 (1970) 44-47. However, it should be noted that the
meaning had already been understood by Pius, who com-

the air and frozen with vain terror; rather it is in
this life that the fear of gods oppresses mortals with-
out cause, and the fall ^a they fear is any that chance
may bring.

⁹⁸⁴ No Tityos ^b lying in Acheron is rummaged by
winged creatures, nor assuredly can they find in
eternity anything at all to dig for deep in that vast
breast. Wide as you will, let that huge body be
spread forth, enough to cover not nine acres only
with the outstretched limbs, but the whole globe of
earth: yet he will not be able to bear pain for ever,
nor to provide food from his own body always. But
Tityos is here among us, the man who, as he lies ^c in
love, is torn by winged creatures ^d and devoured by
agonizing anguish or rent by anxieties through some
other passion.

⁹⁹⁵ Sisyphus ^e also appears in this life before our
eyes, athirst to solicit from the people the licitor's
rods and cruel axes, and always retiring defeated
and full of gloom: for to solicit power, an empty
thing, which is never granted, and always to endure
hard toil in the pursuit of it, this is to push labori-
ously up a hill the rock that still rolls down again
from the very top, and in a rush recovers the levels
of the open plain.^f

¹⁰⁰³ Then to be always feeding an ungrateful mind, ^{the}
yet never able to fill and satisfy it with good things— ^{Danaids}
^{are those}

ments on *volucres*: "curae et alati cupidines."

^g For the punishment of Sisyphus, cf. Homer, *Od.* 11.593-
600, whom Lucr. follows.

^f Again (cf. 983, 992-994) a double meaning: *plani*
raptim petit aequora campi suggests the candidate (*petitor*)
hurrying back to the Campus Martius to seek re-election
(see D. West, *The Imagery and Poetry of Lucretius* 102). For the
likelihood that a passage about Ixion has dropped out after 1002,
see esp. H. D. Jocelyn, *Acta Classica* 29 (1986) 49-51.

quod faciunt nobis annorum tempora, circum 1005
 cum redeunt fetusque ferunt variosque lepores,
 nec tamen explemur vitai fructibus unquam—
 hoc, ut opinor, id est, aevo florentem puellas
 quod memorant laticem pertusum congerere in vas,
 quod tamen expleri nulla ratione potestur. 1010

Cerberus et Furiae iam vero et lucis egestas,
 Tartarus horriferos eructans faucibus aestus—
 qui neque sunt usquam nec possunt esse profecto.
 sed metus in vita poenarum pro male factis
 est insignibus insignis, scelerisque luella— 1015
 carcer et horribilis de saxo iactu' deorsum,
 verbera carnifices robur pix lammina taedae ;
 quae tamen etsi absunt, at mens sibi conscia factis
 praemetuens adhibet stimulos torretque flagellis,
 nec videt interea qui terminus esse malorum 1020
 possit nec quae sit poenarum denique finis,
 atque eadem metuit magis haec ne in morte graves-
 cant.

hic Acherusia fit stultorum denique vita.

Hoc etiam tibi tute interdum dicere possis :
 "lumina sis oculis etiam bonus Ancu' reliquit, 1025
 qui melior multis quam tu fuit, improbe, rebus.
 inde alii multi reges rerumque potentes

1011 *Munro assumes a lacuna after this verse, and Bailey once argued for a lacuna after 1012. For the probability that some lines are indeed lost, see H. D. Jocelyn, Acta Classica 29 (1986) 47-49* 1016 iactu' deorsum *Lambinus: iactus eorum OQP: iactu' reorum Heinsius* 1018 factis *OQP: facti ed. Aldina, followed recently by Kenney—perhaps rightly, but see Ernout-Robin*

^a The Danaids.

^b The monstrous watch-dog at the entrance to the lower world.

^c *robur* almost certainly refers to the Tullianum, the execution-cell of the prison at Rome. The most notable

as the seasons of the year do for us when they come round bringing their fruits and manifold charms, yet we are never filled with the fruits of life—this, I think, is meant by the tale of the damsels ^a in the flower of their age pouring water into a riddled urn, which, for all their trying, can never be filled.

¹⁰¹¹ Cerberus ^b also and the Furies and the withholding of light, and Tartarus belching horrible fires from his throat—these neither exist anywhere nor in truth can exist. But in this life there is fear of punishment for evil deeds, fear as notorious as the deeds are notorious, and atonement for crime—prison, and the horrible casting down from the Rock, stripes, executioners, condemned cell, ^c pitch, red-hot plates, firebrands ; and even if these are absent, yet the guilty conscience, terrified before anything can come to pass, applies the goad and scorches itself with whips, and meanwhile does not see where can be the end to its miseries or the final limit to its punishment, and fears that these same afflictions may become heavier after death. The fool's life at length becomes a hell on earth.

¹⁰²⁴ This thought also you may at times address to yourself ^d : " Even good Ancus has closed his eyes on the light, ^e who was better than you, unconscionable man, in many ways. ^f After him many other prisoners executed there were Jugurtha (104 B.C.) and the Catilinarian conspirators (63 B.C.). *saxum* (1016) is the Tarpeian Rock on the Capitol.

^a See note on 932.

^e A quotation from Ennius, *Ann.* 149V : *postquam lumina sis oculis bonus Ancu' reliquit*. According to tradition, Ancus Marcius was the fourth king of Rome.

^f Cf. Homer, *Il.* 21.107 : " Even Patroclus died, and he was a far better man than you."

occiderunt, magnis qui gentibus imperitarunt.
 ille quoque ipse, viam qui quondam per mare magnum
 stravit iterque dedit legionibus ire per altum 1030
 ac pedibus salsas docuit super ire lacunas
 et contempsit equis insultans murmura ponti,
 lumine adempto animam moribundo corpore fudit.
 Scipiadas, belli fulmen, Carthaginis horror,
 ossa dedit terrae proinde ac famul infimus esset. 1035
 adde repertoires doctrinarum atque leporum,
 adde Heliconiadum comites, quorum unus Homerus
 sceptrata potitus eadem aliis sopitu' quietest.
 denique Democritum postquam matura vetustas
 admonuit memores motus languescere mentis, 1040
 sponte sua leto caput obuius obtulit ipse.
 ipse Epicurus obit decurso lumine vitae,
 qui genus humanum ingenio superavit et omnis
 restinxit, stellas exortus ut aetherius sol.
 tu vero dubitabis et indignabere obire, 1045
 mortua cui vita est prope iam vivo atque videnti,
 qui somno partem maiorem conteris aevi
 et vigilans stertis nec somnia cernere cessas
 sollicitamque geris cassa formidine mentem

1042 lumine *OQP*: limite *Pius* (notes) 1044 aetherius *Lac-*
tantius, *Div. Inst.* 3.17 28 (cf. 5.215, 267, 281, 389): haerius *O*:
 aeriis *Q*, *O corr.*, *P*, *Wakefield*, *Merrill* (1917)

^a Xerxes, who in 480 B.C. built a pontoon bridge over the Hellespont.

^b Probably an imitation of Ennius (the end of 1035 is from *Ann.* 313V). Munro thinks that the comparison may have been suggested by a false derivation of Scipio from *σκηπτός* (= "thunderbolt"). The Scipio to whom Lucr. refers is the elder Africanus, who defeated Hannibal at Zama in 202 B.C.

^c The Muses.

^d Lucr. appropriately uses the language of an atomist to
 270

kings and potentates have fallen, who ruled over kings,
 great nations. Even he himself,^a who once paved a
 road across the great sea for his armies to pass over
 the deep, and taught them to walk on foot over the
 salt bays, and despised the roarings of the ocean as
 he trampled upon it with his cavalry, he also was
 robbed of the light and poured his spirit out of a
 dying body. The son of the house of Scipio, thunder- warriors,
 bolt of war,^b terror of Carthage, gave his bones to
 the earth as though he had been the humblest menial.
 Add the inventors in the worlds of science and beauty, wise men,
 add the companions of the Heliconian maids,^c whose poets,
 one and only king, Homer, has been laid to rest in
 the same sleep with all the others. Democritus philo-
 sopher:
 again, when ripe old age warned him that the record-
 ing motions of his mind^d were beginning to fail, of
 his own free will himself offered his head to death.
 Epicurus himself died when the light of life had run
 its course,^e he whose intellect surpassed humanity,
 who quenched the light of all as the risen sun of
 heaven quenches the stars. And will you hesitate, will you
 fear to die.
 will you be indignant to die? You whose life is now
 all but dead though you live and see, you who waste
 the greater part of your time in sleep, who snore
 open-eyed and never cease to see dreams, who bear
 with you a mind plagued with vain terror, who often
 describe the failing powers of Democritus, who is said to have
 starved himself to death (cf. 1041).

^e The only mention of Epicurus' name in the entire poem. The editors point out that *decurso lumine* is a mixture of two metaphors, *decurso spatio* and *extincto lumine*. The combination results naturally from the conception of the sun (to which Epicurus is compared) as both lamp and chariot(eer): cf. e.g. 5.397-404. 1043-1044 almost certainly owe something to the epigram on Homer by Leonidas of Tarentum (*Anth. Pal.* 9.24)—an epigram of which the reference to Homer in 1037 perhaps put Lucr. in mind.

nec reperire potes tibi quid sit saepe mali, cum 1050
ebrius urgeris multis miser undique curis
atque animi incerto fluitans errore vagaris ? ”

Si possent homines, proinde ac sentire videntur
pondus inesse animo quod se gravitate fatiget,
e quibus id fiat causis quoque noscere et unde 1055
tanta mali tamquam moles in pectore constet,
haud ita vitam agerent, ut nunc plerumque videmus
quid sibi quisque velit nescire et quaerere semper
commutare locum, quasi onus deponere possit.
exit saepe foras magnis ex aedibus ille, 1060
esse domi quem pertaesumst, subitoque revertit,
quippe foris nilo melius qui sentiat esse.
currit agens mannos ad villam praecipitanter,
auxilium tectis quasi ferre ardentibus instans ;
oscitat extemplo, tetigit cum limina villae, 1065
aut abit in somnum gravis atque oblivia quaerit,
aut etiam properans urbem petit atque revisit.
hoc se quisque modo fugit, at quem scilicet, ut fit,
effugere haud potis est, ingratis haeret et odit,
propterea morbi quia causam non tenet aeger ; 1070
quam bene si videat, iam rebus quisque relictis
naturam primum studeat cognoscere rerum,
temporis aeterni quoniam, non unius horae,

1052 animi *Lambinus* : animo *OQP* 1061 revertit
Politian : omitted by *OQP*

^a With this passage *Lambinus* (*Bailey* credits *Ernout* with the quotation) compares *Ennius*, *Sc.* 234-241V.

^b Noted for their speed. With this whole passage *cf.* *Matthew Arnold*, *Obermann Once More* 97-104: “ In his 272

cannot discover what is amiss with you, when you are
oppressed, poor drunken wretch, by a host of cares
on all sides, while you wander drifting on the way-
ward tides of impulse ! ”

1053 Just as men evidently feel that there is a Men are restless and weary,
weight on their minds which wearies with its op-
pression, if so they could also recognize from what
causes it comes, and what makes so great a mountain
of misery to lie on their hearts, they would not so
live their lives as now we generally see them do, each
ignorant what he wants,^a each seeking always to
change his place as if he could drop his burden. The
man who has been bored to death at home often goes
forth from his great mansion, and then suddenly
returns because he feels himself no better abroad.
Off he courses, driving his Gallic ponies^b to his
country house in headlong haste, as if he were bring-
ing urgent help to a house on fire. The moment he
has reached the threshold of the house, he yawns, or
falls into heavy sleep and seeks oblivion, or even
makes haste to get back and see the city again.
Thus each man tries to flee from himself, but to that and try to flee from themselves;
self, from which of course he can never escape, he
clings against his will, and hates it, because he is a
sick man that does not know the cause of his com-
plaint ; for could he see that well, at once each
would throw his business aside and first study to
learn the nature of things, since the matter in doubt but only philosophy can help them.
is not his state for one hour, but for eternity, in what

cool hall, with haggard eyes, | The Roman noble lay ; | He
drove abroad in furious guise, | Along the Appian way. | He
made a feast, drunk fierce and fast, | And crown'd his hair
with flowers— | No easier nor no quicker pass'd | The im-
practicable hours ”

ambigitur status, in quo sit mortalibus omnis 1074
aetas, post mortem quae restat cumque, manenda.

Denique tanto opere in dubiis trepidare periclis
quae mala nos subigit vitai tanta cupido?
certa quidem finis vitae mortalibus adstat,
nec devitari letum pote quin obeamus.
praeterea versamur ibidem atque insumus usque,
nec nova vivendo procuditur ulla voluptas; 1081
sed dum abest quod avemus, id exsuperare videtur
cetera; post aliud, cum contigit illud, avemus,
et sitis aequa tenet vitai semper hiantis.
posteraque in dubiis fortunam quam vehat aetas,
quidve ferat nobis casus quive exitus instet. 1086
nec prorsum vitam ducendo demimus hilum
tempore de mortis nec delibare valemus,
quo minus esse diu possimus forte perempti.
proinde licet quot vis vivendo condere saecula: 1090
mors aeterna tamen nilo minus illa manebit,
nec minus ille diu iam non erit, ex hodierno
lumine qui finem vitai fecit, et ille,
mensibus atque annis qui multis occidit ante.

1075 manenda *Lambinus*: manendo *OQP* 1078 certa
quidem *Avancius* (*cf. I.107*): certe equidem *OQP* 1090
condere *OP*: ducere *Q*

state mortals must expect all time to be passed which
remains after death.

1076 Besides, what is this great and evil lust of life
that drives us to be so greatly agitated amidst doubt
and peril? There is an end fixed for the life of
mortals, and death cannot be avoided, but die we
must. Again we move and have our being always
amidst the same things, and by living we cannot
forge for ourselves any new pleasure; but while we
have not what we crave, that seems to surpass all
else; afterwards, when we have attained that, we
crave something else; one unchanging thirst of life
fills us and our mouths are for ever agape. And it is
uncertain what fortune the next years may bring,
what chance has in store, what end awaits us. And
by protracting life we do not deduct one jot from
the duration of death, nor are we able to diminish
that, so as to leave perhaps a shorter time after our
taking off. Therefore you may live to complete as
many generations as you will: nevertheless that
everlasting death will still be waiting, and no less
long a time will he be no more, who has made an
end of life with to-day's sun, than he who fell many
a month and year before.

What is this
craving for
life?
There is
nothing
new to
expect,
and nothing
can
diminish
the time
when we
shall be no
more.

LIBER QUARTUS

AVIA Pieridum peragro loca nullius ante
 trita solo. iuvat integros accedere fontis
 atque haurire, iuvatque novos decerpere flores
 insignemque meo capiti petere inde coronam 5
 unde prius nulli velarint tempora Musae :
 primum quod magnis doceo de rebus et artis
 religionum animum nodis exsolvere pergo,
 deinde quod obscura de re tam lucida pango
 carmina, musaeo contingens cuncta lepore.
 id quoque enim non ab nulla ratione videtur ; 10
 nam veluti pueris absinthia taetra medentes
 cum dare conantur, prius oras pocula circum
 contingunt mellis dulci flavoque liquore,
 ut puerorum aetas inprovida ludificetur 15
 laborum tenuis, interea perpetet amarum
 absinthii laticem deceptaque non capiatur,
 sed potius tali pacto recreata valescat,
 sic ego nunc, quoniam haec ratio plerumque videtur
 tristior esse quibus non est tractata, retroque
 vulgus abhorret ab hac, volui tibi suaviloquenti 20
 carmine Pierio rationem exponere nostram
 et quasi musaeo dulci contingere melle,
 si tibi forte animum tali ratione tenere

8 pango (*cf.* 1.933) *ABCF*: pando *OQL*, *Wakefield* 17
 pacto *Heinsius* in 1.942, *Lachmann*: atacto *OQ*: attactu *Q*
corr., *ABF*: a tactu *L*: tactu *Lambinus* (1570): factu
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BOOK 4

A PATHLESS country of the Pierides I traverse, where
 no other foot has ever trod. I love to approach
 virgin springs, and there to drink ; I love to pluck
 new flowers, and to seek an illustrious chaplet for my
 head from fields whence before this the Muses have
 crowned the brows of none : first because my teach-
 ing is of high matters, and I proceed to set free the
 mind from the close knots of superstition ; next
 because the subject is so dark and the verses I write
 so clear, touching every part with the Muses' grace.
 For even this seems not to be out of place ; but as
 with children, when physicians try to administer
 rank wormwood, they first touch the rim of the cups
 all about with the sweet yellow fluid of honey, that
 unthinking childhood may be deluded as far as the
 lips, and meanwhile that they may drink up the
 bitter juice of wormwood, and though beguiled be
 not betrayed, but rather by such means be restored
 and regain health, so now do I : since this doctrine
 commonly seems somewhat harsh to those who have
 not used it, and the people shrink back from it, I
 have chosen to set forth my doctrine to you in sweet-
 speaking Pierian song, and as it were to touch it with
 the Muses' delicious honey, if by chance in such a

Introduc-
 tion: the
 poet's task.

(*OQGP* in 1.942) *Lambinus* (1563–64, 1565), *Gifanius*, *Wake-*
field (notes), *Martin*

versibus in nostris possem, dum percipis omnem
naturam rerum ac persentis utilitatem. 25

Atque animi quoniam docui natura quid esset
et quibus e rebus cum corpore compta vigeret
quove modo distracta rediret in ordia prima,
nunc agere incipiam tibi, quod vementer ad has res
attinet, esse ea quae rerum simulacra vocamus ; 30
quae, quasi membranae summo de corpore rerum
dereptae, volitant utroque citroque per auras,
atque eadem nobis vigilantibus obvia mentes
terrificant atque in somnis, cum saepe figuras
contuimur miras simulacraque luce carentum, 35
quae nos horrifice languentis saepe sopore
excierunt ; ne forte animas Acherunte reamur
effugere aut umbras inter vivos volitare
neve aliquid nostri post mortem posse relinqui,
cum corpus simul atque animi natura preempta 40
in sua discessum dederint primordia quaeque.
dico igitur rerum effigias tenuisque figuras
mittier ab rebus summo de corpore eorum ;
id licet hinc quamvis hebeti cognoscere corde.

43 eorum (cf. 101, 1.450) OQABL : rerum (cf. 64) Lachmann

^a 1-25 = 1.926-950, except for minor variations in 11, 24, 25 and possibly (see critical notes) 8, 17.

^b *simulacra* is Lucr.'s most common term for what Epicurus calls εἰδωλα ("images") or τύποι ("impressions"), and it is indeed a literal translation of εἰδωλα. Other words which Lucr. uses less frequently are *imagines*, *effigiae*, *figurae*. The *simulacra*, as he is going to explain, are fine atomic films constantly and rapidly discharged from the surface of all things. When the films, which are similar in shape to the objects from which they emanate, impinge on our eyes, they cause vision ; when they enter our minds, they

way I might engage your mind in my verses, while you are learning to understand the whole nature of things and perceive its utility.^a

²⁶ Now, since I have explained what is the nature of the mind, from what elements it takes its strength when combined with the body, and how when torn away from the body it returns to its first elements, you shall now see me begin to deal with what is of high importance for this subject, and to show that there exist what we call images^b of things ; which, like films^c drawn from the outermost surface of things, flit about hither and thither through the air ; it is these same that, encountering us in wakeful hours, terrify our minds, as also in sleep, when we often behold wonderful shapes and images of the dead, which have often aroused us in horror while we lay languid in sleep^a ; lest by chance we should think that spirits escape from Acheron or ghosts flit about amongst the living, or that anything of us can be left after death, when body and mind both taken off together have dissolved abroad, each into its own first-beginnings. I say, therefore, that semblances and thin shapes of things are thrown off from their outer surface. This can be recognized by the dullest brain from what follows.

I. The cause of Vision.

Images or films are thrown off from the surface of things.

cause thoughts or dreams, according to whether we are awake or asleep. Cf. especially Epicurus, *Ep. ad Hdt.* 46-52, Diogenes of Oenoanda fr. 9 Smith, Usener 317-319.

^c *membranae* (cf. 51, 59, 95) is no doubt a translation of ὑμέτες, which, though it is not found in Epicurus' extant works, occurs in Diogenes of Oenoanda fr. 10.V.3 Smith.

^a Cf. 1.132-135.

[Sed quoniam docui cunctarum exordia rerum 45
 qualia sint et quam variis distantia formis
 sponte sua volitent aeterno percita motu
 quoque modo possit res ex his quaeque creari,
 nunc agere incipiam tibi, quod vementer ad has res
 attinet, esse ea quae rerum simulacra vocamus, 50
 quae quasi membranae vel cortex nominatandast,
 quod speciem ac formam similem gerit eius imago
 cuiuscumque cluet de corpore fusa vagari.]

Principio quoniam mittunt in rebus apertis
 corpora res multae, partim diffusa solute, 55
 robora ceu fumum mittunt ignesque vaporem,
 et partim contexta magis condensaque, ut olim
 cum teretis ponunt tunicas aestate cicadae,
 et vituli cum membranas de corpore summo
 nascentes mittunt, et item cum lubrica serpens 60
 exiit in spinis vestem (nam saepe videmus
 illorum spoliis vepres volitantibus auctas)—
 quae quoniam fiunt, tenuis quoque debet imago
 ab rebus mitti summo de corpore rerum.
 nam cur illa cadant magis ab rebusque recedant 65
 quam quae tenuia sunt, hiscendist nulla potestas,
 praesertim cum sint in summis corpora rebus
 multa minuta, iaci quae possint ordine eodem
 quo fuerint et formai servare figuram, 70
 et multo citius, quanto minus indupediri

^a 45-53 are bracketed in both text and translation, because it is certain that Lucr. did not intend to retain them. They were evidently written at a time when his plan was that Book 4 should follow Book 2, for 45-48, which are, except for three minor variations, identical to 3.31-34, refer to the subject matter of Books 1-2. When he changed his plan, he wrote a new passage (26-44) in which he referred to the subject matter of Book 3 and included two lines (29-30) from the

⁴⁵ [But ^a since I have shown of what kind are the beginnings of all things, and in how varying and different shapes they fly of their own accord driven in everlasting motion, and how all things can be produced from these, you shall now see me begin to deal with what is of high importance for this subject, and to show that there exist what we term images of things, which are to be called as it were their films or bark, because the image bears a look and shape like the object, whatever it is, from whose body it is shed to go on its way.]

⁵⁴ In the first place, since amongst visible things many throw off bodies, sometimes loosely diffused abroad, as wood throws off smoke and fire heat, sometimes more close-knit and condensed, as often when cicadas drop their neat coats in summer, and when calves at birth throw off the caul from their outermost surface, and also when the slippery serpent casts off his vesture amongst the thorns (for we often see the brambles enriched with their flying spoils): since these things happen, a thin image must also be thrown off from things, from the outermost surface of things. Why thin films should not fall and be thrown off from things as much as those others,^b no one could whisper a reason, especially since there are numerous minute bodies on the outermost side of things, which can be cast off in the same arrangement they were in before, preserving the shape of the object, and far more quickly, as, being few ^c and original passage (49-50). (*Cf. J. Mewaldt, Hermes* 43 [1908] 286-295.)

^b If coarse things are thrown off, as they are, there is the more reason to suppose that fine films are discharged.

^c Few in comparison with the many that compose a solid mass like a cast-off skin.

Arguments for the existence of the films: (1) smoke and heat are discharged from certain things, (2) crickets and snakes cast their skins, calves their caul, from the surface; and a thin external film would meet with less resistance.

pauca queunt et quae sunt prima fronte locata.
 nam certe iacere ac largiri multa videmus,
 non solum ex alto penitusque, ut diximus ante,
 verum de summis ipsum quoque saepe colorem. 75
 et volgo faciunt id lutea russaque vela
 et ferrugina, cum magnis intenta theatris
 per malos volgata trabesque trementia flutant ;
 namque ibi consessum caveai subter et omnem
 scaenai speciem †patrum matrumque deorum†
 inficiunt coguntque suo fluitare colore. 80
 et quanto circum mage sunt inclusa theatri
 moenia, tam magis haec intus perfusa lepore
 omnia conident correpta luce diei.
 ergo lintea de summo cum corpore fucum
 mittunt, effigias quoque debent mittere tenvis 85
 res quaeque, ex summo quoniam iaculantur utraque.
 sunt igitur iam formarum vestigia certa
 quae volgo volitant subtili praedita filo,
 nec singillatim possunt secreta videri.

Praeterea omnis odor fumus vapor atque aliae res
 consimiles ideo diffusae e rebus abundant, 91
 ex alto quia dum veniunt intrinsecus ortae,
 scinduntur per iter flexum, nec recta viarum
 ostia sunt qua contendant exire coortae.

71 quae sunt *Lachmann*: sunt *OQP*: sunt in (*cf.* 97) *Q*
corr., *AB* 79 patrum matrumque deorum (*or* deo-
 rumque) *OQP*: patrum coetumque decorum *Munro*:
 patrum turbamque (*earlier* partemque) decoram *M. F.*
Smith: personarumque decorem *K. Müller*. *Many other*
suggestions have been made 92 intrinsecus *Lambinus*:
 extrinsecus *OQP* (*for the corruption cf.* 6.1099)

^a The reference is to 56, where *Lucr.* mentions smoke and heat, but not until 90-94 does he explain that they come from deep inside things.

stationed in the front rank, they are less able to be impeded. For assuredly we see many things cast off particles with lavish bounty, not only from the depths and from within (as we said before)^a but from the outermost surface, amongst others colour not seldom. This is often done by yellow and red and dark purple awnings, when outspread in the public view over a great theatre^b upon posts and beams they tremble and flutter; for then they dye, and force to flutter in their own colour, the assembly in the great hollow below, and all the display of the stage ; and the more the walls of the theatre are enclosed all round, the more all within laughs in the flood of beauty when the light of day is thus confined. Therefore, since canvas throws off colour from its outermost surface, everything else must also cast off thin semblances, because in each case they throw off from the outermost surface. There are therefore fixed outlines of shapes and of finest texture which flit about everywhere, but singly and separately cannot be seen.

⁹⁰ Besides, all smell, smoke, heat and other such things stream away from objects all diffused abroad, for this reason, because they arise from the depths, and as they come forth they are torn up in their tortuous course, there being no direct openings to the paths to let them push out together when they have

^b Rome's first stone theatre was constructed in 55 B.C., so that *Lucretius* is presumably referring to temporary theatres with wooden seats and stage. Awnings were first used in 78 B.C. Sockets for the masts that supported the awnings can still be seen in some Roman theatres. See now *R. Graefe, Vela erunt: die Zelttücher der römischen Theater und ähnlicher Anlagen*, Mainz (1979).

(3) Colour indeed we see to be thrown off from the surface;

just as we assume things in general do.

at contra tenuis summi membrana coloris 95
cum iacitur, nil est quod eam discernere possit,
in promptu quoniam est in prima fronte locata.

Postremo speculis in aqua splendoreque in omni
quaecumque apparent nobis simulacra, necessest,
quandoquidem simili specie sunt praedita rerum, 100
ex ea imaginibus missis consistere eorum. 101
sunt igitur tenues formae rerum similesque 104
effigiae, singillatim quas cernere nemo 105
cum possit, tamen adsiduo crebroque repulsu
reiectae reddunt speculorum ex aequore visum,
nec ratione alia servari posse videntur,
tanto opere ut similes reddantur cuique figurae.

Nunc age quam tenui natura constet imago 110
percepe. et in primis, quoniam primordia tantum
sunt infra nostros sensus tantoque minora
quam quae primum oculi coeptant non posse tueri,
nunc tamen id quoque uti confirmem, exordia rerum
cunctarum quam sint subtilia percepe paucis. 115

Primum animalia sunt iam partim tantula, quorum
tertia pars nulla possit ratione videri.
horum intestinum quodvis quale esse putandumst ?
quid cordis globus aut oculi ? quid membra ? quid
artus ? 119
quantula sunt ? quid praeterea primordia quaeque

101 ex ea *H. Lotze* : ex *OQ* : ex in *H. Purmann* 102-
103 = 65-66, *excluded by all modern editors* 104 formae
rerum similesque *H. Purmann, Munro* : formarum dissi-
milesque *OQP* : formarum illis similesque *Lachmann*

^a The phenomenon of the mirror is introduced again in
150-167, 269-323. Cf. *Diogenes of Oenoanda fr. 9.I.4-12*
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gathered together. But contrariwise when a thin
film of surface colour is thrown off, there is nothing
to tear it up, since it lies in front and on the very
outside.

⁹⁸ Lastly, whatever similitudes we see in mirrors,^a (4) Mirrors
in water, in any bright surface, since they are pos- and the like
sessed of the same appearance as the things, must throw back
consist of images thrown off from those things, these films
There are therefore thin shapes and like semblances of unchanged.
things, which singly no one can perceive, yet being
flung back by incessant and unremitting repulsion
give back a vision from the surface of mirrors. Nor
does there seem to be any other way in which they
could be preserved so that figures so like each thing
should be given back.

¹¹⁰ Now listen and learn how thin the structure of ^{These}
this image is.^b And in the first place, since the first- images are
beginnings are so far below our senses, and so much unsur-
smaller than the point at which our eyes begin not- passed in
to be able to see, now to confirm this yet further, let fineness.
me explain in a few words how fine are the elements
of all things.

¹¹⁶ Firstly, there are some living creatures so small
that their third part cannot possibly be seen. What
must you suppose one of their guts is like ? the ball
of the heart, or the eyes ? the limbs and members ?
How small are they ? What further of the first-

Smith: "[And] often mirrors too will be my witnesses [that
likenesses] and appearances are real [entities]. For what I say
will certainly not be denied at all by the reflection which will give
supporting evidence on oath in the mirrors."

^b For the unsurpassed fineness of the images, cf. *Epicurus*,
Ep. ad Hdt. 47.

unde anima atque animi constet natura necessumst ?
nonne vides quam sint subtilia quamque minuta ?

Praeterea quaecumque suo de corpore odorem
expirant acrem, panaces absinthia taetra
habrotonique graves et tristia centaurea, 125
quorum unum quidvis leviter si forte duobus

quin potius noscas rerum simulacra vagari
multa modis multis nulla vi cassaque sensu ?

Sed ne forte putes ea demum sola vagari,
quaecumque ab rebus rerum simulacra recedunt, 130
sunt etiam quae sponte sua gignuntur et ipsa
constituuntur in hoc caelo qui dicitur aer,
135 quae multis formata modis sublimis feruntur ;
133 ut nubes facile interdum concresecere in alto
134 cernimus et mundi speciem violare serenam, 135
aera mulcentes motu ; nam saepe Gigantum
ora volare videntur et umbram ducere late,
interdum magni montes avolsaque saxa
montibus anteire et solem succedere praeter,
inde alios trahere atque inducere belua nimbos. 140
nec speciem mutare suam liquentia cessant
et cuiusque modi formarum vertere in oras.

126 *A lacuna after this line noted with a cross by Q corr.*
See note on translation

^a After 126 a passage, probably of considerable length, is missing. The words in square brackets give the probable sense of the first part of the lost passage.

^b *e.g.* powers of speech or reasoning. Cf. Diogenes of Oenoanda fr. 10.IV.11-14 Smith.

^c *cassa ... sensu* (128) means not "unable to be perceived", but, as Pius says "*vacua et privata sensu*". 127-128 are the closing lines of an argument against the Democritean view that

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beginnings which must compose the nature of their mind and spirit ? Do you not see how fine and how minute they are ?

¹²³ Besides, anything that exhales a pungent smell from its body, heal-all, rank wormwood, strong southernwood, bitter centaur, any one of which, if by chance [you hold it] lightly between two [fingers, will impart its smell to them ; and yet the particles that cling to them are invisible.]^a

¹²⁷ . . . but that you should rather recognize that many similitudes are moving about in many ways, without any intrinsic quality^b and devoid of sensation.^c

¹²⁹ But that you may not think these images which pass off from things to be the only ones that move about, there are others which arise of themselves and are formed by themselves in this part of the sky called the air^d; which formed in many ways are carried aloft : as we sometimes see clouds quickly massing together on high and marring the serene face of the firmament, while they caress the air with their motion. For often giants' countenances appear to fly over and to draw their shadow afar, sometimes great mountains and rocks torn from the mountains to go before and to pass by the sun, after them some monster pulling and dragging other clouds ; they never cease to dissolve and change their shapes and turn themselves into the outlines of figures of every kind.

Other images are formed in the air,

as we see clouds taking the shape of monsters, or mountains, or the like.

simulacra are sentient and rational. Cf. Diogenes of Oenoanda fr. 10,43 Smith, and see A. Barigazzi, *Emerita* 49 (1981) 1-15.

^d The formation of compound images in the air is mentioned by Epicurus, *Ep. ad Hdt.* 48. The present passage should be compared with 732-748.

Nunc ea quam facili et celeri ratione genantur
perpetuoque fluant ab rebus lapsaque cedant

semper enim summum quicquid de rebus abundat 145
quod iaculentur. et hoc alias cum pervenit in res,
transit, ut in primis vitrum. sed ubi aspera saxa
aut in materiam ligni pervenit, ibi iam
scinditur, ut nullum simulacrum reddere possit.
at cum splendida quae constant opposta fuerunt 150
densaque, ut in primis speculum est, nil accidit
horum ;

nam neque, uti vitrum, possunt transire, neque autem
scindi ; quam meminit levor praestare salutem.
quapropter fit ut hinc nobis simulacra redundant.
et quamvis subito quovis in tempore quamque 155
rem contra speculum ponas, apparet imago ;
perpetuo fluere ut noscas e corpore summo
texturas rerum tenuisque figuras.
ergo multa brevi spatio simulacra genuntur,
ut merito celer his rebus dicatur origo. 160
et quasi multa brevi spatio summittere debet
lumina sol ut perpetuo sint omnia plena,
sic ab rebus item simili ratione necessest
temporis in puncto rerum simulacra ferantur
multa modis multis in cunctas undique partis, 165
quandoquidem speculum quocumque obvertimus oris,
res ibi respondent simili forma atque colore.

Praeterea modo cum fuerit liquidissima caeli

144 *A lacuna after this line noted by Lachmann. The missing verse was perhaps similar or identical to 2.66 expediā : tu te dictis praebere memento or 4.931 expediā : tu fac ne ventis verba profundam 147, 152 vitrum (cf. 601-602) Oppenrieder : vestem OQP, Brieger, Merrill, Diels, Martin, Ernout, Büchner, but see Bailey 166 oris (cf. 142) Q : omitted by O : illud P : omnis (cf. 242) Isaac*

¹⁴³ Now [let me tell you] how easily and quickly these images arise, constantly flowing off from things and gliding away.^a For there is always something streaming from the outermost surface of things for them to shoot off. And this when it meets some things passes through, particularly through glass. But when it meets rough stone or solid wood, there at once it is broken, so that it can give back no image. But when the opposed object is bright and compact, as particularly a mirror, nothing happens of this sort ; for the images cannot pass through as through glass, nor again can they be broken : so much safety the smoothness never forgets to afford. Therefore it follows that the images stream back from it upon us. And no matter how suddenly you place any object before a mirror at any time, its image appears, so that you may recognize that there is a constant flow from the surface of things of thin textures and thin shapes. Therefore many images arise in brief space, so that there is good reason to call the origin of these things rapid. And just as the sun must send up many lights in brief space, that all places may be full of them without a break, so in like manner from things also it must be that in a moment of time many images pass off in many ways and in all directions everywhere, since in whatever direction we turn the mirror to the shapes of things, something answers back of like form and colour.

¹⁶⁸ Besides, when the weather has but now been of
^a Epicurus, *Ep. ad Hdt.* 48, says that the creation of the images is as quick as thought.

Voss (see Havercamp), not Cartault as stated by recent editors : orbis (gen. after quocumque) E. Orth, Helmantica 11 (1960) 316

tempestas, perquam subito fit turbida foede,
 undique uti tenebras omnis Acherunta rearis 170
 liquisse et magnas caeli complesse cavernas :
 usque adeo taetra nimborum nocte coorta
 inpendent atrae formidinis ora superne ;
 quorum quantula pars sit imago dicere nemost
 qui possit neque eam rationem reddere dictis. 175

Nunc age, quam celeri motu simulacra ferantur
 et quae mobilitas ollis tranantibus auras
 reddita sit, longo spatio ut brevis hora teratur,
 in quem quaeque locum diverso numine tendunt,
 suavidicis potius quam multis versibus edam ; 180
 parvus ut est cyeni melior canor, ille gruum quam
 clamor in aetheriis dispersus nubibus austri.

Principio persaepe levis res atque minutis
 corporibus factas celeris licet esse videre.
 in quo iam genere est solis lux et vapor eius, 185
 propterea quia sunt e primis facta minutis
 quae quasi cuduntur perque aeris intervallum
 non dubitant transire sequenti concita plaga ;
 suppeditatur enim confestim lumine lumen,
 et quasi protelo stimulator fulgere fulgur. 190
 quapropter simulacra pari ratione necesse est
 inmemorable per spatium transcurrere posse
 temporis in puncto, primum quod parvola causa

the clearest, all on a sudden the sky becomes ugly and turbid, so that you might think all the darkness had deserted Acheron from all sides and filled full the great caverns of the sky : so completely has the loathsome night of clouds gathered together, and black faces of fear hang over us on high ^a : of which clouds how small a fraction the image is, no man can tell or give any reasonable account.^b

¹⁷⁶ Now listen : how rapid is the motion which carries the images along, and what velocity has been given to them in swimming through the air, so that but a brief time is spent over a long space,^c to whatever part they tend with diverse inclination, this I will tell in verses few but sweet-voiced, as the short song of the swan is better than that honking of cranes, spread abroad in the skyey clouds of the south.^d

¹⁸³ In the first place, you may very often see that things light and made of minute elements are rapid. An example of these is the sun's light and his heat, because they are made of minute elements, which are as it were beaten with knocks, and do not hesitate to pass through the intervening air when struck by the blow of that which follows ; for instantly light comes up behind light, and flash is pricked on by flash, as in a long team.^e Therefore the images in like manner must be able to run through space inexpressible by words in a moment of time, first be-

^a Cf. 1.64-65 and see D. West, *The Imagery and Poetry of Lucretius* 58. 170-173 = 6.251-254 with one minor variation.

^b The argument of 174-175 is compressed. The idea is that, if clouds can be formed so swiftly, the images (which are far, far smaller than clouds) will be formed with almost unimaginable rapidity.

^c Epicurus, *Ep. ad Hdt.* 47, states that the velocity of the images is unsurpassed.

^d 180-182 (=909-911) are, as Lambinus points out, very similar to lines of Antipater of Sidon (*Anth. Pal.* 7.713.7-8).

^e For the literal meaning of *protelum* see note on 2.531.

est procul a tergo quae provehat atque propellat,
quod superest, ubi tam volucris levitate ferantur, 195
deinde quod usque adeo textura praedita rara
mittuntur, facile ut quasvis penetrare queant res
et quasi permanere per aeris intervallum.

Praeterea si quae penitus corpuscula rerum
ex altoque foras mittuntur, solis uti lux 200
ac vapor, haec puncto cernuntur lapsa diei
per totum caeli spatium diffundere sese
perque volare mare ac terras caelumque rigare,
quid quae sunt igitur iam prima fronte parata,
cum iaciuntur et emissum res nulla moratur? 205
quone vides citius debere et longius ire
multiplexque loci spatium transcurrere eodem
tempore quo solis pervolant lumina caelum?

Hoc etiam in primis specimen verum esse videtur
quam celeri motu rerum simulacra ferantur, 210
quod simul ac primum sub diu splendor aquai
ponitur, extemplo caelo stellante serena
sidera respondent in aqua radiantia mundi.
iamne vides igitur quam puncto tempore imago
aetheris ex oris in terrarum accidat oras? 215
quare etiam atque etiam mira fateare necessest

216 mira *OQP*: mitti *Lambinus* (not *Lachmann* as stated by most modern editors). If *mira* is retained, *H. Purmann* must be right in assuming a lacuna after 216, and *mira* will have qualified (e.g.) *mobilitate* in the next line. *Bailey* makes 216 the start of a new passage, but, in view of *quare etiam atque etiam*, this cannot be right. The new passage should begin before 217, but after 216, the opening of it being lost. 217-229 are repeated, with a few minor variations, in 6.923-935, and the reviser of this work thinks it most probable that 217 was preceded by two lines identical or almost identical to 6.921-922, and that those two lines were preceded by lines in which the new subject was introduced. Moreover, if the loss

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cause there is a very small impulse ^a far behind which carries them on and pushes them on, also because they move with so swift a lightness, next because they are emitted with such a rarefied texture that they can easily penetrate anything, and as it were ooze through the intervening air.

¹⁹⁹ Besides, if those particles of things that are sent forth from their depths, like the sun's light and heat, are observed to glide and diffuse themselves abroad in a moment of time through the whole space of heaven, to fly over the sea and land and to flood the sky, what then of those which are ready on the very outside, when they are cast off and nothing impedes their discharge? Do you not see that they must travel so much the faster and farther, and run over many times the space in the same time as the sun's light takes to spread abroad over the sky?

²⁰⁹ This further seems a true and pre-eminent indication to show with how rapid a motion the images are borne along, that as soon as the brightness of water is laid in the open air under a starry sky, at once the serene constellations of the firmament answer back twinkling in the water. Now do you see therefore how in an instant an image falls from the borders of heaven to the borders of earth? Therefore again and again I say you must confess

^a The reference is apparently to the constant vibration of the atoms of compound bodies, which causes the atoms on the surface of objects to be discharged as *simulacra parvula* probably has concessive force.

of a page of the archetype was responsible for the disappearance of the lines, it is possible that we have also lost an argument that intervened between the passage on the speed of the films and the passage on effluences

(2) since particles sent forth from within things move so swiftly, those which come from the surface must move more swiftly:

(3) indeed, we see their speed when the sky is reflected in water in an instant of time.

corpora quae feriant oculos visumque lacessant.
 perpetuoque fluunt certis ab rebus odores ;
 frigus ut a fluviis, calor ab sole, aestus ab undis
 aequoris exesor moerorum litora circum ; 220
 nec variae cessant voces volitare per auras ;
 denique in os salsi venit umor saepe saporis,
 cum mare versamur propter, dilutaque contra
 cum tuimur misceri absinthia, tangit amaror.
 usque adeo omnibus ab rebus res quaeque fluenter
 fertur et in cunctas dimittitur undique partis, 226
 nec mora nec requies interdatur ulla fluendi,
 perpetuo quoniam sentimus, et omnia semper
 cernere odorari licet et sentire sonare.

Praeterea quoniam manibus tractata figura 230
 in tenebris quaedam cognoscitur esse eadem quae
 cernitur in luce et claro candore, necessessest
 consimili causa tactum visumque moveri.
 nunc igitur si quadratum temptamus et id nos
 commovet in tenebris, in luci quae poterit res 235
 accidere ad speciem quadrata, nisi eius imago ?
 esse in imaginibus quapropter causa videtur
 cernundi neque posse sine his res ulla videri.

Nunc ea quae dico rerum simulacra feruntur
 undique et in cunctas iaciuntur didita partis ; 240
 verum nos oculis quia solis cernere quimus,

^a On the lacuna and its probable contents, see critical note on 216.

[that the images move] with a marvellous [velocity].

[.]
 In the first place, from everything we see there
 must of necessity continually flow and discharge and
 scatter]^a bodies which strike our eyes and excite
 vision. And there is a continual flow of odours from
 certain things, as there is of cold from rivers, heat
 from the sun, surge from the waves of the sea, that
 devourer of walls about the shore. Manifold voices
 also fly through the air without ever slackening.
 Again, a moisture salt to the taste often comes into
 our mouth when we walk by the sea, and when we
 see wormwood being mixed with water in our pres-
 ence, we have a sense of bitterness. So true it is
 that from all things the different qualities pass off
 in a flow, and disperse in every direction around ;
 there is no delay, no rest to interrupt the flow, since
 we constantly feel it, and we can at all times see all
 things, smell them, and perceive their sound.

Similar effects are produced in touch, taste,

and hearing by other influences.

²³⁰ Besides, since a shape handled in the dark is
 recognized to be the same which is seen in the clear
 light by day, it must be that touch and sight are
 moved by a like cause. Now, therefore, if we take
 hold of something square and it excites our feeling
 in the dark, in the light what square thing can fall
 upon our vision, if not an image of it ? Therefore
 there is seen to be in images a cause of vision, and
 without these nothing can be seen.

Touch and sight are moved by a like cause.

²³⁹ Now the images of things I speak of are being
 carried all about and thrown off scattered abroad in
 all directions ; but because it is only with eyes we
 These images are scattered everywhere ;

propterea fit uti, speciem quo vertimus, omnes
res ibi eam contra feriant forma atque colore.

Et quantum quaeque ab nobis res absit, imago
efficit ut videamus et internoscere curat ; 245

nam cum mittitur, extemplo protrudit agitque
aera qui inter se cumque est oculosque locatus,
isque ita per nostras acies perlabitur omnis
et quasi perterget pupillas atque ita transit.

251 propterea fit uti videamus quam procul absit 250

250 res quaeque ; et quanto plus aeris ante agitur
et nostros oculos perterget longior aura,
tam procul esse magis res quaeque remota videtur.
scilicet haec summe celeri ratione geruntur,
quale sit ut videamus et una quam procul absit. 255

Illud in his rebus minime mirabile habendumst,
cur, ea quae feriant oculos simulacra videri
singula cum nequeant, res ipsae perspiciantur.

ventus enim quoque paulatim cum verberat et cum
261 acre fluit frigus, non privam quamque solemus 260

260 particulam venti sentire et frigoris eius,
sed magis unorsum, fierique perinde videmus
corpore tum plagas in nostro tamquam aliquaes res
verberat atque sui det sensum corporis extra.
praeterea lapidem digito cum tundimus, ipsum 265
tangimus extremum saxi summumque colorem,
nec sentimus eum tactu, verum magis ipsam
duritiam penitus saxi sentimus in alto.

Nunc age, cur ultra speculum videatur imago

^a Strictly speaking, we never see an object itself, but only the image produced by the continuous stream of *simulacra* from the object.

^b This example is more complex. We touch the surface

can perceive them, therefore it happens that where we turn our sight, there all things strike upon it with shape and colour.

²⁴⁴ And the image enables us to see and takes care that we distinguish how far each thing is distant from us ; for when it is sent off, at once it pushes and drives all the air that is between itself and our eyes, and thus this air all streams through our eyes and, as it were, brushes the pupils and thus passes through. This is how we come to see how far off each thing is ; and the more air is driven before it, the longer the breeze that brushes our eyes, the more distant and far removed the thing is seen to be. Assuredly all this passes in a supremely rapid manner, so that we see all at once both what it is and how far away.

they enable us to judge distance.

All this is very swift.

²⁵⁶ But in this regard it should not be thought at all wonderful why the objects themselves ^a are perceived, and yet the images that strike our eyes cannot be seen singly. For when the wind also beats upon us little by little, and when sharp cold flows upon us, we are not accustomed to feel every single particle of that wind and that cold, but rather the whole at once, and we see that the blows take effect upon our body exactly as if some object were striking us and giving us the feeling of its own body outside. Besides, when we knock a stone with a toe, we touch just the uppermost surface of the stone, and the outermost colour, but we do not feel this by the touch, but rather we perceive the real hardness of the stone in its inmost depths.^b

We cannot perceive the single image any more than the single particles of wind or cold, or all the parts of a stone.

²⁶⁹ Now listen while I tell why the image is seen colour, but we feel hardness (not the colour) by the combined effects of the lower strata. We see

percepe ; nam certe penitus remmota videtur. 270
 quod genus illa foris quae vere transpiciuntur,
 ianua cum per se transpectum praebet apertum,
 multa facitque foris ex aedibus ut videantur ;
 is quoque enim duplici geminoque fit aere visus :
 primus enim citra postes tum cernitur aer, 275
 inde fores ipsae dextra laevaue sequuntur,
 post extraria lux oculos perterget et aer
 alter et illa foris quae vere transpiciuntur.
 sic ubi se primum speculi proiecit imago,
 dum venit ad nostras acies, protrudit agitque 280
 aera qui inter se cumquest oculosque locatus,
 et facit ut prius hunc omnem sentire queamus
 quam speculum ; sed ubi speculum quoque sensimus
 ipsum,
 continuo a nobis illuc quae fertur imago
 pervenit, et nostros oculos reiecta revisit, 285
 atque alium prae se propellens aera volvit,
 et facit ut prius hunc quam se videamus, eoque
 distare ab speculo tantum semota videtur.
 quare etiam atque etiam minime mirarier est par,

illis quae reddunt speculorum ex aequore visum, 290
 aeribus binis quoniam res confit utraque.

Nunc ea quae nobis membrorum dextera pars est
 in speculis fit ut in laeva videatur eo quod,
 planitiam ad speculi veniens cum offendit imago,

270 remmota *Q*: remota *OP*: semota (*cf.* 288) *Marullus*
 284 illuc *W. S. Watt, Mus. Helv.* 47 (1990) 123: in eum *OQP*:
 in id haec *Lambinus* (1570): in idem *Munro*: itidem *C. L.*
Howard, CPhil. 45 (1961) 152-153 289 *A lacuna after this*
line noted by P. E. Goebel. Bailey suggests e.g. hoc illis fieri,
 quae transpiciuntur, idemque

beyond the mirror ; for certainly it seems to be far
 withdrawn. It is the same as with those objects
 which are seen in their reality ^a through the doors
 outside, when the doorway provides an open view
 through it and allows us to see from the house many
 things outside. For this vision also is brought about
 by two distinct stretches of air ; for first in this case
 is seen the air on this side of the doors, next follows
 the door itself right and left leaf, afterwards the ex-
 ternal light brushes the eyes, and the other air, and
 those things which are seen in their reality through
 the doors outside. So when the image of the mirror
 has first thrown itself forwards, while it is on the way
 to our eyes, it pushes and drives all the air that is
 between itself and our eyes, and makes us able to
 perceive all this before we perceive the mirror ; but
 when we have perceived the mirror itself also, at once
 the image which is carried from us to the mirror
 reaches it, and being flung back, comes back to our
 eyes, rolling and propelling before it another air, and
 makes us see this before we see itself ; and that is
 why it seems to be withdrawn so far off from the
 mirror. Therefore again and again I say, it is by
 no means right to wonder [that this happens both to
 those things which are seen through doors and also] ^b
 to those things which give back a vision from the
 surface of a mirror, since the whole is done by two
 airs in each case.

²⁹² Next, that which is the right side of our frame
 appears in a mirror on the left, for this reason, that
 when the approaching image hits on the flat of the

^a In contrast with the images in the mirror.

^b The words in square brackets translate the line supplied
exempli gratia by Bailey (see critical note).

the image
 beyond the
 mirror, as
 we see
 through a
 door ;

first the air
 this side of
 the door
 touches our
 eyes, then
 the door,
 then the
 outside air,
 then the
 things seen.
 So with a
 mirror.

The mirror
 reverses the
 image, be-
 cause the

non convertitur incolumis, sed recta retrorsum 295
 sic eliditur, ut siquis, prius arida quam sit
 cretea persona, adlidat pilaeve trabive,
 atque ea continuo rectam si fronte figuram
 323 servet et elisam retro sese exprimat ipsa :
 324 fiet ut, ante oculus fuerit qui dexter, ut idem 300
 nunc sit laevus, et e laevo sit mutua dexter.

Fit quoque de speculo in speculum ut tradatur
 imago,

quinque etiam aut sex ut fieri simulacra suerint.
 nam quaecumque retro parte interiore latebunt,
 329 inde tamen, quamvis torte penitusque remota, 305
 omnia per flexos aditus educta licebit
 pluribus haec speculis videantur in aedibus esse :
 usque adeo speculo in speculum translucet imago,
 et cum laeva data est, fit rursus ut dextera fiat,
 334 inde retro rursus redit et convertit eodem. 310

Quin etiam quaecumque latuscula sunt speculorum
 adsimili lateris flexura praedita nostri,
 dextera ea propter nobis simulacra remittunt,
 aut quia de speculo in speculum transfertur imago,
 339 inde ad nos elisa bis advolat, aut etiam quod 315
 circum agitur, cum venit, imago propterea quod
 flexa figura docet speculi convertier ad nos.

Indugredi porro pariter simulacra pedemque
 ponere nobiscum credas gestumque imitari
 344 propterea quia, de speculi qua parte recedas, 320

299-347 Q corr. restores the correct order of lines. OQ have
 299-322 and 323-347 (line numbers as given above on the
 right) in the wrong order, evidently because a loose leaf of the
 archetype had been turned the wrong way

^a The reference is to a horizontally concave mirror, which
 reflects the image twice (and therefore reverses it twice) so
 restoring it like the original. On the phenomenon described

mirror, it is not turned round unaltered, but is thrust
 out straight backwards, just as if someone should
 dash upon a pillar or beam some mask of plaster
 before it were dry, and if it should at once keep its
 shape undistorted in front and mould a copy of itself
 dashed backwards : it will happen that what was
 formerly the right eye now becomes the left, and
 that the left becomes right in exchange.

³⁰² An image may also be transmitted from mirror
 to mirror, so that as many as five or six images
 have often been produced. For whatever lies hidden
 behind in the inner parts of a house, however tortuous
 and secluded be the ways in between, may yet be all
 brought out through these involved passages by
 means of a number of mirrors and seen to be in the
 house. So truly does the image shine across from
 mirror to mirror ; and when it has been presented
 left, it becomes right again, then once more it comes
 back again and returns to the same position.

³¹¹ Moreover, all mirrors that have little sides
 curved in the same degree as our sides return the
 images right to our right,^a either for the reason that
 the image is carried across from one side of the
 mirror to the other and then flies to us after being
 twice dashed off, or indeed because the image is
 driven round when it has arrived, since the curved
 shape of the mirror teaches it to turn round to-
 wards us.

³¹⁸ Furthermore, when the images march along
 with us and set down the foot with ours and mimic
 our gestures, you may believe the reason to be that
 from whatever part of the mirror you may move, at

by Lucr. in 311-317, see especially Munro, Ernout-Robin,
 Leonard-Smith.

- continuo nequeunt illinc simulacra reverti,
omnia quandoquidem cogit natura referri
347 ac resilire ab rebus ad aequos reddita flexus.
- 299 Splendida porro oculi fugitant vitantque tueri.
300 sol etiam caecat, contra si tendere pergas, 325
propterea quia vis magnast ipsius et alte
aera per purum graviter simulacra feruntur
et feriunt oculos turbantia composituras.
praeterea splendor quicumque est acer adurit
305 saepe oculos ideo quod semina possidet ignis 330
multa, dolorem oculis quae gignunt insinuando.
Lurida praeterea fiunt quaecumque tuentur
arquati, quia luroris de corpore eorum
semina multa fluunt simulacris obvia rerum,
310 multaque sunt oculis in eorum denique mixta, 335
quae contage sua palloribus omnia pingunt.
E tenebris autem quae sunt in luce tuemur
propterea quia, cum propior caliginis aer
ater init oculos prior et possedit apertos,
315 insequitur candens confestim lucidus aer, 340
qui quasi purgat eos ac nigras discutit umbras
aeris illius; nam multis partibus hic est
mobilior multisque minutior et mae pollens.
qui simul atque vias oculorum luce replevit
320 atque patefecit quas ante obsederat aer 345
321 ater, continuo rerum simulacra sequuntur
322 quae sita sunt in luce, lacessuntque ut videamus.

345 aer *Bernays*: ater *OP*: a . er *Q* 346 ater (*cf.* 339)
Bernays: omitted by *OQP*: perhaps aer, reading ater in
345 (*M. F. Smith*)

^a "He refers no doubt to the angle of reflexion being equal to the angle of incidence" (*Munro*).

once the images are unable to return back from that part, since nature compels them all to be carried back and leap back from things, given back at equal angles.^a

³²⁴ Bright objects, moreover, the eyes avoid and try not to see. The sun actually blinds if you persist in staring against it, because its own power is great, and from on high through the pure air the images come heavily rushing, and strike the eyes so as to disturb their structure. Besides, whatever brightness is fierce often burns the eyes, because it contains many seeds of fire which cause pain to the eyes by penetrating.

³³² Moreover, jaundiced persons see everything a greenish-yellow, because many seeds of this greenish-yellow colour stream out from their bodies to meet the images of things, and besides many are mingled in their own eyes which by their contact paint everything with lurid hues.

³³⁷ Again we see out of the dark what is in the light, because, when the black air of darkness, being nearer, has entered our open eyes first and possessed them, there follows immediately a bright clear air, which as it were purges them and beats abroad the black shades of the first air; for this bright air is far more mobile and made of far more minute elements and more powerful. As soon as this has filled up again the channels of the eyes^b with light, and opened them out after being beset by that black air, at once those images of things follow that are in the

^b Bailey thinks that *vias oculorum* probably means "the ways to the eyes," *i.e.* in the outer air, but this interpretation seems less natural.

quod contra facere in tenebris e luce nequimus
 propterea quia posterior caliginis aer
 crassior insequitur, qui cuncta foramina complet 350
 obsiditque vias oculorum, ne simulacra
 possint ullarum rerum coniecta movere.

Quadratasque procul turris cum cernimus urbis,
 propterea fit uti videantur saepe rutundae,
 angulus obtusus quia longe cernitur omnis, 355
 sive etiam potius non cernitur ac perit eius
 plaga nec ad nostras acies perlabitur ictus,
 aera per multum quia dum simulacra feruntur,
 cogit hebescere eum crebris offensibus aer.
 hoc ubi suffugit sensum simul angulus omnis, 360
 fit quasi ut ad tornum saxorum structa terantur—
 non tamen ut coram quae sunt vereque rutunda,
 sed quasi adumbratim paulum simulata videntur.

Umbra videtur item nobis in sole moveri
 et vestigia nostra sequi gestumque imitari 365
 (aera si credis privatum lumine posse
 indugredi, motus hominum gestumque sequentem ;
 nam nil esse potest aliud nisi lumine cassus
 aer id quod nos umbram perhibere suēmus) ;
 nimirum quia terra locis ex ordine certis 370
 lumine privatur solis quacumque meantes
 officimus, repletur item quod liquimus eius,
 propterea fit uti videatur, quae fuit umbra
 corporis, e regione eadem nos usque secuta.
 semper enim nova se radiorum lumina fundunt 375
 primaque dispereunt, quasi in ignem lana trahatur.

361 terantur *Munro*: tuantur *OQP* (tuentur *L*): tuamur
Lachmann: rotentur *Munro* (*notes*); cf. *Petron. fr.* 29. 3-4 nam
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light, and provoke us to see. But contrariwise we but not the
 cannot see out of the light what is in the darkness, opposite,
 for this reason, because a grosser air of the darkness because the
 follows second, which fills all pores and besets the dark air
 passages of the eyes, that no images of anything comes last.
 when thrown upon them may move them.

³⁵³ And when afar off we see the foursquare towers (4) Square
 of a city, they often appear to be round, for this buildings
 reason, because every angle at a distance is seen seen at a
 blunted or rather it is not seen at all, its blow is lost distance
 and the stroke does not glide across to our eyes ; look round,
 because, while the images are rushing through a because the
 great space of air, the air with frequent buffetings angles of
 forces it to become blunt. By this means when every the images
 angle at once has escaped our vision, the stone struc- are rubbed
 tures appear as though rounded on a lathe ; not, off in pass-
 however, like things that are close before us and ing through
 really round, but they appear somewhat similar in a the air.
 shadowy fashion.^a

³⁶⁴ Our own shadow also appears to move in the (5) Our
 sun, and to follow our footsteps, imitating our shadow
 gestures (if you can imagine air without light able to seems to
 march along, following the movements and gestures follow us,
 of men ; for that which we are accustomed to call because we
 shadow can be nothing else but air without light) ; hide the
 doubtless because the earth in certain spots one after light as we
 another is deprived of the sun's light wherever we in move.
 our course obstruct it, and what part of it we have
 left is filled up again, which causes it to seem that
 what was the shadow of our body remains the same
 and follows always opposite to us. For there are always
 new rays of light pouring out, and the first disappear

^a Cf. Diogenes of Oenoanda fr. 69 Smith.

turris, prope quae quadrata surgit, | detritis procul angulis
 rotatur

propterea facile et spoliatur lumine terra
et repletur item nigrasque sibi abluit umbras.

Nec tamen hic oculos falli concedimus hilum.
nam quocumque loco sit lux atque umbra tueri 380
illorum est ; eadem vero sint lumina necne,
umbraque quae fuit hic eadem nunc transeat illuc,
an potius fiat paulo quod diximus ante,
hoc animi demum ratio discernere debet,
nec possunt oculi naturam noscere rerum. 385
proinde animi vitium hoc oculis adfingere noli.

Qua vehimur navi, fertur, cum stare videtur ;
quae manet in statione, ea praeter creditur ire.
et fugere ad puppim colles campique videntur
quos agimus praeter navem velisque volamus. 390

Sidera cessare aetheriis adfixa cavernis
cuncta videntur, et adsiduo sunt omnia motu,
quandoquidem longos obitus exorta revisunt,
cum permensa suo sunt caelum corpore claro.
solque pari ratione manere et luna videtur 395
in statione, ea quae ferri res indicat ipsa.

Exstantisque procul medio de gurgite montis
classibus inter quos liber patet exitus ingens,
insula coniunctis tamen ex his una videtur.

Atria versari et circumcursare columnae 400
usque adeo fit uti pueris videantur, ubi ipsi

^a There is always wool at the point where the flame is, looking the same but really different.

^b The function of the eyes is similar to that of a camera : it is simply to receive the images of objects ; and, like the camera, the eyes are not at fault, if (*e.g.*) they receive a round image of a distant square tower (*cf.* 353-363). If the owner of the eyes at once assumes that the distant tower really is

like wool drawn into a flame.^a Thus the ground is easily robbed of its light, and again filled up as it washes off the black shadows.

³⁷⁹ However, we do not grant that the eyes are deceived in this one jot. For it is their task to see in what place light is, and where shadow ; but whether it be the same light or not, whether the same shadow that was here now pass thither, or whether that happen rather which I said before, this nothing must decide but the mind's reasoning power, and eyes cannot recognize the nature of things. Then do not impute to the eyes this fault of the mind.^b

³⁸⁷ A ship in which we sail moves on while it seems to stand still, one which remains in its place is thought to pass by ; and the hills and plains, which we row by or sail by, seem to be flying astern.

³⁹¹ The stars all seem to be fixed and stationary in the vaults of ether, yet all are in constant motion, since they rise and return to their far distant settings when they have traversed the sky with bright body. And the sun and moon in like manner appear to remain in their places, while experience proves that they move along.

³⁹⁷ And mountains that stand up afar off from the midst of the ocean, between which is a great channel wide enough for a fleet to pass freely through, these nevertheless seem to be joined into a single island.

⁴⁰⁰ The room seems to children to be turning round and the columns revolving when they them-

Not the eyes are deceived in all this, but the mind.

So when a moving ship seems to stand still, and the surroundings to move ; the stars seem to be still ;

separated mountains seem to be joined ;

the room seems to revolve ;

round, the fault lies with his mind, whose function it is to interpret the information provided by his senses. *Cf.* 462-468, Epicurus, *Ep. ad Hdt.* 50-52, *Sent.* 24, Diogenes Laertius 10.34.

desierunt verti, vix ut iam credere possint
non supra sese ruere omnia tecta minari.

Iamque rubrum tremulis iubar ignibus erigere alte
cum coeptat natura supraque extollere montes, 405
quos ibi tum supra sol montis esse videtur
comminus ipse suo contingens fervidus igni,
vix absunt nobis missus bis mille sagittae,
vix etiam cursus quingentos saepe veruti ;
inter eos solemque iacent immania ponti 410
aequora substrata aetheriis ingentibus oris,
interiectaque sunt terrarum milia multa
quae variae retinent gentes et saecula ferarum.

At conlectus aquae digitum non altior unum,
qui lapides inter sistit per strata viarum, 415
despectum praebet sub terras impete tanto,
a terris quantum caeli patet altus hiatus,
nubila despiciere et caelum ut videre et aperta
corpora mirande sub terras abdita cernas.

