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EARLY GREEK  
PHILOSOPHY  
LATER IONIAN AND  
ATHENIAN THINKERS

PART 2



*Edited and Translated by*

ANDRÉ LAKS

GLENN W. MOST

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EARLY GREEK PHILOSOPHY

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# EARLY GREEK PHILOSOPHY

VOLUME VII

LATER IONIAN AND  
ATHENIAN THINKERS

PART 2

EDITED AND TRANSLATED BY  
ANDRÉ LAKS AND GLENN W. MOST

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LATER IONIAN AND  
ATHENIAN THINKERS  
PART 2





## 27. ATOMISTS (LEUCIPPUS, DEMOCRITUS)

The ancient ‘successions’ (cf. **DOX. T20**) present Leucippus as a disciple of Zeno (**P2, P3**) on account of the interest they share in the question of indivisibility; but otherwise his is a personality that we cannot grasp. Most often, when he is mentioned he is associated with Democritus, in the wake of Aristotle, but what belongs to each of the two thinkers is not indicated explicitly. However, the ancient reports (cf. especially **D30**) do suggest that Leucippus supplied the general principles—the indivisible atoms and the void—of a system that Democritus went on to elaborate further and above all to amplify considerably by the range of his own research in all the fields of knowledge. In any case, it is hardly possible to treat the two thinkers separately from each other.

About Democritus we are much better informed. We know that he came from Abdera, a village in Thrace to which his name remains indissolubly linked (whereas in the case of Leucippus the ancient tradition hesitates between Miletus and Abdera). The chronological indications are complicated: one dating sets his birth earlier, in 472/68 BC, another later, in 460/56; his longevity is well attested, and he certainly outlived Socrates, who was in any case his near contemporary.

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Democritus' original works were as diverse as they were numerous, as is indicated by the transmitted catalog of his writings (even if this includes a certain number of apocryphal titles); but from these there survive only isolated terms and expressions and a few sentences (the ethical maxims that are attributed to him pose a special problem; see below). His writings must have disappeared quite early; one sign of this is that Simplicius, our major source for citations of the principal early Greek philosophers, does not seem to have had access to any of his works. But the doxographical reports concerning his doctrine of principles and his natural philosophy are abundant, and some of them are very detailed. This can be seen as an effect of the very special attention paid him by Aristotle, and following him by Theophrastus, an attention owing principally to three factors: the force and coherence of his doctrine; the abundance and sophistication of his causal explanations (Democritus himself placed his research under the banner of 'aetiology'); and the encyclopedic character of his work, in which Aristotle was able to recognize an undertaking of the same range as his own.

Democritus' ethical fragments pose an insoluble problem because of the many uncertainties that weigh upon the ca. 228 quotations transmitted in Stobaeus' *Anthology* under the name of Democritus and, in some cases, under that (otherwise unknown) of Democrates. These quotations, which most often take the form of maxims or advice, are presented without context; besides those that are assigned to Democrates, others appear in other anthologies, where they are attributed to other people, for example Epictetus or Maximus the Confessor. Some are of a con-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

siderable banality. It is hard to avoid the impression that most of these fragments have been attributed to Democritus for what might be called honorific reasons. From this perspective, they belong rather to the history of his reception, or indeed of his pseudepigraphic reception, which in any case is known to have been abundant. But it would be just as risky to attach them exclusively to this tradition as to attribute them in their entirety to Democritus himself. Rather than trying systematically to distinguish the authentic from the inauthentic—an undertaking for which no satisfactory criteria are available—we have chosen to print the great majority of these maxims in italics, in order to indicate their problematic character. The few exceptions are due to their closeness, semantic or doctrinal, to texts that there is no particular reason to distrust.

### BIBLIOGRAPHY

#### *Editions and Translations*

- W. Leszl. *I Primi Atomisti* (Florence, 2009).  
S. Luria. *Democritea* (Leningrad, 1970). Italian translation by A. Krivushina (Milan, 2007).  
C. C. W. Taylor. *The Atomists: Leucippus and Democritus* (Toronto, 1999).

#### *Collection of Articles*

- P.-M. Morel and A. Brancacci, eds. *Democritus: Science, the Arts, and the Care of the Soul* (Leiden-Boston, 2007).

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W. Leszl. "Democritus' Works: From Their Titles to Their Contents," in Morel and Brancacci, eds., pp. 11–76.

### *On the Alchemical Tradition*

M. Martelli. *Scritti alchemici. Pseudo-Democrito, con il commentario di Sinesio*. Edizione critica del testo greco, traduzione e commento (Paris-Milan, 2011).

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ATOMISTS  
(LEUCIPPUS [67 DK],  
DEMOCRITUS [68 DK])

For Leucippus, references to DK take the form 67 Ax or Bx; for Democritus, references are generally by only Ax, Bx, or Cx.

P

*Leucippus (P1–P5)*  
*Family and city (P1)*

**P1**

**a** (< 67 A1) Diog. Laert. 9.30

Λεύκιππος Ἐλεάτης, ὡς δέ τινες, Ἀβδηρίτης, κατ' ἐνίους δὲ Μιλήσιος<sup>1</sup> [. . . = **P2**].

<sup>1</sup> Μιλήσιος recc.: μῆλιος mss.

**b** (< 67 A8) Simpl. *In Phys.*, p. 28.4–5

Λεύκιππος δὲ ὁ Ἐλεάτης ἢ Μιλήσιος (ἀμφοτέρως γὰρ λέγεται περὶ αὐτοῦ) [. . . = **D32**].

ATOMISTS  
(LEUCIPPUS, DEMOCRITUS)

P

*Leucippus (P1–P5)*  
*Family and City (P1)*

**P1**

**a** (< 67 A1) Diogenes Laertius

Leucippus of Elea, but of Abdera according to other people, and according to some, of Miletus [. . .].

**b** (< 67 A8) Simplicius, *Commentary on Aristotle's Physics*

Leucippus, of Elea or of Miletus (for both are said about him) [. . .].



## EARLY GREEK PHILOSOPHY VII

### *Teachers (P2–P5)*

**P2** (< 67 A1) Diog. Laert. 9.30

[. . . = **P1**] οὗτος ἤκουσε Ζήνωνος.

**P3** (< 67 A10) (Ps.-?) Hippol. *Ref.* 1.12.1

Λεύκιππος δὲ Ζήνωνος ἐταῖρος [. . .].

**P4** (67 A5) Tzetz. *Chil.* 2.980

[. . .] Λευκίππου [. . .] τοῦ μαθητοῦ Μελίσσου [. . .].

**P5** (< 67 A5) Iambl. *VP* 104

[. . .] μαθητεύσαντες τῷ Πυθαγόρᾳ πρεσβύτη νέοι, Φιλόλαός τε καὶ Εὐρυτος, [. . .] Λεύκιππός τε καὶ Ἀλκμαίων [. . .].

### *Democritus (P6–P56)*

#### *Family and City of Origin (P6–P8)*

**P6** (< A1) Diog. Laert. 9.34

Δημόκριτος Ἡγησιστράτου, οἱ δὲ Ἀθηνοκρίτου, τινὲς Δαμασίππου, Ἀβδηρίτης ἢ, ὥς ἐνιοι, Μιλήσιος.

**P7** (< A40) (Ps.-?) Hippol. *Ref.* 1.13.1

[. . . = **P18**] Δημόκριτος Δαμασίππου, Ἀβδηρίτης  
[. . . = **P18**].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Teachers (P2–P5)*

**P2** (< 67 A1) Diogenes Laertius

[. . .] he studied with Zeno.

**P3** (< 67 A10) (Ps.-?) Hippolytus, *Refutation of All Heresies*

Leucippus, companion of Zeno [. . .].

**P4** (67 A5) Tzetzes, *Chiliades*

Leucippus [. . .] the disciple of Melissus [. . .].

**P5** (< 67 A5) Iamblichus, *Life of Pythagoras*

[. . .] young disciples of the aged Pythagoras: Philolaus and Eurytus, [. . .] Leucippus and Alcmaeon [. . .].

### *Democritus (P6–P56)*

#### *Family and City of Origin (P6–P8)*

**P6** (< A1) Diogenes Laertius

Democritus, son of Hegesistratus; but other people say, of Athenocritus; certain ones, of Damasippus; he was from Abdera, or according to some people, from Miletus.

**P7** (< A40) (Ps.-?) Hippolytus, *Refutation of All Heresies*

[. . .] Democritus, son of Damasippus, of Abdera [. . .].

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**P8** (< A2) *Suda* Δ.447

Δημόκριτος [. . .] Ἀβδηρίτης ἐκ Θράκης [. . .].

*Chronology (P9–P15)*

**P9** (B5) *Diog. Laert.* 9.41

γέγονε δὲ τοῖς χρόνοις, ὡς αὐτός φησιν ἐν τῷ Μικρῷ διακόσμῳ, νέος κατὰ πρεσβύτην Ἀναξαγόραν, ἔτεσιν αὐτοῦ νεώτερος τετταράκοντα. συντετάχθαι δέ φησι τὸν Μικρὸν διάκοσμον ἔτεσιν ὕστερον τῆς Ἰλίου ἀλώσεως τριάκοντα<sup>1</sup> καὶ ἑπτακοσίους.

<sup>1</sup> τρία <καὶ ἐξή>κοντα Mansfeld

**P10** (< A1) *Diog. Laert.* 9.41

γεγόναι δ' αὖν, ὡς μὲν Ἀπολλόδωρος ἐν Χρονικοῖς [*FGrHist* 244 F36a], κατὰ τὴν ὀγδοηκοστὴν Ὀλυμπιάδα, ὡς δὲ Θράσυλλος ἐν τῷ ἐπιγραφομένῳ Τὰ πρὸ τῆς ἀναγνώσεως τῶν Δημοκρίτου βιβλίων [*Test.* 18a Tarrant], κατὰ τὸ τρίτον ἔτος τῆς ἐβδόμης καὶ ἐβδομηκοστῆς Ὀλυμπιάδος, ἐνιαυτῷ, φησί, πρεσβύτερος ὢν Σωκράτους. εἴη αὖν οὖν κατ' Ἀρχέλαον τὸν Ἀναξαγόρου μαθητὴν καὶ τοὺς περὶ Οἰνοπίδην καὶ γὰρ τούτου<sup>1</sup> μέμνηται [. . . = **P26**].

<sup>1</sup> τούτων Reiske

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### P8 (< A2) *Suda*

Democritus [. . .] an Abderite who came from Thrace [. . .].

### *Chronology (P9–P15)*

### P9 (B5) Diogenes Laertius

With regard to chronology, he was, as he himself says in his *Small World System*, “**young when Anaxagoras was old,**” being younger than him by forty years. And he says that the *Small World System* was composed 730 years after the fall of Troy.<sup>1</sup>

<sup>1</sup> If we accept the date of 1184/83 for the fall of Troy, as established by Eratosthenes (and by Apollodorus following him), then this work will have been written in 454/53, but that date is too early. Mansfeld lowers it to 421/20 by correcting 730 to 763. It remains uncertain whether this computation goes back to Democritus himself or, as Mansfeld thinks, to Apollodorus (in which case Apollodorus would be the subject of “he says”).

### P10 (< A1) Diogenes Laertius

He would have been born, at least according to Apollodorus in his *Chronology*, during the 80th Olympiad [= 460/56 BC]; but according to Thrasyllus, in his book entitled *Preliminaries to Reading Democritus’ Books*, it was during the third year of the 77th Olympiad [= 470/69], and he was, he says, one year older than Socrates. So he would be a contemporary of Archelaus, the disciple of Anaxagoras, as well as of Oenopides; and in fact he mentions this latter [. . .].

## EARLY GREEK PHILOSOPHY VII

### **P11** (< A2) *Suda* Δ.447

Δημόκριτος [. . .] γεγονὼς ὅτε καὶ Σωκράτης ὁ φιλόσοφος, κατὰ τὴν οἷ' Ὀλυμπιάδα, οἱ δὲ κατὰ τὴν π' φασίν.

### **P12** (A4) *Eus. Chron.* (Cyr., Hier.; cf. *Chron. Pasch.*)

#### **a** *Cyrill. Alex. Jul.* 1.15

ἐβδομηκοστῇ Ὀλυμπιάδι φασὶ γενέσθαι<sup>1</sup> Δημόκριτον καὶ Ἀναξαγόραν, φιλοσόφους φυσικούς [. . .].

<sup>1</sup> γενέσθαι] ἐγνωρίζοντο *Chron. Pasch.* 317.5, clari habentur Hier. p. 107, 15

#### **b** *Hier. Chron.*, p. 114.7

[ad Ol. 86.1] Democritus Abderites et Empedocles et Hippocrates medicus Gorgias Hippiasque et Prodicus et Zeno et Parmenides philosophi insignes habentur.<sup>1</sup>

<sup>1</sup> insignes habentur] γενέσθαι *Cyrill. Alex. Jul.* 1.15

#### **c** *Hier. Chron.*, p. 117.17

[ad Ol. 94.4] Democritus moritur.

### **P13** (A5) *Diod. Sic.* 14.11.5

περὶ δὲ τὸν αὐτὸν χρόνον καὶ Δημόκριτος ὁ φιλόσοφος ἐτελεύτησε βιώσας ἔτη ἐνενήκοντα.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **P11** (< A2) *Suda*

Democritus [. . .] born at the same time as Socrates the philosopher, during the 77th Olympiad [= 472/68]; but other people say, during the 80th [= 460/56].

### **P12** (A4) Eusebius, *Chronicle*

#### **a** (Cyril of Alexandria)

They say that it was during the 70th Olympiad [= 500/496] that Democritus and Anaxagoras, natural philosophers, were born [. . .].

#### **b** (Jerome)

[86th Olympiad, 1st year = 436] Democritus of Abdera, Empedocles, Hippocrates the doctor, Gorgias, Hippias, Prodicus, Zeno, and Parmenides, philosophers, are considered famous.

#### **c** (Jerome)

[94th Olympiad = 404/400] Democritus dies.

### **P13** (A5) Diodorus Siculus

About the same time [Ol. 94.1 = 404] the philosopher Democritus died, after having lived for ninety years.

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**P14** (< A6) Ps.-Luc. *Long.* 18

Δημόκριτος μὲν ὁ Ἀβδηρίτης ἐτῶν γεγονὼς τεττάρων καὶ ἑκατὸν [. . . = **P54**] ἐτελεύτα.

**P15** (< A1) Diog. Laert. 9.43

[. . . = **P51**] ἀλνπότατα τὸν βίον προήκατο, ὥς φησιν ὁ Ἰππαρχος [*FGrHist* 1109 F1], ἐννέα πρὸς τοῖς ἑκατὸν ἔτη βιούς.

*Reported Teachers and Travels (P16–P22)*  
*Greek Teachers and Oriental Ones?* (P16–P20)

**P16** (< A1) Diog. Laert.

**a** 9.34

οὗτος μάγων τινῶν διήκουσε καὶ Χαλδαίων, Ξέρξου τοῦ βασιλέως τῷ πατρὶ αὐτοῦ ἐπιστάτας καταλιπόντος, ἥνίκα ἐξενίσθη παρ' αὐτῷ, καθά φησι καὶ Ἡρόδοτος· παρ' ᾧν τά τε περὶ θεολογίας καὶ ἀστρολογίας ἔμαθεν ἔτι παῖς ὢν. ὕστερον δὲ Λευκίππῳ παρέβαλε καὶ Ἀναξαγόρᾳ κατὰ τινας [. . .].

**b** 9.35–36

φησὶ δὲ Δημήτριος ἐν Ὁμωνύμοις [*Frag.* 29 Mejer] καὶ Ἀντισθένης ἐν Διαδοχαῖς [*FGrHist* 508 F12 = *Frag.* 12 Giannattasio Andria] ἀποδημῆσαι αὐτὸν καὶ εἰς Αἴγυπτον πρὸς τοὺς ἱερέας γεωμετρίαν μαθησόμενον καὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **P14** (< A6) Ps.-Lucian, *Long-lived Men*

Democritus of Abdera died after having lived for 104 years [. . .].

### **P15** (< A1) Diogenes Laertius

[. . .] he abandoned life without any suffering, as Hipparchus says, after having lived for 109 years.

*Reported Teachers and Travels (P16–P22)*  
*Greek Teachers and Oriental Ones?* (P16–P20)

### **P16** (< A1) Diogenes Laertius

#### **a**

He studied with certain Magi and Chaldeans, as King Xerxes had left supervisors with his father when he had been his guest, as Herodotus **too** reports [cf. 7.109, 8.120]; he learned theology and astronomy from them while he was still a boy. Later he met Leucippus, and, according to some people, Anaxagoras [. . .].

#### **b**

Demetrius in his *Homonyms* and Antisthenes in his *Successions* say that he traveled to the priests in Egypt in order to learn geometry, and went to the Chaldeans in



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πρὸς Χαλδαίους εἰς τὴν Περσίδα καὶ εἰς τὴν Ἐρυθρὰν θάλασσαν γενέσθαι. τοῖς τε γυμνοσοφισταῖς φασὶ τινες συμμῖξαι αὐτὸν ἐν Ἰνδία καὶ εἰς Αἰθιοπίαν ἐλθεῖν. [. . . = **P37b**]

**P17** (< A2) *Suda* Δ.447

Δημόκριτος [. . .] φιλόσοφος, μαθητῆς κατὰ τινας Ἀναξαγόρου καὶ Λευκίππου, ὥς δέ τινες καὶ Μάγων καὶ Χαλδαίων Περσῶν.<sup>1</sup> ἦλθε γὰρ καὶ εἰς Πέρσας καὶ Ἰνδοὺς καὶ Αἰγυπτίους καὶ τὰ παρ' ἐκάστοις ἐπαίδεύθη σοφά.

<sup>1</sup> <καὶ> Περσῶν Bernhardt

**P18** (< A40) (Ps.-?) *Hippol. Ref.* 1.13.1

Δημόκριτος δὲ Λευκίππου γίνεται γνώριμος. Δημόκριτος [. . . = **P7**] πολλοῖς συμβαλὼν γυμνοσοφισταῖς ἐν Ἰνδοῖς καὶ ἱερεῦσιν ἐν Αἰγύπτῳ καὶ ἀστρολόγοις καὶ ἐν Βαβυλῶνι μάγοις.

**P19** (A13) *Cic. Fin.* 5.19.50

quid de Pythagora? quid de Platone aut de Democrito loquar? a quibus propter discendi cupiditatem videmus ultimas terras esse peragratas.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

Persia and the Red Sea. Some people say that he associated with the gymnosophists in India and that he went to Ethiopia. [. . .]

### **P17** (< A2) *Suda*

Democritus [. . .] philosopher, according to some people a disciple of Anaxagoras and Leucippus, according to others also of the Magi and of the Persian Chaldeans. For he went to Persia, India, and Egypt, and was educated in the wisdom of each of them.

### **P18** (< A40) (Ps.-?) Hippolytus, *Refutation of All Heresies*

Democritus becomes a companion of Leucippus. Democritus [. . .] having met many gymnosophists in India, priests in Egypt, and astronomers and Magi in Babylonia.

### **P19** (A13) Cicero, *On Ends*

Why should I speak of Pythagoras? Why of Plato or Democritus? We see that, because of their desire to learn, these men traveled through the very farthest countries.

## EARLY GREEK PHILOSOPHY VII

**P20** (0.3.21 Leszl) Diod. Sic. 1.98.3

ὑπολαμβάνουσι δὲ καὶ Δημόκριτον παρ' αὐτοῖς ἔτη διατρῦναι πέντε καὶ πολλὰ διδασκῆναι τῶν κατὰ τὴν ἀστρολογίαν.

*Pythagoreans?* (P21)

**P21** (< A1) Diog. Laert. 9.38

δοκεῖ δέ, φησὶν ὁ Θράσυλλος [Test. 18b Tarrant], ζηλωτῆς γεγονέναι τῶν Πυθαγορικῶν [. . . = **P24**]. πάντα δὲ δοκεῖν παρὰ τούτου λαβεῖν καὶ αὐτοῦ δ' ἂν ἀκηκοέναι, εἰ μὴ τὰ τῶν χρόνων ἐμάχετο. πάντως μέντοι τῶν Πυθαγορικῶν τινος ἀκοῦσαί φησιν αὐτὸν Γλαῦκος ὁ Ῥηγῖνος [Frag. 5 Lanata], κατὰ τοὺς αὐτοὺς χρόνους αὐτῷ γεγονώς. φησὶ δὲ καὶ Ἀπολλόδωρος ὁ Κυζικηνὸς [74.2 DK] Φιλολάῳ αὐτὸν συγγεγονέναι.

*Visit to Athens?* (P22)

**P22** (< A1, B116) Diog. Laert.

**a** 9.36

δοκεῖ δέ, φησί [scil. Dem. Magn. Frag. 29 Mejer ], καὶ Ἀθήναζε ἐλθεῖν καὶ μὴ σπουδάσαι γνωσθῆναι, δόξης καταφρονῶν. καὶ εἰδέναι μὲν Σωκράτη, ἀγνοεῖσθαι δὲ ὑπ' αὐτοῦ. “ἦλθον” γάρ, φησὶν, “εἰς Ἀθήνας καὶ οὐ τις με ἔγνωκεν.”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **P20** (≠ DK) Diodorus Siculus

They [i.e. the Egyptians] suppose that Democritus too [scil. like Lycurgus, Plato, Solon, and Pythagoras] spent five years with them learning many things about astronomy.

See also **R115**, **R125**

### *Pythagoreans?* (P21)

### **P21** (< A1) Diogenes Laertius

“He seems,” says Thrasyllus, “to have been an emulator of the Pythagoreans” [. . .]. And it seems that he took over everything from him [i.e. Pythagoras] and that he would have studied with him if the chronology had not prevented it. Glaucus of Rhegium, who lived at the same time as him [i.e. Democritus], says that in any case he studied with one of the Pythagoreans. And Apollodorus of Cyzicus too says that he spent time with Philolaus.

### *Visit to Athens?* (P22)

### **P22** (< A1, B116) Diogenes Laertius

**a**

He [i.e. Demetrius of Magnesia in his *Homonyms*] says that he seems to have gone to Athens too and not to have tried to be recognized, since he despised glory; and that he knew Socrates, but was not known by him, for he said, **“I came to Athens and no one recognized me.”**

See also **P39**

**b 9.37**

Δημήτριος δὲ ὁ Φαληρεὺς ἐν τῇ Σωκράτους ἀπολογία  
μηδὲ ἐλθεῖν φησιν [Frag. 93 Wehrli] αὐτὸν εἰς Ἀθήνας.  
τοῦτο δὲ καὶ μείζον, εἵγε τοσαύτης πόλεως ὑπερεφρό-  
νησεν, οὐκ ἐκ τόπου δόξαν λαβεῖν βουλόμενος, ἀλλὰ  
τόπῳ δόξαν περιθεῖναι προελόμενος.

*References to Other Thinkers (P23–P26)**Thales*

See **THAL. P2, R1**

*Anaxagoras (P23)*

**P23** (< A1, cf. B5) Diog. Laert. 9.34–35

Φαβωρίνος δέ φησιν ἐν Παντοδαπῇ ἱστορίᾳ [Frag. 81  
Amato] λέγειν Δημόκριτον περὶ Ἀναξαγόρου ὡς οὐκ  
εἴησαν αὐτοῦ αἱ δόξαι αἷ τε περὶ ἡλίου καὶ σελήνης,  
ἀλλὰ ἀρχαῖαι, τὸν δ' ὑφηγήσθαι διασύρειν τε αὐτοῦ  
τὰ περὶ τῆς διακοσμήσεως καὶ τοῦ νοῦ, ἐχθρῶς  
ἔχοντα πρὸς αὐτὸν, ὅτι δὴ μὴ προσήκατο αὐτόν. πῶς  
οὖν κατὰ τινας ἀκήκοεν αὐτοῦ;

*Pythagoreans (P24)*

**P24** (< A1) Diog. Laert. 9.38

[. . .] ἀλλὰ καὶ αὐτοῦ Πυθαγόρου μέμνηται, θαυμάζων  
αὐτὸν ἐν τῷ ὁμωνύμῳ συγγράμματι [. . . cf. **P21**].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### b

But Demetrius of Phalerum in his *Defense of Socrates* says that he did not even come to Athens. This is something that is even greater, if it is true that he despised so great a city, not wishing to derive glory from a place, but preferring to bestow glory on it.

### *References to Other Thinkers (P23–P26)* *Thales*

See **THAL. P2, R1**

### *Anaxagoras (P23)*

**P23** (< A1, cf. B5) Diogenes Laertius

Favorinus reports in his *Miscellaneous History* that Democritus said about Anaxagoras that the opinions he expressed about the sun and moon were not his own but were ancient, and that he had stolen them; and that he tore to pieces what he said about the cosmic ordering and mind, displaying hostility toward him because he had not accepted him to his company. So how could he have been his student, as some people maintain? [= **ANAXAG. R1**]

See also **ANAXAG. R2**

### *Pythagoreans (P24)*

**P24** (< A1) Diogenes Laertius

[Scil. Thrasyllus says,] “[. . .] in fact he mentions Pythagoras himself, expressing admiration for him in the treatise that bears his name [. . .].”

## EARLY GREEK PHILOSOPHY VII

### *Xeniades of Corinth (P25)*

**P25** (B163) Sext. Emp. *Adv. Math.* 7.53

Ξενιάδης δὲ ὁ Κορίνθιος, οὗ καὶ Δημόκριτος μέμνηται [. . . = **XENI. D1**].

### *Other 5th Century Thinkers (P26)*

**P26** (< A1) Diog. Laert. 9.42

[. . . = **P10**] καὶ γὰρ τούτου μέμνηται. μέμνηται δὲ καὶ τῆς περὶ τοῦ ἐνὸς δόξης τῶν περὶ Παρμενίδην καὶ Ζήνωνα, ὡς κατ' αὐτὸν μάλιστα διαβεβοημένων, καὶ Πρωταγόρου τοῦ Ἀβδηρίτου [. . .].

### *Alleged Direct Disciples (P27–P28)*

#### *Protagoras (P27)*

**P27** (A9) Athen. *Deipn.* 8.354C

ἐν δὲ τῇ αὐτῇ ἐπιστολῇ ὁ Ἐπίκουρος [Frag. 172 Usener] καὶ Πρωταγόραν φησὶ τὸν σοφιστὴν ἐκ φορμοφόρου καὶ ξυλοφόρου πρῶτον μὲν γενέσθαι γραφέα Δημοκρίτου· θαυμασθέντα δ' ὑπ' ἐκείνου ἐπὶ ξύλων τινὶ ἰδίᾳ συνθέσει ἀπὸ ταύτης τῆς ἀρχῆς ἀναληφθῆναι ὑπ' αὐτοῦ καὶ διδάσκειν ἐν κώμῃ τινὶ γράμματα, ἀφ' ὧν ἐπὶ τὸ σοφιστεῦν ὀρμήσαι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Xeniades of Corinth (P25)*

**P25** (B163) Sextus Empiricus, *Against the Logicians*

Xeniades of Corinth, whom Democritus mentions [. . .].

### *Other 5th Century Thinkers (P26)*

**P26** (< A1) Diogenes Laertius

[. . .] and in fact he mentions this latter [i.e. Oenopides]. He also mentions the doctrine of the One held by Parmenides and Zeno, as they were very much talked about during his time, as well as Protagoras of Abdera [. . .].

### *Alleged Direct Disciples (P27–P28)*

#### *Protagoras (P27)*

**P27** (A9) Athenaeus, *Deipnosophists*

In the same letter [scil. *On Occupations*] Epicurus also says that Protagoras the sophist started out as a porter and wood-carrier, and then first became Democritus' personal secretary. The latter admired him for a particular way he had of assembling pieces of wood, and from this starting point he took him on and he taught him how to read in some village; from this he received the impulse toward becoming a sophist [cf. **PROT. P5–P7**].



## EARLY GREEK PHILOSOPHY VII

### *Hippocrates (P28)*

**P28** (< A10) *Suda* I.564

Ἴπποκράτης [. . .] μαθητῆς γέγονε [. . .] ὥς δέ τινες  
Δημοκρίτου τοῦ Ἀβδηρίτου, ἐπιβαλεῖν γὰρ αὐτὸν νέῳ  
πρεσβύτην.<sup>1</sup>

<sup>1</sup> νέον πρεσβύτη ed. Porti

### *Character (P29–P48)*

#### *Intelligence (P29)*

**P29** (< A92) Sen. *Quaest. nat.* 7.3.2

Democritus [. . .], subtilissimus antiquorum omnium  
[. . . = **D100**].

### *Experience (P30)*

**P30** (< B15) Agathem. *Geogr.* 1.1.2 (GGM 2.471.12)

[. . .] Δημόκριτος, πολύπειρος ἀνὴρ [. . . = **D112**].

### *Withdrawal and Self-Discipline (P31–P32)*

**P31** (< A1) Diog. Laert. 9.36

[. . . = **P16b**] λέγει δὲ [Dem. Magn. Frag. 29 Mejer] ὅτι  
τοσοῦτον ἦν φιλόπονος, ὥστε τοῦ περικήπου δω-  
μάτιόν τι ἀποτεμόμενος κατάκλειστος ἦν· καί ποτε

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Hippocrates (P28)*

#### **P28** (< A10) *Suda*

Hippocrates [. . .] became the student [. . .] according to some people, of Democritus of Abdera; for he [i.e. Hippocrates] became attached to (?) him [i.e. Democritus] when the latter was young while he himself was an old man.

### *Character (P29–P48)*

#### *Intelligence (P29)*

#### **P29** (< A92) Seneca, *Natural Questions*

Democritus [. . .], the most subtle of all the ancients [. . .].

### *Experience (P30)*

#### **P30** (< B15) Agathemerus, *A Sketch of Geography in Epitome*

[. . .] Democritus, a man of great experience [. . .].

### *Withdrawal and Self-Discipline (P31–P32)*

#### **P31** (< A1) Diogenes Laertius

[. . .] He [i.e. Demetrius in his *Homonyms*] says that he was so industrious that he divided off a little room from the garden around the house and locked himself inside;

## EARLY GREEK PHILOSOPHY VII

τοῦ πατρὸς αὐτοῦ πρὸς θυσίαν βούν ἀγαγόντος καὶ αὐτόθι προσδήσαντος, ἱκανὸν χρόνον μὴ γινῶναι, ἕως αὐτὸν ἐκεῖνος διαναστήσας προφάσει τῆς θυσίας καὶ τὰ περὶ τὸν βούν διηγῆσατο.

**P32** (< A1) Diog. Laert. 9.38

ἥσκει δέ, φησὶν ὁ Ἀντισθένης [FGrHist 508 F13 = Frag. 13 Giannattasio Andria], καὶ ποικίλως δοκιμάζειν τὰς φαντασίας, ἐρημάζων ἐνίοτε καὶ τοῖς τάφοις ἐν-διατρίβων.

### *The Eyes as a Hindrance (P33–P35)*

**P33** (A22) Cic. *Tusc.* 5.39.114

Democritus luminibus amissis alba scilicet discernere et atra non poterat, at vero bona mala, aequa iniqua, honesta turpia, utilia inutilia, magna parva poterat, et sine varietate colorum licebat vivere beate, sine notione rerum non licebat. atque hic vir impediri etiam animi aciem aspectu oculorum arbitrabatur, et cum alii saepe, quod ante pedes esset, non viderent, ille in infinitatem omnem peregrinabatur, ut nulla in extremitate consisteret.

**P34** (< A23) Aul. Gell. *Noct.* 10.17.1

Democritum philosophum in monumentis historiae Graecae scriptum est, virum praeter alios venerandum auc-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

and once when his father tied up an ox there that he had brought for sacrifice, he did not notice it for a long time until his father woke him up on account of the sacrifice and told him about the ox.

### **P32** (< A1) Diogenes Laertius

Antisthenes [scil. of Rhodes] reports that he trained himself and tested his sense impressions in many ways, sometimes withdrawing into solitude and spending time among the tombs.

#### *The Eyes as a Hindrance (P33–P35)*

### **P33** (A22) Cicero, *Tusculan Disputations*

When Democritus lost his eyesight he was not able to distinguish white and black—but certainly he was able [scil. to distinguish] good and evil, just and unjust, noble and shameful, useful and useless, big and small, and he was able to live happily, deprived of the variety of colors, but he was not able to do so without an idea of things. And this man even thought the acuity of his mind was hindered by the vision of his eyes, and whereas other people often do not see what is right in front of their feet, he traveled throughout all of infinity without stopping at any limit.

### **P34** (< A23) Aulus Gellius, *Attic Nights*

In the records of Greek history it is written that Democritus the philosopher, a man worthy of veneration beyond all others and enjoying an ancient authority, deprived him-

## EARLY GREEK PHILOSOPHY VII

toritateque antiqua praeditum, luminibus oculorum sua sponte se privasse, quia existimaret cogitationes commutationesque animi sui in contemplandis naturae rationibus vegetiores et exactiores fore, si eas videndi inlecebris et oculorum impedimentis liberasset.

**P35** (A27) Plut. *Curios.* 12 521C–D

ὅθεν ἐκείνο μὲν ψεῦδός ἐστι, τὸ Δημόκριτον ἐκουσίως σβέσαι τὰς ὄψεις ἀπερεισάμενον εἰς ἔσοπτρα πυρωθέντα καὶ τὴν ἀπ' αὐτῶν ἀνάκλασιν δεξάμενον, ὅπως μὴ παρέχωσι θόρυβον τὴν διάνοιαν ἔξω καλοῦσαι πολλάκις, ἀλλ' ἐῷσιν ἔνδον οἰκουρεῖν καὶ διατρίβειν πρὸς τοῖς νοητοῖς, ὥσπερ παρόδιοι θυρίδες ἐμφραγεῖσαι.

### *Attitude Toward Money and Public Recognition (P36–P39)*

**P36** (0.3.17 Leszl) Sen. *Prov.* 6.2

Democritus divitias proiecit onus illas bonae mentis existimans.

**P37**

**a** (A16) Ael. *Var. hist.* 4.20

Δημόκριτον τὸν Ἀβδηρίτην λόγος ἔχει τὰ τε ἄλλα γενέσθαι σοφὸν καὶ δὴ καὶ ἐπιθυμῆσαι λαθεῖν, καὶ ἐν

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

self voluntarily of the sight of his eyes because he thought that the ideas and reflections of his mind would be more lively and precise for contemplating natural causes if he freed them from the temptations of seeing and from the obstacles of the eyes.

### **P35** (A27) Plutarch, *On Curiosity*

[. . .] it is a fabrication that Democritus voluntarily extinguished the vision of his eyes by staring at a blazing mirror and receiving its reflection so that they would not disturb his thought by often summoning it to go outward but instead would leave it inside to keep the house and to occupy itself with intelligibles, as though they were windows to the street that had been shut.

See also **R111**

### *Attitude Toward Money and Public Recognition (P36–P39)*

### **P36** (≠ DK) Seneca, *On Providence*

Democritus rejected riches, thinking that they are a burden for the health of the mind.

### **P37**

### **a** (A16) Aelian, *Historical Miscellany*

It is reported that Democritus of Abdera was wise in many regards and above all in his desire to escape notice, and

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ἔργῳ θέσθαι πάνν σφόδρα τοῦτο. διὰ ταῦτά τοι καὶ πολλήν ἐπήγει γῆν. ἦκεν οὖν καὶ πρὸς τοὺς Χαλδαίους ἐς Βαβυλῶνα καὶ πρὸς τοὺς μάγους καὶ τοὺς σοφιστὰς τῶν Ἰνδῶν. τὴν παρὰ τοῦ Δαμασίππου τοῦ πατρὸς οὐσίαν ἐς τρία μέρη νεμηθεῖσαν τοῖς ἀδελφοῖς τοῖς τρισί, τὰργύριον μόνον λαβὼν ἐφόδιον τῆς ὁδοῦ, τὰ λοιπὰ τοῖς ἀδελφοῖς εἴασε. διὰ ταῦτά τοι καὶ Θεόφραστος αὐτὸν ἐπῆναι [Frag. 513 FHS&G], ὅτι περιγίει κρείττονα ἀγερμὸν ἀγείρων Μενέλεω καὶ Ὀδυσσέως. ἐκεῖνοι μὲν γὰρ ἡλῶντο, αὐτόχρημα Φοινίκων ἐμπόρων μηδὲν διαφέροντες· χρήματα γὰρ ἤθροιζον, καὶ τῆς περιόδου καὶ τοῦ περίπλου ταύτην εἶχον τὴν πρόφασιν.

**b** (< A1) Diog. Laert. 9.35–36

[. . . = **P16b**] τρίτον τε ὄντα ἀδελφὸν νείμασθαι τὴν οὐσίαν· καὶ οἱ μὲν πλείους φασὶ τὴν ἐλάττω μοῖραν ἐλέσθαι τὴν ἐν ἀργυρίῳ, χρεῖαν ἔχοντα ἀποδημῆσαι, τοῦτο κάκείνων δολίως ὑποπτευσάντων. [36] ὁ δὲ Δημήτριος [Frag. 29 Mejer] ὑπὲρ ἑκατὸν τάλαντά φησιν εἶναι αὐτῷ τὸ μέρος, ἃ πάντα καταναλῶσαι.

**P38** (A15) Phil. *Vita contemp.* 14

Ἀναξαγόραν καὶ Δημόκριτον Ἕλληνες ᾄδουσιν, ὅτι φιλοσοφίας ἱμέρῳ πληχθέντες μηλοβότους εἴασαν γενέσθαι τὰς οὐσίας.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

that he put this into practice very much. And that is why he traveled around much of the earth; and so he went to the Chaldeans, Babylonia, the Magi, and the sages of India [cf. **P16–P20**]. And when the estate of his father Damaspis was divided into three portions for the three brothers, he took only the money, to pay for his travels, and left the rest for his brothers. That is why Theophrastus praised him, for he traveled around amassing a better collection than Menelaus and Odysseus had [cf. *Od.* 3.301, 4.80, 90]: for these latter had wandered without differing at all from Phoenician merchants, since they had gathered riches, and this has been the reason for their travels by land and by sea.

**b** (< A1) Diogenes Laertius

[. . . = **P16**] [scil. and some people say] that he was the third brother and divided the family estate; and most people say that he chose the smaller share, the one that consisted in money, since he needed this for the sake of his travels—and they [i.e. his brothers] had cunningly guessed he would do so. Demetrius says that his share was greater than one hundred talents and that he spent it all.

**P38** (A15) Philo, *On the Contemplative Life*

The Greeks sing the praises of Anaxagoras and Democritus because these men, struck by a desire for philosophy, left their estates to be grazed by sheep.



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**P39** (< B116) Cic. *Tusc.* 5.36.104

“**veni Athenas,**” inquit Democritus, “**neque me quisquam ibi adgnovit.**” constantem hominem et gravem, qui gloriatur a gloria se afuisse.

*His Passion for Causes (P40–P41)*

**P40** (< B118) Dionys. Alex. *Nat.* in Eus. *PE* 14.27.4

Δημόκριτος γοῦν αὐτός, ὥς φασιν, ἔλεγε βούλεσθαι μᾶλλον μίαν εὐρεῖν αἰτιολογίαν ἢ τὴν Περσῶν οἱ βασιλείαν γενέσθαι [. . .].

**P41** (< A17a) Plut. *Quaest. conv.* 1.10 628C–D

[. . .] καὶ γάρ ἐκεῖνος ὥς ἔοικε τρώγων σίκκον, ὥς ἐφάνη μελιτώδης ὁ χυμός, ἠρώτησε τὴν διακονοῦσαν, ὁπόθεν πρίαιτο· τῆς δὲ κῆπόν τινα φραζούσης, ἐκέλευσεν ἔξαναστὰς ἠγείσθαι καὶ δεικνύναι τὸν τόπον· θαυμάζοντος δὲ τοῦ γυναιίου καὶ πυνθανομένου τί βούλεται, “τὴν αἰτίαν,” ἔφη, “δεῖ με τῆς γλυκύτητος εὐρεῖν, εὐρήσω δὲ τοῦ χωρίου γενόμενος θεάτης”· “κατάκεισο δῆ,” τὸ γύναιον εἶπε μειδιῶν, “ἐγὼ γὰρ ἀγνοήσασα τὸ σίκκον εἰς ἀγγεῖον ἐθέμην μεμελιτωμένον”· ὁ δ’ ὥσπερ ἀχθεσθεὶς “ἀπέκναισας,” εἶπεν, “καὶ οὐδὲν ἦττον ἐπιθήσομαι τῷ λό-γῳ καὶ ζητήσω τὴν αἰτίαν,” ὥς ἂν οἰκείου καὶ συγγενοῦς οὔσης τῷ σικκύῳ τῆς γλυκύτητος.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**P39** (< B116) Cicero, *Tusculan Disputations*

**“I came to Athens,”** said Democritus, **“and no one there recognized me”** [cf. **P22**]**—a steadfast and serious man, who made it his glory that he avoided glory.**

### *His Passion for Causes (P40–P41)*

**P40** (< B118) Dionysius, Bishop of Alexandria, in Eusebius, *Evangelical Preparation*

Democritus himself, as they say, stated that he would rather discover a single causal explanation (*aitiologia*) than become king of the Persians [. . .].

**P41** (< A17a) Plutarch, *Table Talk*

[. . .] Apparently, when he was eating a cucumber its flavor seemed to him to taste like honey, so he asked his serving woman where she had bought it. When she indicated a certain garden, he got up and told her to lead him and to show him the place. The woman was surprised and asked him what he wanted, and he said, “I have to discover the cause of the sweetness, and I shall discover it by observing the place.” “Then you can sit down,” the woman said with a smile, “for without noticing it I put the cucumber into a container that had been filled with honey.” But he replied in irritation, “You have tried to fool me, and I shall stick nonetheless to what I said and I shall look for the cause,” on the idea that the sweetness was inherent and innate to the cucumber.

## EARLY GREEK PHILOSOPHY VII

### *The Encyclopedist (P42–P45)*

**P42** (< A1) Diog. Laert. 9.37

“εἴπερ οἱ Ἀντερασταὶ Πλάτωνός εἰσι,” φησὶ Θράσυλλος [Test. 18c Tarrant], “οὗτος ἂν εἴη ὁ παραγενόμενος ἀνώνυμος, τῶν περὶ Οἰνοπίδην καὶ Ἀναξαγόραν ἕτερος,<sup>1</sup> ἐν τῇ πρὸς Σωκράτην ὁμιλίᾳ διαλεγόμενος περὶ φιλοσοφίας, ᾧ,<sup>2</sup> φησὶν, ὡς πεντάθλων ἔοικεν ὁ φιλόσοφος. καὶ ἦν ὡς ἀληθῶς ἐν φιλοσοφίᾳ πένταθλος· τὰ γὰρ φυσικὰ καὶ τὰ ἠθικὰ <ῥσκητο>,<sup>3</sup> ἀλλὰ καὶ τὰ μαθηματικὰ καὶ τοὺς ἐγκυκλίους λόγους· καὶ περὶ τεχνῶν πᾶσαν εἶχεν ἐμπειρίαν.”

<sup>1</sup> <ἐριζόντων νεανιῶν> ἕτερος Marcovich e Plat. *Amat.* 132b1 et c1      <sup>2</sup> ᾧ BPF: <ἐν> ᾧ Reiske: οὗ Diels      <sup>3</sup> <ῥσκητο> Casaubon e Suda II.971

**P43** (B144) Philod. *Music.* 4.23 Col. 150.29–34

Δημ[ό]κριτος μὲν | τοίνυν, ἀνὴρ οὐ φυσιολογώ|τατος μόν[ον] τῶν ἀρχαίων, ἀλλὰ καὶ τῶν ἱστορου|μένων οὐδενὸς ἥττον πολυπράγμων [. . . = **D204**].

**P44** (< B165)

**a** Cic. *Acad.* 2.23.73

quid loquar de Democrito? quem cum eo conferre possumus non modo ingenii magnitudine sed etiam animi, qui ita sit ausus ordiri: “haec loquor de universis.”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *The Encyclopedist (P42–P45)*

#### **P42** (< A1) Diogenes Laertius

“If indeed *The Rivals* is by Plato,” says Thrasyllus, “he [i.e. Democritus] must be the unnamed man, different from Oenopides and Anaxagoras, who speaks about philosophy during the conversation with Socrates, the one for whom, he [scil. Socrates] says, the philosopher resembles a pentathlete [cf. Ps.-Plato, *Rivals* 136a]. And indeed he was in truth a real pentathlete in philosophy: for he <practiced> physics and ethics, and also mathematics and the subjects of general culture (*enkuklioi logoi*), and he had full practical experience in the arts and crafts.”

#### **P43** (B144) Philodemus, *On Music*

Democritus, a man who not only inquired into natural phenomena the most of any of the ancient philosophers but was also, in his curiosity, second to none of those we have heard of [. . .].

#### **P44** (< B165)

##### **a** Cicero, *Prior Academics*

What shall I say of Democritus? To whom can we compare him for the extent not only of his intelligence but also of his courage—he who dared to begin with, “I say this about the totality of things.”

## EARLY GREEK PHILOSOPHY VII

**b** Sext. Emp. *Adv. Math.* 7.265

Δημόκριτος δὲ ὁ τῇ Διὸς φωνῇ παρειαζόμενος, καὶ λέγων τάδε περὶ τῶν ξυμπάντων [. . . = **D26b**].

**P45** (< B26f) Colum. *Agric.* 1 Praef. 32

[. . .] perfectum [. . .] agricolam, si quidem artis consummatae sit et in universa rerum natura sagacitatem Democriti vel Pythagorae fuerit consecutus [. . .].

*The Laughing Philosopher—or the  
Crazy One?* (P46–P48)

**P46** (A21) Sotion Περὶ ὀργῆς in Stob. 3.20.53

τοῖς δὲ σοφοῖς ἀντὶ ὀργῆς Ἡρακλείτῳ μὲν δάκρυα, Δημοκρίτῳ δὲ γέλως ἐπῆει.

**P47** (0.3.11 Leszl) Ael. *Var. hist.* 4.20

ὅτι οἱ Ἀβδηρίται ἐκάλουν τὸν Δημόκριτον Φιλοσοφίαν [. . .]. κατεγέλα δὲ πάντων ὁ Δημόκριτος καὶ ἔλεγεν αὐτοὺς μαίνεσθαι· ὅθεν καὶ Γελασίνον αὐτὸν ἐκάλουν οἱ πολῖται. λέγουσι δὲ οἱ αὐτοὶ τὸν Ἱπποκράτην περὶ τὴν πρώτην ἔντευξιν ὑπὲρ τοῦ Δημοκρίτου δόξαν λαβεῖν ὥς μαινομένον· προϋούσης δὲ αὐτοῖς τῆς συνουσίας εἰς ὑπερβολὴν θαναμάσαι τὸν ἄνδρα.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **b** Sextus Empiricus, *Against the Logicians*

Democritus, who is compared with the voice of Zeus and who “says this about the totality of all things” [. . .].<sup>1</sup>

<sup>1</sup> These might be the opening words of *The Small World System*.

### **P45** (< B26f) Columella, *On Agriculture*

[. . .] the perfect [. . .] farmer, if he possesses consummate art and has acquired the sagacity of Democritus or Pythagoras in the domain of the universal nature of things [. . .].

### *The Laughing Philosopher—or the Crazy One?*<sup>1</sup> (P46–P48)

<sup>1</sup> Laughing Democritus is attested in many ancient texts; Democritus is opposed to Heraclitus, the weeping philosopher (cf. **HER. P12**, **R99**).

### **P46** (A21) Sotion, *On Anger* in Stobaeus, *Anthology*

Among the sages, Heraclitus was overcome by tears instead of by anger, and Democritus by laughter [= **HER. P12**].

### **P47** (≠DK) Aelian, *Historical Miscellany*

The Abderites called Democritus ‘Philosophy’ [. . .]. Democritus laughed at everyone and said they were crazy; and that is why his fellow citizens called him ‘Laughter.’ The same people say that when Hippocrates met him for the first time he thought that Democritus was crazy, but that as they spent more time together he came to admire the man enormously.

**P48** (cf. C3) Ps.-Hipp. *Epist.* 17

**a** 9.348 Littré

τοῦτ' ἐκεῖνο, Δαμάγητε, ὅπερ εἰκάζομεν, οὐ παρέκοπτε  
Δημόκριτος, ἀλλὰ πάντα<sup>1</sup> ὑπερεφρόνεε, καὶ ἡμᾶς ἐσω-  
φρόνιζε καὶ δι' ἡμέων πάντας ἀνθρώπους. [. . .] καὶ  
οὗτοι μέντοι ᾧδε εἶχον ὥς ἐπὶ μαινομένῳ τῷ Δημο-  
κρίτῳ, ὃ δὲ μετ' ἀκριβείης τότε ὑπερεφιλοσόφειν.

<sup>1</sup> πάντας aliqua mss.

**b** 9.352, 354, 356 Littré

ἐπεὶ δὲ ἐπλησίαζον, ἔτυχεν ὅτε ἐπῆλθον αὐτέῳ, τι<sup>1</sup> δὴ  
ποτε γράφων ἐνθουσιωδῶς καὶ μεθ' ὀρμῆς. [. . .]  
[III.] “καὶ πρῶτόν γε τί τοῦτο τυγχάνεις γράφων  
φράζε.” [. . .]

ὃ δ' ἐπισχὼν ὀλίγον, “περὶ μανίης,” ἔφη. [. . .]  
[III.] “ἀλλὰ τί περὶ μανίης γράφεις;”

“τί γάρ,” εἶπεν, “ἄλλο, πλὴν ἥτις τε εἶη, καὶ ὅπως  
ἀνθρώποισιν ἐγγίνεται, καὶ τίνα τρόπον ἀπολωφείοιτο·  
τά τε γὰρ ζῶα ταῦτα ὀκόσα, ἔφη, ὀρῆς, τουτέου μέν-  
τοι γε ἀνατέμνω εἵνεκα, οὐ μισέων θεοῦ ἔργα, χολῆς  
δὲ διζήμενος φύσιν καὶ θέσιν· οἶσθα γὰρ ἀνθρώπων  
παρακοπῆς ὥς αἰτὴν ἐπιτοπολὺν αὕτη πλεονάσασα,  
ἐπεὶ πᾶσι μὲν φύσει ἐννύαρχει, ἀλλὰ παρ' οἷς μὲν  
ἐλαττον, παρ' οἷς δέ τι πλεόν· ἢ δ' ἀμετρίῃ αὐτέης

<sup>1</sup> ὅ ante τι del. Littré

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**P48** (cf. C3) Ps.-Hippocrates, *Letters*

**a**

It is, Damagetus, just as you and I [i.e. Hippocrates] guessed: Democritus has not gone mad, but he has been despising everything and has been bringing us, and through us all men, to our senses. [. . .] But these [i.e. all the Abderitans] were like this [scil. sad] because they thought that Democritus was crazy, but instead at that time he was devoting himself with great precision to the highest philosophy.

**b**

When [. . .] I [i.e. Hippocrates] approached, he [i.e. Democritus] happened, when I went up to him, to be writing something with inspiration and ardor. [. . .]

[Hippocrates:] “Tell me first what it is that you are writing.”

He paused for a moment, then said, “About madness.”  
[. . .]

[Hippocrates:] “But what is it that you are writing about madness?”

“What else,” he said, “than what it is, and how it befalls humans, and how it can be allayed. For all these animals,” he said, “that you see—this is why I dissect them, not because I hate the works of god, but because I am investigating the nature and location of the bile. For, as you know, it is an excess of this that most often is the cause of frenzy in human beings, since it is present in all men by nature, but there is less of it in some, rather more in oth-



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νοῦσοι τυγχάνουσιν, ὥς ὕλης ὅτε μὲν ἀγαθῆς, ὅτε δὲ φαύλης ὑποκειμένης.”

καὶ γὰρ, “νῆ Δία,” ἔφην, “ὦ Δημόκριτε, ἀληθέως γε καὶ φρονίμως λέγεις, ὅθεν εὐδαίμονά σε κρίνω τοσαύτης ἀπολαύοντα ἡσυχίης· ἡμῖν δὲ μετέχειν ταύτης οὐκ ἐπιτέτραπται.”

ἐρεομένου δὲ “διὰ τί, ὦ Ἰππόκρατες, οὐκ ἐπιτέτραπται;” “ὅτι,” ἔφην, “ἢ ἀγροὶ ἢ οἰκίῃ ἢ τέκνα ἢ δάνεια ἢ νοῦσοι ἢ θάνατοι ἢ δμῶες ἢ γάμοι ἢ τοιαῦτά τινα τὴν εὐκαιρίην ὑποτάμνεται.” ἐνταῦθα δὴ ὁ ἀνὴρ εἰς τὸ εἰωθὸς πάθος κατηνέχθη, καὶ μάλα ἀθρόον τι ἀνεκάγχασε, καὶ ἐπετώθασε, καὶ τὸ λοιπὸν ἡσυχίην ἦγεν.

### c 9.360 Litré

[III.] “ἴσθι δὲ νῦν περὶ σέο γέλωτος τῷ βίῳ λόγον δώσων.”

ὁ δὲ μάλα τρανὸν ἐπιδῶν μοι, “δύο,” φησὶ, “τοῦ ἐμοῦ γέλωτος αἰτίας δοκέεις, ἀγαθὰ καὶ φαῦλα· ἐγὼ δὲ ἓνα γελῶ τὸν ἄνθρωπον, ἀνοίης μὲν γέμοντα, κενεὸν δὲ πρηγμάτων ὀρθῶν, πάσῃσιν ἐπιβουλῇσι νηπιάζοντα, καὶ μηδεμιῆς ἔνεκεν ὠφελείης ἀλγέοντα τοὺς ἀνηνύτους μόχθους, πείρατα γῆς καὶ ἀορίστους μυχοὺς ἀμέτροισιν ἐπιθυμίῃσιν ὀδεύοντα, ἄργυρον τήκοντα καὶ χρυσὸν, καὶ μὴ παυόμενον τῆς κτήσιος ταύτης, αἰεὶ δὲ θορυβεύμενον περὶ τὸ πλεόν, ὅκως αὐτοῦ ἐλάσσων μὴ γένηται· καὶ οὐδὲν αἰσχύνεται λεγόμενος εὐδαίμων [. . .].”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

ers. And its disproportion produces illnesses, as though its matter were sometimes beneficial, other times harmful.”

I said, “By Zeus, Democritus, you are speaking truthfully and sensibly, and for this reason I consider you to be happy, since you enjoy such great tranquility. But as for me, it has not been granted to me to have a share in this.”

Then he asked, “For what reason, Hippocrates, has it not been granted to you?” and I replied, “Because either fields or household or children or loans or illnesses or deaths or servants or marriages or other things of this sort deprive me of any opportunity for it.” And then that man fell into his accustomed state, burst into gales of laughter and made fun of me, and afterward remained silent.

c

[Hippocrates:] “Know that you must now provide the world with an explanation of your laughter.”

But he gave me a piercing glance and said, “You think that there are two reasons for my laughter, good things and bad ones. But in fact I laugh at only one thing, man, who is full of foolishness, empty of correctness, behaves like a baby in all his plans, suffers never-ending toils without gaining any advantage, travels the limits of the earth and boundless nooks and crannies because of his measureless desires, melts down silver and gold and never puts a stop to this greediness, always frantic to have more so that he **is** never **inferior to himself** (?)—and he is not ashamed to call himself happy [. . .].”<sup>1</sup>

<sup>1</sup> There are many echoes in the maxims of Democritus and those attributed to him; cf. e.g. **D228**, **D253**, etc.

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### *Predictions (P49–P50)*

**P49** (A18) Clem. Alex. *Strom.* 6.32.2

Δημόκριτος δὲ ἐκ τῆς τῶν μεταρσίων παρατηρήσεως πολλὰ προλέγων Σοφία ἐπωνομάσθη. ὑποδεξαμένου γοῦν αὐτὸν φιλοφρόνως Δαμάσου τοῦ ἀδελφοῦ τεκμηράμενος ἔκ τινων ἀστέρων πολλὴν ἐσόμενον προεῖπεν ὄμβρον. οἱ μὲν οὖν πεισθέντες αὐτῷ συνείλον τοὺς καρπούς (καὶ γὰρ ὥρα θέρους ἐν ταῖς ἄλωσιν ἔτι<sup>1</sup> ἦσαν), οἱ δὲ ἄλλοι πάντα ἀπώλεσαν ἀδοκῆτου καὶ πολλοῦ καταρρήξαντος ὄμβρον.

<sup>1</sup> ἔτι Victorius: ἔτη L

**P50** (< A1) Diog. Laert. 9.42

φησὶ δ' Ἀθηνόδωρος ἐν ὀγδόῃ Περιπάτων<sup>1</sup> ἐλθόντος Ἴπποκράτους πρὸς αὐτὸν κελεύσαι κομισθῆναι γάλα· καὶ θεασάμενον τὸ γάλα εἰπεῖν εἶναι<sup>2</sup> αἰγὸς πρωτόκου καὶ μελαίνης· ὅθεν τὴν ἀκρίβειαν αὐτοῦ θαυμάσαι τὸν Ἴπποκράτην. ἀλλὰ καὶ κόρης ἀκολουθούσης τῷ Ἴπποκράτει, τῇ μὲν πρώτῃ ἡμέρᾳ ἀσπάσασθαι οὕτω· “χαῖρε κόρη,” τῇ δ' ἐχομένῃ· “χαῖρε γύναι.” καὶ ἦν ἡ κόρη τῆς νυκτὸς διεφθαρμένη.

<sup>1</sup> περιπάτων F: περὶ πάντων BP

<sup>2</sup> καὶ mss., corr. Casaubon

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Predictions (P49–P50)*

#### **P49** (A18) Clement of Alexandria, *Stromata*

Democritus received the nickname ‘Wisdom’ because he made many predictions on the basis of his observation of the heavens. When his brother Damasus received him hospitably, he predicted from examining certain heavenly bodies that there would be a lot of rain. Some people believed him and gathered in the fruits (for it was summer and they were still in the plantations), but the others lost everything when it rained intensely and unexpectedly.

#### **P50** (< A1) Diogenes Laertius

Athenodorus says in the 8th book of his *Walks* that when Hippocrates came to visit him [i.e. Democritus], he ordered that milk be brought; and when he had observed the milk he said that it came from a black, primiparous she-goat. Hippocrates was very surprised at his precision. Another time, a girl was accompanying Hippocrates; and on the first day he greeted her by saying, “Hello, maiden,” but on the next day, “Hello, woman.” And in fact the girl had been deflowered during the night.

## EARLY GREEK PHILOSOPHY VII

### *The Circumstances of His Death (P51–P54)*

**P51** (< A1) Diog. Laert. 9.43

τελευτῆσαι δὲ τὸν Δημόκριτόν φησιν Ἑρμιππος [Frag. 31 Wehrli] τοῦτον τὸν τρόπον. ἤδη ὑπέργερων ὄντα πρὸς τῷ καταστρέφειν εἶναι. τὴν οὖν ἀδελφὴν<sup>1</sup> λυπεῖσθαι ὅτι ἐν τῇ τῶν Θεσμοφόρων ἐορτῇ μέλλοι τεθνήξασθαι καὶ τῇ θεῷ τὸ καθήκον αὐτῇ<sup>2</sup> οὐ ποιήσιν· τὸν δὲ θαρρεῖν εἰπεῖν καὶ κελεύσαι αὐτῷ προσφέρειν ἄρτους θερμούς ὅσημέραι. τούτους δὲ ταῖς ῥισὶ προσφέρων διεκράτησεν αὐτὸν τὴν ἐορτήν· ἐπειδὴ δὲ παρήλθον αἱ ἡμέραι (τρεῖς δὲ ἦσαν), ἀλυπότατα τὸν βίον προήκατο [. . . = **P15**].

<sup>1</sup> ἀδελφιδῆν Reiske  
αὐτὴν BP

<sup>2</sup> αὐτῇ Reiske et Kühn (-ῇ F):

**P52** (< A29) Athen. *Deipn.* 2.26 46E–F

Δημόκριτον δὲ τὸν Ἀβδηρίτην λόγος ἔχει διὰ γῆρας ἐξάξει αὐτὸν διεγνωκότα τοῦ ζῆν καὶ ὑφαιρούντα τῆς τροφῆς καθ' ἐκάστην ἡμέραν, ἐπεὶ αἱ τῶν Θεσμοφορίων ἡμέραι ἐνέστησαν, δεηθεισῶν τῶν οἰκείων γυναικῶν μὴ ἀποθανεῖν κατὰ τὴν πανήγυριν, ὅπως ἐορτάσωσι, πεισθῆναι κελεύσαντα μέλιτος ἀγγεῖον αὐτῷ πλησίον παρατεθῆναι, καὶ διαζῆσαι ἡμέρας ἱκανὰς τὸν ἄνδρα, τῇ ἀπὸ τοῦ μέλιτος ἀναφορᾷ μόνη χρώμενον, καὶ μετὰ τὰς ἡμέρας βασταχθέντος τοῦ μέλιτος ἀποθανεῖν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *The Circumstances of His Death (P51–P54)*

#### **P51** (< A1) Diogenes Laertius

Hermippus says that Democritus died in the following way. When he was already very old, he was near the end. Then his sister became upset because he was going to die during the festival of the Thesmophoria and she would not be able to perform the proper honors for the goddess. He told her to cheer up and ordered her to bring him hot loaves of bread every day. By applying these to his nostrils he managed to stay alive until the end of the festival; and when the days had passed (there were three of them) he abandoned life without any suffering [. . .].

#### **P52** (< A29) Athenaeus, *Deipnosophists*

It is reported that Democritus of Abdera had decided to kill himself because of his old age, and that he was reducing his food every day. But when the days of the Thesmophoria were imminent and his female relatives asked him to stay alive during the festival, so that they could celebrate it, he was persuaded and ordered that a container of honey be set down near him. And by consuming only what evaporated from the honey, that man stayed alive long enough, and when the honey was removed after those days he died.

## EARLY GREEK PHILOSOPHY VII

**P53** (A24) Lucr. 3.1039–41

denique Democritum post quam matura vetustas  
admonuit memores motus languescere mentis,  
sponte sua leto caput obvius optulit ipse.

**P54** (< A6) Ps.-Luc. *Long.* 18

Δημόκριτος μὲν ὁ Ἀβδηρίτης [. . . = **P14**] ἀποσχόμενος  
τροφῆς ἐτελεύτα.

*Honors* (P55)

**P55** (< A1) Diog. Laert. 9.39–40

ἐλθόντα δὴ φησιν [FGrHist 508 F14 = Antisth. Rhod.  
Frag. 14 Giannattasio Andria] αὐτὸν ἐκ τῆς ἀποδημίας  
ταπεινότατα διάγειν, ἅτε πᾶσαν τὴν οὐσίαν κατανα-  
λωκότα· τρέφεσθαι τε διὰ τὴν ἀπορίαν ἀπὸ τᾶδελφοῦ  
Δαμάσου. ὥς δὲ προειπὼν τινα τῶν μελλόντων εὐδο-  
κίμησε, λοιπὸν ἐνθέου δόξης παρὰ τοῖς πλείστοις  
ἠξιώθη. νόμου δὲ ὄντος τὸν ἀναλώσαντα τὴν πα-  
τρίαν οὐσίαν μὴ ἀξιοῦσθαι ταφῆς ἐν τῇ πατρίδι,  
φησὶν ὁ Ἀντισθένης, συνέντα, μὴ ὑπεύθυνος γενηθείη  
πρὸς τινων φθονούντων καὶ συκοφαντούντων, ἀναγνώ-  
ναι αὐτοῖς τὸν Μέγαν διάκοσμον, ὃς ἀπάντων αὐτοῦ  
τῶν συγγραμμάτων προέχει· καὶ πεντακοσίοις ταλάν-  
τοις τιμηθῆναι· μὴ μόνον δέ, ἀλλὰ καὶ χαλκαῖς εἰ-  
κόσι· καὶ τελευτήσαντα αὐτὸν δημοσίᾳ ταφῆναι, βιώ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **P53** (A24) Lucretius, *On the Nature of Things*

And finally, after his ripe old age had warned Democritus  
That the mental impulses of his memory were  
deteriorating,  
Of his own free will he delivered himself up to death.

### **P54** (< A6) Ps.-Lucian, *Long-lived Men*

Democritus of Abdera [. . .] died by starving himself.

#### *Honors (P55)*

### **P55** (< A1) Diogenes Laertius

He [i.e. Antisthenes of Rhodes] says that when he returned from his travels he lived in extreme poverty, since he had spent all his wealth; and that because of his lack of means he was supported by his brother Damasus. But he enjoyed a high reputation because he predicted some future events; and in consequence he was considered worthy of divine honor by most men. Antisthenes says that there was a law forbidding anyone who had squandered his patrimony to be buried in his fatherland; and Democritus, knowing this, so as to avoid being made liable to render an account by anyone who might envy and prosecute him, gave them a reading of his *Great World System*, which is the greatest of all of his treatises. And he was rewarded with five hundred talents, and not only with that, but also with bronze statues; and when he died he was buried at public expense, after he had lived for over one hundred



## EARLY GREEK PHILOSOPHY VII

σαντα ὑπὲρ τὰ ἑκατὸν ἔτη. ὁ δὲ Δημήτριος τοὺς  
συγγενέας αὐτοῦ φησιν [Frag. 30 Mejer] ἀναγνῶναι  
τὸν Μέγαν διάκοσμον, ὃν μόνον ἑκατὸν ταλάντων τι-  
μηθῆναι. ταῦτα δὲ καὶ Ἰππόβοτος φησιν [Frag. 21  
Gigante].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

years. But Demetrius says that it was his relatives who gave the reading of his *Great World System*, and that it was awarded only one hundred talents; and Hippobotus says the same thing.

### *Iconography (P56)*

**P56** ( $\neq$  DK) Koch, “Ikonographie,” in Flashar, Bremer, Rechenauer (2013), I.1, pp. 225, 226.

ATOMISTS  
(LEUCIPPUS [67 DK],  
DEMOCRITUS [68 DK])

For Leucippus, references to DK take the form 67 Ax or Bx; for Democritus, references are generally by only Ax, Bx, or Cx.

D

*Writings of Leucippus and Democritus (D1–D9)*  
*Titles Attested for Leucippus (D1)*

**D1**

**a** (67 B2) Aët. 1.25.4 (Stob.) [περὶ ἀνάγκης]

Λεύκιππος [. . .] λέγει [. . .] ἐν τῷ Περὶ νοῦ [. . . cf. **D73**].

**b** (≠ DK) Ps.-Arist. MXG 980a7

[. . .] καθάπερ ἐν τοῖς Λευκίππου καλουμένοις λόγοις  
γέγραπται [. . . cf. **GORG. D26a[16]**].

ATOMISTS  
(LEUCIPPUS, DEMOCRITUS)

D

*Writings of Leucippus and Democritus (D1–D9)*  
*Titles Attested for Leucippus (D1)*

**D1**

**a** (67 B2) Aëtius

Leucippus [. . .] says in his *On Mind*: [. . . cf. **D73**].

**b** (≠ DK) Ps.-Aristotle, *On Melissus, Xenophanes, and Gorgias*

[. . .] as is written in what are called the arguments of Leucippus [. . .].

See also **D2b** (III.1)

## EARLY GREEK PHILOSOPHY VII

### *Ancient Lists of the Writings of Democritus (D2–D3)*

**D2** Diog. Laert.

**a** (< A1) 9.41

[. . .] ὥς δὲ Θράσυλλος ἐν τῷ ἐπιγραφομένῳ Τὰ πρὸ  
τῆς ἀναγνώσεως τῶν Δημοκρίτου βιβλίων [. . .].

**b** (A33) 9.45–49

τὰ δὲ βιβλία αὐτοῦ καὶ Θράσυλλος ἀναγέγραφε κατὰ  
τάξιν οὕτως ὥσπερ καὶ τὰ Πλάτωνος κατὰ τετρα-  
λογίαν.

[46] ἔστι δὲ ἠθικά μὲν τάδε·

- [I] 1. Πυθαγόρης 2. Περὶ τῆς τοῦ σοφοῦ διαθέσεως  
3. Περὶ τῶν ἐν ᾿Αιδου<sup>1</sup> 4. Τριτογένεια (τοῦτο δέ  
ἐστιν ὅτι τρία γίνεται ἐξ αὐτῆς, ἃ πάντα ἀνθρώ-  
πινα συνέχει)

<sup>1</sup> ᾿Αιδου Suda T.1019: ἄ\*δη vel ἄδη mss.

- [II] 1. Περὶ ἀνδραγαθίας ἢ περὶ ἀρετῆς 2. Ἀμαλ-  
θείης κέρας 3. Περὶ εὐθυμίας 4. Ἑπομνημάτων  
ἠθικῶν.<sup>1</sup> ἢ γὰρ Εὐεστὼ οὐχ εὐρίσκεται.

καὶ ταῦτα μὲν τὰ ἠθικά.

<sup>1</sup> ἢ οἴκων mss., corr. Steph. Monachius ap. Menagium: post  
ἠθικῶν lac. numerum librorum continet<sup>tem</sup> pos. Diels

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Ancient Lists of the Writings of Democritus (D2–D3)*

#### **D2** Diogenes Laertius

##### **a** (< A1)

[. . .] according to Thrasyllus, in his book entitled *Preliminaries to Reading Democritus' Books* [. . .].

##### **b** (A33)

Thrasyllus has cataloged his books in order, just as he did for Plato's, in tetralogies.<sup>1</sup>

His ethical books are the following:

- [I] 1. *Pythagoras*      2. *On the Disposition of the Sage*  
3. **On those** [scil. *People or Things*] **in Hades**  
4. *Tritogeneia* (that is because she produces the three things that comprise [or: preserve] all things human)

- [II] 1. *On Manly Excellence or On Virtue*      2. *The Horn of Amalthea*      3. *On Contentment*      4. *Ethical Treatises* (*hupomnêmata*) (for *Well-Being* is not to be found)

And these are the ethical ones.

<sup>1</sup> The titles attested elsewhere are in boldface. Many of the titles that figure in this catalog are certainly inauthentic. See the study by W. Leszl listed in the introduction to this chapter.

## EARLY GREEK PHILOSOPHY VII

φυσικά δὲ τάδε·

- [III] 1. Μέγας διάκοσμος (ὃν οἱ περὶ Θεόφραστον  
Λευκίππου φασὶν εἶναι) 2. Μικρὸς διάκοσμος  
3. Κοσμογραφίη 4. Περί τῶν πλανήτων  
[IV] 1. Περί φύσεως πρῶτον 2. Περί ἀνθρώπου  
φύσιος (ἢ Περί σαρκός) δεύτερον 3. Περί νοῦ  
4. Περί αἰσθησίων (ταῦτά τινες ὁμοῦ γράφοντες  
Περί ψυχῆς ἐπιγράφουσι)  
[V] 1. Περί χυμῶν 2. Περί χροῶν [47] 3. Περί τῶν  
διαφερόντων ῥυσμῶν 4. Περί ἀμειψιρυσμιῶν  
[VI] 1. Κρατυντήρια (ὅπερ ἐστὶν ἐπικριτικά τῶν  
προειρημένων) 2. Περί εἰδώλων<sup>1</sup> ἢ περὶ προ-  
νοίας<sup>2</sup> 3. Περί λογικῶν<sup>3</sup> κανὼν α' β' γ' 4. Ἀπο-  
ρημάτων<sup>4</sup>

ταῦτα καὶ περὶ φύσεως.

<sup>1</sup> εἰδώλων mss., corr. Cobet <sup>2</sup> ἀπορροίης Krische

<sup>3</sup> λογικῶν F, γρ. P<sup>4</sup>: λοιμῶν BP<sup>1</sup>: λογικῶν <ἢ> Cobet

<sup>4</sup> post Ἀπορημάτων lac. numerum librorum continentem pos.  
Diels

τὰ δὲ ἀσύντακτά ἐστι τάδε·

1. Αἰτίαι οὐράνιαι 2. Αἰτίαι ἀέριοι 3. Αἰτίαι  
ἐπίπεδοι 4. Αἰτίαι περὶ πυρὸς καὶ τῶν ἐν πυρί  
5. Αἰτίαι περὶ φωνῶν 6. Αἰτίαι περὶ σπερμάτων  
καὶ φυτῶν καὶ καρπῶν 7. Αἰτίαι περὶ ζώων α'  
β' γ' 8. Αἰτίαι σύμμικτοι 9. Περί τῆς λίθου

ταῦτα καὶ τὰ ἀσύντακτα.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

The physical ones are the following:

- [III] 1. **The Great World System** (which Theophrastus attributes to Leucippus<sup>1</sup>) 2. **The Small World System** 3. *Description of the Word* 4. *On the Planets*
- [IV] 1. *On Nature, first book* 2. *On the Nature of Man (or On Flesh), second book* 3. **On Mind** 4. *On the Sensations* (some people combine these books and entitle them *On the Soul*)
- [V] 1. *On Flavors* 2. *On Colors* 3. *On the different Configurations* 4. **On Changes of Configuration**
- [VI] 1. **Corroborations** (that is, confirmations of the preceding works) 2. *On Images or On Foreknowledge* 3. *Canon, On Logical Matters, Books 1, 2, 3* 4. *Difficulties*

These are the ones on nature.

<sup>1</sup> Cf. also *PHerc.* 1788 (67 B1a DK), where the name of Leucippus can probably be restored as the author of this work.

The unclassified ones are the following:

1. *Celestial Causes* 2. *Atmospheric Causes*  
3. *Terrestrial Causes* 4. *Causes Relating to Fire and Fiery Phenomena* 5. *Causes Relating to Sounds* 6. *Causes Relating to Seeds, Plants, and Fruits* 7. *Causes Relating to Animals, Books 1, 2, 3.* 8. *Miscellaneous Causes* 9. *On the Magnet*

These are the unclassified ones.



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μαθηματικά δὲ τάδε·

- [VII] 1. Περὶ διαφορῆς γνώμης<sup>1</sup> ἢ Περὶ ψαύσιος κύκλου καὶ σφαίρης 2. Περὶ γεωμετρίας 3. Γεωμετρικῶν<sup>2</sup> 4. Ἀριθμοί

<sup>1</sup> γωνίης Heath: γνώμονος Cobet <sup>2</sup> post Γεωμετρικῶν  
lac. numerum librorum continet **tem** pos. Diels

- [VIII] 1. Περὶ ἀλόγων γραμμῶν καὶ ναστῶν α' β'  
2. Ἐκπετάσματα[48] 3. Μέγας ἐνιαυτὸς ἢ Ἀστρονομία, παράπηγμα 4. Ἄμιλλα † κλειψύδρα†<sup>1</sup>

<sup>1</sup> κλειψύδρας <καὶ οὐρανοῦ> Diels

- [IX] 1. Οὐρανογραφία 2. Γεωγραφία 3. Πολογραφία 4. Ἀκτινογραφία

τοσαῦτα καὶ τὰ μαθηματικά.

μουσικά δὲ τάδε·

- [X] 1. Περὶ ῥυθμῶν καὶ ἀρμονίας 2. Περὶ ποιήσιος  
3. Περὶ καλλοσύνης ἐπέων 4. Περὶ εὐφώνων καὶ δυσφώνων γραμμάτων<sup>1</sup>

<sup>1</sup> γραμμάτων PF: πραγματῶν B

- [XI] 1. Περὶ Ὁμήρου ἡ<sup>1</sup> ὀρθοεπείης καὶ γλωσσέων  
2. Περὶ αἰοιδῆς 3. Περὶ ῥημάτων 4. Ὀνομαστικῶν<sup>2</sup>

τοσαῦτα καὶ τὰ μουσικά.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

The mathematical ones are the following:

- [VII] 1. *On a Difference of Opinion*<sup>1</sup> or *On the Contact of the Circle and Sphere* 2. *On Geometry* 3. *Geometrical Matters* 4. *Numbers*

<sup>1</sup> Or, emending the text: “On a Different Angle” (cf. **D60b**).

- [VIII] 1. *On Irrational Lines and Solids, Books 1, 2*  
2. *Projections* 3. *The Great Year, or **Astronomy**,  
**an observation table*** (parapêgma) 4. *Rivalry  
†for the Clepsydra†*

- [IX] 1. *Description of the Heavens* 2. *Description of  
the Earth* 3. *Description of the Poles* 4. *Descrip-  
tion of the Rays of Light*

These are the mathematical ones.

The ones on poetry and music are the following:

- [X] 1. *On Rhythms and Harmony* 2. *On Poetry*  
3. *On the Beauty of Verses* 4. *On Letters that  
Sound Good and Bad*

- [XI] 1. *On Homer or Correct Diction and Unusual  
Terms* (glôssai) 2. *On Song* 3. *On Words* 4. *On-  
omastic Matters*

These are the ones on poetry and music.

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<sup>1</sup> ᾗ del. Friedel: περὶ Classen      <sup>2</sup> post Ὀνομαστικῶν lac.  
numerus librorum continetur pos. Diels

## EARLY GREEK PHILOSOPHY VII

τεχνικὰ δὲ τάδε·

- [XII] 1. Πρόγνωσις      2. Περὶ διαίτης ἢ Διαιτητικόν  
3. Ἡ<sup>1</sup> ἡτρικὴ γνώμη      4. Αἰτίαι περὶ ἀκαιριῶν  
καὶ ἐπικαιριῶν

<sup>1</sup> ἢ nos: ἢ mss.: del. Diels

- [XIII] 1. Περὶ γεωργίας ἢ Γεωμετρικόν<sup>1</sup>      2. Περὶ  
ζωγραφίας      3. Τακτικὸν καὶ      4. Ὀπλομαχικόν

<sup>1</sup> Γεωργικόν Menagius, cf. D9: -κῶν Wellmann: -κά Diels

τοσαῦτα καὶ τάδε.

[49] τάττουσι δέ τινες κατ' ἰδίαν ἐκ τῶν ὑπομνημάτων  
καὶ ταῦτα·

1. Περὶ τῶν ἐν Βαβυλῶνι ἱερῶν γραμμάτων  
2. Περὶ τῶν ἐν Μερόῃ      3. Ὠκεανοῦ περίπλους  
4. Περὶ ἱστορίας      5. Χαλδαϊκὸς λόγος      6. Φρύ-  
γιος λόγος      7. Περὶ πυρετοῦ καὶ τῶν ἀπὸ νόσου  
βησσόντων      8. Νομικὰ<sup>1</sup> αἵτια      9. †Χερνικὰ† ἢ<sup>2</sup>  
προβλήματα

<sup>1</sup> Λοιμικὰ Reiske  
Χειρόκητα Salmasius

<sup>2</sup> Χερνικὰ (vel Χερνιβὰ) ἢ mss.:

τὰ δ' ἄλλα ὅσα τινὲς ἀναφέρουσιν εἰς αὐτὸν τὰ μὲν  
ἐκ τῶν αὐτοῦ διεσκεύασται, τὰ δ' ὁμολογουμένως  
ἐστὶν ἀλλότρια. ταῦτα καὶ περὶ τῶν βιβλίων αὐτοῦ  
καὶ τοσαῦτα.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

The ones on the crafts are the following:

- [XII] 1. *Prognostication*      2. *On Diet or Dietetics*  
3. *The Medical Judgment*      4. *Causes of Inopportune*  
    *and Opportune Events*
- [XIII] 1. ***On Agriculture or Land Measurement***  
2. *On Painting*      3. *Tactics* and      4. *Hoplite Combat*

This is the number of these books too.

Among his treatises (*hupomnêmata*), some people classify the following separately:

1. *On the Sacred Writings of Babylon*      2. *On those*  
[scil. *People or Things*] *in Meroe*      3. *Voyage around*  
*the Ocean*      4. *On Research*      5. *Chaldean Dis-*  
*course*      6. *Phrygian Discourse*      7. *On Fever and*  
*Coughing caused by Disease*      8. *Causes Relating to*  
*Laws*      9. †*Chernika*† or *Problems*.<sup>1</sup>

Among all the other works that some people attribute to him, some derive from compilations of his writings, the others are generally agreed not to be by him. So much for his books and their number.

<sup>1</sup> Saumaise conjectured *Problems Relating to Works Fabricated Manually* (*Kheirokmêta problêmata*).

## EARLY GREEK PHILOSOPHY VII

**D3** (A31) *Suda* Δ.447

γνήσια δὲ αὐτοῦ βιβλία εἰσὶ δύο, ὃ τε μέγας Διά-  
κοσμος, καὶ τὸ Περὶ φύσεως κόσμου. ἔγραψε δὲ καὶ  
ἐπιστολάς.

*Titles Otherwise Attested (D4–D9)*

**D4** (< B9) *Sext. Emp. Adv. Math.* 7.136

ἐν δὲ τοῖς Κρατυνηρίοις [. . .] [cf. **D15**].

**D5** (< B6) *Sext. Emp. Adv. Math.* 7.137

[. . .] ἐν δὲ τῷ Περὶ ἰδεῶν [. . .] [cf. **D17**].

**D6** (< B11) *Sext. Emp. Adv. Math.* 7.138 (cf. 8.327)

[. . .] ἐν δὲ τοῖς Κανόσι [. . .] [cf. **D20**].

**D7** (< B119) *Dion. Alex. Nat.* in *Eus. PE* 14.27.5 (cf. *Stob.* 2.8.16)

[. . .] τῶν γοῦν Ὑποθηκῶν ἀρχόμενος λέγει. [. . .] [cf. **D274**].

**D8** (< B1) *Procl. In Remp.* 2.113.8–9

[. . .] Δημόκριτος ὁ φυσικὸς ἐν τοῖς Περὶ τοῦ Ἄιδου  
γράμμασιν [. . .] [cf. **D143**].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D3** (A31) *Suda*

There are two authentic books by him, *The Great World System* and *On the Nature of the World*. He also wrote letters<sup>1</sup> [cf. **R116**].

<sup>1</sup> The letters attributed to Democritus (68 C2–6) are certainly inauthentic.

### *Titles Otherwise Attested (D4–D9)*<sup>1</sup>

<sup>1</sup> Cf. also perhaps **R3a**.

### **D4** (< B9) Sextus Empiricus, *Against the Logicians*

In the **Corroborations** [. . .].

### **D5** (< B6) Sextus Empiricus, *Against the Logicians*

[. . .] in **On the Forms** [. . .].

### **D6** (< B11) Sextus Empiricus, *Against the Logicians*

[. . .] in his **Criteria** [. . .].

### **D7** (< B119) Dionysius of Alexandria, *On Nature*, in Eusebius, *Evangelical Preparation*

[. . .] he says at the beginning of his **Precepts** [. . .].

### **D8** (< B1) Proclus, *Commentary on Plato's Republic*

[. . .] Democritus the natural philosopher in his writings **On Hades** [. . .].

## EARLY GREEK PHILOSOPHY VII

**D9** (B28) Colum. *Agric.* 11.3.2

Democritus in eo libro, quem Georgicon appellavit [. . .]  
[cf. **D402**].

*Leucippus, the Founding Father (D10)*

**D10** (< 67 A1) Diog. Laert. 9.30

πρῶτός τε ἀτόμους ἀρχὰς ὑπεστήσατο.

*Democritus, the Elaborator (D11)*

**D11** (67 A8) Cic. *Acad.* 2.36.118

Leucippus plenum et inane. Democritus huic in hoc  
similis, uberior in ceteris.

*An Evolving Doctrine? (D12)*

**D12** (A35a) Plut. *Virt. moral.* 7 448A

[. . .] ἀλλ' αὐτός τ' Ἀριστοτέλης Δημόκριτός τε καὶ  
Χρύσιππος ἔνια τῶν πρόσθεν αὐτοῖς ἀρεσκόντων  
ἀθορύβως καὶ ἀδήκτως καὶ μεθ' ἡδονῆς ἀφείσαν.

*The General Summary in Diogenes Laertius (D13)*

**D13** (< A1) Diog. Laert. 9.44–45

[44] δοκεῖ δὲ αὐτῷ τάδε· ἀρχὰς εἶναι τῶν ὅλων ἀτόμους

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**D9** (B28) Columella, *On Agriculture*

Democritus, in the book that he entitled **Georgic** [*On Agriculture*] [. . .].

*Leucippus, the Founding Father (D10)*

**D10** (< 67 A1) Diogenes Laertius

He was the first to posit the atoms as principles.

*Democritus, the Elaborator (D11)*

**D11** (67 A8) Cicero, *Prior Academics*

Leucippus [scil. said that the principles] are the full and the void. Democritus is similar to him on this point but he is more elaborated in everything else.

*An Evolving Doctrine? (D12)*

**D12** (A35a) Plutarch, *On Moral Virtue*

Aristotle himself, Democritus, and Chrysippus abandoned some of their earlier opinions, unperturbed, untroubled, and with pleasure.

*The General Summary in Diogenes Laertius (D13)*

**D13** (< A1) Diogenes Laertius

[44] His opinions are as follows. The principles of the to-



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καὶ κενόν, τὰ δ' ἄλλα πάντα νενομίσθαι.<sup>1</sup> ἀπείρους τε εἶναι κόσμους καὶ γεννητοὺς καὶ φθαρτοὺς. μηδέν τε ἐκ τοῦ μὴ ὄντος γίνεσθαι μηδὲ εἰς τὸ μὴ<sup>2</sup> ὄν φθείρεσθαι. καὶ τὰς ἀτόμους δὲ ἀπείρους εἶναι κατὰ μέγεθος καὶ πλῆθος, φέρεσθαι δ' ἐν τῷ ὅλῳ δινουμένας. καὶ οὕτω πάντα τὰ συγκρίματα γεννᾶν, πῦρ, ὕδωρ, ἀέρα, γῆν· εἶναι γὰρ καὶ ταῦτα ἐξ ἀτόμων τινῶν συστήματα· ἅπερ εἶναι ἀπαθῆ καὶ ἀναλλοιώτα διὰ τὴν στερρότητα. τόν τε ἥλιον καὶ τὴν σελήνην ἐκ τοιούτων λείων καὶ περιφερῶν ὄγκων συγκεκρίσθαι, καὶ τὴν ψυχὴν ὁμοίως· ἥν καὶ νοῦν ταῦτόν εἶναι. ὁρᾶν δ' ἡμᾶς κατ' εἰδώλων ἐμπτώσεις. [45] πάντα τε κατ' ἀνάγκην γίνεσθαι, τῆς δίνης αἰτίας οὕσης τῆς γενέσεως πάντων, ἣν ἀνάγκην λέγει. [. . . = **D375**].

<sup>1</sup> post νενομίσθαι hab. δοξάζεσθαι BPF: om. Φ

<sup>2</sup> μὴ F: μηδὲ BP<sup>1</sup>: μηδὲν φ

### *Knowledge (D14–D24)*

**D14** (B9, cf. B125) Sext. Emp. *Adv. Math.* 7.135

“νόμῳ,” γὰρ φησι, “γλυκὺ καὶ νόμῳ πικρόν, νόμῳ θερμόν, νόμῳ ψυχρόν, νόμῳ χροιή· ἐτεῖ<sup>1</sup> δὲ ἄτομα καὶ κενόν.”

<sup>1</sup> αἰτίη mss., corr. Stephanus

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talities of things are atoms and the void, everything else is the object of convention. The worlds are unlimited and they are subject to generation and destruction. Nothing comes into being from what does not exist nor is it destroyed into what does not exist. And the atoms are unlimited in magnitude and number and they move in the whole, whirling around. And this is how they generate all the aggregates, fire, water, air, earth. For these too are assemblages of atoms of a certain kind, which are impassible and inalterable because of their solidity. The sun and the moon are the result of the aggregation of such smooth and round masses, and so too the soul, which is the same thing as the intellect. We see by virtue of the impact of images. [45] Everything happens by necessity, the vortex, which he calls **necessity**, being the cause of the generation of all things [. . .].

### *Knowledge (D14–D24)*

**D14** (B9, cf. B125) Sextus Empiricus, *Against the Logicians*

**By convention sweet and by convention bitter, by convention hot, by convention cold, by convention color, but in reality (*eteê*) atoms and void.**

**D15** (B9) Sext. Emp. *Adv. Math.* 7.136

ἐν δὲ τοῖς Κρατυνηρίοις [. . .] φησὶ γὰρ “ἡμεῖς δὲ τῷ μὲν εἰσὶν οὐδὲν ἀτρεκέες συνιέμεν, μεταπίπτον δὲ κατὰ τε σώματος διαθήκην<sup>1</sup> καὶ τῶν ἐπεισιόντων καὶ τῶν ἀντιστηριζόντων.”

<sup>1</sup> διατιγῆν Menzel

**D16** (B10) Sext. Emp. *Adv. Math.* 7.136–137

καὶ πάλιν φησὶν· “ἐτεῖν<sup>1</sup> μὲν νυν ὅτι οἶον ἕκαστον ἔστιν <ῆ><sup>2</sup> οὐκ ἔστιν οὐ<sup>3</sup> συνιέμεν, πολλαχῇ δεδήλωται.”

<sup>1</sup> τίη vel τοίη mss., corr. Fabricius

<sup>2</sup> <ῆ> ed. Gen.

<sup>3</sup> οὐ ed. Gen.: οὐ mss.

**D17** (B6) Sext. Emp. *Adv. Math.* 7.137

ἐν δὲ τῷ Περὶ ἰδεῶν “γινώσκειν τε χρή,” φησὶν, “ἄνθρωπον τῷδε τῷ κανόνι, ὅτι ἐτεῖς<sup>1</sup> ἀπήλλακται.”

<sup>1</sup> αἰτίας vel αἰτίης mss., corr. Menagius

**D18** (B7) Sext. Emp. *Adv. Math.* 7.137

καὶ πάλιν· “δηλοῖ μὲν δῆ<sup>1</sup> καὶ οὗτος ὁ λόγος ὅτι ἐτεῖ<sup>2</sup> οὐδὲν ἴσμεν περὶ οὐδενός, ἀλλ’ ἐπιρυσμὶν ἐκάστοισιν ἡ δόξις.”

<sup>1</sup> δῆ om. N5

<sup>2</sup> αἰτίη mss., corr. Menagius

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D15 (B9) Sextus Empiricus, *Against the Logicians*

And in the ***Corroborations*** [. . .] he says, “**We grasp in actuality (*eon*) not anything that is certain, but something that changes according to the disposition (*diathêkê*) both of the body and of what penetrates and repels.**”

### D16 (B10) Sextus Empiricus, *Against the Logicians*

And again he says, “**That thus in reality (*eteê*) we do not grasp what each thing is <or> is not, has been made clear in a number of ways.**”

### D17 (B6) Sextus Empiricus, *Against the Logicians*

And in ***On the Forms*** he says, “**It is necessary to recognize that man by virtue of this criterion is separated from reality (*eteê*).**”

### D18 (B7) Sextus Empiricus, *Against the Logicians*

And again: “**Certainly this argument too makes it clear that in reality (*eteê*) we know nothing about anything, but for each person opinion is a rhythmic afflux (*epirhusmiê*).**”

**D19** (B8) Sext. Emp. *Adv. Math.* 7.137

καὶ ἔτι· “καίτοι δηλον ἔσται ὅτι ἐτεῇ<sup>1</sup> οἶον ἕκαστον  
γιγνώσκειν ἐν ἀπόρῳ ἐστί.”

<sup>1</sup> αἰτία mss., corr. Menagius

**D20** (B11) Sext. Emp. *Adv. Math.* 7.139

ἐν δὲ τοῖς Κανόσι [. . .] λέγει δὲ κατὰ λέξιν· “γνώμης  
δὲ δύο εἰσὶν ἰδέαι, ἡ μὲν γνησίη, ἡ δὲ σκοτίη· καὶ  
σκοτίης μὲν τάδε σύμπαντα, ὅψις ἀκοὴ ὁδμὴ γεύσις  
ψαύσις· ἡ δὲ γνησίη,<sup>1</sup> ἀποκεκριμένη δὲ<sup>2</sup> ταύτης.”

<sup>1</sup> post γνησίη lac. stat. Brieger      <sup>2</sup> ἀποκεκριμένη δὲ VR:  
ἀποκεκρυμμένη δὲ ceteri et VR i.m. (γρ.): ἀποκεκρυμμένη διὰ  
Natorp

**D21** (B11) Sext. Emp. *Adv. Math.* 7.139

εἶτα [. . .] ἐπιφέρει λέγων· “ὅταν ἡ σκοτίη μηκέτι  
δύνηται μήτε ὀρῆν ἐπ’ ἔλαττον μήτε ἀκούειν μήτε  
ὀδμᾶσθαι μήτε γεύεσθαι μήτε ἐν τῇ ψαύσει αἰσθά-  
νεσθαι, ἀλλ’ ἐπὶ λεπτότερον < . . . >?”<sup>1</sup>

<sup>1</sup> post λεπτότερον lacunam pos. Diels <δέη ζητεῖν, τότε ἐπι-  
γίνεται ἡ γνησίη ἅτε ὄργανον ἔχουσα τοῦ νῶσαι λεπτότε-  
ρον>, alii alia

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**D19** (B8) Sextus Empiricus, *Against the Logicians*

And again: “**And yet it will be clear that in reality** (*eteê*) **to recognize of what sort each thing is, belongs to what is impracticable** (*aporos*).”

**D20** (B11) Sextus Empiricus, *Against the Logicians*

But in his ***Criteria*** [. . .] he says verbatim, “**There are two forms of knowledge** (*gnôêmê*), **the one genuine, the other obscure. And to the obscure one belong all of these: sight, hearing, smell, taste, touch. The other is genuine, and is separated from this one** [or: but, separated from this one . . .].”

**D21** (B11) Sextus Empiricus, *Against the Logicians*

and then [. . .] he adds, saying, “**When the one** [scil. form of knowledge] **that is obscure is no longer able either to see what is smaller or to hear or to smell or to taste or to perceive by touching, but** [scil. one must have recourse (?)] **toward something that is finer** [. . . ?].”

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**D22** (≠ DK) Theophr. *Sens.* 71

[. . . cf. **R56**] ἐν οἷς φησι γίνεσθαι μὲν ἕκαστον καὶ εἶναι κατ' ἀλήθειαν, ἰδίως δ' ἐπὶ μικροῦ “μοῖραν ἔχειν συνέσεως.”

Cf. app. ad **R56**

**D23** Gal.

**a** (B125, cf. B9) *Exper. med.* 15.7.5, Frag. graec., p. 1259. 10–14 Schöne 1901

τοῦτο καὶ Δημόκριτος εἰδὼς ὅποτε τὰ φαινόμενα διέβαλε “νόμῳ χροίῃ, νόμῳ γλυκύ, νόμῳ πικρόν,” εἰπὼν “ἐτεῇ δ' ἄτομα καὶ κενόν” [cf. **D14**] ἐποίησε τὰς αἰσθήσεις λεγούσας πρὸς τὴν διάνοιαν οὕτως: “τάλαινα φρήν, παρ' ἡμέων λαβοῦσα τὰς πίστεις ἡμέας καταβάλλεις; πτώμά τοι τὸ κατάβλημα.”

**b** (A49) *Elem. Hipp.* 1.2 (p. 60.12–19 De Lacy)

[. . . = **D63**] τὸ γὰρ δὴ νόμῳ τοῦτ' αὐτὸ βούλεται τὸ οἶον νομιστὶ καὶ πρὸς ἡμᾶς, οὐ κατ' αὐτὴν τῶν πραγμάτων τὴν φύσιν· ὅπερ δ' αὖ πάλιν ἐτεῇ καλεῖ, παρὰ τὸ ἐτεδόν, ὅπερ ἀληθὲς δηλοῖ, ποιήσας τοῦνομα. καὶ εἴη ἂν ὁ σύμπας αὐτοῦ νοῦς τοῦ λόγου τοιόσδε. νομίζεται μὲν τι<sup>1</sup> παρὰ τοῖς ἀνθρώποις λευκόν τε εἶναι, καὶ μέλαν καὶ γλυκὺ καὶ πικρὸν καὶ τᾶλλα πάντα τὰ τοιαῦτα, κατὰ δὲ τὴν ἀλήθειαν δὲν καὶ μηδέν ἐστι

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D22 (≠ DK) Theophrastus, *On Sensations*

[. . .] where he says that each thing becomes and exists according to truth, but, with regard to what is small, in a particular way, that it **“possesses a share of understanding.”**

### D23 Galen

#### a (B125, cf. B9) *On Medical Experience*

Democritus, knowing this [scil. that evidence (*enargeia*) is the basis of confidence], whenever he made his accusations against appearances, saying, **“by convention color, by convention sweet, by convention bitter, but in reality atoms and void,”** made the sensations reply to thought in this way: **“Poor mind (*phrên*), you receive from us all your certainties, and then you overthrow us? That overthrow is your downfall.”**

#### b (A49) *On the Elements according to Hippocrates*

[. . .] The term **‘by convention’** (*nomos*) signifies the same thing as ‘conventionally’ (*nomisti*) and ‘relatively to us,’ not according to the nature of the things themselves. This latter in turn he calls **“in reality”** (*eteê*), for ‘real,’ which signifies ‘true,’ inventing the word. And the whole meaning of what he says would be something like this: men think that white and black are something, as well as sweet and bitter and all the other qualities of this sort, but according to the truth all these things are **something** (*den*)

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<sup>1</sup> μέντοι mss., corr. Ed. Ald.



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τὰ πάντα. καὶ γὰρ αὖ καὶ τοῦτ' εἴρηκεν αὐτός, δὲν<sup>2</sup>  
μὲν τὰς ἀτόμους ὀνομάζων, μηδὲν δὲ τὸ κενόν. [. . .]

<sup>2</sup>ἐν . . . ἐν mss., corr. Mullach

**D24** (B117) Diog. Laert. 9.72

[. . .] Δημόκριτος δὲ τὰς ποιότητας ἐκβάλλων, ἵνα  
φησί, “νόμῳ θερμόν, νόμῳ ψυχρόν, ἐτεῇ<sup>1</sup> δὲ ἄτομα  
καὶ κενόν” [cf. **D14**]. καὶ πάλιν, “ἐτεῇ<sup>2</sup> δὲ οὐδὲν ἴδμεν·  
ἐν βυθῷ γὰρ ἡ ἀλήθεια” [. . .].

<sup>1-2</sup>αἰτίη BPF, corr. Stephanus

*Considerations of Method (D25–D28)*  
*Definition (D25–D26)*

**D25** (A36) Arist.

**a** PA 1.1 642a25–27

[. . .] τὸ τί ἦν εἶναι καὶ τὸ ὀρίσασθαι τὴν οὐσίαν [. . .]  
ἤψατο μὲν Δημόκριτος πρῶτος [. . .].

**b** *Metaph.* M4 1078b19–21

τῶν μὲν γὰρ φυσικῶν ἐπὶ μικρὸν Δημόκριτος ἤψατο  
μόνον καὶ ὠρίσατό πως τὸ θερμόν καὶ τὸ ψυχρόν  
[. . .].

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and **nothing** (*mêden*). For again he has also said this, calling “**something**” (*den*) the atoms and “**nothing**” (*mêden*) the void [. . .].

### D24 (B117) Diogenes Laertius

[. . .] Democritus, rejecting the qualities, where he says, “**by convention cold, by convention hot, but in reality** (*eteêi*) **atoms and void,**” and again, “**in reality** (*eteê*) **we know nothing. For truth is in an abyss**” [. . .].

*Considerations of Method (D25–D28)*  
*Definition (D25–D26)*

### D25 (A36) Aristotle

#### **a** *Parts of Animals*

[. . .] what a thing is and the definition of its essence [. . .] Democritus was the first to approach this question [. . .].<sup>1</sup>

<sup>1</sup> Cf. also *Physics* 2.2 194a20–21.

#### **b** *Metaphysics*

Among the natural philosophers, Democritus approached the question [scil. of definition] only to a small extent and defined in a certain way hot and cold [. . .].

## EARLY GREEK PHILOSOPHY VII

### D26 (< B165)

**a** Arist. *PA* 1.1 640b31–33

[. . . = **R24**] φησὶ γοῦν παντὶ δῆλον εἶναι οἷόν τι τὴν μορφὴν ἐστὶν ὁ<sup>1</sup> ἄνθρωπος, ὥς ὄντος αὐτοῦ τῷ τε σχήματι καὶ τῷ χρώματι γνωρίμων.

<sup>1</sup> ὁ om. EΠ

**b** Sext. Emp. *Adv. Math.* 7.265

Δημόκριτος [. . . = **P44b**] ἐπεχέιρησε μὲν τὴν ἐπίνοιαν ἐκθέσθαι [. . . = **R105**] εἰπὼν “ἄνθρωπός ἐστιν ὃ πάντες ἴδμεν.”

### *Argumentation (D27–D28)*

**D27** (B10b) Sext. Emp. *Adv. Math.* 8.327

οἱ δὲ ἐμπειρικοὶ ἀναιροῦσιν [scil. τὴν ἀπόδειξιν], τάχα δὲ καὶ Δημόκριτος (ἰσχυρῶς γὰρ αὐτῇ διὰ τῶν Κανόνων ἀντείρηκεν) [. . .].

**D28** (B150) Plut. *Quaest. conv.* 1.1.5 614D

[. . .] ἐριδαντέων<sup>1</sup> δὲ κατὰ Δημόκριτον καὶ ἱμαντελικτέων<sup>2</sup> λόγους ἀφετέον [. . .].

<sup>1-2</sup> ἐριδανταίων et ἱμαντελικταίων T, corr. Stephanus

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D26** (< B165)

**a** Aristotle, *Parts of Animals*

[. . .] He says that it is clear to everyone what kind of thing a man is with regard to his form, on the idea that he is recognizable by his shape and color [cf. **R24**].

**b** Sextus Empiricus, *Against the Logicians*

Democritus [. . .] tried to explain the concept [scil. of man] [. . .] by saying, “**a man is what we all know.**”

### *Argumentation (D27–D28)*

**D27** (B10b) Sextus Empiricus, *Against the Logicians*

The Empiricist [scil. doctors] suppress it [i.e. argumentation], and so too does Democritus, for he speaks strongly against it in his *Criteria*.

**D28** (B150) Plutarch, *Table Talk*

[. . .] one should dismiss the discourses of **quibblers** and **mountebanks** according to Democritus [. . .].

## EARLY GREEK PHILOSOPHY VII

### *Atoms and Void (D29–D69) Four General Presentations by Aristotle, or Going Back to Him (D29–D32)*

**D29** (A37) Simpl. *In Cael.*, pp. 294.33–295.22 (= Arist. *Dem. Frag.* 208 Rose)

ὀλίγα δὲ ἐκ τῶν Ἀριστοτέλους περὶ Δημοκρίτου  
παραγραφέντα<sup>1</sup> δηλώσει τὴν τῶν ἀνδρῶν ἐκείνων διά-  
νοιαν.

Δημόκριτος [295.1] ἡγείται τὴν τῶν αἰδίων  
φύσιν εἶναι μικρὰς οὐσίας πλήθος ἀπείρους,  
ταύταις δὲ τόπον ἄλλον ὑποτίθησιν ἄπειρον τῷ  
μεγέθει· προσαγορεύει δὲ τὸν μὲν τόπον τοῖσδε  
τοῖς ὀνόμασι τῷ τε κενῷ καὶ τῷ οὐδενὶ καὶ τῷ  
ἀπείρῳ, τῶν δὲ οὐσιῶν ἐκάστην τῷ τε δὲν<sup>2</sup> καὶ  
τῷ ναστῷ<sup>3</sup> καὶ τῷ<sup>4</sup> ὄντι. νομίζει [5] δὲ εἶναι οὕτω  
μικρὰς τὰς οὐσίας ὥστε ἐκφυγεῖν τὰς ἡμετέρας  
αἰσθήσεις, ὑπάρχειν δὲ αὐτοῖς παντοίας μορ-  
φὰς καὶ σχήματα παντοῖα καὶ κατὰ μέγεθος  
διαφοράς· ἐκ τούτων οὖν ἥδει καθάπερ ἐκ<sup>5</sup> στοι-  
χείων γεννᾶν καὶ συγκρίνειν τοὺς ὀφθαλμοφα-  
νεῖς καὶ τοὺς αἰσθητοὺς ὄγκους· στασιάζειν δὲ  
καὶ φέρεσθαι ἐν τῷ κενῷ διὰ τε τὴν ἀνομοι-  
ότητα καὶ τὰς ἄλλας τὰς [10] εἰρημένας δια-  
φοράς, φερομένας δὲ ἐμπίπτειν καὶ περιπλέκε-  
σθαι περιπλοκὴν τοσαύτην, ἥ συμβαίνει μὲν  
αὐτὰ καὶ πλησίον ἀλλήλων εἶναι ποιεῖ. φύσιν

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Atoms and Void (D29–D69)*

#### *Four General Presentations by Aristotle, or Going Back to Him (D29–D32)*

**D29** (A37) Aristotle in Simplicius, *Commentary on Aristotle's On the Heavens*

A few lines cited from Aristotle's *On Democritus* will indicate the thought of those men.

Democritus [295.1] thinks that the nature of eternal things consists of small substances (*ousiai*) unlimited in number; but he assumes a place for these that is unlimited in magnitude. He assigns to place the following terms: **void, nothing, the unlimited;** and to each of the substances (*ousiai*) **the something** (*den*), **the compact**, and **what is**. He thinks [5] that the substances are so small that they escape our senses. They possess all kinds of forms and all kinds of shapes and differences in magnitude. Out of these then, as though out of letters (*stoikheia*), they generate and combine the masses that appear to sight and are perceptible. They are at variance with one another and are borne along in the void because of both their dissimilarity and the other [10] differences mentioned, and as they are borne along they collide and become interlaced with so strong an interlacing that they adhere (*sumpsauei*) and become close to one another, but without in any

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<sup>1</sup> παραγραφέντα A: -των DE      <sup>2</sup> τῶ τε δὲν Heiberg: τῶ  
τε δὲ A: τῶ τε lac. VII litt. D: lac. VIII litt. E      <sup>3</sup> καὶ τῶ  
ναστῶ AD: om. E      <sup>4</sup> τῶ A: om. DE      <sup>5</sup> ἐκ A: εἰ DE

## EARLY GREEK PHILOSOPHY VII

μέντοι μίαν ἐξ ἐκείνων κατ' ἀλήθειαν οὐδ' ἦντι-  
ναοὺν γεννᾷ· κομιδῇ γὰρ εὐήθες εἶναι τὸ<sup>6</sup> δύο ἢ  
τὰ πλείονα γενέσθαι ἂν ποτε ἔν. τοῦ δὲ συμμέ-  
νειν τὰς οὐσίας μετ' ἀλλήλων μέχρι τινὸς αἰ-  
τιᾶται τὰς ἐπαλλαγὰς καὶ τὰς [15] ἀντιλήψεις  
τῶν σωμάτων· τὰ μὲν γὰρ αὐτῶν εἶναι σκα-  
ληνά, τὰ δὲ ἀγκιστρῶδη, τὰ δὲ κοῖλα, τὰ δὲ  
κυρτά,<sup>7</sup> τὰ δὲ ἄλλας<sup>8</sup> ἀναρίθμους ἔχοντα δια-  
φοράς· ἐπὶ τοσοῦτον οὖν χρόνον σφῶν αὐτῶν  
ἀντέχεσθαι νομίζει καὶ συμμένειν, ἕως ἰσχυρο-  
τέρα τις ἐκ τοῦ περιέχοντος ἀνάγκη παραγενο-  
μένη διασείση καὶ χωρὶς αὐτὰς διασπείρη.

λέγει δὲ τὴν γένεσιν καὶ τὴν ἐναντίαν [20] αὐτῇ<sup>9</sup> διά-  
κρισιν οὐ μόνον περὶ ζώων, ἀλλὰ καὶ περὶ φυτῶν καὶ  
περὶ κόσμων καὶ συλλήβδην περὶ τῶν αἰσθητῶν σω-  
μάτων ἀπάντων.

<sup>6</sup> τὸ A: τὰ DE <sup>7</sup> τὰ δὲ κοῖλα, τὰ δὲ κυρτά Heiberg ex  
vers. lat. (Moerbeke): lac. A: om. DE <sup>8</sup> ἄλλας D: ἄλλα AE  
<sup>9</sup> αὐτῶν A

**D30** (67 A7) Arist. GC 1.8 324b35–325a3, 325a23–b5

ὁδῶ δὲ μάλιστα καὶ περὶ πάντων ἐνὶ λόγῳ<sup>1</sup> διωρίκασι  
Λεύκιππος καὶ Δημόκριτος [325a] ἀρχὴν ποιησάμενοι  
κατὰ φύσιν ἥπερ<sup>2</sup> ἐστίν. ἐνίοις γὰρ τῶν ἀρχαίων  
ἔδοξε τὸ ὄν ἐξ ἀνάγκης εἶναι καὶ ἀκίνητον· [. . . cf.  
**PARM. R44**] [325a23] Λεύκιππος δ' ἔχειν ὥθηθη λό-

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case engendering a single nature out of them. For it is absolutely simpleminded [scil. to think] that two or more things could ever become one. As for the fact that the substances remain with one another for a certain time, he attributes the cause of this to the bodies' interlacings (*epallagai*) and [15] adherences (*antilêpseis*). For some of them are irregular, others hook-shaped, others concave, others convex, others provided with innumerable other differences. So he thinks that they hold on to one another and remain together for a length of time until some stronger necessity arising from their surroundings shakes and disperses them.

He also speaks of generation, and of the dissociation [20] that is opposed to it, with regard not only to animals but also to plants and worlds, and in short to all perceptible bodies.

### **D30** (67 A7) Aristotle, *On Generation and Corruption*

It is by a very methodical procedure and by a single argument about the totality of things that Leucippus and Democritus [325a] have established their definitions (*diorizein*), taking a starting point in conformity with nature as it is. For some of the ancients were of the opinion that what is is necessarily one and unmovable [. . .]. [325a23] But Leucippus thought he possessed assertions

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<sup>1</sup> ἐνὶ λόγῳ om. E<sup>1</sup>MJ<sup>2</sup>

<sup>2</sup> ἡπερ mss., corr. Joachim



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γους οἷτινες πρὸς τὴν αἴσθησιν ὁμολογούμενα λέγον-  
τες οὐκ ἀναιρήσουσιν οὔτε γένεσιν οὔτε φθορὰν οὔτε  
κίνησιν καὶ τὸ πλῆθος τῶν ὄντων. ὁμολογήσας δὲ  
ταῦτα μὲν τοῖς φαινομένοις, τοῖς δὲ τὸ ἐν κατασκευ-  
άζουσιν ὡς οὐκ<sup>3</sup> ἂν κίνησιν οὔσαν ἄνευ κενοῦ τό τε  
κενὸν μὴ ὄν καὶ τοῦ ὄντος οὐθὲν μὴ ὄν, φησὶν εἶναι  
τὸ<sup>4</sup> κυρίως ὄν<sup>5</sup> παμπλήρες ὄν, ἀλλ' εἶναι τὸ τοιοῦτον  
οὐχ ἔν, ἀλλ' ἄπειρα τὸ πλῆθος καὶ ἀόρατα διὰ σμι-  
κρότητα τῶν ὄγκων. ταῦτα δ' ἐν τῷ κενῷ φέρεσθαι  
(κενὸν γὰρ εἶναι), καὶ συνιστάμενα μὲν γένεσιν ποι-  
εῖν, διαλυόμενα δὲ φθοράν. ποιεῖν δὲ καὶ πάσχειν ἥ  
τυγχάνουσιν ἀπτόμενα (ταύτη γὰρ οὐχ ἔν εἶναι) καὶ  
συντιθέμενα δὲ καὶ περιπλεκόμενα γεννᾶν· ἐκ δὲ τοῦ  
κατ' ἀλήθειαν ἑνὸς οὐκ ἂν γενέσθαι πλῆθος, οὐδ' ἐκ  
τῶν ἀληθῶς πολλῶν ἔν, ἀλλ' εἶναι τοῦτ' ἀδύνατον·  
ἀλλ' ὥσπερ Ἐμπεδοκλῆς καὶ τῶν ἄλλων τινὲς φασι  
πάσχειν [325b] διὰ πόρων, οὕτω πᾶσαν ἀλλοίωσιν καὶ  
πᾶν τὸ πάσχειν τοῦτον γίνεσθαι τὸν τρόπον, διὰ τοῦ  
κενοῦ γινομένης τῆς διαλύσεως καὶ τῆς φθορᾶς,  
ὁμοίως δὲ καὶ τῆς αὐξήσεως, εἰσδυομένων ἐτέρων.

<sup>3</sup> οὐκ] οὔτ' FHJVLW

<sup>4</sup> τὸ γὰρ FHL

<sup>5</sup> ὄν] ἐν EJ<sup>1</sup>V Hunayn

### D31 (67 A6) Arist. *Metaph.* A4 985b4–20

Λεύκιππος δὲ καὶ ὁ ἐταῖρος αὐτοῦ Δημόκριτος στοι-  
χεῖα μὲν τὸ πλήρες καὶ τὸ κενὸν εἶναί φασι, λέγοντες  
οἶον τὸ μὲν ὄν τὸ δὲ μὴ ὄν, τούτων δὲ τὸ μὲν πλήρες

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that, in agreement with sensation, would not abolish either generation or destruction or motion and the multiplicity of the things that are. Having thus granted these points to appearances and also to the defenders of the one, that there could not be motion without a void, that the void is what does not exist, and that nothing that is not belongs to being, he says that what is in the proper sense is being that is completely full, but that such a being is not one, but that they are unlimited in number and invisible because of the smallness of their masses. These are borne along in the void (because the void exists) and when they gather together they produce generation, and when they are dissociated, destruction. They act and are affected according to the way in which they happen to be in contact; for in this way they are not one. And it is by combining and interlacing that they generate. But neither could a multiplicity come to be out of what is in truth one nor one out of what are in truth multiple, but this is impossible. But just as Empedocles and some of the others say that there is affection [325b] by means of passages [cf. **EMP. D210**], in the same way all change and all affection are produced in this way, dissociation and destruction coming about by means of the void, and similarly growth, when other [scil. bodies] penetrate.

### **D31** (67 A6) Aristotle, *Metaphysics*

Leucippus and his companion Democritus say that the elements are the full and the void, saying something like this: that the one exists and that the other does not, and

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καὶ στερεὸν τὸ ὄν, τὸ δὲ κενόν τε καὶ μανὸν<sup>1</sup> τὸ μὴ ὄν (διὸ καὶ οὐθὲν μᾶλλον τὸ ὄν τοῦ μὴ ὄντος εἶναί φα-  
σιν, ὅτι οὐδὲ τὸ κενὸν τοῦ σώματος),<sup>2</sup> αἷτια δὲ τῶν  
ὄντων ταῦτα ὡς ὕλην. καὶ καθάπερ οἱ ἐν ποιοῦντες  
τὴν ὑποκειμένην οὐσίαν τᾶλλα τοῖς πάθεσιν αὐτῆς  
γεννῶσι, τὸ μανὸν καὶ τὸ πυκνὸν ἀρχὰς τιθέμενοι τῶν  
παθημάτων, τὸν αὐτὸν τρόπον καὶ οὗτοι τὰς διαφορὰς  
αἰτίας τῶν ἄλλων εἶναί φασιν. ταύτας μέντοι τρεῖς  
εἶναι λέγουσι, σχῆμά τε καὶ τάξιν καὶ θέσιν· δια-  
φέρειν γάρ φασι<sup>3</sup> τὸ ὄν ῥυσμῶ καὶ διαθηγῇ<sup>4</sup> καὶ  
τροπῇ μόνον· τούτων δὲ ὁ μὲν ῥυσμὸς σχῆμά ἐστιν,  
ἡ δὲ διαθηγῇ<sup>5</sup> τάξις, ἡ δὲ τροπὴ θέσις· διαφέρει γὰρ  
τὸ μὲν Α τοῦ Ν σχήματι, τὸ δὲ ΑΝ τοῦ ΝΑ τάξει, τὸ  
δὲ Ζ τοῦ Ν θέσει. περὶ δὲ κινήσεως, ὅθεν ἡ πῶς ὑπάρ-  
χει τοῖς οὖσι, καὶ οὗτοι παραπλησίως τοῖς ἄλλοις  
ῥαθύμως ἀφείσαν.

<sup>1</sup> τε καὶ μανὸν E: om. A<sup>b</sup>

<sup>2</sup> τοῦ κενοῦ τὸ σῶμα Schwegler: τὸ κενὸν ἔλαττον τοῦ  
σώματος Zeller

<sup>3</sup> διαφέρειν . . . φασι A<sup>b</sup>: διαφέρει . . . φησι E

<sup>4,5</sup> (bis) διαθηγῇ E: διαθιγῇ A<sup>b</sup>

**D32** (67 A8, 68 A38) Simpl. *In Phys.*, p. 28.4–27 (= **Theophr. Frag. 229 FHS&G**)

Λεύκιππος [. . . = **P1b**] κοινωνήσας Παρμενίδῃ τῆς  
φιλοσοφίας, οὐ τὴν αὐτὴν ἐβάδισε Παρμενίδῃ καὶ  
Ξενοφάνει περὶ τῶν ὄντων ὁδόν, ἀλλ' ὡς δοκεῖ τὴν  
ἐναντίαν. ἐκείνων γὰρ ἐν καὶ ἀκίνητον καὶ ἀγένητον

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that of these the one that is full and solid is the one that exists, and the other that is empty and rarefied is the one that does not exist (and that is why they say that being does not exist more than nonbeing, because neither does the void [scil. exist more] than the body<sup>1</sup>), and that these are the causes of the things that are as matter. And just as those who posit a single substance as substrate generate all the other things by means of its affections, positing the rarefied and the dense as principles of the affections, so too in the same way these too say that the differences are causes of all the other things. But they say that these are three in number: shape, order, and position. For they say that what is differs only by **configuration** (*rhusmos*), **disposition** (*diathêgê*), and **turning** (*tropê*). Of these, **configuration** is the shape, **disposition** is the order, and **turning** is the position. For A differs from N by form, AN from NA by order, and Z from N by position. As for motion, where it comes from or how it comes about for the things that are, they too, just like the others, have carelessly neglected these questions.

<sup>1</sup> This phrase is usually emended into its contrary: “because neither does the body exist more than the void.”

**D32** (67 A8, 68 A38) **Theophrastus in** Simplicius, *Commentary on Aristotle's Physics*

Leucippus [. . .], who had made common cause with Parmenides in philosophy, did not continue along the same path as Parmenides and Xenophanes regarding the things that are, but rather, as it seems, the opposite one. For whereas these latter asserted that the whole is one, un-

καὶ πεπερασμένον ποιούντων τὸ πᾶν, καὶ τὸ μὴ ὄν  
 μηδὲ ζητεῖν συγχωρούντων, οὗτος ἄπειρα καὶ ἀεὶ κι-  
 νούμενα ὑπέθετο στοιχεῖα τὰς ἀτόμους καὶ τῶν ἐν  
 αὐτοῖς σχημάτων ἄπειρον τὸ πλῆθος διὰ τὸ μηδὲν  
 μᾶλλον τοιοῦτον ἢ τοιοῦτον εἶναι<sup>1</sup> καὶ γένεσιν καὶ  
 μεταβολὴν ἀδιάλειπτον ἐν τοῖς οὖσι θεωρῶν. ἔτι δὲ  
 οὐδὲν μᾶλλον τὸ ὄν ἢ τὸ μὴ ὄν ὑπάρχειν, καὶ αἷτια  
 ὁμοίως εἶναι τοῖς γινομένοις ἄμφω. τὴν γὰρ τῶν ἀτό-  
 μων οὐσίαν ναστὴν καὶ πλήρη ὑποτιθέμενος ὄν ἔλε-  
 γεν εἶναι καὶ ἐν τῷ κενῷ φέρεσθαι, ὅπερ<sup>2</sup> μὴ ὄν ἐκάλει  
 καὶ οὐκ ἔλαττον τοῦ ὄντος εἶναί φησι.

παραπλησίως δὲ καὶ ὁ ἐταῖρος αὐτοῦ Δημόκριτος  
 ὁ Ἀβδηρίτης ἀρχὰς ἔθετο τὸ πλήρες καὶ τὸ κενόν, ὧν  
 τὸ μὲν ὄν, τὸ δὲ μὴ ὄν ἐκάλει. ὡς <γὰρ><sup>3</sup> ὕλην τοῖς  
 οὖσι τὰς ἀτόμους ὑποτιθέντες τὰ λοιπὰ γεννῶσι ταῖς  
 διαφοραῖς αὐτῶν. τρεῖς δὲ εἰσιν αὗται ῥυσμός τροπὴ  
 διαθηγή,<sup>4</sup> ταῦτόν δὲ εἰπεῖν σχῆμα καὶ θέσις καὶ τά-  
 ξις. πεφυκέναι γὰρ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου κινεῖ-  
 σθαι καὶ φέρεσθαι τὰ συγγενῇ πρὸς ἄλληλα καὶ τῶν  
 σχημάτων ἕκαστον εἰς ἑτέραν ἐγκοσμούμενον<sup>5</sup> σύγ-  
 κρισιν ἄλλην ποιεῖν διάθεσιν. ὥστε εὐλόγως ἀπείρων  
 οὐσῶν τῶν ἀρχῶν πάντα τὰ πάθη καὶ τὰς οὐσίας  
 ἀποδώσειν ἐπηγγέλλοντο, ὑφ' οὗ τέ τι γίνεται καὶ  
 πῶς. διὸ καὶ φασι μόνοις τοῖς ἄπειρα ποιοῦσι τὰ

<sup>1</sup> ταύτην γὰρ post εἶναι del. Diels <sup>2</sup> φέρεσθαι καὶ ὅπερ  
 E<sup>a</sup>F <sup>3</sup> <γὰρ> ed. Ald. <sup>4</sup> διαθηγή mss., corr. nos, cf.  
 app. ad D31, n.4 <sup>5</sup> ἐγκοσμούμενον mss., corr. Usener

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movable, ungenerated, and limited, and accept that what is not cannot even be the object of research, he posited elements that are unlimited and always in motion, the indivisible [scil. natures] (*atomoi*), and the unlimited number of the shapes that are in them, for the reason that nothing is more of this sort than of that sort, and because he observed incessant generation and change among the things that are. Moreover, what exists does not exist at all more than what does not exist, and both are causes in a similar way for the things that come about. For positing that the substance of the indivisible [scil. natures] is **compact** and full, he said that it is what is and that it moves in the void, which he called 'what is not' and about which he says that it does not exist less than what is.

In the same way, his companion Democritus of Abdera posited as principles the full and the void, of which he called the one 'what is,' the other 'what is not.' <For> positing the indivisible [scil. natures] as matter for beings, they generate everything else by means of their differences. These are three in number: **configuration**, **turning**, and **disposition** (*diathêgê*); these are equivalent to shape, position, and order. For by its nature the similar is moved by the similar and things that are akin move toward each other, and each of the shapes, arranged in a different aggregate, produces a different disposition. So that, the principles being unlimited, it was reasonable for them to announce that they would explain all the properties and substances, from what something comes about and in what way. And that is why they say that it is only for those who make the elements unlimited that everything comes

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στοιχεῖα πάντα συμβαίνειν κατὰ λόγον. καὶ τῶν ἐν ταῖς ἀτόμοις σχημάτων ἄπειρον τὸ πλήθος φασὶ διὰ τὸ μηδὲν μᾶλλον τοιοῦτον ἢ τοιοῦτον εἶναι. ταύτην γὰρ αὐτοὶ τῆς ἀπειρίας αἰτίαν ἀποδιδόασιν.

*Some Terms Specific to Democritus (D33–D38)*

**D33** (< B156) Plut. *Adv. Col.* 4 1109A

[. . .] μὴ μᾶλλον τὸ δὲν ἢ τὸ μηδὲν εἶναι, ‘δέν’ μὲν ὀνομάζων τὸ σῶμα, ‘μηδέν’ δὲ τὸ κενόν, ὥς καὶ τούτου φύσιν τινὰ καὶ ὑπόστασιν ἰδίαν ἔχοντος.

**D34**

**a** (< A57) Plut. *Adv. Col.* 8 1111A

[. . .] τὰς ἀτόμους, ‘ιδέας’ ὑπ’ αὐτοῦ καλουμένας [. . .].

**b** (B141) Hesych. *Lex.* I.171

ιδέα· ἡ ὁμοιότης, μορφή, εἶδος. καὶ τὸ ἐλάχιστον σῶμα.

**D35** (≠ DK) Simpl. *In Cael.*, p. 609.24–25

τὴν δὲ συμπλοκὴν Ἀβδηρῖται ἐπάλλαξιν<sup>1</sup> ἐκάλουν, ὥσπερ Δημόκριτος.

<sup>1</sup> ἐπάλλαξιν A: παράλλαξιν C: περιπάλλαξιν DE: περιπάλλ-ξιν F

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about according to reason. And they say that the number of shapes that are in the indivisible [scil. natures] is unlimited, since nothing is more of this sort than of that sort. For that is the cause of the infinity that they assert.

### *Some Terms Specific to Democritus (D33–D38)*

**D33** (< B156) Plutarch, *Against Colotes*

[. . .] the **something** (*den*) does not exist more than the **nothing** (*mêden*). He calls the body ‘**something**,’ the void ‘**nothing**,’ on the idea that this too possesses a certain nature and its own existence.

### **D34**

**a** (< A57) Plutarch, *Against Colotes*

[. . .] the indivisible [scil. natures], which he calls ‘**forms**’ (*ideai*) [. . .].

**b** (B141) Hesychius, *Lexicon*

**Form** (*idea*): similarity, shape, form (*eidos*), and the smallest body.

**D35** (≠ DK) Simplicius, *Commentary on Aristotle’s On the Heavens*

The Abderites called the interlacing (*sumplokê*) ‘**inter-twining**’ (*epallaxis*), like Democritus.



**D36** (A58, B168) Simpl. *In Phys.*, pp. 1318.31–1319.2

καὶ οἱ ποιητικοῦ δὲ μὴ μνησθέντες αἰτίου, περὶ δὲ κινήσεως λέγοντες, ὥς οἱ περὶ Δημόκριτον, διὰ τὸ κενὸν καὶ οὗτοι τὴν κατὰ τόπον κίνησιν κινεῖσθαι λέγουσι τὴν φύσιν, τουτέστι τὰ φυσικὰ καὶ πρῶτα καὶ ἄτομα σώματα. ταῦτα γὰρ ἐκείνοι ‘φύσιν’ ἐκάλουν καὶ ἔλεγον κατὰ τὴν ἐν αὐτοῖς βαρύτητα κινούμενα ταῦτα διὰ τοῦ κενοῦ εἶκοντος καὶ μὴ ἀντιτυποῦντος κατὰ τόπον κινεῖσθαι. ‘περιπαλάσσεσθαι’<sup>1</sup> γὰρ ἔλεγον αὐτά.

<sup>1</sup> περιπαλάσσεσθαι Diels: περιπαλαίσεσθαι mss.

**D37** (< A47) Aët. 1.12.6 (Stob.) [περὶ σωμάτων]

Δημόκριτος τὰ πρῶτά φησι σώματα (ταῦτα δ’ ἦν τὰ<sup>1</sup> ναστά) [. . .] [cf. **D53**].

<sup>1</sup> ἦν τὰ F: ἄν τὰ P: ὄντα Heeren

**D38** (B139) Hesych. A.3563

ἀμειψιρυσμεῖν· ἀλλάσσειν τὴν σύγκρισιν ἢ μεταμορφοῦσθαι. [cf. **D2** V.4]

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**D36** (A58, B168) Simplicius, *Commentary on Aristotle's Physics*

Those who have not mentioned the efficient cause but speak about motion, like Democritus, also say that nature, i.e. the natural bodies, which are the first and indivisible ones, are moved through the void by a locomotion. For they called these '**nature**' and said that, moved by virtue of their weight, they move locally through the void, which yields and does not resist. For they said that they "**are sprinkled about**" (?).

**D37** (< A47) Aëtius

Democritus says that the first bodies (these are [scil. what he called] '**the compact**' ones) [. . .].

**D38** (B139) Hesychius, *Lexicon*

'**To change the configuration**' (*ameipsirusmein*): to modify the aggregate or to change the form.

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### *Void and Atoms (D39–D69) Arguments in Favor of the Existence of the Void (D39–D40)*

**D39** (< 67 A19) Arist. *Phys.* 4.6 213b3–b7; 213b15–16; 213b18–19; 213b 21–22

λέγουσιν δ' ἐν μὲν ὅτι κίνησις ἢ κατὰ τόπον οὐκ ἂν εἴη (αὕτη δ' ἐστὶ φορὰ καὶ αὔξησις)· οὐ γὰρ ἂν δοκεῖν εἶναι κίνησιν, εἰ μὴ εἴη κενόν· τὸ γὰρ πλήρες ἀδύνατον εἶναι δέξασθαι τι. [. . .] ἄλλον δ' ὅτι φαίνεται ἔνια συνιόντα καὶ πιλούμενα [. . .]. ἔτι δὲ καὶ ἡ αὔξησις δοκεῖ πᾶσι γίγνεσθαι διὰ κενοῦ· [. . .]. μαρτύριον δὲ καὶ τὸ περὶ τῆς τέφρας ποιούνται, ἥ δέχεται ἴσον ὕδωρ ὅσον τὸ ἀγγεῖον τὸ κενόν.

**D40** (cf. A60) Arist. *Cael.* 4.2 308b30–32, 309a2–11

[308b30] [. . .] ἀλλὰ καίπερ ὄντες ἀρχαιότεροι ταῖς ἡλικίαις καινοτέρως ἐνόησαν περὶ τῶν νῦν λεχθέντων. [. . . cf. **D68**] [309a2] τῶν δὲ συνθέτων, ἐπειδήπερ [. . .] πολλὰ βαρύτερα ὀρώμεν ἐλάττω τὸν ὄγκον ὄντα, καθάπερ ἐρίου χαλκόν [. . .], ἕτερον τὸ αἷτιον οἷονταί τε καὶ λέγουσιν ἔνιοι· τὸ γὰρ κενὸν ἐμπεριλαμβανόμενον κουφίζειν τὰ σώματά φασι καὶ ποιεῖν ἔστιν ὅτε τὰ μείζω κουφότερα· πλείον γὰρ ἔχει κενόν. διὰ τοῦτο γὰρ καὶ τὸν ὄγκον εἶναι μείζω συγκείμενα πολλάκις ἐξ ἴσων στερεῶν ἢ καὶ ἐλαττόνων. ὅλως δὲ καὶ παντὸς αἷτιον εἶναι τοῦ κουφοτέρου τὸ πλείον ἐνυπάρχειν κενόν [. . . = **R44**].

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### *Void and Atoms (D39–D69)* *Arguments in Favor of the* *Existence of the Void (D39–D40)*

#### **D39** (< 67 A19) Aristotle, *Physics*

They [i.e. those who state that the void exists] say as one [scil. argument] that [scil. otherwise] local motion (that is, locomotion and growth) would not exist: for there would not seem to be motion if there were no void, for what is full is incapable of receiving anything. [. . .] Another [scil. argument] is that certain things are seen to retract and compress themselves [. . .]. Again, all people believe that growth comes about thanks to the void; [. . .]. They also use as evidence what happens with ash, which absorbs as much water as an empty container.

#### **D40** (cf. A60) Aristotle, *On the Heavens*

[. . .] [308b30] although they were more ancient in terms of chronology [scil. than Plato], they thought in a more modern way about the subjects mentioned just now [scil. heavy and light in Plato's *Timaeus*]. [. . .] [309a2] Among composite bodies, since [. . .] we see that many things that are smaller in volume are heavier, like bronze compared to wool [. . .], some people think and say that the reason is different [scil. from the size of the constituents]; for they say that the void contained in the interior makes the bodies light and sometimes has the effect of making bigger things lighter; for they contain more void. For this is the reason why bodies composed of solids in the same number or even fewer **are often superior in volume**. And generally speaking, the cause of any body being lighter is that there is more void in it [. . .].

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### *The Atoms (D41–D62)*

#### *The Ultimate Indivisibility (D41–D44)*

**D41** (< A48b) Arist. GC 1.2 316a13–17

Δημόκριτος δ' ἂν φανείη οἰκείοις καὶ φυσικοῖς λόγοις πεπεῖσθαι. [. . .] ἔχει γὰρ ἀπορίαν, εἴ τις θήσῃ<sup>1</sup> σώματα εἶναι καὶ μέγεθος πάντῃ διαιρετόν, καὶ τοῦτο δυνατόν. τί γὰρ ἔσται ὅπερ τὴν διαίρεσιν διαφεύγει; [. . .]

<sup>1</sup> θήσῃ Philoponus *In Phys.*, p. 27 (in lemmate): φήσῃ EM: θείῃ cett.

**D42** (A48) Aët. 1.16.2 (Ps.-Plut.; cf. Stob.) [περὶ τομῆς σωμάτων]

οἱ τὰς ἀτόμους<sup>1</sup> περὶ<sup>2</sup> τὰ ἀμερῇ ἴστασθαι καὶ μὴ εἰς ἄπειρον εἶναι τὴν τομήν.

<sup>1</sup> λέγοντες audiendum Diels, <εἰσάγοντες> Mau

<sup>2</sup> περὶ Diels ex Stob.: ἢ Plut. mss.

**D43** (< A49) Galen. *Elem. Hipp.* 1.2 (p. 62.6–7 De Lacy)

ἀπαθῇ δ' ὑποτίθενται τὰ σώματα εἶναι τὰ πρῶτα. [. . .] ἔνιοι δὲ ὑπὸ σμικρότητος ἀδιαίρετα, καθάπερ οἱ περὶ<sup>1</sup> τὸν Λεύκιππον [. . .].

<sup>1</sup> περὶ <τὸν Διόδωρον καὶ> De Lacy ex Arab.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *The Atoms (D41–D62)*

#### *The Ultimate Indivisibility (D41–D44)*

**D41** (< A48b) Aristotle, *On Generation and Corruption*

But Democritus seems to have been convinced by arguments that were appropriate and physical [scil. in contrast with the Platonists, who on the basis of purely logical arguments posit the existence of an indivisible ‘triangle in itself’]. [. . .] For there is a difficulty if someone posits that a body exists and that a magnitude is divisible everywhere and that this is possible: for what will there be that will escape division? [. . .]<sup>1</sup>

<sup>1</sup> What follows develops a series of arguments in favor of ultimate indivisibility (there will not remain any magnitude, and it is not possible that there subsist only points), which Philoponus in his commentary ad loc. (24.5 Leszl) attributes to Democritus; but this is doubtless a reconstruction.

**D42** (A48) Aëtius

Those who [scil. posit] the indivisible [scil. natures]: the division [scil. of bodies] stops at what has no parts and it does not go on to infinity.

**D43** (< A49) Galen, *On the Elements according to Hippocrates*

They [scil. Leucippus and his followers] assume that the first bodies are impassible [. . .], some because they are indivisible due to their smallness, like Leucippus and his disciples [. . .].

**D44** ( $\neq$  DK) Simpl. *In Cael.*, p. 609.17–18

[. . .] τοὺς περὶ Λεύκιππον καὶ Δημόκριτον στοιχεῖα  
λέγοντας τὰς διὰ σμικρότητα καὶ ναστότητα ἀτόμους  
[. . .].

*Number (D45–D47)*

**D45** (67 A15, 68 A120) Arist. *Cael.* 3.4 303a5–8, 10–12

[. . . cf. **R33**] φασὶ γὰρ εἶναι τὰ πρῶτα μεγέθη πλήθει  
μὲν ἄπειρα, μεγέθει δὲ ἀδιαίρετα, καὶ οὐτ' ἐξ ἑνὸς  
πολλὰ γίνεσθαι οὔτε ἐκ πολλῶν ἔν, ἀλλὰ τῇ τούτων  
συμπλοκῇ καὶ ἐπαλλάξει<sup>1</sup> πάντα γεννᾶσθαι. [. . . cf.  
**R13**] καὶ πρὸς τούτοις, ἐπεὶ διαφέρει τὰ σώματα  
σχήμασιν, ἄπειρα δὲ τὰ σχήματα, ἄπειρα καὶ τὰ  
ἀπλὰ σώματά φασιν εἶναι.

<sup>1</sup> ἐπαλλάξει JHE<sup>4</sup>: περιπλέξει E: περιπαλάξει Diels (cf. app.  
ad **D35**, **D36**)

**D46** (59A45) Arist. *Phys.* 3.4 203a19–23

ὅσοι δ' ἄπειρα ποιοῦσι τὰ στοιχεῖα, καθάπερ Ἀναξα-  
γόρας καὶ Δημόκριτος, ὁ μὲν ἐκ τῶν ὁμοιομερῶν, ὁ δ'  
ἐκ τῆς πανσπερμίας τῶν σχημάτων, τῇ ἀφῇ συνεχὲς  
τὸ ἄπειρον εἶναί φασιν [. . . cf. **R15**].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D44** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's On the Heavens*

[. . .] Leucippus and Democritus [. . .] say that the elements are [scil. natures] indivisible by virtue of their smallness and compactness [. . .].

*Number (D45–D47)*

**D45** (67 A15, 68A120) Aristotle, *On the Heavens*

[. . .] For they [i.e. Leucippus and Democritus] say that the first magnitudes are unlimited in number, but indivisible in magnitude, and that neither does a plurality come about out of one nor one out of a plurality, but that it is by the interlacing and **intertwining** (*epallaxis*) of these things that all things are generated. [. . .] And furthermore, since the bodies differ by their shapes, and since the shapes are unlimited, they say that the simple bodies too are unlimited.

**D46** (59A45) Aristotle, *Physics*

Those who posit that the elements are unlimited [scil. in number], like Anaxagoras and Democritus, constituted for the former out of the homoeomers [cf. e.g. **ANAXAG. D18**], for the latter out of the ‘universal seminal reserve’ (*panspermia*) of the shapes, say that the unlimited [scil. in magnitude] exists as continuous by virtue of contact [. . .].



## EARLY GREEK PHILOSOPHY VII

**D47** (67 A15) Aët. 1.18.3 (Ps.-Plut.) [περὶ κενοῦ]

Λεύκιππος Δημόκριτος [. . .] τὰ μὲν ἄτομα ἄπειρα τῷ  
πλήθει, τὸ δὲ κενὸν ἄπειρον τῷ μεγέθει.

*Weight: Contradictory Reports (D48–D51)*

*The Atoms Have Weight (D48–D49)*

**D48** (A60) Arist. GC 1.8 326a9–10

καίτοι βαρύτερόν γε κατὰ τὴν ὑπεροχὴν φησιν εἶναι  
Δημόκριτος ἕκαστον τῶν ἀδιαιρέτων [. . .].

**D49** (A61) Simpl. *In Cael.*, p. 569.5–9

οἱ γὰρ περὶ Δημόκριτον καὶ ὕστερον Ἐπίκουρος τὰς  
ἀτόμους πάσας ὁμοφυεῖς οὕσας βάρους ἔχειν φασί, τῷ  
δὲ εἶναί τινα βαρύτερα ἐξωθούμενα τὰ κουνφότερα ὑπ'  
αὐτῶν ὑφίζανόντων ἐπὶ τὸ ἄνω φέρεται, καὶ οὕτω λέ-  
γουσιν οὗτοι δοκεῖν τὰ μὲν κούφα εἶναι τὰ δὲ βαρέα.

*The Atoms Have No Weight (D50–D51)*

**D50** (< A47) Aët. 1.12.6 (Stob.) [περὶ σωμάτων]

Δημόκριτος τὰ πρῶτά φησι σώματα [. . . = **D37**]  
βάρος μὲν οὐκ ἔχειν [. . . = **D53**].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D47** (67 A15) Aëtius

Leucippus, Democritus [. . .]: the atoms are unlimited in number, the void unlimited in magnitude.

*Weight: Contradictory Reports (D48–D51)*

*The Atoms Have Weight (D48–D49)*

### **D48** (A60) Aristotle, *On Generation and Corruption*

And yet Democritus says that each of the indivisibles is at least heavier as a function of the preponderance [scil. of its mass] [. . .].

### **D49** (A61) Simplicius, *Commentary on Aristotle's On the Heavens*

Democritus and his disciples and later Epicurus say that the indivisible [scil. natures], which all have a similar nature, have weight, but because some are heavier, the lighter ones are expelled by these (which remain below) and are borne upward, and it is in this way, they say, that it seems that some things are light and others heavy.

*The Atoms Have No Weight (D50–D51)*

### **D50** (< A47) Aëtius

Democritus says that the first bodies [. . .] do not have weight [. . .].

## EARLY GREEK PHILOSOPHY VII

**D51** (< A47) Aët. 1.3.18 (Ps.-Plut.) [περὶ ἀρχῶν τί  
εἰσιν]

Δημόκριτος μὲν γὰρ ἔλεγε δύο, μέγεθος τε καὶ σχῆμα,  
ὁ δ' Ἐπίκουρος τούτοις καὶ τρίτον, τὸ βάρος, ἐπέθη-  
κεν.<sup>1</sup> [. . .].

<sup>1</sup> ἐπέθηκεν Plut.: προσέθηκεν Diels ex Eus. *PE* 14.14.5

### *The Motion of the Atoms (D52–D54)*

**D52** (A47) Aët. 1.23.3 (Stob.) [περὶ κινήσεως]

Δημόκριτος ἐν γένος κινήσεως τὸ κατὰ παλμὸν ἀπ-  
εφαίνετο.

**D53** (A47) Aët. 1.12.6 (Stob.) [περὶ σωμάτων]

Δημόκριτος [. . . = **D50**] κινεῖσθαι δὲ κατ' ἀλληλοτυ-  
πίαν ἐν τῷ ἀπείρῳ [. . . = **D62**].

**D54** (A47) Simpl. *In Phys.*, p. 42.10–11

τοιγαροῦν καὶ Δημόκριτος φύσει ἀκίνητα λέγων τὰ  
ἄτομα πληγῇ κινεῖσθαι φησιν.

### *The Principle of Similarity (D55)*

**D55** (< B164) Sext. *Emp. Adv. Math.* 7.117–118

[117] ἀλλ' ὁ μὲν Δημόκριτος ἐπὶ τε τῶν ἐμφύχων καὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D51 (< A47) Aëtius

Democritus said [scil. that the properties of the atoms are in number] two, magnitude and shape, but Epicurus added to these a third one, weight [. . .].

#### *The Motion of the Atoms (D52–D54)*

### D52 (A47) Aëtius

Democritus declared that one kind of motion is by **vibration**.

### D53 (A47) Aëtius

Democritus says [. . .] that they [scil. the first bodies] move because of collision with one another (*allêlotupia*) in the unlimited [. . .].

### D54 (A47) Simplicius, *Commentary on Aristotle's Physics*

Democritus, who says that the atoms are immobile by nature, states that they are set in motion by **impact**.

#### *The Principle of Similarity (D55)*

### D55 (< B164) Sextus Empiricus, *Against the Logicians*

[117] Democritus establishes this proposition [i.e. that the similar knows the similar] for both animate beings and

ἀψύχων ἴστησι τὸν λόγον. “καὶ γὰρ ζῶα, φησὶν, ὁμογενέσι ζώοις συναγελάζεται, ὡς περιστεραὶ περιστεραῖς καὶ γέρανοι γεράνοις, καὶ ἐπὶ τῶν ἄλλων ἀλόγων <ὡσαύτως>· ὡσαύτως<sup>1</sup> δὲ καὶ ἐπὶ τῶν ἀψύχων, καθάπερ ὄραν πάρεστιν ἐπὶ τε τῶν κοσκινευομένων σπερμάτων καὶ ἐπὶ τῶν παρὰ ταῖς κυματωγαῖς ψηφίδων· ὅπου μὲν γὰρ κατὰ τὸν τοῦ κοσκίνου δῖνον διακριτικῶς φακοὶ μετὰ φακῶν τάσσονται καὶ κριθαὶ μετὰ κριθῶν καὶ πυροὶ μετὰ πυρῶν, [118] ὅπου δὲ κατὰ τὴν τοῦ κύματος κίνησιν αἱ μὲν ἐπιμήκεις ψηφίδες εἰς τὸν αὐτὸν τόπον ταῖς ἐπιμήκεσιν ὠθοῦνται, αἱ δὲ περιφερεῖς ταῖς περιφερέσιν, ὡς ἂν συναγωγόν τι ἐχούσης τῶν πραγμάτων τῆς ἐν τούτοις ὁμοιότητος.” ἀλλ’ ὁ μὲν Δημόκριτος οὕτως [. . .].

<sup>1</sup> <ὡσαύτως>· ὡσαύτως Kochalsky: ὡσαύτως· <ὡς> Diels

### *The Shapes of the Atoms (D56–D61)*

**D56** (67 A9) Arist. GC 1.2 315b6–15

[. . . cf. **D71**] Δημόκριτος δὲ καὶ Λεύκιππος ποιήσαντες τὰ σχήματα τὴν ἀλλοίωσιν καὶ τὴν γένεσιν ἐκ τούτων ποιοῦσι, διακρίσει μὲν καὶ συγκρίσει γένεσιν καὶ φθοράν, τάξει δὲ καὶ θέσει ἀλλοίωσιν. ἐπεὶ δ’ ὥοντο τὰληθὲς ἐν τῷ φαίνεσθαι, ἐναντία δὲ καὶ ἄπειρα τὰ φαινόμενα, τὰ σχήματα ἄπειρα ἐποίησαν, ὥστε ταῖς μεταβολαῖς τοῦ συγκειμένου τὸ αὐτὸ ἐναντίον

inanimate ones: **“For animals,”** he says, **“flock together with animals of the same species, like pigeons with pigeons, and cranes with cranes, and <so too> for the other irrational beings. So too for inanimate things, as can be seen in seeds that are sifted and in pebbles on beaches. For in the first case, because of the circular motion of the sieve, lentils separate out and are ordered together with lentils, and barleycorns with barleycorns, and grains of wheat with grains of wheat; [118] while in the latter one, because of the motion of the wave, oblong pebbles are pushed into the same place as oblong ones, and round ones as round ones, as though the similarity that exists in them had the capacity to bring things together.”**<sup>1</sup> So much for Democritus [. . .].

<sup>1</sup> “For animals . . . bring things together” is generally considered to be a literal citation; but it could also be a summary.

*The Shapes of the Atoms (D56–D61)*

**D56** (67 A9) Aristotle, *On Generation and Corruption*

[. . .] Democritus and Leucippus, by positing shapes, explain alteration and generation on the basis of these: generation and destruction by dissociation and association, alteration by order and position. But because they thought that truth is in appearance, and that appearances are contrary and unlimited [scil. in number], they posited shapes unlimited [scil. in number], so that the same thing would appear contrary to different people because of changes in the aggregate, that it be modified when a small element is

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δοκεῖν ἄλλω καὶ ἄλλω,<sup>1</sup> καὶ μετακινεῖσθαι μικροῦ ἐμ-  
μιγνυμένου καὶ ὅλως ἕτερον φαίνεσθαι ἐνὸς μετακι-  
νηθέντος· ἐκ τῶν αὐτῶν γὰρ ‘τραγωδία’ καὶ ‘τρυγω-  
δία’<sup>2</sup> γίνεται γραμμάτων.

<sup>1</sup> ἄλλο καὶ ἄλλο W: καὶ ἄλλω om. L

<sup>2</sup> τρυγωδία West: κωμωδία mss.

### D57 Theophr.

**a** (A120) in Simpl. *In Cael.*, p. 564.24–29

Δημόκριτος δέ, ὡς Θεόφραστος ἐν τοῖς Φυσικοῖς  
ἱστορεῖ [Frag. 238 FSH&G], ὡς ἰδιωτικῶς ἀποδιδόντων  
τῶν κατὰ τὸ θερμὸν καὶ τὸ ψυχρὸν καὶ τὰ τοιαῦτα  
αἰτιολογούντων ἐπὶ τὰς ἀτόμους ἀνέβη, [. . .] νομίζον-  
τες τὰ σχήματα αἷτια καὶ τὰ μεγέθη τῆς θερμότητος  
καὶ τῆς ψύξεως· τὰ μὲν γὰρ διακριτικὰ καὶ διαιρετικὰ  
θερμότητος συναίσθησιν παρέχεσθαι, τὰ δὲ συγκρι-  
τικὰ καὶ πιλητικὰ ψύξεως.

**b** (≠ DK) *Metaph.* 11b20–23

εἰ γὰρ καὶ μὴ πᾶν ἄλλ’ ἐν τούτοις πλέον τὸ τεταγμέ-  
νον, πλὴν εἴ τις τοιαύτας λαμβάνει τὰς μορφὰς οἷας  
Δημόκριτος ὑποτίθεται τῶν ἀτόμων.

**D58** (67 A11) Cic. *Nat. deor.* 1.24.66

ista enim flagitia Democriti sive etiam ante Leucippi, esse

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

added to the mixture, and in general that it appear different when a single [scil. element] is modified. For [scil. the words] ‘tragedy’ (*tragôidia*) and ‘comedy’ (*trugôidia*) are composed out of the same letters.<sup>1</sup>

<sup>1</sup> Or: “For a tragedy and a comedy are composed out of the same letters.”

### **D57** Theophrastus

**a** (A120) in Simplicius, *Commentary on Aristotle’s On the Heavens*

Because Democritus, as Theophrastus reports in his *Physics*, thought that those people who consider heat and cold and other things of this sort to be causes, are giving explanations in an idiosyncratic way, he had recourse to indivisible [scil. natures] [. . .], for they [i.e. Democritus and the Pythagoreans] thought that the shapes and magnitudes are the causes of heat and cold. For those that dissociate and divide produce the sensation of heat, those that assemble and condense that of cold.

### **b** (≠ DK) *Metaphysics*

Even if the order is not total [scil. in the mathematical objects], at least it is greater in this domain, unless one conceives the forms as Democritus supposes them to be for the atoms.

### **D58** (67 A11) Cicero, *On the Nature of the Gods*

These disgraceful ideas of Democritus, or of Leucippus



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corpuscula quaedam levia, alia aspera, rotunda alia, partim autem angulata et hamata, curvata quaedam et quasi adunca, ex iis effectum esse caelum atque terram nulla cogente natura, sed concursu quodam fortuito [. . .].

**D59** (< 67 A15) Arist. *Cael.* 3.4 303a12–16

ποῖον δὲ καὶ τί ἐκάστου τὸ σχῆμα τῶν στοιχείων, οὐθὲν ἐπιδιώρισαν, ἀλλὰ μόνον τῷ πυρὶ τὴν σφαῖραν ἀπέδωκαν· ἀέρα δὲ καὶ ὕδωρ καὶ τᾶλλα μεγέθει καὶ μικρότητι διείλον, ὥς οὖσαν αὐτῶν τὴν φύσιν οἶον πανσπερμίαν πάντων τῶν στοιχείων.

**D60** (> B155a) Arist. *Cael.* 3.8

**a** 306b32–307a3

οἶον ἐπεὶ τὸ πῦρ εὐκίνητόν ἐστι καὶ θερμαντικὸν καὶ καυστικόν, οἱ μὲν ἐποίησαν αὐτὸ σφαῖραν, οἱ δὲ πυραμίδα· ταῦτα γὰρ εὐκίνητότατα μὲν διὰ τὸ ἐλαχίστων ἄπτεσθαι καὶ ἥκιστα βεβηκέναι, θερμαντικώτατα δὲ καὶ καυστικώτατα, διότι τὸ μὲν ὅλον ἐστὶ γωνία, τὸ δὲ ὀξυγωνιώτατον, καίει δὲ καὶ θερμαίνει ταῖς γωνίαις, ὥς φασιν.

**b** 307a16–17

Δημοκρίτῳ δὲ καὶ ἡ σφαῖρα, ὥς γωνία τις οὖσα, τέμνει ὥς εὐκίνητον.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

even before him, that there are certain smooth corpuscles, others rough, others round, some angular or hooked, certain ones curved and almost bent<sup>1</sup> and that the heavens and the earth have been produced out of these without any compulsion by nature but by some chance encounter [. . .].

<sup>1</sup> But cf. **R94**.

### **D59** (< 67 A15) Aristotle, *On the Heavens*

Of what sort and what is [scil. exactly] the shape of each of the elements, they have not defined, but have only attributed the sphere to fire. As for air, water, and the others, they have distinguished them by largeness and smallness, on the idea that their nature is like the ‘universal seminal reserve’ (*panspermia*) of all the elements.

### **D60** (> B155a) Aristotle, *On the Heavens*

**a**

So, since fire is very mobile, and heats and burns, the ones made it a sphere, the others a pyramid [cf. Plato, *Timaeus* 56b]. For these are most mobile since the contact takes place between the smallest parts and they are least stable, and they are the hottest and burn the most because the one is entirely an angle while the other has extremely acute angles, and it is by means of its angles that something burns and heats, as they say.

**b**

For Democritus the sphere too, inasmuch as it is a kind of angle, cuts since it is very mobile.

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**D61** (67 A14) Simpl. *In Phys.*, p. 36.1–7

οἱ δὲ περὶ Λεύκιππον καὶ Δημόκριτον τὰ ἐλάχιστα  
πρῶτα σώματα ‘ἄτομα’ καλοῦντες κατὰ τὴν τῶν σχη-  
μάτων αὐτῶν καὶ τῆς θέσεως καὶ τῆς τάξεως δια-  
φορὰν τὰ μὲν θερμὰ γίνεσθαι καὶ πύρια τῶν σωμά-  
των, ὅσα ἐξ ὀξυτέρων καὶ λεπτομερεστέρων καὶ κατὰ  
ὁμοίαν θέσιν κειμένων σύγκειται τῶν πρώτων σω-  
μάτων, τὰ δὲ ψυχρὰ καὶ ὑδατώδη, ὅσα ἐκ τῶν ἐναν-  
τίων, καὶ τὰ μὲν λαμπρὰ καὶ φωτεινά, τὰ δὲ ἀμυδρὰ  
καὶ σκοτεινά.

*A Singular Report on the Size of the Atom (D62)*

**D62** (< A47) Aët. 1.12.6 (Stob.) [περὶ σωμάτων]

Δημόκριτος [. . . = **D37**, **D53**] δυνατὸν <δ’><sup>1</sup> εἶναι  
κοσμιαίαν ὑπάρχειν ἄτομον.

<sup>1</sup><δ’> Heeren

*The Perceptible Qualities (D63–D69)*  
*The Atoms Do Not Have Perceptible*  
*Qualities (D63–D64)*

**D63** (< A49) Galen. *Elem. Hipp.* 1.2 (p. 60 De Lacy)

ὑπόκειται γὰρ ἅπασιν τούτοις ἄποιον εἶναι τὸ πρῶτον  
στοιχείον οὔτε λευκότητα σύμφυτον ἔχον ἢ μελανό-  
τητα ἢ ὅλως ἡντιναοῦν χροιάν οὔτε γλυκύτητα ἢ πι-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D61** (67 A14) Simplicius, *Commentary on Aristotle's Physics*

Leucippus and Democritus, who called the smallest first bodies 'atoms' [or: 'indivisible'], [scil. said that] as a function of their shapes, position, and order, certain bodies are warm and fiery, those that are composed of first bodies that are sharper and thinner and occupy a similar position, while others are cold and watery, those [scil. that are composed] of the contraries, and that the ones are clear and luminous, the others dark and obscure.

### *A Singular Report on the Size of the Atom (D62)*

**D62** (< A47) Aëtius

Democritus says [. . .] and that it is possible that there exists an atom of the size of a world.<sup>1</sup>

<sup>1</sup> This statement might represent not Democritus' position but a criticism: if there is an infinity of shapes and a lower limit to division, then there must also be atoms that are visible, indeed ones possessing the size of a world.

See also **R96**

### *The Perceptible Qualities (D63–D69)* *The Atoms Do Not Have Perceptible* *Qualities (D63–D64)*

**D63** (< A49) Galen, *On the Elements according to Hippocrates*

All of these authors [scil. Epicurus, Democritus, and their disciples] have in common that they posit that the first element is without quality, possessing by nature neither

κρότητα ἢ θερμότητα ἢ ψυχρότητα οὐθ' ὅλως ἦντινα-  
οὖν ἑτέραν ποιότητα. “νόμῳ γὰρ χροίῃ, νόμῳ γλυκύ,  
νόμῳ πικρόν, ἑτεῇ δὲ ἄτομα καὶ κενόν” [cf. **D14**], ὁ  
Δημόκριτός φησιν, ἐκ τῆς συνόδου τῶν ἀτόμων γί-  
γνεσθαι νομίζων ἀπάσας τὰς αἰσθητὰς ποιότητας ὡς  
πρὸς ἡμᾶς τοὺς αἰσθανομένους αὐτῶν, φύσει δ' οὐδὲν  
εἶναι λευκὸν ἢ μέλαν ἢ ξανθὸν ἢ ἐρυθρὸν ἢ πικρὸν ἢ  
γλυκύ [. . . = **D23b**].

**D64** (< A135) Theophr. *Sens.* 63–64

[. . . = **D69**] [63] τῶν δὲ ἄλλων αἰσθητῶν οὐδενὸς εἶναι  
φύσιν, ἀλλὰ πάντα πάθη τῆς αἰσθήσεως ἀλλοι-  
ομένης, ἐξ ἧς γίνεσθαι τὴν φαντασίαν. οὐδὲ γὰρ τοῦ  
ψυχροῦ καὶ τοῦ θερμοῦ φύσιν ὑπάρχειν, ἀλλὰ τὸ  
σχῆμα μεταπίπτει ἐργάζεσθαι καὶ τὴν ἡμετέραν ἀλ-  
λοίωσιν· ὅ τι γὰρ ἂν ἄθρουν ἦ, τοῦτ' <sup>1</sup> ἐνισχύειν ἐκά-  
στω, τὸ δ' εἰς μακρὰ διανενομημένον ἀναίσθητον εἶ-  
ναι. σημεῖον δ' ὡς οὐκ εἰσὶ φύσει τὸ μὴ ταῦτα <sup>2</sup> πᾶσι  
φαίνεσθαι τοῖς ζώοις, ἀλλ' ὃ ἡμῖν γλυκύ, τοῦτ' ἄλλοις  
πικρὸν καὶ ἑτέροις ὀξύ καὶ ἄλλοις δριμύ τοῖς δὲ  
στρυφνὸν καὶ τὰ ἄλλα δ' ὡσαύτως. [64] ἔτι δ' αὐτοὺς  
μεταβάλλειν τῇ κρίσει <sup>3</sup> κατὰ <sup>4</sup> τὰ πάθη καὶ τὰς ἡλι-  
κίας· ἡ <sup>5</sup> καὶ φανερόν, ὡς ἡ διάθεσις αἰτία τῆς φαντα-  
σίας. ἀπλῶς μὲν οὖν περὶ τῶν αἰσθητῶν οὕτω δεῖν

<sup>1</sup> τοῦτ' Stephanus: τοῦ mss. <sup>2</sup> ταῦτα mss., corr. Vossia-  
nus <sup>3</sup> κρίσει mss.: κράσει Schneider <sup>4</sup> καὶ mss., corr.  
Papencordt <sup>5</sup> ἡ mss., corr. Stephanus

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whiteness nor blackness nor in general any color whatsoever, nor sweetness nor bitterness nor warmth nor coldness nor in general any other quality whatsoever. For **“by convention color, by convention sweet, by convention bitter, but in reality atoms and void”** [= D14], says Democritus, who thinks that it is from the encounter of the atoms that all the sensible qualities come about, since they are in relation to us who have the sensation of them, while by nature nothing is white or black or yellow or red or sweet or bitter [. . .].

### D64 (< A135) Theophrastus, *On Sensations*

[. . .] [63] As for the other perceptibles [scil. besides heavy and light, hard and soft, cf. D69], [scil. according to Democritus] none of them possesses a nature, but they are all affections of sensation that is altered, and out of this arises the representation (*phantasia*). For there does not exist a nature of the cold or the hot either, but the shape **“that shifts”** [scil. place] produces our alteration too: for whatever is present in concentration prevails upon each person, while what is widely dispersed is imperceptible. Evidence that these qualities do not exist by nature is found in the fact that they do not appear as identical to all living beings, but what appears sweet to us appears bitter to others, acidic for others, pungent for others, sour for others, and similarly for the other qualities. [64] Furthermore, people themselves change in their judgment according to their affections and ages; by which it is manifest that the disposition is the cause of the representation. In general, therefore, it is in this way that one must think about the perceptibles [scil. according to Democritus].

ὑπολαμβάνειν. οὐ μὴν ἄλλ' ὥσπερ καὶ τὰ ἄλλα καὶ ταῦτα ἀνατίθησι<sup>6</sup> τοῖς σχήμασι· πλήν οὐχ ἀπάντων ἀποδίδωσι τὰς μορφάς, ἀλλὰ μᾶλλον τῶν χυλῶν καὶ τῶν χρωμάτων καὶ τούτων ἀκριβέστερον διορίζει τὰ περὶ τοὺς χυλοὺς ἀναφέρων τὴν φαντασίαν πρὸς ἄνθρωπον [. . . = **D65**].

<sup>6</sup> ἀντίθησι mss. (ἀντιτί- F<sup>2</sup>), corr. Stephanus

*Flavors (D65)*

**D65** (< A135) Theophr. *Sens.* 65–68

[. . . = **D64**] [65] τὸν μὲν οὖν ὁξὺν εἶναι τῷ σχήματι γωνοειδῇ τε καὶ πολυκαμπῇ καὶ μικρὸν καὶ λεπτόν. διὰ γὰρ τὴν δριμύτητα ταχὺ καὶ πάντα διαδύεσθαι,<sup>1</sup> τραχὺν δ' ὄντα καὶ γωνοειδῇ συνάγειν καὶ συσπᾶν, διὸ καὶ θερμαίνειν τὸ σῶμα κενότητος ἐμποιοῦντα· μάλιστα γὰρ θερμαίνεσθαι τὸ πλείστον ἔχον κενόν. τὸν δὲ γλυκὺν ἐκ περιφερῶν συγκεῖσθαι σχημάτων<sup>2</sup> οὐκ ἄγαν μικρῶν, διὸ καὶ διαχεῖν ὅλως<sup>3</sup> τὸ σῶμα, καὶ οὐ βιαίως καὶ οὐ ταχὺ πάντα περαίνειν· τοὺς <δ'><sup>4</sup> ἄλλους ταραττεῖν, ὅτι διαδύνων πλανᾷ τὰ ἄλλα καὶ ὑγραίνει· ὑγραινόμενα δὲ καὶ ἐκ τῆς τάξεως κινούμενα συρρεῖν εἰς τὴν κοιλίαν· ταύτην γὰρ εὐπορώτατον εἶναι διὰ τὸ πλείστον ἐνεῖναι<sup>5</sup> κενόν.

<sup>1</sup> διαδύεσθαι F<sup>2</sup>; διαδύνεσθαι PF<sup>1</sup>

<sup>2</sup> σχημάτων <καὶ> Diels <sup>3</sup> λείως prop. Diels

<sup>4</sup> <δ'> Schneider

<sup>5</sup> διὰ τοῦτο πλείστον εἶναι mss.,

corr. Diels: an διὰ τοῦτο, τὸ πλείστον εἶναι?

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

And yet, just like all the others, he attributes these too to the shapes; except that he does not indicate the forms of all of them, but instead those of flavors and colors [cf. **D65**, **D66**], and that among these he distinguishes more precisely what regards flavors, referring their representation to man [. . .].

### *Flavors (D65)*

**D65** (< A135) Theophrastus, *On Sensations*

[...] [65] Thus what is acidic is in its form angular, sinuous, small, and thin. For thanks to its pungency it penetrates rapidly and everywhere, while, being rough and angular, it compresses and contracts. That is also why it warms the body, by producing voids within it. For whatever possesses the most void is warmed the most. But what is sweet is composed of round shapes, not too small: and that is why it liquefies the body completely, and accomplishes everything without violence and without haste. It disturbs the other [scil. flavors] because by penetrating it disorients the other [scil. forms] and makes them moist. And when they are moistened and disordered, they flow down into the intestines, for these offer the best passage, since there is the most void in them.



[66] τὸν δὲ στρυφνὸν ἐκ μεγάλων σχημάτων καὶ πολυγωνίων καὶ περιφερὲς ἤκιστ' ἐχόντων· ταῦτα γὰρ ὅταν εἰς τὰ σώματα ἔλθῃ, ἐπιτυφλοῦν ἐμπλάττοντα τὰ φλεβία καὶ κωλύειν συρρεῖν, διὸ καὶ τὰς κοιλίας ἰστάναι. τὸν δὲ πικρὸν ἐκ μικρῶν καὶ λείων καὶ περιφερῶν, τὴν περιφέρειαν εἰληχότα<sup>1</sup> καὶ καμπὰς ἔχουσαν· διὸ καὶ γλισχρὸν<sup>2</sup> εἶναι καὶ<sup>3</sup> κολλώδη. ἀλμυρὸν δὲ τὸν<sup>4</sup> ἐκ μεγάλων καὶ οὐ περιφερῶν, ἀλλ' ἐπ' ἐνίων καὶ<sup>5</sup> σκαληνῶν, διὸ οὐδὲ πολυκαμπῶν (βούλεται δὲ σκαληνὰ λέγειν, ἅπερ παράλλαξιν ἔχει πρὸς ἄλληλα καὶ συμπλοκὴν)· μεγάλων μὲν, ὅτι ἡ ἀλμυρὶς ἐπιπολάζει· μικρὰ γὰρ ὄντα καὶ τυπτόμενα τοῖς περιέχουσι μίγνυσθαι ἂν τῷ παντί· οὐ περιφερῶν δ', ὅτι τὸ μὲν ἀλμυρὸν τραχύ, τὸ δὲ περιφερὲς λείον· σκαληνῶν<sup>6</sup> δὲ διὰ τὸ μὴ περιπλάττεσθαι, διὸ ψαφαρὸν εἶναι.