Denique ubi in medio nobis equus acer obhaesit
flumine et in rapidas amnis despeximus undas, 421
stantis equi corpus transversum ferre videtur
vis et in adversum flumen contrudere raptim,
et, quocumque oculos traiecimus, omnia ferri
et fluere adsimili nobis ratione videntur. 425

406 *ibi ed. Juntina: ubi OQP: tibi Naugerius, modern editors, but ibi seems palaeographically preferable (for the corruption cf. e.g. 3.28, 5.100, 6.1218, 1231) and the emphatic combination ibi tum is appropriate in this description of a phenomenon that occurs briefly at a precise time* 414
conlectus Lambinus "secutus trium librorum manuscriptorum obscura quaedam vestigia" (cf. *Aetna* 295): coniectus OQP, Wakefield, Martin (cf. 5.600) 418 aperta M. F. Smith: videre OQP: videre et Lambinus, but in his 1570 ed. he obelizes et (which *Lucr.* never has at the end of a line) and 419 419
cernas M. F. Smith: caelo OQ. *There may have been a blot or tear affecting the ends of 418-419. For aperta corpora . . . cernas cf. 1.297 aperto corpore, 4.596 res cernere apertas*
308

selves have ceased to turn, so much so that they can hardly believe all the building is not threatening to fall in upon them.

⁴⁰⁴ Again, when nature begins to uplift on high the sun's beam red with flickering fires, and to raise it above the mountains, those mountains which the sun then seems to be above, quite close and touching them with his hot fire, are scarcely distant from us a couple of thousand bowshots, often even scarcely five hundred throws of a javelin; but between them and the sun lie vast stretches of sea below the wide regions of the sky, between them are thrown many thousands of lands inhabited by manifold nations and tribes of wild beasts.

⁴¹⁴ But a puddle of water no more than one finger deep, lying between the stones upon a paved street, offers a view downwards under the earth to as great a reach as the open heavens yawn on high, so that you seem to look down upon the clouds and heaven, and you see manifest objects miraculously buried beneath the earth.^a

⁴²⁰ Furthermore, when our spirited horse has stuck fast in the middle of a river, and we have looked down upon the swift waters of the stream, while the horse stands there a force seems to be carrying his body sideways and pushing it violently against the stream, and, wherever we turn our eyes, all seems to be rushing and flowing in the same way as we are.

^a Cf. Shelley, *To Jane: The Recollection* 53-58: "We paused beside the pools that lie | Under the forest bough, | Each seemed as 'twere a little sky | Gulfed in a world below; | A firmament of purple light | Which in the dark earth lay."

Porticus aequali quamvis est denique ductu
 stansque in perpetuum paribus suffulta columnis,
 longa tamen parte ab summa cum tota videtur,
 paulatim trahit angusti fastigia conii,
 tecta solo iungens atque omnia dextera laevis, 430
 donec in obscurum conii conduxit acumen.

In pelago nautis ex undis ortus in undis
 sol fit uti videatur obire et condere lumen,
 quippe ubi nil aliud nisi aquam caelumque tuentur ;
 ne leviter credas labefactari undique sensus. 435

At maris ignaris in portu clauda videntur
 navigia aplustris fractis obnitier undis.
 nam quaecumque supra rorem salis edita pars est
 remorum, recta est, et recta superne gubernata ;
 quae demersa liquore obeunt, refracta videntur 440
 omnia converti sursumque supina reverti
 et reflexa prope in summo fluitare liquore.

Raraque per caelum cum venti nubila portant
 tempore nocturno, tum splendida signa videntur
 labier adversum nimbos atque ire superne 445
 longe aliam in partem ac vera ratione feruntur.

At si forte oculo manus uni subdita subter
 pressit eum, quodam sensu fit uti videantur
 omnia quae tuimur fieri tum bina tuendo,
 bina lucernarum florentia lumina flammis 450
 binaque per totas aedis geminare supellex
 et duplicis hominum facies et corpora bina.

437 undis *F*, *Codex Musaei Britannici Butl.* 11912,
Marullus : undas *OQABL* : undae *Lachmann*

^a Rouse's translation of *rorem salis*. However, *ros* is probably (see note on 1.496) more than a mere synonym for 310

⁴²⁶ Again, a colonnade may be of equal line from a colonnade
 end to end and supported by columns of equal height seems to
 throughout, yet, when its whole length is surveyed vanish in a
 from one end, it gradually contracts into the point of point ;
 a narrowing cone, completely joining roof to floor and
 right to left, until it has gathered all into the vanishing
 point of the cone.

⁴³² At sea sailors seem to perceive the sun to rise the sun
 out of the water and to set in the water, and there seems to
 to hide its light, naturally because they behold nothing rise and set
 but water and sky, that you may not lightly believe in the sea ;
 the credit of their senses to be utterly shaken.

⁴³⁶ Then those ignorant of the sea think that ships
 in harbour are maimed and struggling against the
 waves with stern-fittings broken. For whatever part oars seem to
 of the oars is raised above the sea water ^a is straight, be broken
 and the rudders above are straight ; but whatever is back in
 submerged under water seems to be all broken back water ;
 and wrenched and turned flat upwards and thus bent
 back to be almost floating upon the flood.

⁴⁴³ And when the winds carry scattered clouds the stars
 across the sky in the night time, then the shining seem to
 stars seem to glide against the clouds and to pass move behind
 above them in a very different direction from their the clouds ;
 true one.

⁴⁴⁷ Then, if by chance a hand be put beneath one pressure on
 eye and press it beneath, a certain sensation follows one eye
 which makes it appear that all we look at makes
 double then and there as we look : two lamps flower- things seem
 ing with flames, the furniture all over the house double ;
 multiplied by two, men with double faces and two
 bodies each.

water. Here perhaps "dew-sparkling brine" (M. F. Smith).

Denique cum suavi devinxit membra sopore
 somnus, et in summa corpus iacet omne quiete,
 tum vigilare tamen nobis et membra movere 455
 nostra videmur, et in noctis caligine caeca
 cernere censemus solem lumenque diurnum,
 conclusoque loco caelum mare flumina montis
 mutare et campos pedibus transire videmur,
 et sonitus audire, severa silentia noctis 460
 undique cum constant, et reddere dicta tacentes.

Cetera de genere hoc mirande multa videmus,
 quae violare fidem quasi sensibus omnia quaerunt—
 nequiquam, quoniam pars horum maxima fallit
 propter opinatus animi quos addimus ipsi, 465
 pro visis ut sint quae non sunt sensibus visa.
 nam nil aegrius est quam res secernere apertas
 ab dubiis, animus quae ab se protinus addit.

Denique nil sciri si quis putat, id quoque nescit
 an sciri possit, quoniam nil scire fatetur. 470
 hunc igitur contra mittam contendere causam,
 qui capite ipse sua in statuit vestigia sese.
 et tamen hoc quoque uti concedam scire, at id ipsum
 quaeram, cum in rebus veri nil viderit ante,
 unde sciat quid sit scire et nescire vicissim, 475

471 mittam *Marullus*: mituam OQ: mutuam P:
 minuam (cf. 2.1029) *Palmerius* (see *Havercamp*), *Martin*:
 metuam *Gronovius* (see *Havercamp*) tentatively 472
 sua *Lachmann*: suo OQP, *Merrill* (1917), *Martin*

^a It is probable that editors and translators have misunderstood the construction in 458 and the meaning of *mutare* in 459, and that H. Jacobson, *CPhil.* 61 (1966) 155-156 is right in suggesting that there is a *mutare aliquid aliqua re* construction, as in Horace, *Carm.* 1.17.1-2.

453 Further, when sleep has fast bound our limbs in sleep we with sweet drowsiness, and our whole body lies in seem to move, see, profound quiet, yet we seem to ourselves then to be hear, speak. awake and to move our limbs, and in the blind darkness of night we think that we see the sun and the light of day, and we seem to exchange our narrow room for sky and sea, rivers and mountains,^a and traverse plains afoot, and to hear sounds though the stern silence of night reigns everywhere, and to utter speech while saying nothing.

462 We see in marvellous fashion many things besides of this kind, which all try as it were to break In all such cases, the the credit of our senses; but all in vain, since the senses are true, but the most part of them deceives because of opinions of the mind which we bring to them ourselves, so that the mind is deceived. things are held to be seen which have not been seen by our senses. For nothing is more difficult than to distinguish plain things from doubtful things which the mind of itself adds at once.

469 Moreover, if anyone thinks that nothing is known, he does not even know whether that can be known, since he declares that he knows nothing.^b I will therefore spare to plead cause against a man who has placed his head in his own footsteps.^c And yet even if I grant that he knows that, still I will ask just this: since material things had no truth for his vision to begin with, how he knows what it is to know or not to know as the case may be, what

^b Although *Lucr.*'s argument against scepticism is undoubtedly derived from Epicurus, that does not mean that he is not aiming it at contemporary sceptics. See A. Barigazzi in *Assoc. G. Budé, Actes du VIII^e Congrès* 286-292.

^c On 472, see M. F. Burnyeat in *Philologus* 122 (1978) 197-206.

notitiam veri quae res falsique crearit,
et dubium certo quae res differre probarit.

Invenies primis ab sensibus esse creatam
notitiam veri neque sensus posse refelli.
nam maiore fide debet reperiri illud, 480
sponte sua veris quod possit vincere falsa.
quid maiore fide porro quam sensus haberi
debet? an ab sensu falso ratio orta valebit
dicere eos contra, quae tota ab sensibus orta est?
qui nisi sunt veri, ratio quoque falsa fit omnis. 485
an poterunt oculos aures reprehendere, an aures
tactus? an hunc porro tactum sapor arguet oris,
an confutabunt nares oculive revincunt?
non, ut opinor, ita est. nam seorsum cuique potestas
divisast, sua vis cuiquest, ideoque necesse est 490
et quod molle sit et gelidum fervensve seorsum
et seorsum varios rerum sentire colores
et quaecumque coloribu' sint coniuncta videre.
seorsus item sapor oris habet vim, seorsus odores
nascuntur, sorsum sonitus. ideoque necesse est 495
non possint alios alii convincere sensus.
nec porro poterunt ipsi reprehendere sese,
aequa fides quoniam debet semper haberi.
proinde quod in quoquest his visum tempore, verumst.

Et si non poterit ratio dissolvere causam, 500
cur ea quae fuerint iuxtim quadrata, procul sint

491 seorsum *Bentley*: videri *OQP*, *Wakefield*, *Merrill*
(1917): videre *Martin* 493 videre *Lachmann*: neces-
sast *O*, *Merrill* (1917), *Martin*: necesse est *QP* (from 495),
Wakefield

^a See note on 2.745.

^b For the fundamentally important Epicurean doctrine that sensation is the primary standard of truth, and that there is no other criterion by which it can be refuted, cf.

gave him the concept ^a of true and false, what evidence proved that the doubtful differs from the certain.

⁴⁷⁸ You will find that it is from the senses in the first instance that the concept of truth has come, and that the senses cannot be refuted.^b For some standard must be found of greater credit, able of itself to refute false things by true. What, moreover, must be held to be of greater credit than the senses? Shall reasoning, derived from false sense, prevail against these senses, being itself wholly derived from the senses? For unless they be true, all reasoning is false. Will the ear be able to convict the eye, or the touch the ear? Will the taste of the mouth again refute the touch, will nose confound it, or eye disprove it? Not so, I think. For each has its own separate function, each its own power, and it is therefore necessary to decide what is soft and cold or hot by a separate sense, and by a separate sense to perceive the various colours of things and to see whatever is involved in colour.^c For the taste of the mouth has power on a separate sense, smell arises for a separate sense, sound for another. Therefore it is necessary that one sense cannot refute another. Nor furthermore will they be able to convict themselves, since equal credit must always be allowed to them.^d Accordingly, what has seemed to these at any given time to be true, is true.

⁵⁰⁰ And if reasoning shall be unable fully to explain the cause why things that were square close at hand especially Diogenes Laertius 10.31-32; also e.g. Epicurus, *Sent.* 23, Lucr. 1.422-425, 699-700, Cicero, *Fin.* 1.19.64.

^c That is, shape.

^d That is, one sense cannot refute its own evidence at another time.

if not the senses?

Reasoning, which rests on the senses, cannot refute the senses; nor can one sense refute another.

nor can the senses refute themselves.

visa rutunda, tamen praestat rationis egentem
reddere mendose causas utriusque figurae,
quam manibus manifesta suis emittere quoquam
et violare fidem primam et convellere tota 505
fundamenta quibus nixatur vita salusque.
non modo enim ratio ruat omnis, vita quoque ipsa
concidat extemplo, nisi credere sensibus ausis
praecipitisque locos vitare et cetera quae sint
in genere hoc fugienda, sequi contraria quae sint. 510
illa tibi est igitur verborum copia cassa
omnis, quae contra sensus instructa paratast.

Denique ut in fabrica, si pravata regula prima,
normaque si fallax rectis regionibus exit,
et libella aliqua si ex parti claudicat hilum, 515
omnia mendose fieri atque obstipa necesse est
prava cubantia prona supina atque absona tecta,
iam ruere ut quaedam videantur velle, ruantque,
proditia iudiciis fallacibus omnia primis,
sic igitur ratio tibi rerum prava necessest 520
falsaque sit, falsis quaecumque ab sensibus ortast.

Nunc alii sensus quo pacto quisque suam rem
sentiat, haudquaquam ratio scruposa relicta est.

Principio auditur sonus et vox omnis, in auris
insinuata suo pepulere ubi corpore sensum. 525
corpoream quoque enim vocem constare fatendumst
et sonitum, quoniam possunt inpellere sensus.

^a There is a play upon *manibus* and *manifesta*.

^b *regula* (cf. Cicero, *Fin.* 1.19.63) = *κανών*, literally a mason's or carpenter's "rule" or "straight-edge," the title of a work (cf. Diogenes Laertius 10.31) in which Epicurus expounded his epistemology (*τὸ κανονικόν*). Thus the comparison between sound rules of investigation and sound methods of building is not Lucr.'s own invention.

seem to be round at a distance, yet it is better that one who finds no reason explain the shape of either figure in a faulty manner, rather than anywhere to let slip from your hands the holdfast of the obvious,^a and to break the credit from which all begins, and to tear up all the foundations upon which life and existence rest. For not only would all reasoning come to ruin, but life itself would at once collapse, unless you make bold to believe the senses, avoiding precipices and all else that must be eschewed of that sort, and following what is contrary. Therefore, believe me, vain is all that array of words which has been prepared and marshalled against the senses.

⁵¹³ Lastly, as in a building, if the original rule ^b is warped, if the square is faulty and deviates from straight lines, if the level is a trifle wrong in any part, the whole house will necessarily be made in a faulty fashion and be falling over, warped, sloping, leaning forward, leaning back, all out of proportion, so that some parts seem about to collapse on the instant, and some do collapse, all betrayed by false principles at the beginning. So therefore your reasoning about things must be warped and false whenever it is based upon false senses.

⁵²² Next our reasoning has no stony path to tread, in showing how each of the other senses perceives its own object. It is easy to deal with the other senses.

⁵²⁴ In the first place, every sound and voice is heard, when creeping into the ears they have struck with their body upon the sense.^c For we must confess that voice and sound also are bodily, since they can strike upon the sense. H. Hearing is caused by sound striking the sense. Sound is bodily

^c Epicurus deals with hearing in *Ep. ad Hdt.* 52-53.

Praeterea radit vox fauces saepe, facitque
 asperiora foras gradiens arteria clamor,
 quippe per angustum turba maiore coorta 530
 ire foras ubi coeperunt primordia vocum,
 scilicet expletis quoque ianua raditur oris.
 haud igitur dubiumst quin voces verbaque constant
 corporeis e principiis, ut laedere possint.

Nec te fallit item quid corporis auferat et quid 535
 detrahat ex hominum nervis ac viribus ipsis
 perpetuus sermo nigraī noctis ad umbram
 aurorae perductus ab exoriente nitore,
 praesertim si cum summost clamore profusus.
 ergo corpoream vocem constare necessest, 540
 multa loquens quoniam amittit de corpore partem.

551 Asperitas autem vocis fit ab asperitate
 552 principiorum, et item levor levore creatur.
 542 nec simili penetrant auris primordia forma,
 cum tuba depresso graviter sub murmure mugit 545
 et reboat raucum retro cita barbara bombum,
 545 et †validis necti tortis† ex Heliconis
 cum liquidam tollunt lugubri voce querellam.

Hasc igitur penitus voces cum corpore nostro
 exprimimus rectoque foras emittimus ore, 550
 mobilis articulat verborum daedala lingua
 550 formaturaque labrorum pro parte figurat.

546 reboat *Q* corr., *B*: revorat *OQ*: revocat *AF* re-
 tro *OQP*: regio *Lachmann* 547 et validis necti (nete *Q*,
O corr.) tortis *OQ*. *The text is seriously corrupt, and no
 entirely satisfactory emendation has been proposed. Lucr.
 may have written something like et convallibu' cyni intortis
 (M. F. Smith). This tentative suggestion, which owes much
 to Lachmann's et cyni tortis convallibus (vallibus et cyni
 318*

528 Besides, the voice often scrapes the gullet, and (1) because
 a cry issuing forth makes the windpipe rougher; for it strikes
 when the first-beginnings of voice gathering in larger the sense,
 quantity begin to issue forth through the narrow (2) because
 passage, naturally the gateway of the mouth also it scrapes
 is scraped when the gullet is filled full. There is there- the gullet,
 fore no doubt that voices and words to be able to
 hurt consist of bodily elements.

535 Nor do you fail to see also how much body is (3) because
 taken away, what is drawn away from a man's very a long
 sinews and strength, by a speech which is drawn out speech
 uninterrupted from the rising gleam of dawn to the weakens
 shades of black night, especially if it is poured forth the body.
 with a great volume of sound. Therefore the voice
 must be bodily, since by much speaking a man loses
 a part of his body.

542 The roughness of voice, moreover, comes from Rough ele-
 roughness of the elements, as also smoothness from ments make
 smoothness. The elements that penetrate the ear the voice
 are not of like shape when the barbarous horn rough,
 bellows with low and hollow roar and is re-echoed smooth,
 with a hoarse reverberating boom, and when from smooth.
 the winding valleys of Helicon the swans ^a uplift the
 mournful tone of their melodious lament.

549 When therefore we press out these voices from The sound
 the inmost parts of our body, and send them forth issuing is
 straight through the mouth, the quickly-moving shaped by
 tongue, cunning fashioner of words, joints and moulds tongue and
 the sounds, and the shaping of the lips does its part lips.

^a For the text translated in 547, see critical note.

earlier printed by Avancius and said by Pius to be "in
 codicibus emendatis"), is translated above

hoc ubi non longum spatiumst unde illa profecta
 perveniat vox quaeque, necessesit verba quoque ipsa
 plane exaudiri discernique articulatum ; 555
 servat enim formaturam servatque figuram.
 at si interpositum spatium sit longius aequo,
 aera per multum confundi verba necessesit
 et conturbari vocem, dum transvolat auras.
 ergo fit sonitum ut possis sentire neque illam 560
 internoscere, verborum sententia quae sit :
 usque adeo confusa venit vox inque pedita.

Praeterea verbum saepe unum perciet auris
 omnibus in populo, missum praeconis ab ore.
 in multas igitur voces vox una repente 565
 diffugit, in privas quoniam se dividit auris,
 obsignans formam verbis clarumque sonorem.
 at quae pars vocum non auris incidit ipsas,
 praeterlata perit frustra diffusa per auras :
 pars, solidis adlisa locis, reiecta sonorem 570
 reddit et interdum frustratur imagine verbi.

Quae bene cum videas, rationem reddere possis
 tute tibi atque aliis, quo pacto per loca sola
 saxa paris formas verborum ex ordine reddant,
 palantis comites cum montis inter opacos 575
 quaerimus et magna dispersos voce clemus.
 sex etiam aut septem loca vidi reddere voces,
 unam cum iaceres : ita colles collibus ipsi
 verba repulsantes iterabant docta referri.

Haec loca capripedes satyros nymphasque tenere
 finitimi fingunt, et faunos esse loquuntur, 581
 quorum noctivago strepitu ludoque iocanti

553 illa *OQP* : una *Bentley* 579 docta (*cf.* 317) *Lach-*
mann : dicta *OQP* referri *OQP* : referre *Marullus*

in giving them form. When there is no long race for
 each of those utterances to run from start to finish,
 the words themselves also must necessarily be plainly
 heard and distinguished in all their joints and mould-
 ing ; for the sound keeps its shaping and keeps its
 form. But if the intervening space is longer than it
 should be, the words passing through much air must
 necessarily be confused together and the voice
 blurred while it flies through the air. Therefore it
 follows that you can perceive a sound, and yet not
 distinguish what is the meaning of the words : so
 confused is the voice when it arrives and so hampered.

⁵⁶³ Besides, one word often awakens the ears of a
 whole crowd when uttered by the crier's lips. There-
 fore one voice is dispersed suddenly into many voices,
 since it distributes itself amongst many separate ears,
 stamping on the words a shape and clear sound. But
 those of the voices which do not fall quite into the
 ears, are carried past and lost, being scattered abroad
 without effect into the air ; some, dashed upon solid
 places and thrown back, give back a sound and at
 times delude with the image of a word.

⁵⁷² When you perceive this well, you may be able
 to give a reason to yourself and others, how it is in
 solitary places that the rocks give back the same
 shapes of words in their order, when we seek stray-
 ing comrades amongst the shady mountains and call
 loudly upon them to all sides. I have even seen
 places give back six or seven cries, when you uttered
 one : so did hill to hill themselves buffet back and
 repeat the words thus trained to come back.

⁵⁸⁰ Such places the neighbours imagine to be
 haunted by goatfoot satyrs and nymphs, and they
 say there are fauns, by whose night-wandering noise
 which causes the tales of satyrs and nymphs.

adfirmant volgo taciturna silentia rumpi,
 chordarumque sonos fieri dulcisque querellas, 585
 tibia quas fundit digitis pulsata canentum,
 et genus agricolum late sentiscere, quom Pan,
 pinea semiferi capitis velamina quassans,
 unco saepe labro calamos percurrit hiantis,
 fistula silvestrem ne cesset fundere musam.
 cetera de genere hoc monstra ac portenta loquuntur,
 ne loca deserta ab divis quoque forte putentur 591
 sola tenere. ideo iactant miracula dictis
 aut aliqua ratione alia ducuntur, ut omne
 humanum genus est avidum nimis auricularum.

Quod superest, non est mirandum qua ratione, 595
 per loca quae nequeunt oculi res cernere apertas,
 haec loca per voces veniant aurisque lacessant.
 conloquium clausis foribus quoque saepe videmus,
 nimirum quia vox per flexa foramina rerum
 incolumis transire potest, simulacra renutant; 600
 perscinduntur enim, nisi recta foramina tranant,
 qualia sunt vitri, species qua travolat omnis.

Praeterea partis in cunctas dividitur vox,
 ex aliis aliae quoniam gignuntur, ubi una 605
 dissiluit semel in multas exorta, quasi ignis
 saepe solet scintilla suos se spargere in ignis.
 ergo replentur loca vocibus abdita retro,
 omnia quae circum fervunt sonituque cientur.
 at simulacra viis drectis omnia tendunt
 ut sunt missa semel; quapropter cernere nemo 610

608 fervunt *Munro*: fuerunt *OQBL*, *Merrill (1917)*,
Ernout: fuerint *AF*

^a Cf. Milton, *Paradise Lost* 1.781-784: ". . . or faëry
 elves | Whose midnight revels, by a forest side | Or fountain,
 some belated peasant sees, | Or dreams he sees."

and jocund play they commonly declare the voiceless
 silence to be broken,^a with the sound of strings and
 sweet plaintive notes, which the pipe sends forth
 touched by the player's fingers^b; they tell how the
 farmers' men all over the countryside listen, while
 Pan, shaking the pine leaves that cover his half-
 human head, often runs over the open reeds with
 curved lips, that the panpipes may never slacken in
 their flood of woodland music. All other signs and
 wonders of this sort they relate, that they may not
 perhaps be thought to inhabit a wilderness which even
 the gods have left. This is why they bandy about
 these miraculous tales, or they are led by some other
 reason, since all mankind are too greedy for ears to
 tickle.^c

⁵⁹⁵ To proceed: there is no need to wonder how
 voices pass and assail the ears through places through
 which the eyes cannot see plain objects. We often
 witness a conversation going on behind closed doors,
 of course because the voice can pass unimpaired
 through tortuous passages in a substance, while im-
 ages refuse: for they are split up, unless they have
 straight passages to swim through, such as those of
 glass through which every appearance can fly.

⁶⁰³ Besides, a voice is distributed abroad in all
 directions, since voices beget other voices when one
 voice uttered has once leapt asunder into many, just
 as a spark of fire is often accustomed to scatter itself
 into fires of its own. Therefore places hidden away
 from sight are filled with voices, and all boil and stir
 round about with sound. But all images tend straight
 forwards when once they are sped; therefore no one

^b 585 = 5.1385.

^c Or *auricularum* may be a gen. of respect or reference: "since
 all mankind are too greedy-eared".

Sounds pass
 where eyes
 cannot see,
 (1) because
 they can
 pass
 through
 tortuous
 passages
 while
 images
 cannot.

(2) because
 one sound is
 dispersed
 into many.
 while
 images go
 straight.

saepe supra potis est, at voces accipere extra.
 et tamen ipsa quoque haec, dum transit clausa domorum,
 vox obtunditur atque auris confusa penetrat
 et sonitum potius quam verba audire videmur.

Nec, qui sentimus sucum, lingua atque palatum 615
 plusculum habent in se rationis plus operaeve.

Principio sucum sentimus in ore, cibum cum
 mandendo exprimimus, ceu plenam spongiam aquai
 siquis forte manu premere ac siccare coëpit.
 inde quod exprimimus per caulas omne palati 620
 diditur et rarae per flexa foramina linguae.
 hoc ubi levia sunt manantis corpora suci,
 suaviter attingunt et suaviter omnia tractant
 umida linguae circum sudantia templa.
 at contra pungunt sensum lacerantque coorta, 625
 quanto quaeque magis sunt asperitate repleta.

Deinde voluptas est e suco fine palati ;
 cum vero deorsum per fauces praecipitavit,
 nulla voluptas est, dum diditur omnis in artus.
 nec refert quicquam quo victu corpus alatur, 630
 dummodo quod capias concoctum didere possis
 artubus et stomachi validum servare tenorem.

611 saepe supra *OQP*, *N. P. Howard, Journ. Phil. 1 (1868) 131, Bailey, Merrill (1917), Diels, Martin, R. Waltz, Rev. Ét. Lat. 29 (1951) 191-193, Büchner, saepe being taken either as a noun (cf. praesaepe) or (with less probability) as the adverb: saepa supra Wakefield, perhaps rightly 612 domorum (cf. 1.354) Lachmann: omitted by OQ 615 nec Marullus: hoc OP, Wakefield, Diels, Martin, Büchner, but see Bailey: . oc Q 616 plus operaeve Lachmann: plus opere *OQFL*: plus operai *AB*: plusque operai *Lambinus* 621 per flexa (cf. 599) *FM*: perplexa *OQABL* 632 validum *A. Cf. Q. Serenus Sammonicus, Liber Medicinalis 302*
 324*

can see over a wall, though he can hear voices through it. And yet even the voice itself, in passing the walls of a house, is blunted and confused when it penetrates the ear, and we seem to hear sound rather than words.

615 Nor need one jot more of reasoning be added, III. Taste is caused or any more trouble, to explain the tongue and because palate, by which we perceive flavours. particles of food are squeezed out in the mouth and distributed through the pores of the palate:

617 In the first place, we perceive flavour in the mouth while we squeeze it out in munching the food, as if one by chance takes in hand a sponge full of water and begins to press it dry. Then that which we squeeze out is distributed abroad through all the pores of the palate and the tortuous passages of the oozing juice are smooth, sweetly they touch and sweetly stroke all the wet trickling regions around the tongue. But contrariwise they prick the sense and tear it as soon as they arise, in proportion as they are more full of roughness.

627 Again, the pleasure that comes from flavour does not go beyond the palate; but when it has dropped down through the throat, there is no pleasure while it is all being distributed abroad through the frame. Nor does it matter at all with what food the body is nourished, so long as you can digest what you take, and distribute it abroad through the limbs, and keep the stomach in a constantly healthy condition.

(*ed. E. Baehrens, PLM III*) huius (*sc. stomachi*) enim validus firmat tenor omnia membra: umidum *OQFL*: vividum *B*: umidulum *Lachmann*

Nunc aliis alius qui sit cibus ut videamus
 expediā, quareve, aliis quod triste et amarumst,
 hoc tamen esse aliis possit perdulce videri. 635
 tantaque in his rebus distantia differitasque est
 ut quod aliis cibus est aliis fuat acre venenum.
 est itaque et serpens, hominis quae tacta salivis
 disperit ac sese mandendo conficit ipsa.
 praeterea nobis veratrum est acre venenum, 640
 at capris adipēs et cocturnicibus auget.

Id quibus ut fiat rebus cognoscere possis,
 principio meminisse decet quae diximus ante,
 semina multimodis in rebus mixta teneri.
 porro omnes quaecumque cibum capiunt animantes,
 ut sunt dissimiles extrinsecus et generatim 646
 extrema membrorum circumcaesura coercet,
 proinde et seminibus constant variante figura.
 semina cum porro distent, differre necessest
 intervalla viasque, foramina quae perhibemus, 650
 omnibus in membris et in ore ipsoque palato.
 esse minora igitur quaedam maioraque debent,
 esse triquetra aliis, aliis quadrata necessest,
 multa rutunda, modis multis multangula quaedam.
 namque figurarum ratio ut motusque reposcunt, 655
 proinde foraminibus debent differre figurae,
 et variare viae proinde ac textura coercet.
 hoc ubi quod suave est aliis aliis fit amarum,
 illi, cui suave est, levissima corpora debent

633 cibus ut videamus *OQP*: *cibu'* suavis et almus
Munro: a lacuna after 633 assumed by *Brieger* 637
 aliis *OP*: alius *Q*: ali *Lachmann*: perhaps aliis, given by
Macrobios in his quotation of 6.1227 638 est itaque
 326

⁶³³ Next I will explain and enable us to see how
 different food is suited to different creatures, and
 why what is sour and bitter for some may yet seem
 very delicious to others. Indeed, there is so great a
 difference and distinction in these things that what
 is food to some creatures, is to others rank poison.
 Thus there is even a serpent, which when touched by
 man's spittle perishes and gnaws itself to death.^a
 Besides, hellebore is rank poison to us, but given to
 goats and quails makes them fat.

⁶⁴² That you may know how this comes about, in
 the first place you must remember what I said be-
 fore,^b that things contain many seeds mingled in
 various ways. Further, all creatures that take food,
 as they are different in outward appearance, and as
 the contour and circumscription of their shape limits
 and defines each according to its kind, so they are
 composed of seeds differing in shape. Since further
 the seeds differ, the intervals and channels, which
 we call passages, must also differ throughout the
 frame and so also in mouth and palate. Some there-
 fore must be smaller and some larger, some tri-
 angular and some square, many round, some again
 with many angles in many arrangements. For as
 the relation of shapes and as the motions demand,
 so the shapes of the passages must differ, and so the
 channels must vary as the texture compels. There-
 fore if what is sweet to some is bitter to others, for
 the creature to whom it is sweet very smooth bodies

Different
 foods are
 good for
 different
 creatures :

(1) because
 there are
 many dif-
 ferent seeds
 in the food,

(2) and the
 channels
 also differ
 in shape.

So what
 suits one
 does not
 suit an-
 other ;

^a For the idea that human spittle is fatal or harmful to
 snakes, cf. Aristotle, *HA* 607 A, Pliny, *HN* 7.2.15.

^b Cf. 1.814-829, 895-896, 2.333-380.

et *N. P. Howard*: est itaque ut *OQP*: est aliquae ut *Lach-*
mann: est in aquis *W. S. Watt*, *Hermes* 117 (1989) 234-235

contractabiliter caulas intrare palati, 660
 at contra quibus est eadem res intus acerba,
 aspera nimirum penetrant hamataque fauces.

Nunc facile est ex his rebus cognoscere quaeque.
 quippe ubi cui febris bili superante coorta est
 aut alia ratione aliquast vis excita morbi, 665
 perturbatur ibi iam totum corpus, et omnes
 commutantur ibi positurae principiorum ;
 fit prius ad sensum ut quae corpora conveniebant
 nunc non convenient, et cetera sint magis apta,
 quae penetrata queunt sensum progignere acerbum ;
 utraque enim sunt in mellis commixta sapore— 671
 id quod iam supera tibi saepe ostendimus ante.

Nunc age, quo pacto naris adiectus odoris
 tangat agam. primum res multas esse necessest
 unde fluens volvat varius se fluctus odorum, 675
 et fluere et mitti volgo spargique putandumst ;
 verum aliis aliis magis est animantibus aptus
 dissimilis propter formas. ideoque per auras
 mellis apes quamvis longe ducuntur odore,
 volturiisque cadaveribus. tum fissa ferarum 680
 ungula quo tulerit gressum promissa canum vis
 ducit, et humanum longe praesentit odorem
 Romulidarum arcis servator, candidus anser.

^a Brieger, Bailey, and others are probably wrong in thinking that *fauces* refers to the *foramina* or their entrances.

^b Cf. Seneca, *Ep.* 109.7 : *sunt enim quidam quibus morbi vitio mel amarum videatur*. According to Sextus Empiricus, *Pyr.* 2.63, Democritus maintained that honey is neither sweet nor bitter, Heraclitus that it is both sweet and bitter.

^c Cf. 2.398-407, 3.191-195. However, in neither of these

must enter the pores of the palate with soothing touch ; but contrariwise if the same thing is bitter to any when it gets in, doubtless rough and hooked elements penetrate the gullet.^a

⁶⁶³ It is easy now from these explanations to understand every separate case. For when fever arises in anyone, from overflow of bile, or when the energy of some disease is excited in another way, then the whole body is thrown into a riot and all the positions of the first-beginnings are changed about ; it follows that the bodies which once were suitable to cause sensation, are so no longer, and the other things are more apt, which in penetrating can engender a bitter sensation ; indeed both these are commingled in the savour of honey ^b—a matter which I have explained to you often before.^c

and taste differs in health and sickness with the same person.

⁶⁷³ Now listen and I will deal with the question, how the impact of odour affects the nose.^a First there must be a large number of things from which rolls flowing a manifold stream of odours, and we must think these flow and are sped and scattered everywhere ; but different odours are more fitted to different creatures, because of their differing forms. And therefore bees are drawn through the air to any distance by the scent of honey, vultures by carrion. Then let loose a pack of hounds, it leads you on wherever the cloven hoof of wild beasts has set its step ; and from afar the scent of man is caught by the white goose, preserver of the citadel of the

IV. So smell is caused by streams of particles which enter the nostrils ; and their different shapes affect creatures differently.

passages is it stated that honey contains both smooth and rough particles.

^d Epicurus gives a brief explanation of smell in *Ep. ad Hdt.* 53.

sic aliis alius nidor datus ad sua quemque
 pabula ducit et a taetro resiliere veneno 685
 cogit, eoque modo servantur saecla ferarum.

Hic odor ipse igitur, naris quicumque lacessit,
 est alio ut possit permitti longius alter ;
 sed tamen haud quisquam tam longe fertur eorum
 quam sonitus, quam vox, mitto iam dicere quam res
 quae feriunt oculorum acies visumque lacessunt. 691
 errabundus enim tarde venit ac perit ante,
 paulatim facilis distractus in aeris auras,
 ex alto primum quia vix emittitur ex re
 (nam penitus fluere atque recedere rebus odores 695
 significat quod fracta magis redolere videntur
 omnia, quod contrita, quod igni conlabefacta) ;
 deinde videre licet maioribus esse creatum
 principiis quam vox, quoniam per saxea saepta
 non penetrat, qua vox volgo sonitusque feruntur. 700
 quare etiam quod olet non tam facile esse videbis
 investigare in qua sit regione locatum ;
 refrigescit enim cunctando plaga per auras,
 nec calida ad sensum decurrit nuntia rerum.
 errant saepe canes itaque et vestigia quaerunt. 705

Nec tamen hoc solis in odoribus atque saporum
 in generest, sed item species rerum atque colores

704 decurrit *Lambinus* : decurrunt *OQP*, -unt *perhaps*
having come in from nuntia

^a When Rome was sacked by the Gauls in 387 B.C., the Capitol was saved by the vigilance of the sacred geese of Juno. Cf. Livy 5.47, Pliny, *HN* 10.51, Cicero, *Rosc. Am.* 20.56, Virgil, *Aen.* 8.655-656.

^b *perit ante, i.e.* "evanescit antequam perveniat ad nares" (Pius).

Roman race.^a So different scent is given to different creatures, leading each to its food, and compelling it to leap back from loathsome poison, and in this manner the generations of wild beasts are preserved.

687 Take all the smells then that assail the nostrils : Smell does not travel as far as sound or images, one may be carried further than another, but yet no smell is ever carried so far as sound, as the voice. I need not add as all that strikes the sight of the eyes and assails the vision. For it wanders about and comes slowly, and is ready gradually to die away too soon,^b being dispersed abroad into the breezes of the air : first because it is emitted with difficulty from the depths of each thing ; for since all things seem to smell stronger when broken, when ground up, when disintegrated in fire, this means that odour comes flowing released out of the depths of things ; again it may be seen that smell is made of larger elements than voice, since it does not penetrate through stone walls,^c through which voice and sound commonly do pass. For this reason also you will see that it is not so easy to trace out in what part the scent is situated ; for the blow grows cold in its leisurely course through the air, and does not run in hot to the sense with news of the object. This is why hounds often are at fault and cast for a scent.

706 Nor yet is this ^d to be found only in smells and tastes, but also the look of things and their colours Sights also affect different

^c And yet in 6.951-952 Lucr. states that smell, like sound, cold, and heat, does pass *per dissaepia domorum saxea*.

^d The state of things described in 684-686. The fact that the present passage is not perfectly adjusted to its context is a mark of lack of revision.

non ita conveniunt ad sensus omnibus omnes,
 ut non sint aliis quaedam magis acria visu.
 quin etiam gallum, noctem explaudentibus alis 710
 auroram clara consuetum voce vocare,
 noenu queunt rabidi contra constare leones
 inque tueri : ita continuo meminere fugai,
 nimirum quia sunt gallorum in corpore quaedam
 semina, quae cum sunt oculis inmissa leonum, 715
 pupillas interfodiunt acremque dolorem
 praebent, ut nequeant contra durare feroces ;
 cum tamen haec nostras acies nil laedere possint,
 aut quia non penetrant aut quod penetrantibus illis
 exitus ex oculis liber datur, in remorando 720
 laedere ne possint ex ulla lumina parte.

Nunc age, quae moveant animum res accipe, et
 unde
 quae veniunt veniant in mentem percipe paucis.

Principio hoc dico, rerum simulacra vagari
 multa modis multis in cunctas undique partis 725
 tenvia, quae facile inter se iunguntur in auris,
 obvia cum veniunt, ut aranea bratteaque auri.
 quippe etenim multo magis haec sunt tenvia textu
 quam quae percipiunt oculos visumque lacessunt, 729
 corporis haec quoniam penetrant per rara cientque
 tenvem animi naturam inter sensumque lacessunt.

Centaurus itaque et Scyllarum membra videmus
 712 rabidei (=rabidi) *Wakefield in notes* : rapidi *OQP*,
retained by Merrill (1917), Diels, Martin, Büchner in sense
of rapaces. Cf. 5.892

^a In the Epicurean view, thought and dreams are closely related to vision. Vision is caused by the impingement of
 332

are not always so suitable to the senses of all, that
 some things are not too stinging for some spectators.
 Why, even the cock, clapping out the night with his
 wings, who is accustomed to summon the dawn with
 clear voice, is one before whom ravening lions dare
 not stand fast or stare : so surely do they think at
 once of flight, no doubt because there are certain
 seeds in the cock's body, which, when they are sped
 into the eyes of a lion, dig holes in the pupils and
 cause stinging pain, so that they cannot endure
 against it for all their courage ; and yet these cannot
 hurt our sight at all, either because they do not
 penetrate, or because when they do penetrate they
 find a free exit from the eyes, that they may not in
 lingering hurt the eyes in any part.

722 Now listen, and hear what things stir the mind,
 and learn in a few words whence those things come
 into the mind that there do come.^a

724 In the first place I tell you that many images
 of things are moving about in many ways and in all
 directions, very thin, which easily unite in the air
 when they meet, being like spider's web or leaf of
 gold. In truth these are much more thin in texture
 than those which take the eyes and assail the vision,
 since these penetrate through the interstices of the
 body,^b and awake the thin substance of the mind
 within, and assail the sense.

732 Thus it is we see Centaurs, and the frames of
 images on the eyes, thought and dreams by the entry of finer
 images into the mind. *Cf. especially Epicurus, Ep. ad Hdt.*
49-51, Cicero, Fin. 1.6.21, Diogenes of Oenoanda fr. 9-10
Smith.

^b *Cf. Diogenes of Oenoanda fr. 9.III.6-14 Smith, quoted*
below in note on 977.

Cerbereasque canum facies simulacraque eorum
 quorum morte obita tellus amplectitur ossa,
 omne genus quoniam passim simulacra feruntur, 735
 partim sponte sua quae fiunt aere in ipso,
 partim quae variis ab rebus cumque recedunt
 et quae confiunt ex horum facta figuris.
 nam certe ex vivo Centauri non fit imago,
 nulla fuit quoniam talis natura animalis ; 740
 verum ubi equi atque hominis casu convenit imago,
 haerescit facile extemplo, quod diximus ante,
 propter subtilem naturam et tenvia texta.
 cetera de genere hoc eadem ratione creantur.
 quae cum mobiliter summa levitate feruntur, 745
 ut prius ostendi, facile uno commovet ictu
 quaelibet una animum nobis subtilis imago ;
 tennis enim mens est et mire mobilis ipsa.

Haec fieri ut memoro, facile hinc cognoscere possis.
 quatenus hoc simile est illi, quod mente videmus 750
 atque oculis, simili fieri ratione necesse est.

Nunc igitur docui quoniam me forte leonem
 cernere per simulacra, oculos quaecumque lacessunt,
 scire licet mentem simili ratione moveri
 per simulacra leonum et cetera quae videt aequae 755
 nec minus atque oculi, nisi quod mage tenvia cernit.

Nec ratione alia, cum somnus membra profudit,
 mens animi vigilat, nisi quod simulacra lacessunt
 haec eadem nostros animos quae cum vigilamus,

740 animalis *Lambinus* (1570): anima OQ: animai P: animantium "in quibusdam codicibus" (Pius): animantis *Gifanius*: animata *Merrill* (1917) 752 leonem *Lachmann*: leonum (cf. 755) OQ, *Diels*, *Martin*, *Büchner*, but see *Bailey*: leones *Marullus*

^a For Lucr.'s demonstration that Centaurs, Scyllas, and such monsters never existed, see 5.878-924.

Scyllas,^a and faces of dogs like Cerberus, and images mind sees monsters and ghosts. of those for whom death is past, whose bones rest in earth's embrace, since images of all kinds are being carried about everywhere, some that arise spontaneously in the air itself, some that are thrown off from all sorts of things, others that are made of a combination of these shapes. For certainly no image of a Centaur comes from one living, since there never For no real Centaur ever existed. was a living thing of this nature; but when the images of man and horse meet by accident, they easily adhere at once, as I said before,^b on account of their fine nature and thin texture. All other things of this class are made in the same way. And since these are carried about with velocity because of their extreme lightness, as I explained before,^c any given one of these fine images easily bestirs our mind by a single impression; for the mind is itself thin and wonderfully easy to move.

749 That this happens as I say, you may easily recognize from what is now to be said. Since this is like that—what we see with the mind like what we see with the eye—it must come about in a like way. The mind sees images, just as the eye does,

752 Now therefore, since I have shown that I perceive a lion, it may be, by means of images which in such a case assail the eyes, we may be sure that the mind is moved in a like way, by means of the images of lions and of all else it sees, equally and no less than the eyes, except that it perceives what is more thin. but the images are thinner.

757 Nor is there any other reason why the mind's intelligence is awake, when sleep has relaxed the limbs, except that the same images assail our minds It is the same in sleep,

^b 726.

^c 4.176-215.

usque adeo, certe ut videamur cernere eum quem 760
 relicta vita iam mors et terra potitast.
 hoc ideo fieri cogit natura, quod omnes
 corporis effecti sensus per membra quiescunt
 nec possunt falsum veris convincere rebus.
 praeterea meminisse iacet languetque spore, 765
 nec dissentit eum mortis letique potitum
 iam pridem, quem mens vivom se cernere credit.

Quod superest, non est mirum simulacra moveri
 brachiaque in numerum iactare et cetera membra ;
 nam fit ut in somnis facere hoc videatur imago ; 770
 quippe ubi prima perit alioque est altera nata
 inde statu, prior hic gestum mutasse videtur.
 scilicet id fieri celeri ratione putandumst :
 tanta est mobilitas et rerum copia tanta,
 tantaque sensibili quovis est tempore in uno 775
 copia particularum, ut possit suppeditare.

Multaque in his rebus quaeruntur multaque nobis
 clarandumst, plane si res exponere avemus.

Quaeritur in primis quare, quod cuique libido
 venerit, extemplo mens cogitet eius id ipsum. 780
 anne voluntatem nostram simulacra tumentur
 et simul ac volumus nobis occurrit imago,

761 relicta (or rēlicta) *Isaac Voss* : reddita *OQP*

^a Cf. Diogenes of Oenoanda fr. 9. IV.7-VI.3 Smith: "When we are asleep, with all the senses as it were paralysed and extinguished [again in] sleep, the soul, which is [still wide] awake [and yet is unable to recognize] the predicament and condition of the senses at that time, on receiving the images that approach it, conceives an untested and false opinion concerning them, as if it were actually apprehending the solid nature of true realities; for the means of testing the opinion are asleep at that time. These are the senses; for the rule and standard [of truth] with respect to [our dreams] remain [these]."

as when we wake, and to such a degree, that we seem surely to see him who has left his life, and of whom now death and dust are masters. This nature compels to happen, for the reason that all our senses are obstructed and quiet throughout the frame, and unable to refute the false by the true.^a Besides, in sleep memory lies inactive and is relaxed, and does not urge in contradiction that he has long since been in the power of death and destruction whom the mind believes itself to see alive.

but memory is inactive and cannot serve our judgement.

⁷⁶⁸ Moreover, it is not wonderful that images move, and stir their arms rhythmically, and the rest of their limbs; for it does happen that the image seems to do this in our sleep; the truth is that, when the first image perishes and a second is then produced in another position, the former seems to have altered its pose. Of course this must be supposed to take place very swiftly: so great is their velocity, so great the store of things, so great the store of particles in any single moment of sensation, to enable the supply to come up.^b

Apparent movement is caused by a succession of images.

⁷⁷⁷ There are many questions to be asked on this topic, many explanations to be given, if we wish to make the matter clear.

Questions suggested:

⁷⁷⁹ The first question is why the mind immediately thinks of whatever the whim takes it to think of. Do the images wait on our will, and as soon as we wish it does an image present itself to us, be it sea, (1) How can the mind think of whatever it wishes?

^b A moment of sensation, as *Lucr.* explains below (794), is the shortest time in which one can feel or perceive. In this time many movements may combine to make one impression. Cinematographic pictures make this easy to understand.

si mare, si terram cordist, si denique caelum ?
 conventus hominum pompam convivia pugnās,
 omnia sub verbone creat natura paratque ? 785
 cum praesertim aliis eadem in regione locoque
 longe dissimilis animus res cogitet omnis.

Quid porro, in numerum procedere cum simulacra
 cernimus in somnis et mollia membra movere,
 mollia mobiliter cum alternis brachia mittunt 790
 et repetunt oculis gestum pede convenienti ?
 scilicet arte madent simulacra et docta vagantur,
 nocturno facere ut possint in tempore ludos.

An magis illud erit verum ? quia tempore in uno,
 cum sentimus, id est, cum vox emittitur una, 795
 tempora multa latent, ratio quae comperit esse,
 propterea fit uti quovis in tempore quaeque
 praesto sint simulacra locis in quisque parata :
 tanta est mobilitas et rerum copia tanta.
 hoc, ubi prima perit alioque est altera nata 800
 inde statu, prior hic gestum mutasse videtur.
 et quia tenvia sunt, nisi quae contendit, acute
 cernere non potis est animus ; proinde omnia quae
 sunt

praeterea pereunt, nisi si ad quae se ipse paravit.
 ipse parat sese porro speratque futurum 805

791 oculis OQP : ollis Creech (notes), but oculis, though strictly inaccurate, is no less natural than in manibus in 820
 795 cum sentimus attributed by most modern editors to Munro, but first printed by Naugerius : consentimus OQP : quod sentimus Lachmann 799-801 = 774, 771-772, except for one small change in 800. Some editors exclude the lines, but, although Lucr. might have made an alteration in revision, it is not the business of modern editors to revise the poem for him 804 si ad quae se Brieger : quae ex se OQL : quae ex sese BF : siquae ad se Lachmann

^a Lambinus well compares Cicero, *Fam.* 15.16.1-2, *Nat.D.* 1.38.108, *Div.* 2.67.137.

be it earth we desire, or be it heaven ? ^a Congregations of men, procession, banquets, battles—does nature make and prepare them all at a word ? and that too although others in the same region and place have the mind thinking of all sorts of things quite different.

⁷⁸⁸ What are we to say, moreover, when we see in (2) How can images seem to move ? dreams the images footing it feately in rhythm and swaying their supple limbs, swinging one supple arm after the other in rippling movement and repeating before our sight the same gesture with foot answering to hand ? Assuredly the wandering images are steeped in art and well trained, so that they can make sport in the night time.

⁷⁹⁴ Or will this rather be the reason ?—because in one moment of time perceived by us, that is, while one word is being uttered, many times are lurking which reason understands to be there, that is why in any given moment all these various images are present ready in every place ^b : so great is their velocity, so great the store of things. Therefore, when the first image perishes and a second is then produced in another position, the former seems to have altered its pose. And because they are thin, the mind cannot perceive any sharply except those which it strains itself to see ; therefore all the others perish except those for which it has prepared itself. ^c It does, moreover, prepare itself, and hopes to see

A great variety of images is ready at any given time ;
 but the mind sees only those to which it attends, and once

^b The reason can divide up a sensible moment into a number of smaller times, as it can divide the atom into a number of *minima* which have no separate existence.

^c This is the reason why not all the images are perceived. The mind does not perceive any except when it directs its attention purposely (*cf.* 779). Lucr. does not explain what leads it to do so.

ut videat quod consequitur rem quamque ; fit ergo.
 nonne vides oculos etiam, cum tenvia quae sunt 807
 cernere coeperunt, contendere se atque parare, 809
 nec sine eo fieri posse ut cernamus acute ? 810
 et tamen in rebus quoque apertis noscere possis,
 si non advertas animum, proinde esse quasi omni
 tempore semotum fuerit longeque remotum.
 cur igitur mirumst, animus si cetera perdit
 praeterquam quibus est in rebus deditus ipse ? 815
 deinde adopinamur de signis maxima parvis
 ac nos in fraudem induimus frustraminis ipsi.

Fit quoque ut interdum non suppeditetur imago
 eiusdem generis, sed femina quae fuit ante,
 in manibus vir uti factus videatur adesse, 820
 aut alia ex alia facies aetasque sequatur.
 826 quod ne miremur sopor atque oblivia curant.
 822 Illud in his rebus vitium vementer avemus
 823 te fugere, errorem vitareque praemetuenter,
 824 lumina ne facias oculorum clara creata, 825
 825 prospicere ut possimus, et ut proferre queamus
 proceros passus, ideo fastigia posse
 surarum ac feminum pedibus fundata plicari,

808 = 804 *rightly omitted in ed. Aldina. A scribe repeated the line when his eye wandered from the end of 807 to the identical end of 803* 823 *avemus (cf. 2.216) Bernays : inesse OQP, retained by Ernout, Diels, Büchner with a lacuna marked after 823, but there may have been a blot or tear at the end of the line (as perhaps in 826) and inesse may have come in under the influence of adesse in 820 : avessis Munro 824 te fugere Bailey ; effugere OQP : te effugere Bernays 826 queamus (cf. 877) Lashmann : via OQ : viai Q corr., P, Ernout*

* The mind directs its powers to see some image, and then

that which follows on each thing: therefore that does follow.^a Do you not see the eyes themselves, when they begin to perceive something that is thin, try hard and prepare themselves, without which we cannot possibly perceive sharply ? And yet even in things plainly visible you can observe that, if your mind fails to attend, it is just as if the thing were all the while withdrawn and far removed from you. Then what wonder is it, if the mind misses everything except what it is itself intent on ? Furthermore, we draw large deductions from small indications, and ourselves bring ourselves into deceit and delusion.^b

begun, they go on in series.
Attention is important when we are awake.
Beware of false deductions.

818 It sometimes happens again that the image that follows up is not of the same kind, but what was before a woman seems to be changed into a man in our grasp ; or that different shapes and ages follow ; but sleep and oblivion see to it that we do not wonder.

Images often change in sleep.

823 There is a fault in this regard which we earnestly desire you to escape, shunning error with exceeding fearfulness : do not suppose that the clear light of the eyes was made in order that we might be able to see before us ; or that the ends of the calves and thighs were jointed and placed upon the foundation of the feet, only to enable us to march forward with long forward strides ; that the forearms again were

A warning. Do not suppose that senses and limbs were made for use ;

determines to see the series belonging to it which follows: therefore this series does follow, the irrelevant ones being unnoticed.

^b Cf. 462-468. The idea here seems to be that the mind's tendency to make the mistake of drawing sweeping conclusions from slight evidence is proof that much escapes its notice.

brachia tum porro validis ex apta lacertis
 esse manusque datas utraque ex parte ministras, 830
 ut facere ad vitam possemus quae foret usus.
 cetera de genere hoc inter quaecumque pretantur,
 omnia perversa praepostera sunt ratione,
 nil ideo quoniam natumst in corpore ut uti
 possemus, sed quod natumst id procreat usum. 835
 nec fuit ante videre oculorum lumina nata,
 nec dictis orare prius quam lingua creatast,
 sed potius longe linguae praecessit origo
 sermonem, multoque creatae sunt prius aures
 quam sonus est auditus, et omnia denique mem-
 bra 840
 ante fuere, ut opinor, eorum quam foret usus ;
 haud igitur potuere utendi crescere causa.

At contra conferre manu certamina pugnae
 et lacerare artus foedareque membra cruore
 ante fuit multo quam lucida tela volarent, 845
 et volnus vitare prius natura coegit
 quam daret obiectum parmai laeva per artem.
 scilicet et fessum corpus mandare quieti
 multo antiquius est quam lecti mollia strata,
 et sedare sitim prius est quam pocula natum. 850
 haec igitur possunt utendi cognita causa
 credier, ex usu quae sunt vitae reperta.
 illa quidem seorsum sunt omnia quae prius ipsa
 nata dedere suae post notitiam utilitatis.
 quo genere in primis sensus et membra videmus ; 855
 quare etiam atque etiam procul est ut credere possis
 utilitatis ob officium potuisse creari.

^a The most notable supporters of the teleological view which *Lucr.* refutes in this passage (823-857) were Aristotle and the Stoics. Although Epicurus, from whom *Lucr.* undoubtedly derived his argument, was probably arguing

fitted upon sturdy upper arms, and ministering hands given on either side, only that we might be able to do what should be necessary for life.^a Such explanations, and all other such that men give, put effect for cause and are based on perverted reasoning ; since nothing is born in us simply in order that we may use it, but that which is born creates the use. There was no sight before the eyes with their light were born, no speaking of words before the tongue was made ; but rather the origin of the tongue came long before speech, and the ear was made long before sound was heard, in a word all the members, as I think, existed before their use ; they could not then have grown up for the sake of use.

they came first, their use after.

⁸⁴³ But contrariwise there was fighting hand to hand in the strife of battle, and tearing of limbs and polluting of bodies with blood, long before flashing shafts went flying ; and nature taught men to avoid a wound before the left arm provided the interposition of a shield by artifice. You may be sure also that to yield the out-wearied body to rest is much more ancient than soft mattresses of a bed, and to quench the thirst is an older thing than drinking-cups. These things, therefore, which were found out from experience and life, may be well believed to have been invented for the sake of use. But those are all in a different class which were produced before any conception of their usefulness. Among the first of this class we see to be the senses and the limbs ; therefore again and again I say, you have no reason at all to believe that they could have been made for the purpose of usefulness.

They differ from instruments made by man.

chiefly against Aristotle, there can be little doubt that *Lucr.* has the Stoics in mind as well (*cf.* note on 1.1053).

LUCRETII

Illud item non est mirandum, corporis ipsa
 quod natura cibum quaerit cuiusque animantis.
 quippe etenim fluere atque recedere corpora rebus
 multa modis multis docui, sed plurima debent 861
 ex animalibu'. quae quia sunt exercita motu,
 multaue per sudorem ex alto pressa feruntur,
 multa per os exhalantur, cum languida anhelant,
 his igitur rebus rarescit corpus et omnis 865
 subruitur natura ; dolor quam consequitur rem.
 propterea capitur cibus, ut suffulciat artus
 et recreet vires interdatus, atque patentem
 per membra ac venas ut amorem obturet edendi.
 umor item discedit in omnia quae loca cumque 870
 poscunt umorem ; glomerataque multa vaporis
 corpora, quae stomacho praebent incendia nostro,
 dissipat adueniens liquor ac restinguit ut ignem,
 urere ne possit calor amplius aridus artus.
 sic igitur tibi anhela sitis de corpore nostro 875
 abluitur, sic expletur ieiuna cupido.

Nunc qui fiat uti passus proferre queamus,
 cum volumus, varieque datum sit membra movere,
 et quae res tantum hoc oneris protrudere nostri
 corporis insuerit, dicam ; tu percipe dicta. 880

Dico animo nostro primum simulacra meandi
 accidere atque animum pulsare, ut diximus ante.
 inde voluntas fit ; neque enim facere incipit ullam
 rem quisquam, quam mens providit quid velit ante ;

862 quae *Lachmann* : omitted by OQ 863-864 trans-
 posed by *Lachmann* and many modern editors 878
 varieque ed. *Veronensis* : varque OQP (cf. 1007, where
 Q has varae for variae) : quareque (or quareve) *Merrill*

^a 2.1128-1143.

^b *Lucr.* pictures the hungry body as a shaky and chinky
 building in need of support and repair : cf. *subruitur* (866),
 344

858 Nor is there any reason to be surprised that Living
 the nature of each living body seeks its own food un- bodies seek
 taught. I have shown ^a you in fact that many bodies food to re-
 are thrown off flowing from things in many ways, place their
 but most must be thrown off from living creatures ; waste ;
 for since these are always in quick movement, and
 many bodies are pressed out from their depths in
 sweat, many are exhaled through the mouth when
 they pant from exhaustion, by these means therefore
 the body becomes rarefied and its whole nature is
 undermined ; and on this pain follows. For this
 reason food is taken, that it may prop up the frame
 and recreate the strength by filling the interstices,
 and may stop up the gaping desire to eat through-
 out limbs and veins.^b Fluid also passes into all the
 different parts that demand fluid, and the bodies of
 heat gathered in large masses, which set our stomach drink
 in a blaze, are scattered abroad by the fluid as it quenches
 comes and extinguished like flame, that the dry the inward
 burning may no longer be able to scorch our frame. parching.
 Thus then your panting thirst is swilled away out of
 the body, thus your starved craving is filled up.

877 Next I will say how it comes about that we can Motion.
 carry onwards our steps when we please, how it has
 been given to us to move our limbs in different ways,
 what has caused the habit of pushing onwards this
 great bodily weight : do you attend to my sayings.

881 I say that in the first place images of move- An image of
 ment come in contact with our mind, and strike the movement
 the mind, as I said before.^c After this comes will ; strikes the
 for no one ever begins anything until the intelligence mind ; then
 will come the
 move,

suffulciat (867), *interdatus*, *patentem* (868), *obturet* (869),
expletur (876).
^c 724-731.

id quod providet, illius rei constat imago. 885
 ergo animus cum sese ita commovet ut velit ire
 inque gredi, ferit extemplo quae in corpore toto
 per membra atque artus animai dissita vis est ;
 et facilest factu, quoniam coniuncta tenetur.
 inde ea porro corpus ferit, atque ita tota 890
 paulatim moles protruditur atque movetur.
 praeterea tum rarescit quoque corpus, et aer
 (scilicet ut debet qui semper mobilis extat)
 per patefacta venit penetratque foramina largus,
 et dispartitur ad partis ita quasque minutas 895
 corporis. hic igitur rebus fit utrimque duabus,
 corpus ut, ac navis velis ventoque, feratur.

Nec tamen illud in his rebus mirabile constat,
 tantula quod tantum corpus corpuscula possunt
 contorquere et onus totum convertere nostrum. 900
 quippe etenim ventus subtili corpore tenuis
 trudit agens magnam magno molimine navem,
 et manus una regit quantovis impete euntem
 atque gubernaculum contorquet quolibet unum,
 multaque per trocleas et tympana pondere magno
 commovet atque levi sustollit machina nisu. 906

Nunc quibus ille modis somnus per membra quietem
 inriget atque animi curas e pectore solvat,
 suavidicis potius quam multis versibus edam ;
 parvus ut est cyeni melior canor, ille gruum quam 910
 clamor in aetheriis dispersus nubibus austri.

897 corpus *Codex Bodleianus Auct. F.1.13, ed. Brixiensis, ed. Aldina, Pius, ed. Juntina, Naugerius, Gryphius—all earlier than Lambinus, to whom modern editors attribute the conjecture: corporis (from 896?) OQP ut ac OQ, ed. Aldina, Pius, etc. (as above): deleted by O corr.: omitted by ABP: ut hac L: uti, ut Lambinus*

^a The limbs and the air. The action of the air upon the

has first foreseen what it wills to do. (What it fore-
 sees, the image of that thing is present in the mind.)
 Therefore when the mind so bestirs itself that it
 wishes to go and to step forwards, at once it strikes
 all the mass of spirit that is distributed abroad the mind
strikes the
spirit,
 through limbs and frame in all the body. And this is
 easy to do, since the spirit is held in close combina-
 tion with it. The spirit in its turn strikes the body,
 and so the whole mass is gradually pushed on and
 moves. Besides, at that moment the body also ex-
 pands its pores, and the air (as you might expect the spirit
strikes the
body,
which
moves,
 with something always so sensitive to movement) aided by
the air in
the opening
pores.
 passes and penetrates through the opened passages
 in abundance, and so is distributed abroad into the
 very smallest parts of the body. Here then by two
 things ^a acting in two ways it comes about that the
 body is carried along, as a ship by sails and wind.
⁸⁹⁸ Again, there is no need to be surprised that
 elements so small can sway so large a body and turn
 about our whole weight. For indeed the wind, which
 is thin and has a fine substance, drives and pushes a
 great ship with mighty momentum, and one hand We know
that small
things do
move great.
 rules it however fast it may go, and one rudder steers
 it in any direction ; and a machine by its blocks and
 treadwheels moves many bodies of great weight and
 uplifts them with small effort.

⁹⁰⁷ Next in what way the sleep I spoke of floods Sleep.
 the body with quietude and lets loose care from the
 heart, I will declare in verses not many but sweet-
 speaking, as the short song of the swan is better
 than that honking of cranes, spread abroad in the
 limbs is compared to the action of the wind upon the sails of
 a ship. Cf. 6.1031-1033.

tu mihi da tenuis aures animumque sagacem,
 ne fieri negites quae dicam posse, retroque
 vera repulsanti discedas pectore dicta,
 tutemet in culpa cum sis neque cernere possis. 915

Principio somnus fit ubi est distracta per artus
 vis animae partimque foras eiecta recessit
 et partim contrusa magis concessit in altum ;
 dissoluuntur enim tum demum membra fluuntque.
 nam dubium non est, animai quin opera sit 920
 sensus hic in nobis, quem cum sopor inpedit esse,
 tum nobis animam perturbatam esse putandumst
 eiectamque foras—non omnem, namque iaceret
 aeterno corpus perfusum frigore leti ;
 quippe ubi nulla latens animai pars remaneret 925
 in membris, cinere ut multa latet obrutus ignis,
 unde reconfari sensus per membra repente
 posset, ut ex igni caeco consurgere flamma ?