<sup>1</sup> εἰληχότα Diels: εἰληκότα P: εἰλημμένα F  
σχρων P, -ῶν F, corr. Burchard <sup>3</sup> καὶ om. P <sup>2</sup> γλί-  
ροὶ δὲ τῷ mss., corr. Burchard <sup>5</sup> καὶ Diels: μὲν mss. <sup>4</sup> ἀλμυ-

<sup>6</sup> οὐ ante σκαληνῶν mss., del. Philippson

[67] τὸν δὲ δριμὺν μικρὸν<sup>1</sup> καὶ περιφερῇ καὶ γωνιοειδῇ, σκαληνὸν δὲ οὐκ ἔχειν. τὸν μὲν γὰρ δριμὺν πολυγώνιον ποιεῖν τῇ τραχύτητι θερμαίνειν καὶ διαχεῖν διὰ τὸ μικρὸν εἶναι καὶ περιφερῇ καὶ γωνιοειδῇ·<sup>2</sup> καὶ γὰρ τὸ γωνιοειδὲς εἶναι τοιοῦτον. ὡσαύτως δὲ καὶ τὰς ἄλλας ἐκάστου δυνάμεις ἀποδίδωσιν ἀνάγων εἰς τὰ σχήματα. ἀπάντων δὲ τῶν σχημάτων οὐδὲν ἀκέραιον εἶναι καὶ ἀμιγὲς<sup>3</sup> τοῖς ἄλλοις, ἀλλ' ἐν ἐκάστῳ πολλὰ<sup>4</sup> εἶναι καὶ τὸν αὐτὸν ἔχειν λείον καὶ τραχέος καὶ περι-

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[66] The sour one [scil. is composed] of large shapes with many angles, possessing very little roundness. For when these enter into bodies, they obstruct the veins by blocking them and prevent the flowing; and this is also why they block the intestines. The bitter one [scil. is composed] of small, smooth, and round ones, and possesses a surface that has curvatures; and that is why it is viscous and adhesive. Salty is the one [scil. that is composed] of ones that are big and not round, and in some cases also irregular, and for this reason without many curvatures either (by ‘irregular’ he means those that can **intertwine** (*parallaxis*) and interlace with each other); big, because what is saline resides on the surface (for if they were small and were struck by those that surround them, they would mix with the whole); not round, because what is salty is rough while what is round is smooth; irregular, because they cannot be molded, and that is why **what is salty is** friable.

[67] Pungent is small, round, and angular but does not have irregularity. For the pungent, having many angles, causes warming by its roughness and it liquefies because it is small, round, and angular (?); for what is angular is like this too. In the same way, he explains the other powers of each one [i.e. flavor], referring them to the shapes. But of all the shapes, none is unblended and unmixed with the others, but in each one there are many, and the same one has some that are smooth, rough, round, sharp, and the

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<sup>1</sup> μικρὰ coni. Usener                      <sup>2</sup> ἀγωνιοειδῆ mss., corr. Diels  
(DK): διὰ . . . †ἀγωνιοειδῆ† del. Diels (Dox.)                      <sup>3</sup> ἀμιγῆς  
Vossianus: ἀμιγῆ mss.                      <sup>4</sup> πολλοὺς mss., corr. Wimmer

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φερούς καὶ ὀξέος καὶ τῶν λοιπῶν. οὐ<sup>5</sup> δ' ἂν ἐνῇ<sup>6</sup> πλείστον, τοῦτο μάλιστα ἐνισχύειν πρὸς τε τὴν αἴσθησιν καὶ τὴν δύναμιν. ἔτι δὲ εἰς ὁποίαν ἔξιν ἂν εἰσέλθῃ,<sup>7</sup> διαφέρειν γὰρ<sup>8</sup> οὐκ ὀλίγον. καὶ τοῦτο διὰ<sup>9</sup> τὸ αὐτὸ τὰναντία καὶ τὰναντία τὸ αὐτὸ πάθος ποιεῖν ἐνίστε. [68] καὶ περὶ μὲν τῶν χυλῶν οὕτως ἀφώρικεν. [. . . = **R46**]

- <sup>5</sup> οὐ Wimmer: οὐ F<sup>1</sup>: ὦ PF<sup>2</sup>      <sup>6</sup> ἐνι mss., corr. Wimer  
<sup>7</sup> εἰσέλθῃ F<sup>2</sup>: εἰσέλθοι P      <sup>8</sup> γὰρ secl. Schneider  
<sup>9</sup> τοῦτο διὰ mss.: διὰ τοῦτο Schneider

### *Colors (D66)*

**D66** (< A135) Theophr. *Sens.* 73–78

[. . . = **R62**] [73] τῶν δὲ χρωμάτων ἀπλᾶ μὲν λέγει τέτταρα. λευκὸν μὲν οὖν εἶναι τὸ λεῖον· ὃ γὰρ ἂν μὴ τραχὺ μὴδ' ἀποσκιάζῃ<sup>1</sup> μὴδὲ δυσδίόδόν τι,<sup>2</sup> τοιοῦτον πᾶν λαμπρὸν εἶναι. δεῖ δὲ καὶ εὐρύτρυνπα<sup>3</sup> καὶ διανγῇ τὰ λαμπρὰ εἶναι. τὰ μὲν οὖν σκληρὰ τῶν λευκῶν ἐκ τοιούτων σχημάτων συγκείσθαι οἶον ἢ ἐντὸς πλάξ τῶν κογχυλίων· οὕτω γὰρ ἂν ἄσκια καὶ εὐαγῇ καὶ εὐθύπορα εἶναι. τὰ <δὲ><sup>4</sup> ψαθυρὰ καὶ εὐθρυπτα ἐκ περιφερῶν μὲν λοξῶν δὲ τῇ θέσει πρὸς ἀλλήλα καὶ κατὰ<sup>5</sup> δύο συζεύξει,<sup>6</sup> τὴν δ' ὅλην τάξιν ἔχειν ὅτι μάλιστα ὁμοίαν. τοιούτων δ' ὄντων ψαθυρὰ μὲν εἶναι, διότι κατὰ μικρὸν ἢ σύναψις· εὐθρυπτα δ', ὅτι ὁμοίως

- <sup>1</sup> ἐπισκιάζῃ Schneider      <sup>2</sup> ἦ Burchard

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others. That of which there is the most is what most prevails with regard to both sensation and power, but also the kind of condition [scil. matters] into which it [i.e. the flavor] penetrates, for the difference is not negligible, and this is because sometimes the same thing produces contrary [scil. affections], and contrary things the same affection. [68] It is in this way that he has made his definitions with regard to flavors. [. . .]

See also **D159**

### *Colors (D66)*

#### **D66** (< A135) Theophrastus, *On Sensations*

[. . .] [73] Of colors, he says that there are four simple ones. White is what is smooth [scil. according to him]; for whatever is not rough, does not cast a shadow, and is not hard to pass through, everything of this kind is bright. Bright things must also have wide perforations and be translucent. White things that are hard are composed of the same kinds of shapes, for example the inner surface of shells; for in this way they are without shadow and luminous, and are provided with straight perforations. Those that are friable and crumble easily are composed of shapes that are round, but oblique in their position with regard to each other combined in pairs, but their total order is the most regular possible. Being like this, they are friable, because there is little contact; they crumble easily, because they are arranged in a regular fashion; they are without shadow, be-

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<sup>3</sup> ἐνθύτυρρυπα Schneider

<sup>5</sup> κατὰ Usener: τὰ mss.

<sup>4</sup> <δὲ> Schneider

<sup>6</sup> σνζεύξεις mss., corr. Diels

κείνται· ἄσκια δέ, διότι λεία καὶ πλατέα· λευκότερα δ' ἀλλήλων<sup>7</sup> τῷ τὰ σχήματα τὰ εἰρημένα καὶ ἀκριβέστερα καὶ ἀμιγέστερα εἶναι καὶ τὴν τάξιν καὶ τὴν θέσιν ἔχειν μᾶλλον τὴν εἰρημένην. [74] τὸ μὲν οὖν λευκὸν ἐκ τοιούτων εἶναι σχημάτων. τὸ δὲ μέλαν ἐκ τῶν ἐναντίων, ἐκ τραχέων καὶ σκαληνῶν καὶ ἀνομοίων· οὕτω γὰρ ἂν σκιάζειν καὶ οὐκ εὐθείς εἶναι τοὺς πόρους οὐδ' εὐδιόδους.<sup>8</sup> ἔτι δὲ τὰς ἀπορροίας νωθεῖς καὶ παραχώδεις· διαφέρειν γάρ τι καὶ τὴν ἀπορροὴν τῷ<sup>9</sup> ποιᾶν εἶναι πρὸς τὴν φαντασίαν, ἣν γίνεσθαι διὰ τὴν ἐναπόληψιν τοῦ ἀέρος ἀλλοίαν.

<sup>7</sup> ἀλλήλοις mss., corr. Diels <sup>8</sup> εὐδιόδους Vossianus:  
εὐδι cum lacuna mss. <sup>9</sup> τὸ mss., corr. Stephanus

[75] ἐρυθρὸν δ' ἐξ οἴωνπερ καὶ<sup>1</sup> τὸ θερμόν, πλὴν ἐκ μειζόνων. ἐὰν γὰρ αἱ συγκρίσεις ὧσι μείζους ὁμοίων ὄντων τῶν σχημάτων μᾶλλον ἐρυθρὸν εἶναι. σημεῖον δ' ὅτι ἐκ τοιούτων τὸ ἐρυθρόν· ἡμᾶς τε γὰρ θερμαινόμενους ἐρυθραίνεσθαι καὶ τὰ ἄλλα τὰ πυρούμενα, μέχρις ἂν οὐ ἔχῃ τὸ τοῦ πυροειδοῦς.<sup>2</sup> ἐρυθρότερα δὲ τὰ ἐκ μεγάλων ὄντα σχημάτων οἷον τὴν φλόγα καὶ τὸν ἄνθρακα τῶν χλωρῶν ξύλων ἢ τῶν αὔων, καὶ τὸν σίδηρον δὲ καὶ τὰ ἄλλα τὰ πυρούμενα· λαμπρότατα μὲν γὰρ εἶναι τὰ πλείστον ἔχοντα καὶ λεπτότατον πῦρ, ἐρυθρότερα δὲ τὰ παχύτερον<sup>3</sup> καὶ ἔλαττον. διὸ καὶ ἦττον εἶναι θερμὰ τὰ ἐρυθρότερα· θερμόν<sup>4</sup> γὰρ τὸ λεπτόν. τὸ δὲ χλωρὸν ἐκ τοῦ στερεοῦ καὶ τοῦ κενοῦ

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cause they are smooth and flat. Some are whiter than others because the shapes mentioned are more exact and less mixed, and because they possess to a greater degree the order and the position mentioned. [74] What is white is composed of shapes of this sort. Black [scil. is composed] of the contrary ones, rough, irregular, and dissimilar; for in this way they cast a shadow and the perforations are not straight nor easy to pass through. Furthermore, the effluxes are sluggish and turbulent. For the efflux also differs to some extent according to its kind with regard to the representation—it becomes different as air is contained.

[75] Red [scil. is composed] out of ones of the same kind as what is warm, except that they [i.e. the red ones] are larger. For whenever the aggregates are larger, the shapes being similar, the result is redder. Evidence for red being composed of shapes of this sort: we become red when we are warm, and so too does everything else that is set ablaze, until it becomes incandescent. Redder are the substances made of large shapes, like flame and charcoal of green wood compared with dry wood, and also iron and other things set ablaze; for the brightest things are the ones that possess the most abundant and thinnest fire, while the redder ones possess thicker fire and less of it. And that is why redder things are less warm, for what is thin is warm. Greenish-yellow is composed of solid and

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<sup>1</sup> οἶωνπερ καὶ Diels: οἶωνπερ ὃ F: οἶων περὶ P <sup>2</sup> μέχρι  
 ἂν συνέχῃ τὸ τοῦ πυρὸς εἶδος coni. Diels <sup>3</sup> παχύτερα  
 mss., corr. Stephanus <sup>4</sup> μὲν post θερμὸν hab. mss., del.  
 Camotius

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συνεστάναι<sup>5</sup> μεγάλων ἐξ ἀμφοῖν,<sup>6</sup> τῇ θέσει δὲ καὶ τά-  
ξει αὐτῶν τὴν χροάν.<sup>7</sup>

<sup>5</sup> post συνεστάναι lacunam posuit Wimmer <sup>6</sup> ἐκ με-  
γάλως δ' ἀμφοῖν Mullach <sup>7</sup> μεμιγμένων δὲ ἀμφοῖν τῇ  
θέσει καὶ τάξει αὐτῶν τὴν χροάν coni. Diels: τὴν χροάν <γί-  
γνεσθαι> Mullach

[76] τὰ μὲν οὖν ἀπλᾶ χρώματα τούτοις κεχρησθαι  
τοῖς σχήμασιν· ἕκαστον δὲ καθαρώτερον, ὅσῳ ἂν ἐξ  
ἀμιγεστέρων ᾖ. τὰ δὲ ἄλλα κατὰ τὴν τούτων μίξιν·  
οἷον τὸ μὲν χρυσοειδὲς καὶ τὸ τοῦ χαλκοῦ καὶ πᾶν τὸ  
τοιούτων ἐκ τοῦ λευκοῦ καὶ τοῦ ἐρυθροῦ· τὸ μὲν γὰρ  
λαμπρὸν ἔχειν<sup>1</sup> ἐκ τοῦ λευκοῦ, τὸ δὲ ὑπέρυθρον ἀπὸ  
τοῦ θερμοῦ.<sup>2</sup> πίπτειν γὰρ εἰς τὰ κενὰ τοῦ λευκοῦ τῇ  
μίξει τὸ ἐρυθρόν. εἰ δὲ προστεθῇ τούτοις τὸ χλωρόν,  
γίνεσθαι τὸ κάλλιστον χρῶμα, δεῖν<sup>3</sup> δὲ μικρὰς τοῦ  
χλωροῦ τὰς συγκρίσεις εἶναι· μεγάλας γὰρ οὐχ οἷόν  
τε συγκειμένων οὕτω τοῦ λευκοῦ καὶ τοῦ ἐρυθροῦ. δια-  
φόρους<sup>4</sup> δὲ ἔσεσθαι τὰς χροὰς τῷ πλείον καὶ ἔλαττον  
λαμβάνειν. [77] τὸ δὲ πορφυροῦν ἐκ λευκοῦ καὶ μέλα-  
νος καὶ ἐρυθροῦ, πλείστην μὲν μοῖραν ἔχοντος τοῦ  
ἐρυθροῦ, μακρὰν<sup>5</sup> δὲ τοῦ μέλανος, μέσην<sup>6</sup> δὲ τοῦ λευ-  
κοῦ· διὸ καὶ ἡδὺ φαίνεσθαι πρὸς τὴν αἴσθησιν. ὅτι  
μὲν οὖν τὸ μέλαν καὶ τὸ ἐρυθρὸν αὐτῷ<sup>7</sup> ἐννύπαρχει,  
φανερὸν εἶναι τῇ ὄψει, διότι δὲ τὸ λευκόν, τὸ λαμπρὸν  
καὶ διαυγὲς σημαίνειν· ταῦτα γὰρ ποιεῖν τὸ λευκόν.  
τὴν δ' ἴσατιν ἐκ μέλανος σφόδρα καὶ χλωροῦ, πλείονα  
δὲ μοῖραν ἔχειν τοῦ μέλανος· τὸ δὲ πράσινον ἐκ πορ-

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void, both big, the color resulting from their position and order.

[76] Thus the simple colors depend on these shapes, each one being more pure to the degree that it is composed of less mixed ones. The other [scil. colors] are in accordance with the mixture of these. Thus the gold-colored, that of bronze, and everything like this comes from white and red. They owe their brightness to what is white, their reddish hue to what is warm. For the red falls into the voids of the white when they mix. If greenish-yellow is added to these, the most beautiful color comes about, but the aggregates of the greenish-yellow must be small, for they should not be large, given that the white and the red are arranged in this way. The hues will be different depending on their accepting a greater or smaller quantity. [77] Purple comes from white, black, and red, with red having the greatest portion, black a large one, white an intermediate one. And this is why it appears agreeable to sensation. That there is black and red in it is clear to the eye; and that there is white is indicated by its brightness and transparency, for these are produced by the white. Indigo comes from extreme black and greenish-yellow, but it has a greater portion of black. Leek-green [scil. comes] from purple and

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<sup>1</sup> ἔχειν Camotius: ἔχει mss.      <sup>2</sup> ἐρυθροῦ Burchard  
<sup>3</sup> δεῖν Schneider: δεῖ mss.      <sup>4</sup> διαφοραῖς mss., corr.  
Stephanus      <sup>5</sup> μακρὰν P<sup>1</sup> F: μικρὰν (ι ss.) P<sup>2</sup>      <sup>6</sup> μέσην F:  
μέσον P      <sup>7</sup> αὐτῷ F paene evanidum: om. P



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φυροῦ καὶ τῆς ἰσάτιδος, ἣ ἐκ χλωροῦ καὶ πορφυροει-  
 δοῦς. τὸ γὰρ θεῖον<sup>8</sup> εἶναι τοιοῦτον καὶ μετέχειν τοῦ  
 λαμπροῦ. τὸ δὲ κυανοῦν ἐξ ἰσάτιδος καὶ πυρώδους,  
 σχημάτων δὲ περιφερῶν καὶ βελονοειδῶν, ὅπως τὸ  
 στίλβον τῷ μέλανι ἐνῇ. [78] τὸ δὲ καρύινον ἐκ χλωροῦ  
 καὶ κυανοειδοῦς. εἰάν δὲ †χλωρὸν†<sup>9</sup> μιχθῇ, φλογοειδὲς  
 γίνεσθαι, τὸ γὰρ ἄσκιον<sup>10</sup> καὶ μελανόχρων ἐξείργε-  
 σθαι.<sup>11</sup> σχεδὸν δὲ καὶ τὸ ἐρυθρὸν τῷ λευκῷ μιχθὲν  
 <τὸ><sup>12</sup> χλωρὸν ποιεῖν εὐαγὲς καὶ οὐ μέλαν· διὸ καὶ τὰ  
 φυόμενα χλωρὰ τὸ πρῶτον εἶναι πρὸ τοῦ θερμανθῆ-  
 ναι καὶ †διαχέισθαι†.<sup>13</sup>

καὶ πλήθει μὲν τοσούτων ἐπιμέμνηται<sup>14</sup> χρωμάτων,  
 ἄπειρα δὲ εἶναι καὶ<sup>15</sup> τὰ χρώματα καὶ τοὺς χυλοὺς  
 κατὰ τὰς μίξεις, εἰάν τις τὰ μὲν ἀφαιρῇ, τὰ δὲ προσ-  
 τιθῇ, καὶ τῶν μὲν ἔλαττον μίσγη,<sup>16</sup> τῶν δὲ πλείον.  
 οὐθὲν γὰρ ὅμοιον ἔσεσθαι θάτερον θατέρω.<sup>17</sup> [. . . =  
**R59]**

<sup>8</sup> τὸν γὰρ ἰὸν coni. Diels

<sup>9</sup> χλωρὸν <πλέον> Schneider

<sup>10</sup> κατάσκιον Mullach

<sup>11</sup> εἰάν δὲ καὶ λαμπρὸν μιχθῇ,

φλογοειδὲς γίνεσθαι (τοῦτο γὰρ ἄσκιον) καὶ τὸ μελανόχρων  
 ἐξείργεσθαι uel τῷ γὰρ ἀσκήῳ μελ. ἐξείργεσθαι coni. Diels

<sup>12</sup> <τὸ> Burchard

<sup>13</sup> διακαίεσθαι coni. Diels

<sup>14</sup> τοσούτον ἐπιμέμικται mss., corr. Schneider

<sup>15</sup> καὶ om. F

<sup>16</sup> μίσγειν mss., corr. Schneider

<sup>17</sup> θατέρου mss., corr. Schneider

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

indigo, or from greenish-yellow and purplish; for sulfur (?)<sup>1</sup> too is like this and has a share in what is bright. Dark blue [scil. comes] from indigo and what is fiery in color, the shapes being round and pointed, so that there is glittering in the black. [78] Nut-brown [scil. comes] from greenish-yellow and dark blue; but if greenish-yellow (?) is mixed, it becomes flame-colored; for in this way the absence of shadow and the presence of black are excluded.<sup>2</sup> Red mixed with white can also produce a clear green, without black; and this is why plant buds at first are clear green, before becoming warm and spreading out (?).

And with regard to number, this is as many colors as he mentions; but the colors and flavors are unlimited, in accordance with their mixtures, if one removes these and adds those, and some are mixed in a smaller quantity, and others in a larger one. For none will be similar to each other. [. . .]

<sup>1</sup> Or, with Diels' correction: "the violet."

<sup>2</sup> Or, adopting Diels' further correction of the text: "for if what is bright is mixed, it becomes flame-colored (for this does not have a shadow) and what is black is excluded."

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### *Odors (D67)*

**D67** (< A135) Theophr. *Sens.* 82

[. . . = **R59**] *περὶ δὲ ὀσμῆς* [. . .] *τὸ λεπτὸν ἀπορρέον ἀπὸ τῶν βαρέων*<sup>1</sup> *ποιεῖ τὴν ὀδμήν*. [. . . cf. **R25**]

<sup>1</sup> *θερμῶν* Usener: *παχέων* Mullach

### *Heavy and Light, Hard and Soft (D68–D69)*

**D68** (< A60) Arist. *Cael.* 4.2 309a1–2

[. . . cf. **D40**] *τοῖς δὲ στερεὰ μᾶλλον ἐνδέχεται λέγειν τὸ μείζον εἶναι βαρύτερον αὐτῶν*.

**D69** (< A135) Theophr. *Sens.* 61–62

[. . . = **R21**] [61] *βαρὺν μὲν οὖν καὶ κοῦφον τῷ μεγέθει διαιρεῖ*<sup>1</sup> *Δημόκριτος*. *εἰ γὰρ διακριθείη*<sup>2</sup> *ἔνθεν ἕκαστον*,<sup>3</sup> *εἰ καὶ κατὰ σχῆμα διαφέρει*, *διαφέρει*,<sup>4</sup> *σταθμοῦ*<sup>5</sup> *ἂν ἐπὶ μεγέθει τὴν φύσιν*<sup>6</sup> *ἔχειν*. *οὐ μὴν ἀλλ' ἐν γε τοῖς μικτοῖς κουφότερον μὲν*<sup>7</sup> *εἶναι τὸ πλεόν ἔχον κενόν*, *βαρύτερον δὲ τὸ ἔλαττον*. *ἐν ἐνίοις μὲν οὕτως εἴρηκεν*. [62] *ἐν ἄλλοις δὲ κοῦφον εἶναί φησιν ἀπλῶς τὸ λεπτόν*. *παραπλησίως δὲ καὶ περὶ σκληροῦ καὶ μαλακοῦ*. *σκληρόν μὲν γὰρ εἶναι τὸ πυκνόν*, *μαλακὸν δὲ τὸ μανόν*, *καὶ τὸ μᾶλλον δὲ καὶ ἥττον καὶ μάλιστα*

<sup>1</sup> *διαιρεῖν* mss., corr. Stephanus

<sup>2</sup> *διακριθῇ* mss., corr. Diels

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Odors (D67)*

**D67** (< A135) Theophrastus, *On Sensations*

[. . .] As for odor [. . .] it is the thin emanating from heavy bodies that makes odor [. . .].

### *Heavy and Light, Hard and Soft (D68–D69)*

**D68** (< A60) Aristotle, *On the Heavens*

[. . .] For the others [scil. who, unlike Plato, say that the principles are] solid [i.e. the Atomists], it is easier to say that the larger ones among them are heavier.

**D69** (< A135) Theophrastus, *On Sensations*

[. . .] [61] Heavy and light Democritus distinguishes by magnitude. For if one analyzed from what source each thing, though differing in its shape too, differs, nature would have in magnitude its unit of weight. But as it is, among mixed bodies at least, the one possessing more void is lighter, the one with less is heavier. In some passages this is what he has said. [62] In others, he says simply that what is thin is light. He speaks similarly about hard and soft: hard is what is dense, soft what is loose; and what is more, less, and most of all [scil. dense and rarefied] varies in proportion. But there is a certain difference in the posi-

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<sup>3</sup> ἔνθεν ἕκαστον mss.: καθ' ἐν ἕκαστον Diels: ἐν ἕκαστον Mullach: ἐν μὲν ἕκαστον Burchard <sup>4</sup> διαφέρει del. Vossianus <sup>5</sup> σταθμὸν mss., corr. Papencordt <sup>6</sup> τὴν φύσιν mss.: τὴν κρίσιν Preller: τὴν διαφοράν coni. Usener: τινὰ φύσιν coni. Diels <sup>7</sup> ἂν mss., corr. Usener

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κατὰ λόγον.<sup>8</sup> διαφέρειν δέ τι<sup>9</sup> τὴν θέσιν καὶ τὴν ἐναπόληψιν<sup>10</sup> τῶν κενῶν τοῦ<sup>11</sup> σκληροῦ καὶ μαλακοῦ καὶ βαρέος καὶ κούφου. διὸ σκληρότερον μὲν εἶναι σίδηρον, βαρύτερον δὲ μόλυβδον· τὸν μὲν γὰρ σίδηρον ἀνωμάλως συγκεῖσθαι καὶ τὸ κενὸν ἔχειν πολλαχῇ καὶ κατὰ μεγάλα, πεπυκνώσθαι δέ<sup>12</sup> κατὰ ἔνια, ἀπλῶς δὲ πλέον ἔχειν κενόν. τὸν δὲ μόλυβδον ἔλαττον ἔχοντα κενὸν ὁμαλῶς συγκεῖσθαι <καὶ><sup>13</sup> κατὰ πᾶν ὁμοίως, διὸ βαρύτερον μὲν, μαλακώτερον δ' εἶναι τοῦ σιδήρου. [. . . = **D64**]

<sup>8</sup> μάλιστα <καὶ ἥκιστα> κενὸν ἔχον coni. Burchard

<sup>9</sup> δ' ἔτι Schneider <sup>10</sup> ἐναπόλειψιν mss., corr. Papencordt

<sup>11</sup> τοῦ susp. Diels <sup>12</sup> καὶ mss., corr. Diels

<sup>13</sup> <καὶ> Diels qui coni. καὶ κατὰ πᾶν ὁμοίως πεπυκνώσθαι

*The Process of Becoming (D70–D72)*

*Acting and Being Acted Upon (D70)*

**D70** (A63) Arist. GC 1.7 323b10–15

Δημόκριτος δὲ παρὰ τοὺς ἄλλους ἰδίως ἔλεξε μόνος· φησὶ γὰρ τὸ αὐτὸ καὶ ὅμοιον εἶναι τό τε ποιῶν καὶ τὸ πάσχον· οὐ γὰρ ἐγχωρεῖ τὰ ἕτερα καὶ διαφέροντα πάσχειν ὑπ' ἀλλήλων, ἀλλὰ καὶ ἕτερα ὄντα ποιῇ τι ἄλληλα, οὐχ ἢ ἕτερα ἀλλ' ἢ ταυτόν τι ὑπάρχει, ταύτη τοῦτο συμβαίνειν αὐτοῖς.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

tion [scil. of the shapes] and in the inclusion of voids between hard and soft on the one hand, and heavy and light on the other. That is why iron is harder but lead is heavier: for iron has an irregular composition and contains void in many places and in large areas; it is condensed in some places, but, speaking generally, it contains more void. But lead, which possesses less void, has everywhere the same regular composition. And that is why it is heavier, even though it is softer than iron. [. . .]

*The Process of Becoming (D70–D72)*  
*Acting and Being Acted Upon (D70)*

### **D70** (A63) Aristotle, *On Generation and Corruption*

Democritus is the only one, compared with the others, to have spoken in his own way. For he says that what acts and what is acted upon are the same and similar. For he does not admit that things that are other and different can be acted upon by each other, but if, even though they are other, they do act in some way upon each other, this happens to them not by virtue of their being other, but by virtue of their possessing something identical.

## EARLY GREEK PHILOSOPHY VII

### *Generation, Corruption, Alteration and Other Processes (D71–D72)*

**D71** (A35, < 67 A9) Arist. GC 1.2 315a34–b9

ὅλως δὲ παρὰ τὰ ἐπιπολῆς περὶ οὐδενὸς οὐδεὶς ἐπέστησεν ἔξω Δημοκρίτου. οὗτος δ' ἔοικε μὲν περὶ πάντων φροντίσαι, ἥδη δὲ ἐν τῷ πῶς διαφέρειν. οὔτε γὰρ περὶ αὐξήσεως οὐδεὶς οὐδὲν διώρικεν, ὥσπερ λέγομεν, ὅτι μὴ καὶ ὁ τυχὼν εἶπαιεν [. . .] οὐδὲ περὶ μίξεως, οὐδὲ περὶ τῶν ἄλλων ὡς εἰπεῖν οὐδενός, οἶον τοῦ ποιεῖν ἢ τοῦ πάσχειν, τίνα τρόπον τὸ μὲν ποιεῖ τὸ δὲ πάσχει τὰς φυσικὰς ποιήσεις. Δημόκριτος δὲ καὶ Λεύκιππος ποιήσαντες τὰ σχήματα τὴν ἀλλοίωσιν καὶ τὴν γένεσιν ἐκ τούτων ποιούσι, διακρίσει μὲν καὶ συγκρίσει γένεσιν καὶ φθοράν, τάξει δὲ καὶ θέσει ἀλλοίωσιν [. . . cf. **D56**].

**D72** (> A123) Arist. GC 1.2 315b33–316a2

[. . .] ὅμως<sup>1</sup> δὲ τούτοις ἀλλοίωσιν καὶ γένεσιν ἐνδέχεται ποιεῖν [. . .], τροπῇ καὶ διαθηγῇ<sup>2</sup> μετακινούμενα τὸ αὐτὸ καὶ ταῖς τῶν σχημάτων διαφοραῖς, ὅπερ ποιεῖ Δημόκριτος· διὸ καὶ χροιάν οὗ φησιν εἶναι, τροπῇ γὰρ χρωματίζεσθαι.

<sup>1</sup> ὅμως] ὁμοίως E<sup>1</sup>J<sup>1</sup>  
διαθιγῇ cett.

<sup>2</sup> διαθηγῇ JL: διαθειγῇ E<sup>1</sup> ut vid.:

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Generation, Corruption, Alteration, and Other Processes (D71–D72)*

**D71** (A35, < 67 A9) Aristotle, *On Generation and Corruption*

In general, setting aside superficial considerations, no one has paused to think about any [scil. of these processes] except for Democritus. He seems to have thought about all of them, already asking himself how they differ. For no one, as we say, has asserted anything about growth that any chance person might not have said [. . .] nor about mixture, nor about practically any of the other ones [i.e. processes], like acting and being acted upon—in what way one thing acts and another is acted upon in natural actions. But Democritus and Leucippus, by positing shapes, explain alteration and generation on the basis of these: generation and destruction by dissociation and association, alteration by order and position [. . .].

**D72** (> A123) Aristotle, *On Generation and Corruption*

[. . .] All the same [scil. despite the absurdities arising from their doctrine] these [scil. Democritus and Leucippus] are able to explain alteration and generation [. . .] by transforming the same thing by **turning** and **disposition**, as well as by the differences in shapes, which is what Democritus does. And that is why he says that color does not exist: for coloration happens by virtue of **turning**.



## EARLY GREEK PHILOSOPHY VII

### *Necessity and Chance (D73–D76)*

**D73** (67 B2) Aët. 1.25.4 (Stob.) [περὶ ἀνάγκης]

Λεύκιππος πάντα κατ' ἀνάγκην, τὴν δ' αὐτὴν ὑπάρχειν εἰμαρμένην· λέγει γὰρ ἐν τῷ Περὶ νοῦ· “οὐδὲν χρῆμα μάτην γίγνεται, ἀλλὰ πάντα ἐκ λόγου τε καὶ ὑπ' ἀνάγκης.”

**D74** (A66) Arist. GA 5.8 789b2–4

Δημόκριτος δὲ τὸ οὐ ἔνεκα ἀφείς λέγειν, πάντα ἀνάγει εἰς ἀνάγκην οἷς χρῆται ἢ φύσις [. . . = **R30**].

**D75** (A66) Aët. 1.26.2 (Ps.-Plut.; cf. Ps.-Gal.) [περὶ τῆς οὐσίας ἀνάγκης]

Δημόκριτος τὴν ἀντιτυπίαν καὶ φορὰν<sup>1</sup> καὶ πληγὴν τῆς ὕλης.

<sup>1</sup> φορὰν Ps.-Gal. *Hist. phil.* 41: φθορὰν vel τὴν φθορὰν mss.

### **D76**

**a** (A68) Arist. *Phys.* 2.4 195b36–196a3

ἔνιοι γὰρ καὶ εἰ ἔστιν ἢ μὴ ἀποροῦσιν· οὐδὲν γὰρ δὴ γίνεσθαι ἀπὸ τύχης φασίν, ἀλλὰ πάντων εἶναί τι αἷτιον ὠρισμένον ὅσα λέγομεν ἀπὸ αὐτομάτου γίνεσθαι ἢ τύχης [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Necessity and Chance (D73–D76)*

#### **D73** (67 B2) Aëtius

Leucippus: everything [scil. happens] according to necessity, and this is the same as destiny (*heimarmenê*). For he says in his *On Mind*, “**nothing happens at random, but everything for a reason and as the effect of necessity.**”

#### **D74** (A66) Aristotle, *Generation of Animals*

Democritus, neglecting to speak of the final cause, refers to necessity everything of which nature makes use [. . .].

#### **D75** (A66) Aëtius

Democritus: it [scil. necessity] is resistance (*antitupia*), locomotion, and the collision of matter.

#### **D76**

#### **a** (A68) Aristotle, *Physics*

For some people raise the difficulty whether it [i.e. chance, *tukhê*] exists or not. For they say that nothing happens by chance, but that there is a determinate cause for all the things about which we say that they happen spontaneously or by chance [. . .].

**b** (≠ DK) Arist. *Phys.* 2.4 196a11–16

πολλὰ γὰρ καὶ γίγνεται καὶ ἔστιν ἀπὸ τύχης καὶ ἀπὸ ταυτομάτου, ἃ οὐκ ἀγνοοῦντες ὅτι ἔστιν ἐπανενεγκεῖν ἕκαστον ἐπὶ τι αἴτιον τῶν γιγνομένων, καθάπερ ὁ παλαιὸς λόγος εἶπεν ὁ ἀναιρῶν τὴν τύχην, ὅμως τούτων τὰ μὲν εἶναί φασι πάντες ἀπὸ τύχης τὰ δ' οὐκ ἀπὸ τύχης.

**c** (A68) Simpl. *In Phys.*, p. 330.14–20

τὸ δὲ “καθάπερ ὁ παλαιὸς λόγος ὁ ἀναιρῶν τὴν τύχην” [cf. **D76b**] πρὸς Δημόκριτον ἔοικεν εἰρῆσθαι· ἐκεῖνος γὰρ καὶ ἐν τῇ κοσμοποιίᾳ ἐδόκει τῇ τύχῃ κεχρηῆσθαι, ἀλλ' ἐν τοῖς μερικωτέροις οὐδενός φησιν εἶναι τὴν τύχην αἰτίαν ἀναφέρων εἰς ἄλλας αἰτίας, οἷον τοῦ θησαυρὸν εὐρεῖν τὸ σκάπτειν ἢ τὴν φυτείαν τῆς ἐλαίας, τοῦ δὲ καταγῆναι τοῦ φαλακροῦ τὸ κρανίον τὸν ἀετὸν ῥύψαντα τὴν χελώνην, ὅπως τὸ χελώνιον ῥαγῇ. οὕτως γὰρ ὁ Εὐδήμους ἱστορεῖ [Frag. 54a Wehrli].

*The Universe (D77–D127)*

*The Whole and Time Are Unlimited (D77–D79)*

**D77** (< A39) Ps.-Plut. *Strom.* 7 in Eus. *PE* 1.8.7

Δημόκριτος ὁ Ἀβδηρίτης ὑπεστήσατο τὸ πᾶν ἄπειρον διὰ τὸ μηδαμῶς ὑπὸ τινος αὐτὸ δεδημιουργῆσθαι· ἔτι δὲ καὶ ἀμετάβλητον αὐτὸ λέγει· καὶ καθό-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**b** ( $\neq$  DK) Aristotle, *Physics*

For many things both happen and exist by chance and spontaneously, about which all people, although they are not unaware that it is possible to refer each of these things that happens to some cause (like the ancient argument that abolishes chance), nonetheless say that some of them are produced by chance and others not by chance.

**c** (A68) Simplicius, *Commentary on Aristotle's Physics*

The phrase “like the ancient argument that abolishes chance” seems to be said with reference to Democritus. For even if he seemed to have recourse to chance in the course of the formation of the world, nonetheless in his particular explanations he states that chance is not the cause of any-thing, referring to other causes, for example that digging or planting an olive tree [scil. was the cause] of the discovery of the treasure, or that the eagle dropping the tortoise in order that its shell be broken [scil. was that] of shattering the bald man's [i.e. Aeschylus'] skull. This is what Eudemus reports.

*The Universe (D77–D127)*

*The Whole and Time Are Unlimited (D77–D79)*

**D77** (< A39) Ps.-Plutarch, *Stromata*

Democritus of Abdera supposed that the whole is unlimited because it has not been fashioned in any way at all by someone. He also says that it is immutable; and in general,

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λου, οἶον πᾶν ἐστίν, ῥητῶς ἐκτίθεται μηδεμίαν ἀρχὴν ἔχειν τὰς αἰτίας τῶν νῦν γιγνομένων, ἄνωθεν δ' ὅλως ἐξ ἀπείρου χρόνου προκατέχεσθαι τῇ ἀνάγκῃ πάνθ' ἀπλῶς τὰ γεγονότα καὶ ὄντα καὶ ἐσόμενα [. . .].

**D78** (< A71) Arist. *Phys.* 8.1 251b14–17

ἀγένητον γὰρ εἶναι λέγουσιν. καὶ διὰ τούτου Δημόκριτός γε δείκνυσιν ὥς ἀδύνατον ἅπαντα γεγονέναι τὸν γὰρ χρόνον ἀγένητον εἶναι.

**D79** (< 42.1 Leszl) Arist. *GA* 2.6 742b20–23

[. . . cf. **R27**] Δημόκριτος ὁ Ἀβδηρίτης, ὅτι τοῦ μὲν αἰὲ καὶ ἀπείρου οὐκ ἔστιν ἀρχή, τὸ δὲ διὰ τί ἀρχή, τὸ δ' αἰὲ ἄπειρον, ὥστε τὸ ἐρωτᾶν τὸ διὰ τί περὶ τῶν τοιούτων τινὸς τὸ ζητεῖν εἶναί φησι τοῦ ἀπείρου ἀρχήν.

*Cosmogony (D80–D89)*  
*Two Summaries (D80–D81)*

**D80** (< 67 A1) Diog. Laert.

**a** 9.30

ἤρεσκε δὲ αὐτῷ ἄπειρα εἶναι τὰ πάντα καὶ εἰς ἄλληλα μεταβάλλειν, τό τε πᾶν εἶναι κενὸν καὶ πλήρες σωμάτων.<sup>1</sup> τοὺς τε κόσμους γίνεσθαι σωμάτων εἰς τὸ

<sup>1</sup> σωμάτων del. Rohde

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

according to what is a whole, he explicitly states that the causes of the things that exist now do not have any beginning, and that simply everything that has been, is, and will be is determined beforehand by necessity, from the earliest beginning, since unlimited time [. . .].

### **D78** (< A71) Aristotle, *Physics*

For they [i.e. everyone except Plato] say that it [i.e. time] is ungenerated. And this is how Democritus, for one, demonstrates that it is impossible for all things to have been generated: for time is ungenerated.

### **D79** (≠ DK) Aristotle, *Generation of Animals*

[. . .] Democritus of Abdera says that there is no beginning (*arkhê*) of the always and of the unlimited, that a cause is a beginning, and that the always is unlimited; so that to ask for the cause of this kind of thing is, he says, to seek a beginning of the unlimited.

### *Cosmogony (D80–D89)* *Two Summaries (D80–D81)*

### **D80** (< 67 A1) Diogenes Laertius

**a**

[30] He [scil. Leucippus] had the opinions that the totality of things is unlimited and they are transformed into one another, and the whole is empty and full of bodies. The worlds come to be when bodies fall in the void and be-

κενὸν ἐμπιπτόντων καὶ ἀλλήλοις περιπλεκομένων· ἔκ τε τῆς κινήσεως κατὰ τὴν αὔξησιν αὐτῶν γίνεσθαι τὴν τῶν ἀστέρων φύσιν. [. . . = **D93**] κεφαλαιωδῶς μὲν ταῦτα.

## **b** 9.30–33

[30] ἐπὶ μέρος δ' ὧδε ἔχει· [31] τὸ μὲν πᾶν ἄπειρόν φησιν, ὡς προείρηται· τούτου δὲ τὸ μὲν πλήρες εἶναι, τὸ δὲ κενόν, <ᾶ><sup>1</sup> καὶ στοιχειᾶ φησι. κόσμους τε ἐκ τούτων ἀπείρους εἶναι καὶ διαλύεσθαι εἰς ταῦτα. γίνεσθαι δὲ τοὺς κόσμους οὕτω· φέρεσθαι κατὰ ἀποτομὴν ἐκ τῆς ἀπείρου πολλὰ σώματα παντοῖα τοῖς σχήμασιν εἰς μέγα κενόν, ἅπερ ἀθροισθέντα δίνην ἀπεργάζεσθαι μίαν, καθ' ἣν προσκρούοντα<sup>2</sup> καὶ παντοδαπῶς κυκλούμενα διακρίνεσθαι χωρὶς τὰ ὅμοια πρὸς τὰ ὅμοια. ἰσορρόπων δὲ διὰ τὸ πλήθος μηκέτι δυναμένων περιφέρεσθαι, τὰ μὲν λεπτὰ χωρεῖν εἰς τὸ ἔξω κενόν, ὥσπερ διαττώμενα· τὰ δὲ λοιπὰ συμμένειν καὶ περιπλεκόμενα συγκατατρέχειν ἀλλήλοις<sup>3</sup> καὶ ποιεῖν πρῶτόν τι σύστημα σφαιροειδές. [32] τοῦτο<sup>4</sup> δὲ οἶον ὑμένα ἀφίστασθαι<sup>5</sup> περιέχοντα ἐν ἑαυτῷ παντοῖα σώματα· ὧν κατὰ τὴν τοῦ μέσου ἀντέρεισιν περιδινουμένων λεπτὸν γενέσθαι τὸν πέριξ ὑμένα, συρρέόντων ἀεὶ τῶν συνεχῶν κατ' ἐπίψαυσιν τῆς δίνης. καὶ οὕτω γενέσθαι τὴν γῆν, συμμενόντων τῶν ἐνεχθέντων

<sup>1</sup> <ᾶ> Hoelk

<sup>2</sup> προσκρούοντα <ἀλλήλοις> Rohde

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

come interlaced with one another. From the motion that accom-panies their growth, the nature of the heavenly bodies comes about. [. . .] So much for the general summary.

### **b**

[30] For the details, it is as follows. [31] He says that the whole is unlimited, as I have just said. Of this, one part is full, the other empty, and he says that these are elements. The worlds that come from these are unlimited and they dissolve into these. The worlds come to be in the following way. Within a section originating from the unlimited, many bodies of all kinds of shapes are borne along toward a great void; when they have gathered together, they form a single vortex, by virtue of which, striking against [scil. one another] and moving circularly in various directions, similar things separate apart [scil. moving] toward similar ones. Since bodies of the same weight are no longer able to revolve because of their number, the light ones go toward the external void, as though they were being winnowed; while the others remain, become interlaced, and rush down to encounter each other and to produce a first stable ensemble (*sustêma*) in the form of a sphere. [32] This becomes detached like a membrane containing within itself bodies of all sorts; and as these revolve around by virtue of the vortex while the center exercises an opposing resistance, the surrounding membrane becomes thinner, while the adjacent bodies continue to flow together by the contact of the vortex. And this is how the

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<sup>3</sup> ἀλλήλους Cobet: ἄλληλα mss.

steiner <sup>5</sup> ἀφίστασθαι BPF: ὑφίστασθαι Ph

<sup>4</sup> τούτου Kerschen-



ἐπὶ τὸ μέσον. αὐτόν τε πάλιν τὸν περιέχοντα οἶον  
ὑμένα αὔξεσθαι κατὰ τὴν ἐπέκρυσιν<sup>6</sup> τῶν ἔξωθεν σω-  
μάτων· δίνῃ τε φερόμενον αὐτόν, ὦν ἂν ἐπιψαύσῃ,  
ταῦτα ἐπικτᾶσθαι. τούτων δέ τινα συμπλεκόμενα ποι-  
εῖν σύστημα, τὸ μὲν πρῶτον κάθυγρον καὶ πηλῶδες,  
ξηρανθέντα δὲ<sup>7</sup> καὶ περιφερόμενα σὺν τῇ τοῦ ὅλου  
δίνῃ, εἴτ' ἐκπυρωθέντα τὴν τῶν ἀστέρων ἀποτελέσαι  
φύσιν. [33] [. . . = **D94**] εἶναί τε ὥσπερ γενέσεις κό-  
σμου,<sup>8</sup> οὕτω καὶ αὐξήσεις καὶ φθίσεις καὶ φθοράς,  
κατὰ τινα ἀνάγκην, ἣν ὁποία ἐστὶν <οὐ><sup>9</sup> διασαφεῖ.

<sup>6</sup> ἐπέκρυσιν BPF: ἐπικράτησιν Φh: ἐπέκκρισιν Arsenius,  
coni. Heidel: ἐπέισρυσιν Rohde, alii alia <sup>7</sup> δὲ Φh: om. BPF  
<sup>8</sup> κόσμων Rohde <sup>9</sup> <οὐ> Stephanus

**D81** (67 A10, 68 A40) (Ps.-?) Hippol. Ref. 1.12 et 13.2–4

[12] Λεύκιππος [. . .] κόσμους δὲ <ᾧδε><sup>1</sup> γενέσθαι<sup>2</sup>  
λέγει· ὅταν εἰς μέγα κενὸν<sup>3</sup> ἐκ τοῦ περιέχοντος ἀθροι-  
σθῇ πολλὰ σώματα καὶ συρρυνῇ, προσκρούοντα  
ἀλλήλοις συμπλέκεσθαι τὰ ὁμοιοσχήμονα καὶ παρα-  
πλήσια τὰς μορφάς, καὶ περιπλεχθέντων<sup>4</sup> ἄστρα<sup>5</sup> γί-  
νεσθαι, αὔξειν δὲ καὶ φθίνειν διὰ τὴν<sup>6</sup> ἀνάγκην. τίς δ'  
ἂν εἴῃ ἡ ἀνάγκη, οὐ διώρισεν. [. . .] [13.2] λέγει [. . .]  
ἀπείρους δὲ εἶναι κόσμους καὶ μεγέθει διαφέροντας·  
ἐν τισι δὲ μὴ εἶναι ἥλιον μῆδὲ σελήνην, ἐν τισι δὲ

<sup>1</sup> <ᾧδε> Usener <sup>2</sup> γενέσθαι mss.: γίνεσθαι Roeper

<sup>3</sup> μετάκουνον mss., corr. Roeper <sup>4</sup> περιπλεχθέντων  
<αὐτῶν κατ' αὔξεσιν> Marcovich conl. DL 9.32

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

earth was formed, since the bodies that are borne inward toward the center remain together there. But in turn the envelope, which is like a membrane, itself grows because of the afflux of bodies coming from outside. And since it is carried along by the vortex, it acquires additionally whatever bodies it comes into contact with. Of these, some become interlaced together and form a stable ensemble (*sustêma*), at first liquid and muddy, but then, drying out and revolving with the vortex of the whole and afterward being set on fire, they produce the nature of the heavenly bodies. [. . .] [33] And just as the generations of a world are, so too are its growth, decline, and destruction, by virtue of a certain necessity; he does <not> say of what sort this is.

**D81** (67 A10, 68 A40) (Ps.-?) Hippolytus, *Refutation of All Heresies*

[12] Leucippus [. . .] says that worlds have come about <in the following way>: when many bodies coming from the periphery are gathered together and rush together into a great void, they collide against one another and those whose shapes are similar and which resemble one another in their forms become interlaced; and from their interlacing arise the heavenly bodies, and they increase and decline by virtue of necessity; but he has not defined what this necessity is. [. . .] [13.2] He [i.e. Democritus] says [. . .] that there exist unlimited worlds and that they are different in magnitude. In some of them there is neither a sun nor moon, in others they are larger than ours, and

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<sup>5</sup> εἰς ἕτερα mss., corr. Diels

<sup>6</sup> τῇν] τινα Roeper

## EARLY GREEK PHILOSOPHY VII

μείζω τῶν παρ' ἡμῖν καὶ ἔν τισι πλείω. [3] εἶναι δὲ τῶν κόσμων ἄνισα τὰ διαστήματα, καὶ τῇ μὲν πλείους, τῇ δὲ ἐλάττους, καὶ τοὺς μὲν αὖξασθαι, τοὺς δὲ ἀκμάζειν, τοὺς δὲ φθίνειν, καὶ τῇ μὲν γίνεσθαι, τῇ δ' <ἐκ>λείπειν.<sup>7</sup> φθείρεσθαι δὲ αὐτοὺς ὑπ' ἀλλήλων προσπίπτοντας. εἶναι δὲ ἐνίους κόσμους ἐρήμους ζώων καὶ φυτῶν καὶ παντὸς ὑγροῦ. [. . . = **D92**] [4] ἀκμάζειν δὲ κόσμον ἕως ἂν μηκέτι δύνηται ἔξωθέν τι προσλαμβάνειν.

<sup>7</sup> λείπειν mss., corr. Ritter

### *Some Parallels (D82–D85)*

**D82** (< A67, B167) Simpl. *In Phys.*, p. 327.24–25

δεῖνον ἀπὸ τοῦ παντὸς ἀποκριθῆναι<sup>1</sup> παντοίων εἰδέων.

<sup>1</sup> ἀποκριθῆναι E: ἀποκρίνεσθαι DF

### **D83**

**a** (< A82) Simpl. *In Cael.*, p. 310.15–17

[. . .] οἱ δὲ Δημοκρίτου κόσμοι εἰς ἑτέρους κόσμους μεταβάλλοντες ἐκ τῶν αὐτῶν ἀτόμων ὄντας οἱ αὐτοὶ τῷ εἶδει γίνονται, εἰ καὶ μὴ τῷ ἀριθμῷ.

**b** (B138) Hesych. A.3562

ἀμειψικοσμία: μετακόσμησις.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

in some there are more than one. [3] The distances between the worlds are unequal, and there are more here and fewer there; some grow, others reach their high point, others decline; and here they come to be and there they pass away. They are destroyed by one another by colliding against each other. Some worlds are devoid of animals and plants and of all humidity. [. . .] [4] The world remains at its high point until it is no longer capable of accepting something additional that comes from outside.

### *Some Parallels (D82–D85)*

**D82** (< A67, B167) Simplicius, *Commentary on Aristotle's Physics*

**A vortex of all kinds of forms became detached from the whole.**

### **D83**

**a** (< A82) Simplicius, *Commentary on Aristotle's On the Heavens*

The worlds of Democritus that are transformed into other worlds come from the same atoms and are identical in species, even if not individually.

**b** (B138) Hesychius, *Lexicon*

**Change of a world** (*ameipsikosmiê*): the transformation of a world.

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**D84** (A84) Aët. 2.4.9 (Stob.) [εἰ ἄφθαρτος ὁ κόσμος]

Δημόκριτος φθείρεσθαι τὸν κόσμον τοῦ μείζονος τὸν μικρότερον νικῶντος.

**D85** (< A81) Cic. *Acad.* 2.17.55

[. . .] et ais Democritum dicere innumerabiles esse mundos, et quidem sic quosdam inter sese non solum similes, sed undique perfecte et absolute ita<sup>1</sup> pares, ut inter eos nihil prorsus intersit et eo quidem innumerabiles,<sup>2</sup> itemque homines.

<sup>1</sup> ita *del. Christ*      <sup>2</sup> *post innumerabiles ind. Plasberg lacunam, e.g. <etiam soles lunas maria terras, singulas denique res>*

### *The Genesis of Our World (D86–D89)*

**D86** (67 A23) Aët. 2.7.2 (Stob.) [περὶ τάξεως τοῦ κόσμου]

Λεύκιππος καὶ Δημόκριτος χιτῶνα κύκλῳ καὶ ὑμένα περιτείνουσι τῷ κόσμῳ διὰ τῶν ἀγκιστροειδῶν ἀτόμων συμπεπλεγμένον.

**D87** (< A39) Ps.-Plut. *Strom.* 7 in Eus. *PE* 1.8.7

[. . . = **D77**] ἡλίου δὲ καὶ σελήνης γένεσιν φησιν· κατ' ἰδίαν φέρεσθαι ταῦτα μηδέπω τὸ παράπαν ἔχοντα θερμὴν φύσιν μηδὲ μὴν καθόλου λαμπρότητα,<sup>1</sup> τοῦναντίον δὲ ἐξωμοιωμένην τῇ περὶ τὴν γῆν φύσει γε-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D84** (A84) Aëtius

Democritus: a world is destroyed when a larger one gains victory over a smaller one.

### **D85** (< A81) Cicero, *Prior Academics*

[Lucullus:] [. . .] you [scil. Cicero] say that Democritus asserts that there exist innumerable worlds, and indeed some of them not only so similar to one another, but so perfectly and absolutely equal in all regards, that there is no difference whatsoever between them, and that for that very reason [scil. they are] innumerable, and the same for people.<sup>1</sup>

<sup>1</sup> The end of this passage is uncertain. See also **R70b**.

### *The Genesis of Our World (D86–D89)*

### **D86** (67 A23) Aëtius

Leucippus and Democritus surround the world circularly with a mantle (*khitôn*) and a membrane, resulting from interlacing due to hook-shaped atoms.

### **D87** (< A39) Ps.-Plutarch, *Stromata*

[. . .] He [i.e. Democritus] speaks of the generation of the sun and moon. They moved along their own trajectory, not yet possessing a nature that was at all warm nor brilliance in general, but on the contrary their nature was entirely similar to that of the terrestrial region. For each

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<sup>1</sup> λαμπροτάτην mss., corr. Diels

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γονέναι γὰρ ἐκάτερον τούτων πρότερον ἔτι κατ' ἰδίαν ὑποβολήν τινα κόσμον, ὕστερον δὲ μεγεθοποιουμένου τοῦ περὶ τὸν ἥλιον κύκλου ἐναποληφθῆναι ἐν αὐτῷ τὸ πῦρ.

**D88** (A95) Aët. 3.13.4 (Ps.-Plut.) [περὶ κινήσεως γῆς]

κατ' ἀρχὰς μὲν πλάζεσθαι τὴν γῆν φησιν ὁ Δημόκριτος διὰ τε μικρότητα καὶ κουφότητα, πυκνωθεῖσαν δὲ τῷ χρόνῳ καὶ βαρυνθεῖσαν καταστήναι.

**D89** (67 A27, 68 A96) Aët. 3.12.1–2 (Ps.-Plut.) [περὶ ἐγκλίσεως γῆς]

[1] Λεύκιππος παρεκπεσεῖν τὴν γῆν εἰς τὰ μεσημβρινὰ μέρη διὰ τὴν ἐν τοῖς μεσημβρινοῖς ἀραιότητα, ἅτε δὴ πεπηγότων τῶν βορείων διὰ τὸ κατεψύχθαι τοῖς κρυμοῖς, τῶν δὲ ἀντιθέτων πεπυρωμένων.

[2] Δημόκριτος διὰ τὸ ἀσθενέστερον εἶναι τὸ μεσημβρινὸν τοῦ περιέχοντος αὐξομένην τὴν γῆν κατὰ τοῦτο ἐγκλιθῆναι· τὰ γὰρ βόρεια ἄκρατα, τὰ δὲ μεσημβρινὰ κέκραται· ὅθεν κατὰ τοῦτο βεβάρηται, ὅπου περισσὴ ἐστὶ τοῖς καρποῖς καὶ τῇ αὔξει.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

of these two [scil. heavenly bodies] came into being even earlier, because of a certain characteristic depositing (*hypobolê*) deriving from the world, and it was later that, as the circle of the sun became larger, fire came to be contained within it.

### **D88** (A95) Aëtius

Democritus says that at the beginning the earth wandered because of its smallness and lightness, but with time, as it became denser and heavier, it came to rest.

### **D89** (67 A27, 68 A96) Aëtius

[1] Leucippus: the earth subsided toward its southern parts because of the rarefaction in these southern regions, since the northern ones had been solidified by being frozen by the frosts, while the opposing ones were burned.

[2] Democritus: because the southern part of the periphery was weaker, the earth inclined in this direction as it grew. For the northern parts are not tempered, while the southern ones are tempered. And that is why it is weighted in this direction, where it is overabundant because of fruits and its growth.



## EARLY GREEK PHILOSOPHY VII

### *Cosmology (D90–D123)* *Nature and Position of the* *Heavenly Bodies (D90–D95)*

**D90** (67 B1) Ach. Tat. *Introd. Arat.* 1.13

τοὺς ἀστέρας δὲ ζῶα εἶναι οὔτε Ἀναξαγόρα οὔτε Δη-  
μοκρίτῳ ἐν<sup>1</sup> τῷ Μεγάλῳ <δια>κόσμῳ<sup>2</sup> δοκεῖ [. . .].

<sup>1</sup> ἐν Maass: σὺν V: om. M  
V: om. M

<sup>2</sup> <δια>κόσμῳ Maass: κόσμῳ

**D91** (A85) Aët. 2.13.4 (Stob.) [περὶ οὐσίας ἀστρων]

Δημόκριτος πέτρους.

**D92** (< 67 A10, 68 A40) (Ps.-?) Hippol. *Ref.* 1.13.4

[. . . cf. **D81**] τοῦ δὲ παρ' ἡμῶν κόσμου πρότερον τὴν  
γῆν τῶν ἀστρων γενέσθαι. εἶναι δὲ τὴν μὲν σελήνην  
κάτω, ἔπειτα τὸν ἥλιον, εἶτα τοὺς ἀπλανεῖς ἀστέρας·  
τοὺς δὲ πλανήτας οὐδ' αὐτοὺς ἔχειν ἴσον ὕψος [. . .].

**D93** (< 67 A1) Diog. Laert. 9.30

[. . . cf. **D80a**] φέρεσθαι δὲ τὸν ἥλιον ἐν μέζονι κύκλῳ  
περὶ<sup>1</sup> τὴν σελήνην· τὴν γῆν ὀχεῖσθαι περὶ τὸ μέσον  
δινουμένην· σχῆμά τε αὐτῆς τυμπανῶδες εἶναι [. . .].

<sup>1</sup> περὶ BPFh: παρὰ F: ἢ Lapini

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Cosmology (D90–D123)* *Nature and Position of the* *Heavenly Bodies (D90–D95)*

**D90** (67 B1) Achilles Tatius, *Introduction to Aratus' Phaenomena*

That the heavenly bodies are living beings, neither Anaxagoras [**ANAXAG. D48**] thinks nor does Democritus in his *Great World System* [. . .].

**D91** (A85) Aëtius

Democritus: [scil. the heavenly bodies are] stones.

**D92** (< 67 A10, 68 A40) (Ps.-?) Hippolytus, *Refutation of All Heresies*

[. . .] In our world, the earth came into being before the heavenly bodies. The moon is lowest, then comes the sun, and then the fixed stars. The planets are not at the same height either [. . .].

**D93** (< 67 A1) Diogenes Laertius [Doxography of Leucippus]

[. . .] The sun moves in a larger circle around the moon. The earth is maintained in the central region because it is whirled around by the vortex. Its shape is like that of a drum [. . .].

## EARLY GREEK PHILOSOPHY VII

**D94** (< 67 A1) Diog. Laert. 9.33

[. . . = **D80b**] εἶναι δὲ τὸν τοῦ ἡλίου κύκλον ἐξώτατον, τὸν δὲ τῆς σελήνης προσγειότατον, τῶν ἄλλων μεταξὺ τούτων ὄντων.<sup>1</sup> καὶ πάντα μὲν τὰ ἄστρα πυροῦσθαι διὰ τὸ τάχος τῆς φορᾶς, τὸν δὲ ἥλιον καὶ ὑπὸ τῶν ἀστέρων ἐκπυροῦσθαι· τὴν δὲ σελήνην τοῦ πυρὸς ὀλίγον μεταλαμβάνειν.

<sup>1</sup> ὄντων Ph: om. BPF

**D95** (A86) Aët. 2.15.3 (Stob., Ps.-Plut.) [περὶ τάξεως ἀστέρων]

Δημόκριτος πρῶτα<sup>1</sup> μὲν τὰ ἀπλανῆ, μετὰ δὲ ταῦτα τοὺς πλανήτας.<sup>2</sup>

<sup>1</sup> ante πρῶτα hab. mss. καὶ, del. Diels <sup>2</sup> post πλανήτας hab. Plut. ἐφ' (ἐν E. A. Schmidt) οἷς ἥλιον φωσφόρον σελήνην.

### *The Cosmic Year (D96)*

**D96** (B12) Cens. *Die nat.* 18.8

[. . .] et Democriti ex annis LXXXII<sup>1</sup> cum intercalariis perinde viginti octo.

<sup>1</sup> LXXII Tannery

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D94** (< 67 A1) Diogenes Laertius [Doxography of Leucippus]

[. . .] The circle of the sun is the farthest out, that of the moon is the closest to earth, the others are located between these. All of the heavenly bodies are set **alight** (*purousthai*) by the rapidity of their motion, while the sun is **made incandescent** (*ekpurousthai*) by the heavenly bodies too. The moon receives only a small share of fire.

**D95** (A86) Aëtius

Democritus: the fixed stars come first, and after these the planets.<sup>1</sup>

<sup>1</sup> The manuscripts of Ps.-Plutarch have, after “planets,” a difficult phrase: “after which [scil. come] the sun, the morning star, the moon.” But Venus is a planet, and the sun and moon are also sometimes considered to be planets by the Greeks. Perhaps one expression is a gloss on the other one, **or there may be a textual corruption**.

### *The Cosmic Year (D96)*

**D96** (B12) Censorinus, *The Birthday*

[. . .] and Democritus’ [scil. world-year consists] of eighty-two years with twenty-eight intercalary months.

## EARLY GREEK PHILOSOPHY VII

### *Milky Way (D97–D98)*

**D97** (A91) Arist. *Meteor.* 1.8 345a25–31.

οἱ δὲ περὶ [. . . cf. **ANAXAG. D49**] Δημόκριτον φῶς εἶναι τὸ γάλα λέγουσιν ἄστρον τινῶν· τὸν γὰρ ἥλιον ὑπὸ τὴν γῆν φερόμενον οὐχ ὁρᾶν ἔνια τῶν ἄστρον. ὅσα μὲν οὖν περιορᾶται ὑπ' αὐτοῦ, τούτων μὲν οὐ φαίνεσθαι τὸ φῶς (κωλύεσθαι γὰρ ὑπὸ τῶν τοῦ ἡλίου ἀκτίνων)· ὅσοις δ' ἀντιφράττει ἡ γῆ ὥστε μὴ ὁρᾶσθαι ὑπὸ τοῦ ἡλίου, τὸ τούτων οἰκείον φῶς εἶναί φασι τὸ γάλα.

**D98** (A91)

**a** Aët. 3.1.6 (Ps.-Plut.) [περὶ τοῦ γαλαξίου κύκλου]

Δημόκριτος πολλῶν καὶ μικρῶν καὶ συνεχῶν ἀστέρων συμφωτιζομένων ἀλλήλοις συναυγασμὸν διὰ τὴν πύκνωσιν.

**b** Ach. Tat. *Introd. Arat.* 24

ἄλλοι δὲ ἐκ μικρῶν πάνυ καὶ πεπυκνωμένων καὶ ἡμῖν δοκούντων ἠνώσθαι διὰ τὸ διάστημα τὸ ἀπὸ τοῦ οὐρανοῦ ἐπὶ τὴν γῆν ἀστέρων αὐτὸν εἶναί φασιν, ὥς εἴ τις ἀλάσι λεπτοῖς καὶ πολλοῖς καταπάσειέ τι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Milky Way (D97–D98)*

#### **D97** (A91) Aristotle, *Meteorology*

The followers of [. . .] Democritus say that the Milky Way is the light of certain heavenly bodies; for the sun does not see some of the heavenly bodies when it moves below the earth. The light of those that are seen by it does not manifest itself (for it is prevented by the sun's rays); but those in front of which the earth interposes itself in such a way that they are not seen by the sun, the light belonging to these is, they say, the Milky Way.

#### **D98** (A91)

##### **a** Aëtius

Democritus: [scil. the Milky Way is] the combined shining of many small and contiguous heavenly bodies that illuminate each other by reason of their density.

##### **b** Achilles Tatius, *Introduction to Aratus' Phaenomena*

Others say that it [i.e. the Milky Way] is made of extremely small and condensed heavenly bodies that seem to us to be unified by reason of the distance from the heavens to the earth, as if someone made a sprinkling of many fine salt crystals.

## EARLY GREEK PHILOSOPHY VII

### *Comets (D99–D100)*

**D99** (59 A81) Arist. *Meteor.* 1.6 342b27–29

[. . . cf. **ANAXAG. D50**] καὶ Δημόκριτός φασιν εἶναι τοὺς κομήτας σύμφασιν τῶν πλανήτων ἀστέρων, ὅταν διὰ τὸ πλησίον ἐλθεῖν δόξωσι θιγγάνειν ἀλλήλων.

**D100** (< A92) Sen. *Quaest. nat.* 7.3.2

Democritus [. . . = **P29**] suspicari se ait plures stellas esse, quae currant, sed nec numerum illarum posuit nec nomina, nondum comprehensis quinque siderum cursibus.

### *Sun and Moon (D101–D107)*

**D101** (A87) Aët. 2.20.7 (Theod.) [περὶ οὐσίας ἡλίου]

[. . .] Δημόκριτος [. . .] μύδρον ἢ πέτρον διάπυρον.

**D102** (A87) Cic. *Fin.* 1.6.20

sol Democrito magnus videtur [. . .].

**D103** (< 67 A1) Diog. Laert. 9.33

[. . .] ἐκλείπειν δὲ ἥλιον καὶ σελήνην <. . .><sup>1</sup> [. . .]. καὶ

<sup>1</sup> lac. indic. Orelli

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Comets (D99–D100)*

**D99** (59 A81) Aristotle, *Meteorology*

[. . .] and Democritus say that comets are the conjunction of planets, when by coming close together they seem to touch one another.

**D100** (< A92) Seneca, *Natural Questions*

Democritus [. . .] says that he suspects that there are many shooting stars, but he has attributed to them neither a number nor a name—the revolutions of the five heavenly bodies [i.e. the planets] had not yet been understood.<sup>1</sup>

<sup>1</sup> For Democritus (and Anaxagoras), the comets depend on the conjunction of planets (cf. **D99**).

### *Sun and Moon (D101–D107)*

**D101** (A87) Aëtius

[. . .] Democritus [. . .]: [scil. the sun is] a blazing mass or stone.

**D102** (A87) Cicero, *On Ends*

For Democritus, the sun seems large [. . .].

**D103** (< 67 A1) Diogenes Laertius

The sun and the moon are eclipsed < . . . ><sup>1</sup> [. . .]. Solar

<sup>1</sup> At this point the text continues with a phrase about an entirely different subject: “because the earth is inclined toward the south; the regions of the north are always snowing, extremely cold, and frozen” [cf. **D89**[2]]. Part of the sentence must have been lost.



## EARLY GREEK PHILOSOPHY VII

τὸν μὲν ἥλιον ἐκλείπειν σπανίως, τὴν δὲ σελήνην συν-  
νεχῶς, διὰ τὸ ἀνίσους εἶναι τοὺς κύκλους αὐτῶν.

**D104** (A89) Aët. 2.23.7 (Stob.) [περὶ τροπῶν ἡλίου]

Δημόκριτος [. . .] τροπὴν δὲ γίνεσθαι<sup>1</sup> ἐκ τῆς περιφε-  
ρούσης αὐτὸν δινήσεως.

<sup>1</sup> τροπὴν δὲ γίνεσθαι ut additamentum secl. Diels

**D105** (< A88) Lucr. 5.620–24

non, inquam, simplex his rebus reddita causast.  
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.

**D106** (A89a) Plut. *Fac. orb. lun.* 16 929C

[. . .] ἀλλὰ κατὰ στάθμην, φησὶ Δημόκριτος, ἰσταμένη  
τοῦ φωτίζοντος ὑπολαμβάνει καὶ δέχεται τὸν ἥλιον,  
ὥστ' αὐτὴν τε φαίνεσθαι καὶ διαφαίνειν ἐκείνον εἰκὸς  
ᾗν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

eclipses happen rarely, lunar ones continually, because of the inequality of their circles.

### **D104** (A89) Aëtius

Democritus: [. . .] the return (*tropê*) [scil. of the sun] is due to the vortex that carries it around.

### **D105** (< A88) Lucretius, *On the Nature of Things*

No simple cause, I say, has been assigned to these things [i.e. the turnings of the sun].  
For it seems that first of all those things could happen  
As the holy opinion of that great man Democritus posited:  
That the closer that each of the heavenly bodies is to the earth,  
The less it can be borne along by the vortex of the heavens.<sup>1</sup>

<sup>1</sup> What follows (v. 625–36) provides a detailed explanation in terms that could either go back to Democritus or reflect an Epicurean elaboration.

### **D106** (A89a) Plutarch, *On The Face in the Moon*

[. . .] but when it [scil. the moon] stands aligned with what illuminates it, says Democritus, it takes up and receives the [scil. light of the] sun. So that it is plausible that it itself [i.e. the moon] shines and that it [i.e. the sun] shines through it.

## EARLY GREEK PHILOSOPHY VII

**D107** (A90) Aët. 2.30.3 (Stob.) [περὶ ἐμφάσεως αὐτῆς καὶ διὰ τί γεώδης φαίνεται]

Δημόκριτος ἀποσκιάσματα<sup>1</sup> τῶν ὑψηλῶν ἐν αὐτῇ μερῶν· ἄγκη<sup>2</sup> γὰρ αὐτὴν ἔχειν καὶ νάπας.

<sup>1</sup> ἀποσκιάσμά τι Canter

<sup>2</sup> ἀνάγκη mss., corr. Canter

*Democritean Calendars and  
Ephemerides (D108–D109)*

*Democritus, Author of Ephemerides (D108)*

**D108** (< B14.6) Clod. Tusc. *Calend.* in Io. Lyd. *Ost.*, pp. 157.18–158.1

[. . .] καὶ ταῦτα μὲν ὁ Κλώδιος [. . .]· καὶ οὐκ αὐτὸς μόνος, ἀλλὰ μὴν καὶ Εὐδοξός τε ὁ πολὺς, Δημόκριτος πρῶτος αὐτῶν [. . .].

*An Example (D109)*

**D109** (B14.3) Gemin. *Isag.*, p. 218.14–17

ἐν δὲ τῇ δ' ἡμέρᾳ Δημοκρίτῳ Πλειάδες δύνουσιν ἅμα ἡοί· ἄνεμοι χειμέριοι, ὥς τὰ πολλὰ καὶ ψύχη ἥδη καὶ πάχνη, ἐπιπνεῖν φιλεῖ· φυλλορροεῖν ἄρχεται τὰ δένδρα μάλιστα.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D107** (A90) Aëtius

Democritus: [scil. the reason why the moon seems earth-like is] the shadows of the high places in it; for it has valleys and dales.

*Democritean Calendars and  
Ephemerides (D108–D109)*<sup>1</sup>  
*Democritus, Author of Ephemerides (D108)*

<sup>1</sup> Ephemerides associate meteorological and celestial phenomena with the days of the year. DK edit as B14 eight testimonia (taken from Vitruvius, Eudoxus, Geminus, Pliny the Elder, the scholia to Apollonius Rhodius, Clodius Tuscus, Ptolemy, and John Lydus) including many examples, of which we present only one, as **D109**.

**D108** (< B14.6) Clodius Tuscus, *Calendar*, in John Lydus, *On Prodigies*

[. . .] and this is what Clodius [scil. says in his collection of ephemerides] [. . .]; and not only he, but so too the celebrated Eudoxus, and Democritus the first of them all [. . .].

*An Example (D109)*

**D109** (B14.3) Geminus, *Introduction to the Phenomena*

[Scorpion] On the fourth day, for Democritus, the Pleiades set at dawn; stormy winds tend to blow, and for the most part [scil. there is] already cold weather and frost; trees start to lose their leaves in great quantity.

## EARLY GREEK PHILOSOPHY VII

### *The Shape and Position of the Earth (D110–D112)*

**D110** (13 A20) Arist. *Cael.* 2.13 294b13–23

[. . . cf. **ANAXIMEN. D19; ANAXAG. D58**] καὶ Δημόκριτος τὸ πλάτος αἴτιον εἶναί φασι τοῦ μένειν αὐτήν. οὐ γὰρ τέμνειν ἀλλ' ἐπιπωμάζειν τὸν ἀέρα τὸν κάτωθεν, ὅπερ φαίνεται τὰ πλάτος ἔχοντα τῶν σωμάτων ποιεῖν. ταῦτα γὰρ καὶ πρὸς τοὺς ἀνέμους ἔχει δυσκινήτως διὰ τὴν ἀντέρεισιν. ταὐτὸ δὲ τοῦτο ποιεῖν τῷ πλάτει φασὶ τὴν γῆν πρὸς τὸν ὑποκείμενον ἀέρα (τὸν δ' οὐκ ἔχοντα<sup>1</sup> μεταστῆναι τόπον ἱκανὸν<sup>2</sup> ἀθρόως<sup>3</sup> κάτωθεν ἡρεμεῖν), ὥσπερ τὸ ἐν ταῖς κλειψύδραις ὕδωρ. ὅτι δὲ δύναται πολὺν βάρος φέρειν ἀπολαμβανόμενος καὶ μένων ὁ αἶρ, τεκμήρια πολλὰ λέγουσιν.

<sup>1</sup> ἔχοντα <τοῦ> Diels      <sup>2</sup> an τόπον ἱκανὸν μεταστῆναι?

<sup>3</sup> τῷ post ἀθρόως utrum delendum an ante ἀθρόως ponendum  
dub. Moraux

**D111** (67 A26, 68 A94) Aët. 3.10.4–5 (Ps.-Plut.) [περὶ σχήματος γῆς]

[4] Λεύκιππος τυμπανοειδῆ.

[5] Δημόκριτος δισκοειδῆ μὲν τῷ πλάτει, κοίλην δὲ τῷ μέσῳ.<sup>1</sup>

<sup>1</sup> τῷ μέσῳ Eus. *PE* 15.56.5: τὸ μέσον Plut.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *The Shape and Position of the Earth (D110–D112)*

#### **D110** (13 A20) Aristotle, *On the Heavens*

[. . .] and Democritus say that its [i.e. the earth's] flatness is the cause for its stationary position. For it does not cut the air beneath it but covers it like a lid, which is what one sees bodies possessing flatness to do; for winds have difficulty moving these bodies too, because of their resistance. And they say that it is in exactly the same way that the earth acts with regard to the air underlying it, because of its flatness, and that since it [i.e. the air] does not have sufficient room to move, it remains motionless below [scil. the earth] in a dense mass, just like the water in clepsydras. And for the fact that air that is enclosed and stationary can bear a great weight, they provide many proofs.

#### **D111** (67 A26, 68 A94) Aëtius

[4] Leucippus: [scil. the earth is] drum-shaped.

[5] Democritus: [scil. it is] disk-shaped in its breadth, and sunken in the middle.

## EARLY GREEK PHILOSOPHY VII

**D112** (< B15) Agathem. *Geogr.* 1.1.2 (GGM 2.471.12–14)

πρῶτος δὲ Δημόκριτος [. . . = **P30**] συνείδεν ὅτι προμήκης ἐστὶν ἡ γῆ, ἡμιόλιον τὸ μῆκος τοῦ πλάτους ἔχουσα.

### *Geography of the Earth (D113–D115)*

**D113** (< B15) Agathem. *Geogr.* 1.1.2 (GGM 2.471.7–9)

ἐξῆς [. . .] Δημόκριτος καὶ Εὐδοξος καὶ ἄλλοι τινὲς γῆς περιόδους καὶ περίπλους ἐπραγματεύσαντο.

**D114** (187.1.1 Leszl) Eustath. *In Dion. Perieg.* (GGM 2.208.14–17)

οὗ δὲ τολμήματος κατάρξαι μὲν ιστόρηται Ἀναξίμανδρος [. . .], Ἑκαταῖος δὲ μετ' αὐτὸν τῇ αὐτῇ τόλμῃ ἐπιβαλεῖν, μετὰ δὲ Δημόκριτος, καὶ τέταρτος Εὐδοξος.

**D115** (< A12) Strab. 15, p. 703

ἐν δὲ τῇ ὀρεινῇ Σίλαν ποταμὸν εἶναι, ᾧ μηδὲν ἐπιπλεῖ. Δημόκριτον μὲν οὖν ἀπιστεῖν ἅτε πολλὴν τῆς Ἀσίας πεπλανημένον [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D112** (< B15) Agathemerus, *A Sketch of Geography in Epitome*

Democritus [. . .] was the first to understand that the earth is oblong, with a length one and a half times its breadth.

See also **D89**

### *Geography of the Earth (D113–D115)*

**D113** (< B15) Agathemerus, *A Sketch of Geography in Epitome*

Afterward [scil. after Damastes of Sigeum] [. . .] Democritus, Eudoxus, and some others elaborated accounts of travels around the earth and sea.

**D114** (≠ DK) Eustathius, *Commentary on Dionysius Periegetes*

Of this bold undertaking [i.e. geography], it is reported that Anaximander [. . .] began it; and after him, Hecataeus dedicated himself to the same bold undertaking; after him, Democritus; and fourth, Eudoxus.

**D115** (A12) Strabo, *Geography*

In the mountainous region [scil. of India] there is a river, the Sila, on which nothing floats. Democritus, who had traveled through much of Asia, disbelieves this [. . .].



## EARLY GREEK PHILOSOPHY VII

### *Atmospheric Phenomena (D116–D118)*

**D116** (B152) Plut. *Quaest. conv.* 4.2.4 665F

“διόβλητον μὲν οὐδέν,” ὥς φησι Δημόκριτος “<. . .><sup>1</sup>  
παρ’<sup>2</sup> αἰθρίης στέγειν <εὐαγές><sup>3</sup> σέλας.”

<sup>1</sup> lac. V-VI lit. ms., <οἶον μὴ τὸ> Bernardakis, <γῆινον οἶον  
τὸ> Pohlenz: an ὥστε? <sup>2</sup> παρ’ ed. Ald.: περ ms.

<sup>3</sup> <εὐαγές> Diels: lac. IV-V litt. ms.

**D117** (67 A25, 68 A93) Aët. 3.3.10–11 (Stob.) [περὶ  
βροντῶν, ἀστραπῶν, κεραυνῶν, πρηστήρων τε καὶ  
τυφώνων]

[10] Λεύκιππος πυρὸς ἐναποληφθέντος<sup>1</sup> νέφεσι παχυ-  
τάτοις ἔκπτωσιν ἰσχυρὰν βροντὴν ἀποτελεῖν ἀποφαί-  
νεται.

[11] Δημόκριτος βροντὴν μὲν ἐκ συγκρίματος ἀνω-  
μάλου τὸ περιειληφὸς αὐτὸ νέφος πρὸς τὴν κάτω φο-  
ρὰν ἐκβιαζομένον· ἀστραπὴν δὲ σύγκρασιν<sup>2</sup> νεφῶν,  
ὑφ’ ἧς τὰ γεννητικὰ τοῦ πυρὸς διὰ τῶν πολυκένων  
ἀραιωμάτων ταῖς παρατρίψεσιν εἰς τὸ αὐτὸ συναλι-  
ζόμενα<sup>3</sup> διηθείται· κεραυνὸν δέ, ὅταν ἐκ καθαρωτέρων  
καὶ λεπτοτέρων<sup>4</sup> ὁμαλωτέρων τε καὶ πυκναρμόνων,  
καθάπερ αὐτὸς γράφει, γεννητικῶν τοῦ πυρὸς ἢ φορὰ  
βιάσσηται·<sup>5</sup> πρηστήρα δέ, ὅταν πολυκενώτερα συγ-  
κρίματα πυρὸς ἐν πολυκένοις κατασχεθέντα χώραις  
καὶ περιοχαῖς ὑμένων ιδίων σωματοποιούμενα τῷ  
πολυμυγεί τὴν ἐπὶ τὸ βάρος<sup>6</sup> ὁρμὴν λάβῃ.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Atmospheric Phenomena (D116–D118)*

**D116** (B152) Plutarch, *Table Talk*

**“Nothing sent by Zeus,”** as Democritus says, “<such as (p)> **to protect the** <pure> **gleam coming from the aether.**”

**D117** (67 A25, 68 A93) Aëtius

[10] Leucippus asserts that the powerful expulsion of fire enclosed in very dense clouds causes thunder.

[11] Democritus: thunder [scil. comes] from a nonhomogeneous aggregate that violently forces the cloud surrounding it to move downward. Lightning is the fusion of clouds, by the effect of which the seeds of fire, converging toward the same place through the interstices that contain much void because of friction, are filtered. The thunderbolt [scil. occurs] whenever the motion violently forces a passage because of seeds of fire that are purer and thinner, more homogeneous and, as he himself writes, **“dense-fitted.”** The lightning storm (*prêstêr*) [scil. occurs] whenever aggregates of fire containing more void, confined in places with abundant void and acquiring the consistency of bodies thanks to their own envelopes of membranes, assume an impulse following their weight as an effect of the mass of the mixture.

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<sup>1</sup> ἐναπολειφθέντος mss., corr. Canter <sup>2</sup> σύγκρουσιν  
 Diels: σύγκρισιν Schneider <sup>3</sup> συνανλιζόμενα mss., corr.  
 Meineke <sup>5</sup> βιώσσηται mss.,  
 corr. Gaisford: βιάζεται Diels <sup>6</sup> βάρος mss.: βάθος Diels

## EARLY GREEK PHILOSOPHY VII

### D118 (A93a) Sen. *Quaest. nat.* 5.2.1

Democritus ait, cum in angusto inani multa sint corpuscula, quae ille atomos vocat, sequi ventum; at contra quietum et placidum aëris statum esse cum in multo inani pauca sint corpora. nam quemadmodum in foro aut vico, quamdiu paucitas est, sine tumultu ambulatur, ubi turba in angustum concurrit aliorum in alios incidentium rixa fit, sic in hoc quo circumdati sumus spatio, cum exiguum locum multa corpora impleverint, necesse est alia aliis incidant et impellent ac repellantur, implicenturque et comprimantur; ex quibus nascitur ventus, cum illa quae colluctabantur incubuere, et diu fluctuata ac dubia inclinavere se. at ubi in magna laxitate corpora pauca versantur, nec aretari possunt nec impelli.

### *Earthquakes (D119)*

### D119

#### a (A97) Arist. *Meteor.* 2.7 365b1–6

Δημόκριτος δέ φησι πλήρη τὴν γῆν ὕδατος οὔσαν, καὶ πολὺ δεχομένην ἕτερον ὄμβριον ὕδωρ, ὑπὸ τούτου κινεῖσθαι· πλείονός τε γὰρ γιγνομένου διὰ τὸ μὴ δύνασθαι δέχεσθαι τὰς κοιλίας ἀποβιαζόμενον ποιεῖν τὸν σεισμόν, καὶ ξηραυνομένην<sup>1</sup> ἔλκουσαν<sup>2</sup> εἰς τοὺς

<sup>1</sup> <καὶ> post ξηραυνομένην F<sup>pc</sup> HN: ξηραυνομένης Thurot

<sup>2</sup> ἐλκούσης Thurot

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D118** (A93a) Seneca, *Natural Questions*

Democritus says that when there are many tiny bodies (which he calls atoms) in a narrow void, a wind follows; but that on the other hand there is a quiet and peaceful condition of the air when there are few bodies in a large void. For just as in a public square or street, as long as there are few people, one can walk about without trouble, but where a crowd comes together in a narrow place a scuffle is caused when people collide with one another: so too in the space that surrounds us, when many bodies have filled up a small space, of necessity they collide with each other, strike, and are repelled, they become intertwined and pressed together; out of these a wind comes about, when those that were struggling with one another press down and change direction after they have fluctuated for a long time and were uncertain. But where few bodies are situated in a large area, they can be neither butted nor struck.

### *Earthquakes (D119)*

### **D119**

#### **a** (A97) Aristotle, *Meteorology*

Democritus says that when the earth is full of water and receives a great quantity of additional water from rain, it is thereby set in motion: both because its cavities cannot receive any more [scil. water], since there is too much of it, so that it is violently forced back and causes an earthquake, and because when it [scil. the earth] dries out and attracts it [scil. the water] out of fuller places to empty

## EARLY GREEK PHILOSOPHY VII

κενοὺς τόπους ἐκ τῶν πληρεστέρων τὸ μεταβάλλον  
ἐμπίπτον κινεῖν.

**b** (< A98) Sen. *Quaest. nat.* 6.20.1, 4

[1] Democritus plura putat. ait enim motum aliquando spiritu fieri aliquando aqua aliquando utroque, et id hoc modo prosequitur: "aliqua pars terrae concava est; in hanc aquae magna vis confluit. ex hac est aliquid tenue et ceteris liquidius. hoc cum superveniente gravitate<sup>1</sup> reiectum<sup>2</sup> est, illiditur terris et illas movet, nec enim fluctuari potest sine motu eius, in quod impingitur. [2] [. . .] ubi in unum locum congesta est et capere se desiit, aliquo incumbit et primo viam pondere aperit deinde impetu. nec enim exire nisi per devexum potest diu inclusa nec in directum cadere moderate aut sine concussione eorum, per quae vel in quae cadit. [3] si vero, cum iam rapi coepit, aliquo loco substitit et illa vis fluminis in se revoluta est, in continentem terram repellitur et illam, qua parte maxime pendet, exagitat. praeterea aliquando madefacta tellus liquore penitus accepto altius sedit et fundus ipse vitatur: tunc ea pars premitur, in quam maxime aquarum vergentium pondus inclinat. [4] spiritus vero nonnumquam impellit undas et si vehementius institit, eam scilicet partem terrae movet, in quam coactas aquas intulit; non-

<sup>1</sup> <densioris aquae gravitate> *Hine*

<sup>2</sup> reiectum *Z<sup>c</sup> θυ*: -tus *p*: rectum *δ*: deiectum *Gercke*

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

ones, it [scil. the water] pours down when it moves and causes the earth to shake.

**b** (< A98) Seneca, *Natural Questions*

[1] Democritus thinks that there are several [scil. causes of earthquakes]. For he says that sometimes the motion is caused by wind, sometimes by water, sometimes by both, and he develops this point as follows: “A certain portion of the earth is hollow; into this a great abundance of water flows. Some of this water is rarefied and more liquid than the rest. When this part is repelled by a heavy mass that falls upon it, it strikes the earth and shakes it; for it cannot be agitated without causing what it collides with to shake.

[2] [. . .] When it has accumulated in one place and can no longer be contained, it presses down somewhere and opens up a passageway, first by means of its weight, then by its impetus. For, having been enclosed for a long time, it cannot escape except in a downward direction, and it cannot fall vertically in a moderate manner or without shaking those things through which or against which it falls. [3] If then, when it has already begun to move rapidly, it stops somewhere and its abundant stream turns back upon itself, it is pushed back against the earth that surrounds it and shakes that part upon which it weighs most heavily. Moreover, sometimes the earth, moistened by liquid that has penetrated to its depths, subsides more deeply and its very foundation is damaged: when that happens, the part upon which the weight of the falling waters presses most heavily crashes down. [4] But as for wind, sometimes it strikes the waves, and if it propels them violently, it evidently shakes that part of the earth toward

## EARLY GREEK PHILOSOPHY VII

numquam in terrena itinera coniectus et exitum quaerens movet omnia; et<sup>3</sup> terra autem penetrabilis ventis est, et<sup>4</sup> spiritus subtilior est quam ut possit excludi, vehementior, quam ut sustineri concitatus ac rapidus.”

<sup>3</sup> et ZVθP: e U: <nam> et Gercke: ut Diels

<sup>4</sup> et] ita Diels

### *Two Different Explanations for the Floods of the Nile (D120–D121)*

#### **D120**

**a** (A99) Aët. 4.1.4 (Ps.-Plut.) [περὶ Νείλου ἀναβάσεως]

Δημόκριτος τῆς χιόνος τῆς ἐν τοῖς πρὸς ἄρκτον μέρεσιν ὑπὸ θερινᾶς τροπᾶς ἀναλυομένης τε καὶ διαχεομένης νέφη μὲν ἐκ τῶν ἀτμῶν πιλοῦσθαι· τούτων δ' ἀνελαυνομένων<sup>1</sup> πρὸς μεσημβρίαν καὶ τὴν Αἴγυπτον ὑπὸ τῶν ἐτησίων ἀνέμων, ἀποτελεῖσθαι ῥαγδαίους ὄμβρους, ὑφ' ὧν ἀναπίμπλασθαι τὰς τε λίμνας καὶ τὸν Νεῖλον ποταμόν.

<sup>1</sup> ἀνελαυνομένων Mm: ἀπε- Π

**b** (> A99) Diod. Sic. 1.39.1–4

[1] Δημόκριτος δ' ὁ Ἀβδηρίτης φησὶν οὐ τὸν περὶ τὴν μεσημβρίαν τόπον χιονίζεσθαι, καθάπερ εἴρηκεν Εὐριπίδης καὶ Ἀναξαγόρας, ἀλλὰ τὸν περὶ τὰς ἄρκτους, καὶ τοῦτο ἐμφανὲς εἶναι πᾶσι. [2] τὸ δὲ πλῆθος τῆς

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which it impels the accumulated waters; at other times, collected in pathways in the earth and seeking an exit, it shakes everything. Moreover, the earth can be penetrated by winds, and the wind is also too rarefied to be kept out and too violent to be resisted when it is agitated and rapid.”

### *Two Different Explanations for the Floods of the Nile (D120–D121)*

#### **D120**

**a** (A99) Aëtius

Democritus: when the snow in the northern regions melts at the summer solstice and spreads out, clouds form by condensation from the evaporations. These are driven toward the south and toward Egypt by the Etesian winds and cause torrential rains, which fill the marshes and the river Nile.

**b** (> A99) Diodorus Siculus

[1] Democritus of Abdera says that it does not snow around the southern region, as Euripides and Anaxagoras have said [cf. **DRAM. T76; ANAXAG. D66**], but around the northern one, and that this is clear to everybody. [2] Most of the snow that gets heaped up in the northern re-



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σωρευομένης χιόνος ἐν τοῖς βορείοις μέρεσι περὶ μὲν τὰς τροπὰς μένειν πεπηγός, ἐν δὲ τῷ θέρει διαλυομένων ὑπὸ τῆς θερμασίας τῶν πάγων πολλὴν τηκεδόνα γίνεσθαι, καὶ διὰ τοῦτο πολλὰ γεννᾶσθαι καὶ παχέα νέφη περὶ τοὺς μετεωροτέρους τῶν τόπων, δαψιλοὺς τῆς ἀναθυμιάσεως πρὸς τὸ ὕψος αἰρομένης. [3] ταῦτα δ' ὑπὸ τῶν ἐτησίων ἐλαύνεσθαι, μέχρι ἂν ὅτου προσπέσῃ τοῖς μεγίστοις ὄρεσι τῶν κατὰ τὴν οἰκουμένην, ἃ φησιν εἶναι περὶ τὴν Αἰθιοπίαν· ἔπειτα πρὸς τούτοις οὖσιν ὑψηλοῖς βιαίως θρανόμενα παμμεγέθεις ὄμβρους γεννᾶν, ἐξ ὧν πληροῦσθαι τὸν ποταμὸν μάλιστα κατὰ τὴν τῶν ἐτησίων ὥραν.

**D121** (A99) Schol. in Apoll. Rhod. 4.269–71a

Δημόκριτος δὲ ὁ φυσικὸς ἀπὸ τοῦ κατὰ μεσημβρίαν ὑπερκειμένου πελάγους λαμβάνειν τὸν Νεῖλον τὴν ἐπίχυσιν, ἀπογλυκαίνεσθαι δὲ τὸ ὕδωρ διὰ τὸ διάστημα καὶ τὸ μῆκος τοῦ πόρου καὶ ὑπὸ τοῦ καύματος ἀφεισόμενον· διὸ καὶ ἐναντίαν φησὶν ἔχειν τὴν γεῦσιν.

*The Sea (D122–D123)*

**D122** (< A100) Arist. *Meteor.* 2.3 356b9–11

τὸ δὲ νομίζειν ἐλάττω τε γίνεσθαι τὸ πλῆθος, ὥσπερ φησὶ Δημόκριτος, καὶ τέλος ὑπολείψειν<sup>1</sup> [. . . cf. **R49**].

<sup>1</sup> ἀπολείπειν cod. Matritensis Bibliothecae Regiae 41

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gions remains frozen around the [scil. winter] solstice, but during the summer, when the frost is thawed by the heat, there is a great melting, and for this reason many thick clouds form around the loftier regions, as an abundance of evaporation rises up toward the heights. [3] These are driven along by the Etesian winds until they encounter the highest mountains of the inhabited region, which he says are in Ethiopia. Then they are shattered by striking violently against these (they are extremely high), and they thereby produce enormous rainstorms by which the river is filled up during the season of the Etesian winds [i.e. the summer].

### **D121** (A99) Scholia on Apollonius Rhodius

Democritus, the natural philosopher, says that the Nile receives an influx from the sea that lies beyond it to the south and that this water is rendered sweet by the distance and the length of its route, and by being boiled down by the heat. And it is for this reason, he says, that it has the opposite taste.

### *The Sea (D122–D123)*

### **D122** (< A100) Aristotle, *Meteorology*

To think that it [i.e. the sea] decreases in volume, as Democritus says, and at the end will cease to exist [. . .].

**D123** (A99a) Theophr. (?) *Aqua* (?) in P. Hib. 16 Col. 1.9–16, 2.1–22, 3.1 (ed. FHS&G vol. 1, App. 4, pp. 462–65)

[Col. 1] [. . .] Δημόκριτος δὲ | [. . .] ποιεῖν | [. . .] τρων. . . | . . . desunt 5 versus . . .

[Col. 2] [. . .] πεσθαι φησ[ι]ν<sup>1</sup> ἐν τῷ ὑγρῷ τὰ ὅμοια | πρὸς τὰ ὅμοια καθάπερ ἐν τῷ παντί, | καὶ οὕτως [γ]ενέσθαι<sup>2</sup> θάλατταν καὶ | τᾶλλα τὰ ἀ[λμῶν]τα πάντα συνενε[χ]θέντων τ[ῶ]ν<sup>3</sup> ὁμοφύλων. ὅτι δὲ | ἐκ τῶν ὁμογενῶν ἔστιν θάλαττα | καὶ ἐξ ἄλλων εἶναι φανερόν· οὔτε γὰρ | λιβανωτὸν οὔτε θείον οὔτε σίλφιον | οὔτε νίτρον οὔτε στυπτηρίαν οὔτε ἄσφαλτον οὔτε ὅσα μεγάλα καὶ θαυμαστὰ πολλαχού γίνεσθαι τῆς γῆς. τούτῳ μὲν οὖν πρόχειρον εἰ καὶ μηθὲν | ἄλλο σκέψασθαι διότι μέρος ποιῶν | τὴν θάλατταν τοῦ κόσμου τὸν αὐτὸν τρ[ό]πον<sup>4</sup> φησὶ γενέσθαι καὶ τὰ | θαυμαστὰ καὶ τὰ παραλογώτατα | τῆς φύσεως ὥσπερ οὐ πολλὰς οὔσας | ἐν τῇ γῇ διαφοράς, ἐπεὶ ποιοῦντί | [γε] τοῦ[s]<sup>5</sup> χυλοῦς διὰ τὰ σχήματα, καὶ | [τὸ] ἀ[λ]μυρὸν<sup>6</sup> ἐκ μεγάλων καὶ γωνιο[ει]δῶν,<sup>7</sup> οὐκ [ᾠ]λογόν πως περὶ τὴν [. . .].

<sup>1-7</sup> rest. Grenfell-Hunt, cetera Diels

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**D123** (A99a) Theophrastus (?), *On Water* (?) in Hibeh Papyrus

[Col. 1] <De>mocritus <. . .> produces <. . . five lines missing>

[Col. 2] he says that similar things <. . .> to similar ones in the liquid, just as in the universe, and that in this way were produced the sea and the other s<alt>y substances, by things that are akin coming together. It is manifest from other things too that the sea is composed of things akin: for neither frankincense nor sulfur nor silphium nor soda nor alum nor bitumen nor all the other great and wonderful things are produced in many places in the earth. So in this way it is easy to see, if nothing else, that when he makes the sea a part of the world he is saying that it is produced in the same way as the wonderful and most astounding things in nature, given that there are not many differences in the earth, since for someone who explains flavors by means of shapes, and saltiness from large and angular ones, it is not unreasonable regarding <. . .>.

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### *Explanations of Various Natural Phenomena (D124–D127)*

#### *Why Does a Flame Have Its Shape? (D124)*

**D124** (A73) Theophr. Ign. 52

ἀπορείται δὲ τοῦτο, διὰ τί<sup>1</sup> τὸ τῆς φλογὸς σχῆμα  
πυραμοειδὲς ἐστὶ· καὶ φησι Δημόκριτος μὲν περιψυ-  
χομένων αὐτῶν<sup>2</sup> τῶν ἄκρων εἰς μικρὸν<sup>3</sup> συνάγεσθαι  
καὶ τέλος ἀποξύνεσθαι.

<sup>1</sup> τί ποτε Ψ

<sup>2</sup> αὐτῆς Münzel

<sup>3</sup> μικρὸν Ψ: μέσον Φ

#### *Why Do Bodies Float? (D125)*

**D125** (< A62) Arist. Cael. 4.6 313a22–b5

[. . .] ἐκεῖνος γάρ φησι τὰ ἀναφερόμενα θερμὰ ἐκ τοῦ  
ὑδατος ἀνακωχεύειν τὰ πλατέα τῶν ἐχόντων βάρος,  
τὰ δὲ στενὰ διαπίπτειν· ὀλίγα γὰρ εἶναι τὰ ἀντι-  
κρούοντα αὐτοῖς. ἔδει δ' ἐν τῷ ἀέρι ἔτι μᾶλλον τοῦτο  
ποιεῖν, ὥσπερ ἐνίσταται καὶ ἐκεῖνος αὐτός. ἀλλ' ἐνστάς  
λύει μαλακῶς· φησὶ γὰρ οὐκ εἰς ἐν ὁρμᾶν τὸν σοῦν,  
λέγων τὸν σοῦν τὴν κίνησιν τῶν ἄνω φερομένων σω-  
μάτων.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Explanations of Various Natural Phenomena (D124–D127)*

#### *Why Does a Flame Have Its Shape? (D124)*

#### **D124** (A73) Theophrastus, *On Fire*

This is a difficulty: for what reason the shape of a flame is pyramidal. Democritus says that when their extremities are cooled they gather into a small space and end up being sharpened.

#### *Why Do Bodies Float? (D125)*

#### **D125** (< A62) Aristotle, *On the Heavens*

[. . .] For he says that the warmth carried upward out of the water sustains those heavy objects that are flat, while narrow ones fall down, for there are only a few bumpings against them. And yet this ought to happen even more in the air, as he himself objects. But his reply to this objection is feeble: for he says that **the impulse** (*sous*) is not directed toward a single point, ‘**impulse**’ being the name he gives to the motion of bodies moving upward.

*Why Does the Magnet Attract Iron?* (D126)**D126** (< A165) Alex. (?) *Quaest.* 2.23, pp. 72.28–73.7

ὁ Δημόκριτος δὲ καὶ αὐτὸς ἀπορροίας τε γίνεσθαι τίθεται καὶ τὰ ὅμοια φέρεσθαι πρὸς τὰ ὅμοια, ἀλλὰ καὶ εἰς τὸ κενὸν<sup>1</sup> πάντα φέρεσθαι. ταῦθ' ὑποθέμενος λαμβάνει<sup>2</sup> τὸ τὴν λίθον καὶ τὸν σίδηρον ἐξ ὁμοίων ἀτόμων συγκείσθαι, λεπτοτέρων<sup>3</sup> δὲ τὴν λίθον, καὶ ἐκείνου<sup>4</sup> ἀραιότεραν τε καὶ πολυκενωτέραν αὐτὴν εἶναι, καὶ διὰ τοῦτ' εὐκινητότερα<sup>5</sup> θάπτει<sup>6</sup> ἐπὶ τὸν σίδηρον φέρεσθαι (πρὸς γὰρ τὰ ὅμοια ἢ φορά), καὶ ἐνδυνόμενα εἰς τοὺς πόρους τοῦ σιδήρου κινεῖν<sup>7</sup> τὰ ἐν ἐκείνῳ σώματα διαδνόμενα δι' αὐτῶν διὰ λεπτότητα, τὰ δὲ κινηθέντα ἔξω τε φέρεσθαι ἀπορρέοντα καὶ πρὸς τὴν λίθον διὰ τε ὁμοιότητα καὶ διὰ τὸ κενὰ ἔχειν πλείω, οἷς ἐπόμενον τὸν σίδηρον διὰ τὴν ἀθρόαν ἔκκρισιν τε καὶ φορὰν φέρεσθαι καὶ αὐτὸν πρὸς τὴν [5] λίθον. οὐκέτι δὲ ἢ λίθος πρὸς τὸν σίδηρον φέρεται, ὅτι μὴ ἔχει τοσαῦτα ὁ σίδηρος κενὰ ὅσα ἢ λίθος.

<sup>1</sup> κοινὸν mss., corr. Diels      <sup>2</sup> λαμβάνειν mss., corr. Spengel      <sup>3</sup> λεπτοτέραν coni. Spengel      <sup>4</sup> καὶ ἐκείνου Diels: καὶ ὅτι (τῷ B<sup>2</sup>, τὸ S<sup>2</sup>a) εἶναι VS<sup>1</sup>B<sup>1</sup>: εἶναι καὶ coni. Spengel      <sup>5</sup> εὐκινητοτέραν mss., corr. Bruns      <sup>6</sup> εὐκινη-  
τοτέρ' ὄντα τὰ άτομα Diels      <sup>7</sup> κινεῖ mss., corr. Spengel

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Why Does the Magnet Attract Iron?* (D126)

**D126** (< A165) Alexander of Aphrodisias (?), *Natural Questions*

Democritus too [scil. like Empedocles, **D148**] posits that effluxes are produced and that similar things move toward similar ones, but also that all things move toward the void. Having assumed this, he supposes that the magnet and iron are composed of similar atoms, but that the magnet's are thinner, and that it has a more rarefied consistency and possesses more void than the other and that this is why, being more mobile, they move more quickly toward the iron (for motion is toward what is similar), and penetrating into the passages of the iron they set in motion the bodies in it that penetrate through them [i.e. the passages] because of their lightness and, once they have been set in motion, move as effluxes outward and toward the magnet, both because of their similarity and because it contains more void, and the iron follows these because of the massive outflow and itself moves in a motion toward the [5] magnet. The magnet does not move toward the iron because the iron does not have as many void places as the magnet does.



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### *Why Do Different Materials React to Heat Differently?*<sup>2</sup> (D127)

**D127** (90.1 Leszl) Sen. *Quaest. nat.* 4b.9

accedit his ratio Democriti: “omne corpus quo solidius est, hoc calorem citius concipit, diutius servat. itaque si in sole posueris aeneum vas et vitreum et argenteum,<sup>1</sup> aeneo calor citius accedet, diutius haerebit.” adicit deinde, quare hoc existimet fieri. “his,” inquit, “corporibus, quae duriora et pressiora sunt, necesse est minora foramina esse et tenuiorem in singulis spiritum: sequitur ut, quemadmodum minora balnearia et minora miliaria citius calefiunt, sic haec foramina occulta et oculos effugientia et celerius fervorem sentiant et propter easdem angustias, quicquid receperunt, tardius reddant.”

<sup>1</sup> et argenteum *del. Gercke*: aut argenteum *Koeler*

### *Life and Vital Functions* (D128–D201) *Origin of Life* (D128–D129)

**D128** (A139) Cens. *Die nat.* 4.9

Democrito vero Abderitae ex aqua limoque primum visum esse homines procreatos.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Why Do Different Materials React to Heat Differently?*<sup>2</sup> (D127)

**D127** ( $\neq$  DK), Seneca, *Natural Questions*

To these [scil. other explanations for the fact that the portion of the atmosphere closest to the earth is the warmest] is added Democritus' explanation: "The more solid every body is, the more quickly does it absorb heat and the longer does it conserve it. That is why if you expose a vessel of bronze, one of glass, and one of silver to the sun, the heat will go more quickly to the bronze one and will remain there longer." He goes on to add the reason why he thinks this happens: "Those bodies," he says, "that are harder and more compact must necessarily have smaller passages and thinner air in each of them; it follows that, just as smaller bathing rooms and smaller water heaters become warm more quickly, in the same way these invisible passages, which escape our vision, both feel heat more quickly and because of the narrowness of the same passageways give back more slowly what they have received."

### *Life and Vital Functions* (D128–D201) *Origin of Life* (D128–D129)

**D128** (A139) Censorinus, *The Birthday*

Democritus of Abdera thought that humans were created at first from water and mud.

**D129** (< B5) Diod. Sic. 1.7.2–6

[2] εἰλούμενον δ' ἐν ἑαυτῷ συνεχῶς καὶ συστρεφόμενον ἐκ μὲν τῶν ὑγρῶν τὴν θάλασσαν, ἐκ δὲ τῶν στερεμνιωτέρων ποιῆσαι τὴν γῆν πηλώδη καὶ παντελῶς ἀπαλὴν. [3] ταύτην δὲ τὸ μὲν πρῶτον τοῦ περὶ τὸν ἥλιον πυρὸς καταλάμψαντος πῆξιν λαβεῖν, ἔπειτα διὰ τὴν θερμασίαν ἀναζυμουμένης τῆς ἐπιφανείας συνοιδῆσαί τινα τῶν ὑγρῶν κατὰ πολλοὺς τόπους, καὶ γενέσθαι περὶ αὐτὰ σηπεδόνας ὑμέσι λεπτοῖς περιεχομένας· ὅπερ ἐν τοῖς ἔλεσι καὶ τοῖς λιμνάζουσι τῶν τόπων ἔτι καὶ νῦν ὁρᾶσθαι γινόμενον, ἐπειδὴ τῆς χώρας κατεψυγμένης ἄφνω διάπυρος ὁ ἀῆρ γένηται μὴ λαβὼν τὴν μεταβολὴν ἐκ τοῦ κατ' ὀλίγον. [4] ζωογονουμένων δὲ τῶν ὑγρῶν διὰ τῆς θερμασίας τὸν εἰρημένον τρόπον τὰς μὲν νύκτας λαμβάνειν αὐτίκα τὴν τροφήν ἐκ τῆς πιπτούσης ἀπὸ τοῦ περιέχοντος ὀμίχλης, τὰς δ' ἡμέρας ὑπὸ τοῦ καύματος στερεοῦσθαι· τὸ δ' ἔσχατον τῶν κυοφορουμένων τὴν τελείαν αὔξησιν λαμβανόντων καὶ τῶν ὑμένων διακαυθέντων τε καὶ περιρραγέντων ἀναφυῆναι παντοδαποὺς τύπους ζώων. [5] τούτων δὲ τὰ μὲν πλείστης θερμασίας κεκοινωνηκότα πρὸς τοὺς μετεώρους τόπους ἀπελθεῖν γενόμενα πτηνά, τὰ δὲ γεώδους ἀντεχόμενα συγκρίσεως ἐν τῇ τῶν ἔρπετῶν καὶ τῶν ἄλλων τῶν ἐπιγείων τάξει καταριθμηθῆναι, τὰ δὲ φύσεως ὑγρᾶς μάλιστα μετειληφότα πρὸς τὸν ὁμογενῆ τρόπον συνδραμεῖν, ὀνομασθέντα πλωτά. [6] τὴν δὲ γῆν αἰεὶ μᾶλλον στε-

**D129** (< B5) Diodorus Siculus

[2] As this [scil. the muddy and turbid matter] turned around continually upon itself and contracted, it made the sea out of the wet parts, and out of the more solid ones the earth, which was muddy and completely soft. [3] This solidified, at first when the fire of the sun blazed down on it, and then, since its surface was fermenting because of the warmth, some of the wet parts swelled up in many places, and around these putrid humors formed, covered by thin membranes. This can be seen to happen even now in marshes and swampy areas, when the ground has become cold and the air suddenly becomes very warm without having gone through a gradual change. [4] And while the wet parts were generating animals because of the heat in the way I have described, they received their nourishment at night from the mist that fell from the atmosphere, and during the day they were solidified by the heat; and finally, when the embryos had attained their complete growth and the membranes had been completely heated and had broken apart, all kinds of animals emerged. [5] Of these, those that had received the largest share of heat rose up toward the higher regions and became winged, while those whose aggregate contained earth were counted in the class of reptiles and other terrestrial animals, while those that had received most of all a share of the moist nature went to the region that was akin to them and were called fish. [6] And since the earth became continually more solid because of

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ρεουμένην ὑπό τε τοῦ περὶ τὸν ἥλιον πυρὸς καὶ τῶν πνευμάτων τὸ τελευταῖον μηκέτι δύνασθαι μηδὲν τῶν μειζόνων ζωογονεῖν, ἀλλ' ἐκ τῆς πρὸς ἄλληλα μίξεως ἕκαστα γεννᾶσθαι τῶν ἐμψύχων [. . . cf. **D202**].

### *The Soul and Thought (D130–D135)*

**D130** (< A101) Arist. *An.* 1.2 405a8–13

Δημόκριτος δὲ καὶ γλαφυρωτέρως εἵρηκεν ἀποφαινόμενος διὰ τί τούτων ἑκάτερον· ψυχὴν μὲν γὰρ εἶναι ταῦτ' οὖν καὶ νοῦν, τοῦτο δ' εἶναι τῶν πρώτων καὶ ἀδιαίρετων σωμάτων, κινητικὸν δὲ διὰ μικρομέρειαν<sup>1</sup> καὶ τὸ σχῆμα· τῶν δὲ σχημάτων εὐκινητότατον τὸ σφαιροειδὲς λέγει· τοιοῦτον δ' εἶναι τὸν τε νοῦν καὶ τὸ πῦρ.

<sup>1</sup> λεπτομέρειαν C

**D131** (< A104) Arist. *An.* 1.3 406b19–22

ὁμοίως δὲ καὶ Δημόκριτος λέγει· κινουμένας γάρ φησι τὰς ἀδιαίρετους σφαῖρας διὰ τὸ πεφυκέναι μηδέποτε μένειν συνεφέλκειν καὶ κινεῖν τὸ σῶμα πᾶν. [. . . = **R51**]

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

the fire of the sun and the winds, in the end it was no longer capable of generating any of the larger animals, but it is out of sexual intercourse with each other that every living being is generated.<sup>1</sup>

<sup>1</sup> Diodorus does not name the text from whom he derives this account (perhaps the *Aegyptica* of Hecataeus of Abdera [73 DK]), but it contains a number of Democritean elements that permit it to be included among his testimonia.

### *The Soul and Thought (D130–D135)*

#### **D130** (< A101) Aristotle, *On the Soul*

Democritus expressed himself more precisely [scil. than those who simply identify the soul with fire] when he explains why it [scil. the soul possesses] each of these two [scil. subtlety and mobility]: for the soul is the same thing as the mind, and this [scil. mind] belongs to the first and indivisible bodies, while it is mobile because of the smallness of its parts and because of their shape. And he says that the most mobile of the shapes is the spherical one, and that mind and fire are [scil. composed of atoms] of this sort.

#### **D131** (< A104) Aristotle, *On the Soul*

Democritus speaks similarly to him [i.e. Philip the comic playwright, who said that Daedalus made wooden statues mobile by pouring quicksilver into them]. For he says that the indivisible spheres in motion (because by nature they never rest) drag the whole body along and set it in motion.

**D132** (< 67 A28) Arist. *An.* 1.2 403b31–404a10

ὅθεν Δημόκριτος μὲν πῦρ τι καὶ θερμόν φησιν αὐτὴν εἶναι· ἀπείρων γὰρ ὄντων σχημάτων καὶ ἀτόμων τὰ σφαιροειδῇ πῦρ καὶ ψυχὴν λέγει (οἶον ἐν τῷ ἀέρι τὰ καλούμενα ξύσματα, ἃ φαίνεται ἐν ταῖς διὰ τῶν θυρίδων ἀκτίσιν), ὧν<sup>1</sup> τὴν μὲν πανσπερμίαν στοιχεῖα λέγει τῆς ὅλης φύσεως (ὁμοίως δὲ καὶ Δεύκιππος), τούτων δὲ τὰ σφαιροειδῇ ψυχὴν, διὰ τὸ μάλιστα διὰ παντὸς δύνασθαι διαδύνειν τοὺς τοιούτους ῥυσμούς καὶ κινεῖν τὰ λοιπά, κινούμενα καὶ αὐτά, ὑπολαμβάνοντες τὴν ψυχὴν εἶναι τὸ παρέχον τοῖς ζώοις τὴν κίνησιν. διὸ καὶ τοῦ ζῆν ὅρον εἶναι τὴν ἀναπνοήν [. . . = **D136**].

<sup>1</sup> τὰ σφαιροειδῇ . . . ὧν ut gloss. del. Diels

**D133** (< A101) Arist. *An.* 1.2 404a27–30

ἐκείνος μὲν γὰρ ἀπλῶς ταῦτόν ψυχὴν καὶ νοῦν· τὸ γὰρ ἀληθές εἶναι τὸ φαινόμενον, διὸ καλῶς ποιῆσαι τὸν Ὅμηρον ὡς “Ἐκτωρ κείτ’ ἀλλοφρονέων.”

**D134** (< A135) Theophr. *Sens.* 58

[. . . = **D158**] περὶ δὲ τοῦ φρονεῖν ἐπὶ τοσοῦτον εἴρηκεν, ὅτι γίνεται συμμέτρως ἐχούσης τῆς ψυχῆς μετὰ τὴν κίνησιν.<sup>1</sup> εἰάν δὲ περίθερμός τις ἢ περίψυχρος γένηται, μεταλλάττειν φησί. διὸ<sup>2</sup> καὶ τοὺς παλαιούς

<sup>1</sup> κατὰ τὴν κρᾶσιν Schneider

<sup>2</sup> διὸ Diels: διότι mss.

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### **D132** (< 67 A28) Aristotle, *On the Soul*

whence Democritus says that it [i.e. the soul] is a certain kind of fire and heat. For the shapes and atoms being unlimited, he says that the spherical ones are fire and the soul (like the so-called motes (*xusmata*) that are visible in the air in sunbeams that pass through windows), of which he says that the ‘universal seminal reserve’ (*panspermia*) is the elements of the whole of nature (just like Leucippus), and that among these, the spherical ones are the soul because such **configurations** (*rhusmoi*) can penetrate best through everything and set everything else in motion by their own motion, since they think that the soul is what supplies motion to living beings. And that is why what limits life is respiration [. . .].

### **D133** (< A101) Aristotle, *On the Soul*

He [i.e. Democritus says] simply that soul and mind are the same thing. For what is true is what appears. And that is why Homer was right to say, “Hector lay there, his thoughts being other.”<sup>1</sup>

<sup>1</sup> This phrase does not occur in our texts of Homer’s epics.

### **D134** (< A135) Theophrastus, *On Sensations*

[. . .] Concerning thinking he has said only that it happens when the soul is in equilibrium after motion. But if someone becomes too warm or too cold, he says that it [i.e. thinking] changes. And that is why the ancients were right



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καλῶς τοῦθ' ὑπολαβεῖν, ὅτι ἐστὶν ἄλλοφρονεῖν'. ὥστε φανερόν, ὅτι τῇ κράσει τοῦ σώματος ποιεῖ τὸ φρονεῖν, ὅπερ ἴσως αὐτῷ καὶ κατὰ λόγον ἐστὶ σῶμα ποιοῦντι τὴν ψυχὴν.

**D135** (A105) Aët. 4.5.1 (Ps.-Plut.) [περὶ τοῦ ἡγεμονικοῦ]

[. . .] Δημόκριτος ἐν ὅλῃ τῇ κεφαλῇ.

### *Respiration (D136)*

**D136** (< 67 A28) Arist. An. 1.2 404a10–15

[. . . = **D132**] συνάγοντος γὰρ τοῦ περιέχοντος τὰ σώματα καὶ ἐκθλίβοντος τῶν σχημάτων τὰ παρέχοντα τοῖς ζώοις τὴν κίνησιν διὰ τὸ μηδ' αὐτὰ ἡρεμεῖν μηδέποτε, βοήθειαν γίνεσθαι θύραθεν ἐπεισιόντων ἄλλων τοιούτων ἐν τῷ ἀναπνεῖν· κωλύειν γὰρ αὐτὰ καὶ τὰ ἐνυπάρχοντα ἐν τοῖς ζώοις ἐκκρίνεσθαι, συνανείργοντα τὸ συνάγον καὶ πηγνύον.

### *Sleep and Death (D137–D143)*

**D137** (A136) Tert. An. 43

Democritus indigentiam spiritus.

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to suppose that this is ‘to have thoughts that are other’ [cf. **D133**]. So that it is evident that he explains thinking by the mixture of the body, which is surely in accordance with his reasoning, since he makes the soul a body.

### **D135** (A105) Aëtius

[. . .] Democritus: it [i.e. the directive center is located] in the whole head.

### *Respiration (D136)*

### **D136** (< 67 A28) Aristotle, *On the Soul*

[. . .] For since what surrounds bodies [i.e. the ambient atmosphere] compresses them and expels those shapes that supply motion to living beings (because they [i.e. the shapes] are never at rest), help comes about from outside, when other [scil. shapes] of the same kind enter during the course of respiration; for these prevent those that are present within the living beings from being expelled, by helping to counteract what contracts and solidifies.<sup>1</sup>

<sup>1</sup> The process is described in very similar terms in *On Respiration*, 4 471b30 (68 A106 DK).

### *Sleep and Death (D137–D143)*

### **D137** (A136) Tertullian, *On the Soul*

Democritus [scil. says that sleep is] a lack of breath.

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**D138** (67 A34) Aët. 5.25.3 (Ps.-Plut.) [ὁποτέρου ἐστὶν ὕπνος καὶ θάνατος, ψυχῆς ἢ σώματος]

Λεύκιππος οὐ μόνον<sup>1</sup> σώματος γίνεσθαι, ἀλλὰ κράσει<sup>2</sup> τοῦ λεπτομεροῦς πλείονι τῆς ἐκκρίσεως<sup>3</sup> τοῦ ψυχικοῦ θερμοῦ, τὸν <δὲ><sup>4</sup> πλεονασμὸν αἴτιον<sup>5</sup> θανάτου· [. . .].

<sup>1</sup> οὐ μόνον mss.: οὐ κόπῳ Reiske: τὸν ὕπνον Diels

<sup>2</sup> ἀλλὰ κράσει mss.: ἀλλ' ἐκκρίσει Heimsoeth: αμ' ἐκκρίσει Bernardakis <sup>3</sup> ἐκκρίσεως nos: ἐκκράσεως mss.: εἰσκρίσεως Diels <sup>4</sup> τὸν <δ> Diels (Dox.): <ῆς> τὸν Diels (DK): τὸν mss. <sup>5</sup> αἴτιον mM: αἰτίαν Π

**D139** (A109) Aët. 4.7.4 (Ps.-Plut.) [περὶ ἀφθαρσίας ψυχῆς]

Δημόκριτος [. . .] φθαρτὴν τῷ σώματι συνδιαφθειρομένην.

**D140** (A117) Aët. 4.4.7 (Ps.-Plut.) [περὶ μερῶν τῆς ψυχῆς]

ὁ δὲ Δημόκριτος πάντα μετέχειν φησὶ ψυχῆς ποιᾶς, καὶ τὰ νεκρὰ τῶν σωμάτων, διότι αἰεὶ διαφανῶς τινος θερμοῦ καὶ αἰσθητικοῦ μετέχει τοῦ πλείονος διαπνεομένου.

**D141** (A160) Cels. *Medic.* 2.6

quin etiam vir iure magni nominis Democritus ne finitae

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### **D138** (67 A34) Aëtius

Leucippus: it [i.e. sleep] belongs not only to the body, but occurs because of a mixture of the thin part that is greater in quantity than the expulsion of the heat of the soul; an excess causes death [. . .].

### **D139** (A109) Aëtius

Democritus [. . .]: it [scil. the soul is] destructible and is destroyed together with the body.

### **D140** (A117) Aëtius

But Democritus says [scil. unlike Epicurus] that all things have a share in a certain kind of soul, even including those bodies that are corpses, since they manifestly always have some share in heat and sensation, even if most of it has been exhaled.

### **D141** (A160) Celsus, *On Medicine*

Indeed, Democritus, a man of a justly great renown, maintained that there are not even sufficiently certain signs of

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quidem vitae satis certas notas esse proposuit, quibus medici credidissent: adeo illud non reliquit, ut certa aliqua signa futurae mortis essent.

**D142** (A160) Tert. *An.* 51

ad hoc et Democritus crementa unguium et comarum in sepulturis aliquanti temporis denotat.

**D143** (< B1) Procl. *In Remp.* 2.113.6–9

τὴν μὲν περὶ τῶν ἀποθανεῖν δοξάντων, ἔπειτα ἀναβιούντων ἱστορίαν ἄλλοι τε πολλοὶ τῶν παλαιῶν ἤθροισαν καὶ Δημόκριτος ὁ φυσικὸς ἐν τοῖς Περὶ τοῦ Ἄιδου γράμμασιν.

*Sensations and Their Objects (D144–D161)*  
*The Number of Senses (D144)*

**D144** (A116) Aët. 4.10.4 (Stob.) [πόσαι εἰσὶν αἱ αἰσθήσεις]

Δημόκριτος πλείους εἶναι αἰσθήσεις περὶ τὰ ἄλογα ζῶα καὶ περὶ τοὺς σοφοὺς καὶ περὶ τοὺς θεούς.

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the ending of life on which doctors could rely; and even less did he accept that there might be any certain signs of a future death.

### **D142** (A160) Tertullian, *On the Soul*

On this point [scil. the continuing signs of some vitality after death], Democritus too notes that the nails and hair grow for a certain time on bodies that have been buried.

### **D143** (< B1) Proclus, *Commentary on Plato's Republic*

Many of the ancients, including Democritus the natural philosopher in his writings *About Hades*, have collected reports about people who were thought to have died but then came to life again.

*Sensations and Their Objects (D144–D161)*

*The Number of Senses (D144)*

### **D144** (A116) Aëtius

Democritus: there are more senses [scil. than the five], if one considers irrational animals, the sages, and the gods.

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*Sight (D145–D154)*

*Ordinary Sight (D145–D150)*

**D145** (67 A29) Aët. 4.13.1 (Stob.) [περὶ ὁράσεως]

Λεύκιππος Δημόκριτος [. . .] κατὰ εἰδώλων εἴσκρυσιν  
τὸ ὁρατικὸν συμβαίνειν πάθος.

**D146** (B123) Etym. Gen.

δείκελον [. . .] παρὰ δὲ Δημοκρίτῳ, κατ' εἶδος ὅμοια  
τοῖς πράγμασιν ἀπόρροια.

**D147** (< A135) Theophr. Sens. 50

[. . . = **R55**] ὁρᾶν μὲν οὖν ποιεῖ τῇ ἐμφάσει· ταύτην δὲ  
ιδίως λέγει· τὴν γὰρ ἔμφασιν οὐκ εὐθὺς ἐν τῇ κόρῃ  
γίνεσθαι, ἀλλὰ τὸν ἀέρα τὸν μεταξὺ τῆς ὄψεως καὶ  
τοῦ ὁρωμένου τυποῦσθαι συστελλόμενον ὑπὸ τοῦ  
ὁρωμένου καὶ τοῦ ὁρῶντος· ἅπαντος γὰρ αἰεὶ γίνεσθαι  
τινα ἀπορροήν· ἔπειτα τοῦτον στερεὸν ὄντα καὶ ἀλλό-  
χρων ἐμφαίνεσθαι τοῖς ὅμμασιν ὑγροῖς. καὶ τὸ μὲν  
πυκνὸν οὐ δέχεσθαι, τὸ δὲ ὑγρὸν διέναι. διὸ καὶ τοὺς  
ὑγροὺς τῶν σκληρῶν ὀφθαλμῶν ἀμείνους εἶναι πρὸς  
τὸ ὁρᾶν, εἰ ὁ μὲν ἔξω χιτῶν ὡς λεπτότατος καὶ πυκνό-  
τατος εἴη, τὰ δ' ἐντὸς ὡς μάλιστα σομφὰ καὶ κενὰ  
πυκνῆς καὶ ἰσχυρᾶς<sup>1</sup> σαρκός, ἔτι δὲ ἰκμᾶδος παχείας  
τε καὶ λιπαρᾶς, καὶ αἱ φλέβες <αἱ><sup>2</sup> κατὰ τοὺς ὀφθαλ-

<sup>1</sup>στιφρᾶς Usener

<sup>2</sup><αἱ> Diels

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*Sight (D145–D154)*

*Ordinary Sight (D145–D150)*

**D145** (67 A29) Aëtius

Leucippus, Democritus [. . .]: the affection of vision comes about because of the penetration of images.

**D146** (B123) *Etymologicum genuinum*

**Portrait** (*deikelon*): [. . .] in Democritus, an efflux that is similar in species to things.

**D147** (< A135) Theophrastus, *On Sensations*

[. . .] He explains vision by impression (*emphasis*); but he provides a particular description of this. For the impression (*emphasis*) is not produced directly in the pupil, but the air located between the organ of vision and what is seen receives an impression (*tupousthai*), since it is compressed by the action of what is seen and of what sees; for from everything some efflux is always being detached. Then this [scil. air], which is solid and of a different color, is reflected in moist eyes: what is dense does not receive it, while what is moist offers it a passage. And that is why moist eyes are better at seeing than dry ones, so long as the external membrane is as thin and as dense as possible, the interior is as spongy as possible and is free of dense and strong flesh, and furthermore of thick and fatty liquid, and the blood vessels near the eyes are straight and free



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μοὺς εὐθεΐαι καὶ ἄνικμοι, †καὶ μὴ εὐσχημονεῖν†<sup>3</sup> τοῖς ἀποτυπουμένοις. τὰ γὰρ ὁμόφυλα μάλιστα ἕκαστον γνωρίζειν [. . . = **R57**].

<sup>3</sup> ὡς ὁμοιοσχημονεῖν Diels: καὶ ὁμοιοσχημονοῖεν Schneider: καὶ μὴ ἐνοχλοῖεν coni. Burchard

**D148** (< A121) Arist. *Sens.* 2 438a5–7

Δημόκριτος δ' ὅτι μὲν ὕδωρ εἶναί φησι, λέγει καλῶς, ὅτι δ' οἶεται τὸ ὁρᾶν εἶναι τὴν ἔμφασιν, οὐ καλῶς.

**D149** (< A122) Arist. *An.* 2.7 419a15–17

[. . .] Δημόκριτος, οἰόμενος, εἰ γένοιτο κενὸν τὸ μεταξύ, ὁρᾶσθαι ἂν ἀκριβῶς καὶ εἰ μύρμηξ ἐν τῷ οὐρανῷ εἴη [. . . = **R58**].

**D150** (67 A31) Aët. 4.14.2 (Stob.; cf. Ps.-Plut., Ps.-Gal.)  
[περὶ κατοπτρικῶν ἐμφάσεων]

Λεύκιππος,<sup>1</sup> Δημόκριτος [. . .] τὰς κατοπτρικὰς ἐμφάσεις γίνεσθαι κατ' εἰδώλων ἐνστάσεις,<sup>2</sup> ἃ τινα φέρεσθαι μὲν ἀφ' ἡμῶν, συνίστασθαι δὲ ἐπὶ τοῦ κατόπτρου κατ' ἀντιπεριστροφὴν.

<sup>1</sup> Λεύκιππος non hab. Plut. <sup>2</sup> ἐνστάσεις Meineke: ἐμφάσεις Stob.: ὑποστάσεις Plut.: ἐπιστάσεις Gal.: ἀποστάσεις Usener

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

of liquid, and †. . † to the objects that are impressed (*apoutupoumenois*) on them; for it is things that are akin that each one recognizes best [. . .].

### **D148** (< A121) Aristotle, *On Sensation*

When Democritus says that it is water [scil. by which we see], he speaks correctly, but when he thinks that seeing is the impression (*emphasis*) he speaks incorrectly.

### **D149** (< A122) Aristotle, *On the Soul*

[. . .] Democritus, thinking that if the intermediate [scil. space] were void, one would see exactly even if an ant were in the sky [. . .].

### **D150** (67 A31) Aëtius

Leucippus, Democritus [. . .]: the reflections (*emphaseis*) in mirrors are produced by the interference (*enstaseis*) of the images that come from us but then are arranged on the mirror in order to go in the inverse direction.

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### *Dreams and Visions of Gods (D151–D154)*

**D151** (A136) Aët. 5.2.1 (Ps.-Plut.) [πῶς ὄνειροι γίνονται]

Δημόκριτος τοὺς ὀνείρους γίνεσθαι κατὰ τὰς τῶν εἰδῶλων παραστάσεις.

**D152** (< A77) Plut. *Quaest. conv.* 8.10.2 735A–B

[. . .] φησὶν Δημόκριτος ἐγκαταβυσσοῦσθαι τὰ εἶδωλα διὰ τῶν πόρων εἰς τὰ σώματα καὶ ποιεῖν τὰς κατὰ ὕπνον ὄψεις ἐπαναφερόμενα· φοιτᾶν δὲ ταῦτα πανταχόθεν ἀπιόντα καὶ σκευῶν καὶ ἱματίων καὶ φυτῶν, μάλιστα δὲ ζώων ὑπὸ σάλου πολλοῦ καὶ θερμότητος οὐ μόνον ἔχοντα μορφοειδεῖς τοῦ σώματος ἐκμεμαγμένας ὁμοιότητας [. . .], ἀλλὰ καὶ τῶν κατὰ ψυχὴν κινήματων καὶ βουλευμάτων ἐκάστω καὶ ἡθῶν καὶ παθῶν ἐμφάσεις ἀναλαμβάνοντα συνεφέλκεσθαι, καὶ προσπίπτοντα μετὰ τούτων ὥσπερ ἔμφυχα φράζειν καὶ διαγγέλλειν<sup>1</sup> τοῖς ὑποδεχομένοις τὰς τῶν μεθιέντων αὐτὰ δόξας καὶ διαλογισμοὺς καὶ ὁρμάς [...].

<sup>1</sup> διαγγέλλειν Wytttenbach: διαστέλλειν ms.

**D153** (< A77) Plut. *Quaest. conv.* 5.7.6 682F–683A

[. . .] ἃ φησιν ἐκεῖνος ἐξιέναι τοὺς φθονοῦντας, οὗτ' αἰσθήσεως ἄμοιρα παντάπασιν οὐθ' ὁρμῆς ἀνάπλεά τε τῆς ἀπὸ τῶν προιεμένων μοχθηρίας καὶ βασκανίας,

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Dreams and Visions of Gods (D151–D154)*

#### **D151** (A136) Aëtius

Democritus: dreams are produced by the manifestations (*parastaseis*) of images.

#### **D152** (< A77) Plutarch, *Table Talk*

[. . .] Democritus says that the images **penetrate deeply into bodies by means of their passages** and produce visions during sleep **when they rise up again**. These roam about, coming from everywhere, from equipment, clothes, plants, but especially from living beings, by the effect of intense agitation and heat; they possess not only similarities of form modeled upon the body [. . .] but they also receive impressions (*emphaseis*) of the motions and desires of each person's soul, of his character traits and passions, which they carry along with them; when they encounter people, accompanied by these things, they speak like living beings and announce to those who receive them the opinions of those who sent them, their considerations, and their impulses [. . .].

#### **D153** (< A77) Plutarch, *Table Talk*

[. . .] That man [scil. Democritus] says that they [scil. the images] are emitted by envious people; they are not at all deprived of a share of sensation nor of impulsion, but are filled with the wickedness and malice of those people who

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μεθ' ἧς ἐμπλασσόμενα καὶ παραμένοντα καὶ συννοικούντα τοῖς βασκαينوμένοις ἐπιταράττειν καὶ κακοῦν αὐτῶν τό τε σῶμα καὶ τὴν διάνοιαν.

**D154** (B166) Sext. Emp. Adv. Math. 9.19

Δημόκριτος δὲ εἰδωλά τινά φησιν ἐμπελάζειν τοῖς ἀνθρώποις, καὶ τούτων τὰ μὲν εἶναι ἀγαθοποιά, τὰ δὲ κακοποιά (ἔνθεν καὶ εὖχετο εὐλόγχων τυχεῖν εἰδῶλων), εἶναι δὲ ταῦτα μεγάλα τε καὶ ὑπερμεγέθη,<sup>1</sup> καὶ δύσφθαρτα μὲν, οὐκ ἄφθαρτα δέ, προσσημαίνειν τε τὰ μέλλοντα τοῖς ἀνθρώποις, θεωρούμενα καὶ φωνὰς ἀφιέντα. ὅθεν τούτων αὐτῶν φαντασίαν λαβόντες οἱ παλαιοὶ ὑπενόησαν εἶναι θεόν, μηδενὸς ἄλλον παρὰ ταῦτα ὄντος θεοῦ τοῦ<sup>2</sup> ἄφθαρτον φύσιν ἔχοντος.

<sup>1</sup> ὑπερφυῆ Papencordt

<sup>2</sup> τοῦ del. Kayser

### *Hearing and Sound (D155–D157)*

**D155** (< A126a) Porph. In Ptol. Harm., p. 32.9–11

[. . .] ἀλλ' ὥς φησιν Δημόκριτος, ἐκδοχεῖον μύθων οὐσα μένει τὴν φωνὴν ἀγγείου δίκη· ἡ δὲ γὰρ εἰσκρίνεται καὶ ἐνρεῖ [. . .].

**D156** (< A128) Aët. 4.19.3 (Ps.-Plut.) [περὶ φωνῆς]

Δημόκριτος καὶ τὸν ἀέρα φησὶν εἰς ὁμοιοσχήμονα

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emitted them; modeled upon this and staying and dwelling with those who are bewitched by malice, they agitate them and inflict damage on their body and thought.

**D154** (B166) Sextus Empiricus, *Against the Natural Philosophers*

Democritus says that certain images **approach people** and that of these some do good and others do evil. That is why he expressed the wish **to obtain propitious images**. These are large and of greater size than normal, and hard to destroy but not indestructible, and they indicate beforehand the future for people when they are observed and utter words. It is on this basis that the ancients, having a representation (*phantasia*) of these very images, came to suppose that there is a god, given that no other god exists that has an indestructible nature besides these.

### *Hearing and Sound (D155–D157)*

**D155** (< A126a) Porphyry, *Commentary on Ptolemy's Harmonics*

[. . .] but as Democritus says, it [i.e. hearing], being **a receptacle for words**, waits for a sound in the manner of a vessel; and this latter penetrates inside and flows into it [. . .].

**D156** (< A128) Aëtius

Democritus says that the air too **is shattered into** bodies

θρύπτεσθαι σώματα καὶ συγκαλινδεῖσθαι τοῖς ἐκ τῆς φωνῆς θραύσμασι. ‘κολοῖδς’ γάρ ‘παρὰ κολοῖδον ἰζάνει’ καὶ ‘ὥς αἰεὶ τὸν ὁμοῖον ἄγει θεὸς ὥς τὸν ὁμοῖον.’ καὶ γὰρ ἐν τοῖς αἰγιαλοῖς αἱ ὅμοιαι ψῆφοι κατὰ τοὺς αὐτοὺς τόπους ὀρώνται κατ’ ἄλλο μὲν αἱ σφαιροειδεῖς, κατ’ ἄλλο δὲ αἱ ἐπιμήκεις· καὶ ἐπὶ τῶν κοσκινευόντων δὲ ἐπὶ τὸ αὐτὸ συναλίσσεται τὰ ὁμοιοσχήμονα, ὥστε χωρὶς εἶναι τοὺς κνάμους καὶ ἐρεβίνθους [. . . = **R61**].

**D157** (< A135) Theophr. *Sens.* 55–56

[. . . = **R57**] [55] τὴν δ’ ἀκοὴν παραπλησίως ποιεῖ τοῖς ἄλλοις. εἰς γὰρ τὸ κενὸν ἐμπίπτοντα τὸν ἀέρα κίνησιν ἐμποιεῖν· πλὴν ὅτι κατὰ πᾶν μὲν ὁμοίως τὸ σῶμα εἰσιέναι, μάλιστα δὲ καὶ πλείστον διὰ τῶν ὥτων, ὅτι διὰ πλείστου τε κενοῦ διέρχεται καὶ ἥκιστα διαμῖναι. διὸ καὶ κατὰ μὲν τὸ ἄλλο σῶμα οὐκ αἰσθάνεσθαι, ταύτῃ δὲ μόνον. ὅταν δὲ ἐντὸς γένηται, σκίδνασθαι διὰ τὸ τάχος· τὴν γὰρ φωνὴν εἶναι πυκνουμένον<sup>1</sup> τοῦ ἀέρος καὶ μετὰ βίας εἰσιόντος. ὥσπερ οὖν ἐκτὸς ποιεῖ τῇ ἀφῇ τὴν αἴσθησιν, οὕτω καὶ ἐντός. [56] ὀξύτατα<sup>2</sup> δ’ ἀκούειν, εἰ ὁ μὲν ἔξω χιτῶν εἴη πυκνός, τὰ δὲ φλεβία κενὰ καὶ ὥς μάλιστα ἄνικμα καὶ εὗτρητα κατὰ τε<sup>3</sup> τὸ ἄλλο σῶμα καὶ τὴν κεφαλὴν καὶ τὰς ἀκοάς, ἔτι δὲ τὰ ὀστᾶ πυκνὰ καὶ ὁ ἐγκέφαλος εὐκρα-

<sup>1</sup> τυπτομένου Burchard: θρυπτομένου Papencordt

<sup>2</sup> ὀξύτατον mss., corr. Diels

<sup>3</sup> δὲ mss., corr. Diels

**of a similar shape** and **rolls about** together with the fragments that come from sound. For “jackdaw sits next to jackdaw”<sup>1</sup> and “a god always leads a similar man toward a similar one” [*Odyssey* 17.218]. For on beaches too similar pebbles are seen gathered together in the same places, spherical ones here, oblong ones there. And when people use sieves, those [scil. seeds] of a similar shape gather in the same place, so that beans and chickpeas are separated [. . .].

<sup>1</sup> A proverb.

**D157** (< A135) Theophrastus, *On Sensations*

[. . .] [55] But he explains hearing in a way similar to the other [scil. philosophers]: air falling into the void causes a motion, except that it penetrates in the same way into the whole surface of the body, but especially and most of all through the ears, for there it passes through the most void and **remains** there least. And that is why it [i.e. the air] is not perceived on the rest of the body, but only in this place. Once it has passed inside, it is **dispersed** by its speed; for a sound comes from air that has been condensed and that penetrates violently. So that just as he explains sensation by contact on the exterior, so he does too on the interior. [56] Hearing is sharpest if the external membrane is dense, the blood vessels empty and as free of liquid as possible and well pierced, in the rest of the body as well as in the head and ears, and furthermore the bones are dense, the brain well tempered, and what sur-



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τος καὶ τὸ περὶ αὐτὸν ὡς ξηρότατον· ἀθρόον γὰρ ἂν οὕτως εἰσιέναι τὴν φωνὴν ἅτε διὰ πολλοῦ κενοῦ καὶ ἀνίκμου καὶ εὐτρήτου εἰσιούσαν καὶ ταχὺ σκίδνασθαι καὶ ὁμαλῶς κατὰ τὸ σῶμα καὶ οὐ διεκπίπτειν<sup>4</sup> ἔξω. [. . . = **R60**]

<sup>4</sup> οὐδὲ ἐκπίπτειν mss., corr. Diels

### *Other Senses (D158–D161)*

**D158** (< A135) Theophr. *Sens.* 57

[. . . = **R60**] καὶ περὶ μὲν ὄψεως καὶ ἀκοῆς οὕτως ἀποδίδωσι, τὰς δὲ ἄλλας αἰσθήσεις σχεδὸν ὁμοίως ποιεῖ τοῖς πλείστοις [. . . = **D134**].

**D159** Theophr.

**a** (< A135) *Sens.* 72

[. . . = **R56b**] τῶν δὲ χυλῶν ἐκάστω τὸ σχῆμα ἀποδίδωσι πρὸς τὴν δύναμιν ἀφομοιῶν τὴν ἐν τοῖς πάθεσιν [. . . cf. **R62**].

cf. app. ad **R62**

**b** (A119) *CP* 6.1.2.1–10

αὐτὸ γὰρ τοῦτο πρῶτον ἔχει τινὰ σκέψιν, πότερον<sup>1</sup> τοῖς πάθεσιν τοῖς κατὰ τὰς αἰσθήσεις ἀποδοτέον ἢ ὥσπερ Δημόκριτος τοῖς σχήμασιν ἐξ ὧν ἕκαστοι.<sup>2</sup>

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

rounds this as dry as possible. For in this way sound penetrates all together, since it passes through many empty places that are free of liquid and are well pierced, and it **is dispersed** quickly and evenly throughout the body, without escaping outward [. . .].

### *Other Senses (D158–D161)*

#### **D158** (< A135) Theophrastus, *On Sensations*

[. . .] This is how he explains vision and hearing; the other senses he discusses more or less in the same way as most people [. . .].

#### **D159** Theophrastus

##### **a** (< A135) *On Sensations*

[. . .] As for the flavors, he [i.e. Democritus] attributes to each one its shape, making it similar to the property manifested in the affections [. . .].

##### **b** (A119) *Causes of Plants*

For first of all one has to examine whether one must give an account [scil. of the various kinds of flavors] in terms of the affections of the senses or, like Democritus, in terms of the shapes which are at the origin of each one.

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<sup>1</sup> γὰρ post πότερον del. Scaliger  
(*singuli* Gaza): ἐκάστοις mss.

<sup>2</sup> ἑκάστοι Heinsius

**D160** (A129) Theophr. *CP* 6.1.6.1–11

Δημόκριτος δὲ σχῆμα περιτιθεὶς ἐκάστω γλυκὺν μὲν τὸν στρογγύλον καὶ εὐμεγέθη ποιεῖ. στρυφνὸν δὲ τὸν μεγαλόσχημον τραχύν τε καὶ<sup>1</sup> πολυγώνιον καὶ ἀπεριφερῆ. ὅξυν δὲ κατὰ τοῦνομα τὸν ὅξυν τῷ ὄγκῳ καὶ γωνοειδῆ<sup>2</sup> καὶ καμπύλον καὶ λεπτὸν καὶ ἀπεριφερῆ. δριμύν δὲ τὸν περιφερῆ καὶ λεπτὸν καὶ γωνοειδῆ καὶ καμπύλον. ἄλμυρὸν δὲ τὸν γωνοειδῆ καὶ εὐμεγέθη καὶ σκολιὸν καὶ ἰσοσκελῆ.<sup>3</sup> πικρὸν δὲ τὸν περιφερῆ καὶ λείον ἔχοντα σκολιότητα μέγεθος δὲ μικρόν. λιπαρὸν δὲ τὸν λεπτὸν καὶ στρογγύλον καὶ μικρόν.

<sup>1</sup> δὲ τὸν mss., corr. Schneider  
ειδῆ mss.: γωνιοειδῆ Schneider  
Link

<sup>2</sup> γωνοειδῆ Diels: κωνο-  
<sup>3</sup> οὐ σκαληνῇ Einarson-

**D161** (< A130) Theophr. *CP* 6.2.1

αὐτῶν γὰρ τῶν δυνάμεων οὕτως ἀποδιδούς<sup>1</sup> οἶεται τὰς αἰτίας ἀποδιδόναι, δι' αὐς ὁ μὲν στύφει καὶ ξηραίνει καὶ πῆγνυσιν, ὁ δὲ λεαίνει καὶ ὀμαλύνει καὶ καθίστησιν, ὁ δὲ ἐκκρίνει καὶ διαχεῖ καὶ ἄλλο τι τοιοῦτο δρᾷ [... = **R63**].

<sup>1</sup> ἀποδιδούς <τὰς διαφορὰς> Diels

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### **D160** (A129) Theophrastus, *Causes of Plants*

Democritus, who attributes a shape to each one [scil. of the flavors], makes sweet the round and good-sized flavor; sour, the one that is large-shaped, rough, polygonal, and devoid of roundness; acidic (*oxus*), as its name indicates, the one that is sharp (*oxus*) in its mass, angular, crooked, thin, and devoid of roundness; pungent, the one that is round, light, angular, and crooked; salty, the one that is angular, good-sized, twisted, and equal-sided; bitter, the one that is round and smooth, possessing crookedness and a small size; fatty, the one that is thin, round, and small.

### **D161** (< A130) Theophrastus, *Causes of Plants*

Having provided an explanation in this way [scil. by the shapes], he thinks that he has provided an explanation of the causes of the faculties themselves whereby the one [scil. flavor] is sour, dries out, and rigidifies, another smooths out, equalizes, and regularizes, and another expels, diffuses, and causes some other effect of this sort [. . .].

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*Reproduction (D162–D179)*

*Seed (D162–D168)*

**D162** (67 A35, 68 A140) Aët. 5.4.1 et 3 (Ps.-Plut.) [εἰ σῶμα τὸ σπέρμα]

[1] Λεύκιππος [. . .] σῶμα· ψυχῆς γὰρ εἶναι ἀπόσπασμα.

[3] [. . .] Δημόκριτος καὶ τὴν δύναμιν σῶμα· πνευματικὴ γάρ.

**D163** (B32)

**a** Stob. 3.6.28

ξυνουσίῃ ἀποπληξίῃ σμικρῇ· ἐξέσονται γὰρ ἄνθρωπος ἐξ ἀνθρώπου.

**b** Clem. Alex. *Paed.* 2.10.94.3–4

“μικρὰν ἐπιληψίαν” τὴν συνουσίαν ὁ Ἀβδηρίτης ἔλεγεν σοφιστῆς, νόσον ἀνίατον ἡγούμενος. ἥ γὰρ οὐχὶ καὶ ἐκλύσεις παρέπονται τῷ μεγέθει τῆς ἀπουσίας ἀνατιθέμεναι; “ἄνθρωπος γὰρ ἐξ ἀνθρώπου ἐκφύεται τε καὶ ἀποσπᾶται.”

**c** Ps.-Gal. *An animal sit* 5 (vol. 19, p. 176 Kühn)

φησὶ δὲ καὶ Δημόκριτος ἄνθρωπον ἐξ ἀνθρώπου ἐξέσυσσθαι καὶ κύνα ἐκ κυνὸς καὶ βοῦν ἐκ βοός.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*Reproduction (D162–D179)*

*Seed (D162–D168)*

**D162** (67 A35, 68 A140) Aëtius

[1] Leucippus [. . .]: [scil. the seed is] a body; for it is a fragment of the soul.

[3] [. . .] Democritus: also the power [scil. of the seed and not only its matter is] a body; for it is of the nature of air.

**D163** (B32)<sup>1</sup>

<sup>1</sup> We give four versions of a passage that was well known and often paraphrased in antiquity (see, besides the apparatus of DK, the texts collected by Leszl as 93.2.1–10).

**a** Stobaeus, *Anthology*

**Sexual intercourse is a small attack of apoplexy (*apoplêxiê*): for a human bursts out of a human.**

**b** Clement of Alexandria, *Pedagogue*

The sophist of Abdera called sexual intercourse **a small attack of epilepsy (*epilêpsiê*)**, considering it to be an incurable disease. For indeed is it not accompanied by feelings of faintness comparable to the magnitude of what is lost [i.e. the semen]? **For a human is born out of a human and is torn away from him.**

**c** Ps.-Galen, *Is What is in the Uterus Alive?*

And for his part Democritus says that **a human bursts out of a human**, and a dog out of a dog, and a bull out of a bull.

**d** (Ps.-?) Hippol. *Ref.* 8.14.4

“ἄνθρωπος ἐξ ἀνθρώπου ἐξέσονται,” φησίν, “καὶ ἀποσπᾶται πληγῇ τινι μεριζόμενος.”

**D164** (B124) Ps.-Galen. *Def. med.* 439

[. . .] καὶ Δημόκριτος [. . .] ἐξ ὅλου τοῦ σώματος, ὁ μὲν Δημόκριτος λέγων “ἄνθρωποι εἰς ἔσται καὶ ἄνθρωπος πάντες.”

**D165** (A141) Aët. 5.3.6 (Ps.-Plut.) [τίς ἡ οὐσία τοῦ σπέρματος]

Δημόκριτος ἀφ’ ὅλων τῶν σωμάτων καὶ τῶν κυριωτάτων μερῶν οἷον ὀστέων σαρκῶν καὶ ἰνῶν.<sup>1</sup>

<sup>1</sup> ὁ γόνος τῶν σαρκῶν καὶ ἰνῶν m, ὁ γόνος τῶν σαρκικῶν ἰνῶν MΠ, corr. Diels

**D166** (< A142) Aët. 5.5.1 (Ps.-Plut.) [εἰ καὶ αἱ θήλειαι προϋέονται σπέρμα]

[. . .] Δημόκριτος καὶ τὸ θῆλυ προϋέσθαι σπέρμα· ἔχει γὰρ παραστάτας ἀπεστραμμένους· διὰ τοῦτο καὶ ὄρεξιν ἔχει περὶ τὰς χρήσεις.

**D167** (B122a) *Etym. Gen.*

γυνή· [. . .] ἥ, ὡς Δημόκριτος, γονή τις οὖσα, ἡ γονῆς δεκτική.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

d (Ps.-?) Hippolytus, *Refutation of All Heresies*

**“A human bursts out of a human,”** he says, **“and is torn away from him** (*apospatai*), **being divided off by a kind of blow** (*plêgê*).”

**D164** (B124) Ps.-Galen, *Medical Definitions*

[. . .] and Democritus [. . .] [scil. say that the seed separates out] from the whole body; Democritus says, **“One will be humans and a human will be all.”**

**D165** (A141) Aëtius

Democritus: [scil. the seed comes] from the whole of bodies and from their principal parts, like the bones, flesh, and muscles.

**D166** (< A142) Aëtius

[. . .] Democritus: the female too emits a seed; for she has the [scil. spermatic] ducts inverted. And that is why she too has desire for sexual activities.

**D167** (B122a) *Etymologicum Genuinum*

**Woman** (*gunê*): [. . .] or, as Democritus, **because she is a kind of seed** (*gonê*), **she who receives the seed** (*gonê*).



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**D168** (A146) Arist. GA 4.4 769b30–36.

Δημόκριτος μὲν οὖν ἔφησε γίγνεσθαι τὰ τέρατα διὰ τὸ δύο γονὰς συμπίπτειν, τὴν μὲν πρότερον ὀρμήσαν τὴν δ' ὕστερον, καὶ ταύτην ἐξελθοῦσαν ἐλθεῖν εἰς τὴν ὑστέραν ὥστε συμφύεσθαι καὶ ἐπαλλάττειν τὰ μόρια. ταῖς δ' ὄρνισιν ἐπεὶ συμβαίνει ταχείαν γίνεσθαι τὴν ὀχείαν, ἀεὶ τὰ τ' ὦὰ καὶ τὴν χροῖαν αὐτῶν ἐπαλλάττειν φησίν.

### *Embryology (D169–D176)*

**D169** (A144) Arist. GA 2.4 740a35–37

[. . .] Δημόκριτός φησιν, ἵνα διαπλάττηται τὰ μόρια κατὰ τὰ μόρια τῆς ἐχούσης.

**D170** (A145) Arist. GA 2.4 740a13–15

[. . .] Δημόκριτος, τὰ ἔξω πρῶτον διακρίνεσθαι τῶν ζώων, ὕστερον δὲ τὰ ἐντός [. . .].

**D171** (A145) Censor. *Die nat.* 6.1

Democritus alvum cum capite, quae plurimum habent ex inani.

**D172** (< B148) Plut. *Am. prol.* 3 495E

ὁ γὰρ ὀμφαλὸς πρῶτον ἐν μήτρησιν, ὥς φησι Δημόκριτος, ἀγκυρηβόλιον σάλου καὶ πλάνης ἐμφύεται,

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### **D168** (A146) Aristotle, *Generation of Animals*

Democritus said that monstrous births were caused by two seeds meeting, the one impelled first, the other later. This one too enters into the womb after it is emitted, so that the parts grow together and become intermingled. And he says that in birds, since their copulation takes place rapidly, both the eggs and their colors are always intermingled.

### *Embryology (D169–D176)*

### **D169** (A144) Aristotle, *Generation of Animals*

[. . .] Democritus says [scil. that the animal remains in the womb] so that its parts can be fashioned according to the parts of the female that bears it.

### **D170** (A145) Aristotle, *Generation of Animals*

[. . .] Democritus [scil. says] that the external parts of animals are the first ones to be differentiated, and the internal ones later [. . .].

### **D171** (A145) Censorinus, *The Birthday*

Democritus [scil. says that what is formed first in the embryo is] the belly at the same time as the head: they have the most void.

### **D172** (< B148) Plutarch, *On Affection for Offspring*

The umbilical cord is the first thing, says Democritus, that develops in the womb, as an anchorage against fluctuation

## EARLY GREEK PHILOSOPHY VII

πείσμα καὶ κλήμα τῷ γεννωμένῳ<sup>1</sup> καρπῷ καὶ μέλ-  
λοντι.

<sup>1</sup>γενομένῳ mss., corr. Xylander

**D173** (A143) Arist. GA 4.1 764a6–10

Δημόκριτος δὲ ὁ Ἀβδηρίτης ἐν μὲν τῇ μητρὶ γίνεσθαι  
φησι τὴν διαφορὰν τοῦ θήλεος καὶ τοῦ ἄρρενος, οὐ  
μέντοι διὰ θερμότητά γε καὶ ψυχρότητα τὸ μὲν γίγνε-  
σθαι θήλυ τὸ δ' ἄρρεν, ἀλλ' ὁποτέρου ἂν κρατήσῃ τὸ  
σπέρμα τὸ ἀπὸ τοῦ μορίου ἐλθὼν ᾧ διαφέρουσιν ἀλ-  
λήλων τὸ θήλυ καὶ τὸ ἄρρεν.

**D174** (67 A36, 68 A143) Aët. 5.7.5 et 6 (Ps.-Plut.) [πῶς  
ἄρρενα γεννᾶται καὶ θήλεα]

[5] Δεύκιππος διὰ τὴν παραλλαγὴν τῶν μορίων καθ'  
ἣν ὁ μὲν καυλόν, ἡ δὲ μήτραν ἔχει· τοσοῦτον γὰρ  
μόνον λέγει.

[6] Δημόκριτος τὰ μὲν κοινὰ μέρη ἐξ ὁποτέρου ἂν  
τύχῃ, τὰ δ' ἰδιάζοντα καὶ<sup>1</sup> κατ' ἐπικράτειαν.

<sup>1</sup>καὶ del. Reiske

**D175** (< A144) Aët. 5.16.1 (Ps.-Plut.) [πῶς τρέφεται τὰ  
ἔμβρυα]

Δημόκριτος [. . .] τὸ ἔμβρυον ἐν τῇ μήτρᾳ διὰ τοῦ  
στόματος τρέφεσθαι, ὅθεν εὐθέως γεννηθὲν ἐπὶ τὸν

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

and wandering, a cable and stem for the fruit that is being generated and will go on to live.

### **D173** (A143) Aristotle, *Generation of Animals*

Democritus of Abdera says that it is in the mother that the difference between female and male is produced, but that it is not because of heat or cold that the one becomes a female and the other male, but depending on whether the seed of the one or of the other dominates that comes from that part by which female and male are differentiated from one another.

### **D174** (67 A36, 68 A143) Aëtius

[5] Leucippus: [scil. males and females are generated] by a modification of the parts, by virtue of which the male acquires a penis, the female a vagina. For that is all he says.  
[6] Democritus: the parts in common [scil. to both sexes] come from either the one [scil. parent] or the other, by chance, while the parts that are peculiar to each are also due to the dominance [scil. of one parent].

### **D175** (< A144) Aëtius

Democritus [. . .]: the embryo is nourished in the womb through its mouth. That is why, as soon as it is born, it

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μαστον φέρεται τῷ στόματι· εἶναι γὰρ καὶ ἐν τῇ μή-  
τρα θηλάς τινας καὶ στόματα, δι' ὧν τρέφεται.

**D176** (A152) Ael. *Nat. anim.* 12.17

ἐν τοῖς νοτίοις μᾶλλον ἐκπίπτειν τὰ ἔμβρυα Δημόκρι-  
τος λέγει ἢ ἐν τοῖς βορείοις, καὶ εἰκότως· χαννοῦσθαι  
γὰρ ὑπὸ τοῦ νότου τὰ σώματα ταῖς κνύσαις καὶ δι-  
ίστασθαι. ἅτε τοίνυν τοῦ σκήνους διακεχυμένου καὶ  
οὐχ ἡρμοσμένου, πλανᾶσθαι καὶ<sup>1</sup> τὰ κνύμενα<sup>2</sup> καὶ  
θερμαινόμενα δεῦρο καὶ ἐκεῖσε διολισθάνειν καὶ ἐκ-  
πίπτειν ῥᾶον· εἰ δὲ εἴη πάγος καὶ βορρᾶς καταπνέει,  
συμπέπηγε μὲν τὸ ἔμβρυον, δυσκίνητον δέ ἐστι καὶ  
οὐ ταράττεται ὥς ὑπὸ κλύδωνος, ἅτε δὲ ἄκλυστον καὶ  
ἐν γαλήνῃ ὄν, ἔρρωταί τε καὶ ἐστι σύντονον καὶ δι-  
αρκεῖ πρὸς τὸν κατὰ φύσιν χρόνον τῆς ζωογονίας.  
οὐκοῦν “ἐν κρυμῷ μέν” φησὶν ὁ Ἀβδηρίτης, “συμμέ-  
νει, ἐν ἀλέᾳ δὲ ὥς τὰ πολλὰ ἐκπτύεται.” ἀνάγκην δὲ  
εἶναι λέγει τῆς θερμῆς πλεοναζούσης διίστασθαι καὶ  
τὰς φλέβας καὶ τὰ ἄρθρα.

<sup>1</sup> καὶ del. Hercher

<sup>2</sup> κνύμενα mss., corr. Hercher

### *Resemblances (D177)*

**D177** (A143) Censor. *Die nat.* 6.5

utrius vero parentis principium sedem prius occupaverit,  
eius reddi naturam Democritus rettulit.

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moves toward the breast with its mouth. For in the womb too there are certain nipples and orifices by which it is nourished.

### D176 (A152) Aelian, *On the Nature of Animals*

Democritus says that embryos are born more in the south than in the north, and this is plausible. For the bodies of pregnant females are made porous and distended by the south wind. Since then **the body** (*skênos*) becomes relaxed and is not closely fitted, the embryos too wander here and there and, being heated, slip out and are born more easily. But if there is frost and the north wind blows, the embryo solidifies and, being less mobile, it is not agitated as though by waves but, being unsubmerged and in a sea-calm, it remains strong and is vigorous and can endure until the natural time of birth. And so, says the Abderite, **“in the cold it stays where it is, while in the heat it is most often spat out.”** And he says that necessarily, when it is very warm, the veins and joints too are distended.

### *Resemblances (D177)*

### D177 (A143) Censorinus, *The Birthday*

Democritus reports that the nature of that parent is reproduced whose principle was the first to occupy the place.

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### *Fertility and Sterility (D178–D179)*

**D178** (A149) Arist. GA 2.8 747a29–31

Δημόκριτος μὲν γάρ φησι διεφθάρθαι τοὺς πόρους τῶν ἡμιόνων ἐν ταῖς ὑστέραις διὰ τὸ μὴ ἐκ συγγενῶν γίνεσθαι τὴν ἀρχὴν τῶν ζώων [. . . cf. **EMP. R22**].

**D179** (A151) Ael. Nat. anim. 12.16

λέγει Δημόκριτος πολύγονα εἶναι ὕν καὶ κύνα, καὶ τὴν αἰτίαν προστίθῃσι λέγων ὅτι πολλὰς ἔχει τὰς μήτρας καὶ τοὺς τόπους τοὺς δεκτικούς τοῦ σπέρματος. ὁ τοίνυν θορὸς οὐκ ἐκ μιᾶς ὁρμῆς ἀπάσας αὐτὰς ἐκπληροῖ, ἀλλὰ δῖς τε καὶ τρὶς ταῦτα τὰ ζῶα ἐπιθόρυνται, ἵνα ἡ συνέχεια πληρώσῃ τὰ τοῦ γόνου δεκτικά. ἡμιόνους δὲ λέγει μὴ τίκτειν· μὴ γὰρ ἔχειν ὁμοίας μήτρας τοῖς ἄλλοις ζώοις, ἑτερομόρφους δέ, ἥκιστα δυναμένας γονὴν δέξασθαι· μὴ γὰρ εἶναι φύσεως ποίημα τὴν ἡμίονον, ἀλλὰ ἐπινοίας ἀνθρωπίνης καὶ τόλμης ὥς ἂν εἴποις μοιχιδίου<sup>1</sup> ἐπιτέχνημα τοῦτο καὶ κλέμμα. “δοκεῖ δέ μοι,” ἢ δ’ ὅς, “ὄνου ἵππον βιασαμένου<sup>2</sup> κατὰ τύχην κυῆσαι, μαθητὰς δὲ ἀνθρώπους τῆς βίας ταύτης γεγεννημένους εἶτα μέντοι προελθεῖν ἐπὶ τὴν τῆς γονῆς αὐτῶν συνήθειαν.” καὶ μάλιστα γε τοὺς τῶν Λιβύων ὄνους μεγίστους ὄντας ἐπιβαίνειν ταῖς ἵπποις οὐ κομώσαις ἀλλὰ κεκαρμέναις· ἔχουσα γὰρ τὴν ἑαυτῆς ἀγλαΐαν τὴν διὰ τῆς

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Fertility and Sterility (D178–D179)*

#### **D178** (A149) Aristotle, *Generation of Animals*

For Democritus says that the passages in the wombs of mules have been destroyed because at the beginning they were not born from animals of the same species.

#### **D179** (A151) Aelian, *On the Nature of Animals*

Democritus says that the pig and dog are prolific and he adds the cause, saying that they have many wombs and places receptive of seed. So a single copulation is not sufficient to fill them all up in only one impetus, but these animals copulate additionally two and three times so that the sequence fills up the receptacles of the seed. As for mules, he says that they do not give birth. For they do not have wombs similar to other animals', but ones of a different form, not at all capable of receiving seed. For the mule is not a product of nature, but rather an artificial supplement and theft deriving from a human inspiration and audacity one might call adulterous. **"It seems to me,"** he said, **"that after an ass had violated a mare she became pregnant by chance, and that humans learned from this violence and then progressed to the point of making their procreation a habit."** And indeed most of all the Libyans' asses, which are the largest in size, mount mares that are not long-maned but that have been shorn; for if she [i.e. the mare] possessed the splendor belonging to her that derives from her mane, she would

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<sup>1</sup> μοιχίδιον (μοσχ- A) mss., corr. Reiske

<sup>2</sup> ὄνον . . . βιασαμένον Diels: ὄνος . . . βιασαμένος mss.



## EARLY GREEK PHILOSOPHY VII

κόμης οὐκ ἂν ὑπομείναι<sup>3</sup> τὸν τοιόνδε γαμέτην, οἱ σο-  
φοὶ τοὺς τούτων γάμους φασίν.

<sup>3</sup> ὑπομείναι L<sup>pc</sup>: ὑπομείναι cett.

### *Medicine (D180–D183)*

**D180** (A159) Soran. *Gyn.* 3.17

ἡ ‘φλεγμονή’ κέκληται μὲν ἀπὸ τοῦ φλέγειν καὶ οὐχ  
ὥς ὁ Δημόκριτος εἶρηκεν ἀπὸ τοῦ αἵτιον εἶναι τὸ  
φλέγμα.

**D181** (< B120) Erot. *Lex. Hipp.*, p. 90.18

καὶ ὁ Δημόκριτος δὲ ‘φλεβοπαλίην’ καλεῖ τὴν τῶν  
ἀρτηριῶν κίνησιν.

**D182** (B135) Hesych.

δεξαμεναί· ὑδάτων δοχεῖα, καὶ ἐν τῷ σώματι φλέβες.  
Δημοκρίτου.

**D183** (B212) Stob. 3.6.27

ἡμερήσιοι ὕπνοι σώματος ὅχλησιν ἢ ψυχῆς ἀδημο-  
σύνην ἢ ἀργίην ἢ ἀπαιδευσίην σημαίνουσι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

not tolerate this kind of spouse, say the experts in their espousals.

### *Medicine (D180–D183)*

**D180** (A159) Soranus, *Gynecology*

**‘Phlegmonê’** (‘inflamed tumor’) received its name from *phlegein* (‘to inflame’) and not, as Democritus said, from the fact that its cause is phlegm.

**D181** (< B120) Erotian, *Hippocratic Lexicon*

Democritus calls the movement of the arteries **‘the beating of the pulse.’**

**D182** (B135) Hesychius, *Lexicon*

**dexamenai** (literally, “receivers,” feminine): containers for fluids, and the veins in the body. From Democritus.

**D183** (B212) Stobaeus, *Anthology*

*Sleeping during the day indicates a disturbance in the body, or distress or indolence or lack of education in the soul.*

## EARLY GREEK PHILOSOPHY VII

*Animals (D184–D198)*

*The Intelligence of Animals (D184)*

**D184** ( $\neq$  DK) Porph. *Abst.* 3.6.7

[. . .] Δημόκριτος τε καὶ [. . .] ἔγνωσαν τὸ μετέχον τοῦ λόγου.