Sed quibus haec rebus novitas confiat, et unde
 perturbari anima et corpus languescere possit, 930
 expediam ; tu fac ne ventis verba profundam.

Principio externa corpus de parte necessum est,
 aeriis quoniam vicinum tangitur auris,
 tundier atque eius crebro pulsariet ictu ;
 proptereaue fere res omnes aut corio sunt 935
 aut etiam conchis aut callo aut cortice tectae.
 interiorum etiam partem spirantibus aer
 verberat hic idem, cum ducitur atque reflatur.
 quare utrimque secus cum corpus vapulet, et cum
 perveniant plagae per parva foramina nobis 940

skyey clouds of the south.^a Do you lend me a keen ear and a sagacious mind, that you may not deny what I shall say to be possible, and depart from me with a breast that repels words of truth, although you are yourself in fault and cannot perceive it.

⁹¹⁶ In the first place sleep comes on when the power of spirit is drawn apart through the body, and part being cast forth has gone away, and part more crowded together has retreated into the depths ; for only then the limbs loosen and become flaccid. For there is no doubt that this feeling in us comes about by action of the spirit, and when sleep hinders the feeling so that there is none, then we must suppose that the spirit has been disordered and cast forth without ; but not all, for then the body would lie pervaded with the everlasting cold of death ; since of course if no part of the spirit were left hidden in the limbs, like fire covered in a heap of ashes, whence if all left the body, it would die.

⁹²⁹ But by what cause this new state comes to pass, and whence the spirit can be disordered and the body become languid, I will proceed to explain ; do you see to it that I do not waste my words on the winds.

⁹³² In the first place, it is necessary that since the body is touched by the breezes of the neighbouring air, the outer part of the body must be thumped and buffeted by the frequent blows of the air ; and that is why nearly all things are protected by skin, or even shells, or a callosity or bark. This same air beats the inner part also when we breathe, as it is drawn in and blown back. Therefore, since the body is beaten on both parts, and also blows coming in

^a 909-911 = 180-182.

corporis ad primas partis elementaque prima,
 fit quasi paulatim nobis per membra ruina ;
 conturbantur enim positurae principiorum
 corporis atque animi. fit uti pars inde animai
 eiiciatur, et introrsum pars abdita cedit, 945
 pars etiam distracta per artus non queat esse
 coniuncta inter se neque motu mutua fungi ;
 inter enim saepit coetus natura viasque ;
 ergo sensus abit mutatis motibus alte.
 et quoniam non est quasi quod suffulciat artus, 950
 debile fit corpus languescuntque omnia membra,
 brachia palpebraeque cadunt poplitesque cubanti
 saepe tamen summittuntur virisque resolvunt.

Deinde cibum sequitur somnus, quia, quae facit aer,
 haec eadem cibus, in venas dum diditur omnis, 955
 efficit. et multo sopor ille gravissimus exstat
 quem satur aut lassus capias, quia plurima tum se
 corpora conturbant magno contusa labore.
 fit ratione eadem coniectus parte animai
 altior atque foras eiectus largior eius, 960
 et divisor inter se ac distractior intus.

Et quo quisque fere studio devinctus adhaeret,
 aut quibus in rebus multum sumus ante morati,

944 animi *OQP* : animae *Bailey tentatively (see note on translation)* : homini (*with semi-colon after corporis*) *Wakefield*
 945 eiiciatur (*cf. 917, 923*) *Lambinus (not eiicitur, as stated by modern editors)* : eliciatur *OQP, Wakefield, Martin*
 959 parte *OQP* : partim (*cf. 918*) *Lachmann*
 961 intus *OQP* : intust *W. Everett, Harv. Stud. 7 (1896) 32, Bailey* : actus *Lachmann*

^a Bailey is right to point out that *animi* is unexpected, because the *animus* is unaffected in sleep, but wrong in thinking that no earlier editor had noticed the difficulty : Wakefield suggests an emendation of *animi* (see critical note) and remarks "huic autem divinationi plus confidimus, quia

through the tiny passages penetrate to the primary particles and elements of our bodies, by degrees there comes about as it were a collapse all through the limbs. For the positions of the first-beginnings of both body and mind ^a are disordered. Next, part of the spirit comes to be cast forth, and a part recedes within and is hidden, a part again, being drawn abroad through the frame, cannot remain in conjunction or perform a combined motion ; for nature shuts off the communications and paths ; therefore sensation buries itself deep when the motions are changed. And since there is nothing as it were to prop up the limbs, the body becomes weak and all the members are languid, arms and eyelids fall, the hams often at the moment of lying down give way beneath you and lose their strength.

⁹⁵⁴ Again, sleep follows after food, because food has exactly the same effect as the air, while it is being distributed abroad into the veins. And much the heaviest sleep is that which you take when replete or weary, because then the greatest number of elements are disordered, being dulled by long effort. Of the spirit, too, in the same way part is thrown together at a greater depth, and the quantity thrown forth is more ample, and it is more divided in itself and dispersed within.

⁹⁶² And whatever be the pursuit to which one clings with devotion, whatever the things on which we have been occupied much in the past, the mind ^{in sleep the mind dreams of the} nulla fiat *animi* mentio per totam hanc de somno disputationem." The answer to the problem is probably not textual emendation, but rather that, as Bailey suggests, Lucr. here uses *animus* in the inclusive sense of *animus + anima*, or perhaps that he made a slip.

atque in ea ratione fuit contenta magis mens,
 in somnis eadem plerumque videmur obire : 965
 causicidi causas agere et componere leges,
 induperatores pugnare ac proelia obire,
 nautae contractum cum ventis degere bellum,
 nos agere hoc autem et naturam quaerere rerum
 semper et inventam patriis exponere chartis. 970
 cetera sic studia atque artes plerumque videntur
 in somnis animos hominum frustrata tenere.

Et quicumque dies multos ex ordine ludis
 assiduas dederunt operas, plerumque videmus,
 cum iam destiterunt ea sensibus usurpare, 975
 relicuas tamen esse vias in mente patentes,
 qua possint eadem rerum simulacra venire.
 per multos itaque illa dies eadem observantur
 ante oculos, etiam vigilantes ut videantur
 cernere saltantis et mollia membra moventis, 980
 et citharae liquidum carmen chordasque loquentis
 auribus accipere, et consessum cernere eundem
 scenaeque simul varios splendere decores.

Usque adeo magni refert studium atque voluntas,
 et quibus in rebus consuerint esse operati 985
 non homines solum, sed vero animalia cuncta.
 quippe videbis equos fortis, cum membra iacebunt,
 in somnis sudare tamen spirareque semper

968 bellum *O* corr., *P*: vellum *O*: velum *Q*: duellum
Codex Bodleianus Auct. F.1.13, adopted by most recent editors
 ("certainly right," according to Bailey), but confusion of *b*
 and *v* is very common, and in 5.1289, where *OQ* read *velli*, all
 editors accept *belli* of *O* corr., and only Ernout tentatively
 suggests reading *duelli*. Cf. W. Clausen in *Harv. Stud.* 75
 (1971) 70 984 voluntas *OQP*: voluptas Lachmann,
 perhaps rightly

^a For the idea that people dream of the activities of waking
 life, cf. e.g. Accius, *Praetext.* 29, Petronius fr. 30, Fronto, *de*
 352

being thus more intent upon that pursuit, it is interests of
 generally the same things that we seem to encounter the day:
 in dreams ^a: pleaders to plead their cause and col-
 late laws, generals to contend and engage battle,
 sailors to fight out their war already begun with the
 winds, I myself to ply my own task, always seeking
 the nature of things and when found setting it forth
 in our own mother tongue. Thus too all other pur-
 suits and arts usually seem in sleep to hold fast men's
 minds with their delusions.

⁹⁷³ And whenever men have given constant atten-
 tion to the games through many days on end, we
 usually see that, when they have now ceased to
 observe all this with their senses, yet certain passages
 are left open in the mind by which the images of
 these things can come in.^b For many days then sometimes
 these same things are moving before their eyes, so even when
 that even while awake they seem to perceive dancers awake.
 swaying their supple limbs, to hear in their ears the
 lyre's rippling tune and its speaking strings, to be-
 hold the same assemblage and with it the diverse
 glories of the stage in their brightness.

⁹⁸⁴ Of so great import are devotion and inclination,
 and what those things are which not men only, but
 indeed all creatures, are in the habit of practising.
 In fact you will see horses of mettle, as they lie Horses also
 stretched out, nevertheless sweating in their sleep dream of
 their races,

feriis Alsiansibus 3. Petronius and Fronto were almost
 certainly influenced by Lucr.

^b Cf. Diogenes of Oenoanda fr. 9.III.6-IV.2 Smith: "And
 after the impingements of the first images, our nature is ren-
 dered porous in such a manner that, even if the objects which it
 first saw are no longer present, images similar to the first ones
 are received by the mind, [creating visions both when we are
 awake and in sleep]."

et quasi de palma summas contendere viris,
aut quasi carceribus patefactis rumpere sese. 990
991 venantumque canes in molli saepe quiete
992 iactant crura tamen subito vocesque repente
993 mittunt et crebro redducunt naribus auras,
994 ut vestigia si teneant inventa ferarum,
995 expergefactive sequantur inania saepe 995
996 cervorum simulacra, fugae quasi dedita cernant,
997 donec discussis redeant erroribus ad se.
998 at consueta domi catulorum blanda propago
999 discutere et corpus de terra corripere instant 999
proinde quasi ignotas facies atque ora tuantur. 1004
et quo quaeque magis sunt aspera seminiorem, 1005
tam magis in somnis eadem saevire necessust.
at variae fugiunt volucres pinnisque repente
solicitant divom nocturno tempore lucos,
accipitres somno in leni si proelia pugnans
edere sunt persectantes visaeque volantes. 1010
Porro hominum mentes, magnis quae motibus edunt
magna, itidem saepe in somnis faciuntque geruntque:
reges expugnant, capiuntur, proelia miscent,
tollunt clamorem, quasi si iugulentur ibidem.
multi depugnant gemitusque doloribus edunt 1015
et, quasi pantherae morsu saevive leonis
mandantur, magnis clamoribus omnia complent.
multi de magnis per somnum rebu' loquuntur
indicioque sui facti persaepe fuere.
multi mortem obeunt. multi, de montibus altis 1020
ut qui praecipitent ad terram corpore toto,
exterruntur, et ex somno quasi mentibu' capti
vix ad se redeunt, permoti corporis aestu.

990 rumpere sese *M. F. Smith* (cf. 2.263-264 patefactis . . . carceribus . . . prorumpere): saepe quiete *OQP* (from 991): fundere sese *W. Richter*: velle volare *Munro exempli gratia*

and for ever panting, as though they were exerting their last strength to win the palm, or as though bursting out from the opened cells. Hunters' dogs often in soft sleep all at once jerk their legs and suddenly give tongue, and often sniff up the air, as though they had found and were holding the track of a wild beast; and if awakened they often chase the empty images of stags, as though they saw them in flight, until they dissipate their delusions and come to themselves. But the friendly breed of dogs that live in the house hasten to shake themselves and to leap up from the ground, exactly as if they caught sight of an unknown face and form. And the fiercer each breed is, the wilder each must be in its dreams. But the different birds take to flight, and suddenly disturb the groves of the gods at night with their wings, if in their gentle sleep hawks chasing and flying have seemed to offer battle and fight.

¹⁰¹¹ Moreover, the minds of men, which with mighty motions accomplish mighty feats, often do and carry out the same things in dreams: kings win victories, are captured, join battle, cry aloud as if their throats were being cut on the spot. Many struggle violently, groan with pain, and, as if they were being gnawed in the jaws of a panther or cruel lion, make the place ring with their cries. Many in sleep talk of important matters, and they have often borne witness against themselves. Many meet their death. Many are terrified with the notion that they are being hurled bodily down to earth from a lofty mountain, and, awaking like men deprived of their senses, they scarcely recover themselves, shaken by

1000-1003=992-995 must be ejected 1022 exterruntur
OQFL: exterruntur *B*, ed. *Aldina*

flumen item sitiens aut fontem propter amoenum
 adsidet et totum prope faucibus occupat amnem. 1025
 parvi saepe lacum propter si ac dolia curta
 somno devincti credunt se extollere vestem,
 totius umorem saccatum corpori' fundunt,
 cum Babylonica magnifico splendore rigantur.
 tum quibus aetatis freta primitus insinuatur 1030
 semen, ubi ipsa dies membris matura creavit,
 conveniunt simulacra foris e corpore quoque,
 nuntia praeclari voltus pulchricoloris,
 qui ciet inritans loca turghida semine multo,
 ut quasi transactis saepe omnibu' rebu' profundant
 fluminis ingentis fluctus vestemque cruentent. 1036

Sollicitatur id in nobis, quod diximus ante,
 semen, adulta aetas cum primum roborat artus.
 namque alias aliud res commovet atque lacessit ;
 ex homine humanum semen ciet una hominis vis. 1040
 quod simul atque suis eiectum sedibus exit,
 per membra atque artus decedit corpore toto
 in loca conveniens nervorum certa, cietque
 continuo partis genitalis corporis ipsas.
 inritata tument loca semine, fitque voluntas 1045
 eicere id quo se contendit dira libido, 1046
 idque petit corpus, mens unde est saucia amore ; 1048

1026 parvi *M. L. Clarke, CQ N.S. 34 (1984) 240*: puri *OQP*:
 multi *Avancius* 1037 id in *ABCF*: id *OQL*: idem *ed.*
Brixianis 1047 = 1034, with incitat for qui ciet, excluded
 by *Naugerius*

^a *fretus* or *fretum* connotes choppy seas and cross currents, whether in the narrows between two shores or in the place where opposing waters meet: see Varro, *Ling.* 7.22 *dictum fretum a similitudine ferventis aquae, quod in fretum saepe concurrat aestus atque effervescat*; cf. *Lucr.* 1.720, 6.427. In 6.364, 374 (if *Lachmann's* restoration is right) it is used of spring and autumn, the unsettled, transitional seasons

the confusion of their body. Again, one athirst often sits beside a stream or a pleasant spring, and all but swallows the whole river. Children often, when held fast in sleep, if they think they are lifting up their garments beside a basin or low pot, pour forth all the filtered liquid of their body, drenching the Babylonian coverlets in all their magnificence. Again those into the choppy tides^a of whose youth the seed is first penetrating, when time has duly produced it in the frame, meet with images from some chance body that fly abroad, bringing news of a lovely face and beautiful bloom, which excites and irritates the parts swelling with seed, so that, as if the whole business had been done, they often pour forth a great flood and stain their clothes.

¹⁰³⁷ This seed, as I have said before, is stirred up within as soon as the age of full growth strengthens our frame. For there are different forces that move and excite different things; but only the power of man can draw forth human seed from a man. As soon as the seed comes forth, driven from its retreats, it is withdrawn from the whole body through all the limbs and members, gathering in fixed parts in the loins, and arouses at once the body's genital parts themselves. Those parts thus excited swell with the seed, and there arises a desire to emit it towards that whither the dire craving tends; and the body seeks that which has wounded the mind with love.^b

The cause
of sexual
desire.

of the year. Here the metaphor vividly describes the emotionally unsettled transitional period between boyhood and maturity.

^b Wound metaphors are common in the erotic poetry of the Greek epigrammatists, and *Lucr.* makes his attack on the conventional attitude to sexual love the more devastating by

namque omnes plerumque cadunt in vulnus, et illam
 emicat in partem sanguis unde icimur ictu, 1050
 et si comminus est, hostem ruber occupat umor.
 sic igitur Veneris qui telis accipit ictus,
 sive puer membris muliebribus hunc iaculatur
 seu mulier toto iactans e corpore amorem,
 unde feritur, eo tendit gestitque coire 1055
 et iacere umorem in corpus de corpore ductum ;
 namque voluptatem praesagit muta cupido.

Haec Venus est nobis ; hinc autemst nomen amoris ;
 hinc illaec primum Veneris dulcedinis in cor
 stillavit gutta, et successit frigida cura. 1060
 nam si abest quod ames, praesto simulacra tamen
 sunt
 illius, et nomen dulce obversatur ad auris.
 sed fugitare decet simulacra et pabula amoris
 absterrere sibi atque alio convertere mentem
 et iacere umorem conlectum in corpora quaeque, 1065
 nec retinere, semel conversum unius amore,
 et servare sibi curam certumque dolorem ;
 ulcus enim vivescit et inveterascit alendo,
 inque dies gliscit furor atque aerumna gravescit,
 si non prima novis conturbes volnera plagis 1070
 volgivagaque vagus Venere ante recentia cures
 aut alio possis animi traducere motus.

exploiting the conventional imagery of the erotic poets (see E. J. Kenney in *Mnemos.* ser. 4, 23 [1970] 380-384). On the attitude of Lucr. and the Epicureans to sexual love, see Bailey, but also K. Kleve, *Assoc. G. Budé, Actes du VIII^e Congrès* 376-382, who argues that Bailey is mistaken in 358

For all generally fall towards a wound, and the blood jets out in the direction of the blow that has struck us, and if he is close by, the ruddy flood drenches the enemy. So therefore, if one is wounded by the shafts of Venus, whether it be a boy with girlish limbs who launches the shaft at him, or a woman radiating love from her whole body, he tends to the source of the blow, and desires to unite and to cast the fluid ^a from body to body ; for his dumb desire presages delight.

¹⁰⁵⁸ This is our Venus ; from this also comes love's name ^b ; from this first trickled into the heart that dewdrop of Venus's sweetness, and then came up freezing care. For if what you love is absent, yet its images are there, and the sweet name sounds in your ears. But it is fitting to flee from images, to scare away what feeds love, to turn the mind in other directions, to cast the collected liquid into any body, and not to retain it, being wrapped up once for all in the love of one, nor to cherish care and certain pain for yourself. For the sore quickens and becomes inveterate by feeding, daily the madness takes on and the tribulation grows heavier, if you do not confuse the first wounds by new blows, and cure them in time while fresh by wandering with Venus light-o'-love, or turn your thoughts in some other direction.

How to avoid its snares.

thinking that Lucr.'s attitude is not entirely that of an orthodox Epicurean.

^a Note *amorem* (1054) . . . *umorem* (1056)—a deliberate play upon words (*cf.* Plautus, *Mil.* 640) emphasizing the connexion between the two things (*cf. e.g.* 1.117-118, and see note on 1.63).

^b Cupido, Cupid.

Nec Veneris fructu caret is qui vitat amorem,
 sed potius quae sunt sine poena commoda sumit ;
 nam certe purast sanis magis inde voluptas 1075
 quam miseris. etenim potiundi tempore in ipso
 fluctuat incertis erroribus ardor amantum,
 nec constat quid primum oculis manibusque fruantur.
 quod petiere, premunt arte faciuntque dolorem
 corporis, et dentes inlidunt saepe labellis 1080
 osculaque adffigunt, quia non est pura voluptas
 et stimuli subsunt qui instigant laedere id ipsum,
 quodcumque est, rabies unde illaec germina surgunt.

Sed leviter poenas frangit Venus inter amorem,
 blandaque refrenat morsus admixta voluptas ; 1085
 namque in eo spes est, unde est ardoris origo,
 restingui quoque posse ab eodem corpore flammam.
 quod fieri contra totum natura repugnat :
 unaque res haec est, cuius quam plurima habemus,
 tam magis ardescit dira cuppedine pectus. 1090
 nam cibus atque umor membris adsumitur intus ;
 quae quoniam certas possunt obsidere partis,
 hoc facile expletur laticum frugumque cupido.
 ex hominis vero facie pulchroque colore
 nil datur in corpus praeter simulacra fruendum 1095
 tenvia ; quae vento spes raptast saepe misella.
 ut bibere in somnis sitiens quom quaerit, et umor
 non datur, ardorem qui membris stinguere possit,
 sed laticum simulacra petit frustraue laborat
 in medioque sitit torrenti flumine potans, 1100
 sic in amore Venus simulacris ludit amantis,
 nec satiari queunt spectando corpora coram,

1081 adffigunt *OACFLM* : adffigunt *QB, Diels, Martin*
 1096 raptast *Munro* : rapta est *AB, ed. Juntina in notes,*
Wakefield from Codex Musaei Britannici Butl. 11912 :
 raptat *OQFL*

¹⁰⁷³ Nor does he who avoids love lack the fruit of Love is
 Venus, but rather he takes the advantages which mixed with
 are without penalty ; for certainly a pleasure more pain.
 unmix'd comes from this to the healthy than to the
 lovesick. Indeed, in the very time of possession,
 lovers' ardour is storm-tossed, uncertain in its course,
 hesitating what first to enjoy with eye or hand.
 They press closely the desired object, hurting the
 body, often they set their teeth in the lips and crush
 mouth on mouth, because the pleasure is not un-
 mixed and there are secret stings which urge them
 to hurt that very thing, whatever it may be, from
 which those germs of frenzy grow.

¹⁰⁸⁴ But Venus gives a light break to the suffering
 amidst their love, and the soothing pleasure inter-
 mingled curbs back the bites. For here lies the hope
 that the fire may be extinguished from the same
 body that was the origin of the burning, which
 nature contrariwise denies out and out to be possible ;
 and this is the only thing, for which the more
 we have, the more fierce burns the heart with fell
 craving. For food and liquid are absorbed into the
 body, and since these can possess certain fixed parts,
 thereby the desire of water or bread is easily fulfilled.
 But from man's aspect and beautiful bloom
 nothing comes into the body to be enjoyed except
 thin images ; and this poor hope is often snatched
 away by the wind. As when in dreams a thirsty man
 seeks to drink, and no water is forthcoming to quench
 the burning in his frame, but he seeks the image of
 water, striving in vain, and in the midst of a rushing
 river thirsts while he drinks : so in love Venus mocks
 lovers with images, nor can bodies even in real
 presence satisfy lovers with looking, nor can they
 It is never satisfied.
 All is vanity.

nec manibus quicquam teneris abradere membris
 possunt errantes incerti corpore toto.
 denique cum membris conlatis flore fruuntur 1105
 aetatis, iam cum praesagit gaudia corpus
 atque in eost Venus ut muliebria conserat arva,
 adfigunt avidae corpus iunguntque salivas
 oris et inspirant pressantes dentibus ora—
 nequiquam, quoniam nil inde abradere possunt 1110
 nec penetrare et abire in corpus corpore toto ;
 nam facere interdum velle et certare videntur :
 usque adeo cupide in Veneris compagibus haerent,
 membra voluptatis dum vi labefacta liquescunt.
 tandem ubi se erupit nervis conlecta cupido, 1115
 parva fit ardoris violenti pausa parumper.
 inde redit rabies eadem et furor ille revisit,
 cum sibi quod cupiunt ipsi contingere quaerunt,
 nec reperire malum id possunt quae machina vincat :
 usque adeo incerti tabescunt vulnere caeco. 1120

Adde quod absumunt viris pereuntque labore,
 adde quod alterius sub nutu degitur aetas.

1124 languent officia atque aegrotat fama vacillans.
 1123 labitur interea res et Babylonia fiunt
 unguenta, et pulchra in pedibus Sicyonia rident ; 1125
 scilicet et grandes viridi cum luce zmaragdi
 auro includuntur, teriturque thalassina vestis
 asidue et Veneris sudorem exercita potat ;

1118 quod cupiunt *A* : quod cupiant *OQFL* (for the corruption cf. e.g. 1259) : quid cupiant *Lachmann* 1123-
 1124 transposed in a manuscript known to *Lambinus* 1124
 Babylonia *OQ* : Babylonica (cf. 1029) *Pius* (notes) 1125
 unguenta *OQBL* : languent *AF* : argentum *Lachmann*
 362

rub off something from tender limbs with hands wandering aimless all over the body. Lastly, when clasped body to body they enjoy the flower of their age, at the moment when the body foretastes its joy and Venus is on the point of sowing the woman's field,^a they cling greedily close together and join their watering mouths and draw deep breaths pressing teeth on lips ; but all is vanity, for they can rub nothing off, nor can they penetrate and be absorbed body in body ; for this they seem sometimes to wish and to strive for : so eagerly do they cling in the couplings of Venus, while their limbs slacken and melt under the power of delight. At length when the gathered desire has burst from their loins, there is a short pause for a while in the furious burning. Then the same frenzy returns, and once more the madness comes, when they seek to attain what they desire, and can find no device to master the trouble : in such uncertainty do they pine with their secret wound.

The frenzy
 ever
 returns.

1121 Add this also,^b that they consume their strength and kill themselves with the labour ; add this, that one lives at the beck of another. Duties are neglected, good name totters and sickens. Meanwhile wealth vanishes, and turns into Babylonian perfumes ; lovely Sicyonian slippers laugh on her feet ; you may be sure too that great emeralds flash their green light set in gold, the sea-purple tunic is ever in wear and, in rough use, drinks up the sweat of Venus. The well-won wealth of fathers

This consumes the strength and wastes the substance.

^a For the metaphor, cf. 1272-1273 and (e.g.) Aeschylus, *Sept.* 753-754, Sophocles, *Ant.* 569, *OT* 1256-1257, 1497, Euripides, *Cyc.* 171, *Phoen.* 18, Plautus, *Asin.* 874, Virgil, *G.* 3.136.

^b On 1121 ff cf. Plaut. *Trin.* 235-276.

et bene parta patrum fiunt anademata, mitrae,
interdum in pallam atque Alidensia Ciaeque vertunt;
eximia veste et victu conviviam, ludi, 1131
pocula crebra, unguenta, coronae,serta parantur—
nequiquam, quoniam medio de fonte leporum
surgit amari aliquid quod in ipsis floribus angat,
aut cum conscius ipse animus se forte remordet 1135
desidiose agere aetatem lustrisque perire,
aut quod in ambiguo verbum iaculata reliquit
quod cupido adfixum cordi vivescit ut ignis,
aut nimium iactare oculos aliumve tueri
quod putat, in voltuque videt vestigia risus. 1140

Atque in amore mala haec proprio summeque
secundo
inveniuntur; in adverso vero atque inopi sunt,
prendere quae possis oculorum lumine operto,
innumerabilia; ut melius vigilare sit ante,
qua docui ratione, cavereque ne inliciaris. 1145
nam vitare, plagas in amoris ne laciamur,
non ita difficile est quam captum retibus ipsis
exire et validos Veneris perumpere nodos.
et tamen implicitus quoque possis inque peditus
effugere infestum, nisi tute tibi obvius obstes 1150
et praetermittas animi vitia omnia primum

1130 Ciaeque *L*: chiaque *OQ*: Ceaque "*Adrianus Turnebus, seu potius Gulielm. Pellisserius, episcopus Mompepessulanus*" (*Lambinus*): Coaque *T. Bergk, Neue Jahrb. für Philologie und Pädagogik* 67 (1853) 323–324 1145 inliciaris *ed. Aldina*: inligniaris *OQP*: inlaqueeris *Lambinus* 1146 laciamur *Lambinus* (*cf. 1207*): iaciamur *OQP*, perhaps rightly, but the idea of luring seems more appropriate and confusion of *l* and *i* is very common

becomes coronets and head-scarves, or it may be a cloak or silks from Alinda^a and Ceos.^b Banquets are prepared with magnificent trappings and rich fare, entertainments, bumpers in abundance, ointment, garlands, festoons; but all is vanity, since from the very fountain of enchantment rises a drop of bitterness to torment even in the flowers; either when a guilty conscience chances to sting him with the thought that he is passing his life in sloth and perishing in debauches, or because she has shot and left a word of doubtful meaning, which, fixed in his yearning heart, keeps alive like fire, or because he thinks that she makes eyes too freely and gazes at another man, while he sees in her face the trace of a smile.

True torments of conscience and jealousy.

¹¹⁴¹ And more, these evils are found in a love that brings possession, and when all goes exceedingly well; but in love that is unhappy and helpless, evils there are that you can see with your eyes shut, innumerable; so that it is better to be on guard beforehand, as I have explained, and to take care that you be not enticed. For to avoid being lured into the snares of love is not so difficult as, when you are caught in the toils, to get out and break through the strong knots of Venus.^c Yet you can escape the danger even when involved and entangled, unless you stand in your own way, and begin by overlooking

Unsuccessful love is worse still:

therefore avoid the beginnings.

^a A town in Caria.

^b One of the Cyclades. If (see critical note) the reading adopted in the text is right, *Lucr.* seems to have followed *Varro* in confusing *Ceos* with *Cos*, one of the *Sporades*, which was renowned for its dresses.

^c On the image of the net, see *E. J. Kenney in Mnemos.* ser. 4, 23 (1970) 386–388.

aut quae corpori' sunt eius, quam praepetis ac vis.
 nam faciunt homines plerumque cupidine caeci
 et tribuunt ea quae non sunt his commoda vere.
 multimodis igitur pravas turpisque videmus 1155
 esse in deliciis summoque in honore vigere.
 atque alios alii inrident Veneremque suadent
 ut placent, quoniam foedo adficientur amore,
 nec sua respiciunt miseri mala maxima saepe.
 nigra "melichrus" est, immunda et fetida "acos-
 mos," 1160
 caesia "Palladium," nervosa et lignea "dorcas,"
 parvula pumilio, "chariton mia," "tota merum sal,"
 magna atque inmanis "cataplexis plenaque honoris."
 balba loqui non quit—"traulizi"; muta "pudens"
 est;
 at flagrans odiosa loquacula "lampadium" fit; 1165
 "ischnon eromenion" tum fit, cum vivere non quit
 prae macie; "rhadine" verost iam mortua tussi;
 at tumida et mammosa "Ceres" est "ipsa ab
 Iaccho,"
 simula "Silena ac saturast," labeosa "philema."
 cetera de genere hoc longum est si dicere coner. 1170
 Sed tamen esto iam quantovis oris honore,
 cui Veneris membris vis omnibus exoriatur:
 nempe aliae quoque sunt; nempe hac sine viximus
 ante;
 nempe eadem facit—et scimus facere—omnia turpi,

1168 tumida *Bernays*: iamina *OQ*: tamina *F*: gemina
Turnebus (see *Lambinus*): nimia *Martin*

^a This justly famous list (1160-1169) of euphemistic descriptions, mostly Greek, probably owes something to Plato, *Resp.* 474 D-E, but may have been still more closely based on a lost source. The Lucretian passage in its turn influenced

all faults of mind and body in her whom you prefer and desire. For this is what men usually do when blinded with desire, and they attribute to women advantages which they really have not. Thus women that are in many ways crooked and ugly we often see to be thought darlings and to be held in the highest honour. One lover will actually deride another, and bid him propitiate Venus as being the victim of a discreditable love, and often, poor wretch, casts not a glance at his own surpassing misery. The black girl is a nut-brown maid,^a the dirty and rank is a sweet disorder, the green-eyed is a little Pallas,^b the stringy and wooden is a gazelle, the squat little dwarf is one of the Graces, a pinch of embodied wit; the huge virago is a "stunner," and full of dignity; if she stutters and cannot speak, *elle zézaye*^c; the dumb is modest; the fiery, spiteful chatterbox is a little squib; when she is too skinny to live, she is his *maigrelette*, his *chérie*; she is *svelte* when she is half dead of consumption. A swollen thing with large breasts is Ceres herself after the birth of Iacchus, the pug-nosed is Silena or Madame Satyr, the thick-lipped is "all kiss." It would be a long task if I were to try to go through all the list.

1171 But, however, let her be one of the supremest dignity of countenance, let the power of Venus radiate from her whole body, the truth is there are others, the truth is we have lived so far without this one; the truth is she does all the same things as the ugly woman does, and we know it, fumigating herself, Ovid, *Ars Am.* 2.657-662, Molière, *Misanthrope* 2.5 (see Merrill), and perhaps Horace, *Sat.* 1.3.43-54, Juvenal 8.30-38.

^b γλαυκῶπις, "grey-green-eyed" or "bright-eyed," is an epithet of Athena in Homer. ^c *traulizi* = τραυλίξει.

Love de-
ludes the
lover and
makes him
praise his
mistress for
her faults.

Women are
really all
alike,

et miseram taetris se suffit odoribus ipsa, 1175
 quam famulae longe fugitant furtimque cachinnant.
 at lacrimans exclusus amator limina saepe
 floribus et sertis operit postisque superbos
 unguis amaracino et foribus miser oscula figit ;
 quem si, iam ammissum, venientem offenderit aura
 una modo, causas abeundi quaerat honestas, 1181
 et meditata diu cadat alte sumpta querella,
 stultitiaque ibi se damnet, tribuisse quod illi
 plus videat quam mortali concedere par est.
 nec Veneres nostras hoc fallit ; quo magis ipsae 1185
 omnia summo opere hos vitae postscaenia celant
 quos retinere volunt adstrictosque esse in amore—
 nequiquam, quoniam tu animo tamen omnia possis
 protrahere in lucem atque omnis inquirere risus,
 et, si bello animos et non odiosa, vicissim 1190
 praetermittere et humanis concedere rebus.

Nec mulier semper ficto suspirat amore
 quae complexa viri corpus cum corpore iungit
 et tenet adsuctis umectans oscula labris ;
 nam facit ex animo saepe et, communia quaerens 1195
 gaudia, sollicitat spatium decurrere amoris.
 nec ratione alia volucres armenta feraeque
 et pecudes et equae maribus subsidere possent,
 si non, ipsa quod illarum subat ardet abundans
 natura et Venerem salientum laeta retractat. 1200
 nonne vides etiam quos mutua saepe voluptas
 vinxit, ut in vinclis communibus excrucientur ?

• Cf. 1176.

poor wretch, with rank odours while her maid-servants give her a wide berth and giggle behind her back. But the lover shut out, weeping, often covers the threshold with flowers and wreaths, anoints the proud doorposts with oil of marjoram, presses his love-sick kisses upon the door ; but if he is let in, once he gets but one whiff as he comes, he would seek some decent excuse for taking his leave ; there would be an end of the complaint so often rehearsed, so deeply felt, and he would condemn himself on the spot of folly, now he sees that he has attributed to her more than it is right to concede to a mortal. Our Venuses are quite well aware of this ; so they are at greater pains themselves to hide all that is behind the scenes of life from those whom they wish to detain fast bound in the chains of love ; but all is vanity, since you can nevertheless in your minds drag it all into the light of day, and seek the cause of all the merriment,^a and if she is nice-minded and not a nuisance, you can overlook in your turn and make some concession to human weakness.

and they
hide their
imperfections.

¹¹⁹² Nor does a woman always feign the passion which makes her sigh, when she embraces her mate joining body to body, and holds his lips in a long kiss, moistening them with her own. For she often does it from the heart, and seeking mutual joys rouses him to run the full course in the lists of love. Nor otherwise could birds or cattle, wild beasts or sheep or mares submit to the male, were it not that their own nature, overflowing, is on heat and burning, and they thrust gladly against the penis of the mounting male. Do you not see also, when mutual pleasure has enchained a pair, how they are often tormented

Women's
passion is
not always
feigned.

in triviis cum saepe canes, discedere aventes,
 1208 divorsi cupide summis ex viribu' tendunt, 1204
 1204 quom interea validis Veneris compagibus haerent.
 1205 quod facerent numquam, nisi mutua gaudia nossent
 1206 quae lacere in fraudem possent vinctosque tenere.
 1207 quare etiam atque etiam, ut dico, est communi' vo-
 luptas.

1208 Et commiscendo quom semine forte virilem
 1209 femina vim vicit subita vi corripuitque, 1210
 tum similes matrum materno semine fiunt,
 ut patribus patrio. sed quos utriusque figurae
 esse vides, iuxtim miscentes vulta parentum,
 corpore de patrio et materno sanguine crescunt,
 semina cum Veneris stimulis excita per artus 1215
 obvia confligit conspirans mutuus ardor,
 et neque utrum superavit eorum nec superatumst.

Fit quoque ut interdum similes existere avorum
 possint et referant proavorum saepe figuras,
 propterea quia multa modis primordia multis 1220
 mixta suo celant in corpore saepe parentes,
 quae patribus patres tradunt a stirpe profecta ;
 inde Venus varia producit sorte figuras
 maiorumque refert voltus vocesque comasque,
 quandoquidem nilo minus haec de semine certo 1225
 fiunt quam facies et corpora membraque nobis.

1207 lacere *Lambinus* : iacere *OQP*. See *critical note on 1146*, and *cf. 5.1005 pellicere in fraudem* 1209 *virilem Isaac Voss* : virili *Q* : virilli *OP* 1225 minus *Codex Musaei Britannici Butl. 11912 (Wakefield)*, *Lambinus (cf. 2.533)* : magis *OQP*

^a Epicurus, like Pythagoras and Democritus, believed that

in their common chains ? For often dogs at the cross-ways, desiring to part, pull hard in different directions with all their strength, when all the while they are held fast in the strong couplings of Venus. But this they would never do, unless they both felt these joys which were enough to lure them into the trap and to hold them enchained. Therefore again and again I say, the pleasure is for both.

1209 And in the mingling of seed, when by any chance the woman suddenly overcomes the man's force by hers and has gained the upper hand, then by means of the mother's seed ^a children are born like the mother, as they are born like the father by reason of the father's seed. But those whom you see with the shape of each, mingling the marks of their parents' countenances together, grow from the father's body and the mother's blood both, when the seeds stirred up through the frame by the goads of Venus have been thrust together by the passion of two breathing as one, neither conquering, neither conquered.

1218 It sometimes happens also that the children ^{or some ancestor.} may appear like a grandfather and often reproduce the looks of a great-grandfather, because the parents often conceal in their bodies many first-beginnings mingled in many ways, which fathers hand on to fathers received from their stock ; from these Venus brings forth forms with varying lot, and reproduces the countenance, the voice, the hair of their ancestors; for these features come from a fixed seed no less than our faces and bodies and limbs.

the female too emits semen during intercourse (*Aëtius 5.5.1*, quoted by *Wakefield*).

Et muliebre oritur patrio de semine saeculum,
maternoque mares existunt corpore creti ;
semper enim partus duplici de semine constat,
atque utri similest magis id quodcumque creatur, 1230
eius habet plus parte aequa ; quod cernere possis,
sive virum suboles sive muliebris origo.

Nec divina satum genitalem numina cuiquam
absterrent, pater a gnatis ne dulcibus umquam
appelletur et ut sterili Venere exigit aevom ; 1235
quod plerumque putant, et multo sanguine maesti
conspargunt aras adolentque altaria donis,
ut gravidas reddant uxores semine largo.
nequiquam divom numen sortisque fatigant ;
nam steriles nimium crasso sunt semine partim, 1240
et liquido praeter iustum tenuique vicissim.
tenve locis quia non potis est adfigere adhaesum,
liquitur extemplo et revocatum cedit abortu.
crassius his porro quoniam concretius aequo
mittitur, aut non tam prolixo provolat ictu 1245
aut penetrare locos aequo nequit aut penetratum
aegre admiscetur muliebri semine semen.
nam multum harmoniae Veneris differre videntur.
atque alias alii complent magis, ex aliisque
succipiunt aliae pondus magis inque gravescunt. 1250
et multae steriles Hymenaeis ante fuerunt
pluribus, et nactae post sunt tamen unde puellios
suscipere et partu possent ditescere dulci.
et quibus ante domi fecundae saepe nequissent
uxores parere, inventast illis quoque compar 1255
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¹²²⁷ Female children also spring from their father's seed, and male children appear made of their mother's substance ; for the birth always is made out of both seeds, and whichever parent the offspring resembles, of that parent it has more than half ; which you may discern, whether the child be male or female.

¹²³³ It is not the divine powers that drive away the genital force from a man, so that he be never called father by sweet children and that he pass his days in barren wedlock, as men for the most part think, sorrowfully sprinkling their altars with much blood and making them burn with offerings, that they may make their wives pregnant with abundant seed. It is all vanity that they weary the gods' power and magic lots ; for they are barren, some because the seed is too thick, others in turn because it is too watery and thin. The thin, because it cannot stick and adhere to the parts, at once flows away and departs withdrawn in untimely birth. That which is too thick, again, since it is emitted too closely clotted, either does not leap forward with so far-reaching a blow, or cannot equally well penetrate the part, or, although it penetrate, does not easily mix with the woman's seed. For sexual harmony is seen to vary greatly. Some men more easily impregnate some women than others, some women more easily receive their burden from some than from others and become pregnant. Many women barren often enough in earlier wedlock, yet have found those from whom they could conceive children and be enriched with sweet offspring ; and often men, in whose homes hitherto women though fruitful have been unable to bear a child, yet have found a natural mate, so that

natura, ut possent gnatis munire senectam,
 usque adeo magni refert, ut semina possint
 seminibus commisceri liquiditer apta,
 crassaque convenient liquidis et liquida crassis.
 atque in eo refert quo victu vita colatur ; 1260
 namque aliis rebus concresecunt semina membris
 atque aliis extendantur tabentque vicissim.

Et quibus ipsa modis tractetur blanda voluptas,
 id quoque permagni refert ; nam more ferarum
 quadrupedumque magis ritu plerumque putantur
 concipere uxores, quia sic loca sumere possunt, 1266
 pectoribus positis, sublatis semina lumbis.
 nec molles opus sunt motus uxoribus hilum ;
 nam mulier prohibet se concipere atque repugnat,
 clunibus ipsa viri Venerem si laeta retractat 1270
 atque exossato ciet omni corpore fluctus ;
 eicit enim sulcum recta regione viaque
 vomeris atque locis avertit seminis ictum.
 idque sua causa conserunt scorta moveri,
 ne complerentur crebro gravidaeque iacerent, 1275
 et simul ipsa viris Venus ut concinnior esset ;
 coniugibus quod nil nostris opus esse videtur.

Nec divinitus interdum Venerisque sagittis
 deteriore fit ut forma muliercula ametur ;
 nam facit ipsa suis interdum femina factis 1280

1271 corpore *W. Clausen, AJPhil. 84 (1963) 415-416*: pectore
 OQP

^a Cf. Horace, *Sat.* 2.7.50.

^b *ciet . . . fluctus*, though rightly interpreted by Pius, Lambinus, Faber, and Wakefield, has been misunderstood by many modern editors and translators, including the reviser of the present work in his own translation. That the translation given here is correct is shown by comparison with (*e.g.*) Juvenal 6.322, Arnobius, *Adv. Nat.* 2.42, 7.33. See

they could protect their old age with children. So important is it that the seeds should be able to be commingled together in a manner suited for generation, and that the thick should be combined with the watery and the watery with the thick. And in this regard it is of importance with what food the life is nourished ; for some foods make the seed thicken in the body, and others again make it thin and wasting.

The importance of food

¹²⁶³ Another thing of very great importance is the position in which the soothing pleasure itself is taken ; for wives are thought generally to conceive better after the manner of wild beasts and quadrupeds, because in that position, breast down and loins up, the seeds can occupy the proper places. Lascivious movements are of no use whatever to wives. For a woman forbids herself to conceive and fights against it, if in her delight she thrusts against the man's penis with her buttocks,^a making undulating movements^b with all her body limp ; for she turns the share clean away from the furrow and makes the seed fail of its place. Whores indulge in such motions for their own purposes, that they may not often conceive and lie pregnant, and at the same time that their intercourse may be more pleasing to men^c ; which our wives evidently have no need for.

and coital position.

Erotic movements undesirable for wives.

¹²⁷⁸ Nor is it due to a god's influence or the arrows of Venus, when, as sometimes happens, a wench of uglier shape is beloved. For a woman sometimes so especially Wakefield, also C. L. Howard, *CPhil.* 56 (1961) 154, W. Clausen, *AJPhil.* 84 (1963) 415.

Habit breeds love.

^c Cf. *Anth. Pal.* 5.132.5, where Philodemus, praising the numerous attractions of an Oscan girl, exclaims ὦ κατὰ χειρὸν ἄνθρωπον (or, perhaps better, κακοτεχνωτάτου) κηρύματος. Cf. *Anth. Pal.* 5.129.1-2.

morigerisque modis et munde corpore culto,
 ut facile insuescat te secum degere vitam.
 quod superest, consuetudo concinnat amorem ;
 nam leviter quamvis quod crebro tunditur ictu, 1285
 vincitur in longo spatio tamen atque labascit.
 nonne vides etiam guttas in saxa cadentis
 umoris longo in spatio pertundere saxa ?

1282 te Bernays : omitted by OQ

manages herself by her own conduct, by obliging
 manners and bodily neatness and cleanliness, that
 she easily accustoms you to live with her. Moreover,
 it is habit that breeds love ; for that which is fre-
 quently struck by a blow, however light, still yields
 in the long run and is ready to fall. Do you not see
 that even drops of water falling upon a stone in the
 long run beat a way through the stone ? ^a

^a Cf. Tobias Smollett, *The Regicide* Act 3, Sc. 4 : " The
 rude flint | Yields to th' incessant drop."

LIBER QUINTUS

QUIS potis est dignum pollenti pectore carmen
 condere pro rerum maiestate hisque repertis ?
 quisve valet verbis tantum qui fingere laudes
 pro meritis eius possit qui talia nobis
 pectore parta suo quaesitaque praemia liquit ? 5
 nemo, ut opinor, erit mortali corpore cretus.
 nam si, ut ipsa petit maiestas cognita rerum,
 dicendum est, deus ille fuit, deus, inclute Memmi,
 qui princeps vitae rationem invenit eam quae
 nunc appellatur sapientia, quique per artem 10
 fluctibus e tantis vitam tantisque tenebris
 in tam tranquillo et tam clara luce locavit.

Confer enim divina aliorum antiqua reperta.
 namque Ceres fertur fruges Liberque liquoris
 vitigeni laticem mortalibus instituisse ; 15

2 maiestate hisque *Lambinus* : maiestatis atque *OQ* :
 maiestatisque *P* : maiestate atque *manuscript reading known*
 to *Lambinus*

^a Imitated by Virgil, *Ecl.* 5.64 : *deus, deus ille, Menalca*.
 Cicero, *Tusc. Disp.* 1.21.48, was probably thinking chiefly of
 Lucr. when he wrote : *soleo saepe mirari nonnullorum in-*
solentiam philosophorum, qui naturae cognitionem (cf. 7
maiestas cognita rerum) admirantur, eiusque inventori et
principi (cf. 9 princeps . . . invenit) gratias exsultantes agunt
eumque venerantur ut deum. The Epicureans felt justified in
 calling their master a god, because, although he was mortal
 (3.1042), his discoveries were seemingly superhuman : he

BOOK 5

Who is able with mighty mind to build a song worthy
 of the majesty of nature and these discoveries ? Or
 who is so potent in speech as to devise praises fit for
 his merits, who by his own intellect winning and
 gaining such treasures, has left them to us ? None
 will be found, I think, of the sons of mortal men.
 For if we must speak as this very majesty of nature
 now known to us demands, he was a god, noble
 Memmius, a god he was,^a who first^b discovered that
 reasoned plan of life which is now called Wisdom,
 who by his skill brought life out of those tempestuous
 billows and that deep darkness, and settled it in such
 a calm and in light so clear.^c

¹³ Do but compare the ancient discoveries ac-
 counted godlike, made by others. For Ceres is said
 to have introduced corn to mortals, Liber^d the liquor
 had saved men from ignorance and misery, and enabled them
 to live lives as peaceful and happy as those of the gods. *CR*
 3.322 and see note there.

^b In each of Lucr.'s four eulogies of Epicurus, it is empha-
 sized that he was the first to save mankind : *primum* (1.66),
primus (3.2), *princeps* (5.9), *primae* (6.4).

^c For the darkness from which Epicurus rescued (or can
 rescue) humanity, *cf. e.g.* 2.15, 3.1-2. On the storm-calm
 metaphor in Lucr. and Epicurus, see M. F. Smith, *CR* N.S.
 16 (1966) 265. It should be noted that *ἀραπαγία* (the Epi-
 curean ideal) is a metaphor from calm water and weather
(cf. e.g. Cicero, *Tusc. Disp.* 5.6.16).

^d Bacchus.

cum tamen his posset sine rebus vita manere,
 ut fama est aliquas etiam nunc vivere gentis.
 at bene non poterat sine puro pectore vivi ;
 quo magis hic merito nobis deus esse videtur,
 ex quo nunc etiam per magnas didita gentis
 dulcia permulcent animos solacia vitae. 20

Herculis antistare autem si facta putabis,
 longius a vera multo ratione ferere.
 quid Nemeaeus enim nobis nunc magnus hiatus
 ille leonis obsesset et horrens Arcadius sus ? 25
 denique quid Cretae taurus Lernaeaque pestis
 hydra venenatis posset vallata colubris ?
 quidve tripectora tergemini vis Geryonai

30 tanto opere officerent nobis Stymphala colentes,
 29 et Diomedis equi spirantes naribus ignem 30
 Thracis Bistoniasque plagas atque Ismara propter ?
 aureaque Hesperidum servans fulgentia mala,
 asper, acerba tuens, immani corpore serpens
 arboris amplexus stirpem, quid denique obsesset
 propter Atlanteum litus pelagique severa, 35
 quo neque noster adit quisquam nec barbarus audet ?
 cetera de genere hoc quae sunt portenta perempta,
 si non victa forent, quid tandem viva nocerent ?

29-30 transposed by Munro, who assumes a lacuna before them, e.g. quid volucres pennis aeratis invia stagna. Marullus places 29 (30 in the manuscripts) after 31. Büchner, followed by Martin and D. A. West, *Hermes* 93 (1965) 499-502, places the same line between 25 and 26 (West assuming a lacuna before it). One of Büchner's main arguments is that "poetam a propinquis ad longinquiores regiones progredi," but this is not true of 26 (as West points out), and it is quite natural that the bull should have been mentioned immediately after the lion and the boar (cf. 1308-1310: tauros . . . sues . . . leones) 31
 Thracia Munro: Thracia OQP

of vine-born juice ^a; but nevertheless life could have remained without these things, as we are told that some nations ^b live even now. But good life was impossible without a purged mind ^c; which makes him seem to us with better reason a god, from whom even now spreading abroad through great nations come sweet consolations of life to soothe our minds.

²² But if you think the deeds of Hercules ^d rival his, you will stray much farther still from true reasoning. For what harm could we now receive from that gaping maw of the Nemean lion, or from the bristling Arcadian boar? What again could the Cretan bull do, or that pest of Lerna, the hydra fenced about with her poisonous snakes? What the great three-fold breast of triple Geryones? What great mischief could we suffer from the [birds] that haunted the Stymphalian [lake], or Thracian Diomedes' horses breathing fire from their nostrils hard by the Bistonian regions and Ismara? And the guardian of the gleaming golden apples of the Hesperides, fierce, with piercing eyes, that enormous serpent coiled about the tree-trunk, what mischief pray could he do by the Atlantic shore and the pitiless tracts of ocean, whither none of our folk ever goes and even the outlander dares not? And all the other monsters of this kind that were slain, if they had not been vanquished, what harm pray could they do alive? None, as I

^a Lucr. is perhaps parodying the language of the mythologists (D. West, *The Imagery and Poetry of Lucretius* 28), but it should be noted that in 6.1072 he has *vitigeni latices* in a straightforward argument.

^b e.g. the Germans (cf. Caesar, *B.Gall.* 6.22.1).

^c That is, a mind purged of fears and unnecessary desires and the vices that result from them: cf. especially 6.24-25.

^d The hero of the Stoics.

nil, ut opinor : ita ad satiatem terra ferarum
nunc etiam scatit et trepido terrore repleta est 40
per nemora ac montes magnos silvasque profundas ;
quae loca vitandi plerumque est nostra potestas.

At nisi purgatumst pectus, quae proelia nobis
atque pericula tunc ingratis insinuandum !
quantae tum scindunt hominem cuppedinis acres 45
sollicitum curae quantique perinde timores !
quidve superbia spurcitia ac petulantia ? quantas
efficiunt clades ! quid luxus desidiaeque ?
haec igitur qui cuncta subegerit ex animoque
expulerit dictis, non armis, nonne decebit 50
hunc hominem numero divom dignarier esse ?—
cum bene praesertim multa ac divinitus ipsis
immortalibu' de divis dare dicta suerit
atque omnem rerum naturam pandere dictis.

Cuius ego ingressus vestigia dum rationes 55
persequor ac doceo dictis, quo quaeque creata
foedere sint, in eo quam sit durare necessum
nec validas valeant aevi rescindere leges
(quo genere in primis animi natura reperta est
nativo primum consistere corpore creta 60
nec posse incolumem magnum durare per aevom,
sed simulacra solere in somnis fallere mentem,
cernere cum videamur eum quem vita reliquit),

44 tunc . . . insinuandum first printed by Lambinus, but, according to Gifanius (1595), already read by Marullus. Munro raises the question of whether Gifanius was telling the truth. Probably he was. It should be noted that, according to Wakefield, the reading is found in three Renaissance manuscripts in England : sunt . . . insinuandum OQP : tumst . . . insinuandum Lachmann : sunt . . . insinuanda Merrill (1917) : tunc . . . insinuantur M. F. Smith formerly 61 incolumem P, rightly defended by Wakefield "suppleas nempe decet 382

think, seeing how the earth even now teems with swarms of wild beasts, how full it is of unnerving terror through forests and great mountains and deep woods, which places it is mostly in our power to avoid.

⁴³ But unless the mind is purged, what battles and perils must then find their way into us against our will!^a How sharp then are the cares with which lust rends the troubled man, how great also the fears ! Or what of pride, of filthy lust, of petulance ? How great the devastation they deal ! What of luxury and sloth ?^b He therefore who has vanquished all these and cast them forth from the mind by words, not by swords, will it not be proper that he be held worthy to be counted in the number of the gods? Especially since he was accustomed to discourse often in good and godlike fashion about the immortal gods themselves, and to disclose in his discourse all the nature of things.

¹¹ His steps I trace, his doctrines I follow, teaching in my poem how all things are bound to abide in that law by which they were made, and how they are impotent to annul the strong statutes of time ; and herein first of all the nature of the mind has been found first to consist of a body that had birth, and unable to endure intact through a long time ; but only images are accustomed in sleep to cheat the intelligence, when we seem to see him whom life has

^a On 43-44 see J. Farrell, CQ N.S. 38 (1988) 178-185.

^b D. E. W. Wormell in *Lucretius*, ed. D. R. Dudley, 48, 66 n. 1, points out that *superbia*, *spurcitia*, *petulantia*, *luxus*, *desidiae* (47-48) + *avarities* and *honorum caeca cupido* (i.e. *ambitio*) (3.59) constitute the seven deadly sins.

repertum est, vice reperta est": incolumen O : vinculum est Q : incolumis Marullus

quod superest, nunc huc rationis detulit ordo,
 ut mihi mortali consistere corpore mundum 65
 nativomque simul ratio reddunda sit esse ;
 et quibus ille modis congressus materiai
 fundarit terram caelum mare sidera solem
 lunaique globum ; tum quae tellure animantes 70
 extiterint, et quae nullo sint tempore natae ;
 quoque modo genus humanum variante loquella
 coeperit inter se vesci per nomina rerum ;
 et quibus ille modis divom metus insinuarit
 pectora, terrarum qui in orbi sancta tuetur
 fana lacus lucos aras simulacrae divom. 75
 praeterea solis cursus lunaeque meatus
 expediam qua vi flectat natura gubernans,
 ne forte haec inter caelum terramque reamur
 libera sponte sua cursus lustrare perennis,
 morigera ad fruges augendas atque animantis, 80
 neve aliqua divom volvi ratione putemus.
 nam bene qui didicere deos securum agere aevom,
 si tamen interea mirantur qua ratione
 quaeque geri possint, praesertim rebus in illis
 quae supera caput aetheriis cernuntur in oris, 85
 rursus in antiquas referuntur religiones,
 et dominos acris adsciscunt, omnia posse
 quos miseri credunt, ignari quid queat esse,
 quid nequeat, finita potestas denique cuique
 quanam sit ratione atque alte terminus haerens. 90

Quod superest, ne te in promissis plura moremur,
 principio maria ac terras caelumque tuere :
 quorum naturam triplicem, tria corpora, Memmi,
 tris species tam dissimilis, tria talia texta,

* 82-90 = 6.58-66. 89-90 = 1.76-77, 595-596.

left. Now for what remains the order of my design
 has brought me to this point, that I must show how I must show
 next that
 the world
 is mortal
 the frame of which the world consists is subject to
 death and has also had birth ; in what ways that
 assemblage of matter established earth, sky, sea,
 and stars, the sun and the ball of the moon ; then explaining
 how
 animals
 first arose
 on earth,
 and man,
 how speech
 and religion
 first began,
 how the
 worlds are
 ruled with-
 out gods.
 what animals arose from the earth, and what have
 never been born at any time ; and in what manner
 the human race began to use variety of speech in
 their intercourse by means of the names of things ;
 and in what ways that fear of gods crept into the
 heart, which in our earth keeps holy their shrines
 and pools and groves, their altars and images. Be-
 sides, I will explain by what force pilot nature steers
 the courses of the sun and the goings of the moon ;
 lest by any chance we think that these between
 heaven and earth traverse their yearly courses free,
 of their own will, and obliging for the increase of
 crops and of animals, or deem them to revolve by
 some plan of the gods. For if those who have been
 rightly taught that the gods lead a life without care,
 yet wonder all the while how things can go on,
 especially those transactions which are perceived
 overhead in the regions of ether, they revert back
 again to the old superstitions, and take to themselves
 cruel taskmasters, whom the poor wretches believe
 to be almighty, not knowing what can be and what
 cannot, in a word how each thing has limited power
 and a deep-set boundary mark.^a

^a To proceed then, and to make no more delay This visible
 world one
 day will be
 destroyed,
 with promises, observe first of all sea and earth and
 sky : this threefold nature, these three masses, Mem-
 mius, these three forms so different, these three

una dies dabit exitio, multosque per annos 95
 sustentata ruet moles et machina mundi.
 nec me animi fallit quam res nova miraque menti
 accidat exitium caeli terraeque futurum,
 et quam difficile id mihi sit pervincere dictis ;
 ut fit ubi insolitam rem adportes auribus ante, 100
 nec tamen hanc possis oculorum subdere visu
 nec iacere indu manus, via qua munita fidei
 proxima fert humanum in pectus templaque mentis.
 sed tamen effabor. dictis dabit ipsa fidem res
 forsitan, et graviter terrarum motibus ortis 105
 omnia conquassari in parvo tempore cernes.
 quod procul a nobis flectat fortuna gubernans,
 et ratio potius quam res persuadeat ipsa
 succidere horrisono posse omnia victa fragore.

Qua prius adgrediar quam de re fundere fata 110
 sanctius et multo certa ratione magis quam
 Pythia quae tripode a Phoebi lauroque profatur,
 multa tibi expediam doctis solacia dictis,
 religione refrenatus ne forte rearis
 terras et solem et caelum, mare sidera lunam, 115
 corpore divino debere aeterna manere,
 proptereaque putes ritu par esse Gigantum
 pendere eos poenas inmani pro scelere omnis
 qui ratione sua disturbent moenia mundi

116 manere *ed. Juntina* : meare *OQP, Wakefield, thought possible by Bailey*

^a Ovid, *Am.* 1.15.23-24, neatly incorporates an adaptation of 5.95 in his prophecy of Lucr.'s fame : *carmina sublimis tunc sunt peritura Lucreti, | exitio terras cum dabit una dies.*

^b *iacere indu*, according to Munro, Merrill, and Bailey, = *inicere*, but *indu* is more probably the preposition, as in 2.1096.

textures so interwoven, one day shall consign to destruction ^a ; the mighty and complex system of the world, upheld through many years, shall crash into ruins. Yet I do not forget how novel and strange it strikes the mind that destruction awaits the heavens and the earth, and how difficult it is for me to prove this by argument ; as happens when you invite a hearing for something hitherto unfamiliar, which you cannot bring within the scope of vision nor put into the hands,^b whereby the highway of belief leads straight to the heart of man and the precincts of his intelligence.^c Nevertheless I will speak out. My words will perhaps win credit by plain facts, and within some short time you will see violent earthquakes arise and all things convulsed with shocks. But may pilot fortune steer this far from us, and may pure reason rather than experience persuade that the whole world can collapse borne down with a frightful-sounding crash.

110 But before I begin to utter my oracles on this matter, more solemnly and with more certain reason than those which the Pythia declares from the tripod and laurel of Phoebus,^d I will expound to you many consolations in words of wisdom ; lest by some chance bitted and bridled by superstition you think that earth and sun and sky, sea, stars, and moon are of divine body and must abide for ever ; and should therefore believe it right that, like the Giants, all they should suffer punishment for a monstrous crime, who with their reasoning shake the walls of the world, and

^c As Bentley first pointed out, 101-103 are closely based on Empedocles fr. 133.

^d 111-112 = 1.738-739. See note there.

praeclarumque velint caeli restinguere solem, 120
 immortalia mortali sermone notantes ;
 quae procul usque adeo divino a numine distent,
 inque deum numero quae sint indigna videri,
 notitiam potius praebere ut posse putentur
 quid sit vitali motu sensuque remotum. 125

Quippe etenim non est, cum quovis corpore ut esse
 posse animi natura putetur consiliumque ;
 sicut in aethere non arbor, non aequore salso
 nubes esse queunt neque pisces vivere in arvis
 nec cruor in lignis neque saxus sucus inesse : 130
 certum ac dispositumst ubi quicquid crescat et insit.
 sic animi natura nequit sine corpore oriri
 sola neque a nervis et sanguine longius esse.
 quod si posset enim, multo prius ipsa animi vis
 in capite aut umeris aut imis calcibus esse 135
 posset et innasci quavis in parte soleret,
 tandem in eodem homine atque in eodem vase
 manere.

quod quoniam nostro quoque constat corpore certum
 dispositumque videtur ubi esse et crescere possit
 seorsum anima atque animus, tanto magis infitandum
 totum posse extra corpus formamque animalem 141
 putribus in glebis terrarum aut solis in igni
 aut in aqua durare aut altis aetheris oris.
 haud igitur constant divino praedita sensu,
 quandoquidem nequeunt vitaliter esse animata. 145

Illud item non est ut possis credere, sedes
 esse deum sanctas in mundi partibus ullis.
 tenuis enim natura deum longeque remota

^a 128-141 are repeated, with a few minor alterations, from 3.784-797, where Lucr. is arguing that mind and soul are mortal.

would quench the shining light of the sun in heaven,
 tarnishing things immortal with mortal speech ;
 although these things are so far distant from the
 power of divinity and unworthy to be found in the
 number of the gods, that they should rather be
 thought to show forth in themselves what that is,
 which has neither lively motion nor feeling.

The parts
of the world
are not
even
animate ;

¹²⁶ For in fact it is not possible that the mind and
 understanding can be thought able to reside in any
 and every body ; just as in the upper air there can
 be no tree, no clouds in the salt sea, as fish cannot
 live on the fields, blood cannot be in wood, nor sap
 in stones.^a It is fixed and ordained where each thing
 can grow and abide. So the mind cannot arise alone
 without a body, nor can it be far distant from sinews
 and blood. But if it could do this, the force of the
 mind itself could much more easily be in head or
 shoulders or down in the heels, and be born in any
 part, and at least abide in the same man, the same
 vessel.^b But since even in our own body there is seen
 to be a fixed rule and ordinance in what place spirit
 and mind can be and grow apart, so much the more
 must we deny that it can abide wholly outside the
 body and the animal structure in crumbling clods of
 earth or the sun's fire or in water or the lofty regions
 of air. Therefore these are not endowed with divine
 feeling, since they cannot be animated with life.

for the
mind needs
appropriate
bodies in
order to
exist,

and apart
from flesh
and blood
there can be
none.

It cannot
exist in
earth, fire,
water, or
air.

¹⁴⁶ Another thing it is impossible that you should
 believe is that any holy abode of the gods exists in
 any part of the world.^c For the nature of the gods,
 being thin and far removed from our senses, is hardly

The gods
have no
abode in
the world :

^b See note on 3.793.

^c The Epicureans taught that the gods live in the spaces
 between the worlds (*μετακόσμια, intermundia*).

sensibus ab nostris animi vix mente videtur ;
 quae quoniam manuum tactum suffugit et ictum, 150
 tactile nil nobis quod sit contingere debet ;
 tangere enim non quit quod tangi non licet ipsum.
 quare etiam sedes quoque nostris sedibus esse
 dissimiles debent, tenues de corpore eorum.
 quae tibi posterius largo sermone probabo. 155

Dicere porro hominum causa voluisse parare
 praeclaram mundi naturam, propterea quae
 adlaudabile opus divum laudare decere
 aeternumque putare atque immortale futurum,
 nec fas esse, deum quod sit ratione vetusta 160
 gentibus humanis fundatum perpetuo aevo,
 sollicitare suis ulla vi ex sedibus unquam
 nec verbis vexare et ab imo evertere summa—
 cetera de genere hoc adfingere et addere, Memmi,
 desiperest. quid enim immortalibus atque beatis 165
 gratia nostra queat largiri emolumenti,
 ut nostra quicquam causa gerere adgrediantur ?
 quidve novi potuit tanto post ante quietos
 inlicere, ut cuperent vitam mutare priorem ?
 nam gaudere novis rebus debere videtur 170
 cui veteres obsunt ; sed cui nil accidit aegri
 tempore in antea, cum pulchre degeret aevom,

^a Cf. Cicero, *Nat. D.* 1.19.49: *Epicurus docet eam esse vim et naturam deorum ut . . . non sensu sed mente cernatur ; 1.37.105 : sic enim dicebas speciem dei percipi cogitatione non sensu.*

^b It has been generally thought that 155 must refer to a full account of the nature of the gods which Lucr. never lived to write. However, this view has been challenged by U. Pizzani, *Il problema del testo e della composizione del DRN di Lucrezio* 174-180, who takes *quae* as referring not to the 390

seen by the mind's intelligence ^a; and since it eludes the touch and impact of the hands, it cannot possibly touch anything that we can touch ; for that cannot touch which may not be touched itself. Therefore their abodes also must be different from our abodes, being thin in accord with their bodies. This I will prove to you later at large. ^b

their abodes, like their bodies, are attenuated.

¹⁵⁶ To say further ^c that for men's sake they had the will to prepare the glorious structure of the world, and that therefore it is fitting to praise it as an admirable work of the gods ; and to think that it will be everlasting and immortal, and that a thing which has by ancient contrivance of the gods been established for the races of mankind to all eternity may not ever lawfully be shaken from its foundations by any force, nor assailed by argument and overthrown from top to bottom ; to feign this and other such conceits, one upon another, Memmius, is the act of a fool. For what largess of beneficence could our gratitude bestow upon beings immortal and blessed, that they should attempt to effect anything for our sakes ? Or what novelty could so long after entice those who were tranquil before to desire a change in their former life ? For it is evident that he must rejoice in new things, who is offended with the old ; but when one has had no annoyance in the time past, enjoying a life of hap-

They did not make the world for man :
what profit could it bring to them,

immediately preceding lines, but (and this is quite natural) to 146-147, and supposes that the promise to prove that the gods do not live in our world is fulfilled in Books 5 and 6. Pizzani's view, though not certainly correct, deserves the most serious consideration.

^c With 156-234 compare Diogenes of Oenoanda, fr. 20-21 Smith.

quid potuit novitatis amorem accendere tali ?
 quidve mali fuerat nobis non esse creatis ?
 an, credo, in tenebris vita ac maerore iacebat, 175
 donec diluxit rerum genitalis origo ?
 natus enim debet quicumque est velle manere
 in vita, donec retinebit blanda voluptas ;
 qui numquam vero vitae gustavit amorem
 nec fuit in numero, quid obest non esse creatum ? 180

Exemplum porro gignundis rebus et ipsa
 notities hominum dis unde est insita primum,
 quid vellent facere ut scirent animoque viderent,
 quove modost umquam vis cognita principiorum,
 quidque inter sese permutato ordine possent, 185
 si non ipsa dedit specimen natura creandi ?
 namque ita multa modis multis primordia rerum
 ex infinito iam tempore percita plagis
 ponderibusque suis consuerunt concita ferri
 omnimodisque coire atque omnia pertemptare, 190
 quaecumque inter se possent congressa creare,
 ut non sit mirum si in talis disposituras
 deciderunt quoque et in talis venere meatus,
 qualibus haec rerum geritur nunc summa novando.

Quod si iam rerum ignorem primordia quae sint,
 hoc tamen ex ipsis caeli rationibus ausim 196

175-176 placed after 173 by Lambinus 175 an credo
O, Q corr., P (cf. Sulpicius in Cicero, Fam. 4.5.3) ; anc credo
Q : at credo Lachmann (cf. Virgil, Aen. 7.297) 182
hominum dis attributed by Munro and subsequent editors to
Wakefield (who in fact prints diis), but already mentioned by
Havercamp as being the reading of OQ (a mistake) and Codex
Bodleianus Auct. F.1.13 (also a mistake ?) : hominum divis
OQP, retained by Marullus with est omitted, by R. J. Shackle,
CR 36 (1922) 115 and Diels with est placed after primum :
divis hominum Munro 186 specimen Pius in notes (cf.
1361, probably 1.321) : speciem OQP, Merrill (1917), Diels,
Martin, Büchner

pinness, what could kindle a love of novelty in such a
 one ? Or what evil had there been for us, had we not or to us ?
 been made ? Was our life presumably wallowing in
 darkness and grief, until the light of the first creation
 shone forth ? For whoever is born must wish to re-
 main in life, so long as soothing pleasure shall keep
 him there ; but he who has never tasted the love of
 life, never been enrolled on the lists, how does it
 hurt him never to have been made ?

¹⁸¹ Again, whence was a pattern for making things
 first implanted in the gods, or even a conception ^a
 of mankind, so as to know what they wished to make
 and to see it in the mind's eye ? Or in what manner
 was the power of the first-beginnings ever known,
 and what they could do together by change of order,
 if nature herself did not provide a model for crea-
 tion ? For so many first-beginnings of things in so
 many ways, smitten with blows and carried by their
 own weight from infinite time up to the present, have
 been accustomed to move and meet together in all
 manner of ways, and to try all combinations, what-
 soever they could produce by coming together,^b that
 it is no wonder if they fell also into such arrange-
 ments, and came into such movements, as this sum
 of things now shows in its course of perpetual reno-
 vation.

¹⁹⁵ But even granting that I did not know what are
 the first-beginnings of things, thus much at least I
 would dare to affirm from the very ways of heaven,
 Even if it were not so, the world is too faulty to be of

^a For *notities*, see note on 2.745. The argument here
 should be compared with that of 1046-1049, where *Lucr.* is
 dealing with the origin of language.

^b 187-191 = 422-426 (from *multa* to *creare*). Also compare
 187-194 with 1.1024-1028.

confirmare aliisque ex rebus reddere multis,
nequaquam nobis divinitus esse paratam
naturam rerum : tanta stat praedita culpa.

Principio quantum caeli tegit impetus ingens, 200
inde avidam partem montes silvaeque ferarum
possedere, tenent rupes vastaeque paludes
et mare quod late terrarum distinet oras.
inde duas porro prope partis fervidus ardor
adsiduusque geli casus mortalibus aufert. 205
quod superest arvi, tamen id natura sua vi
sentibus obducat, ni vis humana resistat,
vitai causa valido consueta bident
ingemere et terram pressis proscindere aratris.
si non fecundas vertentes vomere glebas 210
terraique solum subigentes cimus ad ortus,
sponte sua nequeant liquidas existere in auras ;
et tamen interdum magno quaesita labore
cum iam per terras frondent atque omnia florent,
aut nimiis torret fervoribus aetherius sol 215
aut subiti peremunt imbres gelidaeque pruinae,
flabraque ventorum violento turbine vexant.

Praeterea genus horrifera natura ferarum
humanae genti infestum terraque marique
cur alit atque auget ? cur anni tempora morbos 220
adportant ? quare mors immatura vagatur ?

Tum porro puer, ut saevis proiectus ab undis
navita, nudus humi iacet, infans, indigus omni
vitali auxilio, cum primum in luminis oras
nixibus ex alvo matris natura profudit, 225

^a 195-199 are repeated, with slight alterations, from 2.177-181.

^b Cf. 1.211-212.

and to show from many other facts, that the world divine
was certainly not made for us by divine power : so origin.
great are the faults with which it stands endowed.^a

²⁰⁰ In the first place, of all that the sky covers
with its mighty expanse, a greedy part is possessed
by mountains and forests full of wild beasts, part
rocks and vasty marshes hold, and the sea that keeps
the shores of lands far apart. Almost two parts of
these lands are robbed from mortals by scorching
heat, and constantly falling frost. Even the land that
is left, nature would still cover with brambles by her
own power, but that man's power resists, well ac-
customed to groan over the stout mattock for very
life, and to cleave the soil with the pressure of the
plough. If by turning over the fruitful clods with
the ploughshare and trenching the soil we do not
bring them to birth,^b no growths could emerge into
the lambent air of their own accord ; and even so
at times, these procured by great labour, when they
are already covering the earth with leafage and are
all in bloom, are either scorched up by the sun in
heaven with too great heat, or cut off by sudden rains
and chilly frost, and the blasts of wind batter them
with violent storms.

²¹⁸ Besides, why does nature feed and increase the
frightful tribes of wild beasts, enemies of the human
race, by land and sea ? Why do the seasons of the
year bring disease ? Why does untimely death stalk
abroad ? Look at wild beasts also, and disease.

²²² Then further the child, like a sailor cast forth
by the cruel waves, lies naked upon the ground,
speechless, in need of every kind of vital support, as
soon as nature has spilt him forth with throes from
his mother's womb into the regions of light, and he
and the helpless-ness of the child

LUCRETIUS

vagituque locum lugubri complet, ut aequumst
 cui tantum in vita restet transire malorum.
 at variae crescunt pecudes armenta feraeque,
 nec crepitacillis opus est, nec cuiquam adhibendast
 almae nutricis blanda atque infracta loquella, 230
 nec varias quaerunt vestes pro tempore caeli,
 denique non armis opus est, non moenibus altis,
 qui sua tutentur, quando omnibus omnia large
 tellus ipsa parit naturaque daedala rerum.

Principio quoniam terrai corpus et umor 235
 aurarumque leves animae calidique vapores,
 e quibus haec rerum consistere summa videtur,
 omnia nativo ac mortali corpore constant,
 debet eodem omnis mundi natura putari.
 quippe etenim quorum partis et membra videmus 240
 corpore nativo ac mortalibus esse figuris,
 haec eadem ferme mortalia cernimus esse
 et nativa simul. quapropter maxima mundi
 cum videam membra ac partis consumpta regni,
 scire licet caeli quoque item terraeque fuisse 245
 principiale aliquod tempus clademque futuram.

Illud in his rebus ne corripuisse rearis
 me mihi, quod terram atque ignem mortalia sumpsit

241 nativo ac (cf. 238 ; for the corruption cf. 321) Lachmann; nativom OQ: nativum O corr., P: nativo et Avancius (in his Catullus)

^a 222-227 are famous lines. Parallels are quoted (see especially Munro, Merrill) from many later writers, including Pliny the Elder, Seneca, Apuleius, and Lactantius. Wordsworth imitates the passage in *To —, Upon the Birth of her First-Born Child* 1-12: "Like a shipwrecked Sailor tost | By rough waves on a perilous coast, | Lies the Babe, in helplessness | And in tenderest nakedness, | Flung by labouring

fills all around with doleful wailings—as is but just, seeing that so much trouble awaits him in life to pass through.^a But the diverse flocks and herds grow, and wild creatures; they need no rattles, none of them wants to hear the coaxing and broken baby-talk of the foster-nurse, they seek no change of raiment according to the temperature of the season, lastly they need no weapons, no lofty walls to protect their own, since for them all the earth herself brings forth all they want in abundance, and nature the cunning fashioner of things.

compared with the young of other animals.

²³⁵ In the first place,^b since the earth's mass and the water, the wind's light breezes, and burning heat, which are seen to compose this sum of things, all consist of a body that is born and dies, we must consider the whole world to be of the same structure. For certainly whenever we see the parts and the members of creatures to be made of body that has birth and forms that are subject to death, we perceive these same creatures to be invariably subject to death and birth along with the parts. Therefore, when I see the grand parts and members of the world being consumed and born again, I may be sure that heaven and earth also once had their time of beginning and will have their destruction.

I. The world is mortal. The parts which compose the world are mortal, therefore the whole is mortal.

²⁴⁷ To show you that I have not here begged the question, when I assumed that earth and fire are

(1) Earth. You can see the earth

Nature forth | Upon the mercies of the earth. | Can its eyes beseech? no more | Than the hands are free to implore: | Voice but serves for one brief cry; | Plaint was it? or prophesy | Of sorrow that will surely come? | Omen of man's grievous doom!"

^b An abrupt resumption of the argument interrupted at 109

esse, neque umorem dubitavi aurasque perire,
 atque eadem gigni rursusque augescere dixi, 250
 principio pars terrarum nonnulla, perusta
 solibus adsiduis, multa pulsata pedum vi,
 pulveris exhalat nebulam nubesque volantis
 quas validi toto dispergunt aere venti.
 pars etiam glebarum ad diluivium revocatur 255
 imbribus, et ripas radentia flumina rodunt.
 praeterea pro parte sua, quodcumque alit auget,
 redditur; et quoniam dubio procul esse videtur
 omniparens eadem rerum commune sepulchrum,
 ergo terra tibi libatur et aucta recrescit. 260

Quod superest, umore novo mare flumina fontes
 semper abundare et latices manare perennis
 nil opus est verbis: magnus decursus aquarum
 undique declarat. sed primum quicquid aquarum
 tollitur in summaque fit ut nil umor abundet, 265
 partim quod validi verrentes aequora venti
 deminuunt radiisque retexens aetherius sol,
 partim quod subter per terras diditur omnis;
 percolatur enim virus retroque remanat
 materies umoris et ad caput amnis omnis 270
 convenit, inde super terras fluit agmine dulci
 qua via secta semel liquido pede detulit undas.

Aera nunc igitur dicam qui corpore toto
 innumerabiliter privas mutatur in horas.

^a In other words, whatever is produced from the earth is eventually returned to the earth, and gives back to the earth as much substance as it earlier took from it.

^b D. West, *The Imagery and Poetry of Lucretius* 82, thinks that *radiis* not only means "rays," but also is intended to suggest "shuttles"—an attractive suggestion already made by B. Farrington (see Bailey, *Addenda* p. 1756).

^c Cf. *Ecclesiastes* 1.7: "All the rivers run into the sea; 398

subject to death, when I did not hesitate to say that ^{diminishing and increasing before your eyes.}
 water and air perish and are born again and increase
 once more, in the first place a large part of the earth,
 scorched with incessant suns and trampled by a host
 of feet, exhales a cloud of dust and flying mists which
 the strong winds disperse abroad through the whole
 sky. A part of the soil again is washed away by rain,
 and the scraping rivers nibble at their banks. Besides,
 whatever the earth nourishes and increases is given
 back in its due proportion ^a; and since beyond all
 doubt the mother of all is seen also to be the universal
 sepulchre, therefore you see that the earth is
 diminished and is increased and grows again.

²⁶¹ Moreover, there is no need to say how sea, ^{(2) Water. You see rivers flowing into the sea, and the surface evaporating.}
 rivers, and springs for ever well up in abundance with
 fresh waters and their streams flow unceasing: the
 great pouring down of waters from all sides makes
 it clear. But, bit by bit, whatever comes first of the
 water is taken off, and the result is that there is no
 superabundance of liquid in the sum total: partly
 because strong winds sweep the surface and diminish
 it, as does the sun on high unravelling it with his
 rays ^b; partly because it is distributed abroad
 through all the earth underneath; for the pungency
 is strained off, and the substance of the water oozes
 back, and all meets at the sources of each river,^c
 whence it returns over the earth in a column of sweet
 water along the path which has once been cut for it
 in its liquid course.^d

²⁷³ Next then I will speak of the air, which through- ^{(3) Air. Air also changes by}
 out its whole body changes in numberless ways every

yet the sea is not full; unto the place from whence the rivers
 come, thither they return again."

^d 269-272 = 6.635-638 except for two minor changes.

semper enim, quodcumque fluit de rebus, id omne 275
 aeris in magnum fertur mare ; qui nisi contra
 corpora retribuat rebus recreetque fluentis,
 omnia iam resoluta forent et in aera versa.
 haud igitur cessat gigni de rebus et in res
 recidere, adsidue quoniam fluere omnia constat. 280

Largus item liquidus fons luminis, aetherius sol,
 inrigat adsidue caelum candore recenti
 suppeditatque novo confestim lumine lumen.
 nam primum quicquid fulgoris disperit ei,
 quocumque accidit. id licet hinc cognoscere possis,
 quod simul ac primum nubes succedere soli 286
 coepere et radios inter quasi rumpere lucis,
 extemplo inferior pars horum disperit omnis,
 terraque inumbratur qua nimbi cumque feruntur ;
 ut noscas splendore novo res semper egere, 290
 et primum iactum fulgoris quemque perire,
 nec ratione alia res posse in sole videri,
 perpetuo ni suppeditet lucis caput ipsum.
 quin etiam nocturna tibi, terrestria quae sunt,
 lumina—pendentes lychni claraeque coruscis 295
 fulguribus pingues multa caligine taedae—
 consimili properant ratione, ardore ministro,
 suppeditare novom lumen, tremere ignibus instant,
 instant, nec loca lux inter quasi rupta relinquit :
 usque adeo properanter ab omnibus ignibus ei 300
 exitium celeri celatur origine flammae.
 sic igitur solem lunam stellasque putandum
 ex alio atque alio lucem iactare subortu,

301 celatur *Marullus* : celeratur *OQ*, *Havercamp*, *Wakefield*, *Merrill (1917)*, *Martin*

^a On the tmesis *inter quasi rumpere* (cf. 299), see note on 3.860.

single hour. For always whatever flows off from things is all carried into the great ocean of air ; and if this contrariwise did not return back particles to the things again, and renew them as they flow away, all would by now be dissolved and changed into air. Therefore air never ceases to be produced from things and to fall back into things again, since it is certain that all things are in a constant flow.

²⁸¹ The generous fountain of clear light also, the ethereal sun, diligently deluges the heavens with fresh brightness, and brings up in the place of light each moment new supplies of light ; for bit by bit whatever comes first of the light is lost to it and gone, wherever it falls. This you may recognize from what follows. As soon as clouds begin first to come up under the sun, and as it were to break in between the rays of light, at once the lower part of these rays is all lost, and the earth is in shadow wherever the clouds go ; that you may see that things need light ever new, that one by one each cast of light is lost, that things cannot be seen in the sun in any other way unless the very source of light should bring up an unceasing supply. Again, you see, by night the lights that are on the earth, hanging lamps, and torches bright with flickering flashes and all fat with thick black smoke, fostered by the fire in like manner, make haste to bring up new supplies of brightness : with trembling flames on they go, on they go, and the light never seems to be broken in between or leaves the place, so swift is it to hide its extinction by the quick birth of flame from all those fires. So, therefore, must we think that sun and moon and stars shoot out light from a store that comes up ever

absorption
and dis-
charge.

(4) Fire
(Light).
The sun is
for ever
sending
forth his
rays to fall
and perish
—and
bringing
up new
supplies.

The inter-
ruption of
light shows
that it
comes in a
constant
stream.

et primum quicquid flammaram perdere semper,
inviolabilia haec ne credas forte vigere. 305

Denique non lapides quoque vinci cernis ab aevo,
non altas turris ruere et putrescere saxa,
non delubra deum simulacraque fessa fatisci,
nec sanctum numen fati protollere finis
posse neque adversus naturae foedera niti? 310
denique non monumenta virum dilapsa videmus,
†quaerere porporro sibi cumque senescere credas,†
non ruere avolsos silices a montibus altis
nec validas aevi vires perferre patique
finiti? neque enim caderent avolsa repente, 315
ex infinito quae tempore pertolerassent
omnia tormenta aetatis privata fragore.

Denique iam tuere hoc circum supraque quod
omnem
continet amplexu terram: si procreat ex se
omnia, quod quidam memorant, recipitque perempta,
totum nativo ac mortali corpore constat; 321
nam quodcumque alias ex se res auget alitque,
deminui debet, recreari, cum recipit res.

Praeterea si nulla fuit genitalis origo
terrarum et caeli semperque aeterna fuere, 325
cur supera bellum Thebanum et funera Troiae

312 *The reading of OQ, obelized above, is manifestly corrupt, and no entirely satisfactory emendation has been proposed. In view of 2.979, quaerere porporro sibi is probably correct, and Munro's sene for cumque seems the most plausible suggestion. However, an attractive alternative is Munro's earlier proposal aeraque porporro solidumque senescere ferrum, for which he well compares 2.447-450; he suggests that credas came from credis in 338, the corresponding line on*
402

fresh and new, and that bit by bit whatever comes first of the fire is always lost; that you may not by any chance believe that their force is indestructible.

³⁰⁶ Again, do you not see that even stones are conquered by time, that tall turrets fall and rocks crumble, that the gods' temples and their images wear out and crack, nor can their holy divinity carry forward the boundaries of fate, or strive against nature's laws? Again, do we not see the monuments of men fall to pieces, [asking whether you believe that they in their turn must grow old?]^a Do we not see lumps of rock roll down torn from the lofty mountains, too weak to bear and endure the mighty force of time finite? For they would not fall thus suddenly torn off, if they had endured all through from time infinite all the wrenchings of the ages without breaking up.

Even stones are worn away in time.

³¹⁸ Again, do but behold that which around and above comprehends all the earth in its embrace: if it makes from itself all things, as some declare, and takes them back when they are destroyed, then the whole consists of a body subject to birth and death. For whatever increases and nourishes other things from itself must be diminished, and remade when it receives things back.^b

If the encompassing sky diminishes and increases, it is mortal.

³²⁴ Besides, if there has been no first birth-time for earth and heaven, and they have been always everlasting, why have not other poets also sung other

Indeed, the world is young, and still developing.

^a The words in square brackets translate *quaerere porporro sibi sene senescere credas*. See critical note and cf. Juv. 10.146.

^b 318-323 are in imitation of Pacuvius (ed. Ribbeck) 86-92.

the next page of the archetype
(cf. 238, 241): nativum OQP

321 nativo ac Bernays

non alias alii quoque res cecinere poetae ?
 quo tot facta virum totiens cecidere neque usquam
 aeternis famae monumentis insita florent ?
 verum, ut opinor, habet novitatem summa recensque
 naturast mundi neque pridem exordia cepit. 331
 quare etiam quaedam nunc artes expoliuntur,
 nunc etiam augescunt ; nunc addita navigiis sunt
 multa, modo organici melicos peperere sonores.
 denique natura haec rerum ratioque repertast 335
 nuper, et hanc primus cum primis ipse repertus
 nunc ego sum in patrias qui possim vertere voces.

Quod si forte fuisse antehac eadem omnia credis,
 sed periisse hominum torrenti saecla vapore,
 aut cecidisse urbis magno vexamine mundi, 340
 aut ex imbris adsiduis exisse rapaces
 per terras amnes atque oppida coperuisse,
 tanto quique magis victus fateare nessest
 exitium quoque terrarum caelique futurum ;
 nam cum res tantis morbis tantisque periclis 345
 temptarentur, ibi si tristior incubisset
 causa, darent late cladem magnasque ruinas.
 nec ratione alia mortales esse videmur,
 inter nos nisi quod morbis aegrescimus isdem
 atque illi quos a vita natura movit. 350

^a A lost epic poem, the *Thebais*, told the story of the Seven against Thebes : how the Argive king Adrastus, Polyneices, the exiled son of Oedipus, and five others led an army against Thebes in an unsuccessful attempt to restore Polyneices to the throne.

^b On *insita florent*, see especially D. West, *The Imagery and Poetry of Lucretius* 2-3.

^c It is usually thought that C. Amafinius, whom Cicero (*Tusc. Disp.* 4.3.6-7) mentions as having achieved great success with his books, had expounded Epicureanism in Latin prose before Lucr. Although H. M. Howe, *AJPhil.* 62 (1957) 57-62, has followed G. Della Valle in maintaining that

things beyond the Theban War^a and the ruin of Troy ? Into what place have so many deeds of men so often fallen, and nowhere flower implanted^b in eternal monuments of fame ? But, as I think, the world is young and new, and it is not long since its beginning. Therefore even now some arts are being perfected, some also are in growth ; to-day many improvements have been made in ships, yesterday musicians invented their musical tunes ; again this nature and system of the world has been discovered but lately, and I myself am now found the very first to be able to describe it in our own mother tongue.^c

³³⁸ But if by any chance you believe that all these things have been the same before, but that the generations of men have perished in scorching heat, or that their cities have been cast down by some great upheaval of the world, or that after incessant rains rivers have issued out to sweep over the earth and overwhelm their towns, so much the more you must own yourself worsted, and agree that destruction will come to earth and sky. For when things were assailed by so great afflictions and so great dangers, if then a more serious cause had come upon them, there would have been widespread destruction and a mighty fall. And in no other way are we seen to be mortal than that we see one another fall sick of the same diseases as those whom nature has taken away from life.^d

See the progress of arts and sciences.

Legends of flood and fire, if you believe them, prove the earth's mortality.

Amafinius and Lucr. were contemporaries, his arguments, though important, are not entirely convincing. But if indeed Amafinius had written earlier than Lucr., why does Lucr. ignore him ? The answer may be that Amafinius' works were brief and dealt mainly with ethical doctrine, and that Lucr. was the first Latin writer to give a detailed account of Epicurean physics. ^d So the afflictions of the earth prove its mortality.

Praeterea quaecumque manent aeterna necessust
aut, quia sunt solido cum corpore, respuere ictus
nec penetrare pati sibi quicquam quod queat artas
dissociare intus partis, ut material
corpora sunt quorum naturam ostendimus ante ; 355
aut ideo durare aetatem posse per omnem,
plagarum quia sunt expertia, sicut inane est,
quod manet intactum neque ab ictu fungitur hilum ;
aut etiam quia nulla loci sit copia circum,
quo quasi res possint discedere dissoluique, 360
sicut summarum summa est aeterna, neque extra
qui locus est quo dissiliant, neque corpora sunt quae
possint incidere et valida dissolvere plaga.
aut neque, uti docui, solido cum corpore mundi
naturast, quoniam admixtumst in rebus inane, 365
nec tamen est ut inane, neque autem corpora desunt,
ex infinito quae possint forte coorta
corruere hanc rerum violento turbine summam
aut aliam quamvis eladem inportare pericli,
nec porro natura loci spatiumque profundi 370
deficit, exspargi quo possint moenia mundi,
aut alia quavis possunt vi pulsa perire.
haud igitur leti praeclosa est ianua caelo
nec soli terraeque neque altis aequoris undis,
sed patet immani et vasto respectat hiatu. 375
quare etiam nativa necessumst confiteare
haec eadem ; neque enim, mortali corpore quae sunt,
ex infinito iam tempore adhuc potuissent
inmensi validas aevi contemnere vires.

Denique tantopere inter se cum maxima mundi 380

^a 351-363 also occur, with a few slight alterations, in 3.806-818. See note on 3.818.

^b 1.329-369.

^c Fire, water, air, earth.

³⁵¹ Besides, whatever bodies abide everlasting must either, being of solid structure, reject blows and allow nothing to penetrate them that could dis-
sever asunder the close-joined parts within, as the particles of matter are, the nature of which we have shown before ; or else the reason why they can endure through all time must be that they are free from assaults, as the void is, which remains untouched and is not a whit affected by blows ; or again because there is no extent of space around into which things can as it were disperse and dissolve, as the sum of all sums is eternal, and there is no place without it into which its elements may leap apart, nor bodies to fall upon it and dissolve it asunder with a strong blow.^a But, as I have shown,^b this world is not made of solid body, since there is void intermingled in things ; nor yet is it like the void ; nor again are bodies lacking that can by chance gather out of the infinite, and overwhelm this sum of things in a violent hurricane or bring in any other disaster and danger ; nor further is place lacking and profundity of space into which the walls of the world can be scattered out ; or they may be struck by any other force and perish. The door of death therefore is not closed for the heavens, nor for sun and earth and the deep waters of the sea, but stands open and awaits them with vast and hideous maw. Therefore also you must confess that these same things have had their birth ; for things which are of mortal body could not have despised the mighty strength of immeasurable ages from infinite time up to this present.

What is everlasting must be solid and impenetrable (like the atoms),

or intangible (like the void),

or have no space around it (like the universe) ;

but the world is none of these,

therefore it is mortal.

³⁸⁰ Again, since the greatest members ^c of the

The war of

pugnent membra, pio nequaquam concita bello,
 nonne vides aliquam longi certaminis ollis
 posse dari finem? vel cum sol et vapor omnis
 omnibus epotis umoribus exsuperarint; 384
 quod facere intendunt, neque adhuc conata patrantur:
 tantum suppeditant amnes ultraque minantur
 omnia diluviare ex alto gurgite ponti—
 nequiquam, quoniam verrentes aequora venti
 deminuunt radiisque retexens aetherius sol,
 et siccare prius confidunt omnia posse 390
 quam liquor incepti possit contingere finem.
 tantum spirantes aequo certamine bellum
 magnis inter se de rebus cernere certant,
 cum semel interea fuerit superantior ignis
 et semel, ut fama est, umor regnarit in arvis. 395

Ignis enim superavit et ambiens multa perussit,
 avia cum Phaethonta rapax vis solis equorum
 aethere raptavit toto terrasque per omnis.
 at pater omnipotens ira tum percitus acri
 magnanimum Phaethonta repenti fulminis ictu 400
 deturbavit equis in terram, Solque cadenti
 obvius aeternam suscepit lampada mundi,
 disiectosque rededit equos iunxitque trementis,
 inde suum per iter recreavit cuncta gubernans,
 scilicet ut veteres Graium cecinere poetae. 405
 quod procul a vera nimis est ratione repulsum.

385 patrantur *OQP*: patrarunt *P. E. Goebel, L. Grasberger, perhaps rightly* 396 superavit *OQP*: superat
Lachmann ambiens *L. Diels, Martin, D. West, The Imagery and Poetry of Lucretius 52*: ambiens *OQABF, Merrill (1917)*: lambens *Q corr.*

^a *pio nequaquam . . . bello = bello civili*, the four warring elements being members of the same state, the world.

^b Helios had lent his chariot to his son Phaëthon for one day. The story is told in detail by Ovid, *Met.* 1.750-2.400.

world fight so hard together, stirred by most un-^{the ele-}
 righteous war,^a do you not see that some end may be ^{ments may}
 given to their long strife? Either when sun and all ^{one day}
 heat shall prevail, having drunk up all the waters; ^{cease by the}
 which they are striving to do, but so far they are ^{victory of}
 unable to accomplish the attempt: so plentiful a ^{one;}
 supply do the rivers bring up, and further threaten
 to deluge the whole from the deep gulf of the sea—
 all in vain, since the winds sweeping the surface of
 the waters diminish them, as does the ethereal sun
 unravelling them by his rays, and these are confident
 that they can dry up all before the water can attain
 the end of its endeavour. So fierce is their warlike
 spirit, as in well-matched contest they strive to win a
 decision upon a mighty cause; although in the
 meanwhile fire won the mastery once, and once, as
 the story goes, water was king over the fields.

³⁹⁶ For fire prevailed and went round burning up ^{partial vic-}
 many parts, when far from his course the furious ^{tories are}
 might of the sun's horses whirled Phaëthon through- ^{recorded in}
 out the sky and over all the earth. But the almighty ^{legend,}
 Father, stirred then with fierce anger, crashed down ^{of fire}
 ambitious Phaëthon from his car to the earth with a
 sudden thunderbolt, and the Sun,^b meeting his fall,
 caught up from him the everlasting lamp of the
 world,^c and bringing back the scattered horses yoked
 them in trembling, and then guiding them on their
 proper path, restored all again—that, you know, is
 the tale which the old Grecian poets have sung. But
 this is all very far indeed removed from true reason-

^c In this passage Lucr. is parodying the style of the *veteres Graium . . . poetae* of 405 (*cf.* D. West, *The Imagery and Poetry of Lucretius 52-53*): for an Epicurean there is no everlasting sun, no *pater omnipotens* (399), and indeed no Phaëthon.

ignis enim superare potest ubi materiai
 ex infinito sunt corpora plura coorta ;
 inde cadunt vires aliqua ratione revictae,
 aut pereunt res exustae torrentibus auris. 410

Umor item quondam coepit superare coortus,
 ut fama est, hominum multos quando obruit undis ;
 inde ubi vis aliqua ratione aversa recessit,
 ex infinito fuerat quaecumque coorta,
 constiterunt imbres et flumina vim minuerunt. 415

Sed quibus ille modis coniectus materiai
 fundarit terram et caelum pontique profunda,
 solis lunai cursus, ex ordine ponam.
 nam certe neque consilio primordia rerum
 ordine se suo quaeque sagaci mente locarunt 420
 nec quos quaeque darent motus pepigere profecto,
 sed quia multa modis multis primordia rerum
 ex infinito iam tempore percita plagis
 ponderibusque suis consuerunt concita ferri
 omnimodisque coire atque omnia pertemptare, 425
 quaecumque inter se possent congressa creare,
 propterea fit uti magnum volgata per aevom,
 omne genus coetus et motus experiundo,
 tandem convenient ea quae convecta repente

412 multos *CF*: multas *OQABL*. *C. L. Howard, CPhil.*
56 (1961) 154-155, who argues for hominum multos but is
apparently unaware that it is a manuscript reading printed
by several early editors and by Wakefield, well compares
Catullus 66.9 multis . . . dearum, Pliny, HN 16.40.96
hominum multis undis OQFL: urbis B, adopted by
most modern editors, but obruit undis is supported by 6.864,
and both undis and hominum multos are supported by Ovid,
Met. 1.311 maxima pars (sc. hominum) unda rapitur, quoted

ing. For fire can prevail, when the particles of its
 matter collected together from the infinite are more
 than usual in number ; afterwards its strength sub-
 sides beaten back in some way, or else the world per-
 ishes burnt up by the scorching blasts.

⁴¹¹ Water also once gathering together began to prevail, as the story goes, when its waves over-
 whelmed much of the human race ; then when all
 its force, gathered up out of the infinite, being
 diverted in some way, moved back, the rains came
 to a standstill and the rivers diminished their force.

⁴¹⁶ But next in order I will describe in what ways that assemblage of matter established earth and sky and the ocean deeps, and the courses of sun and moon.^a For certainly it was no design of the first-beginnings that led them to place themselves each in its own order with keen intelligence, nor assuredly did they make any bargain what motions each should produce ; but because many first-beginnings of things in many ways, struck with blows and carried along by their own weight from infinite time up to the present, have been accustomed to move and to meet in all manner of ways, and to try all combinations, whatsoever they could produce by coming together, for this reason it comes to pass that being spread abroad through a vast time, by attempting every sort of combination and motion, at length those come together which, being suddenly brought together, often

^a For the Epicurean cosmological theory, cf. especially Aëtius 1.4.1-4 (= Usener 308).

by Howard 429 convecta Lachmann : conventa *OQAL* : coniecta attributed by most recent editors to Martin, who attributes it to himself, but first suggested by Lambinus (notes only)

magnarum rerum fiunt exordia saepe, 430
terrai maris et caeli generisque animantum.

Hic neque tum solis rota cerni lumine largo
altivolans poterat nec magni sidera mundi
nec mare nec caelum nec denique terra neque aer
nec similis nostris rebus res ulla videri, 435
sed nova tempestas quaedam molesque coorta
440 omnigenis e principiis, discordia quorum
441 intervalla vias conexus pondera plagas
442 concursus motus turbabat proelia miscens,
443 propter dissimilis formas variasque figuras 440
444 quod non omnia sic poterant coniuncta manere
445 nec motus inter sese dare convenientis.
437 diffugere inde loci partes coepere, paresque
438 cum paribus iungi res, et discludere mundum
439 membraque dividere et magnas disponere partes. 445
hoc est, a terris altum discernere caelum,
et sorsum mare, uti secreto umore pateret,
seorsus item puri secretique aetheris ignes.

Quippe etenim primum terrai corpora quaeque,
propterea quod erant gravia et perplexa, coibant 450
in medio atque imas capiebant omnia sedes ;
quae quanto magis inter se perplexa coibant,
tam magis expressere ea quae mare sidera solem
lunamque efficerent et magni moenia mundi ;
omnia enim magis haec e levibus atque rutundis 455
seminibus multoque minoribu' sunt elementis
quam tellus. ideo per rara foramina terrae
partibus erumpens primus se sustulit aether

437-445 arranged in the order given above by A. J. Reisacker. The arrangement is adopted by Lachmann and all subsequent editors except Bockemüller and Martin

^a The passage 416-431 contains only one entirely new line

become the beginnings of great things, of earth and sea and sky and the generation of living creatures.^a

⁴³² Then, in these circumstances, was not to be seen the sun's wheel soaring aloft with generous light, nor the constellations of the great firmament, nor sea nor sky nor indeed earth nor air nor anything like to our things, but a sort of strange storm, all kinds of beginnings gathered together into a mass, while their discord, exciting war amongst them, made a confusion of intervals, courses, connexions, weights, blows, meetings, motions,^b because, on account of their different shapes and varying figures, not all when joined together could remain so or make the appropriate motions together. In the next place parts began to separate, like things to join with like, and to parcel out the world, to put its members in place and to arrange its great parts—that is, to set apart high heaven from earth, and to make the sea spread with its water set apart in a place of its own, apart from the pure fires of ether set in their own place.

⁴⁴⁹ For in plain fact firstly all the bodies of earth, being heavy and entangled, came together in the midst and all took the lowest place ; and the more entangled they came together, the more they squeezed out those particles which could make sea, stars, sun, and moon and the walls of the great world ; for these were all made of seeds more smooth and more round and far smaller elements than the earth. Therefore through the loose-knit interstices, breaking out from the parts of the earth,

(427). 416 should be compared with 67 ; 417 with 68 ; 418 with 76 ; 419-421 with 1.1021-1023 ; 422 with 187, 1.1024 ; 423 with 188 ; 424-426 with 189-191 ; 428 with 1.1026 ; 429-431 with 2.1061-1063.

^b Cf. 2.726-727.

ignifer et multos secum levis abstulit ignis,
 non alia longe ratione ac saepe videmus, 460
 aurea cum primum gemmantis rore per herbas
 matutina rubent radiati lumina solis
 exhalantque lacus nebulam fluviique perennes,
 ipsaque ut interdum tellus fumare videtur ;
 omnia quae sursum cum conciliantur in alto, 465
 corpore concreto subtexunt nubila caelum.
 sic igitur tum se levis ac diffusilis aether
 corpore concreto circumdatus undique flexit
 et late diffusus in omnis undique partis
 omnia sic avido complexu cetera saepsit. 470

Hunc exordia sunt solis lunaeque secuta,
 intrutrasque globi quorum vertuntur in auris ;
 quae neque terra sibi adscivit nec maximus aether,
 quod neque tam fuerunt gravia ut depressa sederent,
 nec levia ut possent per summas labier oras ; 475
 et tamen intrutrasque ita sunt ut corpora viva
 versent et partes ut mundi totius extent ;
 quod genus in nobis quaedam licet in statione
 membra manere, tamen cum sint ea quae moveantur.

His igitur rebus retractis terra repente, 480
 maxuma qua nunc se ponti plaga caerulea tendit,
 succidit et salso suffudit gurgite fossas.
 inque dies quanto circum magis aetheris aestus
 et radii solis cogeant undique terram
 verberibus crebris extrema ad limina in artum, 485
 in medio ut propulsa suo condensa coiret,

468 flexit *Lachmann* : saepsit *OQP*, almost certainly from 470, but retained by *Merrill* (1917), *Diels*, *Martin*, *Büchner* 485 in artum *Münro* (cf. 6.158) : partem *OQP* : partes *Bockemüller* (with terrae in 484) : raptim *Bentley*

^a Cf. 2.319 and see note there.

^b Or, as C. L. Howard, *CPhil.* 56 (1961) 155-156, suggests,

first fiery ether uplifted itself and lightly drew with it quantities of fire ; in no very different way than we often see, when in the morning the golden light of the beaming sun first blushes over herbage jewelled with dew,^a when the lakes and the ever-flowing streams exhale a mist, and the very earth seems sometimes to smoke ; then when all these exhalations come together on high above us, clouds with body now cohering weave a texture under the sky. In this way therefore at that time the light and expansive ether, with coherent body, bent around on all sides, and expanded widely on all sides in every direction, thus fenced in all the rest with greedy embrace.

⁴⁷¹ This was followed by the beginnings of sun and moon, whose globes revolve in the air between the two ; which neither earth nor the great ether adopted to itself, because they were neither so heavy as to sink down and settle, nor so light that they could glide through the uppermost regions, and yet they remain between both in such fashion that they revolve like living bodies and abide as parts of the whole world ; in the same way as in us some members may remain at rest, while yet there are others moving.

⁴⁸⁰ Therefore when these bodies were withdrawn, suddenly the earth sank down where now the blue expanse of the sea extends so wide, and drowned its hollows with the salt flood. And day by day, the more the tide of ether and the sun's rays compressed the earth into compactness with frequent blows from all sides upon its outermost confines, so that thus beaten it was packed together and came together upon its own centre,^b so much the more did the salt

in medio . . . suo may mean " in that middle position which is appropriate to it," *i.e.* in the middle of the world (as in 451).

tam magis expressus salsus de corpore sudor
 augebat mare manando camposque natantis,
 et tanto magis illa foras elapsa volabant
 corpora multa vaporis et aeris, altaque caeli 490
 densabant procul a terris fulgentia templa.
 sidebant campi, cresebant montibus altis
 ascensus; neque enim poterant subsidere saxa
 nec pariter tantundem omnes succumbere partes.

Sic igitur terrae concreto corpore pondus 495
 constitit, atque omnis mundi quasi limus in imum
 confluit gravis et subsedit funditus ut faex;
 inde mare, inde aer, inde aether ignifer ipse
 corporibus liquidis sunt omnia pura relictæ,
 et leviora aliis aliæ, et liquidissimus aether 500
 atque levissimus aeris super influit auras,
 nec liquidum corpus turbantibus aeris auris
 commiscet: sinit hæc violentis omnia verti
 turbinibus, sinit incertis turbare procellis,
 ipse suos ignis certo fert impete labens, 505
 nam modice fluere atque uno posse aethera nisu
 significat Pontos, mare certo quod fluit aestu,
 unum labendi conservans usque tenorem.

Motibus astrorum nunc quæ sit causa canamus.
 principio magnus caeli si vortitur orbis, 510
 ex utraque polum parti premere aera nobis
 dicendum est extraque tenere et claudere utrimque;

509-533 bracketed or placed after 563 by several editors,
 but see Bailey 1398-1399

^a The idea that the Pontus (the Black Sea) invariably flows into the Propontis, towards the Aegean, is found in Aristotle, Strabo, Pliny, and Seneca. Cf. Shakespeare, *Othello* 3.3.453-456: "... like to the Pontick Sea, | Whose icy current and compulsive course | Ne'er feels retiring ebb, but keeps due on | To the Propontick and the Hellespont."

416

sweat, squeezed out of its body, by its oozing increase the sea and the swimming plains, and so much the more slipped out and flew away those many bodies of heat and air, and on high far from the earth packed the shining regions of the sky. The plains settled down, the lofty mountains increased their height; for the rocks could not sink, nor could all parts subside equally to the same degree.

⁴⁹⁵ In this way, therefore, the heavy earth became solid with compact body, and all the mud of creation, so to speak, flowed together by its weight and settled to the bottom like dregs; then sea, then air, then the fiery ether itself, being made of fluid particles, were all left pure, some lighter than others, and ether, lightest and most fluid, floats above the airy breezes, and does not mingle its fluid consistency with the stormy breezes of air: it leaves all things below to be turned upside down by violent tempests, leaves them to be disturbed with wayward storms, while itself bearing its own fires it glides with unchanging sweep. For that the ether may flow gently along with one sole movement is proved by the Pontus, a sea which flows with unchanging current and keeps ever one course of gliding movement.^a

until the elements were arranged as we see them.

⁵⁰⁹ Next let us sing what is the cause of the motions of the heavenly bodies.^b Firstly, if the great circle of heaven turns round, we must say that air presses on the pole at each end^c and holds it from without and shuts it in from both directions; then that (1) The

III. Astronomical phenomena. Motions of the celestial bodies.

^b On the meaning of *astrorum*, see Bailey. For Epicurean astronomy and for the way in which astronomical phenomena should be investigated, cf. especially Epicurus, *Ep. ad Pyth.*, *Ep. ad Hdt.* 78-80. ^c That is, at each end of the axis.

inde alium supra fluere atque intendere eodem
 quo volvenda micant aeterni sidera mundi ;
 aut alium subter, contra qui subvehat videmus, 515
 ut fluvios versare rotas atque haustra videmus.

Est etiam quoque uti possit caelum omne manere
 in statione, tamen cum lucida signa ferantur ;
 sive quod inclusi rapidi sunt aetheris aestus
 quaerentesque viam circum versantur et ignes 520
 passim per caeli volvunt summania templa ;
 sive aliunde fluens alicunde extrinsecus aer
 versat agens ignis ; sive ipsi serpere possunt
 quo cuiusque cibus vocat atque invitat euntis,
 flammea per caelum pascentis corpora passim. 525

Nam quid in hoc mundo sit eorum ponere certum
 difficile est ; sed quid possit fiatque per omne
 in variis mundis varia ratione creatis,
 id doceo, plurisque sequor disponere causas,
 motibus astrorum quae possint esse per omne ; 530
 e quibus una tamen siet hic quoque causa necessesit
 quae vegeat motum signis ; sed quae sit earum
 praecipere haudquaquamst pedetemptim progredi-
 entis.

Terraque ut in media mundi regione quiescat,

531 siet hic *Bernays* : sit et haec *QABF* : sit et hae *OL* :
 sit et heic (= hic) *F. Nencini* : siet haec *Lachmann*

^a The poetical epithet is scientifically unfortunate, being
 "contra Epicuri doctrinam" (Faber).

^b This is the irrigation wheel still used in the East. The
 sky goes round with its stars moved by the air, as the wheel
 with its buckets moved by the river.

^c *inclusi* probably means "confined within the sky."

^d *Summanus*, an ancient Roman deity who had the power
 of thunder by night.

^e In 523-525 *Lucr.* is comparing the stars to sheep moving
 418

another air flows above, and moves in the same direc- whole sky
 tion in which roll the shining stars of the everlasting ^a may move,
 world ; or else that another air flows below to lift up driven by
 the circle in the opposite direction, just as we see currents of
 rivers turn wheels and buckets.^b air ;

⁵¹⁷ It is also possible that all the heavens remain (2) the
 at rest, and yet the bright constellations move along : celestial
 whether because swift tides of ether are shut in,^c and bodies may
 and turn round in seeking a way out, and roll the blazing move,
 signs everywhere through the night-thundering ^d driven by
 regions of the sky ; or some air flowing from some currents of
 outside place turns and drives these fires ; or they ether
 themselves can creep forward, whither their food within the
 calls each and invites them as they go, feeding their sky, or by
 fiery bodies all over the sky.^e currents of
 air from
 without, or
 by desire for
 food.

⁵²⁶ For which of these causes holds in our world it Which of
 is difficult to say for certain ; but what may be done these causes
 and is done through the whole universe in the various prevails in
 worlds made in various ways, that is what I teach, our world is
 proceeding to set forth several causes which may uncertain.
 account for the movements of the stars throughout
 the whole universe ; one of which, however, must
 be that which gives force to the movement of the
 signs in our world also ; but which may be the true
 one, is not his to lay down who proceeds step by
 step.^f

⁵³⁴ That the earth may rest in the middle region Earth is at
 slowly over a field in search of grass. The passage should be
 compared with 2.317-319 (see especially D. West, *The
 Imagery and Poetry of Lucretius* 13-14).

⁷ For the Epicurean view that two or more explanations of
 the same phenomenon must often be put forward, cf. 6.703-
 711, Epicurus, *Ep. ad Hdt.* 79-80, *Ep. ad Pyth.* 86-87,
 Diogenes of Oenoanda fr. 13.II.12-III.13 Smith.

evanescere paulatim et decrescere pondus 535
 convenit, atque aliam naturam subter habere
 ex ineunte aevo coniunctam atque uniter aptam
 partibus aeriis mundi quibus insita vivit.
 propterea non est oneri neque deprimit auras,
 ut sua cuique homini nullo sunt pondere membra,
 nec caput est oneri collo, nec denique totum 541
 corporis in pedibus pondus sentimus inesse ;
 at quaecumque foris veniunt inpostaque nobis
 pondera sunt laedunt, permulto saepe minora.
 usque adeo magni refert quid quaeque queat res. 545
 sic igitur tellus non est aliena repente
 allata atque auris aliunde obiecta alienis,
 sed pariter prima concepta ab origine mundi
 certaue pars eius, quasi nobis membra videntur.

Praeterea grandi tonitru concussa repente 550
 terra supra quae se sunt concutit omnia motu ;
 quod facere haud ulla posset ratione, nisi esset
 partibus aeriis mundi caeloque revincta ;
 nam communibus inter se radicibus haerent
 ex ineunte aevo coniuncta atque uniter apta. 555

Nonne vides etiam quam magno pondere nobis
 sustineat corpus tenuissima vis animai
 propterea quia tam coniuncta atque uniter apta est ?
 denique iam saltu pernicipi tollere corpus
 quid potis est nisi vis animae quae membra gubernat ?
 iamne vides quantum tenuis natura valere 561

555 apta *Pontanus* (cf. 537, 558, 3.839, 846): aucta *OQP*,
Wakefield, *Martin* 560 quid *Lambinus* (1570, *Errata*):
 quis *OQP*, *Wakefield*

^a 554 = 3.325 where *Lucr.* is describing the close relationship between body and soul—a relationship which he men-
 420

of the world, it is proper that the weight should
 vanish away by degrees and grow less, and that it
 should have another substance beneath, joined to-
 gether with it from the beginning of its life and
 united into one with the airy parts of the world on
 which it is engrafted and lives. This is why it is no
 burden and does not depress the air ; just as to a
 man his limbs are no burden, the head no burden to
 the neck, nor in a word do we feel the whole weight
 of the body to be pressing upon the feet ; but all
 weights that come from without and are placed upon
 us annoy, although often very much smaller. So im-
 portant is it what each thing can do. In this way
 then the earth is not something alien suddenly
 brought and thrown upon alien airs from some other
 quarter, but it was conceived along with them from
 the first beginning of the world and a fixed part of it,
 as in us the limbs are seen to be.

⁵⁵⁰ Besides, the earth shaken suddenly with a
 mighty thunderclap shakes all that is above itself
 with its motion, which it could not by any means do,
 unless it were bound fast to the airy parts of the
 world and to the sky. For they cling together
 joined and knit together into one by common roots ^a
 from the beginning of their existence.

⁵⁵⁶ Do you not see also how the most thin essence
 of the spirit sustains our body for all its great weight,
 just because it is so joined together and knit up with
 it into one ? Again, what is able actually to lift the
 body in a vigorous leap, except the power of the
 spirit which guides the limbs ? Now do you see
 how great can be the power of a thin nature when it

tions in 5.556-563 to illustrate the close connexion between
 earth and air.

rest in the
 middle,
 forming an
 organic
 whole with
 the atmo-
 sphere.

(1) Com-
 parison
 with the
 limbs ;

(2) the
 earth shares
 its shocks
 with the
 atmo-
 sphere ;

(3) the soul
 and body
 are simi-
 larly inter-
 mingled.

possit, ubi est coniuncta gravi cum corpore, ut aer
coniunctus terris et nobis est animi vis ?

is joined together with a heavy body, as air is joined
together with earth and the power of mind joined to-
gether with us ?

Nec nimio solis maior rota nec minor ardor
esse potest nostris quam sensibus esse videtur. 565
nam quibus e spatiis cumque ignes lumina possunt
adiicere et calidum membris adflare vaporem,
nil illa his intervallis de corpore libant
flammarum, nil ad speciem est contractior ignis.
573 proinde, calor quoniam solis lumenque profusum 570
570 perveniunt nostros ad sensus et loca fulgent,
571 forma quoque hinc solis debet filumque videri,
572 nil adeo ut possis plus aut minus addere, vere. 573

564 The wheel of the sun and its heat cannot be
much greater or less than is perceived by our senses.^a The sun is
For from whatever distances fires can project light about the
and breathe warm heat upon our bodies, they same size as
diminish nothing by these intervals from their mass we see it ;
of flame, and the fire is made no narrower to the as fires at
eye. Therefore, since the sun's heat and flooding a distance
light reach to our senses and the world shines^b with do not
its rays, the shape also of the sun and its size must diminish.
so truly be seen from the earth that you can add
nothing at all to it and take nothing away.

Lunaque, sive notho fertur loca lumine lustrans 575
sive suam proprio iactat de corpore lucem,
quidquid id est, nilo fertur maiore figura
quam nostris oculis qua cernimus esse videtur.
nam prius omnia, quae longe semota tuemur
aera per multum, specie confusa videntur 580
quam minui filum. quapropter luna necesse est,
quandoquidem claram speciem certamque figuram
praebet, ut est oris extremis cumque notata,
quantaque quantast, hinc nobis videatur in alto. 584

575 And the moon, whether with bastard light she
moves illumining the world, or whether she casts her
own light from her own body, however that may be, So is the
her shape as she moves is no larger than that seems moon,
to be with which she is presented to our eyes. For
all things that we see at a great distance through
much air become dimmed in appearance before their
size is diminished. Therefore the moon, since it
offers a clear appearance and a firm outline, must be since its
seen on high by us from the earth in exactly the outline is
the shape that defines it and of the size it really is. not blurred.

Postremo quoscumque vides hinc aetheris ignes,
quandoquidem quoscumque in terris cernimus ignes,
dum tremor est clarus, dum cernitur ardor eorum,
perparvom quiddam interdum mutare videntur
alteram utram in partem filum, quo longius absunt,

585 Lastly, since all the fires which we see on the
earth, so long as their flickering is clear, so long as
their glow is perceived, seem sometimes to change
their size very little indeed one way or the other
according to their distance, so with all the fires of
So the stars
also.

568 nil illa his *Bernays* : nihil nisi *OQP* : nil illi his *A.*
Cartault, Rev. Phil. 29 (1905) 33 574 = 571 (570 in the
manuscripts) must be excluded 587 est *ACF* : omitted
by *OQ* : et *Diels*

^a Cf. Epicurus, *Ep. ad Pyth.* 91, Cicero, *Fin.* 1.6.20.

^b There is no need to follow Bailey and others in taking
fulgent as transitive ; still less is there any need to emend the
text.

594 scire licet perquam pauxillo posse minores 590
 595 esse vel exigua maiores parte brevique.

590 Illud item non est mirandum, qua ratione
 591 tantulus ille queat tantum sol mittere lumen,
 592 quod maria ac terras omnis caelumque rigando
 593 compleat et calido perfundat cuncta vapore. 595
 nam licet hinc mundi patefactum totius unum 597
 largifluum fontem scatere atque erumpere lumen,
 ex omni mundo quia sic elementa vaporis
 undique conveniunt et sic coniectus eorum 600
 confluit, ex uno capite hic ut profluat ardor.
 nonne vides etiam quam late parvus aquai
 prata riget fons interdum campisque redundet ?

Est etiam quoque uti non magno solis ab igni
 aera percipiat calidis fervoribus ardor, 605
 opportunus ita est si forte et idoneus aer,
 ut queat accendi parvis ardoribus ictus,
 quod genus interdum segetes stipulamque videmus
 accidere ex una scintilla incendia passim.

Forsitan et rosea sol alte lampade lucens 610
 possideat multum caecis fervoribus ignem
 circum se, nullo qui sit fulgore notatus,
 aestifer ut tantum radiorum exaugeat ictum.

Nec ratio solis simplex et recta patescit,
 quo pacto aestivis e partibus aegocerotis 615
 brumalis adeat flexus atque inde revertens
 canceris ut vertat metas ad solstitialis,

596 *erroneously repeated in the manuscripts from 584*
 424

ether which you see from this earth, you may be sure that they can be only a very little indeed smaller or larger by a small and but trifling difference.

592 Another thing also need not excite wonder, How can so small a sun emit so much light ? how it can be that so small a sun emits so much light, enough to fill with its flood seas and all lands and the heavens, and to suffuse all with warm heat. For it is possible that from this place is opened one single fountain of the whole world, to splash its generous flood and to fling forth light, because the elements of heat gather together from all parts of the world in such a manner, and their assemblage flows together in such a manner, that the heat flows out here from one single source. Do you not see also how widely a small spring of water sometimes floods the meadows and streams over the fields ?

604 It is possible also that, even if the sun's fire be not great, yet the glow may pervade the air with hot burnings, if by any chance the air is so fit and disposed that it can be kindled when struck by small quantities of heat, just as at times we see a wide conflagration fall upon corn and straw from one spark.

610 Perhaps also the sun, as he shines on high with his rosy lamp, may have about him much fire with invisible heat, such that it has no shining to mark it, so that the heat he brings increases the blow of the rays to so great a force.

614 Nor is there open before us any single and straightforward explanation, how the sun passes from his summer regions to the turning-point of Capricorn at midwinter, and coming back from that point how he turns to his goal of the solstice in Cancer ; and

lunaque mensibus id spatium videatur obire,
 annua sol in quo consumit tempora cursu.
 non, inquam, simplex his rebus reddita causast. 620

Nam fieri vel cum primis id posse videtur,
 Democriti quod sancta viri sententia ponit,
 quanto quaeque magis sint terram sidera propter,
 tanto posse minus cum caeli turbine ferri ;
 evanescere enim rapidas illius et acris 625
 imminui subter viris, ideoque relinqui
 paulatim solem cum posterioribu' signis,
 inferior multo quod sit quam fervida signa.
 et magis hoc lunam : quanto demissior eius
 cursus abest procul a caelo terrisque propinquat, 630
 tanto posse minus cum signis tendere cursum ;
 flaccidiore etiam quanto iam turbine fertur
 inferior quam sol, tanto magis omnia signa
 hanc adipiscuntur circum praeterque feruntur.
 propterea fit ut haec ad signum quodque reverti 635
 mobilius videatur, ad hanc quia signa revisunt.

Fit quoque ut e mundi transversis partibus aer
 alternis certo fluere alter tempore possit,
 qui queat aestivis solem detrudere signis
 brumalis usque ad flexus gelidumque rigorem, 640
 et qui reiciat gelidis a frigoris umbris
 aestiferas usque in partis et fervida signa.
 et ratione pari lunam stellasque putandumst,

632 etiam *OQP* : etenim *Lachmann*

^a 621-649 is a passage of considerable difficulty. The reader who finds *Lucr.*'s explanations hard to follow may derive comfort from the thought that the poet does not seem to have fully understood them himself! For a helpful discussion, illustrated with two figures, see *Bailey*.

^b 622 = 3.371.

^c From *Lucr.*'s point of view, in which the earth is the fixed centre, the sun and the signs of the zodiac are moving

how the moon is seen to traverse month by month the space which the sun's course takes a year to travel. No single reason, I say, is given for these things.

⁶²¹ For ^a among the most likely causes is that which the venerable judgement of that great man *Democritus* puts forward ^b : that the nearer the different heavenly bodies are to the earth, the less can they be carried along with the whirling of the sky, since the swiftness of force in that movement vanishes away and its power grows less in the lower regions, and so the sun is gradually left behind with the signs that are behind him, because he is much lower than the burning signs.^c And the moon, he says, still more than this : in proportion as her course is still lower, farther from the sky and nearer the earth, so much the less can she keep up with the signs ; and in proportion as she is carried with fainter whirling movement, being lower than the sun, so much the sooner do the signs catch her up all around and pass by. That is why she seems to move back to each sign more quickly, because it is the signs that more quickly return to her.

⁶³⁷ It is possible also that from parts of the world across the sun's path two airs may flow alternately each at its own fixed time, one strong enough to push him away from the summer signs as far as the midwinter solstice and the stiffening cold, one to throw him back from the icy shades of cold as far as the regions full of heat and the burning signs. And in like manner we must suppose that the moon, and the

in the same direction, but the sun more slowly than the signs because nearer the earth. Hence the signs catch him up one by one, and he appears to move through the signs in the opposite direction.

(1) It may be that each is moved by the whirling sky, the faster the further away from earth.

This would explain why the moon seems to move backwards through the signs.

(2) Or steady currents of air may move them, varying in direction,

quae volvunt magnos in magnis orbibus annos,
 aeribus posse alternis e partibus ire. 645
 nonne vides etiam diversis nubila ventis
 diversas ire in partis inferna supernis ?
 qui minus illa queant per magnos aetheris orbis
 aestibus inter se diversis sidera ferri ?

At nox obruit ingenti caligine terras, 650
 aut ubi de longo cursu sol ultima caeli
 impulit atque suos efflavit languidus ignis
 concussos itere et labefactos aere multo,
 aut quia sub terras cursum convolvere cogit
 vis eadem, supra quae terras pertulit orbem. 655

Tempore item certo roseam Matuta per oras
 aetheris auroram differt et lumina pandit,
 aut quia sol idem, sub terras ille revertens,
 anticipat caelum radiis accendere temptans,
 aut quia conveniunt ignes et semina multa 660
 confluere ardoris consuerunt tempore certo,
 quae faciunt solis nova semper lumina gigni ;
 quod genus Idaeis fama est e montibus altis
 dispersos ignis orienti lumine cerni,
 inde coire globum quasi in unum et conficere orbem.
 Nec tamen illud in his rebus mirabile debet 666
 esse, quod haec ignis tam certo tempore possunt
 semina confluere et solis reparare nitorem ;
 multa videmus enim, certo quae tempore fiunt

^a Cf. 1.1029 and see note there.

^b Matuta or Mater Matuta, deity of the first morning light, identified with Leucothea (Cicero, *Tusc. Disp.* 1.12.28) or Aurora.

^c Mount Ida in Phrygia. The phenomenon which Lucr.

stars which revolve for vast years ^a in vast orbits, may move driven by airs this way and that way. Do you not see also that clouds driven by contrary winds in contrary directions move in layers, the lower ^{as we see with clouds.} contrary to the upper ? Is it not equally possible that those constellations can be carried by contrary tides through the great orbits of the ether ?

⁶⁵⁰ But night buries the earth in vasty blackness, either when the sun after his long course has struck upon the extremity of the sky and breathed out his fires in weariness, shaken by the journey and made weak by passing through so much air ; or because he is compelled to turn round his course beneath the earth by the same force which carried his orb above the earth.
Night comes, (1) because the sun is put out each day, (2) or because he travels under the earth.

⁶⁵⁶ At a fixed time also Matuta ^b diffuses the rosy dawn through the regions of ether and spreads out her light, either because the same sun returning under the earth takes his first hold on the sky as he tries to kindle it with his rays, or because there is a gathering together of fires, and many seeds of heat are accustomed to flow together at a fixed time, which make each day the light of a new sun arise : just as it is said that from the lofty mountains of Ida ^c at sunrise scattered fires are seen, and then as it were these gather together into one globe and together form an orb.
Dawn comes, (1) either because the coming sun sends rays before him ; (2) or because his fires gradually collect,

⁶⁶⁶ Yet here it must not be thought wonderful that these seeds of fire can flow together at so fixed a time and restore the brightness of the sun : for we see many things that come to pass at a fixed time mentions is described also by Diodorus Siculus 17.7.5-7, Pomponius Mela 1.18.94-95.

omnibus in rebus : florescunt tempore certo 670
 arbusta et certo dimittunt tempore florem ;
 nec minus in certo dentes cadere imperat aetas
 tempore et inpubem molli pubescere veste
 et pariter mollem malis demittere barbam ;
 fulmina postremo nix imbres nubila venti 675
 non nimis incertis fiunt in partibus anni.
 namque ubi sic fuerunt causarum exordia prima
 atque ita res mundi cecidere ab origine prima,
 consequē quoque iam redeunt ex ordine certo.