*Animal Physiology (D185–D198)*

*Dentition (D185–D186)*

**D185** (A147) Arist. *GA* 5.8 788b9 et 12–14

ἔρρηκε μὲν οὖν περὶ αὐτῶν καὶ Δημόκριτος [. . .]. φησὶ γὰρ ἐκπίπτειν μὲν διὰ τὸ πρὸ ὥρας γίνεσθαι τοῖς ζώοις· ἀκμαζόντων γὰρ ὥς εἰπεῖν φύεσθαι κατὰ γε φύσιν· τοῦ δὲ πρὸ ὥρας γίνεσθαι τὸ θηλάζειν αἰτιᾶται.

**D186** ( $<$  98.3 Leszl) Arist. *GA* 5.8 788b24–25 et 28

**a**

εἰ οὖν συνέβαινεν, ὥς ἐκεῖνος λέγει, πρὸς ἡβην [. . . = R67b].

**b**

βία δέ φησι συμβαίνειν τὴν γένεσιν τῶν ὀδόντων.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*Animals (D184–D198)*

*The Intelligence of Animals (D184)*

**D184** (≠ DK) Porphyry, *On Abstinence*

[. . .] Democritus and [. . .] recognized that they [i.e. animals] have a share in reason.

*Animal Physiology (D185–D198)*

*Dentition (D185–D186)*

**D185** (A147) Aristotle, *Generation of Animals*

Democritus too has spoken about these [i.e. milk teeth] [. . .]. For he says that they fall out because they appear prematurely in animals. For when these have attained their full vigor, they [i.e. the teeth] grow as it were according to nature. Their premature appearance, he says, is caused by suckling.

**D186** (≠ DK) Aristotle, *Generation of Animals*

**a**

If it [scil. the eruption of the permanent teeth] occurred, as he [i.e. Democritus] says, at puberty [. . .].

**b**

He says that the generation of the teeth occurs by force.

## EARLY GREEK PHILOSOPHY VII

### *Viscera (D187)*

**D187** (< A148) Arist. *PA* 3.4 665a28–33

Δημόκριτος [. . .] ὥθη διὰ μικρότητα τῶν ἀναίμων  
ζώων ἄδηλα εἶναι ταῦτα.

### *Visual Organs (D188–D189)*

**D188**

**a** (A156) Ael. *Nat. anim.* 5.39

λέγει Δημόκριτος τῶν ζώων μόνον τὸν λέοντα ἐκ-  
πεπταμένοις τίκτεσθαι τοῖς ὀφθαλμοῖς ἤδη τρόπον  
τινὰ τεθυμωμένον καὶ ἐξ ὠδίνων δρασεύοντά τι γεννι-  
κόν.

**b** (< 99.4.2 Leszl) Eust. *In Il.* 11.554, vol. 3, p. 252.7–8

[. . .] οὐδὲ μύει κοιώμενος, ὥς δὲ Δημόκριτός φησι,  
οὐδὲ τικτόμενος [. . .].

**D189** (< A157) *Etym. Mag.* s.v. γλαύξ (p. 233.12–18  
Gaisford)

Δημόκριτος δὲ ἱστορεῖ ὅτι μόνον τῶν γαμφωνύχων  
καὶ σαρκοφάγων μὴ τυφλὰ τίκτει, ὅτι πολὺ τὸ πυρῶ-  
δες καὶ θερμὸν περὶ τοὺς ὀφθαλμοὺς ἔχει, ὃ σφοδρῶς  
ὀξὺ καὶ τμητικὸν ὑπάρχον διαιρεῖ καὶ ἀναμίγνυσιν τὴν  
ὄρασιν διὸ καὶ ἐν ταῖς σκοτομήνησιν ὀρᾷ διὰ τὸ πυ-  
ρῶδες τῶν ὀφθαλμῶν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Viscera (D187)*

#### **D187** (< A148) Aristotle, *Parts of Animals*

Democritus [. . .] thought that these [i.e. the viscera] are not visible because of the smallness of the bloodless animals.

### *Visual Organs (D188–D189)*

#### **D188**

##### **a** (A156) Aelian, *On the Nature of Animals*

Democritus says that the lion, alone among animals, is born with its eyes wide open, since already at its birth it is in a certain way full of ferocity and wants to accomplish something noble.

##### **b** (≠ DK) Eustathius, *Commentary on Homer's Iliad*

[. . .] it [i.e. the lion] does not close its eyes when it sleeps, nor, as Democritus says, when it is born [. . .].

#### **D189** (< A157) *Etymologicum Magnum*

Democritus reports that, alone among the taloned and carnivorous ones [i.e. birds], it [i.e. the owl] does not give birth to young that are blind, because in its eyes it has much fire and heat which, being very sharp and cutting, divides [scil. the object of their vision] and blends their vision [scil. with this object].<sup>1</sup> And this is why it sees even in moonless nights, because of the fieriness of its eyes.

<sup>1</sup> The expression of this last phrase is elliptical and its meaning uncertain.

## EARLY GREEK PHILOSOPHY VII

### *Horns and Other Secretions (D190–D193)*

**D190** (A153) *Ael. Nat. anim.* 12.18

αἰτίαν δὲ ὁ αὐτὸς λέγει τοῖς ἐλάφοις τῆς τῶν κεράτων ἀναφύσεως ἐκείνην εἶναι. ἡ γαστήρ αὐτοῖς ὥς ἐστι θερμοτάτη ὁμολογεῖ, καὶ τὰς φλέβας δὲ αὐτῶν τὰς διὰ τοῦ σώματος πεφυκίας παντὸς ἀραιοτάτας λέγει, καὶ τὸ ὁστέον τὸ κατειληφὸς τὸν ἐγκέφαλον λεπτότατον εἶναι καὶ ὑμενῶδες καὶ ἀραιόν, φλέβας τε ἐντεῦθεν καὶ ἐς ἄκραν τὴν κεφαλὴν ὑπανίσχειν παχυτάτας. τὴν γοῦν τροφήν καὶ ταύτης γε τὸ γονιμώτατον ὥκιστα ἀναδίδοσθαι καὶ ἡ μὲν πιμελὴ αὐτοῖς ἔξωθεν φησι περιχεῖται, ἡ δὲ ἰσχὺς τῆς τροφῆς ἐς τὴν κεφαλὴν διὰ τῶν φλεβῶν ἀναθόρνυται. ἐνθεν οὖν τὰ κέρατα ἐκφύεσθαι διὰ πολλῆς ἐπαρδόμενα τῆς ἱκμάδος. συνεχῆς οὖν οὕσα ἐπιρρέουσά τε ἔξωθελί τὰ πρότερα. καὶ τὸ μὲν ὑπερίσχον ὑγρὸν ἔξω τοῦ σώματος σκληρὸν γίνεται, πηγνύντος αὐτὸ καὶ κερατοῦντος τοῦ αέρος, τὸ δὲ ἔνδον ἔτι μεμνκὸς ἀπαλὸν ἐστι. καὶ τὸ μὲν σκληρύνεται ὑπὸ τῆς ἔξωθεν ψύξεως, τὸ δὲ ἀπαλὸν μένει ὑπὸ τῆς ἔνδον ἀλέας. οὐκοῦν ἡ ἐπίφυσις τοῦ νέου κέρατος τὸ πρεσβύτερον<sup>1</sup> ὥς ἀλλότριον ἔξωθελί, θλίβοντος τοῦ ἔνδοθεν καὶ ἀνωθεῖν τοῦτο ἐθέλοντος καὶ ὀδυνῶντος καὶ σφύζοντος, ὥσπερ οὖν ἐπιγομένου τεχθῆναι καὶ προελθεῖν. ἡ γάρ τοι ἱκμάς πηγνυμένη καὶ ὑπανατέλλουσα ἀτρεμεῖν ἀδύνατός ἐστι γίνεται γὰρ καὶ αὐτὴ σκληρὰ καὶ ἐπωθεῖται τοῖς

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Horns and Other Secretions (D190–D193)*

#### **D190** (A153) Aelian, *On the Nature of Animals*

The same man [i.e. Democritus] says that the cause for the growth of horns on deer is this: he accepts that their stomach is very warm, and he says that the blood vessels that extend throughout their whole body are very fine and that the bone that contains their brain is very thin, like a veil and porous, and that very thick blood vessels arise from there and go to the top of the head. Their food, and of this the most productive part, is diffused very rapidly, and, he says, the soft fat spreads outward in them while the strength of the food leaps up into the head through the blood vessels. So it is from there that the horns grow, since they are irrigated by abundant liquid. Now, since this is continuous and keeps flowing, it extrudes the earlier parts. And the excess liquid becomes hard on the outside of the body, as the air solidifies it and turns it into horn, while the part remaining hidden inside is soft. And the one part becomes hard by the effect of the external cold, while the other remains soft by that of the internal warmth. The further growth of the new horn extrudes the older one as though it were a foreign body, while the interior exerts pressure and tends to make this rise up, causes pain, and throbs as though it desired to be born and leave. For the liquid, solidifying and rising up from below, is not able to remain immobile; for it too becomes hard and is extruded by the earlier parts. And most often they are expelled by

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<sup>1</sup> *πρεσβύτατον* mss., corr. Hercher



## EARLY GREEK PHILOSOPHY VII

προτέροις. καὶ τὰ μὲν πλείω ἐκθλίβεται ὑπὸ τῆς  
 ἰσχύος τῆς ἔνδον, ἥδη δέ τινα καὶ κλάδοις περισχε-  
 θέντα καὶ ἐμποδίζοντα ἐς τὸν ὠκὺν δρόμον ὑπὸ ῥύμης<sup>2</sup>  
 τὸ θηρίον ὠθούμενον ἀπήραξε. καὶ τὰ μὲν ἐξώλισθε,  
 τὰ δὲ ἔτοιμα ἐκκύπτειν ἢ φύσις προάγει.

<sup>2</sup> ῥώμης mss., corr. Gesner

### D191 (A154) Ael. Nat. anim. 12.19

οἱ τομῖαι βόες, Δημόκριτος λέγει, σκολιὰ καὶ λεπτὰ  
 καὶ μακρὰ φύεται τὰ κέρατα αὐτοῖς, τοῖς δὲ ἐνόρχοις  
 παχέα τὰ πρὸς τῇ ῥίζῃ καὶ ὀρθὰ καὶ πρὸς μῆκος  
 προήκοντα ἦττον. καὶ πλατυμετώπους εἶναι λέγει τού-  
 τους τῶν ἐτέρων πολὺ μᾶλλον· τῶν γὰρ φλεβῶν πολ-  
 λῶν ἐνταῦθα οὐσῶν, εὐρύνεσθαι τὰ ὀστέα ὑπ' αὐτῶν.  
 καὶ ἡ ἔκφυσις δὲ τῶν κεράτων παχυτέρα οὔσα ἐς πλά-  
 τος τὸ αὐτὸ τῷ ζῳῳ μέρος προάγει καὶ ἐκείνη· οἱ δὲ  
 τομῖαι μικρὸν ἔχοντες τὸν κύκλον τῆς ἑδρας τῆς τῶν  
 κεράτων πλατύνονται ἦττόν φησιν.

### D192 (A155) Ael. Nat. anim. 12.20

οἱ δὲ ἄκερῳ ταῦροι τὸ τενθρηγιῶδες<sup>1</sup> (οὕτω δὲ ὀνομά-  
 ζει Δημόκριτος) ἐπὶ τοῦ βρέγματος οὐκ ἔχοντες (εἶη  
 δ' ἂν τὸ σηραγγῶδες λέγων) ἀντιτύπου τοῦ παντὸς  
 ὄντος ὁστέου καὶ τὰς συρροίας τῶν χυμῶν οὐ δεχο-  
 μένου γυμνοί τε καὶ ἄμοιροι γίνονται τῶν ἀμυντη-  
 ρίων. καὶ αἱ φλέβες δὲ αἱ κατὰ τοῦ ὁστέου τοῦδε

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

the internal strength, but sometimes the animal, driven by its own impetus, breaks them off when they are caught in branches and prevent it from running quickly. And some slip out, while nature brings out those that are ready to peep out.

### D191 (A154) Aelian, *On the Nature of Animals*

With regard to castrated bulls, says Democritus, their horns grow curved, thin, and long, while those of uncastrated ones are thick at the base, straight, and shorter. And he says that the latter have a much broader forehead than the former. For since there are many vessels in this place, the bones become wider because of them. And the outgrowth of the horns too, being thicker, makes this part of the animal grow broader too; while the castrated ones, since the circle of the emplacement of their horns is smaller, become less broad, he says.

### D192 (A155) Aelian, *On the Nature of Animals*

Bulls without horns, since they do not have the front part of their head **honeycombed** (this is what Democritus calls it, presumably referring to its porosity), and so the whole bone being resistant and not receptive of the combined flow of fluids, are defenseless and deprived of protection. And the vessels leading to this bone, being less

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<sup>1</sup> θρηνηῶδες vel θρινῶδες mss., corr. J. G. Schneider

## EARLY GREEK PHILOSOPHY VII

ἀτροφώτεραι οὔσαι λεπτότεραί τε καὶ ἀσθενέστεραι γίνονται. ἀνάγκη δὲ καὶ ξηρότερον τὸν αὐχένα τῶν ἀκεράτων εἶναι. λεπτότεραι γὰρ καὶ αἱ τούτου φλέβες. ταύτη τοι καὶ ἐρρωμέναι ἦττον. ὅσαι δὲ Ἀράβιοι βόες θήλειαι μὲν εἰσι τὸ γένος, εὐφνεῖς δὲ τὰ κέρατα, καὶ ταύταις ἢ γέ<sup>2</sup> πολλὴ ἐπίρροια τῶν χυμῶν, φησί, τροφή τῆς εὐγενοῦς βλάστης τοῖς κέρασιν ἐστίν. ἄκρω δὲ καὶ αὗται ὅσαι τὸ δεκτικὸν τῆς ἱκμάδος ὁστέον στερεώτερόν τε ἔχουσι καὶ δέχεσθαι τοὺς χυμοὺς ἠκιστον. καὶ συνελόντι εἰπεῖν αὕξης ἢ ἐπιρροῇ αἰτία τοῖς κέρασιν ταύτην δὲ ἄρα ἐποχετεύουσι φλέβες πλείσταί τε καὶ παχύταται καὶ ὑγρὸν κύουσai ὅσον καὶ δύνανται στέγειν.

<sup>2</sup> ἢ γε Hercher: ἢ τε P: τις LA: τῇ H

### D193 (< A150)

**a** Arist. *HA* 9.39 623a30–33

δύνανται δ' ἀφιέναι οἱ ἀράχναι τὸ ἀράχνιον [. . .], οὐκ ἔσωθεν ὥς ὃν περίττωμα, καθάπερ φησὶ Δημόκριτος [. . .].

**b** Plin. *Nat. hist.* 11.80

[. . .] tantique operis materiae uterus ipsius sufficit, sive ita corrupta alvi natura stato tempore, ut Democrito placet, sive [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

nourished, are thinner and weaker. Necessarily, too, the neck of hornless animals is drier. For the vessels of this kind of animal are thinner, and hence less robust. But all the bovids of Arabia are female in sex but are supplied with fine horns by nature; and among these it is the abundant afflux of fluids, he says, that nourishes a majestic growth of horns. But all those are hornless whose liquid-receiving bone is too hard and less able to receive fluids. And summarizing, the cause of the growth of horns is the afflux. And this is caused by irrigation by the most numerous and thickest vessels, which become impregnated with as much moisture as they are able to contain.

### **D193** (< A150)

**a** Aristotle, *History of Animals*

Spiders are capable of producing their web [. . .], not from inside as though it were a residue, as Democritus says [. . .].

**b** Pliny, *Natural History*

[. . .] its [i.e. a third kind of spider's] own abdomen supplies enough material for such a large-scale work, whether because, as Democritus supposes, at a certain moment the natural matter within its bowels is corrupted in this way, or [. . .].

## EARLY GREEK PHILOSOPHY VII

### *Birds (D194–D195)*

**D194** (A158) Cic. *Div.* 2.26.57

Democritus quidem optumis verbis causam explicat cur ante lucem galli canant: depulso enim de pectore et in omne corpus diviso et mitificato cibo cantus edere quiete satiatos.

**D195** (< B22) Porph. *Quaest. Hom.* 1.274.9–12 ad *Il.* 21.252

[. . .] Δημόκριτον ἱστορεῖν ἐπὶ τοῦ ἀετοῦ τὰ ὅσα μέλανα εἶναι [. . .].

### *Invertebrates (D196)*

**D196** (< B126) Gal. *Diff. puls.* 1.25

[. . .] καθάπερ καὶ Δημόκριτος λέγει πον περὶ τῶν τοιούτων διαλεγόμενος τῶν “ὅσα κυματοειδῶς ἀνὰ τὴν πορείαν πλάζεται.”

### *Fish (D197–D198)*

**D197** (< A155a) Ael. *Nat. anim.* 9.64

λέγει [. . .] Δημόκριτος [. . .] μὴ τῷ ἁλμυρῷ τρέφεσθαι τοὺς ἰχθύς, ἀλλὰ τῷ παρακειμένῳ<sup>1</sup> τῇ θαλάττῃ γλυκεῖ ὕδατι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Birds (D194–D195)*

#### **D194** (A158) Cicero, *On Divination*

Democritus provides an excellent explanation for why roosters crow before daybreak: for when their food has left the stomach and has been distributed through the whole body and has been well digested, they are satiated and serene, and they emit songs.

#### **D195** (< B22) Porphyry, *Homeric Questions*

[. . .] Democritus reports about the eagle that its bones are black [. . .].

### *Invertebrates (D196)*

#### **D196** (< B126) Galen, *On the Difference in Pulses*

[. . .] as Democritus says when discussing [scil. animals] of this sort [scil. worms] , **“all those that wander about proceeding with a wave-like motion.”**

### *Fish (D197–D198)*

#### **D197** (< A155a) Aelian, *On the Nature of Animals*

[. . .] Democritus [. . .] says that fish are nourished not by salty water but by the sweet water that exists next to it in the sea.

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<sup>1</sup> παραμεμιγμένῳ Hercher

## EARLY GREEK PHILOSOPHY VII

**D198** (< A155b) Theophr. *Pisc.* 12

[. . .] εἰκὸς δὲ μάλλον καὶ τοῖς ὀρυκτοῖς καὶ τοῖς ἐτέροις, τοῖς μὲν ἀπλῶς,<sup>1</sup> τοῖς δ' ὡς ἀμφιβίοις κατὰ Δημόκριτον, ὃ καὶ ἐπ' ἄλλων συμβαίνει [. . .].

<sup>1</sup> ἀπλοῖς ms., corr. Schneider

### *Plants (D199–D201)*

**D199** (< 59 A116) Plut. *Quaest. nat.* 911D

ζῶον γὰρ ἔγγαιον τὸ φυτόν εἶναι οἱ περὶ [. . . cf. **ANAXAG. D93**] καὶ Δημόκριτον οἴονται.

**D200** (31 A70, cf. 68 A163) Nic. Dam. *Plant.* 1.10, p. 129  
Drossaart Lulofs (cf. Ps.-Arist. *Plant.* 1.1 815b17–18)

فأما أنكساغورس وهمفدوقلس وديمقراطيس فزعموا أن للنبات عقلا وفهما.

**D201** (A162) Theophr. *CP*

**a** 2.11.7–8

[7] ὥς δὲ Δημόκριτος αἰτιᾶται τὰ εὐθέα τῶν σκολιῶν βραχυβιώτερα καὶ πρωῒβλαστώτερα διὰ τὰς αὐτὰς ἀνάγκας εἶναι (τοῖς μὲν γὰρ ταχὺ διαπέμπεσθαι τὴν τροφήν ἀφ' ἧς ἡ βλάστησις καὶ οἱ καρποί, τοῖς δὲ βραδέως διὰ τὸ μὴ εὖρονν εἶναι τὸ ὑπὲρ γῆς, ἀλλ' αὐτὰς τὰς ρίζας ἀπολαύειν· καὶ γὰρ μακρόρριζα ταῦτα εἶναι καὶ παχύρριζα), δόξειεν ἂν οὐ καλῶς λέ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D198 (< A155b) Theophrastus, *On Fishes*

This [i.e. that they live in their natural place] is more plausible in those [scil. fish] that dig themselves [scil. into the sand] and of the others [scil. that live on dry land]—for the former, purely and simply; for the latter, inasmuch as they are ‘**amphibious**,’ according to Democritus, something that is also the case for others as well [. . .].

### *Plants (199–D201)*

### D199 (< 59 A116) Plutarch, *Natural Questions*

Democritus and [. . .] and their disciples think that a plant is an animal in the ground.

### D200 (31 A70, cf. 68 A163) Nicolaus of Damascus, *On Plants*

Anaxagoras, Empedocles and Democritus maintained that plants possess reason and understanding.<sup>1</sup>

<sup>1</sup>Translated by H. J. Drossaart Lulofs.

### D201 (A162) Theophrastus, *Causes of Plants*

**a**

[7] The way in which Democritus explains by the same necessities the cause of the fact that those [scil. trees of which the wood is] straight live less long and bud earlier than those [scil. of which the wood is] curved—namely that in the former the nourishment from which the foliage and fruits come passes through quickly, but slowly in the latter, since the part above the ground does not have **an easy passage**, but the roots themselves consume it (for these have roots that are long and thick)—does not seem



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γειν. [8] καὶ γὰρ τὰς ρίζας ἀσθενεῖς φησιν εἶναι τῶν εὐθέων, ἐξ ὧν ἀμφοτέρων θάττον γίνεσθαι τὴν φθοράν· ταχὺ γὰρ ἐκ τοῦ ἄνω διέναι καὶ τὸ ψῦχος καὶ τὴν ἀλέαν ἐπὶ τὰς ρίζας διὰ τὴν εὐθυπορίαν, ἀσθενεῖς δ' οὔσας οὐχ ὑπομένειν· ὅλως δὲ τὰ πολλὰ τῶν τοιούτων κάτωθεν ἄρχεσθαι γηράσκειν διὰ τὴν ἀσθένειαν τῶν ριζῶν. ἔτι δὲ τὰ ὑπὲρ γῆς διὰ τὴν λεπτότητα καμπτόμενα ὑπὸ τῶν πνευμάτων κινεῖν τὰς ρίζας· τούτου δὲ συμβαίνοντος ἀπορρήγνυσθαι καὶ πηροῦσθαι καὶ ἀπὸ τούτων τῷ ὅλῳ δένδρῳ γίγνεσθαι<sup>1</sup> τὴν φθοράν. ἃ μὲν οὖν λέγει ταῦτά ἐστιν.

<sup>1</sup> γίγνεσθαι Wimmer: πηγνυσθαι mss.: ῥήγνυσθαι <καὶ τῷ δένδρῳ γίγνεσθαι> Diels

### b 1.8.2

[. . .] πότερα κατὰ τὰς εὐθύτητας τῶν πόρων ληπτέον, ὥσπερ Δημόκριτος (εὗρους γὰρ ἡ φορὰ καὶ ἀνεμπόδιστος, ὥς φησιν) [. . .].

*Mankind: Technology, Forms of Knowledge, and  
Representations (D202–D224)  
The Development of Civilization and  
Technology (D202–D204)*

**D202** (< B5) Diod. Sic. 1.8.1–9

[. . . cf. **D129**] [1] τοὺς δὲ ἐξ ἀρχῆς γεννηθέντας τῶν ἀνθρώπων φασὶν ἐν ἀτάκτῳ καὶ θηριώδει βίῳ καθε-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

to be correct. [8] For he says that the roots of straight trees are weak too. For both of these reasons [scil. the easiness of the passage and the weakness of the roots] they are destroyed more rapidly. For both cold and heat pass rapidly from the upper part to the roots because of the straightness of the passage, and since they are weak they do not offer resistance. In general, most of these species begin to grow old from below because of the weakness of their roots. Furthermore, the parts above the ground, being bent by the winds because of their thinness, shake the roots, and when this happens these are broken off and mutilated, and starting from these destruction comes about for the whole tree. This then is what he says.

### b

[. . .] whether one should take the straightness of the passages [scil. for determining whether trees grow quickly or slowly], like Democritus (for then the motion is **easy-flowing** and unobstructed, as he says) [. . .].

*Mankind: Technology, Forms of Knowledge, and  
Representations (D202–D224)  
The Development of Civilization and  
Technology (D202–D204)*

**D202** (< B5) Diodorus Siculus

[. . .] [1] they say that the first men to be born in the beginning, leading a disordered and bestial life, dispersed and

στῶτας σποράδην ἐπὶ τὰς νομας ἐξιέναι καὶ προσφέρεισθαι τῆς τε βοτάνης τὴν προσηνεστάτην καὶ τοὺς αὐτομάτους ἀπὸ τῶν δένδρων καρπούς. [2] καὶ πολεμουμένους μὲν ὑπὸ τῶν θηρίων ἀλλήλοις βοηθεῖν ὑπὸ τοῦ συμφέροντος διδασκομένους, ἀθροιζομένους δὲ διὰ τὸν φόβον ἐπιγινώσκειν ἐκ τοῦ κατὰ μικρὸν τοὺς ἀλλήλων τύπους.

[3] τῆς φωνῆς δ' ἀσήμεν καὶ συγκεχυμένης οὔσης ἐκ τοῦ κατ' ὀλίγον διαρθροῦν τὰς λέξεις, καὶ πρὸς ἀλλήλους τιθέντας σύμβολα περὶ ἐκάστου τῶν ὑποκειμένων γνώριμον σφίσιν αὐτοῖς ποιῆσαι τὴν περὶ ἀπάντων ἐρμηνείαν. [4] τοιούτων δὲ συστημάτων γινομένων καθ' ἅπασαν τὴν οἰκουμένην, οὐχ ὁμόφωνον πάντας ἔχειν τὴν διάλεκτον, ἐκάστων ὡς ἔτυχε συνταξάντων τὰς λέξεις· διὸ καὶ παντοίους τε ὑπάρξαι χαρακτήρας διαλέκτων καὶ τὰ πρῶτα γενόμενα συστήματα τῶν ἀπάντων ἐθνῶν ἀρχέγονα γενέσθαι.

[5] τοὺς οὖν πρώτους τῶν ἀνθρώπων μηδεὶνὸς τῶν πρὸς βίον χρησίμων εὐρημένου ἐπιπόνως διάγειν, γυμνοὺς μὲν ἐσθήτος ὄντας, οἰκήσεως τε καὶ πυρὸς ἀήθεις, τροφῆς δ' ἡμέρου παντελῶς ἀνεγνωήτους. [6] καὶ γὰρ τὴν συγκομιδὴν τῆς ἀγρίας τροφῆς ἀγνοοῦντας μηδεμίαν τῶν καρπῶν εἰς τὰς ἐνδείας ποιεῖσθαι παράθεσιν· διὸ καὶ πολλοὺς αὐτῶν ἀπόλλυσθαι κατὰ τοὺς χειμῶνας διὰ τε τὸ ψῦχος καὶ τὴν σπάνιν τῆς τροφῆς. [7] ἐκ δὲ τοῦ<sup>1</sup> κατ' ὀλίγον ὑπὸ τῆς πείρας διδασκομένους εἰς τε τὰ σπήλαια καταφεύγειν ἐν τῷ χειμῶνι καὶ τῶν καρπῶν τοὺς φυλάττεσθαι δυναμέ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

went out to the pastures and nourished themselves with the healthiest herbs and the fruits that grew spontaneously on the trees. [2] When they were attacked by wild animals, they came to one another's help, being taught by utility, and, gathering together out of fear, they gradually came to recognize one another's features.

[3] Their voices being meaningless and confused, they gradually articulated their words, and establishing in accord with one another signs regarding each object, they made understandable to one another their way of expressing all things. [4] Since groups of this sort came into being throughout the whole of the inhabited world, they did not all have the same language, since each one organized the words according to the circumstances. And that is why the characters of the various languages are so different and how the first groups that came into being came to be the original ancestors of all the nations.

[5] Now the first men lived wretchedly, since none of the things useful for life had been discovered: they were bare of clothing, ignorant of dwellings and fire, completely unaware of domestic food. [6] Indeed, knowing nothing of the communal provision of wild food, they made no reserves of fruits against eventual need. And that is why many of them died during the winters, because of cold and scarcity of food. [7] But being taught gradually by experience, they took refuge in caves during the winter and stored away those fruits that could be conserved.

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<sup>1</sup> τοῦ Schäfer: τοῦτου mss.

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νοὺς ἀποτίθεσθαι. [8] γνωσθέντος δὲ τοῦ πυρὸς καὶ τῶν ἄλλων τῶν χρησίμων κατὰ μικρὸν καὶ τὰς τέχνας εὗρεθῆναι καὶ τᾶλλα τὰ δυνάμενα τὸν κοινὸν βίον ὠφελῆσαι. [9] καθόλου γὰρ πάντων τὴν χρεῖαν αὐτὴν διδάσκαλον γενέσθαι τοῖς ἀνθρώποις, ὑφηγουμένην οἰκείως τὴν ἐκάστου μάθησιν εὐφυνεῖ ζῶν καὶ συνεργοὺς ἔχοντι πρὸς ἅπαντα χεῖρας καὶ λόγον καὶ ψυχῆς ἀγχίνοιαν.

**D203** (< B154) Plut. *Soll. anim.* 20 974A

[. . .] τὰ ζῶα [. . .] ὧν ὁ Δημόκριτος ἀποφαίνει μαθητὰς ἐν τοῖς μεγίστοις γεγονότας ἡμᾶς· ἀράχνης <ἐν><sup>1</sup> ὑφαντικῇ καὶ ἀκεστικῇ, χελιδόνος ἐν οἰκοδομίᾳ, καὶ τῶν λιγυρῶν, κύκνου καὶ ἀηδόνος, ἐν ὧδῃ κατὰ μίμησιν.

<sup>1</sup> <ἐν>Xylander

**D204** (< B144) Philod. *Music.* 4.23 (Col. 150.29–39 Delattre)

Δημόκριτος [. . . = **P43**] μουσικὴν | φησι νεωτέραν εἶναι καὶ | τὴν αἰτίαν [ἀπ]οδίδωσι λέγων μὴ ἀπ' ἐκείνο[υ] τὰ νῆα γκαῖον, [ἀ]λλὰ ἐκ τοῦ περικυβερνήτου ἤδη [γ]ενέσθαι.

*Language (D205–D206)*

**D205** (< B26) Procl. *In Crat.* 16, pp. 6.20–7.6

ὁ δὲ Δημόκριτος θέσει λέγων τὰ ὀνόματα διὰ τεσσ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

[8] Once fire and other useful things came to be known, the crafts were gradually discovered, and everything else that can assist life in common. [9] For in general, it was need itself that taught humans all things, and that supplied instruction about everything in an appropriate way for a creature that was well endowed by nature and possessed hands, reason (*logos*), and subtlety of mind to assist in everything.<sup>1</sup>

<sup>1</sup> Cf. D129, n. 1.

**D203** (< B154) Plutarch, *On the Cleverness of Animals*

[. . .] animals [. . .] of which Democritus affirms that we have been the pupils in the most important matters: of the spider for weaving and mending; of the swallow for house building, of the singing birds, the swan and nightingale, for song, by imitation.

**D204** (< B144) Philodemus, *On Music*

Democritus says that music is more recent and gives the reason for this, saying that **it was not necessity starting at that time** [scil. that caused it], **but it came into being when there was already overabundance.**

*Language (D205–D206)*<sup>1</sup>

<sup>1</sup> Some scholars think that this and the following text are to be attributed to a different Democritus, a Platonist who lived in the third century AD.

**D205** (< B26) Proclus, *Commentary on Plato's Cratylus*

Democritus, who said that names are arbitrary (*thesei*),

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σάρων ἐπιχειρημάτων τοῦτο κατεσκεύαζεν· ἐκ τῆς ὁμωνυμίας· τὰ γὰρ διάφορα πράγματα τῷ αὐτῷ καλοῦνται ὀνόματι, οὐκ ἄρα φύσει τὸ ὄνομα· καὶ ἐκ τῆς πολυωνυμίας· εἰ γὰρ τὰ διάφορα ὀνόματα ἐπὶ τὸ αὐτὸ καὶ ἐν πρᾶγμα ἐφαρμόσουσιν, καὶ ἐπάλληλα, ὅπερ ἀδύνατον· τρίτον ἐκ τῆς τῶν ὀνομάτων μεταθέσεως· διὰ τί γὰρ τὸν Ἀριστοκλέα μὲν Πλάτωνα, τὸν δὲ Τύρταμον Θεόφραστον μετωνομάσαμεν, εἰ φύσει τὰ ὀνόματα; ἐκ δὲ τῆς τῶν ὁμοίων ἐλλείψεως· διὰ τί ἀπὸ μὲν τῆς φρονήσεως λέγομεν φρονεῖν, ἀπὸ δὲ τῆς δικαιοσύνης οὐκέτι παρονομάζομεν; τύχη ἄρα καὶ οὐ φύσει τὰ ὀνόματα. καλεῖ δὲ ὁ αὐτὸς τὸ μὲν πρῶτον ἐπιχείρημα πολύσημον, τὸ δὲ δεύτερον ἰσόρροπον, <τὸ δὲ τρίτον μετώννυμον><sup>1</sup>, τὸ δὲ τέταρτον νώννυμον.

<sup>1</sup> <τὸ δὲ τρίτον μετώννυμον> Diels

**D206** (< B142) Damasc. *In Phil.* 22 (24 Westerink)

[. . .] τὰ τῶν θεῶν ὀνόματα [. . .] ‘ἀγάλματα φωνήεντα’ καὶ ταυτὰ ἐστὶ ‘τῶν θεῶν,’ ὡς Δημόκριτος.

*The Origin of Belief in the Gods* (D207–D210)

**D207** (A75) Sext. Emp. *Adv. Math.* 9.24

εἰσὶ δὲ οἱ ἀπὸ τῶν γιγνομένων κατὰ τὸν κόσμον παραδόξων ὑπονοήσαντες εἰς ἔννοιαν ἡμᾶς ἐληλυθέ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

established this by means of four arguments: from homonymy (for different things are called by the same name, hence the name is not by nature); from polyonymy (for if different names are applied to one and the same thing, [scil. they will be applied] mutually as well, which is impossible<sup>1</sup>); the third from the change of names (for why did we change the name of Aristocles to Plato, and of Tyrtamus to Theophrastus, if names are by nature?<sup>2</sup>); and from the lack of similar [scil. forms] (why do we say *phronēin* ('to think') derived from *phronêsis* ('thought'), but we have no word derived from *dikaïosunê* ('justice'))? So names are by chance and not by nature. The same author calls the first argument that of **multiple meanings**, the second that of **equal tendency**, <the third that of name-changing,> the fourth that of **the absence of a term**.

<sup>1</sup> The argument is unclear                      <sup>2</sup> Chronology would permit Democritus to invoke Plato's name, but not Theophrastus'. So this last example at least, and perhaps both of them, must be assigned to Proclus or to his source if this Democritus is the ancient Atomist.

**D206** (< B142) Damascius, *Commentary on Plato's Philebus*

[. . .] the names of the gods [. . .] they too are **speaking icons of the gods**, according to Democritus.

### *The Origin of Belief in the Gods (D207–D210)*

**D207** (A75) Sextus Empiricus, *Against the Natural Philosophers*

There are some people who think that it was on the basis of the unexpected events that happen in the world that we



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ναι θεῶν, ἀφ' ἧς φαίνεται εἶναι δόξης καὶ ὁ Δημόκριτος· ὁρῶντες γάρ, φησί, τὰ ἐν τοῖς μετεώροις παθήματα οἱ παλαιοὶ τῶν ἀνθρώπων, καθάπερ βροντὰς καὶ ἀστραπάς, κεραυνούς τε καὶ ἀστρων συνόδους ἡλίου τε καὶ σελήνης ἐκλείψεις, ἐδειματοῦντο, θεοὺς οἰόμενοι τούτων αἰτίους εἶναι.

**D208** (< A76) Plin. *Nat. hist.* 2.14

innumeros quidem credere [. . .] aut, ut Democrito placuit, duos omnino, Poenam et Beneficium [. . .].

**D209** (< A74) Cic. *Nat. deor.*

**a** 1.12.29

[. . .] Democritus [. . .] tum imagines eorumque circumitus in deorum numero refert, tum illam naturam quae imagines fundat ac mittat, tum sententiam intellegentiamque nostram [. . .].

**b** 1.43.120

[. . .] Democritus [. . .] nutare videtur in natura deorum. tum enim censet imagines divinitate praeditas inesse in universitate rerum, tum principia mentis quae sint in eodem universo deos esse dicit, tum animantes imagines quae vel prodesse nobis solent vel nocere, tum ingentis quasdam imagines tantasque ut universum mundum complectantur extrinsecus [. . .].

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have come to conceive of gods; Democritus too seems to be of this opinion. For, he says, when ancient men saw what happens in the sky, like thunder, lightning, lightning bolts, conjunctions of stars, eclipses of the sun and moon, they became frightened and thought that gods were the causes of these things.

**D208** (< A76) Pliny, *Natural History*

To believe that there are innumerable [. . .] [scil. gods] [. . .] or, [. . .] as Democritus thought, just two, Punishment and Reward [. . .].

**D209** (< A74) Cicero, *On the Nature of the Gods*

**a**

[. . .] Democritus [. . .] sometimes counts among the gods their images and wanderings, sometimes the nature that sends forth and emits images, sometimes our judgment and intelligence [. . .].

**b**

[. . .] Democritus [. . .] seems to waver in his opinion concerning the nature of the gods. For at one time he thinks that images endowed with divinity exist in the universe, at another he calls gods the principles of mind that exist in the same universe, at another images endowed with life that have the custom either of benefiting or of harming us, at another certain enormous images, so large that they encompass the whole world from outside [. . .].

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**D210** (> B30) Clem. Alex. *Protr.* 68.5 (et *Strom.* 5.102.1 = Eus. *PE* 13.13)

[. . .] οὐκ ἀπεικότως ὁ Δημόκριτος “τῶν λογίων ἀνθρώπων ὀλίγους” φησὶν “ἀνατείναντας<sup>1</sup> τὰς χεῖρας ἐνταῦθα, ὃν<sup>2</sup> νῦν ἡέρα καλέομεν οἱ Ἕλληνες, <εἰπεῖν><sup>3</sup> ‘πάντα<sup>4</sup> Ζεὺς ἐνθυμέεται<sup>5</sup> καὶ πάνθ’<sup>6</sup> οὗτος οἶδε καὶ διδοῖ<sup>7</sup> καὶ ἀφαιρέεται καὶ βασιλεὺς οὗτος τῶν πάντων.”

<sup>1</sup> ἀνατείναντας *Protr.*: -οντες *Strom.*: -αντες Eus. <sup>2</sup> ὃν Clem.: οὗ Eus. <sup>3</sup> <εἰπεῖν> nos <sup>4</sup> πάντα <φασί> Diels: πάντα <εἶπαν> Reinhardt <sup>5</sup> Ζεὺς ἐνθυμέεται nos: Ζεὺς μυθέεται *Strom.* (μυθεῖται Eus.): διαμυθεῖσθαι *Protr.* (Δία μυθεῖσθαι corr. Heinsius) <sup>6</sup> καὶ πάνθ’ *Strom.*: καὶ πάντα *Protr.*: καὶ <γὰρ> πάντα Stählin <sup>7</sup> οἱ Ἕλληνες . . . διδοῖ locus vexatus et aliis aliter temptatus

### *Divination (D211–D212)*

**D211** (< A138) Cic. *Div.* 1.3.5

[. . .] cum [. . .] plurumisque locis gravis auctor Democritus praesensionem rerum futurarum comprobaret [. . .].

**D212** (A138) Cic. *Div.* 1.57.131

Democritus autem censet sapienter instituisse veteres ut hostiarum immolatarum inspicerentur exta; quorum ex habitu atque ex colore tum salubritatis tum pestilentiae signa percipi, non numquam etiam quae sit vel sterilitas agrorum vel fertilitas futura.

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**D210** (> B30) Clement of Alexandria, *Proptreptic* (and *Stromata*)

[. . .] Democritus said, not implausibly, that “**a few wise men** (*logioi*), **lifting their hands toward that place that we Greeks now call the air**, <said>, “**Zeus meditates on all things, and he knows all things, gives them, and takes them away, and he is the king of all things.**”

### *Divination (D211–D212)*

**D211** (< A138) Cicero, *On Divination*

[. . .] since [. . .] in many passages Democritus, a weighty authority, has assented to a presentiment of future things [. . .].

**D212** (A138) Cicero, *On Divination*

Democritus thinks that the ancients acted wisely in establishing that the most important internal organs of sacrificial animals be examined, for their condition and color reveal signs of health and of pestilence, and sometimes even what will be the sterility or fertility of the fields.

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### *Mathematics (D213–D216)*

**D213** (< B155) *Plut. Comm. not.* 39 1079E

[. . .] Δημοκρίτῳ διαποροῦντι φυσικῶς καὶ ἐμφύχως,<sup>1</sup> εἰ κῶνος τέμνοιτο παρὰ τὴν βάσιν ἐπιπέδῳ, τί χρὴ διανοεῖσθαι τὰς τῶν τμημάτων ἐπιφανείας, ἴσας ἢ ἀνίσους γιγνομένας. “ἀνισοὶ μὲν γὰρ οὔσαι τὸν κῶνον ἀνώμαλον παρέξουσιν, πολλὰς ἀποχαράξεις λαμβάνοντα βαθμοειδεῖς καὶ τραχύτητας· ἴσων δ’ οὐσῶν ἴσα τμήματα ἔσται καὶ φανεῖται τὸ τοῦ κυλίνδρου πεπονηθὼς ὁ κῶνος, ἐξ ἴσων συγκείμενος καὶ οὐκ ἀνίσων κύκλων, ὅπερ ἐστὶν ἀτοπώτατον.” [. . . = **R110**]

<sup>1</sup> ἐπιτυχῶς vel εὐφυῶς Wytttenbach

**D214** (ad B155) *Archim. Meth. Mech. Theor.* 2.430.1–9

<. . . διόπερ καὶ τῶν θεωρημάτων τούτων <ῶν> Εὐδοξος ἐξηγήρηκεν πρῶτος τὴν ἀποδείξιν, ἐπὶ τοῦ κώνου καὶ τῆς πυραμίδος, ὅτι τρίτον μέρος ὁ μὲν κῶνος τοῦ κυλίνδρου ἢ δὲ πυραμὶς τοῦ πρίσματος τῶν βάσιν ἔχόντων τὴν αὐτὴν καὶ ὕψος ἴσον, οὐ μικρὰν ἀπονεύμαι <ἄν> τις Δημοκρίτῳ μερίδα πρῶτῳ τὴν ἀπόφασιν τὴν περὶ τοῦ εἰρημένου σχήματος χωρὶς ἀποδείξεως ἀποφηναμένῳ.

omnia add. Heiberg

**D215** (B162) *Schol. AB ad Il.* 13.137b

Δημόκριτος δὲ τὸ κυλινδρικὸν σχῆμα ὀλοοῖτροχον καλεῖ.

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### *Mathematics (D213–D216)*

#### **D213** (< B155) Plutarch, *On Common Conceptions*

[. . .] Democritus poses the following difficulty in physical terms and very vividly: if a cone is cut by a surface parallel to its basis, how must one think of the surfaces of the sections? Will they be equal or unequal? If unequal, they will make the cone irregular, with a multitude of step-like incisions and asperities; but if equal, the sections will be equal and the cone, being composed of equal circles and not of unequal ones, will evidently be the same as a cylinder, which is completely absurd.

#### **D214** (ad B155) Archimedes, *Method for Mechanical Theorems*

< . . . wherefore of those theorems > of which Eudoxus was the first to discover the demonstration, on the cone and pyramid, viz. that the cone is the third part of the cylinder and the pyramid is the third part of the prism if these have the same basis and an equal height to theirs, a considerable part must be assigned to Democritus, who was the first person to make such an assertion regarding the above-mentioned shape [i.e. the cone in the cylinder], though without supplying a demonstration.

#### **D215** (B162) Scholia on Homer's *Iliad*

Democritus calls the shape of a cylinder ‘**rolling mass.**’

## EARLY GREEK PHILOSOPHY VII

**D216** (< 59 A39) Vitruv. 7 *Praef.* 11

[. . .] Democritus et [. . . cf. **ANAXAG.** D97] de eadem re scripserunt, quemadmodum oporteat ad aciem oculorum radiorumque extentionem certo loco centro constituto lineas<sup>1</sup> ratione naturali respondere, uti de incerta re certae imagines aedificiorum in scaenarum picturis redderent speciem et quae in directis planisque frontibus sint figurata, alia abscedentia alia prominentia esse videantur.

<sup>1</sup> adlineas *GH*, corr. *Schneider*

*Poetics* (D217–D224)  
*The Poet* (D217–D221)

**D217** (B18) Clem. Alex. *Strom.* 6.168.2

καὶ ὁ Δημόκριτος ὁμοίως· “ποιητῆς δὲ ἄσσα μὲν ἂν γράφῃ μετ’ ἐνθουσιασμοῦ καὶ ἱεροῦ πνεύματος, καλὰ κάρτα ἐστίν.”

D218 (< B129) *Etym. Gen.* s.v. *νένωται* ex Hdn. *Affect.* (Frag. 120 Lentz)

Δημόκριτος· φρενὶ θείῃ<sup>1</sup> νοῦνται.

<sup>1</sup> φρενὶ θείῃ (vel φρενὶ θεῖα) Lobeck: φῆνι θεὰ ms.

**D219** (< B17) Cic. *Div.* 1.38.80

negat enim sine furore Democritus quemquam poetam magnum esse posse [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D216 (< 59 A39) Vitruvius, *On Architecture*

[. . .] Democritus and [. . .] wrote about the same subject [scil. as Agatharchus, viz. scene painting]: how, by taking a certain point as the center, to make the lines correspond by a natural ratio to the visual angle and the projection of the rays, in such a way that, in virtue of an object without reality, real images would produce the appearance of buildings on the scene painting, and so that what was represented on vertical and plane surfaces would seem in some cases to recede and in others to project outward.

*Poetics* (D217–D224)  
*The Poet* (D217–D221)

### D217 (B18) Clement of Alexandria, *Stromata*

And Democritus similarly [scil. as Plato, cf. *Ion* 534b]:  
**“On the one hand, whatever a poet writes with divine inspiration and sacred breath is extremely beautiful;** [scil. but on the other hand . . .].”

### D218 (< B129) *Etymologicum Genuinum*

Democritus: **They** [scil. poetic creations?] **are thought of by a divine spirit.**<sup>1</sup>

<sup>1</sup> The text is uncertain and the context unknown.

### D219 (< B17) Cicero, *On Divination*

Democritus says that no one can be a great poet without madness [. . .].



## EARLY GREEK PHILOSOPHY VII

**D220** (B16) Flav. Manl. Theod. *Metr.*, p. 19.13–14 Romanini

metrum dactylicum hexametrum inventum primitus [. . .]  
adserit Democritus a Musaeo [. . .].

**D221** (B21) Dio *Homer.* 1 (*Oratio* 36 = 53 Arnim, vol. 2, p. 109.21–24)

Ὅμηρος φύσεως λαχὼν θεαζούσης ἐπέων κόσμον  
ἐτεκτῆνατο παντοίων [. . .].

### *Exegeses of Homer (D222–D224)*

**D222** (< B23) Schol. A in *Il.* 7.390

τὸ ὥς πρὶν ὥφελλ' ἀπολέσθαι' [. . .] λέγει ὁ κῆρυξ  
[. . .] καθ' ἑαυτὸν καὶ ἡρέμα, ὥς Δημόκριτος ἀξιοῖ  
ἀπρεπὲς ἡγησάμενος τὸ φανερώς λέγεσθαι [. . .].

**D223** (< B24) Eust. *In Od.* 15.376, p. 1784.58–60

ἰστέον δὲ ὅτι ἐς τοσοῦτον ἡξιώθη λόγου τοῖς παλαιοῖς  
ὁ εὐνοϊκὸς οὗτος δοῦλος Εὐμαιος, ὥστε καὶ μητέρα  
αὐτοῦ ἐξευρίσκουσι. Δημόκριτος μὲν Πενίαν [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D220** (B16) Flavius Manlius Theodorus, *On Meters*

Democritus says [. . .] that the meter of the dactylic hexameter was first invented by Musaeus.

**D221** (B21) Dio of Prusa, *On Homer*

**Homer, who received as his share a nature that was divine, has constructed an ordered world (*kosmos*) of all kinds of epic verses [. . .].**

*Exegeses of Homer (D222–D224)*

**D222** (< B23) Scholia on Homer's *Iliad*

The herald says the phrase “if only he could have died earlier!” (*Il.* 7.390) [. . .] to himself and softly, as is thought by Democritus, who considers it inappropriate that it be spoken out clearly [. . .].

**D223** (< B24) Eustathius, *Commentary on Homer's Odyssey*

One should know that this benevolent slave Eumaeus was estimated so highly by the ancients that they even invented a mother for him: for Democritus, it was Poverty [. . .].

## EARLY GREEK PHILOSOPHY VII

**D224** (B25) Eust. *In Od.* 12.65, p. 1713.14, 15–16

ἄλλοι δὲ Δία μὲν νοοῦσι τὸν ἥλιον [. . .], ἀμβροσίαν  
δὲ τὰς ἀτμίδας αἶς ὃ ἥλιος τρέφεται, καθὰ δοξάζει  
καὶ Δημόκριτος.

*Mankind: Ethics and Politics (D225–D412)*

*What a Human Being Is (D225)*

**D225** (< B34) David. *Proleg.* 38.18

[. . .] ἐν τῷ ἀνθρώπῳ μικρῷ κόσμῳ ὄντι κατὰ τὸν  
Δημόκριτον [. . .].

*The Goal of Life (D226–D232)*

**D226** (B191) Stob. 3.1.210

ἀνθρώποισι γὰρ εὐθυμίῃ γίνεται μετριότητι τέρψιος  
καὶ βίου συμμετρίῃ· τὰ δ' ἐλλείποντα<sup>1</sup> καὶ ὑπερβάλ-  
λοντα μεταπίπτειν τε φιλεῖ καὶ μεγάλας κινήσιας  
ἐμποιεῖν τῇ ψυχῇ. αἱ δ' ἐκ μεγάλων διαστημάτων

<sup>1</sup> δὲ λείποντα mss., corr. Hirschig

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D224** (B25) Eustathius, *Commentary on Homer's Odyssey*

Other people think that Zeus is the sun [. . .] and ambrosia the vapors by which the sun is nourished, as Democritus too supposes.<sup>1</sup>

<sup>1</sup> Some scholars think that Democritus is cited here only for the theory of the nourishment of the sun, and not for the exegesis of Homer.

*Mankind: Ethics and Politics (D225–D412)*  
*What a Human Being Is (D225)*

**D225** (< B34) David, *Prolegomena*

[. . .] in man, who is a **small world** according to Democritus [. . .].<sup>1</sup>

<sup>1</sup> David invokes Democritus with regard to a triple analogy (of Platonic inspiration) between god and master, masters and slaves, and irrational animals and slaves. But the original context of the quotation could have been physical or medical.

*The Goal of Life (D226–D232)*

**D226** (B191) Stobaeus, *Anthology*

**For contentment** (*euthumia*) **comes about for human beings from the moderation of enjoyment and proportion** (*summetria*) **in life. Lacks and excesses tend to change** [scil. into one another] **and to produce powerful movements in the soul. Among souls, those that move from large distances** [or: intervals] **are neither**

κινούμεναι τῶν ψυχέων οὔτε εὐσταθέες εἰσὶν οὔτε εὐθυμοί· ἐπὶ τοῖς δυνατοῖς οὖν δεῖ ἔχειν τὴν γνώμην καὶ τοῖς παρεούσιν ἀρκέεσθαι, τῶν μὲν ζηλουμένων καὶ θαυματομένων ὀλίγην μνήμην ἔχοντα καὶ τῇ διανοίᾳ μὴ προσεδρεύοντα, τῶν δὲ ταλαιπωρεόντων τοὺς βίους θεωρεῖν, ἐννοούμενον ἂν πάσχουσι κάρτα,<sup>2</sup> ὅπως ἂν τὰ παρεόντα σοι καὶ ὑπάρχοντα μεγάλα καὶ ζηλωτὰ φαίνεται, καὶ μηκέτι πλειόνων ἐπιθυμέοντι συμβαίνει κακοπαθεῖν τῇ ψυχῇ· ὁ γὰρ θαυμάζων τοὺς ἔχοντας καὶ μακαριζομένους ὑπὸ τῶν ἄλλων ἀνθρώπων, καὶ τῇ μνήμῃ πᾶσαν ὥραν προσεδρεύων αἰὲ ἐπικαινουργεῖν ἀναγκάζεται, καὶ ἐπιβάλλεσθαι δι' ἐπιθυμίην τοῦ τι πρήσσειν ἀνήκεστον ὧν<sup>3</sup> νόμοι κωλύουσιν. διόπερ τὰ μὲν μὴ δίξεσθαι χρεών, ἐπὶ δὲ τοῖς εὐθυμέεσθαι χρεὼν παραβάλλοντα τὸν ἑαυτοῦ βίον πρὸς τὸν τῶν φαυλότερον πρησσόντων καὶ μακαρίζειν ἑωυτὸν ἐνθυμεύμενον ἂν πάσχουσιν, ὁκόσω<sup>4</sup> αὐτέων βέλτιον πρήσσει τε καὶ διάγει. ταύτης γὰρ ἐχόμενος τῆς γνώμης εὐθυμότερόν τε διάξεις καὶ οὐκ ὀλίγας κῆρας ἐν τῷ βίῳ διώσσει, φθόνον καὶ ζῆλον καὶ δυσμενίην.

<sup>2</sup> κακὰ coni. Iacobs      <sup>3</sup> ὧν A: ᾧ M<sup>d</sup>: ὁ Gesner

<sup>4</sup> ὁκόσω Wachsmuth.: ὅπως mss.

## D227 (B189) Stob. 3.1.47

ἄριστον ἀνθρώπῳ τὸν βίον διάγειν ὡς πλείστα εὐθυ-

well balanced (*eustathees*) nor contented. Therefore you must direct your thought (*gnômê*) to what is possible and be satisfied with what is present, maintaining only a small memory of the things that cause envy and admiration and not sitting and watching them (*prosedreuonta*) in thought (*dianoia*), and you must observe the lives of those who are distressed, thinking of their great sufferings, so that what is present to you and what belongs to you appears to be great and enviable, and so that it no longer happens to you that, because you desire more, you suffer in your soul. For when one admires those who have riches and are considered happy by other people, and sits and constantly watches them (*prosedreuôn*) at every hour in one's memory, one is obliged always to invent something new and to desire eagerly, because of the passion to do some irreparable deed, one of those things that the laws prohibit. That is why one must not seek certain things and must be contented with regard to other ones, comparing one's own life to that of those who are less successful, and must consider oneself happy, reflecting upon what they suffer, to what degree one succeeds and passes one's life better than they do. For if you hold fast to this thought (*gnômê*), you will pass your life with greater contentment and you will drive away quite a few sources of destruction in life, envy, rivalry, and hostility.

D227 (B189) Stobaeus, *Anthology*

*The best thing for a man is to pass his life as far as possible*

## EARLY GREEK PHILOSOPHY VII

μηθέντι καὶ ἐλάχιστα ἀνιηθέντι. τοῦτο δ' ἂν εἴη, εἴ τις  
μὴ ἐπὶ τοῖς θνητοῖσι τὰς ἡδονὰς ποιοῖτο.

**D228** (B3) Stob. 4.39.25

τὸν εὐθυμεῖσθαι μέλλοντα χρὴ μὴ πολλὰ πράσσειν,  
μήτε ἰδίῃ μήτε ξυνῇ, μηδὲ ἄσπ' ἂν πράσση ὑπὲρ τε  
δύναμιν αἰρεῖσθαι τὴν ἐντοῦ καὶ φύσιν· ἀλλὰ το-  
σαύτην ἔχειν φυλακὴν, ὥστε καὶ τῆς τύχης ἐπιβαλλού-  
σης καὶ ἐς τὸ δέον<sup>1</sup> ὑπηγεομένης τῷ δοκεῖν κατατίθε-  
σθαι, καὶ μὴ πλέω προσάπτεσθαι τῶν δυνατῶν· ἡ  
γὰρ εὐογκίη ἀσφαλέστερον τῆς μεγαλογκίης.

<sup>1</sup> πλέον Orelli

**D229** (< A1) Diog. Laert. 9.45

τέλος δ' εἶναι τὴν εὐθυμίαν [. . . = **R99**] καθ' ἣν γαλη-  
νῶς καὶ εὐσταθῶς ἡ ψυχὴ διάγει, ὑπὸ μηδενὸς ταρατ-  
τομένη φόβου ἢ δεισιδαιμονίας ἢ ἄλλου τινὸς πάθους.  
καλεῖ δ' αὐτὴν καὶ εὐεστῶ καὶ πολλοῖς ἄλλοις ὀνό-  
μασι.

**D230** (< A169) Cic. *Fin.* 5.29.87

ideo enim ille summum bonum εὐθυμίαν et saepe ἀθαμ-  
βίαν appellat, id est animum terrore liberum.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*in contentment (euthumêthenti) and as little as possible in distress (aniêthenti). This will be the case if one does not set one's pleasures upon mortal things.*

### **D228** (B3) Stobaeus, *Anthology*

*He who intends to live in contentment (euthumeisthai) should not do many things, either on his own or in common with others, nor, whatever he does, should he choose what is beyond his own capability and nature; but he should be so much on his guard that even if fortune strikes and guides him toward what ought to be done, by means of his thinking he deposits it safely and does not try to grasp more than what is possible. For the right mass is safer than a large mass.*

### **D229** (< A1) Diogenes Laertius

The goal is **contentment** (*euthumia*) [. . .], the state by virtue of which the soul lives in serenity and equilibrium, without being disturbed by any fear, superstition, or other affection. He calls this **well-being** (*euestô*) and many other terms.

### **D230** (< A169) Cicero, *On Ends*

And that is why he calls the greatest good **contentment** (*euthumia*) and often **unastoundedness** (*athambia*), that is, a spirit free of terror.



**D231** (A167) Stob. 2.7.3i

Δημόκριτος καὶ Πλάτων κοινῶς ἐν τῇ ψυχῇ τὴν εὐ-  
δαιμονίαν τίθενται. γέγραφε δ' ὁ μὲν οὕτως· [. . . =  
**D237, D238]** · τὴν δ'<sup>1</sup> εὐθυμίαν καὶ εὖεστὼ καὶ ἁρμο-  
νίαν, συμμετρίαν τε καὶ ἀταραξίαν καλεῖ· συνίστα-  
σθαι δ' αὐτὴν ἐκ τοῦ διορισμοῦ καὶ τῆς διακρίσεως  
τῶν ἡδονῶν· καὶ τοῦτ' εἶναι τὸ κάλλιστόν τε καὶ συμ-  
φορώτατον ἀνθρώποις.

<sup>1</sup> τὴν δ' <εὐδαιμονίαν καὶ> Meineke

**D232** (B140) Hesych. E.6809

εὖεστῶ· [. . .] εὐδαιμονία· ἀπὸ τοῦ εὖ ἐστάναι τὸν  
οἶκον.

*Body and Soul (D233–D240)*

**D233**

**a** (B159) **Ps.-Plut.** *Libid. et aegrit.* 2

ἔοικε παλαιά τις αὕτη τῷ σώματι διαδικασία πρὸς  
τὴν ψυχὴν περὶ τῶν παθῶν εἶναι. καὶ Δημόκριτος μὲν  
ἐπὶ τὴν ψυχὴν ἀναφέρων <τὴν αἰτίαν τοῦ> κακοδαι-  
μον<εῖν><sup>1</sup> φησὶν, εἰ τοῦ σώματος αὐτῇ<sup>2</sup> δίκην λαχόν-  
τος, παρὰ πάντα τὸν βίον ὧν ὠδύνηται <καὶ><sup>3</sup> κακῶς  
πέπονθεν αὐτὸς γένοιτο τοῦ ἐγκλήματος δικαστῆς><sup>4</sup>,  
ἡδέως ἂν καταψηφίσασθαι τῆς ψυχῆς, ἐφ' οἷς τὰ μὲν  
ἀπώλεσέ<sup>5</sup> τοῦ σώματος ταῖς ἀμελείαις καὶ ἐξέλυσε

**D231** (A167) Stobaeus, *Anthology*

Democritus and Plato both locate happiness in the soul. The former writes, “[. . . = **D237, D238**].” This [scil. happiness] he also calls **contentment** (*euthumia*), **well-being** (*euestô*), and **harmony, equilibrium** and **imperturbability** (*ataraxia*). It comes from the delimitation and distinction of pleasures, and this is the finest and most useful thing for human beings.

**D232** (B140) Hesychius, *Lexicon*

**Well-being** (*euestô*): [. . .] happiness, deriving from “the house is in good shape.”

*Body and Soul (D233–D240)*

**D233**

**a** (B159) **Ps.-Plutarch**, *On Desire and Grief*

This lawsuit of the body against the soul regarding the affections seems to be ancient. Democritus, ascribing <the cause of> unhappiness to the soul, says that if the body were permitted to file a lawsuit against it [i.e. the soul] because of what it had suffered <and> how it had been mistreated during the course of its whole life, and if he [i.e. apparently: the man in question] were himself made <judge> of the accusation, he would gladly condemn the soul for having destroyed some parts of the body by its

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<sup>1</sup> *κακοδαίμων* mss., corr. Ziegler, alii alia  
 mss., corr. Wytttenbach      <sup>3</sup> <καὶ> Tyrrell      <sup>2</sup> ἡ. . . αὐτῇ  
 Tyrrell: lac. 3–7 litt. mss.      <sup>4</sup> *δικαστήρ*      <sup>5</sup> *ἀπέλυσε* mss., corr. Wytttenbach

## EARLY GREEK PHILOSOPHY VII

ταῖς μέθαις, τὰ δὲ κατέφθειρε καὶ διέσπασε ταῖς φι-  
ληδονίαις, ὥσπερ ὄργανον τινὸς ἢ σκεύους κακῶς  
ἔχοντος τὸν χρώμενον ἀφειδῶς αἰτιασάμενος.

**b** (< B159) **Plut.** *Sanit. praec.* 24 135E

πρὸς τούτους γὰρ οἶμαι μάλιστα τὸν Δημόκριτον εἰ-  
πεῖν, ὥς εἰ τὸ σῶμα δικάσαιτο τῇ ψυχῇ κακώσεως,  
οὐκ ἂν αὐτὴν ἀποφυγεῖν.

**D234** (B223) *Stob.* 3.10.65

ὦν τὸ σκῆνος χρήζει, πᾶσι πάρεστιν εὐμαρέως ἄτερ  
μόχθου καὶ ταλαιπωρίας· ὅκόσα δὲ μόχθου καὶ ταλαι-  
πωρίας χρήζει καὶ βίον ἀλγύνει, τούτων οὐκ ἰμείρεται  
τὸ σκῆνος, ἀλλ' ἡ τῆς γνώμης κακοηθία.<sup>1</sup>

<sup>1</sup> κακοηθία Gesner: κακοθηγία SA: καθοδιγίη M<sup>d</sup>: κακοθη-  
γίη dub. Diels

**D235** (B31) *Clem. Alex. Paed.* 1.2.6.2

ἱατρικὴ μὲν γὰρ κατὰ Δημόκριτον σώματος νόσους  
ἀκέεται, σοφίη δὲ ψυχὴν παθῶν ἀφαιρεῖται.

**D236** (B187) *Stob.* 3.1.27 (cf. *Democrat. Sent.* 2)

ἀνθρώποις ἀρμόδιον ψυχῆς μᾶλλον ἢ σώματος λόγον  
ποιεῖσθαι. ψυχὴ μὲν γὰρ τελεωτάτῃ σκῆνεος μοχθη-  
ρίην ὀρθοῖ, σκῆνεος δὲ ἰσχύς ἄνευ λογισμοῦ ψυχὴν  
οὐδέν τι ἀμείνω τίθησιν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

negligence and enfeebled it by drinking-bouts, and for having ruined and ripped to pieces other parts by its desire for pleasure, just as, if an instrument or tool were in bad shape, he would accuse the man who used it without taking proper care of it.

**b** (< B159) **Plutarch**, *Advice about Keeping Well*

[. . .] For it was with regard to these [i.e. various kinds of people harmful to society], I believe, that Democritus said that if the body filed a lawsuit against the soul for mistreatment the latter would not be acquitted.

**D234** (B223) Stobaeus, *Anthology*

*What the body requires is easily available to all without toil (mokhthos) or suffering (talaiporiê); but what requires toil and suffering and makes life painful, is desired not by the body but by a bad disposition of judgment.*

**D235** (B31) Clement of Alexandria, *Pedagogue*

Medicine, according to Democritus, cures the illnesses of the body, but wisdom removes the soul from its affections [or: sufferings].

**D236** (B187) Stobaeus, *Anthology*

*For humans it is fitting to take account of the soul more than of the body. For perfection of the soul corrects the bad condition of the bodily envelope (skênos), while strength of the body, devoid of reasoning, does not make the soul better at all.*

## EARLY GREEK PHILOSOPHY VII

**D237** (B170) Stob. 2.7.3i

εὐδαιμονίη ψυχῆς καὶ κακοδαιμονίη.

**D238** (B171) Stob. 2.7.3i

εὐδαιμονίη οὐκ ἐν βοσκήμασιν οἰκεῖ, οὐδὲ ἐν χρυσῷ·  
ψυχῇ<sup>1</sup> οἰκητήριον δαίμονος.

<sup>1</sup> ψυχῇ <δ'> Heeren

**D239** (B290) Stob. 4.44.67

λύπην ἀδέσποτον ψυχῆς ναρκώσης λογισμῷ ἔκκρουε.

**D240** (B234) Stob. 3.18.30

ὑγιήν ἐυχῇσι<sup>1</sup> παρὰ θεῶν αἰτέονται ἄνθρωποι, τὴν  
δὲ ταύτης δύναμιν ἐν ἑωυτοῖς ἔχοντες οὐκ ἴσασιν·  
ἀκрасίη δὲ τάναντία πρήσσοντες αὐτοὶ προδόται τῆς  
ὑγιήσ τῇσιν ἐπιθυμίησι γίνονται.

<sup>1</sup> ὑγιήν ἐυχῇσι Meineke (ὑγιείην ἐυχαῖς Gesner ex  
Frobenio): ὑγεινήν ἐυχῇν mss.

*Pleasure (D241–D250)*

**D241** (B188) Stob. 3.1.46

ὁρος συμφόρων καὶ ἀσυμφόρων<sup>1</sup> τέριψις καὶ ἀτερπής.

<sup>1</sup> συμφορέων καὶ ἀσυμφορέων mss., corr. Cobet

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D237** (B170) Stobaeus, *Anthology*

*Happiness belongs to the soul, and unhappiness too.*

**D238** (B171) Stobaeus, *Anthology*

*Happiness (eudaimoniê) does not reside in flocks nor in gold: the soul is the residence of a divinity (daimôn).*

**D239** (B290) Stobaeus, *Anthology*

*The unmastered pain of a numbed soul—repel it by reasoning.*

**D240** (B234) Stobaeus, *Anthology*

*In their prayers, men ask for health from the gods, but they do not know that they possess the capacity for possessing this within themselves; doing the opposite because of their intemperance, they themselves betray their health by their desires.*

*Pleasure (D241–D250)*

**D241** (B188) Stobaeus, *Anthology*

*The dividing line between what is useful and what is useless is satisfaction (terpsis) and dissatisfaction.*

## EARLY GREEK PHILOSOPHY VII

### D242 (B207) Stob. 3.5.22

ἡδονὴν οὐ πᾶσαν, ἀλλὰ τὴν ἐπὶ τῷ καλῷ αἰρεῖσθαι  
χρεών.

### D243 (B194) Stob. 3.3.46

αἱ μεγάλαι τέρψεις<sup>1</sup> ἀπὸ τοῦ θεᾶσθαι τὰ καλὰ τῶν  
ἔργων γίνονται.

<sup>1</sup> τέρψεις Orelli: θέρψεις ed. Trincav.: desunt mss.

### D244 (B211) Stob. 3.5.27

σωφροσύνη τὰ τερπνὰ ἀέξει καὶ ἡδονὴν ἐπιμείζονα<sup>1</sup>  
ποιεῖ.

<sup>1</sup> ἔτι μείζονα Diels

### D245 (B146) Plut. *Quis suos* 10 81A

[. . .] τὸν λόγον [. . .] κατὰ Δημόκριτον αὐτὸν ἐξ ἑαυτοῦ  
τὰς τέρψιας ἐθιζόμενον λαμβάνειν.

### D246 (B233) Stob. 3.17.38

εἴ τις ὑπερβάλλοι τὸ μέτριον, τὰ ἐπιτερέστατα ἀτερ-  
πέστατα ἂν γίγνοιτο.

### D247 (B232) Stob. 3.17.37

τῶν ἡδέων τὰ σπανιώτατα γινόμενα μάλιστα τέρπει.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D242** (B207) Stobaeus, *Anthology*

*It is necessary to choose not every pleasure, but that one which depends upon what is fine.*

**D243** (B194) Stobaeus, *Anthology*

*Great satisfactions (terpsies) come about from observing fine actions.*

**D244** (B211) Stobaeus, *Anthology*

*Temperance increases satisfactions (terpna) and makes pleasure even greater.*

**D245** (B146) Plutarch, *Progress in Virtue*

[. . .] reason [. . .] according to Democritus, is accustomed to derive satisfactions (*terpsies*) from itself.

**D246** (B233) Stobaeus, *Anthology*

*If someone exceeds the right measure, the greatest satisfactions become the greatest dissatisfactions.*

**D247** (B232) Stobaeus, *Anthology*

*Among pleasures, the ones that happen most rarely satisfy the most.*



**D248** (B235) Stob. 3.18.35 (cf. 3.6.65)

ὅσοι ἀπὸ γαστρὸς τὰς ἡδονὰς ποιέονται ὑπερβεβλη-  
κότες τὸν καιρὸν ἐπὶ βρώσεσιν ἢ πόσεσιν ἢ ἀφροδι-  
σίοισιν, τούτοις<sup>1</sup> πᾶσιν αἱ μὲν ἡδοναὶ βραχεαί τε καὶ  
δι' ὀλίγου γίνονται, ὁκόσον ἂν χρόνον ἐσθίωσιν ἢ  
πίνωσιν, αἱ δὲ λῦπαι πολλάι. τοῦτο μὲν γὰρ τὸ ἐπι-  
θυμῆν αἰὲ τῶν αὐτῶν πάρεστι, καὶ ὁκόταν γένηται  
ὁκοίων ἐπιθυμέουσι, διὰ ταχέος τε ἢ ἡδονὴ παροίχε-  
ται, καὶ οὐδὲν ἐν<sup>2</sup> αὐτοῖσι χρηστόν ἐστιν ἀλλ' ἢ τέρ-  
ψις βραχεῖα καὶ αὐθις τῶν αὐτῶν δέει.

<sup>1</sup> τούτοις 3.6.65: τοῖσι ms.

<sup>2</sup> ἐν secl. Hense

**D249** (B127) Hdn. *Prosod. cath.* vol. 3.1, p. 445.9-11, p. 1766.7-8

[. . .] καὶ Δημόκριτος ξυόμενοι ἄνθρωποι ἡδονται καὶ  
σφιν γίνεται ἅπερ τοῖς ἀφροδισιάζουσιν.

**D250** (B147) Clem. Alex. *Protr.* 92.4

ῥες [. . .] “ἐπὶ φορυτῷ μαργαίνουσιν” κατὰ Δημόκρι-  
τον.

*Desires* (D251–D266)

*Self-Sufficiency* (D251–D255)

**D251** (B224) Stob. 3.10.68

<ἡ><sup>1</sup> τοῦ πλέονος ἐπιθυμία τὸ παρεὸν ἀπόλλυσι, τῇ  
Αἰσωπίῃ κυνὶ ἰκέλη γιγνομένη.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D248 (B235) Stobaeus, *Anthology*

*For all those who derive their pleasures from the belly, exceeding the proper measure (kairos) in eating, drinking, or sex, their pleasures are small and short-lived, lasting as long a time as they eat or drink, but their sufferings are many. For this desire is always present for the same things, and whenever what they desire occurs, the pleasure departs quickly, and there is nothing of value in them except for a brief satisfaction, and once again a need for the same things arises.*

### D249 (B127) Herodian, *General Prosody*

[. . .] and Democritus **When men scratch themselves they feel pleasure, and they feel like those who are having sex.**

### D250 (B147) Clement of Alexandria, *Protreptic*

Pigs [. . .] **go mad for rubbish**, according to Democritus.<sup>1</sup>

<sup>1</sup> This fragment, a reprise of Heraclitus (cf. **HER. D80a**), is cited by many ancient authors.

*Desires (D251–D266)*

*Self-Sufficiency (D251–D255)*

### D251 (B224) Stobaeus, *Anthology*

*The desire for what is more destroys what is present, revealing itself to be like the dog in Aesop.*<sup>1</sup>

<sup>1</sup> Cf. Fable 233 Halm, 185 Chambry.

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<sup>1</sup> <ῥ> Br: om. cett.

**D252** (B176) Stob. 2.9.5

τύχη μεγαλόδωρος, ἀλλ' ἀβέβαιος, φύσις δὲ αὐτάρ-  
κης· διόπερ νικᾷ τῷ ἥσσοι καὶ βεβαίῳ τὸ μείζον τῆς  
ἐλπίδος.

**D253** (B231) Stob. 3.17.25

εὐγνώμων ὁ μὴ λυπεόμενος ἐφ' οἷσιν οὐκ ἔχει, ἀλλὰ  
χαίρων ἐφ' οἷσιν ἔχει.

**D254** (B246) Stob. 3.40.6

ξενιτείη βίου αὐτάρκειαν διδάσκει· μᾶζα γὰρ καὶ στι-  
βὰς λιμοῦ καὶ κόπου γλυκύτατα ἰάματα.

**D255** (B209) Stob. 3.5.25 (et al.)

αὐταρκείῃ τροφῆς<sup>1</sup> σμικρῇ<sup>2</sup> νὺξ οὐδέποτε γίνεται.

<sup>1</sup> αὐταρκείῃ τροφῆς Max. Conf. 13.17: αὐτάρκει τροφῇ mss.

<sup>2</sup> σμικρῇ M (-ὰ A, μικ-L): μακρῇ Hense

*Wealth and Poverty (D256–D264)*

**D256** (B285) Stob. 4.34.65

γιγνώσκειν χρεῶν ἀνθρωπίνην βιοτὴν ἀφαιρῆν τε  
εἶδον καὶ ὀλιγοχρόνιον, πολλῇσί τε κηρσὶ συμπε-  
φυρμένην καὶ ἀμηχανίῃσιν, ὅπως ἂν τις<sup>1</sup> μετρίης τε  
κτησίος ἐπιμέληται καὶ μετρήται<sup>2</sup> ἐπὶ τοῖς ἀναγκαίοις  
ἢ τάλαιπωρή.<sup>3</sup>

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D252 (B176) Stobaeus, *Anthology*

*Fortune bestows big gifts but is instable; but nature is self-sufficient, which is why it gains the victory, by being less and stable, over what is bigger and belongs to hope.*

### D253 (B231) Stobaeus, *Anthology*

*He has good judgment who does not suffer for what he does not have but rejoices at what he does have.*

### D254 (B246) Stobaeus, *Anthology*

*Living abroad [scil. probably: as a mercenary] teaches self-sufficiency in life. For a loaf of barley bread and some straw are the most pleasant remedies for hunger and fatigue.*

### D255 (B209) Stobaeus, *Anthology*

For self-sufficiency in food, the night is never short (?).<sup>1</sup>

<sup>1</sup> Meaning obscure, text uncertain.

## *Wealth and Poverty (D256–D264)*

### D256 (B285) Stobaeus, *Anthology*

*It is necessary to recognize that human life is feeble and of short duration, and is mixed together with many sources of ruin and difficulties, so that one should care about moderate possessions and so that suffering should be measured in relation to necessities.*

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<sup>1</sup> πρὸς mss., corr. Mullach      <sup>2</sup> ἀμέτρητα Diels

<sup>3</sup> ἀναγκαίοις ἢ ταλαιπωρίῃ ut vid. S: ἀναγκαίοις ἢ ταλαιπωρέῃ MA: ἀναγκαίοισι ταλαιπωρέῃ Meineke

## EARLY GREEK PHILOSOPHY VII

### D257 (B219) Stob. 3.10. 43

χρημάτων ὄρεξις, ἣν μὴ ὀρίζηται κόρω,<sup>1</sup> πενίης ἐσχάτης πολλὸν χαλεπωτέρη· μέζονες γὰρ ὀρέξεις μέζονας ἐνδείας ποιεῦσιν.

<sup>1</sup> καίρω coni. Meineke, οὐρῳ Hirschig, λόγῳ Iacobs

### D258 (B283) Stob. 4.33.23

πενίη πλούτου ὀνόματα ἐνδείης καὶ κόρου. οὔτε οὖν πλούσιος <ὁ><sup>1</sup> ἐνδέων οὔτε πένης ὁ μὴ ἐνδέων.

<sup>1</sup> <ὁ> Orelli

### D259 (B284) Stob. 4.33.24 et 25

ἣν μὴ πολλῶν ἐπιθυμέης, τὰ ὀλίγα τοι πολλὰ δόξει. σμικρὰ γὰρ ὄρεξις πενίην ἰσοσθενέα πλούτῳ ποιέει.

### D260 (B198) Stob. 3.4.72

τὸ χρῆζον οἶδεν ὁκόσον χρήζει, ὁ δὲ χρήζων οὐ γινώσκει.

### D261 (B78) Stob. 4.31.121 (= Democrat. Sent. 43)

χρήματα πορίζουν μὲν οὐκ ἀχρεῖον, ἐξ ἀδικίης δὲ πάντων<sup>1</sup> κάκιον.

<sup>1</sup> πάντων A: πάντως SM

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D257** (B219) Stobaeus, *Anthology*

*The appetite (orexis) for wealth, if it is not limited by satiety, is much harder to endure than extreme poverty. For greater appetites create greater needs.*

### **D258** (B283) Stobaeus, *Anthology*

*Poverty, wealth: names for need and satiety. So the man in need is not wealthy, nor poor the one not in need.*

### **D259** (B284) Stobaeus, *Anthology*

*If you do not desire many things, few will seem to you to be many; for a small appetite makes poverty as strong as wealth.*

### **D260** (B198) Stobaeus, *Anthology*

*That which needs knows how much it needs, but he who needs does not know.<sup>1</sup>*

<sup>1</sup> The meaning is obscure, perhaps the sentence is incomplete. Scholars often suppose that the opposition between neuter and masculine refers to that between animal and human.

### **D261** (B78) Stobaeus, *Anthology* (attributed to Democritus)

*To acquire wealth is not useless, but [scil. to do so] unjustly is the worst thing of all.*

## EARLY GREEK PHILOSOPHY VII

### D262 (B282) Stob. 4.31.120

χρημάτων χρήσις ξὺν νόῳ μὲν χρήσιμον εἰς τὸ ἐλευ-  
θέριον εἶναι καὶ δημωφελέα, ξὺν ἀνοίῃ δὲ χορηγίῃ  
ξυνή.<sup>1</sup>

<sup>1</sup> ξυνή mss.: κενεή Gomperz

### D263 (B218, cf. B302.194) Stob. 3.10.36

πλοῦτος ἀπὸ κακῆς ἐργασίης περιγινόμενος ἐπιφανέ-  
στερον τὸ ὄνειδος κέκτηται.

### D264 (B281) Stob. 4.31.49

ὥσπερ ἐν<sup>1</sup> τοῖς ἔλκεσι φαγέδαινα κάκιστον νόσημα,  
οὕτως ἐν τοῖς χρήμασι τὸ †μὴ προσαρμόσαν καὶ τὸ  
συνεχές†.<sup>2</sup>

<sup>1</sup> ἐν Natorp: ἐν μὲν S: μὲν MA <sup>2</sup> post τὸ lac. indic. et  
μὴ προσαρμόσαν καὶ τὸ συνεχές ut gloss. secl. Philippon qui  
μὴ λήγειν πλούτου ἐπιθυμέοντα prop.: μὴ προσαρμόσασθαι  
τοῖς ἄν ἔχῃς <τὴν δαπάνην> prop. Diels

### *Love and Sex (D265–D266)*

### D265 (B271) Stob. 4.20.33

ἐρωτικὴν μέμψιν ἢ ἀγαπωμένη<sup>1</sup> λύει.

<sup>1</sup> ἀγαπωμένη mss., corruptum iud. Hense: ἀγάπη (εὐνὴ  
Meineke, στρωμνὴ Haupt, εὐεστώ Mekler) μούνη Nauck:  
ἀγαπὸ μόνη Diels

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D262** (B282) Stobaeus, *Anthology*

*The use of wealth in conjunction with intelligence is useful for being generous and beneficial for the common people, but in conjunction with lack of intelligence it is a public contribution shared in common (?).<sup>1</sup>*

<sup>1</sup> Meaning uncertain.

### **D263** (B218, cf. B302.194) Stobaeus, *Anthology*

*Wealth deriving from a sordid activity acquires blame more visibly.*

### **D264** (B281) Stobaeus, *Anthology*

*Just as, among ulcers, cancer is the worst disease, so too among kinds of wealth †that which is unadapted and continuous ‡.*

### *Love and Sex (D265–D266)*

### **D265** (B271) Stobaeus, *Anthology*

*A woman regarded with affection dissolves the blame attaching to sexual desire (erôs).*



## EARLY GREEK PHILOSOPHY VII

**D266** (B73) Stob. 3.5.23 (= Democrat. *Sent.* 38)

δίκαιος ἔρως, ἀνυβρίστως ἐφίεσθαι τῶν καλῶν.

*Good and Evil Things (D267–D273)*

**D267** (< B149) Plut. *Anim. an corp. aff.* 2 500D

ἂν δὲ σαρτὸν ἀνοίξης ἔνδοθεν, ποικίλον τι καὶ πολυ-  
παθεῖς κακῶν ταμιεῖον εὐρήσεις καὶ θησαύρισμα, ὥς  
φησι Δημόκριτος, οὐκ ἔξωθεν ἐπιρρεόντων [. . .].

**D268** (B172) Stob. 2.9.1

ἀφ' ὧν ἡμῖν τὰγαθὰ γίνεται, ἀπὸ τῶν αὐτῶν τούτων  
καὶ τὰ κακὰ ἐπαυρισκοίμεθ' ἂν,<sup>1</sup> τῶν δὲ κακῶν ἐκτὸς  
εἵημεν.<sup>2</sup> αὐτίκα ὕδωρ βαθὺ εἰς πολλὰ χρήσιμον καὶ  
δηῦτε κακόν, κίνδυνος γὰρ ἀποπνιγῆναι· μηχανὴ οὖν  
εὐρέθη, νήχεσθαι διδάσκειν.<sup>3</sup>

<sup>1</sup> ἐπαυρισκοίμεθα τῶν mss., corr. Meineke <sup>2</sup> post εἵη-  
μεν lac. stat. Heeren: εἰδήμονες seu εἶναι εἰδήμονος coni.  
Wachsmuth <sup>3</sup> νήχεσθαι διδάσκειν mss.: νήχεσθαι καὶ  
πλέειν Usener: νήχειν διδάσκεσθαι Meineke

**D269** (B173) Stob. 2.9.2

ἀνθρώποισι κακὰ ἐξ ἀγαθῶν φύεται, ἐπὴν τις τὰγαθὰ  
μὴ 'πιστῆται ποδηγετεῖν μηδὲ ὀχεῖν εὐπόρως. οὐ<sup>1</sup> δί-  
καιον <ὧν><sup>2</sup> ἐν κακοῖσι τὰ τοιαῦδε κρίνειν, ἀλλ' ἐν ἀγα-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D266** (B73) Stobaeus, *Anthology* (attributed to Democrates)

*A just desire (erôs): to crave beautiful boys without violence.*

### *Good and Evil Things (D267–D273)*

**D267** (< B149) Plutarch, *Do the Passions Come from the Soul or the Body?*

If you open yourself up inside, you will find a kind of treasury and storeroom of evils, variegated and full of sufferings [or: passions], as Democritus says, which do not come from outside [. . .].

**D268** (B172) Stobaeus, *Anthology*

*The source of our good things is the same one from which we could derive evil ones too, but remaining outside of the evils. For example, deep water is useful for many things but also inversely it is evil: for there is a danger of drowning. So a resource was discovered: to teach people how to swim.*

**D269** (B173) Stobaeus, *Anthology*

*For humans, evils are born by nature from good things, when someone does not know how to guide good things and ride them easily. It is not justified to count such things*

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<sup>1</sup> οὐδὲ Heeren

<sup>2</sup> <ᾧν> Hense, <δὲ> Meineke

## EARLY GREEK PHILOSOPHY VII

θοῖσι.<sup>3</sup> τοῖσι δὲ<sup>4</sup> ἀγαθοῖσι οἶόν τε χρήσθαι καὶ πρὸς τὰ κακά, εἴ τιμι βουλομένῳ, ἀλκῇ.<sup>5</sup>

<sup>3</sup> ὧν post ἀγαθοῖσιν del. Koen: ὧν Diels: χρᾶν Meineke

<sup>4</sup> τοῖς τε mss., corr. Wachsmuth <sup>5</sup> εἴ τιμι βουλομένῳ  
(βουλόμενον F) ἀλκῇ mss., corr. Diels: ᾧ τιμι βουλομένῳ ἂν  
εἴη Usener cum Meineke, εἴ τιμι βουλομένῳ ἂν ᾧ Koen

**D270** (B221) Stob. 3.10.58

ἐλπίς κακοῦ κέρδεος ἀρχὴ ζημίας.

**D271** (B220) Stob. 3.10.44

κακὰ κέρδεα ζημίαν ἀρετῆς φέρει.

**D272** (B196) Stob. 3.4.70

λήθη τῶν ἰδίων κακῶν θρασύτητα γεννᾷ.

**D273** (B108) Stob. 4.34.58 (= Democrat. Sent. 75)

διζημένοισι τὰγαθὰ μόλις παραγίνεται, τὰ δὲ κακὰ καὶ μὴ διζημένοισι.

*Fortune (D274–D279)*

**D274** (< B119) Stob. 2.8.16 (cf. Dion. Alex. Nat. in Eus. PE 14.27.5)

[. . .] τῶν γοῦν Ὑποθηκῶν ἀρχόμενος λέγει.<sup>1</sup>

ἄνθρωποι τύχης εἰδωλον ἐπλάσαντο πρόφασιν

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*among evils, but rather among good things. And it is possible to make use of good things, if one will, as a defense against evils.*

**D270** (B221) Stobaeus, *Anthology*

*The hope for evil gain is the beginning of loss [or: punishment].*

**D271** (B220) Stobaeus, *Anthology*

*Evil gains bring the loss [or: punishment] of virtue.*

**D272** (B196) Stobaeus, *Anthology*

*Forgetfulness of one's own evils generates impudence.*

**D273** (B108) Stobaeus, *Anthology* (attributed to Democrates)

*Good things come only with difficulty to those who seek them, but evils [scil. come] even to those who do not seek them.*

### *Fortune (D274–D279)*

**D274** (< B119) Stobaeus, *Anthology*

[. . .] he [scil. Democritus] says at the beginning of his *Precepts*,

### **Humans have fabricated an image of Fortune**

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<sup>1</sup> τῶν . . . λέγει hab. solus Dion. Alex., qui Democriti sententiam paraphrasi ampliatur

## EARLY GREEK PHILOSOPHY VII

ιδίης ἀβουλίας. βαιὰ γὰρ φρονήσει τύχη μάχεται, τὰ δὲ πλείστα ἐν βίῳ εὐξύνετος ὀξυδερκείῃ κατιθύνει.

**D275** (B269) Stob. 4.10.28

τόλμα πρήξιος ἀρχή, τύχη δὲ τέλεος κυρίη.

**D276** (B288\*) Stob. 4.41.59

οὐκ ἔστιν οὕτως ἀσφαλὴς πλούτου πυλεών, ὃν οὐκ ἀνοίγει<sup>1</sup> τύχης καιρός.

<sup>1</sup> ἀνοίγει S: ἐπανοίγει MA

**D277** (B210) Stob. 3.5.26

τράπεζαν πολυτελέα μὲν τύχη παρατίθησιν, αὐταρ κέα δὲ σωφροσύνη.

**D278** (B286) Stob. 4.39.17

εὐτυχὴς ὁ ἐπὶ μετρίοισι χρήμασιν εὐθυμεόμενος, δυστυχὴς δὲ ὁ ἐπὶ πολλοῖσι δυσθυμεόμενος.

**D279** (B293) Stob. 4.48.10

οἷσιν ἡδονὴν ἔχουσιν αἱ τῶν πέλας ξυμφοραί, οὐ ξυν-  
ιασι μὲν ὥς τὰ τῆς τύχης κοινὰ πᾶσιν, ἀπορέουσι δὲ  
οἰκηίης χαρᾶς.

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**as a screen for their own imprudence** (*abouliê*).  
**For only rarely does fortune fight against prudence** (*phronêsis*), **and most of the things in life an intelligent sharp-sightedness straightens out.**

**D275** (B269) Stobaeus, *Anthology*

*Audacity begins an action, but fortune is in charge of its end.*

**D276** (B288\*) Stobaeus, *Anthology*

*There is no portal for wealth so secure that it cannot be opened by the opportunities of fortune.*

**D277** (B210) Stobaeus, *Anthology*

*Fortune sets an abundant table, temperance a self-sufficient one.*

**D278** (B286) Stobaeus, *Anthology*

*Fortunate is he who is contented with moderate wealth, unfortunate he who is discontented with much.*

**D279** (B293) Stobaeus, *Anthology*

*Those who derive pleasure from the adversities of their neighbors not only do not understand that what belongs to fortune is shared by all people in common, but also they are deprived (*aporeousi*) of their own joy.*

## EARLY GREEK PHILOSOPHY VII

### *Life and Death (D280–D292)*

**D280** (B160) Porph. *Abst.* 4.21.6

τὸ γὰρ κακῶς ζῆν καὶ μὴ φρονίμως καὶ σωφρόνως  
καὶ ὁσίως Δημόκριτος<sup>1</sup> ἔλεγεν οὐ κακῶς ζῆν εἶναι,  
ἀλλὰ πολὺν χρόνον ἀποθνήσκειν.

<sup>1</sup> Δημόκριτος coni. Reiske ; Δημοκράτης mss.

**D281** (B1a) Philod. *Mort.* 28.27–33

[27] τῆς δ' αὐ[τῆς ἀλγη]δόνης ἔχετ[αι κατὰ] | Δημό-  
κριτο[ν καὶ] τὸ δυσωπεῖσθαι . .] | διὰ τὴν οσο [.]  
αντ[. . .]νιτουσ[. . . . .] | [.]ας [. . .] καὶ [δ]υσμο[ρφ]  
ίας· καταφέρονται γὰρ ἐπὶ [το]ιοῦτο πάθος ὥς [κ]αὶ  
τῶ[ν] | μετὰ τ[ῆς εὐ]σαρκίας [κ]αὶ τοῦ κάλλου[s | ἀπο-  
θνη[σκό]ντων καὶ τῶν ἐκ [. . . .

Rest. Mekler, Diels, Delattre                      27 αὐ[τῆς ἀλγη]δόνης  
Delattre, αὐ[τῆς φλε]δόνης Armstrong-Henry, αὖ σηπε[δόνης]  
Mekler                      29–30 διὰ τὴν ὀσφ<ρ>αντ<ικ>ῶν τούτων φαν>τα-  
σ<ίαν> καὶ δυσμορφίας Diels post Mekler

**D282** (B1a) Philod. *Mort.* 39.9–15

[9] εἴθ' ὅταν ἐναρ|γῆς αὐτοῦ γένηται θεωρία, παράδοι-  
ξος αὐτοῖς ὑποπίπτει, παρ' ἣν αἰτίαν | οὐδὲ διαθήκας  
ὑπομένοντες γράφεσθαι περικατάληπτοι γίνονται καὶ  
διεξυμφορεῖν ἀναγκάζονται κατ[ὰ] Δημόκριτον.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Life and Death (D280–D292)*

#### **D280** (B160) Porphyry, *On Abstinence*

To live badly and not wisely, temperately, and piously, Democritus (?),<sup>1</sup> said was not to live badly but **to die over the course of a long time.**

<sup>1</sup> Democrates, according to the manuscripts.

#### **D281** (B1a) Philodemus, *On Death*

To the same sense of pain (?) belongs, according to Democritus, the feeling of disgust on account of . . . and of ugliness. For they fall into an affection of this sort when those who die with their flesh in good condition and with beauty and those who . . .

#### **D282** (B1a) Philodemus, *On Death*

Then, when the sight of it [i.e. death] becomes manifestly visible, it befalls them unexpected. That is the reason why, not even bearing to write their testament, they are taken by surprise and obliged **to undergo a double suffering** according to Democritus.

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rest. Mekler, Diels      13–14 *διξνμφορεῖν* leg. Amstrong-Henry post Crönert (*δισνμφορεῖν*): *δίσσις* *ἐμφορεῖν* Diels post Gomperz (*δὲς ἐμφορεῖν*)



## EARLY GREEK PHILOSOPHY VII

**D283** (B200) Stob. 3.4.74

*ἀνοήμονες βιοῦσιν οὐ τερπόμενοι βιοτῇ.*

**D284** (B201) Stob. 3.4.75

*ἀνοήμονες δηναιότητος ὀρέγονται οὐ τερπόμενοι δη-  
ναιότητι.<sup>1</sup>*

<sup>1</sup> δὴ νεότητος . . . δὴ νεότητι mss., corr. Bücheler

**D285** (B205) Stob. 3.4.79

*ἀνοήμονες ζωῆς ὀρέγονται<sup>1</sup> θάνατον δεδοκότες.*

<sup>1</sup> post ὀρέγονται hab. mss. γήραος, del. Friedländer,  
Philippson: <ἀντὶ> γήραος Gomperz: γήρας ὡς θάνατον coni.  
Schenkl, γήραος κάματος Hense

**D286** (B199) Stob. 3.4.73

*ἀνοήμονες τὸ ζῆν ὡς στυγέοντες ζῆν ἐθέλουσι δείματι  
ἄιδεω.*

**D287** (B206) Stob. 3.4.80

*ἀνοήμονες θάνατον δεδοκότες γηράσκειν ἐθέλουσι.*

**D288** (B203) Stob. 3.4.77

*ἄνθρωποι<sup>1</sup> τὸν θάνατον φεύγοντες διώκουσιν.*

<sup>1</sup> ἀνόητοι vel ἀνοήμονες coni. Meineke

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D283** (B200) Stobaeus, *Anthology*

*Thoughtless people live without enjoying life.*

**D284** (B201) Stobaeus, *Anthology*

*Thoughtless people desire duration without deriving satisfaction (terpomenoi) from duration.*

**D285** (B205) Stobaeus, *Anthology*

*Thoughtless people desire life because they are afraid of death.*

**D286** (B199) Stobaeus, *Anthology*

*Thoughtless people want to exist as though hating to exist, out of fear of Hades.*

**D287** (B206) Stobaeus, *Anthology*

*Thoughtless people, fearing death, want to grow old.*

**D288** (B203) Stobaeus, *Anthology*

*People that flee death are pursuing it.*

## EARLY GREEK PHILOSOPHY VII

**D289** (B297) Stob. 4.52.40 (cf. 4.34.62)

ἔνιοι θνητῆς φύσεως διάλυσιν οὐκ εἰδότες ἄνθρωποι, συννειδήσει δὲ τῆς ἐν τῷ βίῳ κακοπραγμοσύνης, τὸν τῆς βιοτῆς χρόνον ἐναραχαῖς καὶ φόβοις ταλαιπωροῦσι, ψεύδεα περὶ τοῦ μετὰ τὴν τελευτὴν μυθοπλαστούντες χρόνον.

**D290** (B295) Stob. 4.50.22

ὁ γέρων νέος ἐγένετο, ὁ δὲ νέος ἄδηλον εἰ ἐς γῆρας ἀφίξεται· τὸ τέλειον οὖν ἀγαθὸν τοῦ μέλλοντος ἔτι<sup>1</sup> καὶ ἀδήλου κρέσσον.

<sup>1</sup> ἔτι Diels: εἰ mss.

**D291** (B296) Stob. 4.50.76

γῆρας ὁλόκληρός ἐστι πῆρωσις· πάντ' ἔχει καὶ πᾶσιν ἐνδεί.

**D292** (B230) Stob. 3.16.22

βίος ἀνεόρταστος μακρὴ ὁδὸς ἀπανδόκευτος.

*Wisdom and Folly (D293–D310)*

**D293** (B2) *Tritogeneia* (cf. **D2b** I.4)

**a** Etym. *Orion.*, p. 153.5

Τριτογένεια. ἡ Ἀθηνᾶ. κατὰ Δημόκριτον, φρόνησις

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D289** (B297) Stobaeus, *Anthology*

*Some people, ignorant of the dissolution of mortal nature, but aware of the adversity that affects life, suffer during the time of their life in troubles and fears, fabricating false myths about the time after death.*

### **D290** (B295) Stobaeus, *Anthology*

*The old man used to be young, but as for the young man, it is unclear whether he will arrive at old age. So a fulfilled good is better than one that is still to come and is unclear.*

### **D291** (B296) Stobaeus, *Anthology*

*Old age is a mutilation intact in all its parts: it has all things and it lacks all things.*

### **D292** (B230) Stobaeus, *Anthology*

*A life without public holidays is a long road without hotels.*

### *Wisdom and Folly (D293–D310)*

### **D293** (B2) *Tritogeneia* (cf. **D2b** I.4)

#### **a** *Etymologicum Orionis*

*Tritogeneia*. Athena. According to Democritus, she is con-

## EARLY GREEK PHILOSOPHY VII

νομίζεται. γίνεται δὲ ἐκ τοῦ φρονεῖν τρία ταῦτα· βου-  
λεύεσθαι καλῶς, λέγειν ἀναμαρτήτως, καὶ πράττειν ἃ  
δεῖ.

**b** *Schol. BT in Il.* 8.39

Δημόκριτος δὲ ἐτυμολογῶν τὸ ὄνομα, φησὶν ὅτι φρό-  
νησίς ἐστιν, ἀφ' ἧς τρία συμβαίνει, εὖ λογίζεσθαι,  
λέγειν καλῶς, πράττειν ἃ δεῖ.

**D294** (B289) Stob. 4.44.64

ἀλογιστίη μὴ ξυγχωρεῖν ταῖσι κατὰ τὸν βίον ἀνάγ-  
καις.

lemma δημοκρίτου A: δημητρίου M

**D295** (B216) Stob. 3.7.74

σοφίη ἄθαμβος ἀξίη πάντων τιμιωτάτη οὖσα.<sup>1</sup>

<sup>1</sup> τιμιωτάτη οὖσα secl. H. Gomperz

**D296** (B236) Stob. 3.20.56

θυμῷ μάχεσθαι μὲν χαλεπόν· ἀνδρὸς δὲ τὸ κρατεῖν  
εὐλογίστου.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

sidered to be prudence (*phronêsis*). For out of prudent thinking (*phronein*) come about (*ginetai*) these three (*tria*) things: to deliberate well, to speak unerringly, and to do what ought to be done.

### **b** Scholia on Homer's *Iliad*

Democritus, providing an etymology for the name [i.e. 'Tritogeneia'] says that from prudence these three things come about: to reason well, to speak well, and to do what ought to be done.

#### **D294** (B289) Stobaeus, *Anthology*

*It is a lack of intelligence not to submit to the necessities that life imposes.*

#### **D295** (B216) Stobaeus, *Anthology*

*Wisdom that is unastounded is valuable, being the most honorable of all things.*

#### **D296** (B236) Stobaeus, *Anthology*

*To fight against an ardor (thumos) is hard [cf. **HER. D116**]; but it is the mark of a rational man to dominate over it.*

## EARLY GREEK PHILOSOPHY VII

### D297 (B197) Stob. 3.4.71

ἀνοήμονες ῥνσμουῖνται τοῖς τῆς τύχης<sup>1</sup> κέρδεσιν, οἱ δὲ τῶν τοιῶνδε δαήμονες τοῖς τῆς σοφίης.

<sup>1</sup> τύχης Grotius: ψυχῆς ed. Trincav.

### D298 (B202) Stob. 3.4.76

ἀνοήμονες τῶν ἀπεόντων ὀρέγονται, τὰ δὲ παρεόντα καὶ παρωχημένων κερδαλεώτερα εἶοντα ἀμαλδύνουσιν.

### D299 (B204) Stob. 3.4.78

ἀνοήμονες οὐδὲν ἀνδάνουσιν<sup>1</sup> ἐν ὅλῃ τῇ βιοτῇ.

<sup>1</sup> ἀνδάνουσιν (ἀνδ- A) M<sup>d</sup>A: *μανθάνουσιν* coni. Valckenaer, *κατάνουσι* vel *ἀνύουσι* Meineke, *λαγχάνουσιν* Wachsmuth, *ἁλδαίνουσιν* dub. Hense

### D300 (B42) Stob. 4.44.68 (= Democrat. Sent. 8)

μέγα τὸ ἐν συμφορῇσι φρονεῖν ἅ δέι.

### D301 (B58) Stob. 4.46.18 (= Democrat. Sent. 23a)

ἐλπίδες αἱ τῶν ὀρθὰ φρονεόντων ἐφικταί, αἱ δὲ τῶν ἀξυνέτων ἀδύνατοι.

### D302 (B292) Stob. 4.46.19

ἄλογοι τῶν ἀξυνέτων αἱ ἐλπίδες.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D297** (B197) Stobaeus, *Anthology*

*Thoughtless people derive their bearing (rhusmountai) from the advantages that come from fortune, those who are expert in such matters from those that come from wisdom.*

**D298** (B202) Stobaeus, *Anthology*

*Thoughtless people desire what is absent, while what is present, even if it is more advantageous than what has departed, they destroy.*

**D299** (B204) Stobaeus, *Anthology*

*Thoughtless people cannot please at all during the course of their whole lifetime.*

**D300** (B42) Stobaeus, *Anthology* (attributed to Democrates)

*It is a great thing to think as one ought to in adversities.*

**D301** (B58) Stobaeus, *Anthology* (attributed to Democrates)

*The hopes of people who think correctly are attainable, those of people who do not understand are impossible.*

**D302** (B292) Stobaeus, *Anthology*

*The hopes of people who do not understand are irrational.*



## EARLY GREEK PHILOSOPHY VII

### D303 (B175) Stob. 2.9.4

οἱ θεοὶ τοῖσι ἀνθρώποισι διδοῦσι τὰγαθὰ<sup>1</sup> πάντα καὶ  
πάλαι καὶ νῦν, πλὴν ὁκόσα κακὰ καὶ βλαβερά καὶ  
ἀνωφελέα· τὰδε δ' οὔτε<sup>2</sup> πάλαι οὔτε νῦν θεοὶ ἀνθρώ-  
ποισι δωροῦνται, ἀλλ' αὐτοὶ τοῖσδεσι ἐμπελάζουσι<sup>3</sup>  
διὰ νοῦ τυφλότητα καὶ ἀγνωμοσύνην.

<sup>1</sup> τὰγαθὰ del. Meineke: τὰλλα ἅπαντα coni. Wachsmuth

<sup>2</sup> οὔτε Meineke: οὐ mss.

<sup>3</sup> ἀμπελάζουσι mss, corr. Valckenaer

### D304 (B61) Stob. 3.37.25 (= Democrat. Sent. 26)

οἷσιν ὁ τρόπος ἐστὶν εὐτακτος, τουτέοισι καὶ <ὁ><sup>1</sup>  
βίος συντέτακται.<sup>2</sup>

<sup>1</sup> ὁ Democrat., om. mss.

<sup>2</sup> εὐ τέτακται Meineke

### D305 (B57) Stob. 4.29.18 (= Democrat. Sent. 23)

κτηνέων μὲν εὐγένεια ἢ τοῦ σκήνεος<sup>1</sup> εὐσθένεια, ἀν-  
θρώπων δὲ ἢ τοῦ ἥθεος εὐτροπία.

<sup>1</sup> σκήνεος mss.: σώματος Democrat.

### D306 (B193) Stob. 3.3.43

φρονήσιος ἔργον<sup>1</sup> μέλλουσιν ἀδικίην φυλάξασθαι,  
ἀναλγησίης δὲ γενομένην<sup>2</sup> μὴ ἀμύνασθαι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D303** (B175) Stobaeus, *Anthology*

*The gods give to human beings all good things, both in ancient times and now. Except that everything that is evil, harmful, and useless—these things neither in ancient times nor now do gods bestow them upon human beings, but these themselves approach them by reason of the blindness of their mind and their lack of judgment.*

### **D304** (B61) Stobaeus, *Anthology* (attributed to Democrates)

*Those whose character (tropos) is well ordered have their life too in good order.*

### **D305** (B57) Stobaeus, *Anthology* (attributed to Democrates)

*For livestock, noble birth is a fine strength of body; for humans, it is the fine turning of their character.*

### **D306** (B193) Stobaeus, *Anthology*

*The function of prudence (phronêsis) is to protect against injustice that will occur, that of insensitivity to pain (anal-gêsîê) is not to take vengeance for that which has occurred.*

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<sup>1</sup> ἔργον <τὸ> Hense                      <sup>2</sup> γενομένην Max. Conf. Sent.  
2.41: τὸ γενομένην M<sup>d</sup>, τὸ γενόμενον A

## EARLY GREEK PHILOSOPHY VII

**D307** (B64) Stob. 3.4.81 (= Democrat. *Sent.* 29)

πολλοὶ πολυμαθείες νόον οὐκ ἔχουσι.

**D308** (B52) Stob. 3.10.42 (= Democrat. *Sent.* 18)

τὸν οἰόμενον νόον ἔχειν ὁ νουθετέων τι ματαιοπονέει.

**D309** (B169) Stob. 2.1.12

μὴ πάντα ἐπίστασθαι προθύμεο, μὴ πάντων ἀμαθὴς γένη.

**D310** (B158) Plut. *Lat. viv.* 5 1129E (et al.)

[. . .] ὥς φησι Δημόκριτος νέα ἐφ' ἡμέρη φρονέοντες<sup>1</sup>  
ἄνθρωποι [. . .].

<sup>1</sup> τρέφοντες mss., corr. Pohlenz ex Plut. *Quaest. conv.* 655D  
et 722D

### *Virtues and Vices (D311–D337)*

#### *The Influence of Other People (D311–D313)*

**D311** (B39) Stob. 3.37.22 (= Democrat. *Sent.* 15)

ἀγαθὸν ἢ εἶναι χρεὼν ἢ μιμέσθαι.

**D312** (B184) Stob. 2.31.90

φαύλων ὁμιλίῃ συνεχῆς ἔξιν κακίης συναύξει.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D307** (B64) Stobaeus, *Anthology* (attributed to Democrates)

*Many people who possess much learning do not have intelligence* [cf. **HER. R103**].

**D308** (B52) Stobaeus, *Anthology* (attributed to Democrates)

*He who admonishes (noutheteôn) someone who thinks he possesses intelligence (nous) labors in vain.*

**D309** (B169) Stobaeus, *Anthology*

*Do not desire to know everything, lest you be ignorant of everything.*

**D310** (B158) Plutarch, *Is the Saying 'Live in Obscurity' Right?*

[. . .] as Democritus says, humans, “**thinking new thoughts every day**” [. . .].

### *Virtues and Vices (D311–D337)*

#### *The Influence of Other People (D311–D313)*

**D311** (B39) Stobaeus, *Anthology* (attributed to Democrates)

*One should either be a good man, or else imitate one.*

**D312** (B184) Stobaeus, *Anthology*

*Spending time continually with worthless people helps increase the disposition to wickedness.*

## EARLY GREEK PHILOSOPHY VII

**D313** (< B143) Philod. *Ira* 29.25–29 Indelli

. . . καὶ μικροῦ δεῖν ὅσα τις ἂν νόσαιοιτο κατὰ Δημόκριτον· κακὰ πάντα παρακολουθεῖ διὰ τὰς ὑπερμέτρους ὀργάς.

*Effort (D314–D316)*

**D314** (B240) Stob. 3.29.63

οἱ ἐκούσιοι πόνοι τὴν τῶν ἀκουσίων ὑπομονὴν ἐλαφροτέραν παρασκευάζουσιν.

**D315** (B241) Stob. 3.29.64

πόνος συνεχὴς ἐλαφρότερος ἑαυτοῦ συννηθίῃ γίνεται.

**D316** (B243) Stob. 3.29.88

τῆς ἡσυχίης πάντες οἱ πόνοι ἡδιόνες, ὅταν ὦν εἵνεκεν πονέουσιν τυγχάνωσιν ἢ εἰδέωσι κύρσοντες. †ἐν δὲ ἄκος τῇ ἀποτυχίῃ τὸ πᾶν<sup>†</sup><sup>1</sup> ὁμοίως ἀνηγρὸν καὶ ταλαίπωρον.

<sup>1</sup> loc. corruptum alii aliter emend., e.g.: ἐὰν δὲ ἀποστῇ Iacobs: ἐν δὲ ἐκάστη τῇ ἀποτυχίῃ τὸ πονεῖν dub. Diels: ἐν δὲ ἄκος <ἢ ἐπιτυχίῃ ἐν δὲ> τῇ ἀποτυχίῃ τὸ πᾶν Fränkel (ἐπιτυχίῃ pro ἀποτυχίῃ iam ed. Trincav.)

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D313** (< B143) Philodemus, *On Anger*

It is almost the case that **all the evils one could think of**, as Democritus puts it, ensue from instances of excessive anger.

### *Effort (D314–D316)*

**D314** (B240) Stobaeus, *Anthology*

*Voluntary efforts make it easier to endure involuntary ones.*

**D315** (B241) Stobaeus, *Anthology*

*A continuous effort becomes easier because of habituation to it.*

**D316** (B243) Stobaeus, *Anthology*

*All efforts are more pleasant than rest, when one obtains what one exerts effort for or knows that one will do so. †But one remedy in misfortune is entirely † vexatious and distressful in a similar way.*

## EARLY GREEK PHILOSOPHY VII

### *Temperance (D317–D318)*

**D317** (B294) Stob. 4.50.20

ἰσχύς καὶ εὐμορφίη νεότητος ἀγαθὰ, γήρας<sup>1</sup> δὲ σωφροσύνης ἄνθος.

<sup>1</sup> γήρας mss., corr. Halm

**D318** (B291) Stob. 4.44.70

πενίην ἐπιεικέως φέρειν σωφρονέοντος.<sup>1</sup>

<sup>1</sup> σωφρονέοντος ed. Trincav.: -ντα mss.

### *Justice (D319–D324)*

**D319** (B256) Stob. 4.2.14

δίκη μὲν ἐστὶν ἔρδειν τὰ χρῆ ἐόντα, ἀδικίη δὲ μὴ ἔρδειν τὰ χρῆ ἐόντα, ἀλλὰ παρατρέπεσθαι.

**D320** (B174) Stob. 2.9.3

ὁ μὲν εὖθυμος εἰς ἔργα ἐπιφερόμενος δίκαια καὶ νόμιμα καὶ ὕπαρ καὶ ὄναρ χαίρει τε καὶ ἔρρωται καὶ ἀνακηδής<sup>1</sup> ἐστίν· ὃς δ' ἂν καὶ δίκης ἀλογῇ καὶ τὰ χρέοντα<sup>2</sup> μὴ ἔρδῃ, τούτῳ πάντα τὰ τοιάδε ἀτερπέα<sup>3</sup> ὅταν τευ<sup>4</sup> ἀναμνησθῇ, καὶ δέδοικε καὶ ἑωυτὸν<sup>5</sup> κακίζει.

<sup>1</sup> ἀνακύδης mss., corr. Mullach      <sup>2</sup> χρέοντα mss., corr. Heeren      <sup>3</sup> ἀτερπείη mss., corr. Usener

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Temperance (D317–D318)*

**D317** (B294) Stobaeus, *Anthology*

*Strength and beauty are the good things of youth, but of old age the flower is temperance.*

**D318** (B291) Stobaeus, *Anthology*

*It is the mark of a temperate man to endure poverty equably.*

### *Justice (D319–D324)*

**D319** (B256) Stobaeus, *Anthology*

*Justice is to do what is necessary, injustice not to do what is necessary but to turn aside from it.*

**D320** (B174) Stobaeus, *Anthology*

*The contented man, being inclined toward deeds that are just and lawful, is joyous day and night, strong and care-free. But for him who disregards justice and does not do what is necessary, all such things cause dissatisfaction whenever he recalls them, and he is frightened and upbraids himself.*

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<sup>4</sup> τευ Diels: τεῦ mss.: τ' εὔ Usener  
corr. cod. Vatic.

<sup>5</sup> ὡντων F, οὐτὸν P:



## EARLY GREEK PHILOSOPHY VII

### D321 (B217) Stob. 3.9.30

μοῦνοι θεοφιλέες, ὅσοις ἐχθρὸν τὸ ἀδικεῖν.

### D322 (B215) Stob. 3.7.31

δίκης κῦδος γνώμης θάρσος καὶ ἀθαμβία, ἀδικίης δὲ δαίμα ξυμφορῆς τέρμα.

### D323 (B216bis) Stob. 3.9.29 (= Democrat. Sent. 27)

ἀγαθὸν οὐ τὸ μὴ ἀδικεῖν ἀλλὰ τὸ μὴδὲ ἐθέλιν.

### D324 (B263) Stob. 4.5.45

δίκης καὶ ἀρετῆς μεγίστην μετέχει μοῖραν ὁ<sup>1</sup> ἀξίας τὰς μεγίστας τάμνων.<sup>2</sup>

<sup>1</sup> τιμὰς post ὁ hab. mss., del. Meineke ut gloss.

<sup>2</sup> τάμνων <τοῖς ἀξιωτάτοις> dub. Diels: ὁ τιμὰς ἀξίως τὰς μεγίστας ταμιεύων prop. Gomperz

### *Courage (D325–D326)*

### D325 (B214) Stob. 3.7.25 (et al.)

ἀνδρείος οὐχ ὁ τῶν πολεμίων<sup>1</sup> μόνον ἀλλὰ καὶ ὁ τῶν ἡδονῶν κρέσσων. ἔνιοι δὲ πόλεων<sup>2</sup> μὲν δεσπόζουσι, γυναιξὶ δὲ δουλεύουσιν.<sup>3</sup>

<sup>1</sup> κρατῶν post πολεμίων hab. mss., om. Stob. 3.17.39, secl. Hense <sup>2</sup> πόλεων A: πόνων Md Br <sup>3</sup> duas sententias separatim praeb. Stob. 3.17.39 et 3.6.26

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D321** (B217) Stobaeus, *Anthology*

*Only those people are friends of the gods for whom it is hateful to commit injustice.*

### **D322** (B215) Stobaeus, *Anthology*

*The glory arising from justice is courage and unastoundedness (athambiê) of judgment, while the fear arising from injustice has an end consisting in misfortune.*

### **D323** (B216bis) Stobaeus, *Anthology* (attributed to Democrates)

*The good thing is not to not commit injustice, but to not even wish to do so.*

### **D324** (B263) Stobaeus, *Anthology*

*Of justice and virtue he has the greatest share who divides up the greatest rewards.*

### *Courage (D325–D326)*

### **D325** (B214) Stobaeus, *Anthology*

*Courageous is he who is stronger not only than enemies but also than pleasures. Some men are masters over cities but slaves to women.*

## EARLY GREEK PHILOSOPHY VII

**D326** (B213) Stob. 3.7.21

ἀνδρείη τὰς ἄτας μικρὰς ἔρδει.

*Magnanimity* (D327)

**D327** (B46) Stob. 4.4.69 (= Democrat. *Sent.* 12)

μεγαλοψυχίη τὸ φέρειν πράως πλημμέλειαν.

*Virtues and Vices of Women* (D328–D329)

**D328** (B273) Stob. 4.22.199

γυνὴ πολλὰ ἀνδρὸς ὀξύτερη πρὸς κακοφραδοσύνην.

**D329** (B274) Stob. 4.23.38

κόσμος ὀλιγομυθίη γυναικί· καλὸν δὲ καὶ κόσμον λιτότης.

*Avarice* (D330–D333)

**D330** (B222) Stob. 3.10.64

ἡ τέκνοις ἄγαν χρημάτων συναγωγὴ πρόφασις ἐστὶ φιλαργυρίας τρόπον ἴδιον ἐλέγχουσα.

**D331** (B227) Stob. 3.16.17

οἱ φειδωλοὶ τὸν τῆς μελίσσης οἶτον ἔχουσιν ἐργαζόμενοι ὥς ἀεὶ βιωσόμενοι.<sup>1</sup>

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D326** (B213) Stobaeus, *Anthology*

*Courage makes calamities small.*

*Magnanimity (D327)*

**D327** (B46) Stobaeus, *Anthology* (attributed to Democritus)

*Great-spiritedness: to endure a blunder easily.*

*Virtues and Vices of Women (D328–D329)*

**D328** (B273) Stobaeus, *Anthology*

*A woman is much keener for evil thoughts than a man.*

**D329** (B274) Stobaeus, *Anthology*

*Adornment for a woman is to speak little; but simplicity of adornment is a fine thing too.*

*Avarice (D330–D333)*

**D330** (B222) Stobaeus, *Anthology*

*Gathering much wealth for one's children is a pretext for avarice that reveals one's own character.*

**D331** (B227) Stobaeus, *Anthology*

*Thrifty people have the fate of the bee: they work as though they were going to live forever.*

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<sup>1</sup> βλίσσόμενοι Buecheler

**D332** (B228) Stob. 3.16.18

οἱ τῶν φειδωλῶν παῖδες ἀμαθέες γινόμενοι, ὥσπερ οἱ ὀρχησται οἱ ἐς τὰς μαχαίρας ὀρούοντες, ἥν ἑνὸς μούνου <μῇ><sup>1</sup> τύχῳσι καταφερόμενοι, ἔνθα δεῖ τοὺς πόδας ἐρεῖσαι, ἀπόλλυνται· χαλεπὸν δὲ τυχεῖν ἑνός,<sup>2</sup> τὸ γὰρ ἔχνιον μῦνον λέλειπται τῶν ποδῶν· οὕτω δὲ καὶ οὗτοι, ἥν ἀμάρτωσι τοῦ πατρικοῦ τύπου τοῦ ἐπιμελέος καὶ φειδωλοῦ, φιλέουσι διαφθείρεσθαι.

<sup>1</sup> <μῇ> Diels: τύχῳσι <μῇ> Mullach      <sup>2</sup> χαλεπὸν δὲ τυχεῖν ἑνός ms.: <οὐ> χαλεπὸν δὲ μῇ τυχεῖν ἑνός conl. Salmasius: χαλ. δὲ μῇ ἀτυχεῖν ἑνός Iacobs: χαλ. δὲ τυχέειν <τοῦ> ἑνός Mullach

**D333** (B229) Stob. 3.16.19

φειδώ τοι καὶ λιμὸς χρηστή, ἐν καιρῷ δὲ καὶ δαπάνη· γινώσκειν δὲ ἀγαθοῦ.

*Envy and Rivalry (D334–D335)*

**D334** (B88) Stob. 3.38.47 (= Democrat. Sent. 54)

ὁ φθονέων ἑωυτὸν ὥς ἐχθρὸν λυπέει.

**D335** (B237) Stob. 3.20.62

φιλονεικίη πᾶσα ἀνόητος· τὸ γὰρ κατὰ τοῦ δυσμενέος βλαβερόν θεωρεῖσα τὸ ἴδιον συμφέρον οὐ βλέπει.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D332** (B228) Stobaeus, *Anthology*

*Children of thrifty people, if they do not learn, die like dancers who leap among swords, if when they land they miss only one of the spots where they have to set their feet (and it is difficult to hit that one spot, since there is only enough space for their feet): in the same way, they too tend to perish, if they fall short of the paternal model of carefulness and thrift.*

### **D333** (B229) Stobaeus, *Anthology*

*Thrift and hunger are useful; but in the right circumstances so too is expense. To discern this is the mark of a good man.*

### *Envy and Rivalry (D334–D335)*

### **D334** (B88) Stobaeus, *Anthology* (attributed to Democrates)

*He who envies inflicts suffering upon himself just as upon an enemy.*

### **D335** (B237) Stobaeus, *Anthology*

*Every contentiousness is thoughtless: for, watching only for what is harmful for the enemy, he does not see what is advantageous for himself.*

## EARLY GREEK PHILOSOPHY VII

### *Shame (D336–D337)*

**D336** (B244) Stob. 3.31.7

φᾶνλον, καὶν μόνος ἦς, μήτε λέξης μήτ' ἐργάσῃ· μάθε  
δὲ πολὺ μᾶλλον τῶν ἄλλων σεαυτὸν αἰσχύνεσθαι.

**D337** (B60) Stob. 3.13.46 (= Democrat. *Sent.* 25)

κρέσσον τὰ οἰκία ἀμαρτήματα ἐλέγχειν ἢ τὰ  
ὀθνήια.<sup>1</sup>

<sup>1</sup> ὀθνήια Meineke: ὀθνεῖα mss. et Democrat.: ἀλλότρια Max.  
Conf.

### *Words and Deeds (D338–D352)*

**D338** (B145) Plut. *De lib. ed.* 14 9F

λόγος γὰρ ἔργου σκιὴ κατὰ Δημόκριτον.

**D339** (B53a) Stob. 2.15.33 (= Democrat. *Sent.* 19b)

πολλοὶ δρῶντες τὰ αἰσχιστα λόγους τοὺς<sup>1</sup> ἀρίστους  
ἀσκέουσιν.

<sup>1</sup> τοὺς om. Democrat.

**D340** (B55) Stob. 2.15.36 (= Democrat. *Sent.* 21)

ἔργα καὶ πρήξιας ἀρετῆς, οὐ λόγους ζηλοῦν<sup>1</sup> χρεών.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Shame (D336–D337)*

**D336** (B244) Stobaeus, *Anthology*

*What is sordid, even if you are alone, you should neither say nor do: learn to feel shame much more before yourself than before others.*

**D337** (B60) Stobaeus, *Anthology* (attributed to Democritus)

*It is a better thing to put to shame one's own errors than someone else's.*

### *Words and Deeds (D338–D352)*

**D338** (B145) Plutarch, *On the Education of Children*

**A word is the shadow of a deed**, according to Democritus.

**D339** (B53a) Stobaeus, *Anthology* (attributed to Democritus)

*Many people who perform the most shameful deeds cultivate the best words.*

**D340** (B55) Stobaeus, *Anthology* (attributed to Democritus)

*One must emulate the deeds and actions of virtue, not its words.*

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<sup>1</sup> ζηλοῦν Democrat.: ζηλεύειν ms.



## EARLY GREEK PHILOSOPHY VII

### D341 (B177) Stob. 2.15.40

οὔτε λόγος ἐσθλὸς φαύλην πρῆξιν ἀμαυρίσκει, οὔτε  
πρῆξις ἀγαθὴ λόγον βλασφημίῃ λυμαίνεται.

### D342 (B190) Stob. 3.1.91

φαύλων ἔργων καὶ τοὺς λόγους παραιτητέον.

### D343 (B192) Stob. 3.2.36

ἔστι ῥάδιον μὲν ἐπαινεῖν ἂ μὴ χρὴ καὶ ψέγειν, ἐκάτε-  
ρον δὲ πονηροῦ τινος ἥθους.

### D344 (B226) Stob. 3.13.47

οἰκίγιον ἐλευθερίης παρρησίῃ, κίνδυνος δὲ ἡ τοῦ και-  
ροῦ διάγνωσις.

### D345 (B226bis, B63) Stob. 3.14.8 (= Democrat. Sent. 28)

εὐλογεῖν ἐπὶ καλοῖς ἔργμασι καλόν· τὸ γὰρ ἐπὶ  
φλαύροισι κίβδηλον καὶ ἀπατεῶνος ἔργον.

### D346 (B51) Stob. 2.4.12 (= Democrat. Sent. 17)

ἰσχυρότερος<sup>1</sup> ἐς πειθῶ λόγος πολλαχῇ γίνεται χρυ-  
σοῦ.<sup>2</sup>

<sup>1</sup> ἰσχυρότερος Democrat.: ἰσχυρόν mss.

<sup>2</sup> χρυσοῦ cum init. prox. sent. iunx. mss.

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D341** (B177) Stobaeus, *Anthology*

*Neither do noble words obscure a worthless action nor is a good action defiled by the defamation of words.*

**D342** (B190) Stobaeus, *Anthology*

*About worthless deeds one should avoid even speaking.*

**D343** (B192) Stobaeus, *Anthology*

*It is all too easy to praise and blame what one should not [scil. praise or blame]: both belong to a wicked character.*

**D344** (B226) Stobaeus, *Anthology*

*It belongs to freedom to speak frankly, but the danger is in discerning the favorable opportunity.*

**D345** (B226bis, B63) Stobaeus, *Anthology* (attributed to Democrates)

*It is a fine thing to speak well about fine deeds; for to do so about worthless ones is the deed of a liar and a cheat.*

**D346** (B51) Stobaeus, *Anthology* (attributed to Democrates)

*Words are often stronger for persuading than gold.*

**D347**

**a** (B225) Stob. 3.12.13

ἀληθομυθέειν χρεών, ὃ πολὺ λώιον.<sup>1</sup>

<sup>1</sup> οὐ πολυλογέειν Friedländer e Democrat. *Sent.* 10

**b** (B44) Democrat. *Sent.* 10

ἀληθόμυθον χρὴ εἶναι,<sup>1</sup> οὐ πολύλογον.

<sup>1</sup> χρὴ εἶναι P: εἶναι χρὴ B: χρὴ ALC

**D348** (B85) Stob. 2.31.73 (= Democrat. *Sent.* 51)

ὁ ἀντιλογεόμενος καὶ πολλὰ λεσχηνεύμενος ἀφυγῆς  
ἐς μάθησιν ὧν χρὴ.<sup>1</sup>

<sup>1</sup> ὧν χρὴ Democrat., om. mss.

**D349** (B86) Stob. 3.36.24 (= Democrat. *Sent.* 52)

πλεονεξίῃ τὸ πάντα λέγειν, μηδὲν δὲ ἐθέλειν ἀκούειν.

**D350** (B239) Stob. 3.28.13

ὄρκους οὓς ποιέονται ἐν ἀνάγκῃσιν ἔοντες, οὐ τηρέου-  
σιν οἱ φλαῦροι ἐπὶ διαφύγῳσιν.

**D351** (B81) Stob. 3.29.67 (= Democrat. *Sent.* 46)

τὸ αἰεὶ μέλλειν ἀτελέας ποιεῖ τὰς πρῆξις.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D347

**a** (B225) Stobaeus, *Anthology*

*One should speak the truth—that is much better.*

**b** (B44) attributed to Democrates

*One should be someone who speaks the truth, not lots of words.*

**D348** (B85) Stobaeus, *Anthology* (attributed to Democrates)

*He who retorts and chatters a lot is ill-suited by nature to learn what is necessary.*

**D349** (B86) Stobaeus, *Anthology* (attributed to Democrates)

*It is greed to want to say everything but not to want to listen.*

**D350** (B239) Stobaeus, *Anthology*

*Worthless people do not respect oaths that they made when they were under duress once they escape from it.*

**D351** (B81) Stobaeus, *Anthology* (attributed to Democrates)

*Always to be about to do something results in actions remaining unaccomplished.*

## EARLY GREEK PHILOSOPHY VII

**D352** (B48) Stob. 3.38.46 (= Democrat. *Sent.* 14)

μωμεομένων φλαύρων ὁ ἀγαθὸς οὐ ποιεῖται λόγον.

### *Appearances (D353)*

**D353** (B195) Stob. 3.4.69

. . . εἶδωλα<sup>1</sup> ἐσθῆτι καὶ<sup>2</sup> κόσμῳ διαπρεπέα πρὸς θεω-  
ρίην, ἀλλὰ καρδίας κενεά.

<sup>1</sup> ante εἶδωλα pos. lac. Diels  
corr. Meineke

<sup>2</sup> αἰσθητικὰ καὶ mss.,

### *The City and Social Life (D354–D374)*

**D354** (B247) Stob. 3.40.7

ἀνδρὶ σοφῷ πᾶσα γῆ βατή· ψυχῆς γὰρ ἀγαθῆς πα-  
τρὶς ὁ ξύμπας κόσμος.

**D355** (< B157) Plut. *Adv. Col.* 32 1126A

[. . .] ὧν Δημόκριτος μὲν παραινεῖ τήν τε πολιτικὴν<sup>1</sup>  
τέχνην μεγίστην οὔσαν ἐκδιδάσκεσθαι καὶ τοὺς πό-  
νους διώκειν, ἀφ' ὧν τὰ μεγάλα καὶ λαμπρὰ γίνεται  
τοῖς ἀνθρώποις.

<sup>1</sup> πολεμικὴν mss., corr. Reiske

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D352** (B48) Stobaeus, *Anthology* (attributed to Democrates)

*The good man takes no account of the blame of worthless people.*

### *Appearances (D353)*

**D353** (B195) Stobaeus, *Anthology*

*. . . images brilliant to look upon in their clothing and adornment, but devoid of a heart.*

### *The City and Social Life (D354–D374)*

**D354** (B247) Stobaeus, *Anthology*

*A wise man can walk upon the whole earth. For the whole world is the fatherland of a good soul.*

**D355** (< B157) Plutarch, *Against Colotes*

[. . .] Democritus recommends that one learn thoroughly the art of politics, the greatest that there is, and to pursue those exertions from which the greatest and most brilliant things come about for people.

## EARLY GREEK PHILOSOPHY VII

### D356 (B 252) Stob. 4.1.43

τὰ κατὰ τὴν πόλιν χρεῶν τῶν λοιπῶν μέγιστα ἡγέσθαι, ὅκως ἄξεται<sup>1</sup> εὔ, μήτε φιλονεικέοντα παρὰ τὸ ἐπιεικὲς μήτε ἰσχὺν ἐαυτῷ περιτιθέμενον παρὰ τὸ χρηστὸν τὸ τοῦ ξυνοῦ.<sup>2</sup> πόλις γὰρ εὔ ἀγομένη μεγίστη ὀρθωσίς ἐστι, καὶ ἐν τούτῳ πάντα ἓν, καὶ τούτου σφζομένου <τὰ><sup>3</sup> πάντα σώζεται καὶ τούτου διαφθειρομένου τὰ πάντα διαφθείρεται.

<sup>1</sup> αὔξεται mss., corr. Koen

<sup>2</sup> ξένου mss., corr. Schaefer

<sup>3</sup> <τὰ> Meineke

### D357 (B250) Stob. 4.1.40

ἀπὸ ὁμοιοίης τὰ μεγάλα ἔργα καὶ ταῖς πόλεσι τοὺς πολέμους δυνατὸν κατεργάζεσθαι, ἄλλως δ' οὔ.

### D358 (B186) Stob. 2.33.9

ὁμοφροσύνη φιλίην<sup>1</sup> ποιεῖ.

<sup>1</sup> φίλην ms., corr. Wachsmuth

### D359 (B151) Plut. *Quaest. Conv.* 2.10.2 643E

ἐν γὰρ ξυνῷ ἰχθύι ἄκανθαι οὐκ ἔνεισιν, ὥς φησιν ὁ Δημόκριτος.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D356** (B252) Stobaeus, *Anthology*

*One should consider the affairs of the city to be the most important of all, so that it will be well directed, neither being contentious against what is equitable nor attributing to oneself a power contrary to what is useful for the whole. For a well-directed city is the greatest rectification, and it contains everything; and as long as it is safe, everything is safe, and if it is destroyed, everything is destroyed.*

**D357** (B250) Stobaeus, *Anthology*

*It is from consensus that great deeds and, for cities, wars can be brought to a successful conclusion, otherwise not.*

**D358** (B186) Stobaeus, *Anthology*

*Agreement in thought creates friendship.*

**D359** (B151) Plutarch, *Table Talk*

**In fish** [scil. eaten] **in common there are no fish bones,**  
as Democritus says.



**D360** (B249) Stob. 4.1.34

στάσις ἐμφύλιος ἐς ἐκάτερα κακόν· καὶ γὰρ νικέουσι  
καὶ ἡσσωμένοις ὁμοίη φθορή.

**D361** (B251) Stob. 4.1.42

ἡ ἐν δημοκρατίῃ πενίη τῆς παρὰ τοῖς δυνάστησι κα-  
λεομένης εὐδαιμονίης τοσοῦτόν ἐστιν αἰρετωτέρη,  
ὁκόσον ἐλευθερίῃ δουλείης.

**D362** (B254) Stob. 4.1.45

οἱ κακοὶ ἰόντες ἐς τὰς τιμὰς ὁκόσῳ ἂν μᾶλλον ἀνάξιοι  
έόντες ἴωσι, τοσοῦτῳ μᾶλλον ἀνακηδέες γίγνονται  
καὶ ἀφροσύνης καὶ θράσεος πίμπλονται.

**D363** (B266) Stob. 4.5.48

οὐδεμία μηχανὴ τῷ νῦν καθεστῶτι ρυθμῷ μὴ οὐκ ἀδι-  
κέειν τοὺς ἄρχοντας, ἣν καὶ πάνν ἀγαθοὶ ἔωσιν. οὐ-  
δενὶ γὰρ ἄλλῳ ἔοικεν ἢ ἐωντῷ τὸν<sup>1</sup> αὐτὸν<sup>2</sup> ἐφ'<sup>3</sup> ἑτέροισι  
γίγνεσθαι. δεῖ δέ κως οὕτω καὶ ταῦτα κοσμηθῆναι,  
ὅκως ὁ μηδὲν ἀδικέων, ἣν καὶ πάνν ἐτάζῃ τοὺς ἀδι-  
κέοντας, μὴ ὑπ' ἐκείνους<sup>4</sup> γενήσεται,<sup>5</sup> ἀλλὰ τις ἢ  
θεσμὸς ἢ τι ἄλλο ἀμυνεῖ τῷ τὰ δίκαια ποιεῖντι.

<sup>1</sup> post τὸν lac. pos. Diels  
MA <sup>3</sup> ἐφ' ἵφ' Iacobs  
σεται Halm: γενέσθαι mss.

<sup>2</sup> τὸν αὐτὸν S: τῶν αὐτῶν  
<sup>4</sup> ἐκείνοις Diels <sup>5</sup> γενή-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D360** (B249) Stobaeus, *Anthology*

*Internal strife is evil for both sides: for the destruction is the same for the victors and the vanquished.*

### **D361** (B251) Stobaeus, *Anthology*

*Poverty in a democracy is just as preferable to what among the powerful is called happiness as liberty is to slavery.*

### **D362** (B254) Stobaeus, *Anthology*

*Bad people who occupy posts of honor become more negligent and more full of folly and impudence, the more unworthy they are of them.*

### **D363** (B266) Stobaeus, *Anthology*

*In the currently established [scil. political] configuration, there is no way to prevent the magistrates from committing injustice, even if they are entirely good men. For it does not seem right to anyone other than himself that the same man exercise power over others. But it is necessary to organize this too in such a way that he who commits no injustice, even when he examines thoroughly those who do commit injustice, not fall under their power, but that some regulation or something else protect the man who acts justly.*

## EARLY GREEK PHILOSOPHY VII

### D364 (B255) Stob. 4.1.46

ὅταν οἱ δυνάμενοι τοῖς μὴ ἔχουσι καὶ προτελεῖν τολ-  
μέωσι καὶ ὑπουργεῖν καὶ χαρίζεσθαι, ἐν τούτῳ ἤδη  
καὶ τὸ οἰκτίρειν ἔνεστι καὶ <τὸ><sup>1</sup> μὴ ἐρήμους εἶναι καὶ  
τὸ ἐταίρους γίγνεσθαι, καὶ τὸ ἀμύνειν ἀλλήλοισι καὶ  
<τὸ><sup>2</sup> τοὺς πολιήτας ὁμονόους εἶναι καὶ ἄλλα ἀγαθὰ,  
ἄσσα οὐδεὶς ἂν δύναιτο καταλέξει.

<sup>1</sup> <τὸ> Meineke      <sup>2</sup> <τὸ> Hense

### D365 (B267) Stob. 4.6.19

φύσει τὸ ἄρχειν οἰκήιον τῷ κρέσσονι.

### D366 (B47) Stob. 3.1.45 (= Democrat. Sent. 13)

νόμῳ καὶ ἄρχοντι καὶ<sup>1</sup> σοφωτέρῳ εἴκειν κόσμιον.

<sup>1</sup> καὶ <τῷ> Democrat.

### D367 (B75) Stob. 4.2.13 (= Democrat. Sent. 40)

κρέσσον ἄρχεσθαι τοῖσιν ἀνοήτοισιν ἢ ἄρχειν.

### D368 (B49) Stob. 4.4.27 (= Democrat. Sent. 15)

χαλεπὸν ἄρχεσθαι ὑπὸ χερείονος.

### D369 (B253) Stob. 4.1.44

τοῖς χρηστοῖσιν οὐ συμφέρον ἀμελείοντας<sup>1</sup> τῶν ἐων-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### D364 (B255) Stobaeus, *Anthology*

*When powerful men have the courage to lend money to those who have none, and to help and gratify them, in this then are present compassion, freedom from solitude, companionship, mutual help, consensus among fellow citizens, and other good things, so many that no one could enumerate them all.*

### D365 (B267) Stobaeus, *Anthology*

*By nature, ruling belongs to the stronger [or: better] one.*

### D366 (B47) Stobaeus, *Anthology* (attributed to Democrates)

*To submit to law, to a magistrate, and to a wiser man is orderly (kosmion). [Or: Also for one who is wiser, it is orderly to submit to a law and to a magistrate. Or: It is orderly to submit to law, to something that both rules and is wiser.]*

### D367 (B75) Stobaeus, *Anthology* (attributed to Democrates)

*It is better for thoughtless people to be governed than to govern.*

### D368 (B49) Stobaeus, *Anthology* (attributed to Democrates)

*It is a hard thing to be governed by a lesser man.*

### D369 (B253) Stobaeus, *Anthology*

*For good men, it is not advantageous to neglect their own*

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<sup>1</sup> ἀμελέοντας ed. Trincav.: ἀμελαίνοντας mss.

## EARLY GREEK PHILOSOPHY VII

τῶν ἄλλα πρήσσειν· τὰ γὰρ ἴδια κακῶς<sup>2</sup> ἔσχειν. εἰ δὲ ἀμελέοι τις<sup>3</sup> τῶν δημοσίων, κακῶς ἀκούειν γίγνεται, καὶ ἦν μηδὲν μήτε κλέπτῃ μήτε ἀδικῇ. ἐπεὶ καὶ <μῇ><sup>4</sup> ἀμελέοντι ἢ ἀδικέοντι κίνδυνος κακῶς ἀκούειν καὶ δὴ καὶ παθεῖν τι· ἀνάγκη δὲ ἀμαρτάνειν, συγγιγνώσκεσθαι δὲ τοὺς ἀνθρώπους οὐκ εὐπετές.

<sup>2</sup> κακῶς <ἄν> Jacobs

<sup>3</sup> ἀμελέοιτο mss., corr. Meineke

<sup>4</sup> <μῇ> Meineke

### D370 (B265) Stob. 4.5.47

τῶν ἡμαρτημένων ἀνθρώποι μεμνέεται μᾶλλον ἢ τῶν εὖ πεπονημένων. καὶ γὰρ δίκαιον οὕτως· ὥσπερ <γὰρ τὸν><sup>1</sup> τὰς παρακαταθήκας ἀποδιδόντα οὐ χρὴ ἐπαινεῖσθαι, τὸν δὲ μὴ ἀποδιδόντα κακῶς ἀκούειν καὶ πάσχειν, οὕτω καὶ τὸν ἄρχοντα. οὐ γὰρ ἐπὶ τούτῳ ἡρέθη ὡς κακῶς ποιήσων, ἀλλ' ὡς εὖ.

<sup>1</sup> <γὰρ τὸν> Hirschig

### D371 (B287) Stob. 4.40.20

ἀπορίη ξυνὴ τῆς ἐκάστου χαλεπωτέρη· οὐ γὰρ ὑπολείπεται ἐλπίς ἐπικουρίας.

### D372 (B238) Stob. 3.22.42

τελευτᾷ γὰρ ἐς κακοδοξίην<sup>1</sup> ὁ παρεκτεινόμενος τῷ κρέσσονι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*affairs and to tend to other people's. For then their own affairs go badly. But if someone neglects public affairs, he acquires a bad reputation even if he steals nothing and commits no injustice. For even someone who neglects <nothing> and commits <no> injustice runs the risk of a bad reputation and even of ill-treatment. And it is unavoidable that one makes mistakes, but not easy that people forgive.*

### **D370** (B265) Stobaeus, *Anthology*

*People remember mistakes committed more than things done well. And it is right that they do so. <For> just as the man who pays back deposits should not be praised, but the one who does not pay them back should suffer a bad reputation and ill-treatment, so too the man in charge. For he was chosen for this: not to act badly, but to act well.*

### **D371** (B287) Stobaeus, *Anthology*

*A predicament shared in common is more onerous than an individual's: for no hope for assistance remains.*

### **D372** (B238) Stobaeus, *Anthology*

*The man who measures himself with someone stronger [or: better] than he is ends up with a bad reputation.*

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<sup>1</sup> κακὴν post κακοδοξίην del. Meineke

## EARLY GREEK PHILOSOPHY VII

**D373** (B268) Stob. 4.7.13

φόβος κολακείην μὲν ἐργάζεται, εὐνοίαν δὲ οὐκ ἔχει.

**D374** (< B153) Plut. *Praec.* 28 821A

[. . .] οὐδέ γε δόξαν ἀτιμάσει [scil. ὁ πολιτικὸς ἀνὴρ]  
φεύγων τὸ τοῖς πέλας ἀνδάνειν, ὥς ἡξίου Δημόκριτος.

### *Laws and Judgments (D375–D387)*

**D375** (< A1) Diog. Laert. 9.45

[. . . = **D13**] ποιητὰ<sup>1</sup> δὲ <τὰ><sup>2</sup> νόμιμα<sup>3</sup> εἶναι· φύσει δὲ  
ἄτομα καὶ κενόν.

<sup>1</sup> ποιότητος Menagius

<sup>2</sup> <τὰ> Bignone

<sup>3</sup> νόμῳ Zeller

**D376** (< A166) Epiph. *Pan.* 3.2.9

Δημόκριτος [. . .] ἔφη [. . .] καὶ τὸ δοκοῦν δίκαιον οὐκ  
εἶναι δίκαιον, ἄδικον δὲ τὸ ἐναντίον τῆς φύσεως. ἐπί-  
νοιαν γὰρ κακὴν τοὺς νόμους ἔλεγε καὶ ‘οὐ χρὴ νό-  
μοις πειθαρχεῖν τὸν σοφόν, ἀλλὰ ἐλευθερίως ζῆν.’

**D377** (B261) Stob. 4.5.43

ἀδικουμένοισι τιμωρεῖν κατὰ δύναμιν χρὴ καὶ μὴ  
παριέναι· τὸ μὲν γὰρ τοιοῦτον δίκαιον καὶ ἀγαθόν, τὸ  
δὲ μὴ τοιοῦτον ἄδικον καὶ κακόν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D373** (B268) Stobaeus, *Anthology*

*Fear produces flattery but does not entail benevolence.*

**D374** (< B153) Plutarch, *Precepts*

[. . .] he [scil. the politician] will not disdain renown, refusing to please his neighbors, as Democritus thought.

### *Laws and Judgments (D375–D387)*

**D375** (< A1) Diogenes Laertius

[. . .] Legal usages are constructed; but by nature, atoms and void.

**D376** (< A166) Epiphanius, *Against Heresies*

Democritus [. . .] said [. . .] also that what seems to be just is not just, but unjust is what is contrary to nature. For he said that laws are an evil notion and that “the wise man should not obey laws but live freely.”

**D377** (B261) Stobaeus, *Anthology*

*One should take vengeance as far as possible for those who suffer injustice and not disregard them. For an action of this sort is just and good, while one that is not of this sort is unjust and bad.*



**D378** (B262) Stob. 4.5.44

καὶ οἱ φυγῆς ἄξια ἔρδουσιν ἢ δεσμῶν, ἢ θωιῆς<sup>1</sup>  
 ἄξιοι,<sup>2</sup> καταψηφιστέον,<sup>3</sup> καὶ μὴ ἀπολύειν· ὅς δ' ἂν  
 παρὰ νόμον<sup>4</sup> ἀπολύῃ κέρδει ὀρίζων ἢ ἡδονῇ, ἀδικεῖ,  
 καὶ οἱ τοῦτο ἐγκάρδιον ἀνάγκη εἶναι.

<sup>1</sup> θωιῆς Burchard: θοίνης ms.: ποινηῆς Gesner <sup>2</sup> ἄξιοι  
 secl. Hirschig, Natorp <sup>3</sup> καταψηφισματέον ms., corr.  
 Mullach <sup>4</sup> νόμον Iacobs: νοῦν ms.

**D379** (B248) Stob. 4.1.33 (et al.)

ὁ νόμος βούλεται μὲν εὐεργετεῖν βίον ἀνθρώπων· δύ-  
 νηται δέ, ὅταν αὐτοὶ βούλωνται πάσχειν <εὖ>.<sup>1</sup> τοῖσι  
 γὰρ πειθομένοισι τὴν ἰδίην ἀρετὴν ἐνδείκνυται.

<sup>1</sup> <εὖ> Gnom. Palat. 58

**D380** (B245) Stob. 3.38.53

οὐκ ἂν ἐκώλυνον οἱ νόμοι ζῆν ἕκαστον κατ' ἰδίην ἐξ-  
 ουσίην, εἰ μὴ ἕτερος ἕτερον ἐλυμαίνετο. φθόνος γὰρ  
 στάσιος ἀρχὴν ἀπεργάζεται.

**D381** (B257) Stob. 4.2.15

κατὰ δὲ ζῶων ἔστιν ὦν φόνου καὶ μὴ φόνου ὧδε ἔχει·  
 τὰ ἀδικέοντα καὶ θέλοντα ἀδικεῖν ἀθῶος ὁ κτείνων,  
 καὶ πρὸς εὖεστοῦν τοῦτο ἔρδειν μᾶλλον ἢ μή.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D378** (B262) Stobaeus, *Anthology*

*Those who perform deeds deserving of exile or prison or who deserve a penalty should be condemned and not acquitted: whoever acquits against the law, deciding with a view toward gain or pleasure, commits injustice, and it is necessary that this be on his mind.*

### **D379** (B248) Stobaeus, *Anthology*

*The law wants to bestow a good life upon humans. And it can do this if they themselves wish to do well. For to those who obey it, it reveals their [or: its] own virtue.*

### **D380** (B245) Stobaeus, *Anthology*

*The laws would not prevent each person from living as he pleased, if one man did not do harm to another. For envy is at the origin of strife.*

### **D381** (B257) Stobaeus, *Anthology*

*In respect of certain animals (?), this is how it is regarding killing them and not killing them: He who kills those that commit an injustice [i.e. that cause damage] and wish to commit injustice should not be penalized. And for the sake of well-being it is better to do this than not to.<sup>1</sup>*

<sup>1</sup> What the other animals are, besides those for which their justice or injustice determines whether they may be killed or not, is unclear. Perhaps those animals are meant that may not be killed at all, whether they are just or unjust, or perhaps those animals that may be killed even if they are just (e.g. sacrificial animals). The grammar of this passage is difficult and the text may be uncertain.

**D382** (B258) Stob. 4.2.16

κτείνειν χρὴ τὰ πημαίνοντα παρὰ δίκην πάντα περὶ παντός· καὶ ταῦτα ὁ ποιῶν εὐθυμίας<sup>1</sup> καὶ δίκης καὶ θάρσεως καὶ κτήσεως<sup>2</sup> ἐν παντὶ κόσμῳ μέζω μοῖραν μεθέξει.

<sup>1</sup> ἐπιθυμίας mss., corr. Wakefield apud Gaisford

<sup>2</sup> κτήσεως dub. Diels: κτάσεως mss.: alii aliter

**D383** (B259) Stob. 4.2.17

ὅκωσπερ περὶ κιναδέων τε καὶ ἐρπετέων γεγράφται<sup>1</sup> τῶν πολεμίων, οὕτω καὶ κατὰ ἀνθρώπων δοκεῖ μοι χρῆναι εἶναι ποιεῖν κατὰ νόμους τοὺς πατρίους κτείνειν πολέμιον ἐν παντὶ κόσμῳ, ἐν ᾧ μὴ νόμος ἀπείργει· ἀπείργει δέ<sup>2</sup> ἱερὰ ἐκάστοισιν ἐπιχώρια καὶ σπονδαὶ καὶ ὄρκοι.

<sup>1</sup> γεγράφται Natorp: γεγράφεται mss.: <νόμοι> γεγράφαται Diels <sup>2</sup> ἀπείργει δέ Deichgräber: νόμος δέ ἀπείργει mss.: φόνον δέ ἀπείργει dub. Diels, alii aliter

**D384** (B260) Stob. 4.2.18

κιξάλλην καὶ ληστήν πάντα κτείνων τις ἀθῶος ἂν εἴη καὶ αὐτοχειρίῃ καὶ κελεύων καὶ ψήφῳ.

**D385** (B181) Stob. 2.31.59

κρείσσων ἐπ' ἀρετὴν φανείται προτροπῇ χρώμενος

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D382** (B258) Stobaeus, *Anthology*

*One must kill the ones [i.e. the animals] that cause damage unjustly, all of them, above all. And he who does this will have a larger share of contentment (euthumiê), justice, courage, and property in every [scil. political] order.*

### **D383** (B259) Stobaeus, *Anthology*

*Just as a law has been made regarding hostile foxes and reptiles, it seems to me to be necessary to act in the same way against human beings too: in conformity with the ancestral laws, to kill an enemy in every [scil. political] order in which a law does not forbid this. It is forbidden by temples that are local for each people, and by treaties and oaths.*

### **D384** (B260) Stobaeus, *Anthology*

*Anyone who kills any brigand or pirate should not be penalized, whether he does so by his own hand, by ordering it done, or by his vote.*

### **D385** (B181) Stobaeus, *Anthology*

*Better, for guiding toward virtue, will turn out to be the*

## EARLY GREEK PHILOSOPHY VII

καὶ λόγου πειθοῖ ἥπερ νόμῳ καὶ ἀνάγκῃ. λάθρῃ μὲν γὰρ ἀμαρτέειν εἰκὸς τὸν εἰργμένον ἀδικίῃς ὑπὸ νόμον, τὸν δὲ ἐς τὸ δέον ἡγμένον πειθοῖ οὐκ εἰκὸς οὔτε λάθρῃ οὔτε φανερώς ἔρδειν τι πλημμελές· διόπερ συνέσει τε καὶ ἐπιστήμῃ ὀρθοπραγέων τις ἀνδρεῖος ἅμα καὶ εὐθύγνωμος γίγνεται.

**D386** (B264) Stob. 4.5.46

μηδέν τι μᾶλλον τοὺς<sup>1</sup> ἀνθρώπους αἰδεῖσθαι ἑωυτοῦ μηδέ τι μᾶλλον ἐξεργάζεσθαι κακόν, εἰ μέλλει μηδεὶς εἰδήσειν ἢ οἱ πάντες ἄνθρωποι· ἀλλ' ἑωυτὸν μάλιστα αἰδεῖσθαι, καὶ τοῦτον νόμον τῇ ψυχῇ καθεστάναι, ὥστε μηδὲν ποιεῖν ἀνεπιτήδειον.

<sup>1</sup> τοὺς <ἄλλους> Diels

**D387** (B41) Stob. 3. 1. 95 (= Democrat., *Sent.* 7)

μὴ διὰ φόβον, ἀλλὰ διὰ τὸ δέον ἀπέχεσθαι χρεῶν ἀμαρτημάτων.

*Home and Family* (D388–D399)

**D388** (< A170) Clem. Alex. *Strom.* 2.138.3

Δημόκριτος δὲ γάμον καὶ παιδοποιίαν παραιτεῖται διὰ τὰς πολλὰς ἐξ αὐτῶν ἀηδίας τε καὶ ἀφολλκὰς ἀπὸ τῶν ἀναγκαιοτέρων.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*man who uses exhortation and the persuasion of speech rather than law and constraint. For it is plausible that someone who is kept away from injustice by law commits it in secret, while it is not plausible that someone who is led to act as he ought to by persuasion does something wrong either in secret or openly. And that is why someone who acts rightly by virtue of his understanding and knowledge is courageous and at the same time straight-judging.*

### **D386** (B264) Stobaeus, *Anthology*

*One should not feel more of a sense of shame with regard to people than with regard to oneself and should not act worse either, whether no one is going to know about it or whether all people will. But one should feel a sense of shame most of all with regard to oneself, and establish this law for one's soul, so as to do nothing harmful.*

### **D387** (B41) Stobaeus, *Anthology* (attributed to Democrates)

*One must refrain from wrong actions not from fear but from duty.*

### *Home and Family* (D388–D399)

### **D388** (< A170) Clement of Alexandria, *Stromata*

Democritus advises against marrying and having children because of the many unpleasantnesses and distractions that ensue with regard to matters that are more urgent.

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**D389** (B288) Stob. 4.40.21

νόσος οἴκου καὶ βίου γίνεται ὅκως περ καὶ σκήνεος.

**D390** (B270) Stob. 4.19.45

οἰκέταισιν ὥς μέρεσι τοῦ σκήνεος χρῶ ἄλλω πρὸς ἄλλο.

**D391** (B111) Stob. 4.23.39 (= Democrat. Sent. 78)

ὑπὸ γυναικὸς ἄρχεσθαι ὕβρις ἀνδρὶ<sup>1</sup> ἐσχάτη.

<sup>1</sup> ἀνδρὶ mss.: ἄν εἴη Corp. Par.: ἀνανδρίη Democrat.: ἄν ἀνδρὶ εἴη Diels

**D392** (B275) Stob. 4.24.29

τεκνοτροφίη σφαλερόν· τὴν μὲν γὰρ ἐπιτυχίην ἀγῶ-  
νος μεστὴν καὶ φροντίδος κέκτηται, τὴν δὲ ἀποτυχίην  
ἀνυπέρθετον ἐτέρῃ ὀδύνῃ.

**D393** (B276) Stob. 4.24.31

οὐ δοκεῖ μοι χρῆναι παῖδας κτᾶσθαι· ἐνορῶ γὰρ ἐν  
παῖδων κτήσει<sup>1</sup> πολλοὺς μὲν καὶ μεγάλους κινδύνους,  
πολλὰς δὲ λύπας, ὀλίγα δὲ τὰ εὐθιγέοντα καὶ ταῦτα  
λεπτὰ τε καὶ ἀσθενέα.

<sup>1</sup> κτίσει mss., corr. Gesner

ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D389** (B288) Stobaeus, *Anthology*

*There is illness of the house and of life just as of the body.*

**D390** (B270) Stobaeus, *Anthology*

*Use household slaves like parts of your body, one for one thing, another for another.*

**D391** (B111) Stobaeus, *Anthology* (attributed to Democrates)

*To be ruled by a woman: the worst outrage (hubris) for a man.*

**D392** (B275) Stobaeus, *Anthology*

*Raising children is a slippery affair: for it involves a success filled with struggle and anxiety, or a failure unsurpassed by any other pain.*

**D393** (B276) Stobaeus, *Anthology*

*It does not seem to me that it is necessary to have children. For I observe in having children many great risks, many sufferings, and few gains—and these slight and weak.*



**D394** (B277) Stob. 4.24.32

ὅτεω χρήμη τεά<sup>1</sup> ἐστὶ παῖδα ποιήσασθαι, ἐκ τῶν φίλων τεύ μοι<sup>2</sup> δοκεῖ ἄμεινον εἶναι. καὶ τῷ μὲν παῖς ἔσται τοιοῦτος, οἷος ἂν βούληται· ἔστι γὰρ ἐκλέξασθαι οἷον ἐθέλει· καὶ ὅς ἂν δοκῇ ἐπιτήδειος εἶναι, καὶ<sup>3</sup> μάλιστα κατὰ φύσιν ἔποιτο. καὶ τοῦτο τοσοῦτον διαφέρει, ὅσον ἐνταῦθα μὲν ἔστι τὸν παῖδα λαβεῖν καταθύμιον ἐκ πολλῶν, οἷον<sup>4</sup> ἂν δέῃ.<sup>5</sup> ἣν δέ τις ποιῇται<sup>6</sup> ἀπὸ ἐωντοῦ, πολλοὶ ἔννεισι κίνδυνοι· ἀνάγκη γάρ, ὅς ἂν γένηται, τούτῳ χρηθῆσθαι.

<sup>1</sup> χρήματα mss., corr. Diels      <sup>2</sup> τ' ἐμοὶ mss., corr. Diels  
<sup>3</sup> καὶ mss., corr. Diels      <sup>4</sup> ὧν mss., corr. Diels      <sup>5</sup> δέῃ  
 Gaisford: δεῖ SA: δὴ M      <sup>6</sup> ἣν . . . ποιῇται MA: εἰ . . . ποιεῖται S

**D395** (B278) Stob. 4.24.33

ἀνθρώποισι τῶν ἀναγκαίων δοκεῖ εἶναι παῖδας κτήσασθαι ἀπὸ φύσιος καὶ καταστάσιός τινος ἀρχαίης. δῆλον δὲ καὶ τοῖς ἄλλοις ζώοισι. πάντα γὰρ ἔκγονα κτᾶται κατὰ φύσιν, ἐπωφελείης<sup>1</sup> γε οὐδεμιᾶς εἵνεκα· ἀλλ' ὅταν γένηται, τάλαιπωρεῖ καὶ τρέφει ἕκαστον ὡς δύναται καὶ ὑπερδέδοικε,<sup>2</sup> μέχρι σμικρὰ ἦ,<sup>3</sup> καὶ ἣν τι πάθῃ ἀνιᾶται. ἣ μὲν φύσις τοιαύτη πάντων ἐστὶν ὅσσα<sup>4</sup> ψυχὴν ἔχει· τῷ δὲ δὴ ἀνθρώπῳ νομίζον<sup>5</sup> ἤδη πεποιήται, ὥστε καὶ ἐπαύρεσιν τινα γίγνεσθαι ἀπὸ τοῦ ἐκγόνου.

**D394** (B277) Stobaeus, *Anthology*

*For anyone who has some kind of need to have a child, it seems to me better [scil. to get it] from one of his friends. His child will be of the sort that he wishes; for he can pick out the kind he wants. And the one that seems suitable to him will follow him most of all, in accordance with its nature. And the difference is that in this case it is possible to choose the child out of many, just as he desires, of the sort that he needs. But if one makes one oneself, there are many risks involved: for, whatever is born, one must deal with that.*

**D395** (B278) Stobaeus, *Anthology*

*People think that to have children is one of the things that are necessary because of nature and an ancient condition. And this is clear for the other animals. For all have offspring in conformity with nature, but not for the sake of any utility: for when each one is born, they work hard and nourish it as far as possible, and they fear greatly for it as long as it is small and suffer if anything happens to it. The nature of all things that have life is of this sort; but for the human being it has become a general belief by now that some kind of benefit comes about from offspring.*

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<sup>1</sup> ἐπὶ ὠφελείῃς mss., corr. Schaeffer  
mss., corr. Gesner

<sup>4</sup> οὕσα mss., corr. Diels

<sup>2</sup> ὑπερδέδυκε  
<sup>3</sup> σμικρὰ ἤ Schaeffer: σμικρᾶς mss.

<sup>5</sup> νόμιμον Natorp

**D396** (B208) Stob. 3.5.24

πατρὸς σωφροσύνη μέγιστον τέκνοις παράγγελμα.

**D397** (B280) Stob. 4.26.26

ἔξεστιν οὐ πολλὰ τῶν σφετέρων ἀναλώσαντας παι-  
δεύσαι τε τοὺς παῖδας καὶ τείχος τε καὶ σωτηρίην  
περιβαλέσθαι τοῖς τε χρήμασι καὶ τοῖς σώμασιν αὐ-  
τῶν.

**D398** (B279) Stob. 4.26.25

τοῖς παισὶ μάλιστα χρὴ τῶν ἀνυστῶν δατεῖσθαι τὰ  
χρήματα, καὶ ἅμα ἐπιμέλεσθαι αὐτῶν, μή τι ἀτηρὸν  
ποιέωσι<sup>1</sup> διὰ χειρὸς ἔχοντες· ἅμα μὲν γὰρ πολλὸν<sup>2</sup>  
φειδότεροι γίνονται ἐς τὰ χρήματα καὶ προθυμότε-  
ροι κτᾶσθαι καὶ ἀγωνίζονται ἀλλήλοισιν. ἐν γὰρ τῷ  
ξυνῶ τὰ τελεύμενα οὐκ ἀνιᾶ ὥσπερ ἰδίῃ οὐδ' εὐθυμεῖ  
τὰ ἐπικτώμενα, ἀλλὰ πολλῶ ἥσσον.

<sup>1</sup> ποιέωσι Wakefield: τοι (τι ed. Trincav.) ἔωσι S

<sup>2</sup> πολλῶν ms., corr. Wakefield

**D399** (B272) Stob. 4.22.108

Δημόκριτος ἔφη ὡς γαμβροῦ ὁ<sup>1</sup> μὲν ἐπιτυχὼν εὖρεν  
υἱόν, ὁ δὲ ἀποτυχὼν ἀπώλεσε καὶ θυγατέρα.

<sup>1</sup> γαμβροῦ ὁ Max Conf., Loc. 18.35: ὁ γαμβροῦ mss.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D396** (B208) Stobaeus, *Anthology*

*Their father's temperance is the greatest instruction for children.*

### **D397** (B280) Stobaeus, *Anthology*

*It is possible, without spending much of what one has, to educate one's children and to build a bulwark and protection around their possessions and their bodies.*

### **D398** (B279) Stobaeus, *Anthology*

*Among one's children it is necessary, as far as is at all possible, to divide one's wealth, and at the same time to pay attention to them to make sure that they not do anything ruinous when they have taken possession of it. For they become at the same time much thriftier with regard to wealth and more eager to acquire it, and they compete with each other. For expenses shared in common do not cause distress as do those made on one's own, nor do the profits provide such contentment (euthumei), but much less.*

### **D399** (B272) Stobaeus, *Anthology*

*Democritus said that whoever has had good luck with his son-in-law has found a son, but whoever has had bad luck with him has lost a daughter too.*

## EARLY GREEK PHILOSOPHY VII

### *Farm Management (D400–D402)*

**D400** (B27) Colum. *Agric.* 3.12.5

[. . .] Democrito [. . .] caeli plagam septentrionalem, quia existiment ei subiectas feracissimas fieri vineas, quae tamen bonitate vini superentur.

**D401** (B27a) Colum. *Agric.* 9.14.6

progenerari posse apes iuvenco perempto Democritus [. . .].

**D402** (B28) Colum. *Agric.* 11.3.2

Democritus in eo libro quem Georgicon appellavit parum prudenter censet eos facere, qui hortis exstruant munita, quod neque latere fabricata maceries perennare possit pluviis ac tempestatibus plerumque infestata, eque lapide supra rei dignitatem poscat impensa; si vero amplum modum sepire quis velit, patrimonio esse opus.

### *Education (D403–D412)*

**D403** (B33) Stob. 2.31.65 (cf. Clem. Alex. *Strom.* 4.149)

ἡ φύσις καὶ ἡ διδαχὴ παραπλήσιόν ἐστι· καὶ γὰρ ἡ διδαχὴ μεταρυσμοῖ<sup>1</sup> τὸν ἄνθρωπον, μεταρυσμοῦσα<sup>2</sup> δὲ φυσιοποιεῖ.<sup>3</sup>

<sup>1</sup> μετὰ ῥυσμοῦ ms., corr. Mullach (μεταρυνθμίζει Clem.)

<sup>2</sup> μετὰ ῥυσμοῦ ms., corr. Mullach (μεταρυνθμοῦσα Clem.)

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Farm Management (D400–D402)*

#### **D400** (B27) Columella, *On Agriculture*

[. . .] Democritus [and . . .] [scil. praise] the northern part of the sky because they think that vineyards exposed in this direction are most productive, even if the quality of the wine is inferior.

#### **D401** (B27a) Columella, *On Agriculture*

That bees can be generated from a bull that has been killed, Democritus [. . .] [scil. has reported].

#### **D402** (B28) Columella, *On Agriculture*

Democritus, in the book that he entitled *Georgic* [*On Agriculture*], thinks that those people who build protective walls around their gardens are acting imprudently. For an enclosure constructed out of bricks cannot resist for years when it is often assailed by rain and storms, while one made out of stones requires expenses greater than the thing's value. And if someone wants to enclose a large piece of land, he will have to use up his patrimony.

### *Education (D403–D412)*

#### **D403** (B33) Stobaeus, *Anthology*

**Nature and instruction are very similar. For instruction modifies the configuration (*metarhusmoi*) of a man, and, modifying his configuration, produces a nature.**

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<sup>3</sup> φύσις ποιεῖ Clem.: φύσιν (ις ss.) ποιεῖ ms.: <καὶ> φύσις π. Usener

**D404** (B178) Stob. 2.31.56

πάντων κάκιστον ἢ εὐπετεῖν παιδεύσαι τὴν νεότητα, αὕτη γάρ ἐστι ἢ τίκτει τὰς ἡδονὰς ταύτας,<sup>1</sup> ἐξ ὧν ἡ κακότης γίνεται.