Crescere itemque dies licet et tabescere noctes, 680
 et minui luces, cum sumant augmina noctes,
 aut quia sol idem sub terras atque superne
 imparibus currens amfractibus aetheris oras
 partit et in partis non aequas dividit orbem,
 et quod ab alterutra detraxit parte, reponit 685
 eius in adversa tanto plus parte relatus,
 donec ad id signum caeli pervenit, ubi anni
 nodus nocturnas exaequat lucibus umbras.
 nam, medio cursu flatus aquilonis et austri,
 distinet aequato caelum discrimine metas 690
 propter signiferi posituram totius orbis,
 annua sol in quo contundit tempora serpens,

679 consequē *Lachmann* : consequiae *OQ*, perhaps
 rightly : consequae *AL* : consequa *CF* : consequar *B*
 redeunt *Lachmann* : rerum *OQP* 692 contundit *ABM*
 (= "conterit, consumit," *Lambinus*) : contudit *OQFL* : con-
 sumit (*cf.* 619) *Diels* : concludit *Lachmann*

^a On the varying length of day and night, see also *Epi-
 curus, Ep. ad Pyth.* 98.

^b The sign of the zodiac through which the sun is passing
 at each equinox, *i.e.* Aries in the spring, Libra in the autumn.

430

everywhere. At a fixed time trees bloom, and at a as other things are made at fixed times,
 fixed time shed their flowers. No less at a fixed time our age commands the teeth to fall out, and bids the ungrown youth to put on the soft vestures of growth and to let his beard grow equally down either cheek. Lastly lightnings, snow, rain, clouds, and winds come at fairly fixed seasons of the year. For since the first-beginnings of causes have been so, and since things have thus befallen from the first beginning of the world, with regular sequence also the causes being constant, and the effects following.
 they now come back in fixed order.

680 Days may also increase and nights may wane, The varying length of day and night is caused (1) either because the sun's curves vary in proportion above and below the earth, until they become equal at the equinox ;
 and days again may diminish when the nights take their increase,^a either because the same sun running above and beneath the earth divides the regions of ether in curves of unequal length, and separates his orbit into unequal parts, giving back as he comes round so much more to one of the two parts as he has taken from the opposite, until he arrives at the sign of the heavens^b where the node^c of the year makes the shades of night equal to the days. For in the mid-course of the blast of the north wind and of the south wind^d the heaven holds his turning-points apart equally distant on account of the position of the whole zodiac, in which the sun, creeping along, consumes the period of a year, as he casts his light

^c *nodus* (= σύνδεσμος) is the intersection of the ecliptic and the equator at the vernal or autumnal equinox.

^d That is, at the vernal equinox and at the autumnal equinox. For the theory that the sun is pushed alternately north and south by winds blowing across its path, see 637-645. 689-693 are notoriously difficult lines : the translation given above is in accordance with the interpretation of Bailey, in whose commentary there is a detailed discussion of the passage and a diagram.

431

obliquo terras et caelum lumine lustrans,
ut ratio declarat eorum qui loca caeli
omnia dispositis signis ornata notarunt. 695

Aut quia crassior est certis in partibus aer,
sub terris ideo tremulum iubar haesitat ignis
nec penetrare potest facile atque emergere ad ortus ;
propterea noctes hiberno tempore longae
cessant, dum veniat radiatum insigne diei. 700

Aut etiam, quia sic alternis partibus anni
tardius et citius consuerunt confluerre ignes
qui faciunt solem certa de surgere parte,
propterea fit uti videantur dicere verum

Luna potest solis radiis percussa nitere 705

inque dies magis id lumen convertere nobis
ad speciem, quantum solis secedit ab orbi,
donique eum contra pleno bene lumine fulsit
atque oriens obitus eius super edita vidit ;
inde minutatim retro quasi condere lumen 710
debet item, quanto propius iam solis ad ignem
labitur ex alia signorum parte per orbem,

704 *A lacuna after this line assumed by Munro. The line was placed after 714 by Naugerius and Lambinus, after 702 by Diels. Recent editors say that Gifanius deleted it, but he too prints it after 714. If Bailey is right in thinking that the lost line emphasized the idea of the plurality of causes, a full stop should be placed at the end of 703. 706 id F corr. (according to Büchner), Lachmann: omitted by OQ: hoc F: et AB: possibly eius (monosyllabic)*

^a Oblique with reference to the ecliptic and the equator.
^b On the moon's phases and light, see also Epicurus, *Ep. ad Pyth.* 94-95. The discovery that the moon is illuminated by the sun was probably made by Anaxagoras (see W. K. C. Guthrie, *A History of Greek Philosophy* I 286, II 66, 306).

obliquely ^a upon earth and sky ; thus much the science of those men makes clear who have mapped out all the regions of the sky with the signs in their places.

⁶⁹⁶ Or else because the air is thicker in certain parts, therefore under the earth the trembling gleam of his fire hesitates, and cannot easily penetrate and come forth to his rising ; for which reason the nights in winter are long and lingering, until the beaming ensign of day appears.

⁷⁰¹ Or again, because for the same reason at alternate seasons of the year there is accustomed to be slower or quicker flowing together of the fires which make the sun rise in a certain place, therefore those seem to speak the truth . . .

⁷⁰⁵ The moon may shine smitten by the sun's rays,^b turning round that light day by day more towards our sight as she recedes from the sun's orb, until right opposite to him she has shone with fullest light, and, as she rises, lifted on high, has seen his setting ; then by small degrees she must as it were hide her light also behind her,^c the nearer she now glides to the sun's fire from the opposite re-

^c *retro* may be taken, as here, with *condere* ; or it may be taken by itself to mean " retiring backwards." The former interpretation is supported by 725. The moon, when furthest from the sun, is perceived by us as at the full, the earth being between sun and moon (but not in the same straight line). As it approaches the sun, we see less and less of its light ; when it is opposite to us, the lines from the earth to sun and moon forming a right angle, it is half full ; when nearest to the sun, the lines forming an obtuse angle, we see nothing. When all three are in one straight line, there is an eclipse either of sun or of moon.

ut faciunt, lunam qui fingunt esse pilai
consimilem cursusque viam sub sole tenere.

Est etiam quare proprio cum lumine possit 715
volvier et varias splendoris reddere formas ;
corpus enim licet esse aliud, quod fertur et una
labitur omnimodis occursans officiensque,
nec potis est cerni, quia cassum lumine fertur.
versarique potest, globus ut, si forte, pilai 720
dimidia ex parti candenti lumine tinctus,
versandoque globum variantis edere formas,
donique eam partem, quaecumque est ignibus aucta,
ad speciem vertit nobis oculosque patentis ;
inde minutatim retro contorquet et aufert 725
luciferam partem glomeraminis atque pilai,
ut Babylonica Chaldaicum doctrina refutans
astrologorum artem contra convincere tendit—
proinde quasi id fieri nequeat quod pugnat uterque,
aut minus hoc illo sit cur amplectier ausis. 730

Denique cur nequeat semper nova luna creari
ordine formarum certo certisque figuris,
inque dies privos aborisci quaeque creata
atque alia illius reparari in parte locoque,
difficilest ratione docere et vincere verbis, 735
ordine cum videas tam certo multa creari.
it Ver et Venus, et Veneris praenuntius ante
pennatus graditur, Zephyri vestigia propter
Flora quibus mater praespargens ante vias

736 videas *Q* corr., *CF* (cf. 669): omitted by *OQ*: possint
Lachmann (cf. 750)

^a As supposed by Anaximander and Xenophanes.

gion through the belt of signs—as they hold who
suppose the moon to be like a ball and to keep the
path of her course below the sun.

⁷¹⁵ It is also possible that she may revolve in light (2) or with
of her own,^a and yet offer various phases of bright- her own
ness ; for there may be another moving body which light, ob-
glides along with her, obstructing and hampering her scured by
in all sorts of ways, yet is not visible because it moves the passing
without light. Possibly she may revolve like a round of a
ball it may be, one half of which is bathed in bright satellite,
light, and by turning her globe may display the or having a
various phases, until that part which is endowed with light half
fire is turned to our sight and open eyes ; then by and a dark
small degrees she turns this behind and takes away half which
the light-bringing part of the spherical ball ; which face us as
the Babylonish doctrine of the Chaldeans^b tries to she
prove as against the science of the astronomers which revolves ;
it refutes ; as if that for which each fights might not
be true, or as if there were any reason why you
should venture to embrace this rather than that.

⁷³¹ Lastly, why a new moon should not be always or (3) fresh
created with a fixed succession of phases in fixed moons may
shapes, why every single day the one which has been be made
made should not vanish and another be restored daily, in
in its place and station, it is difficult to explain succession,
by reasoning and to prove in words, seeing that one sees
many things produced in so fixed an order. On
come Spring and Venus, and Venus' winged har- like the suc-
binger^c marching before, with Zephyr and mother cession of
Flora a pace behind him strewing the whole path in the seasons.

^b Berosus, a priest of Bel, and his followers. *Cf.* Aëtius 2.28.1, Vitruvius 9.2.1. Berosus wrote in the first half of the fourth century B.C.

^c Cupid.

cuncta coloribus egregiis et odoribus opplet ; 740
 inde loci sequitur Calor aridus et comes ana
 pulverulenta Ceres et etesia flabra Aquilonum ;
 inde Autumnus adit, graditur simul Euhius Euan ;
 inde aliae tempestates ventique sequuntur,
 altitonans Volturnus et Auster fulmine pollens ; 745
 tandem Bruma nives adfert pigrumque rigorem
 reddit ; Hiemps sequitur crepitans hanc dentibus
 algu.

quo minus est mirum si certo tempore luna
 gignitur et certo deletur tempore rursus,
 cum fieri possint tam certo tempore multa. 750

Solis item quoque defectus lunaeque latebras
 pluribus e causis fieri tibi posse putandumst.
 nam cur luna queat terram secludere solis
 lumine et a terris altum caput obstruere ei,
 obiciens caecum radiis ardentibus orbem, 755
 tempore eodem aliud facere id non posse putetur
 corpus quod cassum labatur lumine semper ?
 solque suos etiam dimittere languidus ignis
 tempore cur certo nequeat recreareque lumen,

747 algu (cf. 3.732) Isaac Voss (see *Havercamp*), not *Wakefield*, better taken as ablative than as nominative of a neuter form : algi OQP : algus *Lambinus* : algor *Gifanius*, not *Lachmann* as stated by the editors

^a The description of the procession of the seasons (737-747), like the description of Mars and Venus in the first proem, may owe something to a painting or sculpture ; and just as the Mars and Venus passage may have had some influence, through Politian, on Botticelli's *Marte e Venere*, so the description of spring (737-740) may have partly inspired, again through Politian, the same painter's *Allegoria della Primavera*. But *Lucr.* was not, as is sometimes claimed, Botticelli's only source of inspiration (see especially G. D. Hadzsits, *Lucretius and his Influence* 264-265, E. Wind, 436

front and filling it with brilliant colours and scents.^a Next in place follows parching Heat, along with him Ceres his dusty comrade and the Etesian Winds ^b that blow from the north. Next comes Autumn, and marching with him Euhius Euan.^c Then follow other seasons and winds, Volturnus ^d thundering on high and Auster ^e lord of lightning ; at length Shortest Day brings the snows and restores the numbing frost ; after it comes Winter, its teeth chattering with cold.^f This makes it less wonderful if the moon is born at a fixed time and destroyed again at a fixed time, seeing that many things are produced at so fixed a time.

⁷⁵¹ Eclipses of the sun also and hidings of the moon ^g you must suppose to have several possible causes. For why should the moon be able to shut off the earth from the sun's light, and from the side of the earth to push her head in his way on high, obstructing his burning rays with her dark orb, and yet at the same time some other body, gliding along ever without light, not be thought able to do the same thing ? And the sun, why should not he also be able to lose his fires and faint at a fixed time and to

Eclipses.
 (1) The sun may be obscured by the passage of the moon, or of some unseen body ;
 or certain regions may

Pagan Mysteries in the Renaissance 110, n. 1, C. Dempsey, *Journal of the Warburg and Courtauld Institutes* 31 [1968] 251-273).

^b See note on 6.716.

^c Bacchus, named from the cry of his worshippers.

^d East-south-east wind.

^e South wind.

^f Cf. Spenser, *The Faerie Queene* 7.7.31.1-2 : " Lastly, came Winter cloathed all in frize, | Chattering his teeth for cold that did him chill."

^g The subject receives very brief treatment in Epicurus, *Ep. ad Pyth.* 96.

cum loca praeteriit flammis infesta per auras, 760
 quae faciunt ignis interstingui atque perire ?

Et cur terra queat lunam spoliare vicissim
 lumine et oppressum solem super ipsa tenere,
 menstrua dum rigidas coni perlabitur umbras,
 tempore eodem aliud nequeat succurrere lunae 765
 corpus vel supra solis perlabier orbem,
 quod radios interrumpat lumenque profusum ?
 et tamen ipsa suo si fulget luna nitore,
 cur nequeat certa mundi languescere parte,
 dum loca luminibus propriis inimica per exit ? 770

772 Quod superest, quoniam magni per caerulea mundi
 qua fieri quicquid posset ratione resolvi,
 solis uti varios cursus lunaeque meatus
 noscere possemus quae vis et causa cieret, 775
 quove modo possent effecto lumine obire
 et neque opinantis tenebris obducere terras,
 cum quasi conivent et aperto lumine rursum
 omnia convisunt clara loca candida luce,
 nunc redeo ad mundi novitatem et mollia terrae 780
 arva, novo fetu quid primum in luminis oras
 tollere et incertis crebrint committere ventis.

Principio genus herbarum viridemque nitorem
 terra dedit circum collis camposque per omnis,
 florida fulserunt viridanti prata colore, 785

771 erroneously repeated in the manuscripts from 764
 776 possent ed. *Brivensis*: omitted by OQ: possint AB:
 soleant CF 784 Some editors punctuate after collis
 instead of after omnis, perhaps rightly

^a The moon, from the earth, appears to be above, and the sun below; the sun's light being intercepted by the earth, a

renew his light, when he has passed through regions choke his
 of air that are hurtful to his flames, making the fires light.
 to be quenched and to perish for a time ?

762 And why should earth be able in turn to rob (2) The
 the moon of light, and herself passing above the sun moon may
 to keep him in subjection, while the moon in her be obscured
 monthly course glides through the clear-cut conical by the
 shadow,^a yet at the same time some other body not earth or
 be able to pass beneath the moon, or glide above the some other
 sun's orb to intercept the rays and the flood of light ? body.
 If, however, the moon shines of herself by her own or certain
 light, why should she not grow faint in some fixed regions may
 part of the heavens, while she passes through regions choke her
 hostile to her own light ? light.

772 And now to proceed: since I have explained IV. The
 in what way everything might come to pass through infancy of
 the blue spaces of the great firmament, so that we the earth,
 might be able to understand what force and what
 cause set in motion the sun's varied courses and the
 moon's travels, how their light could be obstructed
 and they disappear veiling the unsuspecting world in
 darkness, when they seem to wink and again with
 open eye gaze on the whole place bright with clear
 light, I now return to the world's infancy and the
 soft fields of earth, to tell what first they thought fit
 to bring forth into the regions of light with new and its
 birth-throes and to commit to the wayward winds. growth.

783 In the beginning the earth gave forth the First came
 different kinds of herbage and bright verdure about herbs and
 the hills and all over the plains, and the flowering trees,

conical shadow is formed upwards, through which the moon
 passes.

arboribusque datumst variis exinde per auras
 crescendi magnum inmissis certamen habenis.
 ut pluma atque pili primum saetaeque creantur
 quadripedum membris et corpore pennipotentum,
 sic nova tum tellus herbas virgultaque primum 790
 sustulit, inde loci mortalia saecla creavit
 multa modis multis varia ratione coorta.
 nam neque de caelo cecidisse animalia possunt
 nec terrestria de salsis exisse lacunis.

Linquntur ut merito maternum nomen adepta 795
 terra sit, e terra quoniam sunt cuncta creata.
 multaque nunc etiam existunt animalia terris,
 imbribus et calido solis concreta vapore ;
 quo minus est mirum si tum sunt plura coorta
 et maiora, nova tellure atque aethere adulta. 800
 principio genus alituum variaeque volucres
 ova relinquebant exclusae tempore verno,
 folliculos ut nunc teretis aestate cicadae
 linqunt sponte sua victum vitamque petentes.
 tum tibi terra dedit primum mortalia saecla ; 805
 multus enim calor atque umor superabat in arvis.
 hoc ubi quaeque loci regio opportuna dabatur,
 crescebant uteri terram radicibus apti ;
 quos ubi tempore maturo patefecerat aetas

809 aetas *Marullus* : aetas *OQP* (so in 828 *L* gives aetas for aetas) : aetas *Lachmann*, but see *D. A. West, CQ N.S. 14 (1964) 101*

^a Cf. 2.1153-1155 and see notes there.

^b They do not arise from water or air, so that only earth is left, fire being out of the question. On the interpretation of 783-836, see *D. A. West, CQ N.S. 14 (1964) 99-102*, who rightly argues that the difficulties which commentators have found in the passage stem from their failure to understand that

meadows shone with the colour of green ; then to the various kinds of trees came a mighty struggle, as they raced at full speed to grow up into the air. As feathers and hair and bristles first grow on the frame of four-footed creatures or the body of strong-winged birds, so then the new-born earth put forth herbage and saplings first, and in the next place created the generations of mortal creatures, arising in many kinds and in many ways by different processes. For animals cannot have fallen from the sky, nor can creatures of the land have come out of the salt pools.^a

⁷⁹⁵ It remains,^b therefore, that the earth deserves the name of mother which she possesses, since from the earth all things have been produced. And even now many living creatures arise from the earth,^c formed by the rain and the warm heat of the sun, so that it is less wonderful if then more and larger ones arose, which grew up when earth and air were young. First the race of winged things and the different birds issued from their eggs being hatched in the springtime, just as now in summer the cicadas of their own accord leave their neat husks, to seek life and living. The earth, you see, first gave forth the generations of mortal creatures at that time,^d for there was great abundance of heat and moisture in the fields. Therefore, wherever a suitable place was found, wombs would grow, holding to the earth by roots ; and when in due time the age of the infants

then living creatures, by different processes.

The earth is mother of all : even now she spontaneously generates living creatures, and in her youth she produced more and larger animals ; birds came first ;

animals emerged from

Lucr. is primarily concerned with demonstrating the motherhood of the earth (cf. 795-796, 821-822). ^c See note on 2.872.

^d In 805 *tum . . . primum* and *mortalia saecla* have exactly the same meaning as in 790-791, i.e. "then for the first time" and "animals" (excluding birds). See *D. A. West, CQ N.S. 14 (1964) 100-101*.

infantum, fugiens umorem aurasque petessens, 810
 convertebat ibi natura foramina terrae
 et sucum venis cogeat fundere apertis
 consimilem lactis, sicut nunc femina quaeque,
 cum peperit, dulci repletur lacte, quod omnis
 impetus in mammis convertitur ille alimenti. 815
 terra cibum pueris, vestem vapor, herba cubile
 praebebat multa et molli lanugine abundans.
 at novitas mundi nec frigora dura ciebat
 nec nimios aestus nec magnis viribus auras.
 omnia enim pariter crescunt et robora sumunt. 820

Quare etiam atque etiam maternum nomen adepta
 terra tenet merito, quoniam genus ipsa creavit
 humanum atque animal prope certo tempore fudit
 omne quod in magnis baccharum montibus passim
 aeriasque simul volucres variantibus formis. 825

Sed quia finem aliquam pariendi debet habere,
 destitit, ut mulier spatio defessa vetusto.
 mutat enim mundi naturam totius aetas,
 ex alioque alius status excipere omnia debet,
 nec manet ulla sui similis res : omnia migrant, 830
 omnia commutat natura et vertere cogit.
 namque aliud putrescit et aevo debile languet,
 porro aliud concrescit et e contemptibus exit.
 sic igitur mundi naturam totius aetas
 mutat, et ex alio terram status excipit alter, 835
 quod tulit ut nequeat, possit quod non tulit ante.

833 concrescit *ed. Aldina* : crescit *OQABL* : clarescit (*cf. 1456, where Q has crescere for clarescere*) *Lachmann* : succrescit *Lachmann (commentary)* : succedit (*cf. 1278*) *Merrill (1907, in notes)* 836 tulit ut *Bentley* : potuit *OQP, Martin, Büchner* : pote uti *Lachmann* : quiti ut *Ernout*

broke these, fleeing from the moisture and seeking wombs growing from the earth, and make it discharge from these open veins a liquid like to milk, just as now when a woman has brought forth she is filled with sweet milk, because all that rush of nourishment is directed towards the breasts. Earth gave food for the children, warmth gave the raiment, the herbage a bed with abundance of down rich and soft. But the infancy of the world produced neither hard cold nor excessive heat nor winds of great force ; for all things grow and gain strength together.^a

⁸²¹ Therefore again and again the earth deserves the name of mother which she has gained, since of herself she created the human race, and produced almost at a fixed time every animal that ranges wild everywhere over the great mountains, and the birds of the air at the same time in all their varied forms. So she is deservedly called mother

⁸²⁶ But because she must have some limit to her bearing, she ceased, like a woman worn out by old age. For time changes the nature of the whole world, and one state of things must pass into another, and nothing remains as it was : all things move, all are changed by nature and compelled to alter. For one thing crumbles and grows faint and weak with age, another grows up and comes forth from contempt. So therefore time changes the nature of the whole world, and one state of the earth gives place to another, so that what she bore she cannot, but can bear what she did not bear before.^b but she came to the end of her bearing. and cannot now do what she once did.

^a That is, cold, heat, and winds were also young and weak.
^b D. A. West, *CQ* N.S. 14 (1964) 102 argues, perhaps rightly, that the relative clauses are subject. He translates : " so that what bore cannot (namely Earth), and what could not bear can (namely the parents of each species). "

Multaque tum tellus etiam portenta creare
 conatast mira facie membrisque coorta,
 androgynem, interutrasque nec utrum, utrimque re-
 motum,
 orba pedum partim, manuum viduata vicissim, 840
 muta sine ore etiam, sine voltu caeca reperta,
 vinctaque membrorum per totum corpus adhaesu,
 nec facere ut possent quicquam nec cedere quoquam
 nec vitare malum nec sumere quod foret usus.
 cetera de genere hoc monstra ac portenta creabat—
 nequiquam, quoniam natura absterruit auctum, 846
 nec potuere cupitum aetatis tangere florem
 nec reperire cibum nec iungi per Veneris res.
 multa videmus enim rebus concurrere debere,
 ut propagando possint procudere saecula : 850
 pabula primum ut sint, genitalia deinde per artus
 semina qua possint membris manare remissis ;
 feminaque ut maribus coniungi possit, habere
 mutua qui mutent inter se gaudia uterque.

Multaque tum interiisse animantum saecula neces-
 sest 855
 nec potuisse propagando procudere prolem.
 nam quaecumque vides vesci vitalibus auris,
 aut dolus aut virtus aut denique mobilitas est
 ex ineunte aevo genus id tutata reservans ;
 multaque sunt, nobis ex utilitate sua quae 860
 commendata manent, tutelae tradita nostrae.
 Principio genus acre leonum saevaue saecula

841 muta *Naugerius* : multa *OQP*, *Lambinus* 844
 foret *Lambinus* (cf. 4.831) : volet *OQP* (valet *F*), *Wakefield*
 (who suggests that *Horace, Ars P. 71* may be in imitation of
 this line), *Diels*, *Martin*, *Büchner*

⁸³⁷ Many were the portents also that the earth
 then tried to make, springing up with wondrous ap-
 pearance and frame : the hermaphrodite, between
 man and woman yet neither, different from both ;
 some without feet, others again bereft of hands ;
 some found dumb also without a mouth, some blind
 without eyes, some bound fast with all their limbs
 adhering to their bodies, so that they could do no-
 thing and go nowhere, could neither avoid mischief
 nor take what they might need. So with the rest of
 like monsters and portents that she made, it was all
 in vain ; since nature banned their growth, and they
 could not attain the desired flower of age nor find
 food nor join by the ways of Venus. For we see
 that living beings need many things in conjunction,
 so that they may be able by procreation to forge out
 the chain of the generations : first there must be
 food, next there must be a way for the life-giving
 seeds throughout the frame to flow out from the
 slackened body ; and that male and female be joined,
 they must both have the means to exchange mutual
 pleasures.^a

Many de-
 formed and
 defective
 beings were
 at first pro-
 duced,
 which
 could not
 propagate
 their kind,

because
 they did
 not suit
 their sur-
 roundings.

⁸⁵⁵ And many species of animals must have
 perished at that time, unable by procreation to forge
 out the chain of posterity : for whatever you see
 feeding on the breath of life, either cunning or
 courage or at least quickness must have guarded and
 kept that kind from its earliest existence ; many
 again still exist, entrusted to our protection, which
 remain, commended to us because of their usefulness.

Many kinds
 perished,
 because
 they could
 not protect
 themselves

or win
 men's
 protection.

⁸⁶² Firstly, the fierce brood of lions, that savage
^a For a different interpretation of 853-854, see C. W.
 Chilton, *CQ* 30 (1980) 378-380.

tutatast virtus, volpes dolus et fuga cervos.
 at levisomna canum fido cum pectore corda,
 et genus omne quod est veterino semine partum, 865
 lanigeraeque simul pecudes et buccera saecla,
 omnia sunt hominum tutelae tradita, Memmi;
 nam cupide fugere feras pacemque secuta
 sunt et larga suo sine pabula parta labore,
 quae damus utilitatis eorum praemia causa. 870

At quis nil horum tribuit natura, nec ipsa
 sponte sua possent ut vivere nec dare nobis
 utilitatem aliquam quare pateremur eorum
 praesidio nostro pasci genus esseque tutum,
 scilicet haec aliis praedae lucroque iacebant, 875
 indupedita suis fatalibus omnia vinculis,
 donec ad interitum genus id natura redegit.

Sed neque Centauri fuerunt, nec tempore in ullo
 esse queunt duplici natura et corpore bino
 ex alienigenis membris compacta, potestas 880
 hinc illinc †parvis ut non sit pars† esse potissit.
 id licet hinc quamvis hebeti cognoscere corde.

Principio circum tribus actis impiger annis
 floret equus, puer haudquaquam; nam saepe etiam
 nunc
 ubera mammaram in somnis lactantia quaeret. 885
 post ubi equum validae vires aetate senecta

868 secuta *Lambinus (1570, Errata)*: secutae OQP,
defended by Wakefield, Orelli 881 parvis ut non sit
 (sat Q) pars OQ: partis (attributed by modern editors to
Lachmann, but see Havercamp, Varias Lectiones) ut sat par
 (*Giussani*) Bailey, Martin. *Lambinus* remarks "si huius
 versus varias scripturas lectori proponere vellem, totam
 paginam implerem," and many emendations have been sug-
 gested since his time

tribe, has been protected by courage, the fox by
 cunning, by swiftness the stag. But the intelligent
 dog, so light of sleep and so true of heart, and all the
 various kinds which are sprung from the seed of
 beasts of burden, woolly sheep also, and horned
 breeds of oxen, all these have been entrusted to
 men's protection, Memmius. For these have eagerly
 fled from the wild beasts, they have sought peace
 and the generous provision gained by no labour of
 theirs, which we give them as the reward of their
 usefulness.

⁸⁷¹ But those to which nature gave no such
 qualities, so that they could neither live by them-
 selves at their own will, nor give us some usefulness
 for which we might suffer them to feed under our
 protection and be safe, these certainly lay at the
 mercy of others for prey and profit, being all ham-
 pered by their own fateful chains, until nature
 brought that race to destruction.

⁸⁷⁸ But Centaurs never existed,^a nor at any time
 can there be creatures of double nature and twofold
 body combined together of incompatible limbs, such
 that the powers of the two halves can be fairly
 balanced.^b Here is a proof that will convince the
 dullest wit.

⁸⁸³ Firstly, the horse is at the best of his vigour
 when three years have passed round; not so the
 boy by any means, for even at this time he will often
 in sleep seek his mother's milky breast. Afterwards,
 when the strong powers of the horse are failing in

But there
 never were
 monsters
 made of
 different
 species,

for animals
 have
 different

^a Cf. 2.700-717, 4.732-748.

^b The text and sense of 881 are uncertain. See critical
 note.

membraque deficiunt fugienti languida vita,
 tum demum puerili aevo florente iuventas
 occipit et molli vestit lanugine malas.
 ne forte ex homine et veterino semine equorum 890
 confieri credas Centauros posse neque esse,
 aut rabidis canibus succinctas semimarinis
 corporibus Scyllas, et cetera de genere horum,
 inter se quorum discordia membra videmus ;
 quae neque florescunt pariter nec robora sumunt 895
 corporibus neque proiciunt aetate senecta,
 nec simili Venere ardescunt nec moribus unis
 conveniunt, neque sunt eadem iucunda per artus :
 quippe videre licet pinguescere saepe cicuta
 barbigeras pecudes, homini quae est acre venenum.

Flamma quidem vero cum corpora fulva leonum 901
 tam soleat torrere atque urere quam genus omne
 visceris in terris quodcumque et sanguinis extet,
 qui fieri potuit, triplici cum corpore ut una,
 prima leo, postrema draco, media ipsa, Chimaera 905
 ore foras acrem flaret de corpore flammam ?

Quare etiam tellure nova caeloque recenti
 talia qui fingit potuisse animalia gigni,
 nix in hoc uno novitatis nomine inani,
 multa licet simili ratione effutiat ore, 910
 aurea tum dicat per terras flumina vulgo
 fluxisse, et gemmis florere arbusta suësse,
 aut hominem tanto membrorum esse impete natum,
 trans maria alta pedum nisus ut ponere posset

889 occipit *Marullus* : officit *OQP*, *Wakefield*, *Martin*
 892 rabidis *Heinsius*, *Bentley* (cf. *Virgil*, *Aen.* 1.200 *Scyl-*
laeam rabiem) : rapidis *OQP*, *Diels*, *Martin*, *Büchner*, as in
 4.712 901 vero ed. *Juntina* (cf. 1.1001, 2.652) :
 omitted by *OQP* : before flamma *Lachmann* supplied *denique*,
Orelli fervida (cf. 1099) 914 ponere *Lactantius Placi-*

old age and his body faints as life recedes, then is the ^{rates of}
 time of the flower of boyhood, when youth is begin- ^{growth,}
 ning and is clothing the cheeks with soft down. I
 say this that you may not believe that Centaurs can
 be formed or be, composed of man and the seed of
 the burden-bearing horse, or that a Scylla can exist
 with body half fish and a girdle of ravening dogs,
 and all other such monsters in which we see the
 members to be incompatible, which are not in their
 prime together, nor come to their bodily strength
 together, nor lose strength in old age, nor burn with
 passion alike, nor agree in habits, nor find the same ^{different}
 things pleasant for their bodies. In fact you may ^{habits and}
 see that bearded goats often grow fat on hemlock, ^{tastes :}
 which for man is rank poison.

⁹⁰¹ Again, seeing that fire is accustomed to scorch
 and to burn the tawny bodies of lions as much as every
 kind in the world that consists of flesh and blood, how
 could it be that a Chimaera, threefold body in one,
 lion in front, serpent behind, goat in the middle,
 could breathe out fierce fire from its body ? ^a

⁹⁰⁷ Therefore also he that supposes that such
 animals could have been born when earth was young
 and heaven new, depending upon this one empty
 word newness, may with equal reason babble on with- ^{just as there}
 out end, saying that then rivers of gold used com- ^{never were}
 monly to flow over the earth, that trees used to have ^{rivers of}
 jewels for flowers, that man was born with so great ^{gold, or}
 expanse of limbs that he could set his stride across ^{giants.}

^a *Lucr.* is imitating the description of *Homer*, *Il.* 6.181-
 182 : πρόσθε λέων, ὄπισθεν δὲ δράκων, μέσση δὲ χίμαιρα, | δεινὸν
 ἀποπνεύουσα πυρὸς μένος αἰθρομένοιο.

dius on *Statius*, *Theb.* 7.585, *Q corr.* : pondere *OQP* : pan-
 dere *Arancius*, *Pius*, *Wakefield*, may well be right

et manibus totum circum se vertere caelum. 915
 nam quod multa fuere in terris semina rerum
 tempore quo primum tellus animalia fudit,
 nil tamen est signi mixtas potuisse creari
 inter se pecudes compactaque membra animantum,
 propterea quia quae de terris nunc quoque abundant—
 herbarum genera ac fruges arbustaque laeta— 921
 non tamen inter se possunt complexa creari,
 sed res quaeque suo ritu procedit, et omnes
 foedere naturae certo discrimina servant.

Et genus humanum multo fuit illud in arvis 925
 durius, ut decuit, tellus quod dura creasset,
 et maioribus et solidis magis ossibus intus
 fundatum, validis aptum per viscera nervis,
 nec facile ex aestu nec frigore quod caperetur
 nec novitate cibi nec labi corporis ulla. 930
 multaue per caelum solis volventia lustra
 volgivago vitam tractabant more ferarum.
 nec robustus erat curvi moderator aratri
 quisquam, nec scibat ferro molirier arva
 nec nova defodere in terram virgulta neque altis 935
 arboribus veteres decidere falcibu' ramos.
 quod sol atque imbres dederant, quod terra crearat
 sponte sua, satis id placabat pectora donum.
 glandiferas inter curabant corpora quercus
 plerumque ; et quae nunc hiberno tempore cernis 940
 arbita puniceo fieri matura colore,
 plurima tum tellus etiam maiora ferebat.

925 Et OQP : At Lachmann

the deep sea and with his hands turn the whole sky about him. For although there were many seeds of things in the soil at the time when first the earth poured forth the animals, that is nevertheless no proof that creatures of mixed growth could be made, and limbs of various creatures joined into one ; because the various kinds of plants and the corn and the luxuriant trees, which even now spring in abundance from the earth, nevertheless cannot be produced interwoven together, but each thing proceeds after its own fashion, and all by fixed law of nature preserve their distinctions.

Certain laws were always fixed.

925 And the race of men at that time ^a was much harder on the land, as was fitting inasmuch as the hard earth had made it : it was built up within with bones larger and more solid, fitted with strong sinews throughout the flesh, not such as easily to be mastered by heat or cold or strange food or any ailment of the body. Through many lustres of the sun rolling through the sky they passed their lives after the wide-wandering fashion of wild beasts. No sturdy guider of the curved plough was there, none knew how to work the fields with iron, to dig new shoots into the ground, to prune off old branches from the tall trees with a sickle. What sun and rain had given, what the earth had produced of her own accord, that was a gift enough to content their minds. Amidst the acorn-laden oaks they refreshed themselves for the most part ; and the arbutu-berries, which in winter-time you now see ripen with crimson colour, then the earth bore in abundance and even

Men were then harder than they are now.

They did not till the soil,

but fed on what Nature provided.

compare Diodorus Siculus 1.8.1-2, 5-9. The Epicurean views probably owed much to the Sophists and Democritus.

^a With Lucr.'s description of the life of primitive man

multaque praeterea novitas tum florida mundi
pabula dura tulit, miseris mortalibus ampla.

At sedare sitim fluvii fontesque vocabant, 945
ut nunc montibus e magnis decursus aquai
claricitat late sitientia saecula ferarum.

denique nota vagis silvestria templa tenebant
nympharum, quibus e scibant umori' fluenta
lubrica proluvie larga lavere umida saxa, 950
umida saxa, super viridibus stillantibus musco,
et partim plano scatere atque erumpere campo.

Necdum res igni scibant tractare neque uti
pellibus et spoliis corpus vestire ferarum,
sed nemora atque cavos montis silvasque colebant,
et frutices inter condebant squalida membra 956
verbera ventorum vitare imbrisque coacti.

Nec commune bonum poterant spectare, neque
ullis
moribus inter se scibant nec legibus uti.
quod cuique obtulerat praedae fortuna, ferebat 960
sponte sua sibi quisque valere et vivere doctus.

Et Venus in silvis iungebat corpora amantum ;
conciliabat enim vel mutua quamque cupido
vel violenta viri vis atque inpensa libido
vel pretium, glandes atque arbita vel pira lecta. 965

Et manuum mira freti virtute pedumque,
consectabantur silvestria saecula ferarum

947 claricitat late *Simeon Bosius (see Lambinus 1570)* :
claricitatiatē *OQU* : clarigitat late *Lachmann* : claru' citat
late *Forbiger, perhaps rightly* 948 vagis *OQUL* : vagi
Bentley, who suggested nocte for nota, Naugerius having
already proposed noctivagi

^a *pira lecta* : "An amusing touch : *i.e.* even the wild
woodland wench had some discrimination and her wooer
some technique" (Leonard-Smith). With 965 Pius com-
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larger than now. Many another kind of food besides
the flowering infancy of the world then produced,
hard but amply sufficient for poor mortals.

⁹⁴⁵ But to quench thirst, rivers and springs invited
them, as now the rushing of water down from the
great mountains calls loud and far to the thirsting
tribes of beasts. Moreover, they dwelt in woodland
precincts of the Nymphs, familiar to them in their
wandering, whence they knew that some running
rivulet issued rippling over the wet rocks, rippling
over the wet rocks in abundant flow and dripping
upon the green moss, and in parts welling up and
bubbling out over the level plain.

⁹⁵³ Not yet did they know how to work things with
fire, nor to use skins and to clothe themselves in the
strippings of wild beasts ; but they dwelt in the
woods and forests and mountain caves, and hid their
rough bodies in the underwoods when they had to
escape the beating of wind and rain.

⁹⁵⁸ They could not look to the common good, they
did not know how to govern their intercourse by
custom and law. Whatever prize fortune gave to
each, that he carried off, every man taught to live
and be strong for himself at his own will.

⁹⁶² And Venus joined the bodies of lovers in the
woods ; for either the woman was attracted by
mutual desire, or caught by the man's violent force
and vehement lust, or by a bribe—acorns and arbut-
berries or choice pears.^a

⁹⁶⁶ And by the aid of their wonderful powers of
hand and foot, they would hunt the woodland tribes
They hunted game,

pares Propertius 3.13.33-34 : *his tum blanditiis (sc. fruit,
flowers, or a bird with gay plumage) furtiva per antra
puellae | oscula silvicolis empta dedere viris.*

975 missilibus saxis et magno pondere clavae ;
 968 multaque vincebant, vitabant pauca latebris.
 969 Saetigerisque pares subus silvestria membra 970
 970 nuda dabant terrae nocturno tempore capti,
 971 circum se foliis ac frondibus involventes.
 972 nec plangore diem magno solemque per agros
 973 quaerebant pavidi palantes noctis in umbris,
 974 sed taciti respectabant somnoque sepulti, 975
 dum rosea face sol inferret lumina caelo ;
 a parvis quod enim consueant cernere semper
 alterno tenebras et lucem tempore gigni,
 non erat ut fieri posset mirarier umquam
 nec diffidere ne terras aeterna teneret 980
 nox in perpetuum detracto lumine solis.
 sed magis illud erat curae, quod saecula ferarum
 infestam miseris faciebant saepe quietem.
 eiiectique domo fugiebant saxea tecta
 spumigeri suis adventu validique leonis, 985
 atque intempesta cedebant nocte paventes
 hospitibus saevis instrata cubilia fronde.
 Nec nimio tum plus quam nunc mortalia saecula
 dulcicia linquebant lamentis lumina vitae.
 unus enim tum quisque magis deprensus eorum 990
 pabula viva feris praebibat, dentibus haustus,
 et nemora ac montis gemitu silvasque replebat,
 viva videns vivo sepeliri viscera busto.
 at quos effugium servarat corpore adeso,
 posterius tremulas super ulcera taetra tenentes 995
 989 lamentis OQP: violenter W. S. Watt, *Hermes* 117 (1989)
 235: *perhaps* tormentis

^a "Quorundam philosophorum opiniones hic videtur ire oppugnatum noster," comments Wakefield, who quotes Manilius 1.66-70, Statius, *Theb.* 4.282-284.

^b The notion that the devouring beast is a tomb is common: it is found in Aeschylus, Sophocles, Euripides, Gorgias,

of beasts with volleys of stones and ponderous clubs, overpowering many, shunning but a few in hiding-places.

⁹⁷⁰ And when night overtook them, like bristly hogs they just cast their savage bodies naked upon the ground, rolling themselves in leaves and boughs. Nor did they go seeking the day and the sun with great outcry over the countryside, wandering panic-stricken in the shadows of night,^a but waited quiet and buried in sleep until the sun with rosy torch spread his light over the heavens. For since they had been accustomed from childhood always to see darkness and light return in alternate sequence, it was impossible that they should ever feel wonder, or fear lest everlasting night should possess the world, the sun's light being withdrawn for ever. Rather what troubled them was that the tribes of beasts

and slept on the ground, not fearing the darkness.

But they were in fear of wild beasts.

driven from their home, they would flee from their rocky shelters when a foaming boar appeared or a mighty lion, and at dead of night in terror would yield their leaf-strewn beds to the savage guests.

⁹⁸⁸ Nor did mortal men much more then than now leave with lamentations the sweet light of life. True, each one was then more likely to be caught and devoured alive by wild beasts, torn by their teeth, and to fill woods and forests and mountains with groaning as he saw his own living flesh buried in a living tomb^b; while any that flight had saved with mangled body afterwards held their trembling hands

They were then more in danger from these than they are now;

Euphorion, Oppian, Ennius, Accius, Ovid, Apuleius, Sedulius, Shakespeare, Spenser, Milton, Pope (for the references and quotations, see Wakefield, J. S. Watson, Munro, Merrill, Leonard-Smith, Meurig Davies, *Mnemos.* ser. 4, 2 [1949] 73). See also Achilles Tatius 3.5.4, 3.16.4.

palmas horriferas accibant vocibus Orcum,
 donique eos vita privarant vermina saeva
 expertis opis, ignaros quid volnera vellent.
 at non multa virum sub signis milia ducta
 una dies dabat exitio, nec turbida ponti 1000
 aequora lidebant navis ad saxa virosque ;
 tum temere incassum frustra mare saepe coortum
 saevibat leviterque minas ponebat inanis,
 nec poterat quemquam placidi pellacia ponti
 subdola pellicere in fraudem ridentibus undis : 1005
 improba navigii ratio tum caeca iacebat.
 tum penuria deinde cibi languentia leto
 membra dabat, contra nunc rerum copia mersat.
 illi imprudentes ipsi sibi saepe venenum
 vergebant, nunc se perdunt sollertius ipsi. 1010

Inde casas postquam ac pellis ignemque pararunt,
 et mulier coniuncta viro concessit in unum

cognita sunt, prolemque ex se videre creatam,
 tum genus humanum primum mollescere coepit.
 ignis enim curavit ut alsia corpora frigus 1015
 non ita iam possent caeli sub tegmine ferre,
 et Venus inminuit viris, puerique parentum
 blanditiis facile ingenium fregere superbum.
 tunc et amicitiam coeperunt iungere aventes
 finitimi inter se nec laedere nec violari, 1020
 et pueros commendarunt muliebrique saeculum,

1002 tum *M. F. Smith* (tum constantly used by *Lucr.* in
 reference to primitive times : cf. e.g. 988, 990, 1006, 1007) :
 nec (from 1004 ?) *OQP* : sed *Lambinus* : hic *Lachmann* :
 nam *C. Hosius* : sic *Diels* 1010 nunc se perdunt *M. L.*
Clarke, CR N.S. 20 (1970) 10 : nudant *OQ* : nunc se nudant
Lachmann : nunc dant aliis ed. *Juntina* : contra nunc dant
 (cf. 1008) *M. F. Smith, CR N.S. 16 (1966) 264* 1012
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over the hideous sores, calling on Orcus with horrible
 cries, until cruel torments put an end to their life,
 with none to help, all ignorant what a wound wanted.
 But one day did not send to destruction many
 thousands of men in the battle-field, ships and
 mariners were not dashed on the rocks by the tur-
 bulent billows of the sea. Then it was all in vain,
 all useless, all for nothing that the sea often rose and
 stormed, and lightly it laid aside its threats without
 meaning, nor could anyone be enticed to his ruin by
 the treacherous witchery of a quiet sea with laughing
 waves.^a The wicked art of navigation then lay
 hidden and obscure. In those days again, it was lack
 of food that drove fainting bodies to death ; now
 contrariwise it is the abundance that overwhelms
 them. In those days men often unwittingly poured
 poison for themselves, now they make away with
 themselves more skilfully.

but not
 from battle
 or ship-
 wreck.

They died
 of hunger,
 but not of
 overeating;
 they
 poisoned
 themselves
 unwit-
 tingly, but
 not delib-
 erately.

1011 Next, when they had got themselves huts and
 skins and fire, and woman mated with man moved
 into one [home, and the laws of wedlock] became
 known, and they saw offspring born of them, then
 first the human race began to grow soft. For the
 fire saw to it that their shivering bodies were less
 able to endure cold under the canopy of heaven, and
 Venus sapped their strength, and children easily
 broke their parents' proud spirit by coaxings. Then
 also neighbours began to join friendship amongst
 themselves in their eagerness to do no hurt and
 suffer no violence,^b and asked protection for their
^a Cf. 2.559 and see note there. ^b Cf. Epicurus, *Sent.* 31-33.

V. Growth
 of civiliza-
 tion.
 Huts, skins,
 fire,
 marriage,
 family life,

friendship

A lacuna after this line noted by Marullus. Munro suggests
e.g. hospitium, ac lecti socialia iura duobus

vocibus et gestu cum balbe significarent
 imbecillorum esse aequum misererier omnis.
 nec tamen omnimodis poterat concordia gigni,
 sed bona magnaue pars servabat foedera caste; 1025
 aut genus humanum iam tum foret omne peremptum,
 nec potuisset adhuc perducere saecula propago.

At varios linguae sonitus natura subegit
 mittere, et utilitas expressit nomina rerum,
 non alia longe ratione atque ipsa videtur 1030
 protrahere ad gestum pueros infantia linguae,
 cum facit ut digito quae sint praesentia monstrent.
 sentit enim vis quisque suas quoad possit abuti :
 cornua nata prius vitulo quam frontibus extent,
 illis iratus petit atque infestum inurget; 1035
 at catuli pantherarum scymnique leonum
 unguibus ac pedibus iam tum morsuque repugnant,
 vix etiam cum sunt dentes unguisque creati ;
 alitum porro genus alis omne videmus
 fidere et a pinnis tremulum petere auxiliatum. 1040
 Proinde putare aliquem tum nomina distribuisse
 rebus et inde homines didicisse vocabula prima,
 desperest. nam cur hic posset cuncta notare
 vocibus et varios sonitus emittere linguae,
 tempore eodem alii facere id non quisse putentur?

1032 monstrent *L. corr. (see Munro), M: monstret*
OQABCF, Wakefield, Merrill (1917) 1033 quoad
Lambinus in notes, but rejected by him in favour of
quam: quod OQP, Merrill (1917), Diels, Martin, Büchner
1036 at OQP: et M. F. Smith formerly, since 1036-1038
contain the second of three similar illustrations. But there is
probably sufficient contrast here to justify at (cf. e.g. 4.1165,
1168, 6.804). Certainly in 1067, where many editors follow
A and Lachmann in reading et, a marked contrast is involved,
and at should be retained

children and womankind, signifying by voice and
 gesture with stammering tongue that it was right
 for all to pity the weak. Nevertheless concord
 could not altogether be produced, but a good part,
 indeed the most, kept the covenant unblemished, or ^{and}
 else the race of mankind would have been even then ^{covenants.}
 wholly destroyed, nor would birth and begetting have
 been able to prolong their posterity to the present
 day.

1028 But the various sounds of the tongue nature ^{Language}
 drove them to utter,^a and convenience moulded the
 names for things, not far otherwise than very speech-
 lessness is seen to drive children to the use of gesture,
 when it makes them point with the finger at things
 that are before them. For each feels to what pur-
 pose he is able to use his own powers.^b Before the
 budding horns stand out on the calf's forehead, these
 are what he uses in anger to butt with and pushes
 viciously; then panthers' kittens and lions' cubs
 already fight with claws and feet and bite, even
 when teeth and claws are as yet scarcely grown.
 Further, we see that all the winged tribes trust to
 their wings and seek unsteady aid from their pinions.

1041 Therefore to suppose that someone then dis-
 tributed names amongst things, and that from him
 men learnt their first words, is folly. For why should
 he have been able to mark all things with titles and
 to utter the various sounds of the tongue, and at the
 same time others not be thought able to have done

^a For the Epicurean theory of language, cf. especially
 Epicurus, *Ep. ad Hdt.* 75-76, Diodorus Siculus 1.8.3-4, Dio-
 genes of Oenoanda fr. 12.II.11-V.14 Smith.

^b See note on 2.586.

praeterea si non alii quoque vocibus ui 1046
inter se fuerant, unde insita notities est
utilitatis et unde data est huic prima potestas,
quid vellet facere ut sciret animoque videret ?
cogere item pluris unus victosque domare 1050
non poterat, rerum ut perdiscere nomina vellent ;
nec ratione docere ulla suadereque surdis,
quid sit opus facto, facilest ; neque enim paterentur
nec ratione ulla sibi ferrent amplius auris
votis inauditos sonitus obtundere frustra. 1055

Postremo quid in hac mirabile tantoperest re,
si genus humanum, cui vox et lingua vigeret,
pro vario sensu varia res voce notaret ?
cum pecudes mutae, cum denique saecula ferarum
dissimilis soleant voces variasque ciere, 1060
cum metus aut dolor est et cum iam gaudia gliscunt.
quippe etenim licet id rebus cognoscere apertis.

Inritata canum cum primum magna Molossum
mollia ricta fremunt duros nudantia dentes, 1065
longe alio sonitu rabie restricta minantur,
et cum iam latrant et vocibus omnia complent.
at catulos blande cum lingua lambere temptant
aut ubi eos iactant pedibusque petentes
suspensis teneros imitantur dentibus haustus,
longe alio pacto gannitu vocis adulant, 1070

1067 See critical note on 1036 1068 iactant Naugerius : lactant OQP, retained by some editors = "provoke," by others = "wheedle," by D. A. West, CQ N.S. 15 (1965) 278-279 = "suckle," but, though West may be right, iactant is used of dogs in 4.992 (though admittedly in a different context), and in 2.122, according to Diels, G has lactari for iactari petentes BFM : potentes OQAL, Wakefield, Martin, but cf. 3.662-663

it ? Besides, if others had not also used these terms in their intercourse, whence was that foreknowledge^a of usefulness implanted in him, and whence did he first gain such power, as to know what he wanted to do and to see it in his mind's eye ? Compel them again he could not, one against many, nor could he master and conquer them, that they should wish to learn the names of things ; nor is it easy to teach in any way or to persuade what is necessary to be done, when men are deaf ; for they would not have suffered or endured in any way that he should go on dinning into their ears sounds of the voice which they had never heard, all to no purpose.

¹⁰⁵⁶ Lastly, what is so very wonderful in this business, if the human race, having active voices and tongues, could distinguish things by varying sounds to suit varying feelings ? seeing that dumb animals, seeing that even wild beasts of all kinds are accustomed to utter sounds different and varying when they are in fear or pain, and when now joy begins to glow. Indeed you may learn this from plain facts.

¹⁰⁶³ When Molossian hounds are irritated, and their dogs, great flabby jaws first begin to growl, baring the hard teeth, they threaten with a far different sound, drawn back in rage, than when at last they bark out and fill the place with their clamour. But when they set about to lick their pups affectionately with their tongue, or when they throw them about with their paws and snapping at them make as though to swallow them gently with teeth checked, they fondle them with yelpings of quite another sort than when

^a For notities, see note on 2.745. 1046-1049 should be compared with 181-186, where Lucr. is arguing that the gods could not have created the world.

et cum deserti baubantur in aedibus aut cum
plorantes fugiunt summis corpore plagas.

Denique non hinnitus item differre videtur,
inter equas ubi equus florenti aetate iuvenus
pinnigeri saevit calcaribus ictus Amoris 1075
et fremitum patulis sub naribus edit ad arma,
et cum sic alias concussis artubus hinnit ?

Postremo genus alituum variaequae volucres,
accipitres atque ossifragae mergique marinis
fluctibus in salso victum vitamque petentes, 1080
longe alias alio iaciunt in tempore voces,
et quom de victu certant praedaeque repugnant.
et partim mutant cum tempestatibus una
raucisonos cantus, cornicum ut saecula vetusta
corvorumque greges ubi aquam dicuntur et imbris
poscere et interdum ventos aurasque vocare. 1086

Ergo si varii sensus animalia cogunt,
muta tamen cum sint, varias emittere voces,
quanto mortalis magis aequumst tum potuisse
dissimilis alia atque alia res voce notare ! 1090

Illud in his rebus tacitus ne forte requiras,
fulmen detulit in terram mortalibus ignem
primitus, inde omnis flammaram diditur ardor.

^a "quaenam arma? Martiane, an Venerea?" asks Lambinus. That the battle is between the stallion and the mares is proved by Virgil's imitation in *G.* 3.83-85: *tum, si qua sonum procul arma dedere, | stare loco nescit, micat auribus et tremat artus, | collectumque fremens volvit sub naribus ignem.* Cf. *G.* 3.98, 100: *si quando ad proelia ventum est | . . . incassum furit* (of a stallion past his prime).

^b C. L. Howard, *CPhil.* 56 (1961) 158, rightly follows A.

they howl if left alone in the house, or when whimpering they cringe away from a blow.

¹⁰⁷³ Again, is there not seen to be a difference also horses, in the neighing, when amidst the mares a young stallion in the flower of his age runs wild, struck with the spurs of winged Love, and snorts out from wide nostrils for the fight,^a and when, as it chances, on some other occasion he neighs with shaking limbs ?

¹⁰⁷⁸ Lastly, the race of winged creatures and birds. different birds, hawks and ospreys, and divers, which seek life and living on the salt water amidst the waves of the sea, utter at other times sounds which differ greatly from those which they utter when they are fighting for food and their prey is offering resistance.^b Some birds change their harsh-toned song with the weather, such as the generations of ancient crows or flocks of rooks, when they are said to call for water and rain, or sometimes to cry for wind and breeze.

¹⁰⁸⁷ Therefore if different feelings compel animals, dumb though they are, to utter different sounds, how much more natural it is that mortal men should then have been able to mark different things with one sound or another !

¹⁰⁹¹ That you may not here perhaps be quietly asking yourself the question, it was lightning that first brought fire down to the earth for mortals, and from this all blazing flames have been spread abroad. For

Cartault in taking *praedae* as nom. plural. It must be the prey that fights back, as in Petronius 109.6: *aliiis hamiis blandientibus convellebat praedam repugnantem.* The plural *praedae* (for which cf. e.g. Juvenal 11.101) is natural here, for, as Howard says, it is a question of the various preys of various birds.

multa videmus enim caelestibus insita flammis
fulgere, cum caeli donavit plaga vapore. 1095
et ramosa tamen cum ventis pulsa vacillans
aestuat in ramos incumbens arboris arbor,
exprimitur validis extritus viribus ignis,
emicat interdum flammai fervidus ardor,
mutua dum inter se rami stirpesque teruntur. 1100
quorum utrumque dedisse potest mortalibus ignem.
inde cibum coquere ac flammae mollire vapore
sol docuit, quoniam mitescere multa videbant
verberibus radiorum atque aestu victa per agros.

Inque dies magis hi victum vitamque priorem 1105
commutare novis monstrabant rebus et igni
ingenio qui praestabant et corde vigeabant.
condere coeperunt urbis arcemque locare
praesidium reges ipsi sibi perfugiumque,
et pecua atque agros divisere atque dedere 1110
pro facie cuiusque et viribus ingenioque ;
nam facies multum valuit viresque vigeabant.
posterius res inventast aurumque repertum,
quod facile et validis et pulchris dempsit honorem ;
divitioris enim sectam plerumque sequuntur 1115
quam lubet et fortes et pulchro corpore creti.

Quod si quis vera vitam ratione gubernet,
divitiae grandes homini sunt vivere parcae
aequo animo ; neque enim est umquam penuria parvi.

1094 insita OQP, Nonius p. 814 Lindsay, Wakefield, Merrill (1917), Ernout, Martin: incita Marullus, but cf. 1.901 and e.g. 6.181-182 ardoris . . . semina quae faciunt nictantia fulgura flammae 1099 emicat (cf. 2.195, 4.1050) OQP, Lambinus (1570 Errata): et micat Marullus and many modern editors, thus spoiling a fine, forceful piece of writing, for the asyndeton admirably reflects and emphasizes the violence and suddenness of the process described, and the triple e-, e- in exprimitur, extritus, emicat is highly effective 1105 hi

we can see many things catch fire implanted with the flames from on high, when the stroke from heaven has given them its heat. And yet also when a branching tree struck by the winds, swaying and tossed about, leans on the branches of a tree, fire is pressed out by the great force of the friction, at times the burning glare of flame flashes out while branches and trunks are rubbed together.^a Either of these causes may have given fire to mankind. After that the sun taught them to cook food and to soften it by the heat of flames, since they saw many things grow mellow, vanquished by the blows of the heat of his rays amid the fields.

1105 More and more daily they were shown how to change their former life and living for new ways and for fire by those who were pre-eminent in genius and strong in mind. Kings began to found cities and to build a citadel for their own protection and refuge ; and they divided cattle and lands, and gave them to each according to beauty and strength and genius ; for beauty had great power, and strength had importance, in those days. Afterwards wealth was introduced and gold was discovered, which easily robbed both the strong and the handsome of their honour ; for however strong and handsome in body, men for the most part follow the party of the richer.

1117 But if one should guide his life by true principles, man's greatest riches is to live on a little with contented mind^b; for a little is never lacking. Yet which

^a Cf. 1.897-903.

^b Cf. e.g. Epicurus, Sent. Vat. 25, Usener 135.

Naugerius: in OQP: hinc Bockemüller 1110 pecua atque Ernout, Rev. Phil. 33 (1959) 39-41: pecudes atque OQAL: pecudes et BF: pecus atque Lachmann (cf. 1291)

at claros homines voluerunt se atque potentes, 1120
 ut fundamento stabili fortuna maneret
 et placidam possent opulenti degere vitam—
 nequiquam, quoniam ad summum succedere honorem
 certantes iter infestum fecere viai,
 et tamen e summo, quasi fulmen, deicit ictos 1125
 invidia interdum contemptim in Tartara taetra,
 1131 invidia quoniam, ceu fulmine, summa vaporant
 1132 plerumque et quae sunt aliis magis edita cumque ;
 1127 ut satius multo iam sit parere quietum
 1128 quam regere imperio res velle et regna tenere. 1130
 1129 proinde sine incassum defessi sanguine sudent,
 1130 angustum per iter luctantes ambitionis,
 quandoquidem sapiunt alieno ex ore petuntque
 res ex auditis potius quam sensibus ipsis,
 nec magis id nunc est neque erit mox quam fuit ante.

Ergo regibus occisis subversa iacebat 1136
 pristina maiestas soliorum et sceptras superba,
 et capitis summi praeclarum insigne cruentum
 sub pedibus vulgi magnum lugebat honorem ;
 nam cupide conculcatur nimis ante metutum. 1140
 res itaque ad summam faecem turbasque redibat,
 imperium sibi cum ac summatum quisque petebat.
 inde magistratum partim docuere creare
 iuraque constituere, ut vellent legibus uti.
 nam genus humanum, defessum vi colere aevom, 1145
 ex inimicitiiis languebat ; quo magis ipsum

^a Cf. e.g. Usener 551: *λάθε βιώσας*, Usener 548, 554, Horace, *Epist.* 1.17.10: *nec vivit male qui natus moriensque fefellit.*

men desired to be famous and powerful, that their ^{caused ambition for power,}
 fortune might stand fast upon a firm foundation,
 and that being wealthy they might be able to pass a
 quiet life : all in vain, since in the struggle to climb
 to the summit of honour, they made their path full of
 danger ; and even down from the summit, neverthe-
 less, envy strikes them sometimes like a thunderbolt
 and casts them with scorn into loathly Tartarus ;
 since envy, like the thunderbolt, usually scorches the
 summits and all those that are elevated above others ;
 so that it is indeed much better to obey in peace
 than to desire to hold the world in fee and to rule
 kingdoms.^a Leave them then to be weary to no ^{which is all vanity.}
 purpose, and to sweat blood in struggling along the
 narrow path of ambition ; since their wisdom comes
 from the lips of others, and they pursue things on
 hearsay rather than from their own feelings. And
 this folly does not succeed at the present, and will
 not succeed in the future, any more than it has suc-
 ceeded in the past.

1136 Kings therefore were slain ; the ancient ^{Kings were slain,}
 majesty of thrones and proud sceptres lay over-
 thrown in the dust ; the illustrious badge of the top-
 most head, bloodstained beneath the feet of the mob,
 bewailed the loss of its high honour ; for men are
 eager to tread underfoot what they have once too
 much feared. So things came to the uttermost dregs
 of confusion, when each man for himself sought
 dominion and exaltation. Then there were some ^{magistrates were appointed, and men, weary of fighting, gladly}
 who taught them to create magistrates, and estab-
 lished law, that they might be willing to obey
 statutes. For mankind, tired of living in violence,
 was fainting from its feuds, and so they were readier

sponte sua cecidit sub leges artaque iura.
acrius ex ira quod enim se quisque parabat
ulcisci quam nunc concessumst legibus aequis,
hanc ob rem est homines pertaesum vi colere aevoem.

Inde metus maculat poenarum praemia vitae. 1151
circumretit enim vis atque iniuria quemque,
atque, unde exortast, ad eum plerumque revertit,
nec facilest placidam ac pacatam degere vitam
qui violat factis communia foedera pacis. 1155
etsi fallit enim divom genus humanumque,
perpetuo tamen id fore clam diffidere debet,
quippe ubi se multi per somnia saepe loquentes
aut morbo delirantes protraxe ferantur
et celata alte in medium et peccata dedisse. 1160

Nunc quae causa deum per magnas numina gentis
pervulgarit et ararum compleverit urbis
suscipiendaque curarit sollemnia sacra,
quae nunc in magnis florent sacra rebu' locisque,
unde etiam nunc est mortalibus insitus horror 1165
qui delubra deum nova toto suscitatur orbi
terrarum et festis cogit celebrare diebus,
non ita difficilest rationem reddere verbis.

Quippe etenim iam tum divom mortalia saecula
egregias animo facies vigilante videbant, 1170
et magis in somnis mirando corporis auctu.
his igitur sensum tribuebant propterea quod
membra movere videbantur vocesque superbas
mittere pro facie praeclara et viribus amplis.

1160 alte *M. F. Smith*: omitted by *OQP*: diu *Marullus*:
mala *Lachmann*: ipsi *Büchner* et *OQP*: deleted by
Marullus

^a Cf. Epicurus, *Sent.* 17, 34-35, *Sent. Vat.* 7, Usener 532.
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of their own will to submit to statutes and strict rules of law. For because each man in his wrath would make ready to avenge himself more severely than is permitted now by just laws, for this reason men were utterly weary of living in violence.

1151 Hence comes fear of punishment that taints the prizes of life; for violence and injury enclose in their net all that do such things, and generally return upon him who began, nor is it easy to pass a quiet and peaceful life for him whose deeds violate the bonds of the common peace. For even if he hide it from gods and men, he must yet be uncertain that it will for ever remain hidden^a; seeing that often many men, speaking in dreams or raving in delirium, are said to have discovered themselves, and to have disclosed deeply hidden matters and their sins.

1161 Next it is not very difficult to explain in words, what cause has spread the divinity of the gods over great nations and filled the cities with altars, and has made customary rites to be undertaken, rites which now flourish in great states and places, from which even now remains implanted in mortal men the awe that raises new shrines to the gods all over the world, and drives them to throng together on festal days.

1169 The truth is that even in those days the generations of men used to see with waking mind, and still more in sleep,^b gods conspicuous in beauty and of marvellous bodily stature. To these therefore they attributed sensation, because they appeared to move their limbs and to utter proud speech in keeping with their splendid beauty and vast

^b Cf. Usener 353.

aeternamque dabant vitam, quia semper eorum 1175
 subpeditabatur facies et forma manebat,
 et tamen omnino quod tantis viribus auctos
 non temere ulla vi convinci posse putabant.
 fortunisque ideo longe praestare putabant,
 quod mortis timor haud quemquam vexaret eorum,
 et simul in somnis quia multa et mira videbant 1181
 efficere et nullum capere ipsos inde laborem.