<sup>1</sup> φαύλας Hense

**D405** (B179) Stob. 2.31.57

†ἐξωτικῶς† μὴ<sup>1</sup> πονέειν παῖδες ἀνιέντες (?), οὔτε γράμματ' ἂν μάθοιεν οὔτε μουσικὴν οὔτε ἀγωνίην, οὐδ', ὅπερ μάλιστα τὴν ἀρετὴν συνέχει, τὸ αἰδεῖσθαι· μάλα γὰρ ἐκ τούτων φιλέει γίγνεσθαι ἢ αἰδῶς.

<sup>1</sup> ἐξωτικῶς μὴ ms.: ζηλωτικῶς ὁμῇ Meineke-Wachsmuth, ἔξω τί κως ἢ Diels, alii aliter

**D406** (B180) Stob. 2.31.58

ἡ παιδεία εὐτυχοῦσι μέν ἐστι κόσμος, ἀτυχοῦσι δὲ καταφύγιον.

**D407** (B182) Stob. 2.31.66

τὰ μὲν καλὰ χρήματα τοῖς πόνοις ἢ μάθησις ἐξεργάζεται, τὰ δ' αἰσχροῦ ἄνευ πόνων αὐτόματα καρποῦται.<sup>1</sup> καὶ γὰρ οὖν οὐκ ἐθέλοντα πολλάκις ἐξείργει τοιοῦτον εἶναι. †οὕτω μεγάλῃς τε τῆς φυτικῆς ἐστι†.<sup>2</sup>

<sup>1</sup> <ἡ ἀμαθία> καρποῦται Usener: καρποῦνται Meineke

<sup>2</sup> locus desperatus

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **D404** (B178) Stobaeus, *Anthology*

*The worst thing of all is laxity in educating youth. For this is what gives birth to those pleasures from which wickedness comes about.*

### **D405** (B179) Stobaeus, *Anthology*

*If children †in a foreign manner† neglected (?) to exert themselves, they would not learn the alphabet nor music nor competitiveness, nor what most of all contains virtue, the feeling of a sense of shame. For it is above all from acts of this sort that a sense of shame tends to come about.*

### **D406** (B180) Stobaeus, *Anthology*

*Education is an adornment for successful people and a refuge for unsuccessful ones.*

### **D407** (B182) Stobaeus, *Anthology*

*It is by effort that learning produces fine things, but ignoble ones are reaped by themselves without effort. For they often oblige someone, even if he does not want to, to be like that †. . . †.*



**D408** (B183) Stob. 2.31.72

ἔστι που νέων ξύνεσις καὶ γερόντων ἀξυνεσίη· χρόνος γὰρ οὐ διδάσκει φρονεῖν, ἀλλ' ὥραίη τροφή καὶ φύσις.

**D409** (B185) Stob. 2.31.94

κρέσσονές εἰσιν αἱ τῶν πεπαιδευμένων ἐλπίδες ἢ ὁ τῶν ἀμαθῶν πλοῦτος.

**D410** (B77) Stob. 3.4.82 (= Democrat. *Sent.* 42)

δόξα καὶ πλοῦτος ἄνευ ξυνέσιος οὐκ ἀσφαλέα κτήματα.

**D411** (B242) Stob. 3.29.66

πλέονες ἐξ ἀσκήσιος ἀγαθοὶ γίνονται ἢ ἀπὸ φύσιος.

**D412** (B59) Stob. 2.31.71 (= Democrat. *Sent.* 24)

οὔτε τέχνη οὔτε σοφίη ἐφικτόν, ἢν μὴ μάθη τις.<sup>1</sup>

<sup>1</sup> μάθη τις Democrat.: μάθησις ms.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**D408** (B183) Stobaeus, *Anthology*

*Surely there is understanding among young men and lack of understanding among old men. For it is not time that teaches how to think (phronein), but early upbringing and one's nature.*

**D409** (B185) Stobaeus, *Anthology*

*The hopes of educated people are stronger than the wealth of uneducated ones.*

**D410** (B77) Stobaeus, *Anthology* (attributed to Democritus)

*Renown and wealth without understanding are not stable possessions.*

**D411** (B242) Stobaeus, *Anthology*

*More people become good by training than by their nature.*

**D412** (B59) Stobaeus, *Anthology* (attributed to Democritus)

*Neither a craft nor wisdom can be attained unless one learns.*

ATOMISTS  
(LEUCIPPUS [67 DK],  
DEMOCRITUS [68 DK])

For Leucippus, references to DK take the form 67 Ax or Bx; for Democritus, references are generally by only Ax, Bx, or Cx.

R

*Titles of Ancient Works Dedicated to  
Democritus (R1–R2)  
Works Concerning His Doctrines (R1)*

**R1** (A34a)

**a** Arist. (Diog. Laert. 5.26 et 27)

26. Προβλήματα ἐκ τῶν Δημοκρίτου β'

27. Πρὸς Δημοκρίτον α'

**b** Theophr. (Diog. Laert. 5.43 et 49)

43. Περὶ τῆς Δημοκρίτου ἀστρολογίας α'

49. Περὶ Δημοκρίτου α'

ATOMISTS  
(LEUCIPPUS, DEMOCRITUS)

R

*Titles of Ancient Works Dedicated to  
Democritus (R1–R2)*  
*Works Concerning His Doctrines (R1)*

**R1** (A34a)

**a** Aristotle

26. *Problems derived from the writings of Democritus*, two books

27. *Against Democritus*, one book

**b** Theophrastus

43. *On the Astronomy of Democritus*, one book

49. *On Democritus*, one book

## EARLY GREEK PHILOSOPHY VII

**c** Heracl. Pont. (Diog. Laert. 5.87 et 88)

87. Πρὸς Δημόκριτον<sup>1</sup>

<sup>1</sup> post Δημόκριτον hab. περὶ τῶν οὐρανῶν mss.

88. Πρὸς τὸν<sup>1</sup> Δημόκριτον ἐξηγήσεις α'

<sup>1</sup> πρὸς τὸν ed. Frob.: πρῶτον BP: πρῶτων (et δημοκρίτων) F

**d** Epicur. (Philod. *Lib. dic.*, Frag. 20.7–9)

ἐν [. . .] τοῖς πρὸς Δημόκριτον . . .

**e** Colotes

See **R88–R89**

**f** Metrod. (Diog. Laert. 10.24)

Πρὸς Δημόκριτον

**g** Cleanth. (Diog. Laert. 7.134 et 174)

134. Περὶ τῶν ἀτόμων

174. Πρὸς Δημόκριτον

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**c** Heraclides of Pontus

87. *Against Democritus*

88. *Explanations, Against Democritus*, one book

**d** Epicurus<sup>1</sup>

in [. . .] his writings against Democritus

<sup>1</sup> It is uncertain whether this was an independent book (cf. H. Usener, *Epicurea*, Leipzig 1877, p. 97).

**e** Colotes

See **R88–R89**

**f** Metrodorus (of Lampsacus, the Epicurean)

*Against Democritus*

**g** Cleanthes

134. *On Atoms*<sup>1</sup>

174. *Against Democritus*

<sup>1</sup> It is possible that this book was directed against Epicurus rather than against the ancient Atomists. The same applies to the work of Sphaerus listed just below, as well as to the preceding title in the list of Sphaerus' works, *On the Minima*.

## EARLY GREEK PHILOSOPHY VII

**h** Sphaer. (Diog. Laert. 7.178)

Πρὸς τὰς ἀτόμους καὶ τὰ εἶδωλα

*Works Concerning His Language (R2)*

**R2** (A32)

**a** Callim. (*Suda* K.227)

Πίναξ τῶν Δημοκρίτου<sup>1</sup> γλωσσῶν καὶ συνταγμάτων

<sup>1</sup> Δημοκρίτου Adler: Δημοκράτους mss.

**b** Heges. Gramm. (Steph. Byz. s.v. Τρώας)

Περὶ τῆς Δημοκρίτου λέξεως βιβλίον ἐν

*Democritus' Language and Style (R3–R9)*

*Morphological Notices (R3)*

**R3**

**a** (B13) Apoll. Dysc. *Pronom.*, p. 65.15

καὶ Φερεκύδης ἐν τῇ θεολογίᾳ καὶ ἔτι Δημόκριτος ἐν τοῖς Περὶ ἀστρονομίας καὶ ἐν τοῖς ὑπολειπομένοις συντάγμασι συνεχέστερον χρῶνται τῇ ἐμεῦ καὶ ἔτι τῇ ἐμέο.

**b** (B29a) Apoll. Dysc. *Pronom.*, p. 92.20

αἱ πληθυντικαὶ κοινολεκτοῦνται κατ' εὐθείαν πρὸς τε

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**h** Sphaerus

*Against the Atoms and Images*

*Works Concerning His Language (R2)*

**R2** (A32)

**a** Callimachus

*Catalog of the Rare Words (glôssai) and Phrases (Sontagmata) of Democritus*<sup>1</sup>

<sup>1</sup> The mss. have ‘Democrates.’

**b** Hegesianax the Grammarian

*On Democritus’ Style* (lexis), one book

*Democritus’ Language and Style (R3–R9)*  
*Morphological Notices (R3)*

**R3**

**a** (B13) Apollonius Dyscolus, *On Pronouns*

Both Pherecydes in his *Theology* [cf. **PHER. R8a**] and also Democritus in his books on astronomy and in his remaining treatises often use ‘**emeu**’ and also ‘**emeo**’ (‘my,’ both the contracted and uncontracted forms).

**b** (B29a) Apollonius Dyscolus, *On Pronouns*

In the nominative, the plural forms *hêmeis*, *humeis*, *spheis*



## EARLY GREEK PHILOSOPHY VII

Ἰώνων καὶ Ἀττικῶν, ἡμεῖς, ὑμεῖς, σφεῖς, ἔστι <δὲ><sup>1</sup>  
πιστώσασθαι καὶ τὸ ἀδιαίρετον τῆς εὐθείας παρ' Ἰω-  
σιν ἐκ τῶν περὶ Δημόκριτον, Φερεκύδην [. . .].

<sup>1</sup> <δὲ> Wilamowitz

**c** (B129a) Epimer. *Hom.* 396.11

καὶ παρὰ τὸ κλίνω κέκλιται παρὰ τῷ Δημοκρίτῳ χω-  
ρὶς τοῦ ν.

**d** (B19) Eust. *In Il.* 3.1, vol. 1, p. 584.3–4

τὸ γάμμα στοιχείον γέμμα φασὶν Ἴωνες καὶ μάλιστα  
Δημόκριτος, ὃς καὶ τὸ μῦ μῶ λέγει.

**e** (B128) Hdn. *Prosod. cath.*, vol. 1, p. 355.11

τὸ γὰρ ἰθύτην παρὰ Δημοκρίτῳ βεβίασται.

**f** (B131) Hesych. A.5840

ἀπάτητον· τὸ ἀνωμάλως συγκεείμενον. παρὰ Δημο-  
κρίτῳ.

**g** (B20) Schol. in Dion. Thrax, p. 184.3 et 23

τὰ ὀνόματα τῶν στοιχείων ἄκλιτά εἰσιν [. . .] παρὰ  
Δημοκρίτῳ δὲ κλίνονται· λέγει γὰρ δέλτατος καὶ θή-  
τατος.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

(‘we,’ ‘you,’ ‘they’) are used in common by both Ionians and Attics, but the uncontracted form of the nominative can also be documented among the Ionians from the works of Democritus, Pherecydes [cf. **PHER. R8b**] [. . .].

### c (B129a) Homeric Epimerisms

And from *klinô* (‘I cause to lean’) [scil. is derived] **keklitai** (‘is leaning’) in Democritus without the *nu*.

### d (B19) Eustathius, *Commentary on Homer’s Iliad*

The Ionians call the letter *gamma* ‘**gemma**,’ and especially Democritus, who also calls *mu* ‘**mô**.’

### e (B128) Herodian, *General Prosody*

The form ‘**ithutrên**’ (‘straight-bored’) in Democritus is an unnatural coinage.

### f (B131) Hesychius, *Lexicon*

**apatêton** (‘untrodden’): compounded irregularly; in Democritus.

### g (B20) Scholia on Dionysius of Thrace’s *Art of Grammar*

The names of the letters are not declined [. . .] but they are declined in Democritus. For he says ‘**deltatos**’ (‘of *delta*’) and ‘**thêtatós**’ (‘of *theta*’).

## EARLY GREEK PHILOSOPHY VII

### *Lexical Notices (R4)*

#### **R4**

**a** (cf. B298) Phot. Lex. A.1

[*scil. ἄ·*] βραχέως δὲ καὶ δασέως ἐκφερόμενον [. . .]  
σημαίνει, παρὰ δὲ Δημοκρίτῳ ἴδια [. . .].

**b** (B29) Apoll. Cit. In Hipp. Artic., p. 28.2–7

[. . .] ὁ Βακχέως [. . .] ἐν τοῖς<sup>1</sup> Περὶ τῶν Ἱπποκρατείων  
λέξεων [. . .] φησὶν πάλιν “ἀναγέγραπται δὲ καὶ ὡς ὁ  
Δημόκριτος εἶη καλῶν τῆς ἵτνος τὴν τῷ κοίλῳ περι-  
κειμένην ὀφρὺν ἄμβην.”

<sup>1</sup> ἐν τοῖς Diels: ουτως L: οὕτως <ἐν τοῖς> Schoene

**c** (B139a) Hesych. A.3564

ἀμειψίχρον.<sup>1</sup> μεταβάλλοντα <τὴν χροάν>.<sup>2</sup>

<sup>1</sup> ἀμειψίχροον Kuster      <sup>2</sup> <τὴν χροάν> Kuster

**d** (B130) Hesych. A.3988

ἀμφιδήτιοι· ὡς κρίκοι διάκενοι, παρὰ Δημοκρίτῳ.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Lexical Notices*<sup>1</sup> (R4)

<sup>1</sup> For further lexical notices from the grammatical tradition concerning Democritus, see also **D34b**, **D38**, **D83b**, **D146**, **D167**, **D180**, **D182**, **D215**, **D218**, **D232**.

#### **R4**

**a** (cf. B298) Photius, *Lexicon*

[scil. *alpha*] pronounced short and with rough breathing [i.e. **‘ha’**] means [. . .], ‘one’s own things’ in Democritus.

**b** (B29) Apollonius of Citium, *Commentary on Hippocrates’ On Joints*

[. . .] Bacchius [scil. of Tanagra] [. . .] in his *Hippocratic Lexicon* [. . .] says again, “It is also registered that Democritus calls the rim lying around the hollow of a shield **‘ambê’** (‘circuit’).”

**c** (B139a) Hesychius, *Lexicon*

**ameipsikhron**: ‘changing <the color>.’

**d** (B130) Hesychius, *Lexicon*

**amphidêtioi**: like empty rings, in Democritus.

## EARLY GREEK PHILOSOPHY VII

**e** (B144a) Phot. *Lex.* A.1406

ἀναβήσομαι· Δημόκριτος ἀντὶ τοῦ ἐπανελεύσομαι  
<ἐπὶ τὰ><sup>1</sup> ἐξ ἀρχῆς.

<sup>1</sup> <ἐπὶ τὰ> Diels

**f** (B132) Hesych. A.7691

ἀσκαληνές·<sup>1</sup> ἰσόπλευρον, παρὰ Δημοκρίτῳ.

<sup>1</sup> ἀσκαληρές H, corr. Diels

**g** (B133) Hesych. B.1215

βροχμώδης· ἡ νοτερὰ καὶ ἀπαλή, Δημόκριτος.

**h** (B134) Hesych. B.1218

βρόχος· ἀγκύλη,<sup>1</sup> Δημόκριτος.<sup>2</sup> ἀγχόνη, δεσμός.

<sup>1</sup> ἀγκοίλη mss., corr. Musurus  
del. Soping

<sup>2</sup> ἀγκοίλη, Δημόκριτος

**i** (B136) Hesych. Δ.2498

δυοχοῖ· πωματίζει παρὰ Δημοκρίτῳ, ἥγουν πωμάζει,  
σκεπάζει.

**j** (B121) Eust. *In Od.* 2.190, p. 1441.18

Δημόκριτος δὲ ἐπιτηδειέστατόν φησι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**e** (B144a) Photius, *Lexicon*

***anabêsomai***: Democritus instead of ‘I shall go back <to> the beginning.’

**f** (B132) Hesychius, *Lexicon*

***askalênes***: ‘equilateral,’ in Democritus.

**g** (B133) Hesychius, *Lexicon*

***brokhmôdês***: ‘moist and soft,’ Democritus.

**h** (B134) Hesychius, *Lexicon*

***brokhos***: ‘noose,’ Democritus. Strangling, bond.

**i** (B136) Hesychius, *Lexicon*

***duokhoi***: ‘he/it covers with a lid’ in Democritus, or ‘cover up,’ ‘protect.’

**j** (B121) Eustathius, *Commentary on Homer’s Odyssey*

Democritus says ‘***epitêdeiestatos***’ (‘most suitable’).

## EARLY GREEK PHILOSOPHY VII

**k** (B122) *Etym. Gen.* A.399 s.v. ἀλαπάξαι

[. . .] καὶ Δημόκριτος τοὺς παρὰ τῶν κυνηγετῶν γινόμενους βόθρους <λα>πάθους<sup>1</sup> καλεῖ διὰ τὸ κεκενωσθαι.

<sup>1</sup> <λα>πάθους Lasserre-Livadaras

**I** (B137) *Hesych.* Σ.2156

συγγονή· σύστασις. Δημόκριτος.

*His Style (R5–R9)*

**R5** (A34) *Cic. De orat.* 1.11.49

si ornate locutus est, sicut et fertur et mihi videtur, physicus ille Democritus, materies illa fuit physici de qua dixit, ornatus vero ipse verborum oratoris putandus est.

**R6** (A34) *Cic. Orat.* 20.67

itaque video visum esse non nullis Platonis et Democriti locutionem etsi absit a versu, tamen quod incitatus feratur et clarissimis verborum luminibus utatur, potius poema putandum quam comicorum poetarum [. . .].

**R7** (A34) *Cic. Div.* 2.64.133

valde Heraclitus obscurus, minime Democritus.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**k** (B122) Etymologicum Genuinum

[. . .] and Democritus calls the pits made by hunters ‘*<la>pathoi*’ because they are hollowed out.

**l** (B137) Hesychius, *Lexicon*

**sungonê**: ‘composition.’ Democritus.

### *His Style (R5–R9)*

**R5** (A34) Cicero, *On the Orator*

If the celebrated natural philosopher Democritus has expressed himself in an ornamented style, as is reported and as seems to me to be the case, the material about which he spoke belonged to natural philosophy, but the ornament of the words itself must be thought to belong to the orator.

**R6** (A34) Cicero, *The Orator*

I see that some people have thought that the style of Plato and Democritus, even if it is free of poetic meter, nevertheless, since it moves along with great rapidity and makes use of the most brilliant verbal ornaments, is more to be considered a [scil. real] poem than those of the comic poets [. . .].

**R7** (A34) Cicero, *On Divination*

Heraclitus is extremely obscure [cf. **HER. R5–R11**], Democritus not at all.



## EARLY GREEK PHILOSOPHY VII

**R8** (A34) Dion. Hal. *Comp. verb.* 24

[. . .] φιλοσόφων δὲ κατ' ἐμὴν δόξαν Δημόκριτός τε καὶ Πλάτων καὶ Ἀριστοτέλης· τούτων γὰρ<sup>1</sup> ἑτέρους εὐρεῖν ἀμήχανον ἄμεινον κεράσαντας τοὺς λόγους.

<sup>1</sup> γὰρ F: δὲ PMV

**R9** (< A77) Plut. *Quaest. conv.* 5.7.6 683A

[. . .] τῇ δὲ λέξει δαιμονίως λέγειν καὶ μεγαλοπρεπῶς.

*Anaxagoras' Attitude Toward Democritus (R10)*

**R10** (< 59 A1) Diog. Laert. 2.14

ἔδοξε δέ πως καὶ Δημοκρίτῳ ἀπεχθῶς ἐσχηκέναι, ἀποτυχὼν τῆς πρὸς αὐτὸν κοινολογίας.

*Plato's Attitude Toward Democritus (R11)*

**R11** (< A1) Diog. Laert. 9.40

Ἀριστόξενος δ' ἐν τοῖς Ἱστορικοῖς ὑπομνήμασί φησι [Frag. 131 Wehrli] Πλάτωνα θελῆσαι συμφλέξαι τὰ Δημοκρίτου συγγράμματα, ὅποσα ἐδυνήθη συναγαγεῖν, Ἀμύκλαν δὲ καὶ Κλεινίαν τοὺς Πυθαγορικούς

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**R8** (A34) Dionysius of Halicarnassus, *On Word Order*

[. . .] among the philosophers, in my opinion, Democritus, Plato, and Aristotle [scil. are the greatest writers in the intermediate style]. For it is impossible to find anyone else who has mixed the [scil. kinds of] discourse better than these.

**R9** (< A77) Plutarch, *Table Talk*

[. . .] but the style he uses when he speaks is divine and sublime.

### *Anaxagoras' Attitude Toward Democritus (R10)*

**R10** (< 59 A1) Diogenes Laertius

He [i.e. Anaxagoras] seemed in some way to feel hostile toward Democritus, since he had failed to enter into a discussion with him.<sup>1</sup>

<sup>1</sup> The relation between this report and Diog. Laert. 9.34–35 (ANAXAG. R2; ATOM. P23) is problematic: was it Anaxagoras who rejected Democritus, or was it the other way around?

### *Plato's Attitude Toward Democritus (R11)*

**R11** (< A1) Diogenes Laertius

Aristoxenus says in his *Historical Memoirs* that Plato wanted to burn all the writings of Democritus that he was able to collect, but that the Pythagoreans Amyclas and Clinias prevented him on the grounds that this would be

## EARLY GREEK PHILOSOPHY VII

κωλύσαι αὐτόν, ὥς οὐδὲν ὄφελος· παρὰ πολλοῖς γὰρ εἶναι ἤδη τὰ βιβλία. καὶ δῆλον δέ· πάντων γὰρ σχεδὸν τῶν ἀρχαίων μεμνημένος ὁ Πλάτων οὐδαμοῦ Δημοκρίτου διαμνημονεύει, ἀλλ' οὐδὲ ἔνθα<sup>1</sup> ἀντειπεῖν τι<sup>2</sup> αὐτῷ δέοι, δῆλον <ὅτι><sup>3</sup> εἰδὼς ὥς πρὸς τὸν ἄριστον αὐτῷ<sup>4</sup> τῶν φιλοσόφων <ὁ ἀγὼν> ἔσοιτο.<sup>5</sup>

<sup>1</sup> ἔνθα <ἄν> Long                      <sup>2</sup> ἀντειπεῖν τι B (ἀντιπεῖν) P<sup>1</sup>: ἀντι-  
πίπτειν F P<sup>4</sup> in marg.                      <sup>3</sup> <ὅτι> Reiske                      <sup>4</sup> αὐτῷ Cobet:  
οὕτω mss.                      <sup>5</sup> <ὁ ἀγὼν> ἔσοιτο Casaubon: ἐρίσοι Lapini: an  
οὕτω . . . εἴσοι vel αὐτῷ . . . εἰσιτέον?

### *The Atomists in Aristotle and the Peripatetic Tradition (R12–R67)*

Cf. **R1a, b, c**

#### *Parallels (R12–R21)*

#### *With the Natural Philosophers in General (R12)*

**R12** (cf. ad 28 B8) Arist. *Phys.* 1.5 188a19–26

πάντες δὴ τὰναντία ἀρχὰς ποιοῦσιν [. . .] (καὶ γὰρ Παρμενίδης θερμὸν καὶ ψυχρὸν ἀρχὰς ποιεῖ [. . .]) καὶ οἱ μανὸν καὶ πυκνόν, καὶ Δημόκριτος τὸ πλήρες<sup>1</sup> καὶ κενόν, ὧν τὸ μὲν ὥς ὃν τὸ δὲ ὥς οὐκ ὃν εἶναι φησιν· ἔτι θέσει, σχήματι, τάξει· ταῦτα δὲ γένη ἐναντίων· θέσεως ἄνω κάτω, πρόσθεν ὀπίσθεν, σχήματος γεω-  
νιωμένον<sup>2</sup> ἀγώνιον,<sup>3</sup> εὐθὺ περιφερές.

<sup>1</sup> πλήρες E<sup>1</sup>I: στερεὸν E<sup>2</sup>FJ                      <sup>2</sup> γεγωνιωμένον FI:  
γωνία EJ                      <sup>3</sup> ἀγώνιον om. mss. plerique

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

useless, since many people already possessed the books. And this is clearly the case: for although Plato mentions almost all the ancients, he never makes mention of Democritus anywhere, even where it would have been necessary for him to contradict him, clearly because he knew that <the struggle> would oppose him to the greatest of philosophers.

*The Atomists in Aristotle and the  
Peripatetic Tradition (R12–R67)*

Cf. **R1a, b, c**

*Parallels (R12–R21)  
With the Natural Philosophers in General (R12)*

**R12** (cf. ad 28 B8) Aristotle, *Physics*

They all make the contraries principles [. . .] for Parmenides too makes hot and cold principles, [. . . cf. **PARM. R11**], as well as those who [scil. take as principles] the rarefied and dense, and Democritus [scil. who takes] the solid and the void, of which he says that the one is what is, the other what is not; and who furthermore, [scil. has recourse to] position, shape, and order. And these are genera of contraries: for position, up/down, in front/in back; for shape, with an angle/without an angle, straight/round.<sup>1</sup>

<sup>1</sup> Or, with a different reading: “for the shape, an angle, straight or round.” For according to Democritus, a sphere is an angle of a certain kind (cf. **D60b**).

## EARLY GREEK PHILOSOPHY VII

### *With the Pythagoreans (R13–R14)*

**R13** (67 A15, 68 A120) Arist. *Cael.* 3.4 303a3–10

ἀλλὰ μὴν οὐδ' ὥς ἕτεροί τινες λέγουσιν, οἷον Λεύκιπ-  
πός τε καὶ Δημόκριτος ὁ Ἀβδηρίτης, εὐλόγα τὰ συμ-  
βαίνοντα· φασὶ γὰρ εἶναι τὰ πρῶτα μεγέθη πλήθει  
μὲν ἄπειρα, μεγέθει δὲ ἀδιαίρετα, καὶ οὐτ' ἐξ ἑνὸς  
πολλὰ γίγνεσθαι οὔτε ἐκ πολλῶν ἔν, ἀλλὰ τῇ τούτων  
συμπλοκῇ καὶ ἐπαλλάξει<sup>1</sup> πάντα γεννᾶσθαι [D45].  
τρόπον γάρ τινα καὶ οὗτοι πάντα τὰ ὄντα ποιοῦσιν  
ἀριθμούς καὶ ἐξ ἀριθμῶν· καὶ γὰρ εἰ μὴ σαφῶς δη-  
λοῦσιν, ὅμως τοῦτο βούλονται λέγειν.

<sup>1</sup> ἐπαλλάξει JHE<sup>4</sup>: περιπλέξει E: περιπαλάξει Diels (cf.  
app. ad D35b et D36)

### **R14**

**a** (< 101.1 Leszl) Arist. *An.* 1.3 404a16–20

[. . . = **ATOM. D132, D136**] ἔοικε δὲ καὶ τὸ παρὰ τῶν  
Πυθαγορείων λεγόμενον τὴν αὐτὴν ἔχειν διάνοιαν·  
ἔφασαν γάρ τινες αὐτῶν ψυχὴν εἶναι τὰ ἐν τῷ ἀέρι  
ξύσματα, οἱ δὲ τὰ ταῦτα κινοῦν, περὶ δὲ τούτων εἴρη-  
ται ὅτι συνεχῶς φαίνεται κινούμενα, καὶ ἡ νηνεμία  
παντελής.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *With the Pythagoreans (R13–R14)*

**R13** (67 A15, 68 A120) Aristotle, *On the Heavens*

But the consequences resulting from the way in which certain others [scil. than the Pythagoreans] speak, like Leucippus and Democritus of Abdera, are not plausible either. For they say that the first magnitudes are unlimited in number, but indivisible in magnitude, and that neither can a plurality come about out of one nor one out of a plurality, but that it is by the interlacing and **intertwining** (*epallaxis*) of these things that all things are generated. For in a certain way these latter too make all beings numbers and constitute them out of numbers. And even if they do not indicate this clearly, all the same it is this that they mean to say.

### **R14**

**a** (≠ DK) Aristotle, *On the Soul*

[. . .] It seems that what the Pythagoreans say means the same thing [scil. as what Leucippus and Democritus say about the soul, cf. **ATOM. D132, D136**]. For some of them said that the soul is motes (*xusmata*) in the air, others that it is what moves these. People say about these that they are seen to be in constant motion, even if there is a total lack of a breeze [= **PYTHS. ANON. D49**].

**b** (< 101.4 Leszl) Simpl. *In An.*, p. 26.11–19

πότερον δὲ οὕτως ὁ Δημόκριτος ἀπὸ σωμάτων ἐγέννα τὴν ζώην, ἢ ἐνδεικτικῶς τὴν νοερὰν ἐβούλετο διὰ τῆς σφαίρας οὐσίαν, οὐκ ἔχομεν ἀποφύνασθαι. οὐ δεῖ γὰρ τῇ Ἀριτοτελικῇ ἐπερείδεσθαι ἱστορία διὰ τὸ ὥς ἐπίπαν μόνον ἐκτίθεσθαι τὸ φαινόμενον, ὥσπερ καὶ τὸ περὶ τῶν Πυθαγορείων ἐπαγόμενον. τὸν μὲν γὰρ Δημόκριτον ἱστορεῖ ὅμοια τοῖς ἐν ἀέρι λέγειν ξύσμασι τὰ στοιχεῖα, τινὰς δὲ τῶν Πυθαγορείων αὐτὰ ταῦτα, οὐκ ἂν ταῦτα οἰηθέντων ποτὲ τῶν Πυθαγορείων ἀνδρῶν, ἐνδεικνυμένων δὲ ἴσως τὴν ἤδη μεριζομένην τῆς ψυχῆς οὐσίαν καὶ εἰς τὸ φανερόν προϋούσαν.

*With Anaxagoras (R15–R16)*

**R15** (> 59 A45) Arist. *Phys.* 3.4 203a19–24, a33–b2

ὅσοι δ' ἄπειρα ποιοῦσι τὰ στοιχεῖα, καθάπερ Ἀναξαγόρας καὶ Δημόκριτος, ὁ μὲν ἐκ τῶν ὁμοιομερῶν, ὁ δ' ἐκ τῆς πανσπερμίας τῶν σχημάτων, τῇ ἀφῇ συνεχὲς τὸ ἄπειρον εἶναί φασιν [D46]. καὶ ὁ μὲν ὅτιοῦν τῶν μορίων εἶναι μίγμα ὁμοίως τῷ παντὶ διὰ τὸ ὁρᾶν ὅτιοῦν ἐξ ὅτουοῦν γιγνόμενον [. . .] Δημόκριτος δ' οὐδὲν ἕτερον ἐξ ἐτέρου γίγνεσθαι τῶν πρώτων φησίν· ἀλλ' ὅμως γε αὐτῷ τὸ κοινὸν σῶμα πάντων ἐστὶν ἀρχή, μεγέθει κατὰ μόρια καὶ σχήματι διαφέρων.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**b** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's On the Soul*

Whether Democritus was generating life in this way on the basis of bodies, or whether he wished to indicate the intelligible substance by means of the sphere [cf. **ATOM. D132**], we are not able to assert. For one should not rely on Aristotle's report since, as he does in general, he only explains the appearance, as also in what he mentions regarding the Pythagoreans. For he reports that Democritus says that the elements are similar to motes (*xusmata*) in the air, and that some Pythagoreans [scil. say] exactly the same thing, whereas never would the Pythagorean men have thought this, but they were surely showing the substance of the soul already divided and progressing toward its manifestation.

*With Anaxagoras (R15–R16)*

**R15** (> 59 A45) Aristotle, *Physics*

Those [scil. natural philosophers] who posit that the elements are unlimited [scil. in number], like Anaxagoras and Democritus, constituted for the former out of the homoeomers, for the latter out of the 'universal seminal reserve' (*panspermia*) of the shapes, say that the unlimited exists as continuous by virtue of contact. And the former says that any one of the parts is a mixture in the same way as the whole, because it is seen that every thing comes about from every thing. [. . .] But Democritus says that none of the first [scil. elements] comes about out of another of them; but all the same, the common body is for him the principle of all things, differing in its parts by its magnitude and shape.



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**R16** (< 57 Leszl) Arist. *Metaph.* Γ5 1009a25–30

εἰ οὖν μὴ ἐνδέχεται γενέσθαι τὸ μὴ ὄν, προσηύρχεν ὁμοίως τὸ πρᾶγμα ἄμφω ὄν, ὥσπερ καὶ Ἀναξαγόρας μεμίχθαι πᾶν ἐν παντί φησι καὶ Δημόκριτος· καὶ γὰρ οὗτος τὸ κενὸν καὶ τὸ πλήρες ὁμοίως καθ' ὅτι οὖν ὑπάρχειν μέρος, καίτοι τὸ μὲν ὄν τούτων εἶναι τὸ δὲ μὴ ὄν.

*With Protagoras (R17)*

**R17** (< 57.3 Leszl) Alex. *In Metaph.*, pp. 271.38–272.2

ἔπεται δὲ τοῦτο καὶ τοῖς λέγουσιν ἐκάστω τὸ φαινόμενον καὶ εἶναι τοιοῦτον, ὧν εἶεν ἂν οἱ τε περὶ Δημόκριτον καὶ Πρωταγόραν.

*With Plato and the Platonists (R18–R21)*

**R18** (67 A7) Arist. *GC* 1.8 325b25–33

τοσοῦτον γὰρ διαφέρει τοῦ μὴ τὸν αὐτὸν τρόπον Λευκίπῳ λέγειν, ὅτι ὁ μὲν στερεὰ ὁ δ' ἐπίπεδα λέγει τὰ ἀδιαίρετα, καὶ ὁ μὲν ἀπείροις ὀρίσθαι σχήμασι τῶν ἀδιαίρετων στερεῶν ἕκαστον ὁ δὲ ὀρισμένοις, ἐπεὶ ἀδιαίρετά γε ἀμφότεροι λέγουσι καὶ ὀρισμένα σχήμασιν. ἐκ δὴ τούτων αἱ γενέσεις καὶ αἱ διακρίσεις, Λευκίπῳ μὲν δύο τρόποι ἂν εἶεν, διὰ τε τοῦ κενοῦ καὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**R16** (≠ DK) Aristotle, *Metaphysics*

If then it is not possible that what is not came to be, the thing must have existed before, being both [scil. contraries] alike, as Anaxagoras says that everything is mixed in everything [cf. **ANAXAG. D25**] as well as Democritus: for the latter too says that the void and the full are found alike in any part, even if one of these is being and the other nonbeing.

*With Protagoras (R17)*

**R17** (≠ DK) Alexander of Aphrodisias, *Commentary on Aristotle's Metaphysics*

This consequence [i.e. the negation of the principle of contradiction] follows for those who say that what appears to each person is also what kind of thing it is; among these are Democritus and Protagoras.

*With Plato and the Platonists (R18–R21)*

**R18** (67 A7) Aristotle, *On Generation and Corruption*

He [i.e. Plato] only differs from Leucippus' way of speaking insofar as the latter says that the indivisibles are solids, the former that they are surfaces [cf. *Timaeus* 53c–55c], and that for the former each of the indivisible solids is delimited by shapes that are unlimited [scil. in number], while for the latter they are limited, since both speak of entities that are indivisible and limited by shapes. It is on the basis of these that generations and dissociations occur; for Leucippus, there would be two ways, by the void and

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διὰ τῆς ἀφῆς (ταύτη γὰρ διαιρετὸν ἕκαστον), Πλάτωνι  
δὲ κατὰ τὴν ἀφὴν μόνον· κενὸν γὰρ οὐκ εἶναί φησιν.

**R19** (47.3 Leszl) Simpl. *In Cael.*, p. 576.10–19

ἀλλὰ τί, φησίν, διοίσει τῆς Δημοκρίτου δόξης ἢ ἐκ  
τῶν ἐπιπέδων λέγουσα, εἴπερ καὶ αὕτη κατὰ τὰ σχή-  
ματα εἰδοποιεῖσθαι τὰ φυσικὰ σώματά φησι; ῥάδιον  
δὴ καὶ πρὸς τοῦτο λέγειν, ὅτι κατὰ τοῦτο μὲν οὐδὲν  
διαφέρει· καὶ γάρ, ὅπερ καὶ πρότερον εἶπον [cf.  
p. 564.24–26 = **D57a**], Δημόκριτον ὁ Θεόφραστος  
ἱστορεῖ ὡς ἰδιωτικῶς ἀποδιδόντων τῶν κατὰ τὸ θερ-  
μὸν καὶ τὸ ψυχρὸν καὶ τὰ τοιαῦτα αἰτιολογούντων  
ἐπὶ τὰς ἀτόμους ἀναβῆναι· διαφέρει δὲ ἴσως ταύτης  
ἐκείνη ἢ δόξα καὶ τῷ ἀπλούστερόν τι τῶν σωμάτων  
προϋποθέσθαι τὸ ἐπίπεδον τῶν ἀτόμων σωμάτων οὐ-  
σῶν καὶ τῷ συμμετρίας καὶ ἀναλογίας δημιουργικὰς  
τοῖς σχήμασιν ἐνιδεῖν καὶ τῷ περὶ τῆς γῆς ἀλλοίως  
δαιτᾶσθαι.<sup>1</sup>

<sup>1</sup> δαιτᾶσθαι Heiberg: διατᾶσθαι A<sup>1</sup>: διατάττεσθαι A<sup>2</sup>DEF

**R20** Arist. *An.*

**a** (≠ DK) 1.4 409a10–15

δόξειε δ' ἂν οὐθὲν διαφέρειν μονάδας λέγειν ἢ σω-  
μάτια μικρά· καὶ γὰρ ἐκ τῶν Δημοκρίτου σφαιρίων  
ἐὰν γένωνται στιγμαί, μόνον δὲ μένη τὸ ποσόν, ἔσται  
τι ἐν αὐτῷ τὸ μὲν κινοῦν τὸ δὲ κινούμενον, ὥσπερ ἐν

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

by contact (for it is in this way that each thing can be divided); for Plato, according to contact alone (for he says that there is no void).

**R19** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's On the Heavens*

But, he [i.e. Alexander of Aphrodisias] says, in what regard will the opinion speaking on the basis of surfaces differ from Democritus', if indeed this latter too states that physical bodies have their specifications (*eidopoieisthai*) on the basis of the shapes? It is quite easy to reply to this that in this regard they do not differ at all; for, as I said earlier [cf. **D57a**], Theophrastus reports [scil. in his *Physics*] that Democritus went back to the atoms, on the idea that those who invoke as causes cold and warmth and these kinds of things are giving idiosyncratic explanations; but surely the other opinion differs from this one by positing the surface as something simpler than bodies, atoms being bodies, by seeing demiurgic symmetries and analogies in the shapes, and by judging differently regarding the earth [cf. Plato, *Timaeus*, 55d–e].

**R20** Aristotle, *On the Soul*

**a** ( $\neq$  DK)

It would seem to make no difference whether one speaks of unities (*monades*) [scil. like such Platonists as Xenocrates, who define the soul as a self-moving number] or of small corpuscles. For if one makes the little spheres of Democritus points, and only quantity remains, there will be in it [i.e. the point] one part that imparts motion and

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τῷ συνεχεῖ· οὐ γὰρ διὰ τὸ μεγέθει διαφέρειν ἢ μικρότητι συμβαίνει τὸ λεχθέν, ἀλλ' ὅτι ποσόν.

**b** (> A104a) 1.5 409a31–b4

συμβαίνει δέ [. . .] τῇ μὲν ταὐτὸ λέγειν τοῖς σῶμά τι λεπτομερὲς αὐτὴν τιθείσι, τῇ δ', ὥσπερ Δημόκριτος κινεῖσθαι φησιν ὑπὸ τῆς ψυχῆς, ἴδιον τὸ ἄτοπον. ἔ-περ γάρ ἐστιν ἡ ψυχὴ ἐν παντὶ τῷ αἰσθανομένῳ σώματι, ἀναγκαῖον ἐν τῷ αὐτῷ δύο εἶναι σώματα, εἰ σῶμά τι ἡ ψυχὴ· τοῖς δ' ἀριθμὸν λέγουσιν [. . .].

**R21** (< A135) Theophr. *Sens.* 60–61

[60] Δημόκριτος δὲ καὶ Πλάτων ἐπὶ πλείστον εἰσιν ἡμμένοι, καθ' ἕκαστον γὰρ ἀφορίζουσι, πλὴν ὁ μὲν οὐκ ἀποστερῶν τῶν αἰσθητῶν τὴν φύσιν, Δημόκριτος δὲ πάντα πάθη τῆς αἰσθήσεως ποιῶν. [. . .] Δημόκριτος μὲν οὖν οὐχ ὁμοίως λέγει περὶ πάντων, ἀλλὰ τὰ μὲν τοῖς μεγέθεσι, τὰ δὲ τοῖς σχήμασιν, ἕνια δὲ τάξει καὶ θέσει διορίζει. Πλάτων δὲ σχεδὸν ἅπαντα πρὸς τὰ πάθη καὶ τὴν αἴσθησιν ἀποδίδωσιν. ὥστε δόξειεν ἂν ἐκάτερος ἐναντίως τῇ ὑποθέσει λέγειν. [61] ὁ μὲν γὰρ πάθη ποιῶν τῆς αἰσθήσεως καθ' αὐτὰ διορίζει τὴν φύσιν· ὁ δὲ καθ' αὐτὰ ποιῶν ταῖς οὐσίαις πρὸς τὰ πάθη τῆς αἰσθήσεως ἀποδίδωσι. [. . . = **D69**]

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

another that is moved, just as in the continuum. For it is not because of a difference in largeness or smallness that what we have described occurs, but because there is quantity.

**b** (> A104a) What happens [. . .] is that on the one hand they [i.e. the proponents of the Platonic theory] say the same thing as those who posit that it [i.e. the soul] is a kind of subtle body, and that on the other, just as Democritus claims that it [i.e. the body] is moved by the soul, [scil. they say] their own particular absurdity. For if the soul is present throughout the whole perceiving body, there must exist two bodies in the same place if the soul is a body. And as for those who say it is a number [. . .].

**R21** (< A135) Theophrastus, *On Sensations*

[60] Democritus and Plato have most deeply studied the question [i.e. of the nature of perceptibles], for they provide a definition in every case, except that the latter does not deprive the perceptible realities of their nature, while Democritus makes all of them affections of sensation. [. . .] Democritus does not speak in the same way about all the phenomena, but defines some by magnitudes, others by shapes, and some by order and position. Plato, by contrast, explains almost all of them in relation to affection and sensation. So that each of them would seem to contradict his hypothesis. [61] For the one who makes them affections of sensation defines them in their nature as realities in themselves; while the one who makes them, by their substance, realities in themselves explains them in relation to affections of sensation. [. . .]

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### *Praise (R22–R23)*

R22 (24.3 Leszl) Arist. GC 1.2 316a5–14

αἴτιον δὲ τοῦ ἐπ' ἔλαττον δύνασθαι τὰ ὁμολογούμενα  
συννορᾶν ἢ ἀπειρία. διὸ ὅσοι ἐνφκῆκασι μᾶλλον ἐν  
τοῖς φυσικοῖς, μᾶλλον δύνανται ὑποτίθεσθαι τοιαύτας  
ἀρχὰς αἱ ἐπὶ πολὺ δύνανται συνείρειν· οἱ δ' ἐκ τῶν  
λόγων πολλῶν ἀθεώρητοι τῶν ὑπαρχόντων ὄντες,  
πρὸς ὀλίγα βλέψαντες, ἀποφαίνονται ῥᾶον. ἴδοι δ' ἂν  
τις καὶ ἐκ τούτων ὅσον διαφέρουσιν οἱ φυσικῶς καὶ  
λογικῶς σκοποῦντες· περὶ γὰρ τοῦ ἄτομα εἶναι με-  
γέθη οἱ μὲν φασιν διότι αὐτὸ τὸ τρίγωνον πολλὰ  
ἔσται, Δημόκριτος δ' ἂν φανείη οἰκείους καὶ φυσικοῖς  
λόγοις πεπεῖσθαι.

R23 (A42) Arist. *Metaph.* Z13 1039a7–11

[. . .] εἰ ἡ οὐσία ἔν, οὐκ ἔσται ἐξ οὐσιῶν ἐνυπαρχου-  
σῶν καὶ κατὰ τοῦτον τὸν τρόπον, ὃν λέγει Δημόκρι-  
τος ὀρθῶς· ἀδύνατον γὰρ εἶναί φησιν ἐκ δύο ἐν ἡ ἐξ  
ένος δύο γενέσθαι· τὰ γὰρ μεγέθη τὰ ἄτομα τὰς οὐ-  
σίας ποιεῖ.

### *Criticisms (R24–R67)*

#### *Regarding Definition (R24–R25)*

R24 (B165) Arist. *PA* 1.1 640b29–35

εἰ μὲν οὖν τῷ σχήματι καὶ τῷ χρώματι ἕκαστόν ἐστι

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Praise (R22–R23)*

#### **R22** (≠ DK) Aristotle, *On Generation and Corruption*

The reason for a diminished capability of seeing the agreed facts is lack of experience. And that is why those who live more among physical phenomena are more capable of positing such principles as can be connected together more fully; while those who because of a multitude of arguments become unobservant of what happens look at only a few cases and make pronouncements too easily. One can see from this too how much those who study things physically are different from those who do so dialectically. For on the question of the existence of indivisible magnitudes, the ones say that there will be a multiplicity of triangles in themselves, whereas Democritus would seem to have been persuaded by appropriate arguments, that is, physical ones.

#### **R23** (A42) Aristotle, *Metaphysics*

[. . .] if substance is one, it will not be composed out of inherent substances, and this in accordance with the argument that Democritus states correctly. For he says that it is impossible that one come from two, or two from one; for he makes substances indivisible magnitudes.

### *Criticisms (R24–R67)*

#### *Regarding Definition (R24–R25)*

#### **R24** (B165) Aristotle, *Parts of Animals*

If then each animal and each of its parts consisted in shape



## EARLY GREEK PHILOSOPHY VII

τῶν τε ζώων καὶ τῶν μορίων, ὀρθῶς ἂν Δημόκριτος λέγοι· φαίνεται γὰρ οὕτως ὑπολαβεῖν. φησὶ γοῦν παντὶ δῆλον εἶναι οἷόν τι τὴν μορφήν ἐστὶν ὁ ἄνθρωπος, ὥς ὅντος αὐτοῦ τῷ τε σχήματι καὶ τῷ χρώματι γνωρίμον. καίτοι καὶ ὁ τεθνεὺς ἔχει τὴν αὐτὴν τοῦ σχήματος μορφήν, ἀλλ' ὅμως οὐκ ἐστὶν ἄνθρωπος.

**R25** (< A135) Theophr. *Sens.* 82

[. . . = **R59**] περὶ δὲ ὁσμῆς προσαφορίζειν παρήκεν<sup>1</sup> πλὴν τοσοῦτον, ὅτι τὸ λεπτὸν ἀπορρέον ἀπὸ τῶν βαρέων<sup>2</sup> ποιεῖ τὴν ὁδμήν. ποῖον δέ τι τὴν φύσιν ὃν ὑπὸ τίνος πάσχει, οὐκέτι προσέθηκεν, ὅπερ<sup>3</sup> ἴσως ἦν κυριώτατον. Δημόκριτος μὲν οὖν οὕτως ἔνια παραλείπει.

<sup>1</sup> παρήκεν Schneider: εἴρηκέ γε mss. <sup>2</sup> θερμῶν Usener: παχέων Mullach <sup>3</sup> ὥσπερ mss., corr. Stephanus

### *Regarding Causes (R26–R31)*

**R26** (> A65) Arist. *Phys.* 8.1 252a32–b5

ὅλως δὲ τὸ νομίζειν ἀρχὴν εἶναι ταύτην ἱκανήν, εἴ τι αἰεὶ ἢ ἐστὶν οὕτως ἢ γίγνεται, οὐκ ὀρθῶς ἔχει ὑπολαβεῖν, ἐφ' ὃ Δημόκριτος ἀνάγει τὰς περὶ φύσεως αἰτίας, ὥς οὕτω καὶ τὸ πρότερον ἐγίγνετο· τοῦ δὲ αἰεὶ οὐκ ἀξιοῖ ἀρχὴν ζητεῖν, λέγων ἐπὶ τινων ὀρθῶς, ὅτι δ' ἐπὶ πάντων, οὐκ ὀρθῶς. καὶ γὰρ τὸ τρίγωνον ἔχει δυσὶν ὀρθαῖς αἰεὶ τὰς γωνίας ἴσας, ἀλλ' ὅμως ἐστὶν τι τῆς αἰδιότητος ταύτης ἕτερον αἷτιον· τῶν μέντοι ἀρχῶν οὐκ ἐστὶν ἕτερον αἷτιον αἰδίων οὐσῶν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

and color, Democritus would be speaking correctly [scil. when he defines man]. For he seems to think in this way; at least he says that it is clear to everyone what sort of thing a man is with regard to his shape [= **D26a**], on the idea that he is knowable by shape and color. And yet a corpse too has the same form of the shape, but all the same is not a man.

### **R25** (< A135) Theophrastus, *On Sensations*

With regard to smell, he has neglected to provide its definition, except that it is the subtle efflux from heavy things that causes odor [**D67**]. Regarding what kind of thing it is by nature and by what thing it undergoes the effect, he has not added anything further—and yet this was perhaps the most important thing. Thus Democritus omits a number of matters.

### *Regarding Causes (R26–R31)*

### **R26** (> A65) Aristotle, *Physics*

In general, to think that it is a sufficient principle if something always is or becomes in such and such a way, is not a correct supposition. But it is to this that Democritus reduces the causes concerning nature when he says that this happened in the same way previously too [cf. **R27**]. But he does not think it necessary to seek a principle of the ‘always,’ so that it is only about certain cases that he speaks correctly, but when he applies it to all he does so incorrectly. For a triangle always has its angles equal to two right angles, but all the same there is a different reason for this ‘always’; whereas of principles there is not a different cause, since they always exist.

**R27** (< 42.1 Leszl) Arist. *GA* 2.6 742b17–21

οὐ καλῶς δὲ λέγουσιν οὐδὲ τοῦ διὰ τί τὴν ἀνάγκην, ὅσοι λέγουσιν ὅτι οὕτως αἰεὶ γίνεται, καὶ ταύτην εἶναι νομίζουσιν ἀρχὴν ἐν αὐτοῖς, ὥσπερ Δημόκριτος ὁ Ἀβδηρίτης, ὅτι τοῦ μὲν αἰεὶ καὶ ἀπείρου οὐκ ἔστιν ἀρχή [. . . cf. **D79**].

**R28** (< A36) Arist. *PA* 1.1 642a24–28

αἴτιον δὲ τοῦ μὴ ἐλθεῖν τοὺς προγενεστέρους ἐπὶ τὸν τρόπον τοῦτον, ὅτι τὸ τί ἦν εἶναι καὶ τὸ ὀρίσασθαι τὴν οὐσίαν οὐκ ἦν, ἀλλ' ἤψατο μὲν Δημόκριτος πρῶτος, ὥς οὐκ ἀναγκαῖον δὲ τῇ φυσικῇ θεωρίᾳ, ἀλλ' ἐκφερόμενος ὑπ' αὐτοῦ τοῦ πράγματος [. . .].

**R29** (< A106) Arist. *Resp.* 4

**a** 471b30–472a3

Δημόκριτος δ' ὅτι μὲν ἐκ τῆς ἀναπνοῆς συμβαίνει τι τοῖς ἀναπνέουσιν λέγει, φάσκων κωλύειν ἐκθλίβεσθαι τὴν ψυχὴν· οὐ μέντοι ὥς τούτου γ' ἔνεκα ποιήσασαν τοῦτο τὴν φύσιν οὐθὲν εἴρηκεν· ὅλως γὰρ ὥσπερ καὶ οἱ ἄλλοι φυσικοί, καὶ οὗτος οὐθὲν ἄπτεται τῆς τοιαύτης αἰτίας [. . .].

**R27** (≠ DK) Aristotle, *Generation of Animals*

They do not speak well nor do they explain the necessity of the cause, those who say that it [i.e. the generation and growth of animals] always occurs this way and who think, like Democritus of Abdera, that this is a principle in them, since there is not a principle [i.e. a beginning, *arkhê*] of the always and unlimited [. . .].

**R28** (< A36) Aristotle, *Parts of Animals*

The reason our predecessors did not arrive at this kind [scil. of cause, the formal or final one] is that what the being of a thing is (*to ti ên einai*) and the definition of its essence (*ousia*) were lacking. It was Democritus who was the first to approach the question, not as being necessary for the theory of nature, but because he was brought to it by the things themselves [. . .].

**R29** (< A106) Aristotle, *On Respiration*

**a**

Democritus says that something comes about from respiration for beings that breathe, when he asserts that it prevents the soul from being expelled [cf. **D136**]. But he has not said anything at all about nature doing this for that reason. For in general he does not approach a cause of this sort any more than the other natural philosophers do [. . .].

**b** 472a16–18

τὴν δ' αἰτίαν διὰ τί ποτε πᾶσι μὲν ἀναγκαῖον ἀποθανεῖν, οὐ μέντοι ὅτε ἔτυχεν ἀλλὰ κατὰ φύσιν μὲν γήρα, βία δὲ παρὰ φύσιν, οὐθὲν δεδήλωκεν [. . .].

**R30** (> A66) Arist. GA 5.8 789b2–8 et 12–15

Δημόκριτος δὲ τὸ οὗ ἕνεκα ἀφείδεις λέγειν, πάντα ἀνάγει εἰς ἀνάγκην οἷς χρήται ἢ φύσις, οἷσι μὲν τοιούτοις, οὐ μὴν ἀλλ' ἕνεκά τινος οἷσι, καὶ τοῦ περὶ ἕκαστον βελτίονος χάριν. ὥστε γίνεσθαι μὲν οὐθὲν κωλύει οὕτω καὶ ἐκπίπτειν, ἀλλ' οὐ διὰ ταῦτα, ἀλλὰ διὰ τὸ τέλος· ταῦτα δ' ὡς κινούμενα καὶ ὄργανα καὶ ὡς ὕλη αἷτια [. . .]. ὅμοιον δ' ἔοικε τὸ λέγειν τὰ αἷτια ἐξ ἀνάγκης καὶν εἴ τις διὰ τὸ μαχαίριον οἶοιτο τὸ ὕδωρ ἐξεληλυθέναι μόνον τοῖς ὑδρωπιῶσιν, ἀλλ' οὐ διὰ τὸ ὑγιαίνειν οὗ ἕνεκα τὸ μαχαίριον ἔτεμεν.

**R31** (A67) Simpl. *In Phys.*, p. 327.23–26

ἀλλὰ καὶ Δημόκριτος ἐν οἷς φησι “δεῖνον ἀπὸ τοῦ παντὸς ἀποκριθῆναι<sup>1</sup> παντοίων εἰδέων” [D82] (πῶς δὲ καὶ ὑπὸ τίνος αἰτίας μὴ λέγει) ἔοικεν ἀπὸ ταῦτομάτου καὶ τύχης γεννᾶν αὐτόν.

<sup>1</sup> ἀποκριθῆναι E: ἀποκρίνεσθαι DF

**b**

But the cause for which it is necessary that all [scil. living beings] die one day, not by chance, but in conformity with nature because of old age, or against nature by violence, he has not indicated clearly [. . .].

**R30** (> A66) Aristotle, *Generation of Animals*

Democritus neglects to speak about the final cause and reduces to necessity all the processes that nature makes use of—which are indeed of this sort [i.e. necessary], but yet they are for a final cause and for what is better in every case. So that nothing prevents them [i.e. teeth] from growing and falling out in this way, but not for these reasons [i.e. material ones], but for the sake of the end: these factors are causes as moving, instruments, and as matter [. . .]. But he seems to speak of necessary causes in the same way as if one thought that the lancet alone were the cause of the water being drawn off from patients with dropsy, and not the condition of healthiness, for the sake of which the lancet made its incision.

**R31** (A67) Simplicius, *Commentary on Aristotle's Physics*

Democritus too [scil. like Empedocles], when he says, “**A vortex of all kinds of forms became detached from the whole**” [= D82] (but without saying either how or by what cause), seems to generate it by a spontaneous process [*automaton*] and by chance [*tukhê*].

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### *Criticism of the Atomist Hypothesis: A Digression in Aristotle's Generation and Corruption (R32)*

**R32** (> A 60) Arist. GC 1.8

**a** 325b33–326a24

περὶ δὴ τῶν ἀδιαιρέτων στερεῶν τὸ μὲν ἐπὶ πλέον  
θεωρῆσαι τὸ συμβαῖνον [35] ἀφείσθω τὸ νῦν, ὥς δὲ  
μικρὸν παρέκβασιν εἰπεῖν, ἀναγκαῖον ἀπαθές τε ἕκα-  
στον λέγειν τῶν ἀδιαιρέτων (οὐ γὰρ οἶόν [326a1] τε  
πάσχειν ἀλλ' ἢ διὰ τοῦ κενοῦ) καὶ μηθενὸς ποιητικὸν  
πάθους· οὔτε γὰρ ψυχρὸν οὔτε σκληρόν<sup>1</sup> οἶόν τ' εἶναι.  
καίτοι τοῦτό γε ἄτοπον, τὸ μόνον ἀποδοῦναι τῷ περι-  
φερεῖ σχήματι τὸ θερμόν· ἀνάγκη γὰρ καὶ τοῦναντίον  
τὸ ψυχρὸν ἄλλῳ τινὶ [5] προσήκειν τῶν σχημάτων.  
ἄτοπον δὲ καὶ εἰ ταῦτα μὲν ὑπάρχει, λέγω δὲ θερ-  
μότης καὶ ψυχρότης, βαρύτης δὲ καὶ κουφότης καὶ  
σκληρότης καὶ μαλακότης μὴ ὑπάρξει· καίτοι βαρύ-  
τερόν γε κατὰ τὴν ὑπεροχὴν φησιν εἶναι Δημόκριτος  
ἕκαστον τῶν ἀδιαιρέτων, ὥστε δῆλον ὅτι καὶ θερμότε-  
ρον. [10] τοιαῦτα δ' ὄντα μὴ πάσχειν ὑπ' ἀλλήλων  
ἀδύνατον, οἶον ὑπὸ τοῦ πολὺν ὑπερβάλλοντος θερμοῦ  
τὸ ἡρέμα ψυχρόν.<sup>2</sup> ἀλλὰ μὴν εἰ σκληρόν, καὶ μαλα-  
κόν, τὸ δὲ μαλακὸν τῷ πάσχειν τι λέγεται· τὸ γὰρ  
ὑπεικτικὸν μαλακόν.

ἀλλὰ μὴν ἄτοπον καὶ εἰ μηθὲν ὑπάρχει ἀλλὰ μόνον  
σχῆμα· [15] καὶ εἰ ὑπάρχει, ἐν δὲ μόνον, οἶον τὸ μὲν  
σκληρόν τὸ δὲ θερμόν· οὐδὲ γὰρ ἂν μία τις εἴη φύσις

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Criticism of the Atomist Hypothesis: A Digression in Aristotle's Generation and Corruption (R32)*

**R32** (> A 60) Aristotle, *On Generation and Corruption*

**a** [The problem of affection]

Concerning indivisible solids, let us set aside for the moment a fuller examination of their consequences; but to speak a little as a digression, it is necessary to state that each of the indivisibles is both impassible (for it is not possible [326a1] to be acted upon if not by means of the void) and does not produce any affections: for it cannot be either cold or hard [or perhaps: hot]. And yet this is very strange, to assign heat only to the round shape [cf. **D59**]. For it is necessary that the contrary as well, cold, [5] belong to some other shape. And it is also very strange that these, I mean heat *and* cold, belong to them, but heaviness *and* lightness, hardness *and* softness do not belong to them. In fact Democritus says that each of the indivisibles is at least heavier in virtue of its excess, so that it is clear that it is also warmer. [10] But being such, it is impossible that they not be affected by each other, for example that the slightly cold [scil. not be affected] by the excessively hot. But on the other hand, if there is hard, there is also soft, and the soft is called that because of a certain affection—for soft is what yields.

But it is also very strange that nothing belongs to them except for shape; [15] and also that if others do belong to them, that there is only one for each, so that the one is

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<sup>1</sup> σκληρόν] calidum coni. Asulanus  
θερμόν FW

<sup>2</sup> ψυχρόν E<sup>1</sup>LMHJV:



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αὐτῶν. ὁμοίως δὲ ἀδύνατον καὶ εἰ πλείω τῷ ἐνί· ἀδιαίρετον γὰρ ὃν ἐν τῷ αὐτῷ ἔξει τὰ πάθη· ὥστε καὶ ἐὰν πάσχη, εἴπερ ψύχεται, ταύτῃ τί<sup>3</sup> καὶ ἄλλο ποιήσῃ ἢ πείσεται; τὸν αὐτὸν δὲ [20] τρόπον καὶ ἐπὶ τῶν ἄλλων παθημάτων· τοῦτο γὰρ καὶ τοῖς στερεὰ καὶ τοῖς ἐπίπεδα λέγουσιν ἀδιαίρετα συμβαίνει τὸν αὐτὸν τρόπον· οὔτε γὰρ μαλόντερα οὔτε πυκνότερα οἷόν τε γίνεσθαι κενού μὴ ὄντος ἐν τοῖς ἀδιαίρετοις.

<sup>3</sup> τί Rashed: τι vel τοι mss. plerique

### b 326a24–326b2

ἔτι δ' ἄτοπον καὶ τὸ μικρὰ μὲν ἀδιαίρετα εἶναι, μεγάλα δὲ μή· νῦν μὲν [25] γὰρ εὐλόγως τὰ μεγάλα θραύεται μᾶλλον τῶν μικρῶν· τὰ μὲν γὰρ διαλύεται ῥαδίως, οἷον τὰ μεγάλα· προσκόπτει γὰρ πολλοῖς· τὸ δὲ ἀδιαίρετον ὅλως διὰ τί μᾶλλον ὑπάρχει τῶν μεγάλων τοῖς μικροῖς; ἔτι δὲ πότερον μία πάντων φύσις ἐκείνων τῶν στερεῶν, ἢ διαφέρει θάτερα τῶν ἐτέρων, [30] ὥσπερ ἂν εἰ τὰ μὲν εἴη πύρινα, τὰ δὲ γήινα τὸν ὄγκον; εἰ μὲν γὰρ μία φύσις ἀπάντων, τί τὸ χωρίσαν; ἢ διὰ τί οὐ γίγνεται ἀψάμενα ἓν, ὥσπερ ὕδωρ ὕδατος ὅταν θίγη; οὐδὲν γὰρ διαφέρει τὸ ὕστερον τοῦ προτέρου. εἰ δ' ἕτερα, ποῖα ταῦτα; καὶ δῆλον ὡς ταύτας θετέον ἀρχὰς καὶ αἰτίας τῶν [35] συμβαινόντων μᾶλλον ἢ τὰ σχήματα. ἔτι δὲ, διαφέροντα [326b1] τὴν φύσιν, καὶ ποιοὶ καὶ πάσχοι θιγγάνοντα ἀλλήλων.

hard and the other hot—for if so, their nature would not be one. But it is likewise impossible that several [scil. affections] belong to only one [scil. indivisible]. For, being indivisible, it will possess the affections in the same place; so that, when it is affected, if it is cooled, what other action or affection will happen at this place? And in the same way [20] for the other affections as well. For the same thing applies to those who say that the indivisibles are solids or surfaces [cf. Plato, *Timaeus* 53c–55d]. For the indivisibles could not become either more rarefied or more dense, since there is no void in them.

**b** [The problem of indivisibility]

[326a24] It is also very strange that small things are indivisible but large ones are not. For as it is, it is reasonable that large things break apart more than small ones; for they decompose easily, given that they are large, for they collide with many things. But why in general does indivisibility belong to small things more than to large ones? Again, is there just one nature of all those solids, or do they differ from each other, [30] so that the ones would be fiery, the others a mass of earth? For if there is only one nature for all of them, what is it that separates them? Or why, when they come into contact, do they not become one, like water when it touches water? For this latter case does not differ at all from the earlier one. But if they are different, of what sort are they? And it is clear that these are what should be posited as principles and causes for what happens rather than the shapes. Furthermore, if they differ [326b1] in their nature, they would both act and be acted upon [scil. all at once] when they touched each other.

c 326b2–6

ἔτι δὲ τί τὸ κινοῦν; εἰ μὲν γὰρ ἕτερον, παθητικά· εἰ δ' αὐτὸ αὐτὸ ἕκαστον, ἢ διαιρετὸν ἔσται, κατ' ἄλλο μὲν κινοῦν κατ' ἄλλο δὲ κινούμενον, ἢ κατὰ ταὐτὸ τάναντία ὑπάρξει, καὶ [5] ἢ ὕλη οὐ μόνον ἀριθμῶ ἔσται μία ἀλλὰ καὶ δυνάμει.

d 326b6–27

ὅσοι μὲν οὖν διὰ τῆς <διὰ><sup>1</sup> τῶν πόρων κινήσεώς φασι τὰ πάθη συμβαίνειν, εἰ μὲν καὶ πεπληρωμένων τῶν πόρων, περίεργον οἱ πόροι· εἰ γὰρ ταύτῃ τι πάσχει τὸ πᾶν, καὶ μὴ πόρους ἔχον ἀλλ' αὐτὸ συνεχές ὃν πάσχοι τὸν αὐτὸν τρόπον. ἔτι δὲ πῶς ἐνδέχεται περὶ τοῦ διορᾶν συμβαίνειν ὡς λέγουσιν; [10] οὔτε γὰρ κατὰ τὰς ἀφὰς ἐνδέχεται διέναι διὰ τῶν διαφανῶν, οὔτε διὰ τῶν πόρων, εἰ πλήρης ἕκαστος· τί γὰρ διοίσει τοῦ μὴ ἔχειν πόρους; πᾶν γὰρ ὁμοίως ἐστὶν πλήρες. ἀλλὰ μὴν εἰ κενὰ μὲν ταῦτα, ἀνάγκη δὲ σώματα ἐν αὐτοῖς ἔχειν, ταὐτὸ συμβήσεται πάλιν. εἰ δὲ τηλικαῦτα τὸ [15] μέγεθος ὥστε μὴ δέχεσθαι σῶμα μηδέν, γελοῖον τὸ μικρὸν μὲν οἶεσθαι κενὸν εἶναι, μέγα δὲ μὴ μὴδ' ὀπηλικονοῦν, ἢ τὸ κενὸν ἄλλο τι οἶεσθαι λέγειν πλὴν χώραν σώματος, ὥστε δῆλον ὅτι παντὶ σώματι τὸν ὄγκον ἴσον ἔσται κενόν.

ὅλως δὲ τὸ πόρους ποιεῖν περίεργον· εἰ μὲν γὰρ

<sup>1</sup> <διὰ> Mugler

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### c [The problem of motion]

Again, what is it that sets them in motion? For if it is something different from themselves, then they will be capable of being acted upon; but if each one [scil. moves] itself, then either it will be divisible (setting in motion in this part, being set in motion in that one) or else contrary properties will belong to it in the same respect, and [5] its matter will be one not only in number but also in potentiality.

### d [The problem of vision and the passages]

So for all those who say that the affections are produced by motion <through> passages, if this happens even when the passages are filled, then the passages are superfluous. For if the whole is affected in this way, it would be affected in the same way even if it did not possess passages but were itself continuous. Furthermore, how is it possible for vision to occur in the way they assert? [10] For it is not possible to penetrate through transparent bodies by their points of contact, nor through the passages if each one is full. For in what way will that be different from not having passages? For the whole is full in the same way. But if these [i.e. the passages] are empty, but it is necessary that they contain bodies within themselves, then the same consequence will ensue once again. And if they are of such a [scil. small] size [15] that they cannot receive any body, it is ridiculous to think that a small void exists but a large one, of whatever size, does not, or to suppose that 'void' means anything other than the place of a body, so that it is clear that for every body there will be a void equal in volume.

In general, to posit passages is superfluous. For if

μηδὲν ποιεῖ [20] κατὰ τὴν ἀφήν, οὐδὲ διὰ τῶν πόρων ποιήσῃ διόν· εἰ δὲ τῷ ἄπτεσθαι, καὶ μὴ πόρων ὄντων τὰ μὲν πείσεται τὰ δὲ ποιήσῃ τῶν πρὸς ἄλληλα τοῦτον τὸν τρόπον πεφυκότων.

ὅτι μὲν οὖν οὕτως λέγειν τοὺς πόρους, ὥς τινες ὑπολαμβάνουσιν, ἢ ψεῦδος ἢ μάταιον, φανερόν ἐκ τούτων ἐστίν· διαιρετῶν [25] δ' ὄντων πάντῃ τῶν σωμάτων πόρους ποιεῖν γελοῖον· ἢ γὰρ διαιρετά, δύναται χωρίζεσθαι.

*Regarding the Unlimited Number of Atoms (R33)*

**R33** (< 67 A15 et > 68 A60a) Arist. *Cael.* 3.4 303a3–5 et a17–b8

[303a3] ἀλλὰ μὴν οὐδ' ὥς ἕτεροί τινες λέγουσιν, οἶον Λεύκιππος τε καὶ Δημόκριτος ὁ Ἀβδηρίτης, εὐλόγα τὰ συμβαίνοντα· [. . . = **D45**]. [303a17] πρῶτον μὲν οὖν ταῦτόν καὶ τούτοις ἀμάρτημα τὸ μὴ πεπερασμένας λαβεῖν τὰς ἀρχάς, ἐξὸν ἅπαντα ταῦτα λέγειν. ἔτι δ' εἰ μὴ ἄπειροι τῶν σχημάτων αἱ διαφοραί, δῆλον ὅτι οὐκ ἔσται τὰ στοιχεῖα ἄπειρα. πρὸς δὲ τούτοις ἀνάγκη [20] μάχεσθαι ταῖς μαθηματικαῖς ἐπιστήμας ἄτομα σώματα λέγοντας, καὶ πολλὰ τῶν ἐνδόξων καὶ τῶν φαινομένων κατὰ τὴν αἴσθησιν ἀναιρεῖν, περὶ ᾧ εἴρηται πρότερον ἐν τοῖς περὶ χρόνον καὶ κινήσεως. ἅμα δὲ καὶ ἐναντία λέγειν αὐτοὺς αὐτοῖς ἀνάγκη· ἀδύ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

something does not act [20] by contact, then neither will it do so by penetrating through passages. But if it does so by making contact, then, even if there are no passages, some things will be acted upon and others will act if their nature is such that they behave in this way with regard to each other.

Therefore it is manifest from these considerations that to speak in this way about passages, as some people suppose them to be, is either false or useless. Since bodies are divisible [25] in every place, it is ridiculous to posit passages; for insofar as they are divisible they can be divided into separate parts.

### *Regarding the Unlimited Number of Atoms (R33)*

**R33** (< 67 A15 and > 68 A60a) Aristotle, *On the Heavens*

[303a3] But neither does what is said by certain others [scil. than Anaxagoras], like Leucippus and Democritus of Abdera, lead to reasonable consequences [. . .]. [303a17] First, these too commit the same error of not conceiving the principles as limited, even though it would be possible [scil. even in this case] for them to say exactly the same things. Furthermore, if the differences of the shapes are not unlimited, it is evident that the elements will not be unlimited. In addition, those who admit indivisible bodies must necessarily enter into conflict [20] with the mathematical sciences and abolish many accepted views (*endoxa*) and phenomena relating to sensation, about which we spoke earlier in our studies on time and motion [cf. *Phys.* 6.1–2]. At the same time it is necessary that they contradict themselves. For it is impossible, if the elements

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νατον γὰρ ἀτόμων ὄντων τῶν στοιχείων μεγέθει [25] καὶ μικρότητι διαφέρειν ἀέρα καὶ γῆν καὶ ὕδωρ· οὐ γὰρ οἷόν τ' ἐξ ἀλλήλων γίνεσθαι· ὑπολείπει γὰρ αἰ τὰ μέγιστα σώματα ἐκκρινόμενα, φασὶ δ' οὕτω γίνεσθαι ὕδωρ καὶ ἀέρα καὶ γῆν ἐξ ἀλλήλων. ἔτι οὐδὲ κατὰ τὴν τούτων ὑπόληψιν δόξειεν ἂν ἄπειρα γίνεσθαι τὰ στοιχεῖα, εἴπερ [30] τὰ μὲν σώματα διαφέρει σχήμασι, τὰ δὲ σχήματα πάντα σύγκειται ἐκ πυραμίδων, τὰ μὲν εὐθύγραμμα ἐξ εὐθυγράμμων, ἡ δὲ σφαῖρα ἐξ ὀκτὼ μορίων. [. . .] ἔτι δ' εἰ ἐκάστῳ μὲν τῶν στοιχείων ἐστὶ τις οἰκεία κίνησις, καὶ ἡ τοῦ ἀπλοῦ σώματος ἀπλῇ, μή εἰσι δ' αἱ ἀπλαῖ κινήσεις [303b5] ἄπειροι διὰ τὸ μήτε τὰς ἀπλᾶς φορὰς πλείους εἶναι δυοῖν μήτε τοὺς τόπους ἀπείρους, οὐκ ἂν εἴη οὐδ' οὕτως ἄπειρα τὰ στοιχεῖα.

### *Regarding Atomic Differences (R34)*

**R34** (< 8.2 Leszl) *Simpl. In Cat.*, pp. 216.31–217.5

καὶ πρὸς Δημόκριτον δὲ καὶ Ἐπίκουρον [Frag. 288 Usener] δικαιολογείται, τί δήποτε τινὰς μὲν διαφορὰς περὶ τὰς ἀτόμους ἀπολείπουσιν, οἷον σχημάτων, βάρους, ναστότητος, σωματότητος, περάτων, μεγέθους, κινήσεως, οὔτε δὲ χροᾶν οὔτε γλυκύτητα οὔτε ζῶν ἔχειν οὐδὲ<sup>1</sup> τῶν ἄλλων τῶν τοιούτων λόγους προϋφessesthekein ἀποφαίνονται· κοινού γὰρ ὄντος τοῦ περὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

are indivisible, that air, earth, and water differ by largeness [25] and smallness. For it is not possible that they come to be out of each other; for the largest bodies, in separating, will always be lacking—but it is in this way that they say that water, air, and earth come to be out of each other. Furthermore, in accordance with their very conception the elements would seem to be not unlimited, since [30] the bodies differ by their shapes, and all the shapes are composed out of pyramids, the rectilineals out of rectilinear pyramids and the sphere out of eight parts. [. . .] Furthermore, if to each of the elements corresponds its own characteristic motion, and the motion of a simple body is simple, and simple motions are not [303b5] unlimited [scil. in number] because there are not more than two simple locomotions and places are not unlimited [scil. in number], on the basis of this reasoning the elements would not be unlimited [scil. in number] either.

### *Regarding Atomic Differences (R34)*

**R34** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's Categories*

This is how one pleads the case against Democritus and Epicurus: why then do they admit certain differences in the atoms, such as those of shapes, weight, compactness, corporeality, limits, magnitude, motion, but assert that they do not possess either color or sweetness or life, and that the reasons for the other [scil. characteristics] of this sort do not preexist either? For given that what they say

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<sup>1</sup> οὐδὲ p. 39.22 in paraphrasi: οὐ mss.



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τῶν ἐκτῶν λόγου ἄτοπον μὴ τὰ αὐτὰ περὶ τῶν αὐτῶν διατάττεσθαι, καὶ ἔτι ἀτοπώτερον τὰς ἀρχηγικωτάτας δυνάμεις ὑστερογενεῖς ποιεῖν, ὥσπερ ζῶν καὶ νοῦν καὶ φύσιν καὶ λόγον καὶ τὰ τοιαῦτα. παραπλησίως δὲ ἀδύνατον καὶ ἀπὸ τῆς συνόδου ταῦτα ἀποτελεῖσθαι· νόμῳ γὰρ ἔστι<sup>2</sup> χροίη κατὰ τὸν Δημόκριτον καὶ τὰ ἄλλα ὁμοίως, τῇ ἀληθείᾳ δὲ ἄτομα καὶ κενόν.

<sup>2</sup> ἔσται mss., corr. Usener

### *Regarding the Void (R35–R36)*

**R35** (30.4 Leszl) Arist. *Phys.* 4.1 208b25–27

ἔτι οἱ τὸ κενὸν φάσκοντες εἶναι τόπον λέγουσιν· τὸ γὰρ κενὸν τόπος ἂν εἴη ἐστερημένος σώματος.

**R36** (< A60) Arist. *Cael.* 4.2 309b24–28

ἄλογον δὲ καὶ τὸ χώραν τῷ κενῷ ποιεῖν, ὥσπερ οὐκ αὐτὸ χώραν τινὰ οὐσαν· ἀναγκαῖον δ', εἴπερ κινεῖται [25] τὸ κενόν, εἶναι αὐτοῦ τινὰ τόπον, ἐξ οὗ μεταβάλλει καὶ εἰς ὄν. πρὸς δὲ τούτοις τί τῆς κινήσεως αἷτιον; οὐ γὰρ δὴ τό γε κενόν· οὐ γὰρ αὐτὸ κινεῖται μόνον, ἀλλὰ καὶ τὸ στερεόν.

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regarding qualities (*hekta*) is shared in common, it is very strange not to assign the same things to the same things, and it is even more strange to posit that the most principal powers, like life, intellect, nature, reason, and things of this sort, are born later. And similarly, it is impossible to produce these [scil. characteristics] out of collection. For by convention there is color according to Democritus and similarly with the other things, but in truth atoms and void [cf. D14].

### *Regarding the Void (R35–R36)*

**R35** (≠ DK) Aristotle, *Physics*

Those who posit the existence of the void say that it is a place, because the void would be a place deprived of body.

**R36** (< A60) Aristotle, *On the Heavens*

It is also absurd to explain place by the void, as though this latter were not itself some kind of place. And it is necessary, given that the void moves, that it have some place from which and into which it makes the change. And besides these considerations, what is the cause of motion? For it is obviously not the void: for it is not the only thing that is moved, but so too is the solid.

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### *Regarding Motion (R37–R43)*

**R37** (67 A18) Arist. *Metaph.* A6 1071b31–34

διὸ ἔνιοι ποιοῦσιν αἰεὶ ἐνέργειαν, οἷον Λεύκιππος καὶ Πλάτων· αἰεὶ γὰρ εἶναί φασι κίνησιν. ἀλλὰ διὰ τί καὶ τίνα οὐ λέγουσιν οὐδ' ὥδι <ἢ ὠδί>, οὐδὲ<sup>1</sup> τὴν αἰτίαν.

<sup>1</sup> οὐδ' ὥδι <ἢ ὠδί>, οὐδὲ Fazzo: οὐδὲ ὥδι οὐδὲ mss.: οὐδ', εἰ ὥδι <ἢ ὠδί> Diels

**R38** (> 67 A6) Alex. *In Metaph.*, p. 36.21–27

οὔτοι γὰρ λέγουσιν ἀλληλοτυπούσας καὶ κρουόμενας πρὸς ἀλλήλας κινεῖσθαι τὰς ἀτόμους· πόθεν μέντοι ἡ ἀρχὴ τῆς κινήσεως τοῖς κατὰ φύσιν, οὐ λέγουσιν· ἡ γὰρ κατὰ τὴν ἀλληλοτυπίαν βίαιός ἐστι κίνησις καὶ οὐ κατὰ φύσιν, ὑστέρα δὲ ἡ βίαιος τῆς κατὰ φύσιν. οὐδὲ γὰρ τὸ πόθεν ἡ βαρύτης ἐν ταῖς ἀτόμοις λέγουσι· τὰ γὰρ ἀμερῇ τὰ ἐπινοούμενα ταῖς ἀτόμοις καὶ μέρη ὄντα αὐτῶν ἀβαρῇ φασιν εἶναι· ἐκ δὲ ἀβαρῶν συγκειμένων πῶς ἂν βάρος γένηται;<sup>1</sup>

<sup>1</sup> γίνοιτο coni. Bonitz

**R39** (> 67 A19) Arist. *Cael.* 1.7 275b29–276a12

εἰ δὲ μὴ συνεχὲς τὸ πᾶν, ἀλλ' ὥσπερ λέγει Δημόκριτος καὶ Λεύκιππος, διωρισμένα τῷ [30] κενῷ, μίαν ἀναγκαῖον εἶναι πάντων τὴν κίνησιν. διώρισται μὲν γὰρ τοῖς σχήμασιν· τὴν δὲ φύσιν φασὶν αὐτῶν εἶναι

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Regarding Motion (R37–R43)*

#### **R37** (67 A18) Aristotle, *Metaphysics*

That is why some people say that there is always activity, like Leucippus and Plato. For they say that there is always motion. But for what reason and because of what factors, they do not say, nor [scil. that the motion is] this way <or that way>, nor the reason [scil. why it is this way or that way].

#### **R38** (> 67 A6) Alexander of Aphrodisias, *Commentary on Aristotle's Metaphysics*

They [scil. Leucippus and Democritus] say that the atoms move by hitting one another and striking against one another, but where the principle of motion comes from for the things that exist by nature, they do not say. For motion due to hitting one another is motion by force and not according to nature, and motion by force is posterior to motion according to nature. And they have not said either where the heaviness in the atoms comes from. For they say that what thought conceives of as partlessness in the atoms and is [scil. in fact] parts of them is without weight. But how could weight come about out of what is composed of things without weight? [cf. **D50–D51**]

#### **R39** (> 67 A19) Aristotle, *On the Heavens*

If the whole is not continuous but, as Democritus and Leucippus say, [scil. things are] distinguished by the [30] void, it is necessary that the motion of all of them be only one. For, to be sure, they are distinguished by the shapes; but they say that their nature is only one, as if they were

μίαν, ὥσπερ ἂν εἰ χρυσὸς ἕκαστον εἴη κεχωρισμένος. τούτων δέ, [276a1] καθάπερ λέγομεν, ἀναγκαῖον εἶναι τὴν αὐτὴν κίνησιν· ὅπου γὰρ μία βῶλος, καὶ ἡ σύμ- πασα γῆ φέρεται, καὶ τό τε πᾶν πῦρ καὶ σπινθήρ εἰς τὸν αὐτὸν τόπον. ὥστ' οὔτε κοῦφον ἀπλῶς οὐθὲν ἔσται τῶν σωμάτων, εἰ πάντ' ἔχει βάρος· εἰ δὲ [5] κουφότητα, βαρὺ οὐδέν. ἔτι εἰ βάρος ἔχει ἢ κου- φότητα, ἔσται ἢ ἔσχατόν τι τοῦ παντός ἢ μέσον. τοῦτο δ' ἀδύνατον ἀπίρου γ' ὄντος. ὅλως δ', οὐ μὴ ἔστι μέσον μηδ' ἔσχατον, μηδὲ τὸ μὲν ἄνω τὸ δὲ κάτω, τόπος οὐθεὶς ἔσται τοῖς σώμασι τῆς φορᾶς. τούτου δὲ μὴ ὄντος κίνησις οὐκ ἔσται· ἀνάγκη γὰρ [10] κινεῖσθαι ἥτοι κατὰ φύσιν ἢ παρὰ φύσιν, ταῦτα δ' ὥρισταί τοῖς τόποις τοῖς τ' οἰκείους καὶ τοῖς ἄλλο- τρίοις.