Praeterea caeli rationes ordine certo
 et varia annorum cernebant tempora verti,
 nec poterant quibus id fieret cognoscere causas. 1185
 ergo perfugium sibi habebant omnia divis
 tradere et illorum nutu facere omnia flecti.
 in caeloque deum sedes et templa locarunt,
 per caelum volvi quia nox et luna videtur,
 luna dies et nox et noctis signa severa 1190
 noctivagaeque faces caeli flammaeque volantes,
 nubila sol imbres nix venti fulmina grando
 et rapidi fremitus et murmura magna minarum.

O genus infelix humanum, taëia divis
 cum tribuit facta atque iras adiunxit acerbas ! 1195
 quantos tum gemitus ipsi sibi, quantaque nobis
 volnera, quas lacrimas peperere minoribu' nostris !
 nec pietas ullast velatum saepe videri
 vertier ad lapidem atque omnis accedere ad aras,
 nec procumbere humi prostratum et pandere pal-
 mas 1200
 ante deum delubra, nec aras sanguine multo

strength. And they gave them everlasting life, because there was always a succession of visions coming up in which the shape remained the same, but above all because they thought that beings endowed with such strength could not lightly be overcome by any force. Therefore they thought them to be pre-eminent in happiness, because the fear of death troubled none of them, and at the same time because in sleep they saw them perform many marvellous feats and feel no distress as a result.

¹¹⁸³ Besides they observed how the array of heaven and the various seasons of the year come round in due order, and could not discover by what causes all that came about. Therefore their refuge was to leave all in the hands of the gods, and to suppose that by their nod all things were done. And they placed the gods' habitation and abode in the sky, because through the sky the night and the moon are seen to revolve, moon and day and night and the solemn stars of night, heaven's night-wandering torches and flying flames, clouds and sun, rain and snow, winds, lightnings and hail, rapid roarings and great threatening rumbles of thunder.^a

¹¹⁹⁴ O unhappy race of mankind, to ascribe such doings to the gods and to attribute to them bitter wrath as well ! What groans did they then create for themselves, what wounds for us, what tears for generations to come ! It is no piety to show oneself often with covered head, turning towards a stone and approaching every altar, none to fall prostrate upon the ground and to spread open the palms before shrines of the gods, none to sprinkle altars with the

^a On 1186-1193, which Bailey unjustly calls "confused," see D. West, *The Imagery and Poetry of Lucretius* 127-128.

spargere quadrupedum, nec votis nectere vota,
sed mage placata posse omnia mente tueri.

Nam cum suspicimus magni caelestia mundi
templa super stellisque micantibus aethera fixum,
et venit in mentem solis lunaeque viarum, 1206
tunc aliis oppressa malis in pectora cura
illa quoque expergefatum caput erigere infit,
nequae forte deum nobis immensa potestas
sit, vario motu quae candida sidera verset; 1210
temptat enim dubiam mentem rationis egestas,
ecquaenam fuerit mundi genitalis origo,
et simul ecquae sit finis, quoad moenia mundi
solliciti motus hunc possint ferre laborem,
an divinitus aeterna donata salute 1215
perpetuo possint aevi labentia tractu
inmensi validas aevi contemnere viris.

Praeterea cui non animus formidine divum
contrahitur, cui non correpunt membra pavore,
fulminis horribili cum plaga torrida tellus 1220
contremittit et magnum percurrunt murmura caelum?
non populi gentesque tremunt, regesque superbi
corripiunt divum percussi membra timore,
ne quod ob admissum foede dictumve superbe
poenarum grave sit solvendi tempus adactum? 1225

Summa etiam cum vis violenti per mare venti
induperatorem classis super aequora verrit
cum validis pariter legionibus atque elephantis,

1203 placata *OQP, Naugerius, Lambinus (1563-64 only), Gifanius, Wakefield, Eichstädt, M. F. Smith, CR N.S. 16 (1966) 265-266 (cf. Cicero, Fin. 1.21.71, Tusc. Disp. 5.6.16):* pacata *ed. Juntina* 1214 solliciti (*cf. 1.343, 6.1038*) *Bentley: et (from 1213?) taciti OQP, Wakefield, Bockemüller, Merrill (1917), Diels, Martin, Büchner* 1224 ne quod *OQP, Merrill (1917), Martin, Ernout, Büchner: nequid Lachmann* 1225 adactum *Pontanus, Marullus: adauc-*

blood of beasts in showers and to link vow to vow; but rather to be able to survey all things with tranquil mind.

¹²⁰⁴ For when we look upwards to the celestial regions of the great firmament, to the ether studded with glittering stars, when we think of the ways of sun and moon, into our hearts already crushed with other woes a new anxious care awakening begins to lift up its head, whether by any chance we have to do with some immeasurable power of the gods, able to make the bright stars revolve with their different movements. For it shakes the mind with doubt to find no answer to the question, whether the world had a birthday, and also whether a limit is set, until which the walls of the world are able to endure the strain of this restless motion; or whether by the gods' ordinance endowed with everlasting existence they are able to glide on for ever through the course of time, despising the strong power of immeasurable time.

¹²¹⁸ Besides, whose mind does not shrink up with fear of the gods, whose limbs do not crawl with terror, when the scorched earth quakes with the shivering shock of a thunderbolt and rumblings run through the mighty sky? Do not nations and peoples tremble, do not proud kings huddle up their limbs smitten with fear of the gods, lest for some base deed or proud word the solemn time of punishment be now brought near at hand?

¹²²⁶ When also the supreme violence of a furious wind upon the sea sweeps over the waters the chief admiral of a fleet along with his mighty legions and

tum *OQP, Merrill (1917), Martin, but the reading hardly makes sense and in 1330 OQCL have adactus for adactus*

non divom pacem votis adit ac prece quaesit
 ventorum pavidus paces animasque secundas?—1230
 nequiquam, quoniam violento turbine saepe
 correptus nilo fertur minus ad vada leti.
 usque adeo res humanas vis abdita quaedam
 obterit, et pulchros fascis saevasque secures
 proculcare ac ludibrio sibi habere videtur. 1235

Denique sub pedibus tellus cum tota vacillat
 concussaeque cadunt urbes dubiaeque minantur,
 quid mirum si se temnunt mortalia saecula
 atque potestates magnas mirasque relinquunt
 in rebus viris divum, quae cuncta gubernent? 1240

Quod superest, aes atque aurum ferrumque re-
 pertumst
 et simul argenti pondus plumbique potestas,
 ignis ubi ingentis silvas ardore cremarat
 montibus in magnis, seu caeli fulmine misso,
 sive quod inter se bellum silvestre gerentes 1245
 hostibus intulerant ignem formidinis ergo,
 sive quod inducti terrae bonitate volebant
 pandere agros pinguis et pascua reddere rura,
 sive feras interficere et ditescere praeda;
 nam fovea atque igni prius est venarier ortum 1250
 quam saepire plagis saltum canibusque ciere.
 quicquid id est, quacumque e causa flammeus ardor
 horribili sonitu silvas exederat altis
 a radicibus et terram percoxerat igni, 1255
 manabat venis ferventibus in loca terrae
 concava conveniens argenti rivus et auri,
 aeris item et plumbi. quae cum concreta videbant

1234 obterit *O* corr., *AFL*: operit *O*: operit *Q*: obterere *Y. L.*
Too, CQ N.S. 41 (1991) 255-257, perhaps rightly
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elephants, does he not crave the gods' peace with
 vows, does he not in his panic seek with prayers the
 peace of the winds and favouring breezes? But all
 in vain, since none the less he is often caught up in
 the furious hurricane and driven upon the shoals of
 death. So true is it that some hidden power grinds
 down humanity, and seems to trample upon the
 noble rods and the cruel axes,^a and hold them in
 derision.

¹²³⁶ Then when the whole earth trembles beneath
 our feet, when cities are shaken and fall or threaten
 to fall, what wonder if the sons of men feel contempt
 for themselves, and acknowledge the great potency
 and wondrous might of gods in the world, to govern
 all things? and the
earth
trembles.

¹²⁴¹ Now to proceed: copper and gold and iron
 were discovered, so also heavy silver and useful lead,
 when fire upon the great mountains had burnt up
 huge forests with its heat, whether by some lightning
 stroke from heaven, or because men waging war in
 the forests had brought fire upon their foes to frighten
 them, or because led by the richness of the soil they
 wished to clear the fat fields and make the place fit
 for pasturage, or to destroy the wild beasts and to
 enrich themselves with spoil. For hunting with pit
 and fire came up before fencing about a glade with
 nets and putting up game with dogs. However that
 may be, whatever the cause by which flaming heat
 with appalling din had devoured the forests deep
 down to the roots and parched up the earth with fire,
 through the hot veins into hollow places of the earth
 would ooze and collect a stream of silver and gold,
 or copper also and lead; and when afterwards they saw

^a Cf. 3.996.

posterius claro in terra splendere colore,
 tollebant nitido capti leviq̄ lepore,
 et simili formata videbant esse figura 1260
 atque lacunarum fuerant vestigia cuique.
 tum penetrabat eos posse haec liquefacta calore
 quamlibet in formam et faciem decurrere rerum,
 et prorsum quamvis in acuta ac tenvia posse
 mucronum duci fastigia procudendo, 1265
 ut sibi tela parent, silvasque ut caedere possint
 materiemque dolare et levia radere tigna
 et terebrare etiam ac pertundere perque forare.
 nec minus argento facere haec auroque parabant
 quam validi primum violentis viribus aeris— 1270
 nequiquam, quoniam cedebat victa potestas,
 nec poterant pariter durum sufferre laborem.
 tum fuit in pretio magis aes, aurumque iacebat
 propter inutilitatem hebeti mucrone retusum ;
 nunc iacet aes, aurum in summum successit honorem.
 sic volvenda aetas commutat tempora rerum : 1276
 quod fuit in pretio, fit nullo denique honore ;
 porro aliud succedit et e contemptibus exit
 inque dies magis adpetitur floretque repertum
 laudibus et miro est mortalis inter honore. 1280

Nunc tibi quo pacto ferri natura reperta
 sit facilest ipsi per te cognoscere, Memmi.
 arma antiqua manus unguis dentesque fuerunt
 et lapides et item silvarum fragmina rami,

1267 dolare et levia *Marullus in ed. Juntina* (dolare ac
 levia *ed. Aldina*) ; dolaret (dolare et *F*, dolare *AB*) levare ac
 (et *AB*) *OQP* 1273 tum *Lachmann* : nam *OQP*, per-
 haps rightly

^a *aes* can mean either "copper" or "bronze" (an alloy
 of copper and tin). In 1241, 1257, where *Lucr.* refers to the
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these congealed together and gleaming upon the
 earth with bright colour, they would pick them up
 captivated by the sleek smooth grace and would see
 that they were each moulded into a shape like the
 hollows in which they had left their mark. Then it
 dawned upon them that these metals might be
 melted and run into any shape and form of objects,
 and might furthermore be beaten out with blows
 into the sharpest and finest possible point or edge,
 to make themselves tools, to cut down trees, to
 rough-hew timber and to plane planks smooth, to
 bore also and to pierce and perforate. And they
 would try to make these at first no less of silver and
 gold than of bronze ^a with its tough and strong sub-
 stance, but in vain, since the strength of these yielded
 and bent, nor could they so well bear the hard work.
 Then bronze was of more worth, and gold was thought
 little of, being useless with its edge blunted and dull.
 Now bronze is thought little of, and gold has mounted
 to the chief honour. So rolling time changes the
 seasons of things. What was of worth comes at
 length to be held in no honour ; next something else
 comes up and comes forth from contempt, is sought
 for more day by day, and once discovered thrives in
 praise and is held in wonderful honour among men.

1281 Now it is easy for you, Memmius, to recognize
 by yourself in what manner the nature of iron was
 discovered. The ancient weapons were hands, nails,
 and teeth, and stones and branches also broken from
 discovery of the metal, the translation "copper" has been
 given ; however, from this point onwards "bronze" has
 been preferred : as R. Geer (*Lucretius, On Nature* 197, n. 99)
 points out, pure copper would not be much better than gold
 for making tools.

into various
 shapes.

Men would
 then melt
 them and
 mould them
 into tools ;

then bronze
 was worth
 more than
 gold.

but that is
 changed
 now.

Bronze
 came before
 iron.

et flamma atque ignes, postquam sunt cognita pri-
mum. 1285

posterius ferri vis est aerisque reperta.
et prior aeris erat quam ferri cognitus usus,
quo facilis magis est natura et copia maior.
aere solum terrae tractabant, aereque belli
miscabant fluctus et vulnera vasta serebant 1290
et pecua atque agros adimebant; nam facile ollis
omnia cedebant armatis nuda et inerma.
inde minutatim processit ferreus ensis,
versaue in obprobrium species est falcis ahenae,
et ferro coepere solum proscindere terrae, 1295
exaequataque sunt creperi certamina belli.

Et prius est armatum in equi conscendere costas
et moderarier hunc frenis dextraque vigere
quam biugo curru belli temptare pericla.
et biugos prius est quam bis coniungere binos 1300
et quam falciferos armatum escendere currus.
inde boves lucas turrato corpore, taetras,
anguimanus, belli docuerunt volnera Poeni
sufferre et magnas Martis turbare catervas.
sic alid ex alio peperit discordia tristis, 1305
horribile humanis quod gentibus esset in armis,
inque dies belli terroribus addidit augmen.
Temptarunt etiam tauros in moenere belli,

1289 See critical note on 4.968 1291 pecua *Ernout*
(see critical note on 1110): pecus O, Q corr.: pecudes Q

^a The choice of metaphor may have been influenced by the agricultural reference in the previous line. For similar thought-links, see notes on 1436, 2.276.

forest trees, flames and fire as soon as they were known. Later was discovered the power of iron and of bronze. The use of bronze was known before iron, because it is more easily worked and there is greater store. With bronze men tilled the soil of the earth, with bronze they stirred up the waves of war, and sowed ^a devastating wounds, and seized cattle and lands; for when some were armed, all that was naked and unarmed readily gave way to them. Then by small degrees the sword of iron gained ground, and the fashion of the bronze sickle became a thing of contempt; then with iron they began to break the soil of the earth, and the struggles of war now become doubtful were made equal.^b

¹²⁹⁷ And it is an earlier practice for one to mount on horseback armed, to guide the horse by the bit and to do doughty deeds with the right hand, than to essay the perils of war in a two-horse car. And to yoke a pair came before yoking twice two to the car, and before the armed men mounted the scythed chariot.^c Next the Lucanian oxen ^d with turreted backs, hideous creatures, snake-handed, were taught by the Carthaginians to endure the wounds of war, and to confound the great hosts of Mars. Thus gloomy Discord bred one thing after another, to be frightful in battle for the nations of men, and added new terror to warfare day by day.

¹³⁰⁸ Bulls also they tried in the service of war, and Bulls,

^b When the use of iron became general.

^c Cf. 3.642 and see note there.

^d Elephants, because the Romans first saw elephants in Lucania, as part of the army of Pyrrhus (280 B.C.). W. Clausen, *CR N.S.* 41 (1991) 546, argues that *bos luca* is masc., but Varro, *Ling.* 7.39, thought it fem. and Lucr. may well have thought the same. The manuscripts provide conflicting evidence.

expertique sues saevos sunt mittere in hostis.
 et validos partim prae se misere leones 1310
 cum doctoribus armatis saevisque magistris
 qui moderarier his possent vinclisque tenere—
 nequiquam, quoniam permixta caede calentes
 turbabant saevi nullo discrimine turmas,
 terrificas capitum quatientes undique cristas, 1315
 nec poterant equites fremitu perterrita equorum
 pectora mulcere et frenis convertere in hostis.
 iritata laeae iaciebant corpora saltu
 undique, et adversum venientibus ora petebant,
 et nec opinantis a tergo deripiebant, 1320
 deplexaeque dabant in terram vulnere victos,
 morsibus adfixae validis atque unguibus uncis.
 iactabantque suos tauri pedibusque terebant,
 et latera ac ventres hauribant subter equorum
 cornibus, et terram minitanti mente ruebant. 1325

^a Bailey, who says that he is "unaware of any parallel account of the actions of primitive man, except in Diodorus Siculus 1.48.1," finds 1308-1349 "fantastic" and as possibly indicative of madness. But he and other commentators are mistaken in thinking that Lucr. is writing of primitive times, as is shown by the mention of *vinclis* (1312) and *tela* (1327). The *arma antiqua* were hands, nails, teeth, stones, branches, and fire (1283-1285); the discovery of metals came later. On the other hand, 1339 implies that the experiments with bulls, boars, and lions are supposed to have occurred before the introduction of elephants. As for the allegation that the passage is "fantastic," even if there were no authority for stories of such experiments, Lucr., in accordance with the Epicurean belief that developments are made gradually by a process of trial and error, might reasonably have thought it unlikely that men immediately made successful experiments with one wild animal, the elephant, and did not try other fierce beasts (*cf.* 1269-1272, on experiments with metals). However, there is no need to suppose that the whole story is a flight of the poet's imagination: *cf.* *S.H.A., Antoninus*

attempted to send fierce boars against the enemy.^a Some let slip strong lions before them, with armed trainers and harsh masters to control them and to hold them in leash; but in vain, since when heated with the promiscuous slaughter they ran wild, and threw the squadrons into confusion, friend and foe alike, on all sides shaking the frightful crests^b upon their heads, nor could the riders soothe the spirits of their horses terrified at the roaring, nor guide them towards the foe with the curb. The she-lions enraged bounded this way and that, and leapt straight for the faces of those that met them, or tore at others unawares from behind, and clasping them close bore them to the ground helpless from the wound, holding fast to them with strong jaws and curling claws. The bulls tossed their own friends and trampled them underfoot, and laid bare flanks and bellies of horses, striking from below with their horns, and scored up the earth with threatening in-

boars, and lions were also tried in battle.

but these proved to be useless.

Caracalla 6.4: *dehinc per Cadusios et Babylonios ingressus tumultuarie cum Parthorum satrapis manum contulit, feris etiam bestiis in hostes inmissis*. The passage could perhaps be taken as unnecessarily long and detailed, if Lucr. were interested merely in giving a straightforward account of an experimental stage in the development of military techniques. But surely he is, as so often in this last section of Book 5, also making a moral point: whereas primitive men (see 982-993) ran away *spumigeri suis adventu validique leonis* (985) and occasionally an individual became the victim of a wild beast, in more recent times men deliberately instigated these animals to kill wholesale. The suggestion that his account was partly inspired by contemporary *venationes* (see K. L. McKay, *AJPhil.* 85 [1964] 125-126) is highly probable. See also S. R. West, *Philol.* 119 (1975) 150-151.

^b By "crests" Lucr. almost certainly means the lions' natural manes, not artificial crests (see E. L. B. Meurig Davies, *Mnemos.* ser. 4, 2 [1949] 74).

et validis socios caedebant dentibus apri,
 tela infracta suo tingentes sanguine saevi,
 [in se fracta suo tingentes sanguine tela,]
 permixtasque dabant equitum peditumque ruinas.
 nam transversa feros exhibant dentis adactus 1330
 iumenta aut pedibus ventos erecta petebant—
 nequiquam, quoniam ab nervis succisa videres
 concidere atque gravi terram consternere casu.
 siquos ante domi domitos satis esse putabant,
 effervescere cernebant in rebus agundis 1335
 volneribus clamore fuga terrore tumultu,
 nec poterant ullam partem reducere eorum ;
 diffugiebat enim varium genus omne ferarum,
 ut nunc saepe boves lucae ferro male mactae
 diffugiunt, fera facta suis cum multa dedere. 1340
 Si fuit ut facerent. sed vix adducor ut ante
 non quierint animo praesentire atque videre,
 quam commune malum fieret foedumque, futurum ;
 et magis id possis factum contendere in omni,
 in variis mundis varia ratione creatis, 1345
 quam certo atque uno terrarum quolibet orbi.
 sed facere id non tam vincendi spe voluerunt,
 quam dare quod gement hostes, ipsique perire,
 qui numero diffidebant armisque vacabant.

Nexilis ante fuit vestis quam textile tegmen. 1350

1328 is almost certainly an interpolation stemming from a gloss explaining *infracta* in 1327 = in se fracta. But since it is just possible that both 1327 and 1328 were written by Lucr. as alternatives (see critical note on 1.884-885), the line has been retained in square brackets 1342-1343 transposed by Lachmann, perhaps rightly

^a See critical note on 1328.

^b 1341-1349 confirm that Lucr. did not invent the story of

tent. And the boars tore their friends with strong tusks, furiously bathing in their own blood the weapons broken in them, [bathing in their own blood the weapons broken in their bodies,]^a and dealt promiscuous destruction to horsemen and footmen. For the horses would swerve aside to escape the wild lunge of the tusks, or rearing aloft pawed the air ; but in vain, since you would see them collapse hamstrung and cover the ground in their heavy fall. If men before had thought any to be sufficiently tamed at home, in action they saw them grow hot with wounds and uproar, flight and terror and tumult, and found themselves unable to bring any part of them back ; for all the different kinds of wild beasts would scatter abroad, as now the Lucanian oxen badly mangled with steel often scatter abroad, after they have dealt cruel deeds to many of their own friends.

¹³⁴¹ If it really was true that they did it.^b But I can hardly bring myself to believe that, before hideous ruin came upon them all, they were not able to imagine and to perceive that this would happen ; and you might rather maintain that this happened somewhere in the universe, in the different worlds made in different ways, than in any single and particular earth that you please. But they did this not so much with a hope to conquer, as wishing to give their enemies cause to mourn, and to perish themselves, when they mistrusted their numbers and were without arms.

Indeed, it is hard to believe that experiments with these beasts were actually made.

1350 Plaited garments came before garments of Plaited

the experiments with wild beasts, but derived it from an Epicurean or historical source.

textile post ferrumst, quia ferro tela paratur,
 nec ratione alia possunt tam levia gigni
 insilia ac fusi radii scapique sonantes.
 et facere ante viros lanam natura coegit
 quam muliebri genus (nam longe praestat in arte
 et sollertius est multo genus omne virile), 1356
 agricolae donec vitio vertere severi,
 ut muliebribus id manibus concedere vellent
 atque ipsi pariter durum sufferre laborem
 atque opere in duro durarent membra manusque.

At specimen sationis et insitionis origo 1361
 ipsa fuit rerum primum natura creatrix,
 arboribus quoniam bacae glandesque caducae
 tempestiva dabant pullorum examina subter ;
 unde etiam libitumst stirpis committere ramis 1365
 et nova defodere in terram virgulta per agros.
 inde aliam atque aliam culturam dulcis agelli
 temptabant, fructusque feros mansuescere terra
 cernebant indulgendo blandesque colendo.
 inque dies magis in montem succedere silvas 1370
 cogeabant infraque locum concedere cultis,
 prata lacus rivos segetes vinetaque laeta
 collibus et campis ut haberent, atque olearum
 caerulea distinguens inter plaga currere posset
 per tumulos et convallis camposque profusa ; 1375
 ut nunc esse vides vario distincta lepore
 omnia, quae pomis intersita dulcibus ornant
 arbustisque tenent felicibus obsita circum.

1353 insilia *OP*: ininsilia *Q*: insubula *O. Foss, Classica et Mediaevalia* 22 (1961) 50 1359, 1360 are probably alternative lines (see critical note on 1.884-885), as Giussani

woven cloth.^a Woven cloth comes after iron, because iron is needed for equipping the loom, nor without it can such smoothness be given to the treadles and spindles, shuttles and noisy leash-rods. And nature made men work in wool before womankind (for the male sex as a whole is far superior in skill and more clever), until the austere farmers made it a reproach, so that the men agreed to leave it in women's hands and themselves to share in hard labour and by hard work hardened their bodies and hands.

¹³⁶¹ But the pattern of sowing and the beginning of grafting first came from nature herself the maker of all things, since berries and acorns falling from trees in due time produced swarms of seedlings underneath ; and this also gave them the fancy to insert shoots in the branches and to plant new slips in the earth all over the fields. Next one after another they tried ways of cultivating the little plot they loved, and saw wild fruits grow tame in the ground with kind treatment and friendly tillage. Day by day they made the forests climb higher up the mountains and yield the place below to their tilth, that they might have meadows, pools and streams, crops and luxuriant vineyards on hill and plain, and that a grey-green belt of olives might run between^b to mark the boundaries, stretching forth over hills and dales and plains ; just as now you see the whole place mapped out with charming variety, laid out and intersected with sweet fruit-trees and set about with fertile plantations.

^a Cf. Diogenes of Oenoanda fr. 12.I.10-II.3 Smith.

^b On the tmesis *inter . . . currere*, see note on 3.860. suggests. It is likely that *Lucr.* would have omitted 1359 (cf. 1272) in revision

At liquidas avium voces imitarier ore
ante fuit multo quam levia carmina cantu 1380
concelebrare homines possent aurisque iuvare.
et zephyri, cava per calamorum, sibila primum
agrestis docuere cavas inflare cicutas.
inde minutatim dulcis didicere querellas,
tibia quas fundit digitis pulsata canentum, 1385
avia per nemora ac silvas saltusque reperta,
per loca pastorum deserta atque otia dia.
[sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras.]
Haec animos ollis mulcebant atque iuvabant 1390
cum satiate cibi; nam tum sunt omnia cordi.
saepe itaque inter se prostrati in gramine molli
propter aquae rivom sub ramis arboris altae
non magnis opibus iucunde corpora habebant,
praesertim cum tempestas ridebat et anni 1395
tempora pingebant viridantis floribus herbas.
tum ioca, tum sermo, tum dulces esse cachinni
consuerant; agrestis enim tum musa vigebat.
tum caput atque umeros plexis redimire coronis
floribus et foliis lascivia laeta monebat, 1400
atque extra numerum procedere membra moventes
duriter et duro terram pede pellere matrem;
unde oriebantur risus dulcesque cachinni,
omnia quod nova tum magis haec et mira vigebant.
et vigilantibus hinc aderant solacia somno, 1405
ducere multimodis voces et flectere cantus

1388-1389 = 1454-1455 deleted by Lachmann, probably interpolated, but it is just possible that *Lucr.* wrote them here without adjusting them to their context 1400 monebat
F: monebant *A*: movebat *OQBL*, *Diels*, *Martin*

* 1385 = 4.585.

¹³⁷⁹ To imitate with the mouth the liquid notes of the birds came long before men could delight their ears by warbling smooth carols in song. And the zephyrs whistling through hollow reeds first taught the countrymen to blow into hollow hemlock-stalks. Next, step by step they learnt the plaintive melodies which the reed-pipe gives forth tapped by the players' fingertips ^a—the pipe discovered amid pathless woods and forests and glades, amid the solitary haunts of shepherds and the peace of the open air. [So by degrees time brings up before us every single thing, and reason lifts it into the precincts of light.]

¹³⁹⁰ These melodies soothed their minds and gave them delight when they had had their fill of food; for that is when everything is pleasant. Often therefore stretched in groups on the soft grass hard by a stream of water under the branches of a tall tree they gave pleasure to their bodies at cheap cost, above all when the weather smiled and the season of the year painted the green herbage with flowers.^b Then was the time for jest, for gossip, for pleasant peals of laughter; for then the rustic muse was in its prime. Then they would wreath the head and shoulders with woven garlands of flowers and leaves, prompted by joyous playfulness, and they would march out moving their limbs out of time and beating mother earth ^c stiffly with stiff foot; from which mirth would arise and pleasant peals of laughter, because all these things being new and wonderful had great vogue. And when wakeful, this was their consolation for sleep, to sing many a long-drawn note and to turn a

^b 1392-1396 are repeated, with minor alterations, from 2.29-33. See note on 2.33.

^c The earth who was indeed their mother: *cf.* 1411, 1427, 790-825.

et supera calamos unco percurrere labro ;
unde etiam vigiles nunc haec accepta tuentur
et numerum servare genus didicere, neque hilo
maiores interea capiunt dulcedini' fructum 1410
quam silvestre genus capiebat terrigenarum.

Nam quod adest praesto, nisi quid cognovimus ante
suavius, in primis placet et pollere videtur,
posteriorque fere melior res illa reperta
perdit et immutat sensus ad pristina quaeque. 1415
sic odium coepit glandis, sic illa relicta
strata cubilia sunt herbis et frondibus aucta.
pellis item cecidit vestis contempta ferinae ;
quam reor invidia tali tunc esse repertam,
ut letum insidiis qui gessit primus obiret, 1420
et tamen inter eos distractam sanguine multo
disperiisse neque in fructum convertere quisse.
tunc igitur pelles, nunc aurum et purpura curis
exercent hominum vitam belloque fatigant ;
quo magis in nobis, ut opinor, culpa resedit. 1425
frigus enim nudos sine pellibus excruciat
terrigenas ; at nos nil laedit veste carere
purpurea atque auro signisque ingentibus apta,
dum plebeia tamen sit quae defendere possit.
ergo hominum genus incassum frustra laborat
semper et in curis consumit inanibus aevom, 1431
nimirum quia non cognovit quae sit habendi
finis et omnino quoad crescat vera voluptas.
idque minutatim vitam provexit in altum
et belli magnos commovit funditus aestus. 1435

^a Cf. 2.36.

^b See note on 2.21 and Introduction p. xxxix.

tune and to run along the tops of the reedpipes with
curved lip ; whence even now the watchmen keep up
the tradition, and they have learnt how to keep
various kinds of rhythm, yet for all that they have
no more profit in enjoyment than the woodland
people had who were born of the earth.

¹⁴¹² For what is ready to hand, unless we have
known something more lovely before, gives pre-
eminent delight and seems to hold the field, until
something found afterwards to be better usually
spoils all that and changes our taste for anything
ancient. So men grew tired of acorns, so were
deserted those old beds strewn with herbage and
leaves piled up. The garment also of wild-beast pelt
fell into contempt ; which I can imagine must have
excited such envy in those days when discovered,
that he who first wore one was done to death by
treachery, and even then that it was torn to pieces
amongst them with much bloodshed and was lost and
could not be turned to use. Then therefore pelts,
now gold and purple, trouble men's life with cares
and weary it with war ; in which, as I think, the
greater fault rests upon us. For without the pelts,
cold tormented the naked sons of earth ; but we
take no harm to be without a vestment of purple
worked with gold and great figures, so long as there
is the poor man's cloak ^a to protect us. Therefore
mankind labours always in vain and to no purpose,
consuming its days in empty cares, plainly because
it does not know the limit of possession, and how
far it is ever possible for real pleasure to grow ^b ; and
this little by little has carried life out into the deep
sea, and has stirred up from the bottom the great
billows of war.

gave as
much
pleasure as
the accom-
plished
playing of
watchmen
to-day.

Men s
present
possessions
give
pleasure
until some-
thing
superior is
discovered.
Acorns and
skins were
discarded
for new
food and
dress ;

but what-
ever their
wealth was,
it brought
war with it,

and men
always
labour for
vanities,

being
ignorant of
the limits
to posses-
sion and
true
pleasure.

At vigiles mundi magnum versatile templum
sol et luna suo lustrantes lumine circum
perdocuere homines annorum tempora verti
et certa ratione geri rem atque ordine certo.

Iam validis saepti degebant turribus aevom, 1440
et divisa colebatur discretaque tellus.
tum mare velivolis florebat navibus altum,
auxilia ac socios iam pacto foedere habebant,
carminibus cum res gestas coepere poetae
tradere; nec multo prius sunt elementa reperta. 1445
propterea quid sit prius actum respicere aetas
nostra nequit, nisi qua ratio vestigia monstrat.

Navigia atque agri culturas moenia leges
arma vias vestes et cetera de genere horum,
praemia, delicias quoque vitae funditus omnis, 1450
carmina picturas et daedala signa polita,
usus et impigrae simul experientia mentis
paulatim docuit pedetemptim progredientis.
sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras; 1455
namque alid ex alio clarescere corde videbant,
artibus ad summum donec venere cacumen.

1442 navibus altum *Merrill, CR 16 (1902) 169 (Büchner wrongly attributes it to himself), cf. Livius Andronicus quoted by Macrobius 6.5.10 tu qui permensus ponti maria alta velivola: propter odores (cf. 2.417) OQP: navibus ponti Gifanius (1595), Wakefield tentatively in his notes, and Martin: puppibus, et res Lachmann: propterea res L. A. MacKay, CPhil. 56 (1961) 105: propterea quod M. F. Smith, Hermathena 98 (1964) 45-52 (for other conjectures, see same article and M. F. Smith, G and R ser. 2, 18 [1971] 102-103, S. Timpanaro, Contributi di filologia e di storia della lingua latina, Roma [1978] 146-190)*

1436 But those watchful sentinels^a sun and moon, Sun and moon travelling with their light around the great revolving region of heaven, taught men well that the seasons of the year come round, and that all is done on a fixed plan and in fixed order. Sun and moon taught them the seasons of the year.

1440 Already men lived fenced in with strong towers, and the earth was divided up and distributed for cultivation. Then the deep sea was blooming with sail-flying ships, men had already allies and friends under formal treaty, when poets began to commemorate doughty deeds in verse; nor had letters been invented long before. For this reason our age cannot look back upon what happened before, unless in any respect reasoning shows the way.^b Fortified towns, division of lands, navigation, international treaties, letters, poetry,

1448 Ships and agriculture, fortifications and laws, arms, roads, clothing and all else of this kind, all life's prizes, its luxuries also from first to last, poetry and pictures, artfully wrought polished statues, all these as men progressed gradually step by step were taught by practice and the experiments of the active mind. So by degrees time brings up before us every single thing, and reason lifts it into the precincts of light. For they saw one thing after another grow clear in their minds, until they attained the highest pinnacle of the arts. all the arts of life, which are continually progressing onwards.

^a Cf. Thomas Campbell, *The Soldier's Dream 2*: "And the sentinel stars set their watch in the sky." The idea of calling the sun and moon *vigiles mundi* was probably suggested by the mention of the human *vigiles* in 1408. See M. F. Smith, *Hermathena* 102 (1966) 76, and for similar thought-links see notes on 1290, 2.276.

^b In 1440-1447 *Lucr.* seems to be following Thucydides. See M. F. Smith, *Hermathena* 98 (1964) 49-50.

LIBER SEXTUS

BOOK 6

PRIMÆ frugiparos fetus mortalibus aegris
 dididerunt quondam praeclaro nomine Athenae
 et recreaverunt vitam legesque rogarunt,
 et primae dederunt solacia dulcia vitae,
 cum genuere virum tali cum corde repertum, 5
 omnia veridico qui quondam ex ore profudit ;
 cuius et extincti propter divina reperta
 divulgata vetus iam ad caelum gloria fertur.

Nam cum vidit hic ad victum quae flagitat usus
 omnia iam ferme mortalibus esse parata, 10
 et, proquam possent, vitam consistere tutam,
 divitiis homines et honore et laude potentis
 affluere atque bona gnatorum excellere fama,
 nec minus esse domi cuiquam tamen anxia corda,
 atque animi ingratis vitam vexare sine ulla 15
 pausa atque infestis cogi saevire querellis,

11 possent *OQP* : posset *Lachmann*, perhaps rightly 15
 sine ulla *Munro* : querellis (*from 16*) *O* : querelis *QP*

^a The reference to Athens and *mortalibus aegris* looks forward to the account of the Athenian plague (1138-1286), *aegris* here being echoed by *aegris* in 1152. Similarly *varieque volaret* (30) anticipates *multarum semina rerum . . . quae sint morbo mortique necessest multa volare* (1093, 1095-1096), where *Lucr.* is describing the cause of pestilences, and *anxia corda . . . querellis* (14, 16) is echoed by *anxius angor . . . querella* (1158-1159). These verbal parallelisms between the proem, with its emphasis on moral sickness and health, and the final passage confirm (see note on 1139) that *Lucr.*

It was Athens of illustrious name that first in former days spread abroad the corn bearing crops amongst suffering mankind ^a ; Athens bestowed on them a new life and established laws ; Athens first gave the sweet and laws, consolations of life, when she brought forth a man ^b but Epicurus the discoverer of truth, endowed with such wisdom, who in past days poured forth all revelations from truth-telling lips ^c ; whose glory, though his light is quenched,^d on account of his divine discoveries has been long since published abroad and is now exalted to the skies.

^e For when he saw how mortals had ready for them nearly all that need demands for living,^e and that, as far as they could, their life was established safe ; saw how men were rolling in riches, mighty in honour and fame, proud in the good repute of their sons, while at home nevertheless each had an anxious heart ; saw how they tormented their life in their own despite without any pause, and were compelled to wax furious with racking lamentations ^f : —then

views the Athenian plague as a physical disaster that involved moral disaster as well, and as symbolizing the moral condition of unenlightened mankind. ^b Epicurus.

^c Like an oracle. See note on 1.739.

^d Cf. 3.1042.

^e Cf. e.g. Epicurus, *Ep. ad Men.* 130, *Sent.* 15, 21, *Dio-genes of Oenoanda fr.* 2.I Smith.

^f Most commentators and translators take *corda* as the subject of *vexare* and *cogi*.

intellegit ibi vitium vas efficere ipsum,
 omniaque illius vitio corrumpier intus
 quae conlata foris et commoda cumque venirent,
 partim quod fluxum pertusumque esse videbat, 20
 ut nulla posset ratione explerier umquam ;
 partim quod taetro quasi conspurcare sapore
 omnia cernebat, quaecumque receperat, intus.
 veridicis igitur purgavit pectora dictis
 et finem statuit cuppedinis atque timoris 25
 exposuitque bonum summum quo tendimus omnes
 quid foret, atque viam monstravit, tramite parvo
 qua possemus ad id recto contendere cursu,
 quidve mali foret in rebus mortalibu' passim,
 quod fieret naturali varieque volaret 30
 seu casu seu vi, quod sic natura parasset,
 et quibus e portis occurri cuique deceret,
 et genus humanum frustra plerumque probavit
 volvere curarum tristis in pectore fluctus.
 nam veluti pueri trepidant atque omnia caecis 35
 in tenebris metuunt, sic nos in luce timemus
 interdum nilo quae sunt metuenda magis quam
 quae pueri in tenebris pavitant finguntque futura.
 hunc igitur terrorem animi tenebrasque necessest
 non radii solis nec lucida tela diei 40
 discutiant, sed naturae species ratioque.
 quo magis inceptum pergam pertexere dictis.

Et quoniam docui mundi mortalia templa
 esse ac nativo consistere corpore caelum,

44 ac *M. F. Smith* : omitted by *OQL* : et *ABCF*

^a The mind.

^b Cf. 3.936-937, 1009-1010.

^c Pleasure.

^d On the Epicurean attitude to chance, see especially Epicurus, *Ep. ad Men.* 133-134, *Sent.* 16, Usener 489, Diogenes of

he understood that the pot itself ^a made the flaw,
 and that by this flaw an inward corruption tainted
 all that came in from without though it were a bless-
 ing ; partly because he saw it to be leaking and ^b riddled, so that nothing ever sufficed to fill it ^b ; ^{who saw how to cleanse the mind of men}
 partly because he perceived that it befouled, as one
 may say, with a noisome flavour everything that it
 received, as soon as it came in. Therefore with truth-
 telling words he scoured the heart, he put a limit to
 desire and fear, he showed what was that chief good ^c
 to which we all move, and pointed the way, that
 strait and narrow path by which we might run
 thither without turning ; he showed what evil there
 was everywhere in human affairs, which comes about
 and flies about in different ways, whether by natural
 chance ^d or force, because nature had so provided,
 and from what sally-ports each ought to be countered ;
 and he proved that mankind had no reason for the ^{and freed them from unnecessary fears.}
 most part to roll the sad waves of trouble within
 their breasts. For just as children tremble and fear
 all things in the blind darkness, so we in the light
 fear, at times, things that are no more to be feared
 than what children shiver at in the dark and imagine
 to be at hand. This terror of the mind, therefore,
 and this gloom must be dispelled, not by the sun's
 rays or the bright shafts of day, but by the aspect
 and law of nature.^e Therefore I will proceed the
 more readily to weave the web of my discourse.

⁴³ And since I have shown that the regions of the ^{I. The sky. I am now to speak of the sky}
 firmament are subject to death, and that the heavens
 consist of a substance that had birth, and since I

Oenoanda fr. 71-72 Smith.

^e 35-41 = 2.55-61, 3.87-93. 39-41 = 1.146-148.

et quaecumque in eo fiunt fierique necesses, 45
 pleraque dissolui, quae restant percipe porro,
 quandoquidem semel insignem conscendere curram

ventorum existant, placentur, ut omnia rursum
 quae fuerint sint placato conversa furore;

cetera quae fieri in terris caeloque tuentur 50
 mortales, pavidis cum pendent mentibu' saepe,
 et faciunt animos humilis formidine divom

depressosque premunt ad terram propterea quod
 ignorantia causarum conferre deorum

cogit ad imperium res et concedere regnum. 55

[quorum operum causas nulla ratione videre
 possunt ac fieri divino numine rentur.]

nam bene qui didicere deos securum agere aevom,
 si tamen interea mirantur qua ratione

quaeque geri possint, praesertim rebus in illis 60
 quae supra caput aetheriis cernuntur in oris,
 rursus in antiquas referuntur religiones,

et dominos acris adsciscunt, omnia posse
 quos miseri credunt, ignari quid queat esse,

quid nequeat, finita potestas denique cuique 65
 quanam sit ratione atque alte terminus haerens ;
 quo magis errantes caeca ratione feruntur.

Quae nisi respuis ex animo longeque remittis
 dis indigna putare alienaque pacis eorum,

delibata deum per te tibi numina sancta 70

47 *A lacuna after this line assumed by Bernays, who perhaps
 rightly supposes another lacuna after 48*

48 *existent A :
 existant OQL: exhiertant B: ex ira ut Munro ut added
 before omnia by Brieger*

49 *fuerint OQP: furerent
 Wakefield, Bailey furore Lambinus (1565): favore OQP*

56-57 = 1.153-154 *probably a commentator's marginal note
 here and in 90-91, where they occur again*

66 *ratione O
 corr.: rationi OQ*

have explained most of the things which are done
 and must be done in it,^a hear further what remains ;
 since once [I have undertaken] to mount the glorious
 chariot^b [of the Muses, I will now explain how
 furious storms] of winds arise, and how they are
 calmed, so that all is once more what it was, changed <sup>and what
 happens
 there ;</sup>
 with its fury appeased; and [I will explain] all else
 that men see happening in earth and sky, when
 they are often held in suspense with affrighted fears—
 happenings which abase their spirits through fear of
 the gods, keeping them crushed to the earth, because <sup>which men
 ascribe to
 the gods.</sup>
 their ignorance of causes compels them to refer
 events to the dominion of the gods, and to yield
 them the place of kings. [They are unable to see
 the causes of these works at all, and think them to be
 done by divine power.] For if those who have been
 rightly taught that the gods have a life without care,
 yet wonder all the while how things can go on,
 especially those transactions which are perceived
 overhead in the ethereal regions, they revert again
 to the old superstitions, and take to themselves cruel
 taskmasters, whom the poor wretches believe to be
 omnipotent, ignorant as they are what can be and
 what cannot, in a word how the power of each thing
 has been limited and its boundary firmly fixed^c ; so
 they are all the more driven astray by blind reason-
 ing.

⁶⁸ Unless you spew all these errors out of your <sup>Such errors
 degrade
 the gods ;</sup>
 mind, and put far from you thoughts unworthy of
 the gods and alien to their peace, their holy divinity,

^a 43-46 refer to 5.91-770.

^b For the idea of the poet as charioteer, cf. 92-95, Par-
 menides fr. 1, Empedocles fr. 4, line 5, Manilius 5.10-11 in
 imitation of Lucr.

^c 58-66 = 5.82-90. 65-66 = 1.76-77, 595-596.

saepe oberunt ; non quo violari summa deum vis
 possit, ut ex ira poenas petere inbibat acris,
 sed quia tute tibi placida cum pace quietos
 constitues magnos irarum volvere fluctus,
 nec delubra deum placido cum pectore adibis, 75
 nec de corpore quae sancto simulacra feruntur
 in mentes hominum divinae nuntia formae,
 suscipere haec animi tranquilla pace valebis.
 inde videre licet qualis iam vita sequatur.

Quam quidem ut a nobis ratio verissima longe 80
 reiciat, quamquam sunt a me multa profecta,
 multa tamen restant et sunt ornanda politis
 versibus : est ratio caeli speciesque tenenda,
 sunt tempestates et fulmina clara canenda,
 quid faciant et qua de causa cumque ferantur ; 85
 ne trepides caeli divisis partibus amens,
 unde volans ignis pervenerit aut in utram se
 verterit hinc partim, quo pacto per loca saepta
 insinuarit, et hinc dominatus ut extulerit se.
 [quorum operum causas nulla ratione videre 90
 possunt ac fieri divino numine rentur.]

Tu mihi supremae praescripta ad candida calcis
 currenti spatium praemonstra, callida Musa

83 caeli (*ed. Veronensis*) speciesque (*ed. Brixianensis*)
Avancius (*cf. e.g. 1.148*) : caelisque *OQL* : terris celisque *A* :
 coeli terraeque *B* : terrae caelique *Bailey*, perhaps rightly (*cf.*
50), but in the following lines *Lucr.* appears to be thinking
 only of the sky, and *Bailey's* objection to species seems un-
 sound, for in 85, just as qua de causa cumque ferantur
 corresponds to ratio, so quid faciant would well correspond to
 species 90-91 See critical note on 56-57 92 calcis
Turnebus, Lambinus : callis *OQP, Wakefield, Martin*

498

impaired by you, will often do you harm ; not that
 the supreme power of the gods is open to insult, so
 that it should in wrath thirst to inflict sharp venge-
 ance, but because you yourself will imagine that they,
 who are quiet in their placid peace, are rolling great
 billows of wrath, you will not be able to approach
 their shrines with placid heart, you will not have the
 strength to receive with tranquil peace of spirit the
 images which are carried to men's minds from their
 holy bodies, declaring what the divine shapes are.
 What kind of a life follows at once from that error,
 it is easy to see.

⁸⁰ In order that truest reasoning may thrust back
 such a life far from us, although many a word has
 been spoken by me, many still remain to be said and
 to be decked out with polished verse. The law and
 aspect of the sky have to be understood ; storms
 and bright lightnings have to be sung, what they do,
 and by what cause they are set in motion at any
 time ; that you may not, like one senseless, divide
 up the heavens into quarters,^a and tremble to see
 from which direction the flying fire has come, or to
 which of the two halves^b it has passed hence, how it
 has penetrated through walled places, and how after
 taking complete possession it has won its way out.^c
 [Men are unable to see the causes of these works at
 all, and think them to be done by divine power.]

⁹² Do you go before and show me the course, as I
 run my race to the white line of my final goal, clearly
 marked out before me, yes you, Calliope, Muse all-

^a The reference is to the Etruscan augural practice of
 dividing the sky into sixteen areas, and of observing in which
 area the lightning appeared and in which it disappeared. *Cf.*
Cicero, Div. 2.18.42, 20.45, Pliny, HN 2.143.

^b Right or left.

^c 87-89 = 383-385.

to avoid
 them we
 must know
 the causes
 of these
 things.

Calliope, requies hominum divomque voluptas,
te duce ut insigni capiam cum laude coronam. 95

Principio tonitru quatiuntur caerulea caeli
propterea quia concurrunt sublime volantes
aetheriae nubes contra pugnantibus ventis.
nec fit enim sonitus caeli de parte serena, 99
verum ubicumque magis denso sunt agmine nubes,
tam magis hinc magno fremitus fit murmure saepe.
praeterea neque tam condense corpore nubes
esse queunt quam sunt lapides ac ligna, neque autem
tam tenues quam sunt nebulae fumique volantes ;
nam cadere aut bruto deberent pondere pressae 105
ut lapides, aut ut fumus constare nequirent
nec cohibere nives gelidas et grandinis imbris.

Dant etiam sonitum patuli super aequora mundi,
carbasus ut quondam magnis intenta theatris
dat crepitum malos inter iactata trabesque, 110
interdum percussa furit petulantibus auris
et fragilis sonitus chartarum commeditatur
(id quoque enim genus in tonitru cognoscere possis),
aut ubi suspensam vestem chartasque volantis
verberibus venti versant planguntque per auras. 115
fit quoque enim interdum ut non tam concurrere
nubes

frontibus adversis possint quam de latere ire
diverso motu radentes corpora tractim,
aridus unde auris terget sonus ille diuque
ducitur, exierunt donec regionibus artis. 120

112 sonitus *CF*: omitted by *OQABL*

^a For the poet as charioteer, *cf.* 47 and see note there. The address to Calliope, the Muse of epic poetry, is modelled on Empedocles fr. 131, lines 1-3, fr. 4, lines 3-7. Note the verbal 500

skilful, man's repose and god's delight, that led by
you I may win the crown with illustrious praise.^a

⁹⁶ In the first place, the blue sky is shaken with
thunder,^b because flying clouds rush together high
in the ether, when winds fight against each other.
For no sound comes from any serene part of the sky ;
but wherever the clouds are found in a denser host,
from there so much the more does the thunder often
roar loudly. Besides, clouds can neither be made of
so dense a body as stones and wood, nor again so
thin as mist and flying smoke ; for then they must
either fall thrust down by their dead weight, like
stones, or, like smoke, be unable to hold together or
to contain cold snow and showers of hail.

¹⁰⁸ They make a noise also over the stretches of
wide-spreading firmament, as at times the canvas
awning stretched over a great theatre cracks flapping
between poles and beams,^c sometimes tears and flies
wild under the boisterous winds, imitating the rend-
ing sound of paper (for that kind of sound also you
may recognize in the thunder) ; or as when a gar-
ment hung on the line or flying sheets of paper are
beaten by the blows of the breeze and slapped
through the air. It often happens too that clouds
cannot exactly meet front to front, but pass by the
side in opposite directions, scraping their bodies as
they drag, which causes that dry sound to grate on
the ear, long drawn out, until they have emerged
from their confined quarters.

play *CALLIDA* . . . *CALLIOPE*, emphasizing the cleverness
of the Muse (*cf.* 1.117-118, 4.1054, 1056, and see note on
1.63).

^b *Cf.* Epicurus, *Ep. ad Pyth.* 100.

^c *Cf.* 4.76-77 and see note there.

1. Thunder
is heard
when clouds
crash
together :

they may
flap and
tear,

or scrape
their sides.

Hoc etiam pacto tonitru concussa videntur
 omnia saepe gravi tremere et divolsa repente
 maxima dissiluisse capacis moenia mundi,
 cum subito validi venti conlecta procella
 nubibus intorsit sese, conclusaque ibidem 125
 turbine versanti magis ac magis undique nubem
 cogit uti fiat spisso cava corpore circum,
 post ubi conminuit vis eius et impetus acer,
 tum perterricrepro sonitu dat scissa fragorem.
 nec mirum, cum plena animae vesicula parva 130
 saepe ita dat magnum sonitum displosa repente.

Est etiam ratio, cum venti nubila perflant,
 ut sonitus faciant; etenim ramosa videmus
 nubila saepe modis multis atque aspera ferri;
 scilicet ut, crebram silvam cum flamina cauri 135
 perflant, dant sonitum frondes ramique fragorem.

Fit quoque ut interdum validi vis incita venti
 perseindat nubem perfringens impete recto.
 nam quid possit ibi flatus manifesta docet res,
 hic, ubi lenior est, in terra cum tamen alta 140
 arbusta evolvens radicibus haurit ab imis.

Sunt etiam fluctus per nubila, qui quasi murmur
 dant in frangendo graviter; quod item fit in altis
 fluminibus magnoque mari, cum frangitur aestus.

Fit quoque, ubi e nubi in nubem vis incidit ardens
 fulminis: haec multo si forte umore recepit 146

131 magnum *Codex Placentinus* (*Landi* 33); cf. *Isidorus, Orig.*
 13.8.2 cum vesicula quamvis parva magnum tamen sonitum
 displosa emittat: parvum (*introduced under the influence of parva*
in 130?) OQP

121 In this way also all things often appear to
 shake and tremble with a heavy thunderclap, and
 it seems that the great walls of the capacious firma-
 ment suddenly torn asunder have leapt apart, when
 a gale of strong wind gathered together has twisted
 itself all at once into the clouds, and enclosed in that
 same place, whirling round and round, compels the
 cloud more and more in every direction to form a
 hollow with a thick crust all round; afterwards, when
 the wind's power and fierce impulse have weakened
 it, then the cloud is torn and explodes with a most
 horrifying crash. And no wonder, when a small
 bladder full of air often makes so loud a noise as it is
 suddenly burst.

132 There is another way whereby the clouds make
 a noise, that is, when the winds blow through them.
 For indeed we often see clouds branching in many
 ways, and ragged as they sweep along; just as, you
 may be sure, leaves rustle, and branches creak, when
 the blasts of the north-west wind blow through a thick
 forest.

137 It sometimes happens also that the swift force
 of strong wind tears through a cloud, breaking
 through with a direct rush. For what the blast can do
 there is plain from our own experience, when here on
 the earth, where it is gentler, it nevertheless tears up
 tall trees and wrenches them from their deepest roots.

142 There are waves also amongst the clouds,
 which in breaking give a kind of low roar, as happens
 likewise in deep rivers and the great sea when the
 rolling tide breaks.

145 Thunder occurs also when the burning force of
 lightning falls from a cloud upon a cloud: if this
 cloud chance to be soaked with water when it
 and hisses,

ignem, continuo magno clamore trucidat,
 ut calidis candens ferrum e fornacibus olim
 stridit, ubi in gelidum propter demersimus imbrem.
 aridior porro si nubes accipit ignem, 150
 uritur ingenti sonitu succensa repente,
 lauricomos ut si per montis flamma vegetur
 turbine ventorum comburens impete magno ;
 nec res ulla magis quam Phoebi Delphica laurus
 terribili sonitu flamma crepitante crematur. 155

Denique saepe geli multus fragor atque ruina
 grandinis in magnis sonitum dat nubibus alte ;
 ventus enim cum confercit, franguntur in artum
 concreti montes nimborum et grandine mixti.

Fulgit item, nubes ignis cum semina multa 160
 excussere suo concursu, ceu lapidem si
 percutiat lapis aut ferrum ; nam tum quoque lumen
 exilit et claras scintillas dissipat ignis.

Sed tonitrum fit uti post auribus accipiamus,
 fulgere quam cernant oculi, quia semper ad auris 165
 tardius adveniunt quam visum quae moveant res.
 id licet hinc etiam cognoscere : caedere si quem
 ancipiti videas ferro procul arboris auctum,
 ante fit ut cernas ictum quam plaga per auris
 det sonitum ; sic fulgorem quoque cernimus ante 170
 quam tonitrum accipimus, pariter qui mittitur igni
 e simili causa, concursu natus eodem.

147 magno . . . trucidat OQP : magno . . . trucidet *ed. Juntina* : ut magno . . . trucidet *Lambinus (not ed. Juntina as stated by recent editors)*

149 propter OQP, rightly retained and explained by Wakefield "i.e. 'qui ad manum iacet' ; adeoque ferri candentis refrigerationi tempore non concessio" : prope *Marullus*

receives the fire, it makes a great noise in destroying it at once, just as white-hot iron from the hot furnace often hisses when we have dipped it into cold water near by. If, further, the cloud be drier when it receives the lightning, it is suddenly kindled and burns up with a loud din, as if the mountains were covered with laurel, and a flame were driven over by a tempest of winds, consuming them with mighty rush ; and there is no other thing that burns with more terrible sound in the crackling flames than the Delphic laurel of Phoebus.

156 Again, the great cracking of ice and falling of hail often makes a noise in large clouds on high ; for when the wind packs them together, broken are all those mountains of clouds crushed together into a narrow space and mixed up with hail.

or on a dry cloud and burns it up.

Rattling hail also makes a din.

160 It lightens ^a also, when clouds by their collision have struck out many seeds of fire ; as if stone or steel should strike stone, for then also a light leaps forth scattering abroad bright sparks of fire.

164 But the reason why we hear the thunder after the eyes see the lightning is that things always take longer to reach the ears than to produce vision. The truth of this you may understand from another experience : if you should see someone at a distance cutting down a well-grown tree with a double-headed axe, you see the stroke before its thud sounds in your ears ; so also we see lightning before we hear the thunder, which is produced at the same time and by the same cause as the fire and born of the same collision.

2. Lightning is struck out by collision of clouds.

Why the lightning is seen before the thunder is heard.

^a For lightning, cf. Epicurus, *Ep. ad Pyth.* 101-103.

Hoc etiam pacto volucris loca lumine tingunt
 nubes et tremulo tempestas impete fulgit :
 ventus ubi inuasit nubem et versatus ibidem 175
 fecit ut ante cavam docui spissescere nubem,
 mobilitate sua ferverescit ; ut omnia motu
 percalefacta vides ardescere, plumbea vero
 glans etiam longo cursu volvenda liquescit.
 ergo fervidus hic nubem cum perscidit atram, 180
 dissipat ardoris quasi per vim expressa repente
 semina quae faciunt nictantia fulgura flammae ;
 inde sonus sequitur qui tardius adficit auris
 quam quae perveniunt oculorum ad lumina nostra.
 scilicet hoc densis fit nubibus et simul alte 185
 extractis aliis alias super impete miro ;
 ne tibi sit frudi quod nos inferne videmus
 quam sint lata magis quam sursum extracta quid
 extent.
 contemplator enim, cum montibus adsimulata
 nubila portabunt venti transversa per auras, 190
 aut ubi per magnos montis cumulata videbis
 insuper esse aliis alia atque urgere superne
 in statione locata sepultis undique ventis :
 tum poteris magnas moles cognoscere eorum
 speluncasque velut saxis pendentibus structas 195
 cernere, quas venti cum tempestate coorta
 conplerunt, magno indignantur murmure clausi
 nubibus, in caveisque ferarum more minantur ;

183 adficit Bentley ("alii," according to Creech, but the reviser of the present work has not found the reading in any earlier edition): adficit OQP, Wakefield, Merrill, Martin 192 superne Bentley: superna OQP, Merrill (1917), Martin

^a 124-129.

^b The same idea in 306-307, Aristotle, *Cael.* 289 A 19-26, Virgil, *Aen.* 9.588, Ovid, *Met.* 2.727-728, 14.825-826, Lucan 506

¹⁷³ In this way also the clouds tinge places with lightning occurs also when wind swift light, and the storm flashes with a quivering occurs also when wind enclosed in a cloud about within the same has made the cloud grow grows hot by its own thick round the hollow, as I explained before,^a it becomes hot by its own quick movement ; just as by its own movement ; just as you see everything become very hot and catch fire by movement, and indeed a leaden bullet even melts when it is whirled a long distance.^b When therefore and burst- violent pressure it seems suddenly to squeeze out ing the and scatter abroad seeds of fire which cause the cloud winking flashes of flame ; then follows the sound, scatters which is slower in striking the ears than what comes fire ; to the sight of our eyes. You may be sure that this is what happens, when clouds are thick and at the same time piled high one above another in a wonderful mass, that you may not be deceived because from below we see more readily how wide they are than how far they extend piled upwards. For do but apply your scrutiny when the winds carry clouds like mountains across through the air, or when you see them piled about the great mountains one above another, pressing down from above, and lying still with the winds deep buried on every side : then you will be able to recognize the great masses of them, in masses and to perceive the similitude of caverns reared with of cloud vaulted roofs, which when a tempest arises the winds fill, and with loud roaring resent their imprisonment in the clouds, menacing like wild beasts in their 7.513, Seneca, *Q.Nat.* 2.57.2. J. K. Anderson in *JHS* 92 (1972) 172 suggests that the belief, which is untrue, is derived from " the fact that leaden bullets (sling or rifle) picked up immediately after impact, are hot because their kinetic energy is converted into heat."

nunc hinc nunc illinc fremitus per nubila mittunt,
 quaerentesque viam circum versantur, et ignis 200
 semina convolvunt e nubibus atque ita cogunt
 multa, rotantque cavis flammam fornacibus intus,
 donec divolsa fulserunt nube corusci.

Hac etiam fit uti de causa mobilis ille
 devolet in terram liquidi color aureus ignis, 205
 semina quod nubes ipsas permulta necessust
 ignis habere; etenim cum sunt umore sine ullo,
 flammeus est plerumque colos et splendidus ollis.
 quippe etenim solis de lumine multa necessesit
 concipere, ut merito rubeant ignesque profundant.
 hasce igitur cum ventus agens contrusit in unum 211
 compressitque locum cogens, expressa profundunt
 semina quae faciunt flammae fulgere colores.

Fulgit item, cum rarescunt quoque nubila caeli;
 nam cum ventus eas leviter diducit euntis 215
 dissoluitque, cadant ingratis illa necessesit
 semina quae faciunt fulgorem; tum sine taetro
 terrore et sonitu fulgit nulloque tumultu.

Quod superest, quali natura praedita constant
 fulmina, declarant ictus et inusta vaporis 220
 signa notaeque gravis halantes sulphuris auras;
 ignis enim sunt haec non venti signa neque imbris.

201 e *ABL*: omitted by *OQP*: in *Creech* 205 color
Servius on Virgil, Ecl. 6.33: calor *OQP*, *Macrobius 6.5.4*,
P. Maas in Bailey's Addenda 216 ingratis *Pius (notes)*:
 ingratis *OQP*: ingratis *Lambinus (wrongly attributed to*
 508

cages: now this way now that way they send their
 growlings through the clouds, roaming round in quest
 of a way out, and rolling together the seeds of fire
 from the clouds, and thus they collect many such and
 send the flame rushing about the hollow furnaces
 within, until they have shattered the cloud and
 flashed forth coruscating.

we can see
 the winds
 trying to
 escape.

²⁰⁴ Another reason why that golden colour of flow-
 ing fire swiftly flies down to the earth is that in
 themselves the clouds must have very many seeds of
 fire; for when they are free from all wetness, their
 colour is mostly flaming and shining. In truth they
 must receive many such seeds from the sun's light,
 so that there is good cause why they should blush
 and pour forth fires. When therefore the wind driv-
 ing these has crushed them together and crowded
 them up together in a confined space, they squeeze
 out and pour forth seeds which make the colours of
 flame to lighten.

Or again it
 is squeezed
 out when
 clouds are
 crushed
 together.

²¹⁴ It lightens also when the clouds grow thin in
 the sky as well. For when the wind gently disperses
 them ^a abroad and diffuses them abroad as they pass,
 those seeds which make lightning must fall perforce.
 Then the lightning comes without hideous terror and
 din and without noise.

or falls as
 they grow
 thin.

²¹⁹ Furthermore, what kind of a nature thunder-
 bolts have, is made clear by the strokes and the
 marks of heat burnt in, and the dints breathing
 offensive gusts of sulphur; for these are the marks

3. Thunder-
 bolts

^a *Lucr. writes eas (215)*, as though not *nubila*, but *nubes*,
 had preceded. *Cf. 456, 1.352.*

Diels by recent editors) 219 quali *Lambinus*: omitted
 by *OQABL* 220 ictus *ABF*: ictu *OQL*

praeterea saepe accendunt quoque tecta domorum
et celeri flamma dominantur in aedibus ipsis.

Hunc tibi subtilem cum primis ignibus ignem 225
constituit natura minutis mobilibusque
corporibus, cui nil omnino obsistere possit.
transit enim validum fulmen per saepta domorum,
clamor ut ac voces, transit per saxa, per aera,
et liquidum puncto facit aes in tempore et aurum.
curat item vasis integris vina repente 231
diffugiant, quia nimirum facile omnia circum
conlaxat rareque facit lateramina vasi
adveniens calor eius, et insinuat in ipsum
mobiliter soluens differt primordia vini. 235
quod solis vapor aetatem non posse videtur
efficere usque adeo pollens fervore corusco :
tanto mobilior vis et dominantior haec est.

Nunc ea quo pacto gignantur et impete tanto
fiant, ut possint ictu discludere turris, 240
disturbare domos, avellere tigna trabesque,
et monimenta virum commoliri atque cedere,
exanimare homines, pecudes prosternere passim,
cetera de genere hoc qua vi facere omnia possint,
expediam, neque te in promissis plura morabor. 245

Fulmina gignier e crassis alteque putandumst
nubibus extractis ; nam caelo nulla sereno
nec leviter densis mittuntur nubibus umquam.
nam dubio procul hoc fieri manifesta docet res,

223 saepe *Codex Placentinus* (*Landi* 33): se *OQL*: seque *AB*:
per se *F* 233 vasi (*gen. sing.*) *Martianus Capella* 3.295, first
adopted not by *Diels* (as *Bailey* and *Büchner* say), but by *Cifanius*,
whom *Lambinus* (1570) and *Wakefield* follow: vasis *OQP*

^a Cf. 1.489-490.

^b Cf. *Pliny, HN* 2.51.137.

of fire, not of wind or rain. Besides, they often set
roofs also alight, and with quick flame take full
mastery within the buildings themselves.

²²⁵ This fire, let me tell you, most refined of all
fires, nature has composed of elements so minute and
swift that nothing whatever can block its way. For
the strong thunderbolt passes through a walled house
just as sounds and voices do,^a it passes through stone,
through bronze, and in an instant melts bronze and
gold. Also it makes wine suddenly evaporate with-
out harming the vessels,^b doubtless because its heat
approaching easily relaxes all the earthenware of the
vessel and makes it porous, then penetrating into the
vessel itself with quick movement dissolves and dis-
perses abroad the first-beginnings of the wine. And
this you see that the sun's heat is unable to do in an
age, powerful as it is with its quivering blaze : so
much more swift-moving and overpowering is this
force.

are made
of the most
refined fire

which has
strange
effects.

²³⁹ And now in what manner these thunderbolts
are produced, and made with so strong a rush that
they can split open towers with a stroke, overturn
houses, tear out beams and rafters, demolish and
displace the monuments of great men, kill human
beings, lay low animals all around, and by what force
they can do all else of this kind, I will expound, and
delay you no longer with promises.

I will ex-
plain their
power.

²⁴⁶ We must believe that thunderbolts are pro-
duced from clouds thick and piled up high ; for they
are never emitted in a serene sky nor when the
clouds are lightly packed. Indeed manifest facts
prove this beyond all doubt, because at such a time ^c

They are
produced
when clouds
are piled
thick and
high :

^c When thunderbolts occur.

quod tunc per totum concresecunt aera nubes, 250
 undique uti tenebras omnis Acherunta reamur
 liquisse et magnas caeli complesse cavernas :
 usque adeo taetra nimborum nocte coorta
 independent atrae formidinis ora superne,
 cum commoliri tempestas fulmina coeptat. 255

Praeterea persaepe niger quoque per mare nim-
 bus,
 ut picis e caelo demissum flumen, in undas
 sic cadit effertus tenebris procul et trahit atram
 fulminibus gravidam tempestatem atque procellis,
 ignibus ac ventis cum primis ipse repletus, 260
 in terra quoque ut horrescant ac tecta requirant.
 sic igitur supra nostrum caput esse putandumst
 tempestatem altam ; neque enim caligine tanta
 obruerent terras, nisi inaedificata superne
 multa forent multis exempto nubila sole ; 265
 nec tanti possent venientes opprimere imbres,
 flumina abundare ut facerent camposque natate,
 si non extractis foret alte nubibus aether.

Hic igitur ventis atque ignibus omnia plena
 sunt ; ideo passim fremitus et fulgura fiunt. 270
 quippe etenim supra docui permulta vaporis
 semina habere cavas nubes, et multa necessessest
 concipere ex solis radiis ardoreque eorum.
 hoc ubi ventus eas idem qui cogit in unum
 forte locum quemvis, expressit multa vaporis 275
 semina seque simul cum eo commiscuit igni,
 insinuatus ibi vertex versatur in arto
 et calidis acuit fulmen fornacibus intus ;
 nam duplici ratione accenditur : ipse sua cum

266 tanti . . . imbres *Lambinus* (1570): tanto . . . imbris *OQP*

^a 251-254 = 4.170-173 with substitution of *reamur* for *rearis*. See note on 4.173.

clouds mass together throughout the air, so that we think that from every side all the darkness has deserted Acheron to fill the great caverns of the sky : to such a degree under the hideous night of cloud does the countenance of black terror overhang us on high,^a when the tempest begins to forge her thunderbolts.

²⁵⁶ Besides very often by sea also, a black cloud, ^{what we see} like a flood of pitch poured down from the sky,^b ^{is the lowest} all stuffed with darkness afar, falls thus upon the waters, ^{part of a} and draws with it a black tempest teeming with thunderbolts and storms, itself full as full can be with fires and winds, so that on land also men shiver and run for shelter. In this way, therefore, we must believe the tempest to reach high above our heads. For the clouds would not submerge the earth with such blackness, unless there were many built high above many, robbing us of the sun ; nor could such mighty rains come to overwhelm us, so as make rivers overflow and plains swim, if the ether were not full of clouds piled high.

²⁶⁹ In such a case, then, all is full of winds and fires, ^{They are} therefore rumblings and lightnings are made every- ^{full of the} where. For indeed I have explained above ^{seeds of} ^{fire,} that the hollow clouds contain very many seeds of heat, and they must of necessity receive many from the sun's rays and their warmth. Therefore when the same wind which happens to collect them together ^{which the} into any one place, has pressed out many seeds of ^{whirling} heat and has mingled itself together with that fire, ^{wind col-} the whirlwind, finding its way in, turns about there in ^{lects, and} the narrow space, and sharpens the thunderbolt ^{sharpens} in the hot furnace within. For the wind is kindled in ^{the} ^{thunder-} ^{bolt in} ^{that} ^{fire.}

^b Cf. Homer, *Il.* 4.275-278.

^c 206-210.

mobilitate calescit et e contagibus ignis. 280
 inde ubi percaluit venti vis et gravis ignis
 impetus incessit, maturum tum quasi fulmen
 percindit subito nubem, ferturque coruscis
 omnia luminibus lustrans loca percitus ardor.
 quem gravis insequitur sonitus, displosa repente 285
 opprimere ut caeli videantur templa superne.
 inde tremor terras graviter pertemptat, et altum
 murmura percurrunt caelum ; nam tota fere tum
 tempestas concussa tremit fremitusque moventur.
 quo de concussu sequitur gravis imber et uber, 290
 omnis uti videatur in imbrem vertier aether
 atque ita praecipitans ad diluviem revocare :
 tantus discidio nubis ventique procella
 mittitur, ardenti sonitus cum provolat ictu.

Est etiam cum vis extrinsecus incita venti 295
 incidit in gravidam maturo fulmine nubem ;
 quam cum percudit, extemplo cadit igneus ille
 vertex quem patrio vocitamus nomine fulmen.
 hoc fit idem in partis alias, quocumque tulit vis.

Fit quoque ut interdum venti vis missa sine igni 300
 igniscat tamen in spatio longoque meatu,
 dum venit, amittens in cursu corpora quaedam
 grandia quae nequeunt pariter penetrare per auras ;
 atque alia ex ipso conradens aere portat
 parvola, quae faciunt ignem commixta volando, 305
 non alia longe ratione ac plumbea saepe

281 venti vis et gravis ignis *Bentley* : gravis venti vis igni
 OQ 296 gravidam *Bentley* (cf. 259, 440) : validam Q
 corr., BF : valida OQAL : calidam *Bernays*

two ways, of itself by the heat which comes from its own speed, and by contact with the fire. Next, when the force of the wind has grown hot through and through and the strong impulse of the fire has thrust in, then the thunderbolt, now as it were ripe, suddenly cleaves the cloud, and out flies the speeded flame, sweeping over all places with flashing lights. Next follows a loud crash, so that the regions of the sky above seem suddenly to burst apart and overwhelm us. Then tremblings violently assail the earth, murmurs roll through the lofty sky, for then almost all the tempest quivers with the shock and roarings are aroused. From this shock follows rain heavy and full, so that the whole ether seems to be turning into rain, and thus tumbling violently down, again to make all a deluge : so great is the torrent discharged by the bursting of the cloud and the storm of wind, when the sound flies forth with a fiery blow.

²⁹⁵ There are times also when a force of wind stirred up from without falls upon a cloud pregnant with a thunderbolt fully formed, and as soon as the wind has burst it, in an instant that fiery vortex falls, which in our mother tongue we call thunderbolt. The same happens in other directions, wherever the force has inclined.

³⁰⁰ It happens also at times that a force of wind sped forth without fire, yet takes fire in its long journey through space, losing in its course as it comes on certain bodies too large to pass equally well through the air, and scraping together from the air itself and carrying with it other very small bodies, which commingled together with it produce fire during the flight ; in much the same way as a leaden

When it is ready, the wind drives it forth,

with noise

and rain.

Or wind splits a cloud from without ;

or it takes fire by moving,

fervida fit glans in cursu, cum multa rigoris
 corpora dimittens ignem concepit in auris.

Fit quoque ut ipsius plagae vis excitet ignem,
 frigida cum venti pepulit vis missa sine igni, 310
 nimirum quia, cum vementi perculit ictu,
 confluere ex ipso possunt elementa vaporis
 et simul ex illa quae tum res excipit ictum ;
 ut, lapidem ferro cum caedimus, evolat ignis,
 nec, quod frigida vis ferrist, hoc setius illi 315
 semina concurrunt calidi fulgoris ad ictum.
 sic igitur quoque res accendi fulmine debet,
 opportuna fuit si forte et idonea flammis.
 nec temere omnino plane vis frigida venti
 esse potest, ea quae tanta vi missa supernest, 320
 quin, prius in cursu si non accenditur igni,
 at tepefacta tamen veniat commixta calore.

Mobilitas autem fit fulminis et gravis ictus,
 et celeri ferme percurrunt fulmina lapsu,
 nubibus ipsa quod omnino prius incita se vis 325
 colligit et magnum conamen sumit eundi,
 inde ubi non potuit nubes capere inpetis auctum,
 exprimitur vis atque ideo volat impete miro,
 ut validis quae de tormentis missa feruntur.

Adde quod e parvis et levibus est elementis, 330
 nec facilest tali naturae obsistere quicquam ;
 inter enim fugit ac penetrat per rara viarum,
 non igitur multis offensibus in remorando
 haesitat, hanc ob rem celeri volat impete labens.

^a Cf. 178-179 and see note there.

^b On the tmesis *inter . . . fugit*, see note on 3.860.

bullet often grows hot in its course,^a when casting
 off many bodies of coldness it catches fire in the air.

³⁰⁹ It may be also that the very force of the blow or strikes
out fire by
a blow,
 produces fire, when a force of wind, sped forth cold
 without fire, has struck ; doubtless because, when it
 has smitten with a violent blow, elements of heat may
 flow together from the wind itself and at the same
 time from that thing which then receives the blow ;
 just as, when we strike stone with iron, out flies fire, like flint
and iron.
 nor do the seeds of hot fire any the less run together
 at the blow because iron is a cold thing. So there-
 fore also a thing must be kindled by the thunderbolt
 if it happens to be fit and proper for flames. And
 no force of wind can easily be completely and utterly
 cold which has been sped from above with such force,
 but, even if it is not first kindled by fire in its course,
 it must nevertheless arrive warm and mingled with
 heat.

³²³ The speed, moreover, and heavy blow of the The speed
of a
thunderbolt
comes from
its first im-
pulse ;
 thunderbolt comes about, and the bolts usually run
 with so quick a fall, because first of all within the
 clouds a force is always aroused and collects itself and
 takes on a mighty energy of movement, and then,
 when the cloud can no longer contain the increasing
 rush, the force is pressed out and therefore flies with
 a wonderful rush, like missiles which are hurled from
 powerful catapults.

³³⁰ Moreover, it consists of small and smooth ele- and it
consists of
small and
smooth
elements ;
 ments, and it is not easy for anything to bar the
 way of such a substance, since it speeds in between ^b
 and penetrates through narrow passages ; therefore
 not many obstacles can delay it or check it, and so it
 flies smoothly with a swift rush.

Deinde, quod omnino natura pondera deorsum 335
omnia nituntur, cum plagast addita vero,
mobilitas duplicatur et impetus ille gravescit,
ut vehementius et citius quaecumque morantur
obvia discutiat plagis itinerque sequatur. 339

Denique quod longo venit impete, sumere debet
mobilitatem etiam atque etiam, quae crescit eundo
et validas auget viris et roborat ictum ;
nam facit ut quae sint illius semina cumque
e regione locum quasi in unum cuncta ferantur,
omnia coniciens in eum volventia cursum. 345
forsitan ex ipso veniens trahat aere quaedam
corpora quae plagis incendunt mobilitatem.

Incolumisque venit per res atque integra transit
multa, foraminibus liquidus quia transviat ignis.
multaque perfigit, cum corpora fulminis ipsa 350
corporibus rerum inciderunt, qua texta tenentur.
dissoluit porro facile aes aurumque repente
confervefacit, e parvis quia facta minute
corporibus vis est et levibus ex elementis,
quae facile insinuantur et insinuata repente 355
dissoluunt nodos omnis et vincla relaxant.

Autumnoque magis stellis fulgentibus apta
concutitur caeli domus undique totaque tellus,
et cum tempora se veris florentia pandunt.
frigore enim desunt ignes, ventique calore 360
deficiunt neque sunt tam denso corpore nubes.

349 transviat *OQP* : transvolat *Naugerius* 357 apta
Turnebus, cf. *Ennius*, *Ann.* 29, 159 caelum . . . stellis ful-
gentibus aptum, *Lucr.* 5.1204 : alta *OQP*, *Martin* comparing
2.1110

335 Then, moreover, all weights always naturally
thrust downwards ; but when a blow is added, the
velocity is doubled, and that first impulse grows
heavier, so that more violently and more quickly it
disperses with its blows whatever meets it to bring
delay, and follows its path.

the impulse
to its
weight
doubles the
speed,

340 Again, because it comes rushing from a long
distance, it must add ever more and more to its
velocity, which grows by moving, increasing its
mighty strength and stiffening the blow. For this ^a
causes all the seeds of the thunderbolt to be carried
straight onwards, as one may say, into one place,
driving them all together as they roll into that single
path. Perhaps as it goes it draws from the air itself
certain bodies which kindle velocity by their blows.

which in-
creases with
the
distance.

348 And it passes through things without hurting
them, leaving many intact after its transit, because
the fire being fluid takes its way through them by
their pores. And many it transpierces, when the
very particles of the thunderbolt have fallen upon
the points where the particles of the things are joined
in the texture. Furthermore, it easily dissolves
bronze and melts gold in a moment, because its mass
is made of bodies extremely small and elements all
smooth, which easily make their way in, and having
so made their way, in a moment loosen all knots
apart and slacken all bonds.

It passes
through
the pores
of many
things,
without
harm,

but melts
bronze and
gold.

357 And it is in autumn that the habitation of the
sky, set with shining stars, is more apt to be shaken
all around, along with the whole earth, and when the
flowering season of spring displays itself. For in the
cold fires fail, and in the heat winds are lacking and
the clouds are not so dense in their substance. When

Autumn
and spring
are the
commonest
times for
thunder-
bolts ;

^a Its velocity.

interutrasque igitur cum caeli tempora constant,
 tum variae causae concurrunt fulminis omnes.
 nam fretus ipse anni permiscet frigus et aestum,
 quorum utrumque opus est fabricanda ad fulmina
 nubi, 365
 ut discordia sit rerum, magnoque tumultu
 ignibus et ventis furibundus fluctuet aer.
 prima caloris enim pars est postrema rigoris,
 tempus id est vernum ; quare pugnare necessest
 dissimilis res inter se turbareque mixtas. 370
 et calor extremus primo cum frigore mixtus
 volvitur, autumnus quod fertur nomine tempus,
 hic quoque configunt hiemes aestatibus acres.
 propterea freta sunt haec anni nominanda,
 nec mirumst, in eo si tempore plurima fiunt 375
 fulmina tempestasque cietur turbida caelo,
 ancipiti quoniam bello turbatur utrimque,
 hinc flammis, illinc ventis umoreque mixto.

Hoc est igniferi naturam fulminis ipsam
 perspicere et qua vi faciat rem quamque videre, 380
 non Tyrrhena retro volentem carmina frustra
 indicia occultae divum perquirere mentis,
 unde volans ignis pervenerit aut in utram se
 verterit hinc partim, quo pacto per loca saepta
 insinuarit, et hinc dominatus ut extulerit se, 385
 quidve nocere queat de caelo fulminis ictus.

365 nubi *Lachmann, cf. Manilius 1.852-853 : nobis OQP, Merrill (1917), Büchner* 374 freta *Lachmann (cf. 364) :*
omitted by OQP

^a See note on 4.1030.

^b 383-385 = 87-89. On the augural practice to which *Lucr.* refers, see note on 86.

^c Not the material damage, but the pollution caused to a
 520

therefore the temperature of the sky is set between the two, then all the different causes of the thunderbolt are combined. For the choppy currents ^a of the year mingle cold and heat—each of which is necessary for the cloud to make thunderbolts—, so that there is discord amongst things, and the air billows furiously in wild tumult with fires and winds. For the first part of warmth is the last part of cold, that is the springtime, for which reason these unlike things must fight and make confusion when mixed together. And when the last heat mixed with the first cold comes round, which is called by the name of autumn time, here also bitter winters come into conflict with summers. This is why these are to be called the choppy currents of the year ; and it is no wonder if at that time very many thunderbolts are made, and a turbulent tempest is stirred up in the sky, since all is confusion with well-matched warfare on both sides, on this part flames, and on that, winds and water commingled.

³⁷⁹ This is to understand the true nature of the fiery thunderbolt, and to see by what power it plays its part ; not by unrolling the scrolls of Tyrrhenian charms, vainly to search for signs of the hidden purpose of the gods, to learn whence the flying fire has come or into which of the two quarters it has turned hence, in what manner it has penetrated through walled places and after winning mastery how it has conveyed itself out,^b or what harm ^c the stroke of a bolt from heaven can do.

place struck by lightning. Such a place was called *bidental* after the *bidentes* (= animals for sacrifice) by whose slaughter it was purified.

Quod si Iuppiter atque alii fulgentia divi
 terrifico quatiunt sonitu caelestia templa
 et iaciunt ignem quo cuiquest cumque voluntas,
 cur quibus incautum scelus aversabile cumquest 390
 non faciunt icti flammās ut fulguris halent
 pectore perfixo, documē mortalibus acre,
 et potius nulla sibi turpi conscius in re
 volvitur in flammās innoxius inque peditur
 turbine caelesti subito correptus et igni? 395

Cur etiam loca sola petunt frustra que laborant?
 an tum brachia consuescunt firmant que lacertos?
 in terraque patris cur telum perpetiuntur
 obtundi? cur ipse sinit neque parcat in hostis?
 denique cur numquam caelo iacit undique puro 400
 Iuppiter in terras fulmen sonitus que profundit?
 an simul ac nubes successere, ipse in eas tum
 descendit, prope ut hinc teli determinet ictus?
 in mare qua porro mittit ratione? quid undas
 arguit et liquidam molem campos que natantis? 405

Praeterea si vult caveamus fulminis ictum,
 cur dubitat facere ut possimus cernere missum?
 si nec opinantis autem vult opprimere igni,
 cur tonat ex illa parte, ut vitare queamus?
 cur tenebras ante et fremitus et murmura concit?

Et simul in multas partis qui credere possis 411
 mittere? an hoc ausis numquam contendere factum,
 ut fierent ictus uno sub tempore plures?
 at saepe numero factum fierique necessest,

^a Cf. 2.1103-1104, Aristophanes, *Nub.* 399-400.

^b Cf. 2.1102-1103.

^c From which he aims.

^d Cf. Cicero, *Div.* 2.19.44, where reference is also made to the thunderbolt striking the sea, mountains, and deserts.

³⁸⁷ But if Jupiter and other gods shake the shining regions of heaven with appalling din, if they cast fire whither it may be the will of each one, why do they not see to it that those who have not refrained from some abominable crime shall be struck and breathe out sulphurous flames from breast pierced through, a sharp lesson to mankind? Why rather does one with no base guilt on his conscience roll in flames all innocent, suddenly involved in a tornado from heaven and taken off by fire? ^a

for if the gods cast (thunderbolts, why do they not strike the guilty

instead of the innocent?

³⁹⁶ Why again do they aim at deserts and waste their labour? Or are they then practising their arms and strengthening their muscles? ^b And why do they suffer the Father's bolt to be blunted against the earth? Why does he himself allow this, instead of saving it for his enemies? Why again does Jupiter never cast a bolt on the earth and sound his thunder, when the heaven is clear on all sides? Does he wait until clouds have come up, to descend into them himself, that he may be near by to direct from them the blow of his bolt? With what purpose again does he strike the sea? What has he against the waves, the mass of water, the swimming plains?

Why do they waste their labour? Are they practising?

Why does Jupiter not cast a bolt from the clear sky?

Why does he strike the sea?

⁴⁰⁶ Furthermore, if he desires that we be on our guard against the thunderstroke, why does he neglect to provide that we may see it when it is hurled? If however he wishes to crush us at unawares with his fire, why does he thunder from that quarter, ^c so that we can avoid it, why gather the darkness first with crashings and growlings?

Does he wish us to avoid the blow or not?

⁴¹¹ And how could you believe him to shoot in many directions at once? ^d Or would you make bold to say that this never is done, never many blows made at one time? In fact, this is often done and

How can he strike in many directions at once?

ut pluere in multis regionibus et cadere imbris, 415
fulmina sic uno fieri sub tempore multa.

Postremo cur sancta deum delubra suasque
discutit infesto praeclaras fulmine sedes,
et bene facta deum frangit simulacra suisque
demit imaginibus violente volnere honorem? 420
altaque cur plerumque petit loca plurimaque eius
montibus in summis vestigia cernimus ignis?

Quod superest, facilest ex his cognoscere rebus,
presteras Graii quos ab re nominatarunt, 425
in mare qua missi veniant ratione superne.
nam fit ut interdum tamquam demissa columna
in mare de caelo descendat, quam freta circum
fervescunt graviter spirantibus incita flabris,
et quaecumque in eo tum sint depressa tumultu
navigia in summum veniant vexata periculum. 430

Hoc fit ubi interdum non quit vis incita venti
rumpere quam coepit nubem, sed deprimit, ut sit
in mare de caelo tamquam demissa columna,
paulatim, quasi quid pugno brachique superne
coniectu trudatur et extendatur in undas; 435
quam cum discidit, hinc prorumpitur in mare venti
vis et fervorem mirum concinnat in undis;
versabundus enim turbo descendit et illam
deducit pariter lento cum corpore nubem;
quam simul ac gravidam detrusit ad aequora ponti,

^a Cf. 2.1101-1102, Aristophanes, *Nub.* 401.

^b Cf. Cicero, *Div.* 1.12.19, quoting his own verses, Seneca, *QNat.* 2.42.2.

^c *πρηστήρ*, related to *πρήθω* and *πύμπρημι*, means a fiery whirlwind or waterspout (cf. Pliny, *HN* 2.48.133). However,

must be done, that as showers and rain fall in many regions, so at one time many thunderbolts fall.

⁴¹⁷ Lastly, why does he shatter holy shrines of the gods,^a and even his own illustrious habitations, with the fatal thunderbolt, why smash fine-wrought images of the gods and rob his own statues^b of their grandeur with a violent wound? And why does he generally attack high places, why do we see most traces of his fire on the mountain-tops?^c

⁴²³ To pass on, it is easy from these thoughts to understand in what way those things which the Greeks call from their nature *presteres*^c come down from above into the sea. For it happens at times that a kind of column let down from the sky comes down into the sea, around which the waters boil stirred up by the heavy blast of the winds; and if any ships are caught in that tumult, they are tossed about and come into great peril.

⁴³¹ This happens when at times the force of the wind stirred up is unable to burst the cloud which it attempts to burst, but depresses it so that it is like a column let down from the sky into the sea, little by little, as though something were being pushed and stretched out towards the waves by a fist and the thrust of an arm from above; and when the force of the wind has torn it asunder, it bursts forth from the cloud upon the sea and causes a wonderful boiling in the waves; for the whirlwind turns as it comes down, and brings down along with it that cloud of yielding body; but as soon as it has thrust down the teeming cloud upon the surface of the ocean, finally it

Lucr. does not mention fire in his account, which should be compared with Epicurus, *Ep. ad Pyth.* 104-105.

ille in aquam subito totum se inmittit et omne 441
excitat ingenti sonitu mare fervere cogens.

Fit quoque ut involvat venti se nubibus ipse
vertex conradens ex aere semina nubis,
et quasi demissum caelo prestera imitetur. 445
hic ubi se in terras demisit dissoluitque,
turbinis inmanem vim provomit atque procellae.
sed quia fit raro omnino montisque necessesit
officere in terris, apparet crebrius idem
prospectu maris in magno caeloque patenti. 450

Nubila conerescunt, ubi corpora multa volando
hoc super in caeli spatio coiere repente
asperiora, modis quae possint indupedita
exiguus tamen inter se compressa teneri.
haec faciunt primum parvas consistere nubes ; 455
inde ea comprehendunt inter se conque gregantur
et coniungendo crescunt ventisque feruntur
usque adeo donec tempestas saeva coortast.

Fit quoque uti montis vicina cacumina caelo
quam sint quoque magis, tanto magis edita fument
adsidue fulvae nubis caligine crassa 461
propterea quia, cum consistunt nubila primum,
ante videre oculi quam possint tenvia, venti
portantes cogunt ad summa cacumina montis.
hic demum fit uti turba maiore coorta 465
et condensa queant apparere et simul ipso
vertice de montis videantur surgere in aethram.

447 procellae *F*: procellat *OQABI*, *Isaac Voss* (according
to *Havercamp*), *Wakefield* 452 super *OQP* (cf. 481):
supero *Lachmann* 453 modis *Q*, *O corr.*, *P*: modos *O*
(?): moris *Lachmann* 454 compressa *Marullus* (cf.
456): compressa *OQP*

^a Cf. Epicurus, *Ep. ad Pyth.* 99.

the wind suddenly plunges itself in full force into bursts and
the water and stirs up the whole sea, compelling it makes the
to boil with a huge noise. sea boil.

443 Sometimes too the vortex of wind enwraps Or a vortex
itself in clouds, scraping together seeds of cloud from of wind
the air, and in a way imitates the *prester* let down gathers
from the sky. When this has let itself down upon cloud about
the land and dissolved, it vomits forth a prodigious it.
violence of whirlwind and storm. But because this
rarely happens at all, and on land the mountains
must get in the way, this same is seen more often
upon the sea with its wide prospect and open sky.

451 Clouds ^a mass together, when in the space of 5. Clouds
the sky above a large number of flying bodies have gather
suddenly come together, which are rougher and, when flying
though they are entangled in a slight degree, are yet particles
able to hold together in mutual attachment. These become
first cause small clouds to be formed; then these entangled,
take hold together and cluster together, and by the and the
combining together grow, and are carried along by cluster thus
the winds until the time when a wild tempest arises. increases.

459 It happens also that the nearer in each case They are
the mountain-tops are to heaven, so much the more seen especi-
busily in their lofty place they smoke with the thick ally about
blackness of a dust-coloured cloud; because, when mountain-
the clouds first take their being, before the eye can tops.
see them, so thin they are, the winds drive and
carry them together to the mountain-tops. Now at
length gathered together in greater mass and packed
together they are able to show themselves, and
appear at the same time to rise from the very peak

^b *ea* (456) = *nubila*, though *nubes* (455) has preceded. Cf.
215.

nam loca declarat sursum ventosa patere
res ipsa et sensus, montis cum ascendimus altos.

Praeterea permulta mari quoque tollere toto 470
corpora naturam declarant litore vestes
suspensae, cum concipiunt umoris adhaesum.
quo magis ad nubis augendas multa videntur
posse quoque e salso consurgere momine ponti ;
nam ratio consanguineast umoribus omnis. 475

Praeterea fluviis ex omnibus et simul ipsa
surgere de terra nebulas aestumque videmus,
quae velut halitus hinc ita sursum expressa feruntur
suffunduntque sua caelum caligine et altas
sufficiunt nubis paulatim conveniundo ; 480
urget enim quoque signiferi super aetheris aestus
et quasi densendo subtexit caerula nimbis.

Fit quoque ut hunc veniant in caelum extrinsecus
illa
corpora quae faciunt nubis nimbosque volantis ;
innumerabilem enim numerum summamque profundi
esse infinitam docui, quantaque volarent 486
corpora mobilitate ostendi, quamque repente
inmemorable per spatium transire solerent.
haud igitur mirumst si parvo tempore saepe
tam magnis nubis tempestas atque tenebrae 490
coperiant maria ac terras impensa superne,
undique quandoquidem per caulas aetheris omnis
et quasi per magni circum spiracula mundi
exitus introitusque elementis redditus extat.

483 hunc *OQL* (cf. 2.1097) : huc *A*, perhaps rightly : hinc
BF 490 nimbis *Lachmann* : montis *OQP*

^a The moisture of the sea and the moisture contained in the clouds.

^b 1.984-1051.

^c 2.142-166.

of the mountain into the ether. For the very facts and our own feelings when we ascend a high mountain make it clear that the open spaces above are full of wind.

⁴⁷⁰ Besides, that nature takes up very many bodies over the whole sea is made clear, when clothes are hung up on the shore and absorb the sticky moisture : which makes it more likely that many bodies can gather upwards to swell the clouds from the salt movement of the ocean, since there is a complete kinship between both these moistures.^a

⁴⁷⁶ Besides, from all rivers and also from the earth itself we see clouds and steam arising, which exhaled from these sources like breath are carried up in this way, and suffuse the sky with their blackness and bring up supplies to the clouds on high as little by little they come together ; for the heat also of the starry ether presses on them from above, and by packing them close seems to weave a texture of cloud beneath the blue.

⁴⁸³ It also happens that those bodies which make clouds and flying storm-rack come into our sky from without ; for I have proved ^b that their number is innumerable and the sum of the deep infinite, and I have shown ^c with what velocity these bodies fly, and how in an instant they are accustomed to traverse a space beyond telling. It is no wonder then if often within a short time tempest and darkness overhanging above cover up sea and land with storm-clouds so great, since from all quarters through all the passages of the ether, and as it were through the breathing-channels of the great world around, there are comings-in and goings-out for the elements.

Many particles arise from sea,

rivers, and earth ;

and the ether drives them down.

Some also come into the sky from outside the world.

Nunc age, quo pacto pluvius conrescat in altis 495
 nubibus umor, et in terras demissus ut imber
 decidat, expediam. primum iam semina aquai
 multa simul vincam consurgere nubibus ipsis
 omnibus ex rebus, pariterque ita crescere utrumque,
 et nubis et aquam quaecumque in nubibus extat, 500
 ut pariter nobis corpus cum sanguine crescit,
 sudor item atque umor quicumque est denique
 membris.

concipiunt etiam multum quoque saepe marinum
 umorem, veluti pendentia vellera lanae,
 cum supera magnum mare venti nubila portant. 505
 consimili ratione ex omnibus amnibus umor
 tollitur in nubis. quo cum bene semina aquarum
 multa modis multis convenere undique adaucta,
 confertae nubes umorem mittere certant
 dupliciter; nam vis venti contrudit, et ipsa 510
 copia nimborum turba maiore coacta
 urget, et e supero premit ac facit effluere imbris.
 praeterea cum rarescunt quoque nubila ventis
 aut dissolvuntur, solis super icta calore,
 mittunt umorem pluvium stillantque, quasi igni 515
 cera super calido tabescens multa liquescat.

Sed vemens imber fit, ubi vehementer utraque
 nubila vi cumulata premuntur et impete venti.
 at retinere diu pluviae longumque morari
 consuerunt, ubi multa cientur semina aquarum 520
 atque aliis aliae nubes nimbique rigantes
 insuper atque omni vulgo de parte feruntur,
 terraque cum fumans umorem tota redhalat.

509 umorem *Munro* (cf. 515): *viventi* (from 510 vis venti)
 OQ

^a Cf. Epicurus, *Ep. ad Pyth.* 99-100.

495 Now attend, and I will explain in what manner 6. Rain is
 rainy moisture ^a grows together in the clouds on high, caused
 and how showers fall sent down upon the earth. because
 First of all you will concede that many seeds of water moisture
 rise upward together with the clouds themselves rises to the
 from things of all sorts, and that in this way both clouds,
 grow together, the clouds and whatever water is in
 the clouds, just as in ourselves body grows along
 with blood, sweat also and in a word whatever
 moisture is in the frame. The clouds also often take
 up a great deal of sea-water besides, like hanging
 fleeces of wool, when the winds carry clouds above
 the great sea. In like fashion water is raised to the
 clouds from all rivers. And when into these clouds
 very many seeds of waters in many ways have
 gathered together, being increased from all sides, the
 clouds stuffed full strive to discharge the moisture in
 two ways: for the force of the wind thrusts them
 together, and the very mass of the clouds, when a
 greater pack than usual has been collected, pushes
 and presses down from above and makes the showers
 flow out. Besides where the clouds are blown thin
 by the winds, or loosened abroad, struck from above
 by the sun's heat, they emit rainy moisture and drip,
 as wax over a hot fire melts and grows fluid apace.

517 But there is a violent downpour of rain, when
 the clouds are violently pressed by both forces, by
 their own pile and by the rushing of the wind. But
 rains are accustomed to persist and linger for a great
 while, when many seeds of waters are put in motion
 and clouds over clouds, storm-rack over storm-rack
 are carried along from every part, streaming from
 above, and when the earth smoking breathes back
 the moisture everywhere.

which
 becoming
 soaked
 discharge it
 downwards

by pressure
 of the wind
 and by
 their own
 weight;

or when
 they be-
 come thin,
 melted by
 the sun's
 heat.

Violent
 showers

and pro-
 longed
 rains.

Hic ubi sol radiis tempestatem inter opacam
adversa fulsit nimborum asparagine contra, 525
tum color in nigris existit nubibus arqui.

Cetera quae sursum crescunt sursumque creantur,
et quae concrescunt in nubibus, omnia, prorsum
omnia, nix venti grando. gelidaeque pruinae
et vis magna geli, magnum duramen aquarum, 530
et mora quae fluvios passim refrenat aventis,
perfacilest tamen haec reperire animoque videre
omnia quo pacto fiant quareve creentur,
cum bene cognoris elementis reddita quae sint.

Nunc age, quae ratio terrai motibus extet 535
percipe. et in primis terram fac ut esse rearis
subter item ut supera ventosis undique plenam
speluncis, multosque lacus multasque lacunas
in gremio gerere et rupes deruptaque saxa ;
multaque sub tergo terrai flumina tecta 540
volvère vi fluctus summersaque saxa putandumst ;
undique enim similem esse sui res postulat ipsa.

His igitur rebus subiunctis suppositisque
terra superne tremit magnis concussa ruinis,
subter ubi ingentis speluncas subruit aetas ; 545
quippe cadunt toti montes, magnoque repente
concussu late dissipant inde tremores.
et merito, quoniam plaustris concussa tremescunt
tecta viam propter non magno pondere tota,

^a Cf. Epicurus, *Ep. ad Pyth.* 109-110.

^b Hail, snow, dew, frost, and ice are explained (in that order) by Epicurus, *Ep. ad Pyth.* 109-110.

^c Cf. Epicurus, *Ep. ad Pyth.* 105-106.

524 When in such a case the sun shines with his rays amidst the gloomy tempest against the opposite showers from the clouds, then the hues of the rainbow ^a stand forth in the black clouds. When the sun shines upon the rain, the rainbow appears.

527 The other things that grow above and are produced above, and those which collect in the clouds, all, absolutely all, snow, winds, hail, and cold frosts, and the great power of ice,^b that great hardener of the waters, that obstacle which everywhere curbs back the eager rivers, how all these are produced and why they are made it is very easy to find out in spite of all and to see with the mind's eye, when you have fully understood what qualities belong to their elements. Snow, wind, hail, frost, ice can all be understood by understanding their elements.

535 Now attend and learn what is the reason for earthquakes.^c And in the first place, be sure to consider the earth below as above to be everywhere full of windy caverns, bearing many lakes and many pools in her bosom with rocks and steep cliffs ; and we must suppose that many a hidden stream beneath the earth's back violently rolls its waves and submerged boulders ; for the facts themselves demand that she be everywhere like herself. II. The earth. 1. Earthquakes. There are caverns, pools, and rivers beneath the surface of the earth.

543 Since therefore she has these things attached beneath her and ranged beneath, the upper earth trembles under the shock of some great collapse when time undermines those huge caverns beneath ; for whole mountains fall, and with the great shock the tremblings in an instant creep abroad from the place far and wide—and with good reason, since when waggons of no great weight pass, whole buildings hard by the road tremble with the shock, nor and internal collapses cause the whole to tremble.

nec minus †exultantes dupuis cumque vim† 550
ferratos utrimque rotarum succutit orbes.

Fit quoque, ubi in magnas aquae vastasque lacunas
gleba vetustate e terra provolvitur ingens,
ut iactetur aquae fluctu quoque terra vacillans,
ut vas interdum non quit constare, nisi umor 555
destitit in dubio fluctu iactarier intus.

Praeterea ventus cum per loca subcava terrae
collectus parte ex una procumbit et urget
obnixus magnis speluncas viribus altas,
incumbit tellus quo venti prona premit vis. 560
tum supera terram quae sunt extracta domorum
ad caelumque magis quanto sunt edita quaeque,
inclinata minent in eandem prodita partem,
protractaeque trabes inpendent ire paratae.
et metuunt magni naturam credere mundi 565
exitiale aliquod tempus clademque manere,
cum videant tantam terrarum incumbere molem !
quod nisi respirent venti, vis nulla refrenet
res neque ab exitio possit reprehendere euntis.
nunc quia respirant alternis inque gravescunt 570
et quasi collecti redeunt ceduntque repulsi,
saepius hanc ob rem minitatur terra ruinas
quam facit ; inclinatur enim retroque recellit
et recipit prolapsa suas in pondere sedes.

550 exultantes dupuis cumque vim OQ—a hopeless corruption. Numerous emendations have been proposed, almost all of them highly improbable. I suggest e.g. exultant axes ubi summa viai (exultant ed. Juntina, viai Lachmann) 555 interdum Lachmann: inter OQABL: in terra Marullus 574 pondere OP: pondera Q

^a The version of 550 translated is that tentatively proposed in the critical note.

less do [the axles] jump up [when the surface of the road]^a
jolts the iron rims of the wheels on either side.

⁵⁵² Sometimes also, when from lapse of time a huge mass is rolled forwards from the earth into some great and wide pool of water,^b the earth also is moved and shaken by the wave of water : just as a vessel sometimes cannot remain still, unless the water within it ceases to be moved about in waves to and fro.

⁵⁵⁷ Besides, when a wind gathering together through the hollow places beneath the earth throws itself forward from one quarter, and bears hard, thrusting with great force into the lofty caverns, the earth leans over in the direction of the wind's headlong force. Then those buildings which are built up above the earth, and each all the more, the more they tower up towards heaven, lean suspended, pushing forward in the same direction, and the beams dragged forward hang over ready to go. And yet people fear to believe that this great world has waiting for it some period of destruction and ruin, although they see the earth's mighty mass leaning over ! Yet if the winds should never abate,^c no force could curb the world back or hold it back in its rush to perdition. As it is, because in turns they abate and gather force, and rally as it were and come back and then are driven back in retreat, for this reason the earth more often threatens to fall than it does fall ; for it inclines forward and then again springs back, and after tumbling forward recovers its proper

Or it may be blasts of wind violently blowing

forwards and backwards.

^b aquae (552) must be scanned either ∪ ∪ - or - - - instead of the usual ∪ -. Cf. 1072, where aquai is to be scanned either ∪ ∪ - - or - - -.

^c respirent here and respirant in 570 mean not " breathe back," but rather " stop to recover their breath."

haec igitur ratione vacillant omnia tecta, 575
summa magis mediis, media imis, ima perhilum.

Est haec eiusdem quoque magni causa tremoris,
ventus ubi atque animae subito vis maxima quaedam,
aut extrinsecus aut ipsa tellure coorta, 580
in loca se cava terrai coniecit ibique

speluncas inter magnas fremit ante tumultu
versabundaque portatur, post incita cum vis
exagitata foras erumpitur et simul altam
diffindens terram magnum concinnat hiatum.
in Syria Sidone quod accidit et fuit Aegi 585
in Peloponneso, quas exitus hic animai

disturbat urbes et terrae motus obortus.
multaque praeterea ceciderunt moenia magnis
motibus in terris, et multae per mare pessum
subsedere suis pariter cum civibus urbes. 590

Quod nisi prorumpit, tamen impetus ipse animai
et fera vis venti per crebra foramina terrae
dispertitur ut horror, et incutit inde tremorem,
frigus uti nostros penitus cum venit in artus,
concutit invitos cogens tremere atque movere. 595

incipiti trepidant igitur terrore per urbis :
tecta superne timent, metuunt inferne cavernas
terrai ne dissoluat natura repente,
neu distracta suum late dispanдат hiatum
idque suis confusa velit complere ruinis. 600

Proinde licet quamvis caelum terramque reantur
incurrupta fore aeternae mandata saluti ;

600 idque OQP, hiatum (599) *then being neuter (see Diels and Bailey, Addenda p. 1758), unless there is a syntactical irregularity : adque (= atque) Lachmann, perhaps rightly : imque (= eumque) Lambinus (1570 Errata) : iamque W. S. Watt, Mus. Helv. 47 (1990) 126*

place in equilibrium. This then is how all buildings totter, the top more than the middle, the middle than the foundation, the foundation the merest trifle.

⁵⁷⁷ There is also another cause of the same great trembling, when wind or a very great force of air, either from without or arising within the earth itself, has thrown itself suddenly into the hollow places of the earth, and there in the great caverns first growls tumultuously and is carried whirling about, afterwards the force thus excited and driven outwards bursts forth, and at the same time cleaving the earth asunder makes a great chasm. This befell at Syrian Sidon, and came to pass at Aegium ^a in the Peloponnese, when such an issue of air overthrew those cities with the earthquake that followed. Many another city wall has fallen by great quakings in the earth, many cities have sunk down to the bottom of the sea along with their inhabitants.

Sometimes again a wind bursts out of the earth, cleaving a great chasm,

wherein cities are swallowed up.

⁵⁹¹ But if there is no breaking forth, yet the impetuous air itself and the furious force of wind is distributed abroad through the many interstices of the earth like an ague, and thus transmits the trembling ; just as, when cold penetrates deep into our limbs, it shakes them, making them tremble and quake against our will. Therefore men shiver in their cities with a twofold terror : they fear the houses above, they dread the caverns below, lest the earth's nature loosen all asunder in a moment, or torn asunder open abroad her own gaping jaws, and in confusion seek to gorge it with her own ruins.

If the wind fails to burst out, it makes the earth tremble.

⁶⁰¹ Therefore let them believe as they please that earth and sky will remain incorruptible, given in

Who then could believe that

^a The earthquake at Sidon, mentioned also by Strabo and Seneca, probably occurred late in the fifth century B.C. The 536

towns of Helice and Buris, near Aegium, were destroyed in 373-372 B.C.

et tamen interdum praesens vis ipsa pericli
 subdit et hunc stimulum quadam de parte timoris,
 ne pedibus raptim tellus subtracta feratur 605
 in barathrum, rerumque sequatur prodita summa
 funditus, et fiat mundi confusa ruina.

Principio mare mirantur non reddere maius
 naturam, quo sit tantus decursus aquarum,
 omnia quo veniant ex omni flumina parte. 610
 adde vagos imbris tempestatesque volantes,
 omnia quae maria ac terras sparguntque rigantque ;
 adde suos fontis ; tamen ad maris omnia summam
 guttai vix instar erunt unius adaugmen ;
 quo minus est mirum mare non augescere magnum.

Praeterea magnam sol partem detrahit aestu. 616
 quippe videmus enim vestis umore madentis
 exsiccare suis radiis ardentibus¹ solem ;
 at pelage multa et late substrata videmus ;
 proinde licet quamvis ex uno quoque loco sol 620
 umoris parvam delibet ab aequore partem,
 largiter in tanto spatio tamen auferet undis.

Tum porro venti quoque magnam tollere partem
 umoris possunt verrentes aequora ponti,
 una nocte vias quoniam persaepe videmus 625
 siccati mollisque luti concreescere crustas.

605 subtracta *P* : substructa *OQ* : subducta (cf. 1.1106)
Wakefield tentatively in notes (Bailey attributes the suggestion to himself) 624 ponti *P*, *A* corr. (cf. 1.3, 2.772, 781, 6.440, 628, and for probable confusion of ventus and pontus cf. 1.276) : venti *OQ* *ABL*, *Wakefield, Merrill (1917)* : ventis *Lachmann*, though accepted by most recent editors, gives a strange word order and, perhaps worse, interrupts the sweeping movement of the line so appropriate to the winds sweeping the seas (cf. 5.266, 388)

¹ The abrupt introduction is almost certainly to be attri-

trust to life everlasting ; and yet sometimes the very present force of peril applies this goad of fear also from one part or another, that the earth may be suddenly withdrawn from under their feet, and fall into the bottomless pit, followed by the whole sum of things utterly giving way, and then may come the confused ruin of the world. the earth is everlasting?

⁶⁰⁸ In the first place,^a men wonder that nature does not increase the measure of the sea, for all the great running down of waters thither, for all the rivers that come into it from every side. Add the wandering showers, the flying tempests, which sprinkle and drench all seas and lands ; add the sea's own fountains^b ; yet all compared with the whole mass of the sea will be scarce equal to the augmentation of one single drop ; which makes it less wonderful that the great sea does not increase. 2. Why the sea does no increase : the water that comes in is a mere drop in the ocean.

⁶¹⁶ Besides the sun by his heat draws off a great portion. For certainly we do see that clothes soaking with wet are dried up by the sun with his burning rays. But we see that the seas are many and spread out wide beneath ; therefore although the sun may sip but a small portion from the surface in any given place, yet over so great an expanse he will take away from the waves in abundance. and much is drawn off by sun

⁶²³ Then further the winds also can lift a goodly and wind portion of moisture by sweeping the surface of the ocean, since we see very often the roads grow dry in one night, and the soft mud massing together into crusts.

buted to lack of revision rather than to a textual loss before 608.

^b The fountains beneath the sea, which feed it. Cf. 1.230.

Praeterea docui multum quoque tollere nubes
umorem magno conceptum ex aequore ponti,
et passim toto terrarum spargere in orbi,
cum pluit in terris et venti nubila portant. 630

Postremo quoniam raro cum corpore tellus
est, et coniunctast, oras maris undique cingens,
debet, ut in mare de terris venit umor aquai,
in terras itidem manare ex aequore salso ;
percolatur enim virus retroque remanat 635
materies umoris et ad caput amnibus omnis
confluit, inde super terras redit agmine dulci
qua via secta semel liquido pede detulit undas.

Nunc ratio quae sit, per fauces montis ut Aetnae
expirent ignes interdum turbine tanto, 640
expediam. neque enim mediocri clade coorta
flammea tempestas Siculum dominata per agros
finitimis ad se convertit gentibus ora,
fumida cum caeli scintillare omnia templa
cernentes pavida complebant pectora cura, 645
quid moliretur rerum natura novarum.

Hisce tibi in rebus latest alteque videndum
et longe cunctas in partibus dispiciendum,
ut reminiscaris summam rerum esse profundam
et videas caelum summae totius unum 650
quam sit parvula pars et quam multesima constet,

^a 470-475, 503-505.

^b 635-638 = 5.269-272 except for two small alterations.
See note on 5.271.

^c There were serious eruptions of Etna in 475 (described by Pindar, *Pyth.* 1.21-28), 396, and 122 B.C. There can be little doubt that it is to the eruption of 122, when Catania was destroyed, that Lucr. refers in 641-646. The modern reader may be surprised that he ignores Vesuvius, but in fact it was 540

⁶²⁷ Besides I have shown ^a that the clouds also lift and clouds a great deal of moisture taken from the great surface of the ocean, which they sprinkle everywhere over the whole world, when it rains on earth and the winds carry the clouds along.

⁶³¹ Lastly, since the earth has a porous body, and it is joined together with the sea, girdling its shores all around, it is necessary that, as the flow of water comes from the land into the sea, so also it should ooze into the land from the salt sea ; for the pungency is strained off, and the substance of the water oozes back, and all meets at the sources of each river, whence it returns over the earth in a moving mass of sweet water along the path which has once been cut for it in its liquid course.^b

⁶³⁹ Now I will explain in what way fires at times ³ breathe out with such tempestuous fury through the throat of Mount Etna.^c For it was no common devastation that attended the fiery storm which arose and held supreme dominance over the fields of Sicily, drawing upon itself the eyes of neighbouring nations, when perceiving all the regions of heaven to smoke and sparkle, they filled their hearts with panic fear, whether nature was in travail to work some universal disaster.

⁶⁴⁷ In considering these matters you must cast your view wide and deep, and survey all quarters far abroad, that you may remember how profound is the sum of things, and see how very small a part, how infinitesimal a fraction of the whole universe is one

not active in his time : its upper slopes were wooded, its lower slopes planted with vineyards, and its crater was occupied by Spartacus and his followers in 73 B.C.

nec tota pars, homo terrai quota totius unus.
quod bene propositum si plane contueare
ac videas plane, mirari multa relinquo.

Numquis enim nostrum miratur, si quis in artus
acceptit calido febrim fervore coortam 656
aut alium quemvis morbi per membra dolorem ?
obturgescit enim subito pes, arripit acer
saepe dolor dentes, oculos invadit in ipsos,
existit sacer ignis et urit corpore serpens 660
quaeumque arripuit partim, repitque per artus,
nimirum quia sunt multarum semina rerum,
et satis haec tellus morbi caelumque mali fert,
unde queat vis immensi prorescere morbi.
sic igitur toti caelo terraeque putandumst 665
ex infinito satis omnia suppeditare,
unde repente queat tellus concussa moveri
perque mare ac terras rapidus percurrere turbo,
ignis abundare Aetnaeus, flammescere caelum ;
id quoque enim fit et ardescunt caelestia templa, 670
et tempestates pluviae graviore coortu
sunt, ubi forte ita se tetulerunt semina aquarum.

“ At nimis est ingens incendi turbidus ardor.”
scilicet, et fluvius qui visus maximus ei
qui non ante aliquem maiorem vidit, et ingens 675
arbor homoque videtur, et omnia de genere omni
maxima quae vidit quisque, haec ingentia fingit,
cum tamen omnia cum caelo terraeque marique
nil sint ad summam summam totius omnem.

674 visus *OQP* : visust *Ernout*

* Erysipelas. Cf. Isidorus, *Orig.* 4.8.4 : *erysipelas est*
542

sky—not so large a part as one man is of the whole earth. If you should keep this steadily before your mind, comprehend it clearly, see it clearly, you would cease to wonder at many things.

655 For is there any of us who feels wonder, if someone has got into his limbs a fever that gathers with burning heat, or any other pain from disease throughout his body ? For the foot suddenly swells, a sharp aching often seizes the teeth, or invades the eyes themselves, the accursed fire ^a appears creeping over the body and burning each part it takes hold on, and crawls over the limbs, assuredly because there are seeds of many things, and this earth and sky produce enough noxious disease that from it may grow forth an immeasurable quantity of disease. In this way therefore we must believe that a supply of all things is brought up from the infinite to the whole heaven and earth, enough to enable the earth on a sudden to quake and move, the swift whirlwind to scour over land and sea, Etna's fires to overflow, the heaven to burst in a blaze ; for that also happens, the regions of heaven burn, and rainy tempests appear with heavier increment, when by some chance the seeds of waters have gathered to that effect.

673 “ But the turbulent blaze of the conflagration is too huge for that.” Yes, and so any river is huge if it be the greatest a man has seen who has seen no greater before, and a tree or a man appears huge, and each imagines as huge all things of every kind which are greatest of those he has seen, although nevertheless all with earth and sea and sky thrown in are nothing to all the sum of the whole universe.

quem Latini sacrum ignem appellant, id est execrandum per antiphrasim.

Nunc tamen illa modis quibus inritata repente 680
 flamma foras vastis Aetnae fornacibus efflet,
 expediam. primum totius subcava montis
 est natura, fere silicum suffulta cavernis.
 omnibus est porro in speluncis ventus et aer ;
 ventus enim fit, ubi est agitando percitus aer. 685
 hic ubi percaluit calefecitque omnia circum
 saxa furens, qua contingit, terramque, et ab ollis
 excussit calidum flammis velocibus ignem,
 tollit se ac rectis ita faucibus eicit alte.
 fert itaque ardorem longe, longeque favillam 690
 differt, et crassa volvit caligine fumum,
 extruditque simul mirando pondere saxa ;
 ne dubites quin haec animai turbida sit vis.

Praeterea magna ex parti mare montis ad eius
 radices frangit fluctus aestumque resorbet. 695
 ex hoc usque mari speluncae montis ad altas
 perveniunt subter fauces. hac ire fatendumst

et penetrare mari penitus res cogit aperto
 atque efflare foras ideoque extollere flammam
 saxaque subiectare et harenae tollere nimbos. 700
 in summo sunt vertice enim crateres, ut ipsi
 nominant, nos quod fauces perhibemus et ora.

Sunt aliquot quoque res quarum unam dicere
 causam

695 resorbet *CF*: resolvet *OQAL*: resolvit *B*, *Wakefield*,
Martin: revolvit *Bockemüller* 697 *A* lacuna after this
 line assumed by *Munro* and most subsequent editors. *Munro*
 suggests *e.g.*: fluctibus admixtam vim venti; intrareque ab
 isto, *Diels* fluctibus admixtum ventum quem surgere saepe

* The words in square brackets translate the line supplied
 by *Diels* after 697 (see critical note).

⁶⁸⁰ Nevertheless I will now explain in what ways
 the flame is excited which suddenly breathes out of
 the vast furnaces of Etna. Firstly, the whole
 mountain is hollow beneath, being supported for the
 most part upon caverns in the basalt rock. In all the
 caverns, moreover, is wind and air; for wind arises
 when the air is excited by driving about. When this
 wind has grown hot, and has heated all the sur-
 rounding rocks by its fury wherever it touches, and
 also the earth, and from these has struck out hot fire
 with quick flames, it rises and throws itself upwards
 straight through the mountain's throat. Thus it
 carries its fire afar, scatters ashes far abroad, rolls the
 smoke all thick and black, thrusts out at the same
 time rocks of wonderful weight; so that you may
 be sure that this is the turbulent force of air.

Explana-
 tion of the
 phenome-
 non:
 there are
 caverns
 beneath;

and when
 the wind
 has grown
 hot in
 these, it
 bursts out
 through the
 mountain's
 throat.

⁶⁹⁴ Besides, around a great part of the mountain's
 roots the sea breaks its waves and sucks back its
 surf. From this sea, caverns reach underground right
 to the lofty throat of the mountain. By these we
 must admit that [wind mingled with water] passes
 in, and that the nature of the case compels [it often
 to rise]^a and to penetrate completely within from
 the open sea, and to blow out the flame and so to
 uplift it on high, and cast up the rocks and raise
 clouds of sand; for on the topmost summit are
 crateres, as they themselves^b call them, what we
 speak of as the throat or the mouth.

Sand and
 stones are
 washed in
 beneath by
 the sea and
 mixed up
 and thus
 cast forth.

⁷⁰³ There are also a number of things for which it We often

^b The Sicilians. The literal meaning of *κρατήρ* is "mixing
 bowl," which of course aptly describes the shape of a vol-
 cano's mouth. But *Lucr.* here implies that the name is
 appropriate also because of the mixing of sand, rocks, and
 fire that goes on inside.

non satis est, verum plaris, unde una tamen sit ;
 corpus ut exanimum siquod procul ipse iacere 705
 conspicias hominis, fit ut omnis dicere causas
 conveniat leti, dicatur ut illius una ;
 nam neque eum ferro nec frigore vincere possis
 interiisse neque a morbo neque forte veneno,
 verum aliquid genere esse ex hoc quod contigit ei 710
 scimus. item in multis hoc rebus dicere habemus.

Nilus in aestatem crescit campisque redundat
 unicus in terris, Aegypti totius amnis.
 is rigat Aegyptum medium per saepe calorem,
 aut quia sunt aestate aquilones ostia contra, 715
 anni tempore eo qui etesiae esse feruntur,
 et contra fluvium flantes remorantur et, undas
 cogentes sursus, replent coguntque manere.
 nam dubio procul haec adverso flabra feruntur
 flumine, quae gelidis ab stellis axis aguntur ; 720
 ille ex aestifera parti venit amnis ab austro,
 inter nigra virum percocto saecla colore
 exoriens penitus media ab regione diei.

Est quoque uti possit magnus congestus harenae
 fluctibus adversis oppilare ostia contra, 725
 cum mare permotum ventis ruit intus harenam ;
 quo fit uti pacto liber minus exitus amnis
 et proclivis item fiat minus impetus undis.

Fit quoque uti pluviae forsan magis ad caput ei

^a Cf. 5.526-533 and see note there.

^b The northerly winds which blow over the Aegean Sea for about forty days from the rising of Sirius. Cf. 730, 5.742.

^c The south.

is not enough to name one cause, but many, one of which is nevertheless the true cause ^a : just as if you should yourself see some man's body lying lifeless at a distance, you may perhaps think proper to name all the causes of death in order that the one true cause of the man's death may be named. For you could not prove that steel or cold had been the death of him, or disease, or it may be poison, but we know that what has happened to him is something of this sort. Even so in many cases we have the like to say.

⁷¹² The Nile, the river of all Egypt, is the only river in the world that swells and overflows on the fields towards summer-time. It is accustomed to irrigate Egypt through the middle heats, either because there are northerly winds in summer opposite to its mouth, which at that time of year are called etesian ^b winds, and these, blowing against the stream, hold it back, and driving the waters up channel fill it and force it to stand. For beyond a doubt these blasts, which are driven from the cold stars of the pole, do blow against the current. The river comes out of the heat-laden country from the south, rising from the heart of the region of noon-day ^c amidst black tribes of men thoroughly baked by the sun.

⁷²⁴ It is possible also that a great collection of sand blocks up the mouth against the stream, when the sea, stirred by the winds, rolls the sand inwards ; by which it comes about that the outlet of the river becomes less free, and the waves have a less easy run downwards.

⁷²⁹ It is also possible that there is perhaps more rain

mention many possible causes, when one only is the true cause.

⁴ The Nile rises in summer

either because the etesian winds blow the water back,

or because sand blocks up the mouth,

tempore eo fiant, quo etesia flabra aquilonum 730
 nebula concidunt in eas tunc omnia partis.
 scilicet ad mediam regionem eiecta diei
 cum convenerunt, ibi ad altos denique montis
 contrusae nubes coguntur vique premuntur.

Forsitan Aethiopum penitus de montibus altis 735
 crescat, ubi in campos albas decedere ningues
 tabificis subigit radiis sol omnia lustrans.

Nunc age, Averno tibi quae sint loca cumque
 lacusque
 expediam, quali natura praedita constant.

Principio, quod Averno vocantur nomine, id ab re
 inpositumst, quia sunt avibus contraria cunctis, 741
 e regione ea quod loca cum venere volantes,
 remigii oblitae pennarum vela remittunt
 praecipitesque cadunt molli cervice profusae
 in terram, si forte ita fert natura locorum, 745
 aut in aquam, si forte lacus substratus Averno.
 is locus est Cumas apud, acri sulphure montes
 oppleti calidis ubi fumant fontibus aucti.

Est et Athenaeis in moenibus, arcis in ipso
 vertice, Palladis ad templum Tritonidis almae, 750
 quo numquam pennis appellunt corpora raucae

736 decedere OQ, *Gifanius, Fay, E. Orth, Helmantica 11*
(1960) 333: descendere *Lambinus and modern editors, but,*
though the change is an easy one, decedere gives excellent
sense, and crescat . . . decedere derives support from Virgil,
Ecl. 2.67 et sol crescentis decedens duplicat umbras 743
remigii Marullus (cf. 5.1006): remigio OQP: remigi Lach-
mann, perhaps rightly, but see Bailey, Addenda p. 1758, for
the view of P. Maas

* Lake Avernus, near Cumae (747), reputed to be an
 entrance to the underworld (762-763), gave off mephitic
 548

at its source at that time, when the etesian breezes or because
at the
source
 from the north then drive all the clouds together there is rain
 into those parts. You may be sure that when they
 have come together driven out to the region of noon-
 day, the clouds there thrust together are collected
 together at last upon high mountains and violently
 compressed.

⁷³⁵ Perhaps the river grows from the heart of the
 high Ethiopian mountains, when the sun shining on
 all things with his melting rays compels the white or melted
snow.
 snows to depart to the plains.

⁷³⁸ Now attend, and I will explain what nature 5. The
Avernian
lakes,
 belongs to those various regions which are called
 Avernian,^a and their lakes.

⁷⁴⁰ In the first place, their name Avernian has
 been bestowed upon them because of their char- fatal to
birds,
 acter, being dangerous to all birds, because when
 they have come in flight straight over those places,
 forgetting their oarage of wings and slackening their
 sails, headlong they fall, sinking down with limp
 neck to the ground, if it so happens that the nature
 of the place allows it, or into the water, if it happens
 that a lake of Avernus lies below. Such a place is
 close by Cumae, where mountains, filled with rank
 sulphur, smoke, all covered with hot springs. as at
Cumae

⁷⁴⁹ There is another place within the walls of
 Athens, on the very crest of the citadel, by the and Athens,
 temple of fostering Tritonian Pallas, whither hoarse
 exhalations (747-748) which were supposed to kill any birds
 that flew over it, and the ancients connected its name with
 ἀόρως "birdless": cf. Virgil, *Aen.* 6.242 (almost certainly
 interpolated) *unde locum Grai dixerunt nomine Aornon.*
 Lucr. gives the name "Avernian" to all places which are
 fatal to birds (740-741).

cornices, non cum fumant altaria donis :
 usque adeo fugitant non iras Palladis acris
 pervigili causa, Graium ut cecinere poetae,
 sed natura loci opus efficit ipsa suapte. 755

In Syria quoque fertur item locus esse videri,
 quadripedes quoque quo simul ac vestigia primum
 intulerint, graviter vis cogat concidere ipsa,
 manibus ut si sint divis mactata repente.

Omnia quae naturali ratione geruntur, 760
 et quibus e fiant causis apparet origo ;
 ianua ne pote eis Orci regionibus esse
 credatur, post hinc animas Acheruntis in oras
 ducere forte deos manis inferne reamur,
 naribus alipedes ut cervi saepe putantur 765
 ducere de latebris serpentia saecla ferarum.
 quod procul a vera quam sit ratione repulsum
 percipe ; nam de re nunc ipsa dicere conor.

Principio hoc dico, quod dixi saepe quoque ante,
 in terra cuiusque modi rerum esse figuras : 770
 multa, cibo quae sunt, vitalia, multaque, morbos
 incutere et mortem quae possint accelerare.
 et magis esse aliis alias animantibus aptas
 res ad vitae rationem ostendimus ante
 propter dissimilem naturam dissimilisque 775
 texturas inter sese primasque figuras.
 multa meant inimica per auras, multa per ipsas

762 pote eis *P. E. Goebel, Rh. Mus. 15 (1860) 404* : poteis
OQU : potis *O corr.*, *L* : potius *ABCF* : potis his *Diels* :
 forte his *Munro*

^a Athena had entrusted to the three daughters of Cecrops a chest containing the infant Erichthonius with instructions not to open it, which of course they did. A crow saw this and reported it to the goddess, who, angry at the news, banished all crows from the Acropolis.

^b For this belief *cf.* Pliny, *HN* 8.32.118, 28.42.149, Martial 550

crows never wing their way, not even when the altars smoke with offerings ; so carefully do they flee, not, as the Greek poets have sung, from the bitter wrath of Pallas because of that vigil of theirs,^a but the nature of the place does the job of itself.

⁷⁵⁶ In Syria also, as it is said, another such place is to be seen, whither as soon as ever four-footed beasts direct their steps, its natural power forces them to fall heavily ; as if they were suddenly slain in sacrifices to the infernal gods. as a place in Syria where beasts fall down,

⁷⁶⁰ But all these things are done for some natural reason, and it is clear from what source come the causes that produce them ; so it should not be believed possible that the gate of Orcus is in these regions, nor should we imagine next that the infernal deities by chance draw down souls from these places to the precincts of Acheron, as wing-footed stags are often thought to draw the tribes of creeping creatures from their holes by the breath of their nostrils.^b Learn how far from true reasoning that is driven away ; for I am now striving to speak of the true facts. have natural causes and are not the gates of Orcus.

⁷⁶⁹ In the first place, I say this, as I have said often before,^c that in the earth are elements of every kind of thing : many (which belong to food) being useful to life, and many such as can strike us with disease and make death come quickly. And I have shown before that different things are better suited to different animals for purposes of life, on account of their unlike nature and unlike interweavings of structure and primary shapes. Many pernicious elements pass through the ears, many make their way into For the earth contains elements of all sorts, wholesome and poisonous.

12.29.5, Aelian, *NA* 2.9, Oppian, *Cyn.* 2.233-241, Isidorus, *Orig.* 12.1.18. ^c *Cf.* 1.809-822, 2.398-477, 4.633-672.

insinuant naris infesta atque aspera tactu,
nec sunt multa parum tactu vitanda neque autem
aspectu fugienda saporeque tristia quae sint. 780

Deinde videre licet quam multae sint homini res
acriter infesto sensu spurcaequae gravesque.
arboribus primum certis gravis umbra tributa
usque adeo, capitis faciunt ut saepe dolores,
siquis eas subter iacuit prostratus in herbis. 785

est etiam magnis Heliconis montibus arbos
floris odore hominem taetro consueta necare.
scilicet haec ideo terris ex omnia surgunt,
multa modis multis multarum semina rerum
quod permixta gerit tellus discretaque tradit. 790

nocturnumque recens extinctum lumen ubi acri
nidore offendit nares, consopit ibidem,
concidere et spumas qui morbo mittere suevit.
castoreoque gravi mulier sopita recumbit,
et manibus nitidum teneris opus effluit ei, 795

tempore eo si odoratast quo menstrua solvit.
multaque praeterea languentia membra per artus
solvunt atque animam labefactant sedibus intus.
denique si calidis etiam cunctere lavabris
plenior et fueris, solio ferventis aquae 800

quam facile in medio fit uti des saepe ruinas!
carbonumque gravis vis atque odor insinuat
quam facile in cerebrum, nisi aquam praecepimus
ante!

at cum membra hominis percepit fervida febris,

800 et fueris attributed by recent editors to Wakefield, but first printed by Naugerius, whom Gifanius and Fay follow: efflueris OQP: et lueris Diels 804 hominis Lambinus: domnus OQU: domus A, ed. Brixianensis: donus CF: dominus BL: domans Marullus febris Lambinus: fervis QU: servis OP

the very nostrils noxious and rough to the touch; and not a few exist which the touch must avoid and sight must shun and such as are unpleasant in taste.

⁷⁸¹ Again, you may see how many things have for man a violently noxious sensation, being loathsome and dangerous. Firstly, certain trees ^a have a shade so dangerous that they often cause headache, if one has lain beneath stretched out on the herbage. There is also in the great mountains of Helicon a tree, which is accustomed to kill men by the vile stench of its flower. You may be sure that the reason why all these things rise from the soil is that the earth has many seeds of many things which she holds mixed up in many ways and separates apart before passing them on. And when a night-light newly extinguished meets the nostrils with a sharp smell, it stupefies on the spot one who is accustomed to fall and foam at the mouth through disease. ^b The heavy scent of castor ^c makes a woman fall back asleep, dropping the dainty work from her tender hands, if she has smelt it at the time of her monthly courses. And many other things besides loosen the languid limbs all through the frame and shake the spirit in its habitations within. Again, if you should ever tarry long in the hot baths after a full meal, how easily you often collapse in the middle of the bath of hot water! And how easily the strong heavy fumes of charcoal creep into the brain, unless we have taken water before! But when a burning fever is in possession of a man's limbs, then

Hence the noxious effect of certain trees,

of a light snuffed out,

of castor,

a hot bath after a meal,

the smell of charcoal,

wine in fever,

^a Juniper (Virgil, *Ecl.* 10.76), box and walnut (Pliny, *HN* 16.16.70, 17.12.89). ^b Epilepsy (cf. 3.487-505).

^c A strong-smelling, reddish-brown liquid obtained from two small pyriform sacs (sometimes wrongly thought to be testicles) in the groin of the beaver. It was used both as a medicine and in the preparation of perfumes.

tum fit odor vini plagae mactabilis instar. 805
 nonne vides etiam terra quoque sulphur in ipsa
 gignier et taetro concresecere odore bitumen ?
 denique ubi argenti venas aurique sequuntur,
 terrai penitus scrutantes abdita ferro,
 qualis expiret Scaptensula subter odores ? 810
 quidve mali fit ut exhalent aurata metalla ?
 quas hominum reddunt facies qualisque colores ?
 nonne vides audisve perire in tempore parvo
 quam soleant et quam vitai copia desit,
 quos opere in tali cohibet vis magna necessis ? 815
 hos igitur tellus omnis exaestuatur aestus
 expiratque foras in apertum promptaque caeli.

Sic et Averna loca alitibus summittere debent
 mortiferam vim, de terra quae surgit in auras,
 ut spatium caeli quadam de parte venenet, 820
 quo simul ac primum pennis delata sit ales,
 impediatur ibi caeco correpta veneno,
 ut cadat e regione loci, qua derigit aestus.
 quo cum conruit, hic eadem vis illius aestus
 reliquias vitae membris ex omnibus aufert. 825
 quippe etenim primo quasi quendam conciet aestum ;
 posterius fit uti, cum iam cecidere veneni
 in fontis ipsos, ibi sit quoque vita vomenda
 propterea quod magna mali fit copia circum.

Fit quoque ut interdum vis haec atque aestus
 Averni 830
 aera, qui inter avis cumquest terramque locatus,

815 *necessis Lachmann* : *necesses OBL could perhaps be retained with a full stop after it and (as in Lambinus' text) a question mark after magna = "you must see" (cf. 3.962) : necesse est QAF* : *necesses (as an adverb) Ernout tentatively*

^a A town in Thrace celebrated for its mines.

^b The miners were slaves.

the odour of wine has the effect of a deadly blow. Do you not see also that sulphur is produced in the earth itself, and asphalt grows together in lumps with its filthy smell ? Again, when they follow veins of silver and gold, rummaging with their tools the innermost secret places of the earth, what smells Scaptensula^a exhales from below ! Or what mischief do gold mines breathe out, what do they make men look like, what colours ! Do you not see or hear in how short a time they are accustomed to perish, how their vital force fails, who are held fast in such work as this by the great constraint of necessity ?^b All these streams therefore the earth streams out and breathes forth into the open and ready space of the sky.

⁸¹⁵ In this way also the Avernian places must send up to the birds the deadly power which rises from earth into the air, to poison some part of the space of heaven ; so that, as soon as the bird has winged its way thither, it may be caught by the unseen poison and checked there, and so may fall straight down to the place where the exhalation directs it. And when it has fallen there, then the same force of this exhalation takes from all the members what remains of life. For at first indeed it seems to excite in them a sort of giddiness^c ; afterwards, when they have fallen into the very fountains of poison, in that place life also has to be vomited forth, because there is so great a store of mischief around them.

⁸³⁰ It happens also at times that this power and exhalation of Avernus strikes apart all the air that

^c That *aestus* has two senses, exhalation and giddiness, seems to make the explanation more credible. Naturally *aestus* causes *aestus*.

discutiat, prope uti locus hic linquatur inanis.
 cuius ubi e regione loci venere volantes,
 claudicat extemplo pinnarum nisus inanis
 et conamen utrimque alarum proditur omne. 835
 hic ubi nixari nequeunt insistereque alis,
 scilicet in terram delabi pondere cogit
 natura, et vacuum prope iam per inane iacentes
 dispergunt animas per caulas corporis omnis.

Frigidior porro in puteis aestate fit umor, 840
 rarescit quia terra calore et, semina si qua
 forte vaporis habet proprie, dimittit in auras.
 quo magis est igitur tellus effeta calore,
 fit quoque frigidior qui in terrast abditus umor.
 frigore cum premitur porro omnis terra coitque 845
 et quasi concrescit, fit scilicet ut coeundo
 exprimat in puteos si quem gerit ipsa calorem.

Esse apud Hammonis fanum fons luce diurna
 frigidus, et calidus nocturno tempore, fertur.
 hunc homines fontem nimis admirantur, et acri 850
 sole putant subter terras ferverescere partim,
 nox ubi terribili terras caligine texit.

839 *A lacuna after this line assumed by most editors since Lachmann, who supposes that a page of the archetype had dropped out, the main arguments for a lacuna being that porro could not introduce an entirely new topic, and that a comment of Servius on Virgil, G. 4.51 implies that Lucr.'s explanation of temperature in wells was part of a longer passage. However, the case for a lacuna cannot be regarded as proved: see Ernout and Büchner; also U. Pizzani, Il problema del testo e della composizione del DRN di Lucrezio 101 ff.*

841 *rarescit Lambinus; arescit OQUP, perhaps rightly, but rarescit is supported by concrescit, its opposite, in 846 and rarefecit in 870* 842 *proprie QUF; propriae O; prope ABCLM but cf. 847; proprii Bernays* 851

lies between birds and the earth, so that an almost empty pocket is left here. And when they have come flying straight over this place, the beat of their wings suddenly goes halting and ineffective, and all the effort of the pinions on either side is wasted. In this case, when they cannot find rest or support on their wings, nature assuredly forces them to fall down to the earth by their own weight, and through this almost empty space they, as they now lie, disperse abroad their souls through all the pores of the body.

840 Furthermore, water grows colder in wells when it is summer, because the earth is rarefied by the heat and sends abroad into the air any seeds of heat which it has of its own. The more therefore the earth is exhausted of its heat, the colder becomes that water which is hidden in the earth. When again all the earth is crushed by cold and congeals and, as it were, grows together, the result naturally is that by congealing it presses out into the wells any heat it has in itself.

848 By the shrine of Ammon^a there is said to be a spring, which is cold in the daylight and hot in the season of night. This spring men wonder at overmuch, and some think that it is the fierce sun under the earth that makes it boil, when night has covered

^a An Egyptian god whom the Greeks identified with Zeus, the Romans with Jupiter. The strange spring at his oracular shrine in the desert about 300 miles west of the Nile is described by Herodotus 4.181.3-4 and many later writers.

partim OQUP, Wakefield, Bockemüller: raptim Lambinus: fur-
 tim W. S. Watt, *Hermes* 117 (1989) 235-236

empty space in the air, which gives no support to wings.

6. Wells and springs. Water in wells is cold in the summer, because the earth dispenses its heat into the air; in winter, the earth congealed presses its heat into the wells.

A spring by the shrine of Jupiter Ammon is cold by day and hot by night:

quod nimis a verast longe ratione remotum.
 quippe ubi sol nudum contractans corpus aquai
 non quierit calidum supera de reddere parte, 855
 cum superum lumen tanto fervore fruatur,
 qui queat hic subter tam crasso corpore terram
 percoquere umorem et calido satiare vapore ?
 praesertim cum vix possit per saepta domorum
 insinuare suum radiis ardentibus aestum. 860

Quae ratio est igitur ? nimirum terra magis quod
 rara tenet circum fontem quam cetera tellus,
 multaque sunt ignis prope semina corpus aquai.
 hoc ubi roriferis terram nox obruit undis,
 extemplo penitus frigescit terra coitque. 865
 hac ratione fit ut, tamquam compressa manu sit,
 exprimat in fontem quae semina cumque habet ignis,
 quae calidum faciunt laticis tactum atque vaporem.
 inde ubi sol radiis terram dimovit obortus
 et rarefecit calido miscente vapore, 870
 rursus in antiquas redeunt primordia sedes
 ignis, et in terram cedit calor omnis aquai.
 frigidus hanc ob rem fit fons in luce diurna.

Praeterea solis radiis iactatur aquai
 umor et in lucem tremulo rarescit ab aestu ; 875
 propterea fit uti quae semina cumque habet ignis
 dimittat, quasi saepe gelum, quod continet in se,
 mittit et exsolvit glaciem nodosque relaxat.

Frigidus est etiam fons, supra quem sita saepe

858 satiare *Codex Vaticanus 1954* : soclare *OQU* : sociare
F : foculare *Merrill (1917) tentatively* : suffire *P. Friedländer,*
AJPhil. 62 (1941) 34

864 undis *OQUAFL* : undas *B* : umbris *Marullus (cf.*
Virgil, Aen. 4.351), but obruit undis *is strongly supported by*
5.412, and cf. 2.152 aérias . . . undas

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the earth with terrifying blackness. But this is very far removed from true reasoning. For when the sun, acting upon the exposed body of water, was unable to make it hot on its upper part, although his light above is possessed of heat so great, how could he when under so gross a body of earth boil the water through the earth and soak it with warming heat ? Especially when he can scarcely make his warmth pass through the walls of a house for all his burning rays.

⁸⁶¹ How comes it then ? Assuredly because the ground keeps more porous about the spring than the rest of the earth, and there are many seeds of fire near the body of water. Therefore when night has overwhelmed the earth with its dewy waves, the earth suddenly grows cold to the heart and contracts ; in this fashion, as though compressed by a hand, it presses out into the spring whatever seeds of fire it has, which cause the warm touch and heat of the water. Next when the sun rising has stirred apart the earth with his rays and made it porous as his warming heat mingles with it, the first-beginnings of fire return to their ancient places, and all the warmth of the water passes into the earth. For this reason the spring becomes cold in the daylight.

⁸⁷⁴ Besides, the fluid of the water is tossed about by the sun's rays, and the quivering heat makes it porous at the coming of light ; for which reason it discharges all its seeds of fire, just as water often discharges the cold which it contains, and melts the ice and loosens its knots.

⁸⁷⁹ There is also a cold spring,^a over which if tow

^a At Dodona. *Cf. Pliny, HN 2.103.228.*

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stuppa iacit flammam concepto protinus igni, 880
 taedaque consimili ratione accensa per undas
 conluet, quocumque natans impellitur auris :
 nimirum quia sunt in aqua permulta vaporis
 semina, de terraque necessesst funditus ipsa
 ignis corpora per totum consurgere fontem 885
 et simul exspirare foras exireque in auras,
 non ita multa tamen, calidus queat ut fieri fons.
 praeterea dispersa foras erumpere cogit
 vis per aquam subito sursumque ea conciliare.

Quod genus endo marist Aradi fons dulcis aquai
 qui scatit et salsas circum se dimovet undas ; 891
 et multis aliis praebet regionibus aequor
 utilitatem opportunam sitientibus nautis,
 quod dulcis inter salsas intervomit undas.

sic igitur per eum possunt erumpere fontem 895
 et scateri illa foras, in stuppam semina quae cum
 conveniunt aut in taedae corpore adhaerent,
 ardescunt facile extemplo, quia multa quoque in se
 semina habent ignis stuppae taedaeque natantes.

Nonne vides etiam, nocturna ad lumina linum 900
 nuper ubi extinctum admoveas, accendier ante
 quam tetigit flammam, taedamque pari ratione ?
 multaque praeterea prius ipso tacta vapore
 eminus ardescunt quam comminus imbuat ignis.
 hoc igitur fieri quoque in illo fonte putandumst. 905

Quod superest, agere incipiam quo foedere fiat
 naturae, lapis hic ut ferrum ducere possit,

889 conciliare *OQUP*, Wakefield who explains "in concilium venire, coire: usu intransitivo, ut passim noster adsolet": conciliari Lambinus 899 natantes *N. II. Romanes*, Further Notes on Lucretius (1935) 74-75, M. F. Smith; cf. 881-882 taeda . . . natans: tenentes *OQUP*: tepentis Lachmann: latentis Bernays: tenaces W. S. Watt, *Hermes* 117 (1989) 236

be held it often throws out flame, catching fire at
 once, and a torch in like manner is kindled and shines
 amidst the waters, wherever it floats driven by the
 winds: surely because there are in the water very
 many seeds of heat, and from deep down in the
 earth itself bodies of fire must rise through the whole
 spring and at the same time be exhaled and come
 out into the air, yet not so many as to make the
 spring hot. Besides, there is a force that compels
 them suddenly to break out through the water dis-
 persed abroad, and then gather together above it.

⁸⁹⁰ This is like the spring of Aradus ^a in the sea,
 which splashes out sweet water and keeps away the
 salt waters around; and in many another region the
 sea offers timely blessings to sailors athirst, by vomit-
 ing out sweet waters amid the salt. In this way
 then those seeds can burst out through the other
 spring and splash out; and when they meet together
 on the tow or adhere to the body of the torch, they
 easily blaze up in a moment, because the tow and
 floating torches also have many seeds of fire within
 them.

⁹⁰⁰ Do you not see also that, if you move a
 wick newly extinguished near a night-light, it kindles
 before touching the flame, and the same with a
 torch? And many other things, touched just by the
 heat, blaze up at some distance before the fire comes
 close and drenches it. This then is what we must
 believe to happen in that spring too.

⁹⁰⁶ To pass on, I will begin to discuss by what law
 of nature it comes about that iron can be attracted

^a An island off the coast of Phoenicia. Cf. Pliny, *HN*
 2.103.227, 5.31.128.

quem Magneta vocant patrio de nomine Grai,
 Magnetum quia fit patriis in finibus ortus.
 hunc homines lapidem mirantur; quippe catenam 910
 saepe ex anellis reddit pendentibus ex se.
 quinque etenim licet interdum pluresque videre
 ordine demisso levibus iactarier auris,
 unus ubi ex uno dependet subter adhaerens,
 ex alioque alius lapidis vim vinclaque noscit : 915
 usque adeo permanenter vis pervaleat eius.

Hoc genus in rebus firmandumst multa prius quam
 ipsius rei rationem reddere possis,
 et nimium longis ambagibus est adeundum ;
 quo magis attentas auris animumque reposito. 920

Principio omnibus ab rebus, quascumque videmus,
 perpetuo fluere ac mitti spargique necessesit
 corpora quae feriant oculos visumque lacessant.
 perpetuoque fluunt certis ab rebus odores ;
 frigus ut a fluviis, calor ab sole, aestus ab undis 925
 aequoris exesor moerorum litora propter ;
 nec varii cessant sonitus manare per auras ;
 denique in os salsi venit umor saepe saporis,
 cum mare versamur propter, dilutaque contra
 934 cum tuimur misceri absinthia, tangit amaror. 930
 935 usque adeo omnibus ab rebus res quaeque fluenter
 930 fertur et in cunctas dimittitur undique partis,
 931 nec mora nec requies interdatur ulla fluendi,

909 fit *OQU*: sit *P*, perhaps rightly 930-935 first
 put in the right order in ed. *Aldina* (*Bailey and Büchner*
 attribute the correction to *Lachmann*)

^a The inhabitants of Magnesia ad Sipylum in Lydia (not to be confused with Magnesia ad Maeandrum in Ionia). The magnet had interested Greek philosophers from the beginning: Thales attributed its behaviour to the presence of a
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by that stone which the Greeks call magnet from the name of its home, because it is found within the national boundaries of the Magnetes.^a This stone astonishes men, because it often makes a chain out of little rings hanging from it. For you may sometimes see five or more hanging in a string and swayed by a light breeze, where one hangs from another attached beneath it, and one from another learns the stone's power and attraction: to such a distance does its power hold force, oozing through and through.

⁹¹⁷ In matters of this sort many principles have to be established before you can give a reason for the thing itself, and you must approach by exceedingly long and roundabout ways; accordingly I crave all the greater attention of ears and mind.

⁹²¹ In the first place, from everything that we see there must of necessity continually flow and discharge and scatter bodies which strike our eyes and excite vision. There is a continual flow of odours from certain things, as there is of cold from rivers, heat from the sun, spray from the sea-waves, that devourer of walls beside the shore. Manifold sounds also ooze through the air without ever slackening. Again, a moisture salt to the taste often comes into our mouth when we walk by the sea, and when we see wormwood being mixed with water in our presence, we have a sense of bitterness. So true is it that from all things the different qualities pass off in a flow, and disperse in every direction around; there is no delay, no rest to interrupt the flow, since we

Many principles must be established as a preliminary to the explanation.

There is a continual discharge of particles from everything, which affect the senses.

soul. Empedocles and Democritus, before Epicurus, explained its power by means of a theory of emanations. As Pius and Lambinus saw, *Lucr.*'s description in 910-916 was almost certainly influenced by Plato, *Ion* 533 D-E.

932 perpetuo quoniam sentimus, et omnia semper
933 cernere odorari licet et sentire sonare. 935

Nunc omnis repetam quam raro corpore sint res
commemorare ; quod in primo quoque carmine claret.
quippe etenim, quamquam multas hoc pertinet ad res
noscere, cum primis hanc ad rem protinus ipsam,
qua de disserere adgredior, firmare necessest 940
nil esse in promptu nisi mixtum corpus inani.
principio fit ut in speluncis saxa superna
sudent umore et guttis manantibus stillent.
manat item nobis e toto corpore sudor,
crescit barba pilique per omnia membra, per artus.
didit in venas cibus omnis, auget alitque 946
corporis extremas quoque partis unguiculosque.
frigus item transire per aes calidumque vaporem
sentimus, sentimus item transire per aurum
atque per argentum, cum pocula plena tenemus. 950
denique per dissaepa domorum saxea voces
pervolitant, permanat odor frigusque vaporesque
ignis, qui ferri quoque vim penetrare suëvit.
denique qua circum caeli lorica coeret

morbida visque simul, cum extrinsecus insinuatur ;
et tempestates terra caeloque coortae 956
in caelum terrasque remotae iure facessunt,
quandoquidem nil est nisi raro corpore nexum.

Huc accedit uti non omnia, quae iaciuntur

942 superna *OQUP* : superne *Lachmann* 954 *A*
lacuna after this line assumed by Brieger and most subsequent
editors. The lost line (if indeed only one line is missing)
was probably similar to corpora nimborum penetrant et
semina nubis (Bailey) or corpora quae faciunt nubis nimbo-
que penetrant (M. F. Smith ; for penetrant cf. 4.613) ; cf.
483-484, 1098-1100. The second of these restorations is trans-
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constantly feel it, and we can at all times see all
things, smell them, and perceive their sound.^a

⁹³⁶ Now I will repeat once more of how porous a
body all things consist ; which is also made clear in
my first book.^b For in truth, although to understand
this is of importance for many subjects, with none
more than this very one which I am about to discuss
is it necessary to establish at the beginning that
there is nothing before us but body mixed with void.
First of all, in caverns the rocks above sweat with
moisture and trickle with oozing drops. Sweat oozes
also from our whole body ; the beard grows, and
hairs over all our limbs and our frame. Food is dis-
tributed abroad into all the veins, increasing and
nourishing even the extreme parts of the body and
the nails. Cold also and warming heat we feel to pass
through bronze, we feel them likewise to pass through
gold and through silver, when we hold full cups.^c
Again, in a house voices flit through dividing walls
of stone, smell oozes through, and cold and the heat
of fire, which is also accustomed to penetrate iron
for all its strength. Again, where the corslet of hea-
ven encompasses us, [the bodies which make clouds
and storm-rack penetrate],^d and the power of disease
at the same time, when it comes in from without ;
and tempests arising from earth and sky quite natu-
rally move away withdrawn into sky or earth, since
nothing exists that does not have a porous texture.

⁹⁵⁹ Moreover, not all bodies that are cast off from
But these

^a 923-935 = 4.217-229, with a few changes.

^b 1.329-369.

^c Cf. 1.494-496, 3.912-913.

^d See critical note on 954.

lated above 956 tempestates . . . coortae *Avancius* :
tempestatem . . . coorta *OQUL*

corpora cumque ab rebus, eodem praedita sensu 960
 atque eodem pacto rebus sint omnibus apta.
 principio terram sol excoquit et facit are,
 at glaciem dissolvit et altis montibus altas
 extractasque nives radiis tabescere cogit.
 denique cera liquefit in eius postea vapore. 965
 ignis item liquidum facit aes aurumque resolvit,
 at coria et carnem trahit et conducit in unum.
 umor aquae porro ferrum condurat ab igni,
 at coria et carnem mollit durata calore.
 barbigeras oleaster eo iuvat usque capellas, 970
 effluat ambrosiam quasi vero et nectare tinctus ;
 qua nil est homini quod amariu' fronde virescat.
 denique amaracinum fugitat sus et timet omne
 unguentum ; nam saetigeris subus acre venenumst,
 quod nos interdum tamquam recreare videtur. 975
 at contra nobis caenum taeterrima cum sit
 spurcicies, eadem subus haec iucunda videtur,
 insatiabiliter toti ut volvantur ibidem.
 Hoc etiam superest, ipsa quam dicere de re
 adgredior quod dicendum prius esse videtur. 980
 multa foramina cum variis sint reddita rebus,
 dissimili inter se natura praedita debent
 esse et habere suam naturam quaeque viasque.
 quippe etenim varii sensus animantibus insunt,
 quorum quisque suam proprie rem percipit in se ; 985
 nam penetrare alio sonitus alioque saporem
 cernimus e succis, alio nidoris odores. 987
 991 praeterea manare aliud per saxa videtur, 990

971 ambrosiam *Avancius* : ambrosias *OQUP*, retained as
 a Greek genitive by *Diels*, *Martin*, *Büchner* : ambrosia
Marullus 972 qua *OQL* : quo *F* : quom *Ernout* fronde
 virescat (cf. I.252) *M. F. Smith* (*Loeb* 1982) : fronde ac extet
 (excset *O*) *OQUL* : frunde hac exstet *Gifanius* : frondeat esca
 566

things are endowed with the same effect on the senses, particles do
 or suited for all things in the same way. In the first not affect
 place, the sun bakes the earth and makes it dry, but everything
 he melts ice and with his rays compels to thaw snow in the
 piled up high on the high mountains. Again, when the same way.
 placed in his heat wax liquefies. Fire also makes Examples :
 bronze melt and dissolves gold, but skins and flesh it the sun,
 contracts and shrivels up. The liquid of water again fire,
 hardens iron taken from the fire, but skins and flesh water,
 it softens after they have been hardened by heat.
 The wild olive gives as great a delight to the bearded wild olives,
 nanny-goat as if it were really running with ambrosia
 and bathed in nectar ; yet there is no green growth which
 is more bitter to man than this foliage. Again, the pig marjoram,
 flees from oil of marjoram and fears every kind of
 unguent ; for that which sometimes seems to give dirt.
 us new life is rank poison to the bristly pig. But on
 the other hand, although mud is to us the most hate-
 ful filth, the same gives pleasure to swine, so much so
 that they cannot have enough of rolling all over in it.

979 Another thing yet remains which it seems best
 to say before I approach my proper theme. Since
 there are many pores to be found in different things,
 they must be endowed with different natures, each
 having its own nature and its own passages. For in
 truth there are different senses in living creatures,
 each of which perceives in itself the object proper to
 it ; for we observe sound to penetrate by one sense,
 taste from flavours by another, by another again the
 smell of odours. Besides, one thing is seen to ooze
 Different things have
 pores of
 different
 sizes and
 shapes.

Lachmann : fronde virescat *Bailey* 988-989=995-996
 must be excluded

992 atque aliud lignis, aliud transire per aurum,
 993 argentoque foras aliud vitroque meare.
 994 nam fluere hac species, illac calor ire videtur,
 995 atque aliis aliud citius transmittere eadem.
 996 scilicet id fieri cogit natura viarum 995
 997 multimodis varians, ut paulo ostendimus ante,
 998 propter dissimilem naturam textaque rerum.

Quapropter, bene ubi haec confirmata atque locata
 omnia constiterint nobis praeposta parata,
 quod superest, facile hinc ratio reddetur et omnis
 causa patefiet quae ferri pelliciat vim. 1001

Principio fluere e lapide hoc permulta necessest
 semina, sive aestum qui discutit aera plagis
 inter qui lapidem ferrumque est cumque locatus.
 hoc ubi inanitur spatium multusque vacefit 1005
 in medio locus, extemplo primordia ferri
 in vacuum prolapsa cadunt coniuncta, fit utque
 anulus ipse sequatur eatque ita corpore toto.
 nec res ulla magis primoribus ex elementis
 indupedita suis arte conexa cohaeret 1010
 quam validi ferri natura et frigidus horror.
 quo minus est mirum, quod [†]dicitur ex elementis[†]
 corpora si nequeunt e ferro plura coorta
 in vacuum ferri, quin anulus ipse sequatur ;
 quod facit, et sequitur, donec pervenit ad ipsum 1015
 iam lapidem caecisque in eo compagibus haesit.
 hoc fit idem cunctas in partibus : unde vacefit
 cumque locus, sive e transverso sive superne,

1007 utque *Marullus* : utqui *OQUP*, *Merrill (1917)*,
Bailey (O.C.T.) 1012 quod *OQUP* : quo *Lachmann*
 dicitur ex elementis (ex el. *ibus* ex el. *Munro*) : ducitur ex
 el. *Lachmann* : dico, *ibus* ex el. *Munro* : paulo diximus
 ante, *Lambinus*, seems the best solution, but not sure enough
 to be printed in the text

^a On the textual uncertainty in 1012, see critical note.

through stone, another through wood, another to
 pass through gold, another to find its way out through
 silver or glass ; for through glass, as we see, images
 flow, through silver warmth, and one thing is seen
 to pass through more quickly than another by the
 same way. Assuredly the nature of the passages
 compels this to happen, for it varies in manifold ways,
 as we have shown a little while since, on account of
 the different nature and texture of the things.

⁹⁹⁸ When therefore all these principles have been
 fully established and laid down ready and prepared
 for us, what remains is easy : from these to deduce
 the explanation and to make clear the whole cause
 which attracts the mass of iron. Now as to
the magnet.

¹⁰⁰² In the first place, it must be that very many
 seeds flow out from this stone, or, let us say, a cur-
 rent which by its blows beats away all the air that
 lies between the stone and the iron. When this space
 is made empty and a large place becomes vacant
 between, at once the first-beginnings of the iron
 gliding forward into the empty space fall in a body
 together, and the result is that the ring itself follows
 and passes in this way as a whole. And indeed there
 is nothing that has its first elements more inter-
 twined, nothing more closely connected together and
 coherent, than the substance of strong iron with its
 chilly roughness. For this reason it is less surprising
 . . .^a if the large number of bodies emanating from
 the iron cannot move into the void without the ring
 itself following ; this it does, and follows until it has
 reached that very stone and clung to it by unseen
 attachments. The same thing happens in all direc-
 tions : wherever an empty space is formed, whether
 on the sides or above, the neighbouring bodies at
An empty
space is
made be-
tween
stone and
iron,
and the ring
falls into it
as a whole.

corpora continuo in vacuum vicina feruntur ;
 quippe agitantur enim plagis aliunde, nec ipsa 1020
 sponte sua sursum possunt consurgere in auras.

Huc accedit item, quare queat id magis esse,
 haec quoque res adiumento, motusque iuvatur,
 quod, simul a fronte est anelli rarior aer
 factus inanusque locus magis ac vacuatus, 1025
 1023 continuo fit uti qui post est cumque locatus
 1026 aer a tergo quasi provehat atque propellat.
 1027 semper enim circumpositus res verberat aer ;
 1028 sed tali fit uti propellat tempore ferrum,
 1029 parte quod ex una spatium vacat et capit in se. 1030
 1030 hic, tibi quem memoro, per crebra foramina ferri
 1031 parvas ad partis subtiliter insinuat, 1032
 1032 trudit et impellit, quasi navem velaque ventus.
 denique res omnes debent in corpore habere
 aera, quandoquidem raro sunt corpore et aer 1035
 omnibus est rebus circumdatus adpositusque.
 hic igitur, penitus qui in ferrost abditus aer,
 sollicito motu semper iactatur eoque
 verberat anellum dubio procul et ciet intus ;
 scilicet ille eodem fertur quo praecipitavit 1040
 iam semel et partem in vacuum conamina sumpsit.

Fit quoque ut a lapide hoc ferri natura recedat
 interdum, fugere atque sequi consueta vicissim.
 exultare etiam Samothracia ferrea vidi
 et ramenta simul ferri furere intus ahenis 1045
 in scaphiis, lapis hic Magnes cum subditus esset :
 usque adeo fugere a saxo gestire videtur.

1023 motusque *Brieger* : motuque *OQUP*

^a There are no resisting blows from the void place, hence the blows from other quarters drive the particles into it ; an automatic motion is impossible. ^b Cf. 4.897.

^c Probably iron rings used as amulets, called after Samo-

once are carried into the void ; for they are impelled by blows from other directions,^a and they cannot of their own accord rise up into the air.

¹⁰²² Moreover, to make the process easier, this matter also is added as an aid to the ring's movement, namely that as soon as the air is made thinner in front of the ring and the space more void and empty, it follows at once that all the air that is behind the ring pushes it forward as it were and propels it forward from the rear. For the air all round is for ever buffeting things ; but the reason why it propels the iron at that moment is that on one side there is empty space which receives it. This air that I speak of insinuates itself in subtle fashion through the many interstices in the iron into its small particles, thrusting and driving it on as the wind drives a ship with its sails.^b Again, all things must have air in their body, since they are of porous structure, and air surrounds and adjoins all things. This air, therefore, which is hidden in the inmost parts of the iron, is always being agitated with restless movement, and therefore beats the ring without doubt and sets it moving from within ; the ring is assuredly carried in that direction whither it has once flung itself forward and taken its impulse towards the void.

¹⁰⁴² Sometimes also the iron recedes from this stone, being accustomed to flee and follow in turns. I have even seen Samothracian iron ^c dance, and at the same time iron filings go mad in a bronze bowl, when this magnet stone was applied underneath : so eager seems the iron to escape from the stone. When

The air that is behind pushes it forward, beating from without

and penetrating within.

The magnet sometimes repels, as with iron filings in a bronze bowl ;

thrace because they were first made there (Lambinus). Wakefield quotes Isidorus, *Orig.* 19.32.5 and refers to Pliny, *HN* 33.6.23.

aere interposito discordia tanta creatur
 propterea quia nimirum prius aestus ubi aeris
 praecepit ferrique vias possedit apertas, 1050
 posterior lapidis venit aestus et omnia plena
 invenit in ferro neque habet qua tranet ut ante.
 cogitur offensare igitur pulsareque fluctu
 ferrea texta suo ; quo pacto respuit ab se
 atque per aes agitat sine eo quod saepe resorbet. 1055

Illud in his rebus mirari mitte, quod aestus
 non valet e lapide hoc alias impellere item res.
 pondere enim fretae partim stant : quod genus
 aurum ;

at partim raro quia sunt cum corpore, ut aestus
 pervolet intactus, nequeunt inPELLIER usquam : 1060
 lignea materies in quo genere esse videtur.
 interutrasque igitur ferri natura locata
 aeris ubi accepit quaedam corpuscula, tum fit
 inpellant ut eam Magnesia flumine saxa.

Nec tamen haec ita sunt aliarum rerum aliena, 1065
 ut mihi multa parum genere ex hoc suppeditentur
 quae memorare queam inter se singulariter apta.
 saxa vides primum sola colescere calce.
 glutine materies taurino iungitur una
 ut vitio venae tabularum saepius hiscant 1070
 quam laxare queant compages taurea vincla.
 vitigeni latices aquai fontibus audent
 misceri, cum pix nequeat gravis et leve olivom.
 purpureusque colos conchyli iungitur una 1074

^a According to Pliny, *HN* 28.17.236, the best glue is made from bulls' ears and genitals.

^b For the scansion of *aquai* (1072), cf. 552 and see note there.

^c "leve dixit oleum, quia non subsidit, immo exstat, et 572

the bronze comes between, all this quarrel is caused, because doubtless when the current from the bronze has come first and taken possession of the open channels of the iron, afterwards comes the current from the stone to find all full in the iron, and no way to swim through as it had before : it is therefore compelled to beat and buffet the iron texture with its flood ; and in this way it rejects from itself and sets moving through the bronze that which without the bronze it often sucks back.

the bronze particles having filled the pores in the iron first.

¹⁰⁵⁶ In this connexion, you must not allow yourself to feel surprise that the current from this stone has not the power to propel other things also. For some stand firm by their weight, of which kind is gold ; while others, because they are of a body so porous that the current flies through unresisted, cannot be propelled anywhere, in which kind the substance of wood is seen to be. Between the two, then, is the nature of iron, and when it receives certain minute bodies of bronze, the result is that the magnet stones drive it by their flow.

Some things are unaffected by the magnet;

but iron is driven away only when bronze particles have come in first.

¹⁰⁶⁵ But yet these properties are not so alien to other things that I could not find good store of similar examples to hand which I might mention, of things that have affinity for each other and for nothing else. Firstly you see stones cemented by mortar alone. Wood is joined together with bull's glue,^a so that the grain of boards often gapes open with a crack before the joints of the bull's glue loosen their hold. The juice of the grape is ready to mingle with spring-water,^b when heavy pitch and light olive-oil cannot.^c The colour of the sea-purple shell unites with the

Other things have affinity :

stones and mortar, wood and bull's glue,

wine and water,

sea-purple and wool,

super insidet humoribus omnibus : . . . contra picem gravem, quia subsidit " (Lambinus).

corpore cum lanae, dirimi qui non queat usquam—
 non si Neptuni fluctu renovare operam des,
 non mare si totum velit eluere omnibus undis.
 denique non auro res aurum copulat una,
 aeriue aes plumbo fit uti iungatur ab albo? 1079
 cetera iam quam multa licet reperire! quid ergo?
 nec tibi tam longis opus est ambagibus usquam,
 nec me tam multam hic operam consumere par est,
 sed breviter paucis praestat comprehendere multa:
 quorum ita texturae ceciderunt mutua contra,
 ut cava conveniant plenis haec illius illa 1085
 huiusque inter se, iunctura haec optima constat.
 est etiam quasi ut anellis hamisque plicata
 inter se quaedam possint coplata teneri;
 quod magis in lapide hoc fieri ferroque videtur.

Nunc ratio quae sit morbis, aut unde repente 1090
 mortiferam possit cladem conflare coorta
 morbida vis hominum generi pecudumque catervis,
 expediam. primum multarum semina rerum
 esse supra docui quae sint vitalia nobis,
 et contra quae sint morbo mortique necesses 1095
 multa volare. ea cum casu sunt forte coorta
 et perturbarunt caelum, fit morbidus aer.
 atque ea vis omnis morborum pestilientiaque
 aut extrinsecus, ut nubes nebulaeque, superne
 per caelum veniunt, aut ipsa saepe coorta 1100

^a The reference is to chrysocolle (χρυσόκολλα) = "gold-solder," usually identified with borax.

^b 769-780.

substance of wool so that it can nowhere be separated, not if you do your best to restore it with Neptune's flood, not if the whole sea would wash it out with all his waters. Again, is there not only one thing ^a that solders gold to gold, and is not bronze joined to bronze by tin? How many other examples of the same sort are to be found! But to what purpose? You do not need anywhere ways so long and so round-about, and I must not use so much labour on this point, but it is best briefly to comprise many things in a few words: when the textures of things have fallen into such a relation to each other that the empty places of this answer to the full places of that, the empty places of that to the full of this, here is the best conjunction. It is also possible that some pairs may be held in coupling as if they were linked with sort of rings and hooks, which seems to be rather what happens between this stone and iron.

gold and gold-gluce, bronze and tin. We need not mention all:

where fullness and emptiness correspond, there is the best conjunction.

¹⁰⁹⁰ Now I will explain the reason of diseases, and 8. Disease.
 from what place the force of disease can suddenly gather together, and blow together a storm of deadly destruction for mankind and for flocks and herds. Firstly, I have shown above ^b that there are many seeds of things which support our life, and on the other hand there must be many flying about ^c which make for disease and death. When these by chance or accident have gathered together, and thrown the heavens into turmoil, the air becomes diseased. And all these diseases in their power and pestilence either come from without ^d down through the sky, like clouds and mists, or often they gather together and

Noxious seeds gather and corrupt the air,

^c Cf. 30, and see note on 1-2.

^d From outside the world: cf. 483-494, 954-955.

de terra surgunt, ubi putorem umida nactast
intempestivis pluvisque et solibus icta.

Nonne vides etiam caeli novitate et aquarum
temptari procul a patria quicumque domoque
adveniunt ideo quia longe discrepant res ? 1105
nam quid Brittannis caelum differre putamus,
et quod in Aegypto est qua mundi claudicat axis,
quidve quod in Ponto est differre, et Gadibus atque
usque ad nigra virum percocto saecla colore ?
quae cum quattuor inter se diversa videmus 1110
quattuor a ventis et caeli partibus esse,
tum color et facies hominum distare videntur
largiter et morbi generatim saecla tenere.
est elephas morbus qui propter flumina Nili
gignitur Aegypto in media neque praeterea usquam.
Athide temptantur gressus, oculique in Achaeis 1116
finibus. inde aliis alius locus est inimicus
partibus ac membris ; varius concinnat id aer.

Proinde ubi se caelum quod nobis forte alienum
commovet, atque aer inimicus serpere coëpit, 1120
ut nebula ac nubes paulatim repit, et omne
qua graditur conturbat et immutare coactat ;
fit quoque ut, in nostrum cum venit denique caelum,
corrumpat reddatque sui simile atque alienum.

Haec igitur subito clades nova pestilitasque 1125
aut in aquas cadit aut fruges persidit in ipsas
aut alios hominum pastus pecudumque cibatus,
aut etiam suspensa manet vis aere in ipso,
et, cum spirantes mixtas hinc ducimus auras,

1106 putamus *OQUP* : putatis *De Syllabis ascribed to Sergius in Codex Vat. Reg. Lat. 1587, fol. 19^v (see C. E. Finch, CPhil. 62 [1967] 261-262)*

^a The reference is to the inclination of the earth's axis, the

rise from the earth itself, when through damp it has
become putrescent, being smitten out of due time or arise
by rains and suns. from the earth.

¹¹⁰³ Do you not see also that novelty of climate Each
and water affects any who travel far from home and climate has
country, just because there is a great difference in its own
these things ? For what difference must we suppose dangers;
to be between the climate of Britain and that of
Egypt where the world's pole leans aslant ? ^a What
between that which is in Pontus, and at Gades right
onwards to the tribes of black men with their roasted
skin ? And as we see these four climates to be
diverse under the four winds and quarters of heaven,
so the colour and aspect of men are seen to be widely
different and diseases to possess the nations after
their kind. There is the elephant disease ^b which is
found by the river of Nile in mid-Egypt and nowhere
else. In Attica the feet are attacked, the eyes in the
Achaean district. Hence different places are danger-
ous to different parts and members ; the variety
of air brings that about.

¹¹¹⁹ Therefore when a sky which is alien to us The plague
happens to set itself in motion, and a dangerous air creeps
begins to crawl about, it creeps slowly, like cloud or through
mist, causing commotion wherever it goes and com- the air,
pelling change ; often also, when it has come to our
sky, it corrupts it, making it like itself and alien to us.

¹¹²⁵ Accordingly this new plague or pestilence sud- and falls on
denly either falls on the waters, or settles on the our water
corn itself or other sustenance of mankind or food of or food,
beasts, or even remains as a force suspended in the or hovers in
air itself, and when breathing we inhale the air mixed the air we
breathe.

north pole being the highest point, the south pole the lowest.
Cf. Virgil, G. 1.240-241. ^b Elephantiasis.

illa quoque in corpus pariter sorbere necessesit. 1130
 consimili ratione venit bubus quoque saepe
 pestilitas et iam pigris balantibus aegror.
 nec refert utrum nos in loca deveniamus
 nobis adversa et caeli mutemus amictum,
 an caelum nobis ultro natura coruptum 1135
 deferat aut aliquid quo non consuevimus uti,
 quod nos adventu possit temptare recenti.

Haec ratio quondam morborum et mortifer aestus
 finibus in Cecropis funestos reddidit agros 1140
 vastavitque vias, exhaustit civibus urbem.
 nam penitus veniens Aegypti finibus ortus,
 aera permensus multum camposque natantis,
 incubuit tandem populo Pandionis omni.
 inde catervatim morbo mortique dabantur.

Principio caput incensum fervore gerebant 1145
 et duplicis oculos suffusa luce rubentes.
 sudabant etiam fauces intrinsecus atrae
 sanguine, et ulceribus vocis via saepta coibat,
 atque animi interpres manabat lingua cruore
 debilitata malis, motu gravis, aspera tactu. 1150

1135 ultro *Avancius*: vitro *OQ*, *U corr.*: vito *U*: ultra
De Syllabis ascribed to Sergius in Codex Vat. Reg. Lat.
1587, fol. 19^v (C. E. Finch, CPhil, 62 [1967] 261-262) 1141
veniens Q corr., P: venies OQU: mediis W. S. Watt, Hermes 117
(1989) 236

^a Traditionally the first king of Athens. Lucr.'s account of the plague of 430 B.C. is closely based on Thucydides 2.47-52. However, as H. S. Commager Jr. has shown in *Harv. Stud.* 62 (1957) 105-118, he sees the plague not merely as a physical disaster, but also as a moral calamity and as symbolic of man's spiritual unenlightenment. This (a) accounts for his departures from Thuc.'s account, (b) explains why he places the passage at the end of his poem, (c) shows that his account is not indicative (as some have thought) of morbid pessimism. The idea that the unenlightened are morally diseased is common in Epicureanism (*cf. e.g.* Cicero,

with it, this also we must likewise absorb into our body. In like manner pestilence often comes to cattle also, distemper even to lazy bleaters. Nor does it matter whether we travel to places unwholesome for us, changing our cope of sky, or whether Nature of herself brings an infected sky to us or something we are not accustomed to experience, which by its recent coming may be able to attack us.

Cattle and sheep also are attacked.

¹¹³⁸ Such a cause of disease and death-bringing current once in the realms of Cecrops ^a poisoned the country-side, made the roads a desert, and drained the city of men. For beginning from the innermost parts of Egypt, and traversing a wide expanse of air and the swimming plains, it fell at length upon all the people of Pandion.^b Then they were given over in troops to disease and death.

An example is the great plague of Athens. It came from Egypt.

¹¹⁴⁵ First they felt the head burning with heat, the two eyes red with the fire diffused beneath. The throat also, black within, sweated blood, ulcers clogged and closed the path of the voice, and the tongue, mind's interpreter, oozed with blood, weakened by pain, heavy to move, rough to the

The symptoms of body

Fin. 1.18.59, Diogenes of Oenoanda fr. 3.IV.3-VI.4 Smith) and is prominent in the proem to this book (see note on 1-2), where it is emphasized that this spiritual sickness is self-inflicted and, thanks to Epicurus, can be completely cured. The truth is that the prospect of salvation and of a heaven on earth which Lucr. offers in the *DRN* shines with a brighter and stronger light on account of this dark and hellish picture of what life is like without the guidance of Epicurus—in much the same way that in the myth in Plato's *Phaedo* the brilliance and colourfulness and beauty of life on the surface of the real earth (110 B 5 ff.) is intensified by the following account (111 c 4 ff.) of the grim subterranean regions.

^b According to legend, king of Athens and father of Procne and Philomela.

inde ubi per fauces pectus complerat et ipsum
 morbida vis in cor maestum confluxerat aegris,
 omnia tum vero vitae claustra lababant.
 spiritus ore foras taetrumolvebat odorem,
 rancida quo perolent proiecta cadavera ritu. 1155
 atque animi prorumpit tum vires totius, omne
 languebat corpus leti iam limine in ipso.
 intolerabilibusque malis erat anxius angor
 adsidue comes et gemitu commixta querella.
 singultusque frequens noctem per saepe diemque
 corripere adsidue nervos et membra coactans 1161
 dissoluebat eos, defessos ante, fatigans.

Nec nimio cuiquam posses ardore tueri
 corporis in summo summam fervere partem,
 sed potius tepidum manibus proponere tactum 1165
 et simul ulceribus quasi inustus omne rubere
 corpus, ut est per membra sacer dum diditur ignis.
 intima pars hominum vero flagrabat ad ossa,
 flagrabat stomacho flamma ut fornacibus intus. 1169
 nil adeo posses cuiquam leve tenveque membris
 vertere in utilitatem, at ventum et frigora semper.
 in fluvios partim gelidos ardentia morbo
 membra dabant nudum iacentes corpus in undas.
 1178 multi praecipites lymphis putealibus alte
 1174 inciderunt, ipso venientes ore patente : 1175
 1175 insedabiliter sitis arida, corpora mersans,
 1176 aequabat multum parvis umoribus imbrem.

1156 tum *Wakefield tentatively in notes: omitted by OQU: et supplied before omne by F, but juxtaposition of totius omne is effective and tum could easily have been omitted by haplography after prorum* 1174 lymphis *BCF: nymphis QUL, Wakefield, Merrill (1917), Diels, Martin: nymphis OA*

touch. After that, when passing through the throat the fell disease had filled the chest and had flooded into the sorrowful mind ^a of the sufferer, then indeed all the barriers of life did totter. The breath rolled out a foul stench, like the penetrating smell of rotting corpses thrown out unburied. And then all the ^{and mind.} powers of the mind, the whole body, grew faint, being now on the very threshold of death. These intolerable sufferings were ever attended by torments of anxiety and laments mingled with moans.^b Retching persisted often through night and day, constantly causing cramps in the muscles and limbs, which quite broke them up, wearying those who were already wearied out.

¹¹⁶³ Yet you could not perceive the outermost part of the body of anyone to be burning with excessive heat on the surface, but rather to give forth a sensation of warmth to the hand, and at the same time to be red all over with ulcers as it were burnt into it, like when the accursed fire ^c spreads abroad over the limbs. But the inward parts in men burnt to the bones; a flame burnt in the stomach as in a furnace. There was nothing so light or thin that you could turn it to use for their bodies; only wind and cold always. Some cast their frame burning with the plague into cool streams, throwing the body naked into the waters. Many fell headlong from a height into wells of water, which they struck first with gaping mouth as they came. Dry thirst beyond all quenching drenched their bodies, and made a flood of water no more than a drop.

^a *cor* is usually taken to mean "heart" or "stomach," but see Commager 105-107, 114-115.

^b 1158-1159: *cf.* 3.993, 6.14, 16 and see Commager 105-107.

^c *Cf.* 660 and see note there.

1177 Nec requies erat ulla mali : defessa iacebant
 corpora. mussabat tacito medicina timore,
 quippe patentia cum totiens ardentia morbis 1180
 lumina versarent oculorum expertia somno.

 Multaque praeterea mortis tum signa dabantur :
 perturbata animi mens in maerore metuque,
 triste supercilium, furiosus voltus et acer,
 sollicitae porro plенаeque sonoribus aures, 1185
 creber spiritus aut ingens raroque coortus,
 sudorisque madens per collum splendidus umor,
 tenvia sputa minuta, croci contacta colore
 salsaque, per fauces rauca vix edita tussi.
 in manibus vero nervi trahere et tremere artus 1190
 a pedibusque minutatim succedere frigus
 non dubitabat. item ad supremum denique tempus
 compressae nares, nasi primoris acumen
 tenve, cavati oculi, cava tempora, frigida pellis
 duraque, in ore iacens rictum, frons tenta manebat.
 nec nimio rigida post artus morte iacebant. 1196
 octavoque fere candenti lumine solis
 aut etiam nona reddebant lampade vitam.

 Quorum siquis, ut est, vitarat funera leti,
 ulceribus taetris et nigra proluvie alvi 1200
 posterius tamen hunc tabes letumque manebat,
 aut etiam multus capitis cum saepe dolore
 corruptus sanguis expletis naribus ibat :
 huc hominis totae vires corpusque fluebat.
 profluvium porro qui taetri sanguinis acre 1205
 exierat, tamen in nervos huic morbus et artus
 ibat et in partis genitalis corporis ipsas.

1195 in ore iacens *Nonius p. 266 Lindsay* : in(h)oretiacet
OQU rictum *Lambinus* : rectum *OQUF* : rictu *Nonius*
loc. cit. manebat *Nonius loc. cit.*, *A* : mebat *OQU* :
 582

1178 Nor was there any rest from pain : out-
 wearied the bodies lay. Medicine muttered below Medicine
 her breath, scared into silence, because no doubt was useless.
 they so often rolled their staring eyes, fiery with the
 plague and knowing no sleep.

1182 And many another sign of death was then to Symptoms
 be seen : a mind disordered in all this sorrow and of
 fear, a gloomy brow, a mad and fierce look, ears also approach-
 troubled and full of droning, quick pants or deep ing death.
 breaths rising at long intervals, dank sweat stream-
 ing and shining over the neck, fine thin spittle, salt
 and yellow in colour, expelled with an effort through
 the throat by hoarse coughing. Relentlessly the
 sinews in the hands twitched, the limbs trembled,
 from the feet cold crept up by inches. At the latter
 end also the nostrils were compressed, the tip of the
 nose grew sharp, the eyes were sunken, the temples
 hollow, the skin cold and hard, the mouth agape and
 grinning, the forehead remaining tense. No long
 time after the limbs lay stiff in death. On the eighth
 shining of the sun's light for the most part, or even Death
 on the ninth, they gave up the ghost. usually
 occurred in eight or nine
 days.

1199 And if one of them, as may happen, had If any
 escaped the destruction of death, yet afterwards by escaped,
 foul ulcers and a black discharge from the bowels, he still
 wasting and death still awaited him, or else a stream suffered.
 of corrupted blood often passed by the choked
 nostrils with pains in the head : into this ran all
 the man's strength and substance. Moreover, he
 who survived this cruel flux of foul blood, yet found
 the disease passing into his sinews and limbs and
 even the genital parts. And some with the strong

tumebat *Heinsius*, but one would expect the forehead to be
 shrunk, not swollen : perhaps tenebat (*intrans. as in 562*).

et graviter partim metuentes limina leti
 vivebant ferro privati parte virili,
 et manibus sine nonnulli pedibusque manebant 1210
 in vita tamen, et perdebant lumina partim :
 usque adeo mortis metus his incesserat acer.
 atque etiam quosdam cepere obliviam rerum
 cunctarum, neque se possent cognoscere ut ipsi.

Multaque humi cum inhumata iacerent corpora
 supra
 corporibus, tamen alituum genus atque ferarum 1216
 aut procul absiliebat, ut acrem exiret odorem,
 aut, ubi gustarat, languebat morte propinqua.
 nec tamen omnino temere illis solibus ulla
 comparebat avis, nec tristitia saecula ferarum 1220
 exhibant silvis. languebant pleraque morbo
 et moriebantur. cum primis fida canum vis
 strata viis animam ponebat in omnibus aegre ;
 extorquebat enim vitam vis morbida membris.

Incomitata rapi certabant funera vasta. 1225
 nec ratio remedi communis certa dabatur ;
 nam quod ali dederat vitalis aeris auras
 volvere in ore licere et caeli templa tueri,
 hoc aliis erat exitio letumque parabat.

Illud in his rebus miserandum magnopere unum
 aerumnabile erat, quod ubi se quisque videbat 1231
 implicitum morbo, morti damnatus ut esset,
 deficiens animo maesto cum corde iacebat,
 funera respectans animam amittebat ibidem.

1225 transferred after 1246 by Lachmann (not Bentley, as
 stated by some recent editors), perhaps rightly 1227 ali
 OQUF: alii Macrobius 6.2.12, perhaps rightly (see critical
 note on 4.637): alii ABL

^a H. Jacobson, *CPhil.* 61 (1966) 156, may be right in
 thinking that *morti damnatus ut esset* means "how he was
 584

fear they had for the threshold of death went on
 living after they had severed the manly part with a
 knife, some without hands or feet remained in life
 for all that, some lost their eyes: so deeply had the
 keen fear of death possessed them. And there were
 others who fell into oblivion of all things, so that
 they could not even tell who they were.

¹²¹⁵ And although bodies on bodies lay unburied
 upon the ground in heaps, yet the tribes of winged
 creatures and wild beasts would either leap away to
 escape the rank smell, or having tasted would faint
 in a speedy death. Yet it was not often in those
 days that any bird was to be seen at all, or the
 gloomy generations of wild beasts came out of the
 forests. Most of them grew faint with disease and
 died. Among the first were the dogs, faithful
 creatures, which, scattered about on all the roads,
 yielded their breath with reluctance; for the power
 of the disease wrenched the life out of their limbs.

¹²²⁵ Without mourners the lonely funerals com-
 peted with one another in being rushed through.
 Nor was any kind of remedy general and certain;
 for what had given one the power to draw the breath
 of life into his lips and to behold the regions of
 heaven, this to others was poison and brought them
 death.

¹²³⁰ But in this situation the most pitiful thing
 above all others and the most lamentable was that,
 when anyone saw himself to be involved in the
 plague, as though ^a he were condemned to death he
 would lose all heart, and lie with sad spirit, thinking
 only of death, until he yielded up his own spirit
 condemned to death," but Pius' almost universally adopted
 explanation that *ut = tamquam si* seems more natural.

quippe etenim nullo cessabant tempore apisci 1235
 ex aliis alios avidi contagia morbi,
 1245 lanigeras tamquam pecudes et buccera saecula ;
 1237 idque vel in primis cumulabat funere funus.
 1238 nam quicumque suos fugitabant visere ad aegros,
 1239 vitae nimium cupidos mortisque timentis 1240
 1240 poenibat paulo post turpi morte malaque,
 1241 desertos, opis expertis, incuria mactans.
 1242 qui fuerant autem praesto, contagibus ibant
 1243 atque labore, pudor quem tum cogebat obire
 1244 blandaque lassorum vox mixta voce querellae. 1245
 optimus hoc leti genus ergo quisque subibat.

inque aliis alium, populum sepelire suorum
 certantes ; lacrimis lassi luctuque redibant ;
 inde bonam partem in lectum maerore dabantur.
 nec poterat quisquam reperiri, quem neque morbus
 nec mors nec luctus temptaret tempore tali. 1251

Praeterea iam pastor et armentarius omnis
 et robustus item curvi moderator aratri
 languebat, penitusque casa contrusa iacebant
 corpora paupertate et morbo dedita morti. 1255
 exanimis pueris super exanimata parentum
 corpora nonnumquam posses retroque videre
 matribus et patribus natos super edere vitam.

1237 (1245) placed here by Bentley and all recent editors
 except Büchner, who unconvincingly defends its position
 in the manuscripts and is driven to alter lanigeras to lanigeras
 1246 A lacuna after this line assumed by Munro and most
 subsequent editors, but Bockemüller and Martin transfer

where he fell. For indeed ^a not for a moment did
 the contagion of the insatiable disease cease to
 spread from one to another, as amongst woolly sheep
 and the horned herds, and this was the chief cause
 that piled deaths upon deaths. For if any shirked
 the visitation of their own sick, avenging Neglect-
 fulness not long after would punish them for their
 too great greed of life and their fear of death, by a
 death foul and evil, deserted and without help. But
 those who remained at hand passed away by con-
 tagion, and by the toil which then shame compelled
 them to face, and the coaxing voice of the weary
 ones mixed with the voice of reproach. All the
 noblest spirits therefore met death in this way.

¹²⁴⁷ . . . and one upon others, fighting to bury the
 multitude of their dead ; weary with weeping and
 grief they returned, then for the greater part took
 to their beds from grief. Nor could anyone be found
 whom neither disease had assailed nor death nor
 mourning at such a time.

¹²⁵² Moreover, by this time the shepherd and the
 herdsman and also the brawny guide of the curved
 plough were all fainting ; their bodies lay huddled
 up in the recesses of their huts, given over to death
 by poverty and disease. Sometimes you might see
 the lifeless bodies of parents lying upon their lifeless
 children, and contrariwise children yielding up their
 life upon the bodies of mother and father.

^a The commentators allege that Lucr. has misunderstood
 Thuc. here and in 1239-1246. But Lucr. was a master of the
 Greek language, and it is probable that his alterations are
 chiefly due to his desire to emphasize the psychological
 aspect of the plague and moralize (cf. Commager 108, 113).

1247-1251 after 1286, and Büchner argues that no lacuna
 exists here

Nec minimam partem ex agris is maeror in urbem
 confluit, languens quem contulit agricolarum 1260
 copia conveniens ex omni morbida parte.
 omnia conplebant loca tectaque ; quo magis aestu
 confertos ita acervatim mors accumulabat.
 multa siti prostrata viam per proque voluta
 corpora silanos ad aquarum strata iacebant 1265
 interclusa anima nimia ab dulcedine aquarum,
 multaue per populi passim loca prompta viasque
 languida semanimo cum corpore membra videres
 horrida paedore et pannis cooperta perire
 corporis inluvie, pelli super ossibus una, 1270
 ulceribus taetris prope iam sordeque sepulta.

Omnia denique sancta deum delubra repleat
 corporibus mors exanimis, onerataque passim
 cuncta cadaveribus caelestium templa manebant,
 hospitibus loca quae complerant aedituentes. 1275
 nec iam religio divom nec numina magni
 pendebantur enim : praesens dolor exsuperabat.
 nec mos ille sepulturae remanebat in urbe,
 quo prius hic populus semper consuerat humari ;
 perturbatus enim totus trepidabat, et unus 1280
 quisque suum pro re et pro tempore maestus huma-
 bat.

1259 is maeror attributed to Munro by himself and subsequent editors, but already suggested by Lachmann as being preferable to maeror is : m(a)eroris OQ : moeros is Wakefield : maeror is Forbiger (not Diels) : aegror is Simeon Bosius in Lambinus (1570) 1270 pelli attributed by the editors to Lachmann, but Lambinus notes " quidam vir doctus legendum censet, pelli, in sexto casu " : pellis OQUP 1277 so punctuated by Naugerius, Lambinus, and most modern editors (Merrill wrongly states that this punctuation was unknown before Wakefield). Pius, Gifanius, and, recently, Diels, Martin, Ernout place colon after pendebantur 1279 prius QUF : pius OL 1281 pro re et pro tempore

¹²⁵⁹ And in no small degree this affliction flowed from the country into the city, for the fainting crowd of countrymen brought it, gathering from all quarters with disease. They filled all places and buildings ; so by the stifling heat death all the more piled them in heaps, being thus packed. Many bodies, thrown down by thirst and rolling over the road, lay stretched by the water-spouts, cut off from the breath of life by the too great sweetness of water ; many in public places and roads you might see all about, bodies half-dead with fainting limbs caked with squalor and covered with rags, perishing in filth of body, nothing but skin on their bones, and that almost buried in foul ulcers and dirt.

¹²⁷² Moreover, death had filled all the sanctuaries of the gods with lifeless bodies, all the temples of the celestials everywhere remained burdened with corpses, all which places the sacristans had crowded with guests. For indeed now neither the worship of the gods nor their power was much regarded : the present grief was too great. Nor did that custom of sepulture remain in the city, with which this nation in the past had been always accustomed to be buried ; for the whole nation was in trepidation and dismay, and each man in his sorrow buried his own dead as time and circumstances allowed. Sudden need also and

M. F. Smith. Cf. Caesar, BGall. 5.8.1 pro tempore et pro re, Cicero, Fam. 12.19.3. pro tempore could easily have been omitted after pro re, because of the repeated pro and the ending -re : pro re OQUBL : prope pro tempore Housman (see T. B. Haber, CJ 51 [1956] 388) : pro re cognatum Avancius : pro re conpostum Lachmann : pro re praesenti Munro

multaque res subita et paupertas horrida suasit ;
 namque suos consanguineos aliena rogorum
 insuper extracta ingenti clamore locabant
 subdebantque faces, multo cum sanguine saepe 1285
 rixantes potius quam corpora desererentur.

1282 res *C* : omitted by *OQU*: vis *F* : mors *Bernays*

poverty persuaded to many dreadful expedients :
 for they would lay their own kindred amidst loud
 lamentation upon piles of wood not their own, and
 would set light to the fire, often brawling with much
 shedding of blood rather than abandon the bodies.^a

^a S. T. Kelly, *Latomus* 39 (1980) 95-97, makes the odd suggestion that 1286 means not only "struggling rather than see the corpses abandoned", but also "struggling rather than see their own bodies left behind" and "struggling rather than see their own atoms left behind".

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