**R40** (36.1 Leszl) Arist. *Phys.* 4.8 214b28–33 et a19–22

συμβαίνει δὲ τοῖς λέγουσιν εἶναι κενὸν ὡς ἀναγκαῖον, εἴπερ ἔσται κίνησις, τούναντίον μᾶλλον, ἂν τις ἐπι- σκοπῇ, μὴ ἐνδέχεσθαι μηδὲ ἐν κινεῖσθαι, ἐὰν ἡ κενόν· ὥσπερ γὰρ οἱ διὰ τὸ ὅμοιον φάμενοι τὴν γῆν ἡρεμεῖν, οὕτω καὶ ἐν τῷ κενῷ ἀνάγκη ἡρεμεῖν· οὐ γὰρ ἔστιν οὐ μᾶλλον ἢ ἥττον κινήσεται· [. . .] [214a19] ἔτι οὐδεὶς ἂν ἔχοι εἰπεῖν διὰ τί κινήθην στήσεταιί που· τί γὰρ μᾶλλον ἐνταῦθα ἢ ἐνταῦθα; ὥστε ἢ ἡρεμήσει ἢ εἰς ἄπειρον ἀνάγκη φέρεσθαι, ἐὰν μὴ τι ἐμποδίσῃ κρεῖτ- τον.

each gold in a separate state. But of these things, [276a1] as we say, it is necessary that the motion be the same. For where a single lump of earth moves to, so too does the whole earth; and both the whole fire and a spark [scil. move] to the same place. So that none of the bodies will be purely and simply light, if all possess heaviness; and if [5] it is lightness [scil. that all possess], then none will be heavy. Furthermore, if they possess heaviness or lightness, there will either be some extreme limit of the whole or some middle. But this is impossible, if it is unlimited. In general, that of which there is neither a middle nor an extreme limit, neither upward nor downward, will not provide bodies with a place for their locomotion. And if this does not exist, there will not be motion. For it is necessary [10] that motion be either in conformity with nature or against nature, and this is defined by places, proper ones and alien ones.

**R40** ( $\neq$  DK) Aristotle, *Physics*

If one examines the question, it is instead the contrary that comes about for those who say that it is necessary that the void exists if there is to be motion, namely that it is not possible for even a single thing to move if there is void. For just as for those who say that the earth is at rest because of similarity [cf. **ANAXIMAND. D30**], so too it is necessary that there be rest in the void as well. For there is no place where there will be more or less motion. [. . .] [214a19] Furthermore, no one could say why something in motion should stop somewhere: for why here rather than there? So that either it will be at rest or else it is necessary that its movement be infinite, at least if something stronger does not prevent it.

**R41** (30.6 Leszl) Simpl. *In Phys.*, p. 533.14–19

διὸ καὶ ὁ Εὐδήμος ἐν τρίτῳ τῶν Φυσικῶν παρακολου-  
θῶν τοῖς ἐνταῦθα λεγομένοις καὶ ὡς ὁμολογούμενον  
ἕκαστον τῶν αἰτίων ἀφαιρῶν τοῦ τόπου “ἀλλ’ ἄρὰ  
γε,” φησὶν, “ὡς τὸ κινήσαν; ἢ οὐδὲ οὕτως ἐνδέχεται,  
ὦ Δημόκριτε· δεῖ γὰρ κινητικὸν εἶναι καὶ ἔχειν τινὰ  
δύναμιν” [Frag. 75 Wehrli]. τὸ γὰρ κενὸν τόπον εἶπεν ὁ  
Δημόκριτος, ὅπερ τῇ ἐαυτοῦ φύσει κενὸν ὄντως καὶ  
ἀδύνατον καὶ ἀδρανὲς ἂν ᾗν.

**R42** (> 67 A16) Arist. *Cael.* 3.2 300b 8–11 et 14–16

διὸ καὶ Λευκίπῳ καὶ Δημοκρίτῳ, τοῖς λέγουσιν ἀεὶ  
κινεῖσθαι τὰ πρῶτα σώματα ἐν τῷ κενῷ καὶ τῷ  
ἀπείρῳ, λεκτέον τίνα κίνησιν καὶ τίς ἢ κατὰ φύσιν  
[10] αὐτῶν κίνησις. [. . .] [300b14] εἰς ἄπειρον γὰρ εἴ-  
σιν, εἰ μὴ τι ἔσται κατὰ φύσιν κινεῖν πρῶτον, ἀλλ’  
ἀεὶ τὸ [15] πρότερον βίᾳ κινούμενον κινήσει.

**R43** (< 64.1 Leszl) Arist. *Cael.* 3.2 301a6–13

ἀλλὰ μὴν καὶ τοῦτο ἄτοπον καὶ ἀδύνατον, τὸ ἄπειρον  
ἄτακτον ἔχειν κίνησιν· ἔστι γὰρ φύσις ἐκείνη τῶν  
πραγμάτων οἷαν ἔχει τὰ πλείω καὶ τὸν πλείω χρόνον·  
συμβαίνει οὖν αὐτοῖς τοῦναντίον τὴν μὲν ἀταξίαν εἶ-  
ναι κατὰ φύσιν, τὴν δὲ τάξιν καὶ τὸν κόσμον παρὰ  
φύσιν· καίτοι οὐδὲν ὥς ἔτυχε γίγνεται τῶν κατὰ φύ-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**R41** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's Physics*

And this [scil. because place is not an efficient cause] is why Eudemus says in the third book of his *Physics*, following what is said here [Arist., *Phys.* 4.1 209a18–22] and denying, as being generally agreed upon, each of the causes for place: “But will it be then as the moving cause? Or else this is not possible either, Democritus. For it must impart motion and possess some power.” For Democritus said that the void is place, which, being in reality void by its own nature, must be without power and without force.

**R42** (> 67 A16) Aristotle, *On the Heavens*

That is why Leucippus and Democritus, who say that the first bodies are in perpetual motion in the void and the unlimited, ought to say what kind of motion this is and what their natural motion is. [. . .] For it will go on to infinity if there is not some first mover in conformity with nature, but instead it is always something that is moved earlier by force that imparts motion.

**R43** ( $\neq$  DK) Aristotle, *On the Heavens*

But this too is absurd and impossible, that the unlimited have a disordered motion. For the nature of things is such as most things possess and for most of the time. So what comes about for them [scil. those who posit, in the unlimited, bodies unlimited in number] is the contrary, namely that disorder is in conformity with nature and that order and the organized world (*kosmos*) are against nature. And yet none of the things that are in conformity with nature happens by chance. This point at least, Anaxagoras seems



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σιν. ἔοικε δὲ τοῦτό γε αὐτὸ καλῶς Ἀναξαγόρας λα-  
βεῖν· ἐξ ἀκινήτων γὰρ ἄρχεται κοσμοποιεῖν.

### *Regarding Weight (R44–R46)*

**R44** (< A60) Arist. *Cael.* 4.2 309a11–18

[. . . = **D40**] λέγουσι μὲν οὖν τοῦτον τὸν τρόπον, ἀνάγκη δὲ προσθεῖναι τοῖς οὕτω διορίζουσι μὴ μόνον τὸ κενὸν ἔχειν πλείον, ἀν ἡ κουφότερον, ἀλλὰ καὶ τὸ στερεὸν ἔλαττον· εἰ γὰρ ὑπερέξει τῆς τοιαύτης ἀναλογίας, οὐκ ἔσται κουφότερον. διὰ γὰρ τοῦτο καὶ τὸ πῦρ εἶναί φασι κουφότατον, ὅτι πλείστον ἔχει κενόν. συμβήσεται οὖν μικροῦ πυρὸς πολὺν χρυσὸν πλείον ἔχοντα τὸ κενὸν εἶναι κουφότερον, εἰ μὴ καὶ στερεὸν ἔξει πολλαπλάσιον· ὥστε τοῦτο λεκτέον.

**R45** (< A60) Arist. *Cael.* 4.2 309a27–32 et 309b17–18

ἀναγκαῖον δὲ καὶ τοῖς περὶ τῆς τοῦ πυρὸς κουφότητος αἰτιωμένοις τὸ πολὺ κενὸν ἔχειν σχεδὸν ἐν ταῖς αὐταῖς ἐνέχεσθαι δυσχερεῖαις. ἔλαττον μὲν γὰρ ἔξει στερεὸν τῶν ἄλλων σωμάτων, καὶ τὸ κενὸν πλείον· ἀλλ' ὅμως ἔσται [30] τι πυρὸς πλῆθος ἐν ᾧ τὸ στερεὸν καὶ τὸ πλῆρες ὑπερβάλλει τῶν περιεχομένων στερεῶν ἐν τινι μικρῷ πλήθει γῆς. [. . .] [309b17] ἄτοπον δὲ καὶ εἰ διὰ τὸ κενὸν μὲν ἄνω φέρονται, τὸ δὲ κενὸν αὐτὸ μῆ.

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to have grasped quite well: for he begins the production of the world from immobile things [cf. **ANAXAG. D29**].

### *Regarding Weight (R44–R46)*

**R44** (< A60) Aristotle, *On the Heavens*

[. . .] This then is how they speak, but it is necessary, for those who define things in this way, to add that something possess not only more void if it is lighter, but also less solid: for if it exceeds this proportion, it will not be lighter. For that is why they say that fire is the lightest thing, because it possesses the most void. But it will follow then that a large amount of gold, since it possesses more void than a small fire, will be lighter than this, unless it also possesses much more solid. So that this is how one should speak.

**R45** (< A60) Aristotle, *On the Heavens*

It is necessary that those too who give as the cause for the lightness of fire the abundance of void in it are caught in just about the same difficulties [scil. as Anaxagoras and Empedocles, cf. **ANAXAG. D59**; **EMP. R15b**]. For it will possess less solid than the other bodies, and more void; but all the same there will be a certain quantity of fire in which the solid and the full exceed the solids contained in some small quantity of earth. [. . .] It is also very strange that they move upward because of the void while the void itself does not.

**R46** (< A135) Theophr. *Sens.* 68

[. . . = **D65**] ἄτοπον δ' ἂν φανείη πρῶτον μὲν τὸ μὴ πάντων ὁμοίως ἀποδοῦναι τὰς αἰτίας, ἀλλὰ βαρὺν<sup>1</sup> μὲν καὶ κούφον καὶ μαλακὸν καὶ σκληρὸν καὶ μεγέθει καὶ σμικρότητι<sup>2</sup> καὶ τῷ μανῶ καὶ πυκνῷ, θερμὸν δὲ καὶ ψυχρὸν καὶ τὰ ἄλλα τοῖς σχήμασιν.<sup>3</sup> ἔπειτα βαρέος μὲν καὶ κούφον καὶ σκληροῦ καὶ μαλακοῦ καθ' αὐτὰ ποιεῖν φύσεις (μέγεθος μὲν γὰρ καὶ σμικρότης καὶ τὸ πυκνὸν καὶ τὸ μανὸν οὐ πρὸς ἕτερόν ἐστι), θερμὸν δὲ καὶ ψυχρὸν καὶ τὰ ἄλλα<sup>4</sup> πρὸς τὴν αἴσθησιν, καὶ ταῦτα πολλάκις λέγοντα, διότι τοῦ χυλοῦ<sup>5</sup> τὸ σχῆμα σφαιροειδές. [. . . = **R56**]

- <sup>1</sup> βαρὺ Philippson: δριμὺ mss.  
Wimmer <sup>3</sup> post σχήμασιν lac. pos. Schneider e.g. <διορίζειν>  
<sup>2</sup> σκληρότητι mss., corr.  
<sup>4</sup> θερμῶν δὲ καὶ ψυχρῶν καὶ τῶν ἄλλων mss., corr.  
Usener <sup>5</sup> χυμοῦ mss., corr. Schneider

*Regarding Generation and Other  
Kinds of Change (R47)*

**R47** (> A38) Arist. *GC* 1.9 327a14–26

ὅλως δὲ τὸ τοῦτον γίνεσθαι τὸν τρόπον μόνον σχιζομένων τῶν σωμάτων, ἄτοπον· ἀναιρεῖ γὰρ οὗτος ὁ λόγος ἀλλοίωσιν, ὁρῶμεν δὲ τὸ αὐτὸ σῶμα συνεχές ὃν ὅτε μὲν ὑγρὸν ὅτε δὲ πεπηγός, οὐ διαιρέσει καὶ συνθέσει τοῦτο παθόν, οὐδὲ τροπῇ καὶ διαθιγῇ, καθάπερ λέγει Δημόκριτος· οὔτε γὰρ μεταταχθὲν οὔτε μετατεθὲν τὴν φύσιν πεπηγὸς ἐξ ὑγροῦ γέγονεν, οὐδὲ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R46** (< A135) Theophrastus, *On Sensations*

It would seem absurd, first of all, not to explain the causes of all [scil. perceptible phenomena] in the same way, but [scil. to explain] heavy, light, soft, and hard by means of largeness, smallness, looseness, and density, but hot, cold, and the others by means of the shapes. And then to posit heavy, light, hard, and soft natures as existing by themselves (for largeness, smallness, density, and looseness are not relative to something else), but [scil. to refer] hot, cold, and the other ones to sensation—and this although he says a number of times that the shape of flavor is spherical.[. . .]

### *Regarding Generation and Other Kinds of Change (R47)*

### **R47** (> A38) Aristotle, *On Generation and Corruption*

In general, it is absurd that this [i.e. acting and being acted upon] happen only in this way, namely when bodies are split apart. For this thesis abolishes alteration, but we see that the same body, even though remaining continuous, is at one time liquid, at another solid, and that it undergoes this affection not because of separation and reunification, nor because of “**turning**” and “**contact**,” as Democritus says [cf. **D72**]. For it is not because there has been a change of disposition or of placement in its nature that it

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νῦν ὑπάρχει σκληρὰ καὶ πεπηγότα ἀδιαίρετα τοὺς ὄγκους· ἀλλ' ὁμοίως ἅπαν ὑγρόν, ὅτε δὲ σκληρὸν καὶ πεπηγὸς ἐστίν. ἔτι δ' οὐδ' αὖξησιν οἶόν τ' εἶναι καὶ φθίσιν· οὐ γὰρ ὅτιοῦν ἔσται γεγονὸς μείζον, εἴπερ ἐστὶ πρόσθεσις, καὶ μὴ πᾶν μεταβεβληκός, ἢ μιχθέν-τος τινὸς ἢ καθ' αὐτὸ μεταβάλλοντος.

### *Regarding the Plurality of Worlds (R48)*

#### **R48**

**a** (≠ DK) Arist. *Phys.* 4.10 218b3–5

ἔτι δ' εἰ πλείους ἦσαν οἱ οὐρανοί, ὁμοίως ἂν ἦν ὁ χρόνος ἢ ὅπου οὖν αὐτῶν κίνησις, ὥστε πολλοὶ χρόνοι ἅμα.

**b** (78.7 Leszl) Simpl. In *Phys.*, p. 701.30–32

“εἰ γὰρ πλείους ἦσαν” φησὶν “οὐρανοί,” τουτέστι κόσμοι, ὥσπερ ὑποτίθενται οἱ περὶ Δημόκριτον [. . .].

### *Regarding the Sea (R49)*

**R49** (< A100) Arist. *Meteor.* 2.3 356b9–15

τὸ δὲ νομίζειν ἐλάττω τε γίγνεσθαι τὸ πλήθος, ὥσπερ φησὶ Δημόκριτος, καὶ τέλος ὑπολείψειν, τῶν Αἰσώπου μύθων οὐθὲν διαφέρειν ἔοικεν ὁ πεπεισμένος οὕτως· καὶ γὰρ ἐκείνος ἐμυθολόγησεν ὥς δις μὲν ἢ Χάρυβδις

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

has changed from being liquid to becoming solidified, nor do there now [i.e. in this state] exist within it hard and solidified bodies indivisible in their masses; but just as it is entirely liquid, it is sometimes hard and solidified. Moreover, it is not possible that there be growth and diminution. For it is not every part that will have become larger, if there is addition, and the whole will not have been transformed, if something has been mixed or it has itself been transformed.

### *Regarding the Plurality of Worlds (R48)*

#### **R48**

**a** ( $\neq$  DK) Aristotle, *Physics*

Again, if there were a plurality of heavens, in the same way the movement of each of them would be a time, so that many times would coexist.

**b** ( $\neq$  DK) Simplicius, *Commentary on Aristotle's Physics*

"If there were," he says, "a plurality of heavens," i.e. worlds, as Democritus and his followers suppose [. . .].

Regarding the Sea (R49)

**R49** ( $<$  A100) Aristotle, *Meteorology*

To think that it [i.e. the sea] decreases in volume, as Democritus says, and at the end will cease to exist [**D122**]—anyone who believes this seems not to be at all different from the fables of Aesop. For he told the myth that

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ἀναρροφήσασα τὸ μὲν πρῶτον τὰ ὄρη ἐποίησε φανερὰ, τὸ δὲ δεύτερον τὰς νήσους, τὸ δὲ τελευταῖον ῥοφήσασα ξηρὰν ποιήσει πάμπαν.

### *Regarding the Magnet (R50)*

**R50** (< A165) Alex. (?) *Quaest.* 2.23, p. 73.7–11

ἀλλὰ τὸ μὲν τὴν λίθον καὶ τὸν σίδηρον ἐξ ὁμοίων συγκεῖσθαι δέξαιτ' ἂν τις, πῶς δὲ καὶ<sup>1</sup> τὸ ἤλεκτρον καὶ τὸ ἄχυρον;<sup>2</sup> ὅταν δὲ καὶ ἐπ' ἐκείνων λέγη τις<sup>3</sup> ταύτην τὴν αἰτίαν, ἔστι<sup>4</sup> πολλὰ ἐλκόμενα ὑπὸ τοῦ ἡλέκτρον, οἷς πᾶσιν εἰ ἐξ ὁμοίων σύγκειται, κακείνα ἐξ ὁμοίων ἀλλήλοις συγκεείμενα ἔλκοι <ἂν><sup>5</sup> ἄλληλα.

<sup>1</sup> καὶ Bruns: εἰς mss. <sup>2</sup> sign. interrog. post αἰτίαν pos. mss., post ἄχυρον Bruns <sup>3</sup> ὅταν. . . λέγη τις Diels: ὅτι. . . λέγεται mss. <sup>4</sup> ἔστι Diels: ἔτι mss. <sup>5</sup> <ἂν> Bruns

### *Regarding the Soul (R51)*

**R51** (< 103.3 Leszl) Arist. *An.* 1.3 406b22–25

[. . . = **D131**] ἡμεῖς δ' ἐρωτήσομεν εἰ καὶ ἡρέμησιν ποιεῖ τοῦτ' αὐτό· πῶς δὲ ποιήσει, χαλεπὸν ἢ ἀδύνατον εἰπεῖν. ὅλως δὲ οὐχ οὕτω φαίνεται κινεῖν ἢ ψυχήν τὸ ζῶον, ἀλλὰ διὰ προαιρέσεώς τινος καὶ νοήσεως.

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Charybdis, having swallowed them twice, the first time made the mountains appear, the second time the islands, but that swallowing a final time, she will make it completely dry.<sup>1</sup>

<sup>1</sup> The fable in question is not extant.

### *Regarding the Magnet (R50)*

**R50** (< A165) Alexander of Aphrodisias (?), *Natural Questions*

But that the magnet and iron are composed of similar [scil. atoms]—one could accept this, but how could it be the same for amber and chaff? And if someone says that this is the cause for the latter two as well, there are many things that are attracted by amber; and if it is composed of [scil. atoms] similar to all of these, these latter too, being composed out of [scil. atoms] similar to each other, would have to attract each other.

### *Regarding the Soul (R51)*

**R51** (≠ DK) Aristotle, *On the Soul*

[. . .] As for us, we shall ask whether this same thing [i.e. the atoms, which are always in motion] also produces rest; but how it will produce this, it is difficult or impossible to say. In general, the soul does not seem to impart motion to the animal in this way, but thanks to a certain choice and thought.



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### *Regarding Sensation and Its Objects (R52–R66) In General (R52–R56)*

**R52** (57 Leszl) Arist. *Metaph.* Γ5 1009b9–12

ποῖα οὖν τούτων ἀληθῆ ἢ ψευδῆ, ἄδηλον· οὐθὲν γὰρ μᾶλλον τάδε ἢ τάδε ἀληθῆ, ἀλλ' ὁμοίως. διὸ Δημόκριτός γέ φησιν ἥτοι οὐθὲν εἶναι ἀληθὲς ἢ ἡμῖν γ' ἄδηλον.

**R53** (cf. A112) Arist. *Metaph.* Γ5 1009b12–17

ὅλως δὲ διὰ τὸ ὑπολαμβάνειν φρόνησιν μὲν τὴν αἴσθησιν, ταύτην δ' εἶναι ἀλλοίωσιν, τὸ φαινόμενον κατὰ τὴν αἴσθησιν ἐξ ἀνάγκης ἀληθὲς εἶναί φασιν· ἐκ τούτων γὰρ καὶ Ἐμπεδοκλῆς καὶ Δημόκριτος καὶ τῶν ἄλλων ὡς ἔπος εἰπεῖν ἕκαστος τοιαύταις δόξαις γεγένηνται ἔνοχοι.

**R54** (A119) Arist. *Sens.* 4 442a29–b3

Δημόκριτος δὲ καὶ οἱ πλείστοι τῶν φυσιολόγων, ὅσοι λέγουσι περὶ αἰσθήσεως, ἀτοπώτατόν τι ποιοῦσιν· πάντα γὰρ τὰ αἰσθητὰ ἀπὸ ποιοῦσιν. καίτοι εἰ τοῦτο οὕτως ἔχει, δῆλον ὡς καὶ τῶν ἄλλων αἰσθήσεων ἐκάστη ἀφή τίς ἐστίν.

**R55** (< A135) Theophr. *Sens.* 49

[49] Δημόκριτος δὲ περὶ μὲν αἰσθήσεως οὐ διορίζει,

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### *Regarding Sensation and Its Objects (R52–R66)* *In General (R52–R56)*

**R52** (≠ DK) Aristotle, *Metaphysics*

So which kinds of these [i.e. sensations] are true or false is unclear. For these are not more true than those, but similarly so. And that is why, as for Democritus, he says that nothing is true or else that it is not clear, at least for us.

**R53** (cf. A112) Aristotle, *Metaphysics*

And in general it is because they suppose that thought is sensation and that this latter is an alteration, that they say that what appears with regard to sensation is necessarily true. For it is for these reasons that Empedocles, Democritus, and practically every one of the others have fallen under the grip of such opinions.

**R54** (A119) Aristotle, *On Sensation*

Democritus and most of the natural philosophers who speak about sensation do something that is extremely strange: for they make all perceptibles objects of touch. But if this is how it is, it is clear that each of the other sensations will also be a certain kind of touching too.

**R55** (< A135) Theophrastus, *On Sensations*

[49] On the subject of sensation, Democritus does not

πότερα τοῖς ἐναντίοις ἢ τοῖς ὁμοίοις ἐστίν. εἰ μὲν γὰρ <τῶ><sup>1</sup> ἀλλοιοῦσθαι ποιεῖ τὸ αἰσθάνεσθαι, δόξειεν ἂν τοῖς διαφόροις· οὐ γὰρ ἀλλοιοῦνται τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου· πάλιν δ' <εἰ><sup>2</sup> τὸ μὲν αἰσθάνεσθαι καὶ ἀπλῶς ἀλλοιοῦσθαι <τῶ><sup>3</sup> πάσχειν, ἀδύνατον δέ, φησί, τὰ<sup>4</sup> μὴ ταῦτα πάσχειν, ἀλλὰ καὶ ἕτερα ὄντα ποιῇ οὐχ <ῆ> ἕτερα ἀλλ' ἥ ταυτόν τι ὑπάρχει,<sup>5</sup> τοῖς ὁμοίοις. διὸ περὶ μὲν τούτων ἀμφοτέρως ἐστὶν ὑπολαβεῖν. περὶ ἐκάστης δ' ἤδη αὐτῶν ἐν μέρει πειρᾶται λέγειν [... = **D147**].

<sup>1</sup> <τῶ> Camotius

<sup>2</sup> <εἰ> Wimmer

<sup>3</sup> <τῶ> Philippson

<sup>4</sup> τῶ vel τὸ mss., corr. Zeller

<sup>5</sup> ἀλλὰ καὶ ἕτερα ὄντα ποιεῖν

οὐχ ἕτερα ἀλλ' ἥ ταυτόν τι πάσχει mss., corr. Diels conl. Arist. GC 1.7. 323b13

## R56

**a** (< A135) Theophr. *Sens.* 69–72

[. . . = **R46**] [69] ὅλως δὲ μέγιστον ἐναντίωμα καὶ κοινὸν ἐπὶ πάντων, ἅμα μὲν πάθη ποιεῖν τῆς αἰσθήσεως, ἅμα δὲ τοῖς σχήμασι διορίζειν, καὶ τὸ αὐτὸ φαίνεσθαι τοῖς μὲν πικρόν, τοῖς δὲ γλυκύ, τοῖς δ' ἄλλως.<sup>1</sup> οὔτε γὰρ οἷόν <τε><sup>2</sup> τὸ σχῆμα πάθος εἶναι οὔτε ταυτόν τοῖς μὲν σφαιροειδές, τοῖς δ' ἄλλως. ἀνάγκη δ'<sup>3</sup> ἴσως, εἴπερ<sup>4</sup> τοῖς μὲν γλυκύ, τοῖς δὲ πικρόν, οὐδὲ κατὰ τὰς ἡμετέρας ἕξεις μεταβάλλειν τὰς μορφάς. ἀπλῶς δὲ τὸ μὲν σχῆμα καθ' αὐτό ἐστι, τὸ δὲ γλυκὺ καὶ ὅλως τὸ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

define whether it is produced by what is contrary or by what is similar. For if he explains sensation by an alteration, it would seem that this occurs by what is different; for what is similar is not altered by what is similar. But on the other hand, if sensation and, in general, being altered is the result of an affection, and if it is impossible, as he says, that things that are not identical be affected, but, even if they are other, they act not insofar as they are other but insofar as they have something in common, [scil. it would seem that this occurs] by what is similar. For this reason it is possible to admit both hypotheses on this subject. He then tries to discuss each of them in turn [. . .].

### R56

**a** (< A135) Theophrastus, *On Sensations*

[. . .] [69] In general, the greatest contradiction, and one that is common to all [scil. the perceptibles], is simultaneously to make them affections of sensation but to define them by the shapes, and [scil. to maintain] that the same thing appears bitter to some, sweet to others, and different to others. For it is not possible either that the shape be an affection, or that the same thing be spherical to some and different to others (but this is surely necessary if it is to be sweet to some and bitter to others), and not that the shapes change according to our conditions either. In short, the shape exists by itself, but sweetness and in general the

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<sup>1</sup> ἄλλοις mss., corr. Diels  
et suppl. Diels

<sup>2</sup> οἷον οὔτε γὰρ mss., corr.

<sup>3</sup> εἶπερ post δ' hab. mss., secl. Stephanus

<sup>4</sup> εἶπερ ὥς εἶπεν Wimmer (qui post πικρὸν lac. sign.)

αἰσθητὸν πρὸς ἄλλο καὶ ἐν ἄλλοις, ὥς φησιν. ἄτοπον δὲ καὶ τὸ πᾶσιν ἀξιούν ταὐτὸ φαίνεσθαι τῶν αὐτῶν αἰσθανομένοις καὶ τούτων τὴν ἀλήθειαν ἐλέγχειν, καὶ ταῦτα εἰρηκότα πρότερον τὸ τοῖς<sup>5</sup> ἀνομοίως διακειμένοις ὅμοια<sup>6</sup> φαίνεσθαι<sup>7</sup> καὶ πάλιν τὸ μὴθὲν μᾶλλον ἕτερον ἑτέρου τυγχάνειν τῆς ἀληθείας.

<sup>5</sup> τούτοις mss., corr. Wimmer

<sup>6</sup> ἀνόμοια Koraïs

<sup>7</sup> φαίνεται mss., corr. Stephanus

[70] εἰκὸς γὰρ τὸ βέλτιον τοῦ χείρονος καὶ τὸ ὑγιαίνον τοῦ κάμνοντος· κατὰ φύσιν γὰρ μᾶλλον. ἔτι δὲ εἴπερ μὴ ἔστι φύσις τῶν αἰσθητῶν διὰ τὸ μὴ ταῦτα πᾶσι φαίνεσθαι, δηλὸν ὥς οὐδὲ τῶν ζώων οὐδὲ τῶν ἄλλων σωμάτων· οὐδὲ γὰρ περὶ τούτων ὁμοδοξοῦσι. καίτοι εἰ μὴ καὶ διὰ τῶν αὐτῶν γίνεται πᾶσι τὸ γλυκὺ καὶ τὸ πικρὸν, ἀλλ' ἢ γε φύσις τοῦ πικροῦ καὶ τοῦ γλυκέος ἢ αὐτὴ φαίνεται πᾶσιν. ὅπερ καὶ αὐτὸς ἂν δόξειεν ἐπιμαρτυρεῖν. πῶς γὰρ ἂν τὸ ἡμῖν πικρὸν ἄλλοις ἦν γλυκὺ καὶ στρυφνόν, εἰ μὴ τις ἦν ὠρισμένη φύσις αὐτῶν;

[71] ἔτι δὲ ποιεῖ σαφέστερον, ἐν οἷς φησι γίνεσθαι μὲν ἕκαστον καὶ εἶναι κατ' ἀλήθειαν, ἰδίως δ' ἐπὶ μικροῦ<sup>1</sup> “μοῖραν ἔχειν<sup>2</sup> συνέσεως.” ὥστε διὰ τε<sup>3</sup> τούτων ἐναντίον ἂν φανείη τὸ μὴ ποιεῖν φύσιν τινὰ τῶν αἰσθητῶν καὶ πρὸς τούτοις, ὅπερ ἐλέχθη καὶ πρότερον,

<sup>1</sup> μικροῦ Schneider

<sup>2</sup> ἔχει vel ἔχη mss., corr. Stephanus

<sup>3</sup> τι mss., corr. Schneider

perceptible exists in relation to something else and in other things, as he says. It is also as absurd to suppose that the same [scil. impression] appears to all those who perceive the same [scil. things] and to refute the truth of these latter—and this, after having said earlier that there appear similar (?) [scil. impressions] to people with dissimilar dispositions—as it is to maintain, inversely, that the one does not touch upon the truth any more than the other does.

[70] For it is likely that the better is superior to the worse and the healthy person to the sick one; for that is more in conformity with nature. Furthermore, if indeed it is true that there is not a nature of perceptibles, given that they do not appear the same to all, it is clear that there is not one either for animals and other bodies; for people are not of the same opinion about these either. And yet even if the sweet and the bitter do not come about for all from the same causes, nonetheless at least the nature itself of the bitter and the sweet appears to be the same for all. He himself would seem to bear witness to this. For how could what is bitter for us be sweet and sour for others, if there were not some determinate nature for them?

[71] He makes this even clearer where he says that each thing becomes and exists according to truth, but, with regard to what is small, in a particular way, that it **“possesses a share of understanding.”**<sup>1</sup> So that it would seem contradictory not to admit a nature of perceptibles, both for these last reasons and, besides these, as was also

<sup>1</sup> The correction, adopted by all the editors, of ‘small’ (*mikron*) to ‘bitter’ (*pikron*), is not an improvement. This seems to be a general epistemological proposition (cf. D22).

ὅταν σχῆμα μὲν ἀποδιδῶ τῆς οὐσίας<sup>1</sup> ὥσπερ καὶ τῶν ἄλλων, μὴ εἶναι δὲ λέγει φύσιν· ἡ γὰρ οὐδενὸς ὅλως ἡ καὶ τούτων ἔσται τῆς αὐτῆς γε ὑπαρχούσης αἰτίας. ἔτι δὲ τὸ θερμόν τε καὶ ψυχρόν, ἅπερ ἀρχὰς τιθέασιν, εἰκὸς ἔχειν τινὰ φύσιν, εἰ δὲ ταῦτα καὶ τὰ ἄλλα. νῦν δὲ σκληροῦ μὲν καὶ μαλακοῦ καὶ βαρέος καὶ κούφου ποιεῖ τιν'<sup>2</sup> οὐσίαν, ἅπερ<sup>3</sup> οὐχ ἥττον ἔδοξε λέγεσθαι πρὸς ἡμᾶς, θερμοῦ δὲ καὶ ψυχροῦ καὶ τῶν ἄλλων οὐδενός· καίτοι τό γε βαρὺ καὶ κούφον ὅταν διορίζῃ τοῖς μεγέθεσιν, ἀνάγκη τὰ ἀπλᾶ πάντα τὴν αὐτὴν ἔχειν ὁρμὴν τῆς φορᾶς, ὥστε μιᾶς τινος ἂν ὕλης εἶη καὶ τῆς αὐτῆς φύσεως.

[72] ἀλλὰ περὶ μὲν τούτων ἔοικε συνηκολουθηκέναι τοῖς ποιούσιν ὅλως τὸ φρονεῖν κατὰ τὴν ἀλλοίωσιν, ἥπερ ἐστὶν ἀρχαιοτάτη δόξα. πάντες γὰρ οἱ παλαιοὶ καὶ<sup>4</sup> ποιηταὶ καὶ σοφοὶ κατὰ τὴν διάθεσιν ἀποδιδόασιν τὸ φρονεῖν [. . . = D159a].

<sup>1</sup> θερμασίας coni. Usener

<sup>2</sup> τὴν mss., corr. Diels

<sup>3</sup> ἅπερ Schneider: ὅπερ mss.

<sup>4</sup> οἱ post καὶ hab. mss., del. Diels

**b** (< A163) Theophr. CP 6.17.11

ἐπεὶ τὰ γε σχήματα Δημοκρίτου [. . .] τεταγμένας ἔχοντα τὰς μορφὰς τεταγμένα καὶ τὰ πάθη καὶ τὰς αἰσθήσεις ἐ>χρῆν<sup>1</sup> ποιεῖν.

<sup>1</sup> lac. in mss. UM suppl. Diels: τοι γε οὐκ ἐχρῆν P

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said earlier, when on the one hand he explains the form of their substance, just as for the others [scil. perceptibles], but on the other hand despite this he denies the existence of a nature. For either no thing at all will have one, or else these will have one too, given that the cause is the same kind. Furthermore, it is plausible that the hot and the cold, which they posit as principles, possess a nature; and if these do, then so too do the others. Now, he establishes that the hard and the soft, the heavy and the light—things that did not seem to be less defined with relation to us—have a certain substance, but not the hot and the cold, nor any of the other [scil. perceptibles]. And yet when he determines the heavy and the light by magnitudes, it follows necessarily that all the simple [scil. bodies] have the same impulse of movement, so that there would be a single kind of matter, endowed with the same nature.

[72] But in these matters he seems to have followed those people who in general explain thinking as a function of alteration, which is an extremely ancient opinion; for all the ancients, both the poets and the sages, give an account of thinking according to the disposition [scil. of the body].

### **b** (< A163) Theophrastus, *Causes of Plants*

For the shapes of Democritus [. . .], since they possess ordered forms, ought also to produce ordered affections and <sensations (?)>.



## EARLY GREEK PHILOSOPHY VII

### *Vision and Colors (R57–R59)*

**R57** (< A135) Theophr. *Sens.* 51–55

[. . . = **D147**] [51] πρῶτον μὲν οὖν ἄτοπος ἢ ἀποτύπω-  
σις ἢ ἐν τῷ ἀέρι. δεῖ γὰρ ἔχειν πυκνότητα καὶ μὴ  
θρύπτεσθαι τὸ πυκνούμενον,<sup>1</sup> ὥσπερ καὶ αὐτὸς λέγει  
παραβάλλων τοιαύτην εἶναι τὴν ἐντύπωσιν, οἶον εἰ  
ἐκμάξειας εἰς κηρόν.<sup>2</sup> ἔπειτα μᾶλλον ἐν ὕδατι τυποῦ-  
σθαι δυνατόν, ὅσῳ πυκνότερον ἦττον δὲ ὁράται,<sup>3</sup>  
καίτοι προσῆκε μᾶλλον. ὅλως δὲ ἀπορροὴν ποιοῦντα  
τῆς μορφῆς, ὥσπερ ἐν τοῖς περὶ τῶν εἰδῶν,<sup>4</sup> τί δεῖ τὴν  
ἀποτύπωσιν ποιεῖν; αὐτῷ γὰρ ἐμφαίνεται τὰ εἶδωλα.<sup>5</sup>

<sup>1</sup> τυπούμενον Zeller      <sup>2</sup> εἰς κηρόν Burchard: εἰς σκλη-  
ρόν mss.      <sup>3</sup> ὁρᾶσθαι mss., corr. Wimmer      <sup>4</sup> εἰδῶλων  
Schneider      <sup>5</sup> τί δὲ τὴν ἀποτύπωσιν ποιεῖ, αὐτῷ γὰρ ἐμ-  
φαίνει τῷ τὰ εἶδωλα P, rescr. F: corr. Schneider

[52] εἰ δὲ δὴ τοῦτο συμβαίνει καὶ ὁ ἀὴρ ἀπομάττεται  
καθάπερ κηρὸς ὠθούμενος καὶ πυκνούμενος, πῶς καὶ  
ποία τις ἢ ἔμφασις γίνεται; δῆλον γὰρ ὡς ἐπὶ προ-  
σώπου <ὁ><sup>1</sup> τύπος ἔσται τῷ ὁρωμένῳ καθάπερ ἐν τοῖς  
ἄλλοις. τοιούτου δ' ὄντος ἀδύνατον ἐξ ἐναντίας ἔμφα-  
σιν γίνεσθαι μὴ στραφέντος τοῦ τύπου. τοῦτο δ' ὑπὸ  
τίνος ἔσται καὶ πῶς, δεικτέον· οὐχ οἶόν τε γὰρ ἄλλως  
γίνεσθαι τὸ ὁρᾶν. ἔπειτα ὅταν ὁράται πλείονα κατὰ  
τὸν αὐτὸν τόπον, πῶς ἐν τῷ αὐτῷ ἀέρι πλείους ἔσον-  
ται τύποι; καὶ πάλιν πῶς ἀλλήλους ὁρᾶν ἐνδέχεται;  
τοὺς γὰρ τύπους ἀνάγκη συμβάλλειν ἑαυτοῖς, ἐκάτε-

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### *Vision and Colors (R57–R59)*

**R57** (< A135) Theophrastus, *On the Sensations*

[. . .] [51] First of all, then, the impression produced in the air is absurd. For the body that is condensed must possess a certain density and not be broken into pieces, as he himself proves when he says, as a comparison, that the impression is exactly as if one were to mold a form in wax. And then it is more probable that the impression would be made in water, to the degree that it is denser; but vision occurs less in that case, whereas it ought to occur more. And in general, given that he posits an efflux of the shape, as he does in his discussions about forms, what need does he have to posit the production of the impression? For the images are reflected in it [scil. probably: the eye].

[52] But if indeed this does happen, and the air is modeled like wax that is pressed and condensed, in what way and of what sort is the reflection produced? For it is clear that the impression will be turned to face the object seen, as in the other cases. And since it will be like this, it is impossible that a reflection be produced inversely without the impression being turned around. By what agency this will come about and in what way remains to be demonstrated; for it is not possible that vision come about in any other way. And then, when a plurality of things is seen in the same place, how will there be room for a plurality of impressions in the same air? And again, how is it possible to see each other? For necessarily the impressions will encounter themselves, given that each of them is a mask

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<sup>1</sup> <ó> Schneider

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ρον ἀντιπρόσωπον<sup>2</sup> ὄντα ἀφ' ὧν ἐστίν. ὥστε τοῦτο ζήτησιν ἔχει.

<sup>2</sup> ἀν πρόσωπον mss., corr. Stephanus

[53] καὶ πρὸς τούτῳ διὰ τί ποτε ἕκαστος αὐτὸς αὐτὸν οὐχ ὁρᾷ; καθάπερ γὰρ τοῖς τῶν πέλας ὄμμασιν, οἱ τύποι καὶ τοῖς ἑαυτῶν<sup>1</sup> ἐμφαίνουσι ἄν, ἄλλως τε εἰ καὶ εὐθὺς ἀντιπρόσωποι κεῖνται καὶ ταῦτ' συμβαίνει πάθος ὥσπερ ἐπὶ τῆς ἡχοῦς. ἀνακλᾶσθαι γάρ φησι καὶ πρὸς αὐτὸν τὸν φθεγγάμενον τὴν φωνήν. ὅλως δὲ ἄτοπος ἡ τοῦ ἀέρος τύπωσις. ἀνάγκη γὰρ ἐξ ὧν λέγει πάντα ἐναποτυπουῖσθαι τὰ σώματα καὶ πολλὰ ἐναλλάττειν, ὃ καὶ πρὸς τὴν ὄψιν ἐμπόδιον ἂν εἴη καὶ ἄλλως οὐκ εὐλογον. ἔτι δὲ εἶπερ ἡ τύπωσις διαμένει, καὶ μὴ φανερῶν ὄντων<sup>2</sup> μηδὲ πλησίον ὄντων τῶν σωμάτων ἐχρήν ὁρᾶν εἰ καὶ μὴ νύκτωρ, ἀλλὰ μεθ' ἡμέραν. καίτοι τοὺς γε τύπους οὐχ ἦττον εἰκὸς διαμένειν νυκτός, ὅσῳ ἐμφυχρότερος<sup>3</sup> ὁ ἀήρ.

<sup>1</sup> καὶ τοῖς ἑαυτῶν Diels: καίτοιγε αὐτῶν mss. <sup>2</sup> ὄντων del. Schneider <sup>3</sup> ἐμφυχρότερος mss., corr. Wimmer

[54] ἀλλ' ἴσως τὴν ἐμφασιν ὃ ἥλιος ποιεῖ καὶ<sup>1</sup> τὸ φῶς ὥσπερ ἐπιφέρων ἐπὶ τὴν ὄψιν, καθάπερ εἴκοι βούλεσθαι λέγειν· ἐπεὶ τό γε τὸν ἥλιον ἀπωθούντα<sup>2</sup> ἀφ' ἑαυτοῦ καὶ ἀποπλαττόμενον πυκνοῦν<sup>3</sup> τὸν ἀέρα, καθάπερ φησὶν, ἄτοπον· διακρίνειν γὰρ πέφυκε μᾶλλον.

ἄτοπον δὲ καὶ τὸ μὴ μόνον τοῖς ὄμμασιν, ἀλλὰ καὶ τῷ ἄλλῳ σώματι μεταδιδόναι τῆς αἰσθήσεως· φησὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

corresponding to the features of its source. So that this remains unresolved.

[53] And besides, for what reason does it happen that each person does not see himself? For the impressions would be reflected in their own eyes too just as in the eyes of those who are nearby, especially if they are located immediately facing and the same phenomenon happens as in the case of an echo. For he says that a sound is rewerberated back toward the same person who emitted it. In general, the impression in the air is absurd. For from what he says it follows necessarily that all bodies are impressed upon it and that many cross one another—something that would be a hindrance for sight and moreover would not be plausible. Moreover, if it is true that the impression persists even in the case of things that are not seen, it would be necessary that vision take place even when the bodies are not near, if not at night, then at least during the day. And yet it is not less likely that the impressions persist at night, to the degree that the air is cooler then.

[54] But perhaps it is the sun that produces the reflection as well as the light, transporting the former in some way toward sight, as he seems to mean—at least his claim that the sun condenses the air by repelling it and modeling it is absurd. For it is more in its nature to disaggregate.

It is also as absurd to make not only the eyes but also the rest of the body participate in sensation. For he says

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<sup>1</sup> καὶ del. Vossianus  
τὸν ὅτι ἀπαθούντα mss.

<sup>2</sup> τὸν ἥλιον ἀπωθούντα Schneider:  
<sup>3</sup> πυκνὸν mss., corr. Schneider

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γὰρ διὰ τοῦτο κενότητα καὶ ὑγρότητα ἔχειν δεῖν τὸν ὀφθαλμόν, ἵν' ἐπὶ πλεόν δέχεται καὶ τῷ ἄλλῳ σώματι παραδιδῶ.

ἄλογον δὲ καὶ τὸ μάλιστα μὲν ὁρᾶν φάναι τὰ ὁμόφυλα, τὴν δὲ ἔμφασιν ποιεῖν τοῖς ἀλλόχρωσιν ὡς οὐκ ἐμφαινόμενων τῶν ὁμοίως.<sup>4</sup> τὰ δὲ μεγέθη καὶ τὰ διαστήματα πῶς ἐμφαίνεται,<sup>5</sup> καίπερ ἐπιχειρήσας λέγειν οὐκ ἀποδίδωσιν.

[55] περὶ μὲν οὖν ὅψεως ἰδίως ἔνια βουλόμενος λέγειν πλείω παραδίδωσι ζήτησιν. [. . . = **D157**]

<sup>4</sup> ὁμοίῳ Vossianus

<sup>5</sup> φαίνεται mss., corr. Philippon

**R58** (> A122) Arist. *An.* 2.7 419a15–21

οὐ γὰρ καλῶς τοῦτο λέγει Δημόκριτος, οἰόμενος, εἰ γένοιτο κενὸν τὸ μεταξύ, ὁρᾶσθαι ἂν ἀκριβῶς καὶ εἰ μύρμηξ ἐν τῷ οὐρανῷ εἴη· τοῦτο γὰρ ἀδύνατόν ἐστιν. πάσχοντος γάρ τι τοῦ αἰσθητικοῦ γίνεται τὸ ὁρᾶν· ὑπ' αὐτοῦ μὲν οὖν τοῦ ὁρωμένου χρώματος ἀδύνατον· λείπεται δὴ ὑπὸ τοῦ μεταξύ, ὥστ' ἀναγκαῖόν τι εἶναι μεταξύ· κενοῦ δὲ γενομένου οὐχ ὅτι ἀκριβῶς, ἀλλ' ὅλως οὐθὲν ὀφθῆσεται.

**R59** (< A135) Theophr. *Sens.* 79–82

[. . . = **D66**] [79] πρῶτον μὲν οὖν τὸ πλείους ἀποδοῦναι τὰς ἀρχὰς ἔχει τινὰ ἀπορίαν· οἱ γὰρ ἄλλοι τὸ λευκὸν καὶ τὸ μέλαν ὡς τούτων ἀπλῶν ὄντων μόνων. ἔπειτα

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that this is why the eye must contain void and moisture, so that it can receive more and transmit to the rest of the body.

It is also unreasonable to assert that one sees better the members of the same species, and to produce the reflection by impressions of different colors, on the pretext that things that appear in a similar way would not be reflected. As for the way in which magnitudes and distances appear, he has tried to explain this but has not succeeded.

[55] And so, in trying to make some original assertions about sight, he leaves even more questions unresolved. [. . .]

### **R58** (> A122) Aristotle, *On the Soul*

Democritus does not speak correctly when he thinks that if the intermediate [scil. space] were void, one would see exactly even if an ant were in the sky [D149]. For this is impossible. For vision is produced when the organ of sensation is acted upon in some way. Now, it is impossible that this happen because of the color that is seen itself, so it remains that this be due to the intermediary, so that it is necessary that there be some intermediary. But if this is void, then so far from seeing exactly, one will see nothing at all.

### **R59** (< A135) Theophrastus, *On Sensations*

[. . .] [79] First of all, admitting a plurality of principles [scil. for explaining colors] presents some difficulty; for other people [scil. explain only] white and black, on the idea that only these [scil. colors] are the simple ones. And

τὸ μὴ πᾶσι τοῖς λευκοῖς μίαν ποιῆσαι τὴν μορφήν, ἀλλ' ἑτέραν τοῖς σκληροῖς καὶ τοῖς ψαθυροῖς. οὐ<sup>1</sup> γὰρ εἰκὸς ἄλλην αἰτίαν εἶναι τοῖς διαφόροις κατὰ τὴν ἀφήν, οὐδ' ἂν ἔτι τὸ σχῆμα αἷτιον εἴη<sup>2</sup> τῆς διαφορᾶς,<sup>3</sup> ἀλλὰ μᾶλλον ἢ θέσις· ἐνδέχεται γὰρ καὶ τὰ περιφερῆ καὶ ἀπλῶς πάντα ἐπισκιάζειν ἑαυτοῖς. σημεῖον δέ καὶ γὰρ αὐτὸς ταύτην φέρει τὴν πίστιν, ὅσα τῶν λείων μέλανα φαίνεται· διὰ γὰρ τὴν σύμφυσιν καὶ τὴν τάξιν ὡς τὴν αὐτὴν ἔχοντα τῷ μέλανι φαίνεσθαι τοιαῦτα. καὶ πάλιν ὅσα λευκὰ τῶν τραχέων· ἐκ μεγάλων<sup>4</sup> γὰρ εἶναι ταῦτα καὶ τὰς συνδέσεις οὐ περιφερεῖς,<sup>5</sup> ἀλλὰ προκρόσσας<sup>6</sup> καὶ τῶν σχημάτων τὰς μορφὰς μιγνυμένας,<sup>7</sup> ὥσπερ ἢ ἀνάβασις καὶ τὰ πρὸ τῶν τειχῶν ἔχει ἰσώματα†.<sup>8</sup> τοιοῦτον γὰρ ὃν ἄσκιον εἶναι καὶ οὐ κωλύεσθαι τοῦ λαμπροῦ.<sup>9</sup>

<sup>1</sup> εἰ Diels      <sup>2</sup> εἴη Diels: εἶναι mss.      <sup>3</sup> διαφορᾶς  
Mullach: **φορᾶς mss.**      <sup>4</sup> μεγάλων F: μέγαλον P      <sup>5</sup> οὐ  
περιφερεῖς F: ὑπερφερεῖς P      <sup>6</sup> προκρόσσας Stephanus:  
προκόσσας mss.      <sup>7</sup> ἀγνυμένας Diels      <sup>8</sup> χῶματα  
Mullach      <sup>9</sup> τὸ λαμπρόν Schneider

[80] πρὸς δὲ τούτοις πῶς λέγει καὶ ἐξ ὧν<sup>1</sup> τὸ λευκὸν ἐνίων γίνεσθαι μέλαν, εἰ τεθείησαν οὕτως, ὥστ' ἐπισκιάζειν; ὅλως δὲ τοῦ διαφανοῦς καὶ τοῦ λαμπροῦ μᾶλλον ἔοικε τὴν φύσιν ἢ τοῦ λευκοῦ λέγειν. τὸ γὰρ εὐδίοπτον εἶναι καὶ μὴ ἐπαλλάττειν<sup>2</sup> τοὺς πόρους τοῦ

<sup>1</sup> ἐξ ὧν mss.: ζῶων Usener      <sup>2</sup> ἀπαλλάττειν mss., corr.  
Schneider

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then, not admitting only one shape for all white things, but one for hard ones and a different one for friable ones; for it is not likely that there would be a different cause for things that differ with regard to touch, and it would no longer be the form that would provide the cause for the difference [scil. between the two whites of different origin], but instead the position—for nothing prevents spherical bodies, and in general all bodies, from casting a shadow upon themselves. And here is evidence: for he himself corroborates this view regarding smooth bodies that appear black; for it is because of their structure and order, to the degree that it is similar to black, that they take on this appearance. And inversely regarding rough bodies that appear white: for these are composed of large elements and their joints are not spherical but protruding, and the forms of their shapes are mixed, like an ascent (?) and †objects† in front of walls.<sup>1</sup> For an arrangement like this does not produce a shadow and is not incompatible with shining brightly.

<sup>1</sup> Text difficult to understand. Are the differences in height on the surface of the atoms being compared with machines permitting the ramparts of a city to be scaled?

[80] And besides, how can he say, and on what basis, that the white color of certain things becomes black if they are placed in such a way as to produce a shadow? In general, he seems to speak about the nature of the diaphanous and the brightly shining more than about that of the white; for



διαφανοῦς· πόσα δὲ λευκὰ τοῦ διαφανοῦς;<sup>3</sup> ἔτι δὲ τὸ μὲν εὐθείς εἶναι τῶν λευκῶν τοὺς πόρους, τῶν δὲ μελάνων ἐπαλλάττειν, ὡς εἰσιούσης τῆς φύσεως<sup>4</sup> ὑπολαβεῖν ἔστιν· ὁρᾶν δὲ φησὶ<sup>5</sup> διὰ τὴν ἀπορροὴν καὶ τὴν ἔμφασιν τὴν εἰς τὴν ὄψιν· εἰ δὲ τοῦτό ἐστι, τί διοίσει τοὺς πόρους κείσθαι κατ' ἀλλήλους ἢ ἐπαλλάττειν; οὐδὲ τὴν ἀπορροὴν ἀπὸ τοῦ κενοῦ πῶς γίνεσθαι<sup>6</sup> ῥάδιον ὑπολαβεῖν· ὥστε λεκτέον τούτου τὴν αἰτίαν. ἔοικε γὰρ ἀπὸ τοῦ φωτὸς ἢ ἀπὸ ἄλλου τινὸς ποιεῖν τὸ λευκόν. διὸ καὶ τὴν παχύτητα τοῦ ἀέρος αἰτιᾶται<sup>7</sup> πρὸς τὸ φαίνεσθαι μέλαν.

<sup>3</sup> πόσα δὲ λευκὰ τοῦ διαφανοῦς temptavimus (vel ἔτι δὲ πόσα δὲ λευκὰ τοῦ διαφανοῦς?): ἐπὶ πόσα δὲ λευκὰ τοῦ διαφανοῦς mss., secl. Wimmer: τοῦ διαφανοῦς ἔστι. πρῶτα δὲ τὰ λευκὰ τοῦ διαφανοῦς coni. Diels <sup>4</sup> φάσεως coni. Philippson, ὅψεως Usener <sup>5</sup> φασὶ mss.: corr. Schneider <sup>6</sup> πῶς γίνεται coni. Diels <sup>7</sup> αἰτιᾶσθαι mss.: corr. Schneider

[81] ἔτι δὲ πῶς<sup>1</sup> τὸ μέλαν ἀποδίδωσιν, οὐ ῥάδιον καταμαθεῖν· ἡ σκιὰ γὰρ μέλαν τι καὶ ἐπιπρόσθησίς ἐστι τοῦ λευκοῦ· διὸ πρῶτον τὸ λευκὸν τὴν φύσιν. ἅμα δὲ οὐ μόνον τὸ ἐπισκιάζειν, ἀλλὰ καὶ τὴν παχύτητα τοῦ ἀέρος καὶ τῆς εἰσιούσης ἀπορροῆς αἰτιᾶται καὶ τὴν ταραχὴν τοῦ ὀφθαλμοῦ. πότερον δὲ ταῦτα συμβαίνει διὰ τὸ μὴ εὐδίοπτον ἢ μέλαν,<sup>2</sup> ἢ καὶ ἄλλως<sup>3</sup> γίνοιτ' ἂν καὶ ποίῳ, οὐ διασαφεί.

<sup>1</sup> ὥς mss., corr. Usener <sup>2</sup> ἢ μέλαν post ποίῳ mox, transp. huc nos: secl. Diels: τὸ μέλαν coni. Wimmer: ἢ μέλανι Stephanus <sup>3</sup> ἄλλῳ Diels

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it belongs to the diaphanous to be transparent and in its case there is no crossing of the passages; and how many white things belong to the diaphanous?<sup>1</sup> Moreover, to say that the passages of white things are straight while those of black things cross, is to admit that their nature penetrates [scil. into the organ of sight]. But he says that one sees thanks to the efflux and the reflection in the eye. But if this is the case, what difference does it make whether the passages are arranged in such a way that they face one another rather than crossing? Nor is it easy to suppose that the efflux is produced in some way from the void, so that the cause of this remains to be stated. For he seems to make white originate from light or from something else; and it is for this reason that he makes the thickness of the air as well the cause for the black appearance.

<sup>1</sup> Text uncertain.

[81] Moreover, it is not easy to comprehend the way in which he explains black. For a shadow is something black and is something superimposed upon white; and that is why white is first by nature. But at the same time he makes not only the production of a shadow the cause but also the thickness of the air and of the efflux that penetrates [scil. into the organ of sight] as well as the disturbance of the eye. But he does not clarify whether this happens because it is not transparent or is black, and whether it might happen in some other way, and if so in which.

[82] ἄτοπον δὲ καὶ τὸ τοῦ χλωροῦ<sup>1</sup> μὴ ἀποδοῦναι μορφήν, ἀλλὰ μόνον ἐκ τοῦ στερεοῦ καὶ τοῦ κενοῦ ποιεῖν. κοινὰ γὰρ ταῦτά γε<sup>2</sup> πάντων καὶ ἐξ ὁποίων οὖν ἔσται σχημάτων. χρῆν δ' ὥσπερ κὰν<sup>3</sup> τοῖς ἄλλοις ἴδιόν τι ποιῆσαι, καὶ εἰ μὲν ἐναντίον<sup>4</sup> τῷ ἐρυθρῷ, καθάπερ τὸ μέλαν τῷ λευκῷ, τὴν ἐναντίαν ἔχει<sup>5</sup> μορφήν· εἰ δὲ μὴ<sup>6</sup> ἐναντίον, αὐτὸ τοῦτ' ἂν τις θαυμάσειεν, ὅτι τὰς ἀρχὰς οὐκ ἐναντίας<sup>7</sup> ποιεῖ· δοκεῖ γὰρ ἐν πᾶσιν<sup>8</sup> οὕτω. μάλιστα δ' ἐχρῆν τοῦτο διακριβοῦν, ποῖα τῶν χρωμάτων ἀπλὰ καὶ διὰ τί τὰ μὲν σύνθετα, τὰ δὲ ἀσύνθετα· πλείστη γὰρ ἀπορία<sup>9</sup> περὶ τῶν ἀρχῶν. ἀλλὰ τοῦτο μὲν ἴσως χαλεπόν· ἐπεὶ καὶ τῶν χυμῶν εἴ τις δύναιτο τοὺς ἀπλοὺς ἀποδοῦναι, μᾶλλον ἂν ὅδε λέγοι. [. . . = **D67**, **R25**]

<sup>1</sup> τὸ τὸ χλωρὸν mss., corr. Schneider <sup>2</sup> ταῦτα τε mss., corr. Camotius et Vossianus <sup>3</sup> κὰν Diels: καὶ mss. <sup>4</sup> ἐναντίω mss., corr. Schneider <sup>5</sup> ἔχειν Diels <sup>6</sup> εἰ δὲ μὴ Diels: εἰ δ' ἢ μὴ mss.: εἰ δ' εἴη μὴ Schneider <sup>7</sup> ἐναντία mss., corr. Schneider <sup>8</sup> ἐν πᾶσιν P: ἐκ πᾶσιν F: ἀπασιν coni. Diels <sup>9</sup> ἀπειρία mss., corr. Camotius

### Hearing (R60–R61)

**R60** (< A135) Theophr. *Sens.* 57

[. . . = **D157**] τὸ μὲν οὖν ἀσαφῶς<sup>1</sup> ἀφορίζειν ὁμοίως ἔχει τοῖς ἄλλοις. ἄτοπον δὲ καὶ ἴδιον<sup>2</sup> <τὸ><sup>3</sup> κατὰ πᾶν τὸ σῶμα τὸν ψόφον εἰσιέναι, καὶ ὅταν εἰσέλθῃ διὰ τῆς ἀκοῆς, διαχεῖσθαι κατὰ πᾶν, ὥσπερ οὐ ταῖς ἀκοαῖς, ἀλλ' ὅλῳ τῷ σώματι τὴν αἴσθησιν οὔσαν. οὐ<sup>4</sup>

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

[82] It is also absurd that he does not assign a shape to greenish-yellow, but defines it only by the solid and the void. For these are elements shared in common by all things and can be composed out of any shapes whatsoever; so it would be necessary to indicate some individual [scil. feature], as in the other cases. And if it is opposed to red, as black is to white, it possesses the opposite shape; but if it is not opposed, one might well be surprised at the very fact that he does not posit the principles as opposites. For this seems to be the case in all things. But above all it would be necessary to determine with precision which colors are the simple ones and for what reason some are composite and others are not; for the greatest uncertainty reigns on the subject of the principles. But this is surely difficult: for with regard to tastes as well, if someone were able to explain which ones are simple, then it would rather be he [i.e. Democritus] who would speak of this.

### *Hearing (R60–R61)*

#### **R60** (< A135) Theophrastus, *On Sensations*

With regard to the lack of precision in his account, he is similar to the others. But one absurdity that is peculiar to him is to suppose that sound penetrates into the whole body, and that when it enters through the ear it is diffused everywhere, as though this sensation were produced not by the ears but by the whole body. For even if it shares the

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<sup>1</sup> ἀσαφῶς Diels: σαφῶς mss.      <sup>2</sup> καὶ ἴδιον Zeller: καὶ δι' ὧν mss.      <sup>3</sup> <τὸ> Diels      <sup>4</sup> οὐ Schneider: εἰ mss.

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γὰρ καὶν συμπάσχη<sup>5</sup> τι τῇ ἀκοῇ, διὰ τοῦτο καὶ αἰσθάνεσθαι.<sup>6</sup> πάσαις γὰρ τοῦτό γε ὁμοίως ποιεῖ, καὶ οὐ μόνον ταῖς αἰσθήσεσιν, ἀλλὰ καὶ τῇ ψυχῇ. [. . . = **D158**]

<sup>5</sup> καὶ συμπάσχει mss., corr. Diels

<sup>6</sup> αἰσθάνεται Schneider

**R61** (< A128) Aët. 4.19.3 (Ps.-Plut.) [περὶ φωνῆς]

[. . . = **D156**] ἔχοι δ' ἄν τις πρὸς τούτους εἰπεῖν· πῶς ὀλίγα θραύσματα πνεύματος μυρίανδρον ἐκπληροῖ θέατρον;

*Flavors and Taste (R62–R66)*

**R62** (< A135) Theophr. *Sens.* 72

[. . . = **R56b**] τῶν δὲ χυλῶν ἐκάστω τὸ σχῆμα ἀποδίδωσι<sup>1</sup> πρὸς τὴν δύναμιν ἀφομοιῶν τὴν<sup>2</sup> ἐν τοῖς πάθεσιν· ὅπερ οὐ μόνον ἐξ ἐκείνων, ἀλλὰ καὶ ἐκ τῶν αἰσθητηρίων ἔδει συμβαίνειν ἄλλως τε καὶ εἰ πάθη τούτων ἐστίν. οὐ γὰρ πᾶν τὸ σφαιροειδὲς οὐδὲ τὰ ἄλλα σχήματα τὴν αὐτὴν ἔχει δύναμιν, ὥστε κατὰ τὸ ὑποκείμενον<sup>3</sup> ἔδει διορίζειν, πότερον ἐξ ὁμοίων ἢ ἐξ ἀμφοῖν<sup>4</sup> ἐστὶ καὶ πῶς ἢ τῶν αἰσθήσεων ἀλλοιώσις γίνεται, καὶ πρὸς τούτοις ὁμοίως ἐπὶ πάντων ἀποδοῦ-

<sup>1</sup> ἀποδιδόασι mss., corr. Schneider

<sup>2</sup> τοῖς mss.: corr. Schneider

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

affection of hearing for it, it is not because of this that it feels the sensation. For it does this in the same way with all the senses, and not only with them, but also with the soul.

### **R61** (< A128) Aëtius

[. . .] But one could object to them [i.e. to philosophers like Democritus]: how could a small number of fragments of air completely fill a theater with thousands of places?

### *Flavors and Taste (R62–R66)*

### **R62** (< A135) Theophrastus, *On Sensations*

[. . .] As for tastes, he [scil. Democritus] attributes to each one the shape that corresponds to its power, making it similar to [scil. the characteristics of] the affections [**D159**; cf. **D65**]<sup>3</sup>—an explanation that should have been derived not only from these [scil. characteristics] but also from the organs of sensation, especially if they [i.e. these characteristics] are affections of these latter. For it is false to suppose that everything spherical possesses the same power, and so too for the other shapes, so that it would have been necessary to determine the substrate [scil. that undergoes the affection] and to establish whether it is composed out of similar [scil. forms] or out of both [scil. kinds], and in what way the alteration of the senses is produced, and besides this to give an explanation in the same way for all

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<sup>3</sup> ὥστε καὶ τὸ κάτω mss., corr. Diels

<sup>4</sup> ἀνομοίων Diels

## EARLY GREEK PHILOSOPHY VII

ναι τῶν διὰ τῆς ἀφῆς καὶ μὴ μόνον τὰ περὶ γεῦσιν.  
ἀλλὰ καὶ ταῦτα μὲν ἦτοι διαφορὰν τινα ἔχει πρὸς  
τοὺς χυλοὺς, ἣν ἔδει διελεῖν, ἣ καὶ παρείται δυνατὸν  
ὄν ὁμοίως εἰπεῖν. [. . . = **D66**]

**R63** (< A130) Theophr. CP 6.2.1

[. . . = **D161**] πλὴν ἴσως ἐκείνα ἂν τις ἐπιζητήσκει  
παρὰ<sup>1</sup> τούτων, ὥστε καὶ τὸ ὑποκείμενον ἀποδιδόναι  
ποιόν τι· δεῖ γὰρ εἰδέναι μὴ μόνον τὸ ποιῶν, ἀλλὰ  
καὶ τὸ πάσχον, ἄλλως τ' εἰ καὶ μὴ πᾶσιν ὁ αὐτὸς  
ὁμοίως φαίνεται, καθάπερ φησύν.

<sup>1</sup> περὶ Diels

**R64** (A131) Theophr. CP 6.2.3–4

ἄτοπον δὲ κακεῖνο τοῖς τὰ σχήματα λέγουσιν ἢ τῶν  
ὁμοίων διαφορὰ κατὰ μικρότητα καὶ μέγεθος εἰς τὸ  
μὴ τὴν αὐτὴν ἔχειν δύναμιν. οὐ γὰρ ἐπὶ<sup>1</sup> τῆς μορφῆς  
ἀλλὰ τῶν ὄγκων αἱ δυνάμεις, οὐς<sup>2</sup> εἰς μὲν τὸ διαβι-  
άσασθαι καὶ ἀπλῶς τὸ μᾶλλον καὶ τὸ ἥττον τάχ' ἂν  
τις ἀποδοίη,<sup>3</sup> εἰς δὲ τὸ μὴ ταῦτό<sup>4</sup> δύνασθαι μηδὲ ποιεῖν  
οὐκ εὐλόγον, ἐπεὶ ἐν τοῖς σχήμασιν αἱ δυνάμεις· εἰ  
γὰρ ὁμοιοσχήματα,<sup>5</sup> ταῦτόν ἂν εἴη τὸ ὑπάρχον ὥσπερ  
καὶ ἐν τοῖς ἄλλοις.

<sup>1</sup> ἔτι Einarson-Link      <sup>2</sup> οὐς Schneider: ἄς mss.      <sup>3</sup> ἀπο-  
δοίη Wimmer: ἀποδέδωκεν mss.      <sup>4</sup> ταῦτό Wimmer: αὐτό  
mss.      <sup>5</sup> εἰ . . . ὁμοιοσχήματα Urec M: εἰ . . . ὁμοιοσχέ-  
μονα P: ἦ . . . ὁμοιος σχήματι Einarson-Link

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

the phenomena that come about by touch and not only for that belong to taste. But either these [scil. tactile] phenomena present in comparison with taste some difference, which he should have analyzed, or else he is neglecting to provide an explanation in common, even though this would be possible. [. . .]

### **R63** (< A130) Theophrastus, *Causes of Plants*

[. . .] but surely one could inquire further [scil. of Democritus and Plato] with regard to these subjects [scil. how the shapes explain tastes], how to explain what kind of thing the substrate is. For it is necessary to know not only what causes an affection, but also what undergoes the affection, especially if the same [scil. taste] does not appear in the same way to all people, as he says.

### **R64** (A131) Theophrastus, *Causes of Plants*

Absurd, too, in those who speak of shapes, is [recurring to] the difference, among those that are similar, with regard to their smallness and largeness, in order [scil. to explain] that they do not possess the same property (*dunamis*). For the properties depend not upon the form but upon the volumes, and one might perhaps use these to explain the forcible penetration [scil. of the soil in germination] and in general the more and the less, but it is not plausible [scil. to use them] with regard to differences in property and in action, since the properties depend upon the shapes. For if these have similar shapes, then their effect would have to be the same, as in the other cases.



**R65** (A132) Theophr. CP 6.7.2

Δημοκρίτῳ μὲν γε πῶς ποτε ἐξ ἀλλήλων ἢ γένεσις, ἀπορήσειεν ἂν τις. ἀνάγκη γὰρ ἢ τὰ σχήματα μεταρρυθμίζεσθαι καὶ ἐκ σκαληνῶν καὶ ὀξυγωνίων περιφερῇ γίνεσθαι, <ἢ><sup>1</sup> πάντων ἐνυπαρχόντων οἷον τῶν τε τοῦ στρυφνοῦ καὶ ὀξέος καὶ γλυκέος τὰ μὲν ἐκκρίνεσθαι τὰ τῶν πρότερον αἰεί, τὰ δ' οἰκεῖα καθ' ἕκαστον, θάτερα δὲ ὑπομένειν,<sup>2</sup> ἢ τρίτον τὰ μὲν ἐξιέναι τὰ δ' ἐπεισιέναι. ἐπεὶ δ' ἀδύνατον μετασχηματίζεσθαι (τὸ γὰρ ἄτομον<sup>3</sup> ἀπαθές), λοιπὸν τὰ μὲν εἰσιέναι τὰ δ' ἐξιέναι <ἢ τὰ μὲν ὑπομένειν τὰ δ' ἐξιέναι>.<sup>4</sup> ἄμφω δὲ ταῦτα ἄλογα· προσapoδοῦναι γὰρ δεῖ καὶ τί τὸ ἐργαζόμενον ταῦτα καὶ ποιοῦν.

<sup>1</sup> <ἢ> Wimmer      <sup>2</sup> θάτερα δὲ ὑπομένειν <τὰ οἰκεῖα καθ' ἕκαστον> Wimmer      <sup>3</sup> ἄτοπον mss., corr. Scaliger      <sup>4</sup> <ἢ τὰ μὲν ὑπομένειν τὰ δ' ἐξιέναι> Wimmer: <τὰ μὲν ἐξιέναι, τὰ δ' οἰκεῖα καθ' ἕκαστον ὑπομένειν> Einarson-Link: <ἢ τὰ μὲν ἐκκρίνεσθαι τὰ δ' οἰκεῖα καθ' ἕκαστον ὑπομένειν> Leszl

**R66** (A133) Theophr. Odor. 64

τί δὴ ποτε Δημόκριτος τοὺς μὲν χυμοὺς πρὸς τὴν γεῦσιν ἀποδίδωσι, τὰς δ' ὀσμὰς καὶ τὰς χροὰς οὐχ ὁμοίως πρὸς τὰς ὑποκειμένας αἰσθήσεις; ἔδει γὰρ ἐκ τῶν σχημάτων.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R65** (A132) Theophrastus, *Causes of Plants*

One might well see a difficulty [scil. in understanding] in what way for Democritus [scil. tastes] are generated out of one another. For it is necessary either that the shapes alter the configuration of their form and change from irregular and acute-angled to spherical, or else that, all of them being contained within, like those of sour, acid, and sweet, the ones separate out (those that each time are located in front, and those that are characteristic for each [scil. flavor]) while the others remain [scil. inside], or thirdly that the ones go out while the others penetrate within. But since it is impossible that they change their form (for the atom is impassible), it remains that the ones penetrate and the others go out <or that the ones remain and the others go out>. But both of these possibilities are senseless. For it is necessary to explain additionally what brings this about and is its efficient cause.

### **R66** (A133) Theophrastus, *On Odors*

Why then does Democritus explain flavors with regard to the sense of taste, but not odors and colors in relation to the corresponding senses in the same way? For he should have done this, on the basis of the shapes.

## EARLY GREEK PHILOSOPHY VII

### *Regarding Animal Physiology (R67)*

**R67** Arist. GA 5.8

**a** (< A147) 788b9–11, 14–15

εἶρηκε μὲν οὖν περὶ αὐτῶν καὶ Δημόκριτος, οὐ καλῶς  
δ' εἶρηκε. οὐ γὰρ ἐπὶ πάντων σκεψάμενος καθόλου  
λέγει τὴν αἰτίαν [. . . = **D185**]. καίτοι θηλάζει γε καὶ  
ὕς, οὐκ ἐκβάλλει δὲ τοὺς ὀδόντας [. . .].

**b** (< 98.3 Leszl) 788b24–28

εἰ οὖν συνέβαινεν, ὥς ἐκεῖνος λέγει, πρὸς ἥβην, ἐν-  
έλειπεν ἂν ἡ φύσις τῶν ἐνδεχομένων αὐτῇ τι ποιεῖν,  
καὶ τὸ τῆς φύσεως ἔργον ἐγίνετ' ἂν παρὰ φύσιν. τὸ  
γὰρ βία παρὰ φύσιν, βία δέ φησι συμβαίνειν τὴν  
γένεσιν τῶν ὀδόντων.

### *Fourth-Century Democriteans (R68–R78)*

#### *Successions and Lines of Descent*

See **DOX. T20**[15], **T21**[64.4]

### *Metrodorus of Chios [70 DK] (R68–R72)*

#### *General Principles (R68–R70)*

**R68**

**a** (B1) Cic. Acad. 2.23.73

is qui hunc maxime est admiratus, Chius Metrodorus

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Regarding Animal Physiology (R67)*

#### **R67** Aristotle, *Generation of Animals*

##### **a** (< A147)

Democritus too has spoken about these [i.e. milk teeth and their shedding], but he has not spoken correctly. For he does not indicate the cause in general on the basis of having examined all the cases [. . .]. And yet the sow too gives milk but does not cause the teeth to be shed [. . .].

##### **b** (≠ DK)

If then it [scil. the appearance of the organs necessary for dealing with food] occurred, as he says, around the time of puberty, nature would be failing with regard to what it is possible for it to do, and the action of nature would occur against nature. For what happens by constraint is against nature, and he says that the formation of the [scil. milk] teeth comes about by constraint.

### *Fourth-Century Democriteans (R68–R78)* *Successions and Lines of Descent*

See **DOX. T20[15], T21[64.4]**

### *Metrodorus of Chios [70 DK] (R68–R72)* *General Principles (R68–R70)*

#### **R68**

##### **a** (B1) Cicero, *Prior Academics*

Metrodorus of Chios, the man who most admired him [i.e.

## EARLY GREEK PHILOSOPHY VII

initio libri qui est de natura “nego,” inquit, “scire nos sciamusne aliquid an nihil sciamus, ne id ipsum quidem nescire aut scire nos, nec omnino sitne aliquid an nihil sit.”

**b** (B1, B2) Aristocl. *Phil.* in Eus. *PE* 14.19.8–9

[. . .] καὶ πάντα χρῆναι πιστεύειν ταῖς τοῦ σώματος αἰσθήσεσιν ὀρισαμένους, ὧν εἶναι Μητρόδωρον τὸν Χίον καὶ Πρωταγόραν τὸν Ἀβδηρίτην. [9] τὸν μὲν οὖν Μητρόδωρον Δημοκρίτου ἔφασαν ἀκηκοέναι, ἀρχὰς δὲ ἀποφήνασθαι τὸ πλήρες καὶ τὸ κενόν· ὧν τὸ μὲν ὄν, τὸ δὲ μὴ ὄν εἶναι. γράφων γέ τοι περὶ φύσεως εἰσβολῇ ἐχρήσατο τοιαύτη· “οὐδεὶς ἡμῶν οὐδὲν οἶδεν, οὐδ’ αὐτὸ τοῦτο, πότερον οἶδαμεν ἢ οὐκ οἶδαμεν.” ἥτις εἰσβολὴ κακὰς ἔδωκεν ἀφορμὰς τῷ μετὰ ταῦτα γενομένῳ Πύρρωνι. προβὰς δέ φησιν ὅτι “πάντα ἐστίν, ὃ ἂν τις νοήσῃ.”

**R69** (A3) Theophr. *Op. phys.* in Simpl. *In Phys.*, p. 28.27–30 (< Frag. 229 FHS&G)

καὶ Μητρόδωρος δὲ ὁ Χίος ἀρχὰς σχεδόν τι τὰς αὐτὰς τοῖς περὶ Δημόκριτον ποιεῖ, τὸ πλήρες καὶ τὸ κενὸν τὰς πρώτας αἰτίας ὑποθέμενος, ὧν τὸ μὲν ὄν, τὸ δὲ μὴ ὄν εἶναι· περὶ δὲ τῶν ἄλλων ἰδίαν τινὰ ποιεῖται τὴν μέθοδον.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

Democritus], says in the beginning of his book *On Nature*: “I say that we do not know whether we know anything or know nothing, nor do we even know whether we do not know or know this, nor in general whether anything exists or nothing exists.”

**b** (B1, B2) Aristocles, *On Philosophy*, in Eusebius, *Evangelical Preparation*

[. . .] those who explained that it is necessary to trust in all matters the sensations of the body, among whom were Metrodorus of Chios and Protagoras of Abdera [cf. **PROT. R4**]. They said that Metrodorus studied with Democritus; and that he asserted that the full and the empty are principles, of which the one is being, the other non-being. And writing on nature he begins in the following way: “**None of us knows anything, and not even this, whether we know it or do not know it.**” This beginning gave bad impulses to Pyrrho, who was born after this. And later he says, “**All the things that one thinks of exist, whatever they are.**”

**R69** (A3) Theophrastus, *Physical Opinions* in Simplicius, *Commentary on Aristotle’s Physics*

And Metrodorus of Chios posits almost exactly the same principles as Democritus, making the full and the empty the first causes, of which the one is being, the other non-being. About all other matters he follows his own method.

**R70** Aët.

**a** (A6) 1.5.4 (Stob.) [εἰ ἐν τὸ πᾶν]

Μητρόδωρος, ὁ καθηγητῆς Ἐπικούρου, φησὶν ἄτοπον εἶναι ἐν μεγάλῳ πεδίῳ ἓνα στάχυν γεννηθῆναι καὶ ἓνα κόσμον ἐν τῷ ἀπείρῳ. ὅτι δὲ ἄπειροι<sup>1</sup> κατὰ τὸ πλῆθος, δῆλον ἐκ τοῦ ἄπειρα τὰ αἷτια εἶναι. εἰ γὰρ ὁ κόσμος πεπερασμένος, τὰ δ' αἷτια πάντα ἄπειρα ἐξ ὧν ὅδε ὁ κόσμος γέγονεν, ἀνάγκη ἀπείρους εἶναι. ὅπου γὰρ τὰ αἷτια <ἄπειρα>,<sup>2</sup> ἐκεῖ καὶ τὰποτελέσματα. αἷτια δὲ ἦτοι αἱ ἄτομοι ἢ τὰ στοιχεῖα.

<sup>1</sup> ἄπειρος mss., corr. Meineke      <sup>2</sup> <ἄπειρα> Reiske

**b** (A7) 2.1.3 (Ps.-Plut.; cf. Stob.) [περὶ κόσμου]

Δημόκριτος, Ἐπίκουρος καὶ ὁ τούτου καθηγητῆς Μητρόδωρος ἀπείρους κόσμους ἐν τῷ ἀπείρῳ κατὰ πᾶσαν περίστασιν.<sup>1</sup>

<sup>1</sup> περίστασιν Plut.: περιαγωγὴν Stob.

*Explanations of Some Natural  
Phenomena (R71–R72)*

**R71** (A9) Aët. 2.17.1 (Stob., Plut.) [πόθεν φωτίζονται οἱ ἀστέρες]

Μητρόδωρος ἅπαντας τοὺς ἀπλανεῖς ἀστέρας ὑπὸ τοῦ ἡλίου προσλάμπεσθαι.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R70** Aëtius

#### **a** (A6)

Metrodorus, the teacher of Epicurus, says that it is absurd that [scil. only] one ear of wheat be born in a large plain, and [scil. only] one world in the unlimited. That they [i.e. the worlds] are unlimited in number, is clear from the fact that the causes are unlimited. For if the world were limited, but all the causes out of which this world came about were unlimited, then of necessity they [i.e. the worlds] would be unlimited. For where the causes are unlimited, there the effects are too. The causes are either the atoms or the elements.

#### **b** (A7)

Democritus, Epicurus, and his teacher Metrodorus: worlds unlimited [scil. in number] in the unlimited, throughout the entire surrounding area (*peristasis*).

### *Explanations of Some Natural Phenomena (R71–R72)*

### **R71** (A9) Aëtius

Metrodorus: all the fixed stars are illuminated by the sun.



## EARLY GREEK PHILOSOPHY VII

**R72** (A17) Aët. 3.5.12 (Ps.-Plut.) [περὶ ἰριδος]

Μητροδόωρος ὅταν διὰ νεφῶν ἥλιος διαλάμψῃ, τὸ μὲν νέφος κυανίζειν, τὴν δ' αὖ γῆν ἐρυθραίνεισθαι.

*Nausiphanes* [75 DK] (R73–R75)

**R73** (A5) Cic. *Nat. deor.* 1.26.73

ita metuit ne quid umquam didicisse videatur. in Nausiphane Democriteo tenetur; quem cum a se non neget auditum, vexat tamen omnibus contumeliis. atqui si haec Democritea non audisset, quid audierat? quid est in physicis Epicuri non a Democrito?

**R74** (B4) Sen. *Epist.* 88.43

Nausiphanes ait ex his, quae videntur esse, nihil magis esse quam non esse.

**R75** (B3) Clem. Alex. *Strom.* 2.130.5

[. . .] Ναυσιφάνης τὴν ἀκαταπληξίαν<sup>1</sup> ταύτην γὰρ ἔφη ὑπὸ Δημοκρίτου ἀθαμβίην λέγεσθαι.

<sup>1</sup> ἀκαταπληξίαν Klotz: κατάπληξιν ms.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R72** (A17) Aëtius

Metrodorus: when the sun shines through the clouds, the cloud becomes dark blue while the ray of light becomes red.

See also ad **DIOG. D15**

*Nausiphanes [75 DK] (R73–R75)*

### **R73** (A5) Cicero, *On the Nature of the Gods*

He [i.e. Epicurus] was afraid of seeming ever to have learned anything [scil. from someone]. But he is caught out in the case of Nausiphanes the Democritean, whom he attacks with all kinds of abuse even though he does not deny that he studied with him. And yet if he did not learn these doctrines of Democritus from him, what did he learn? What is there in Epicurus' natural philosophy that does not come from Democritus?

### **R74** (B4) Seneca, *Letters to Lucilius*

Nausiphanes says that, among the things that seem to exist, nothing exists more than it does not exist.

### **R75** (B3) Clement of Alexandria, *Stromata*

[. . .] Nausiphanes [scil. calls] imperturbability [scil. the goal]; for he says that this is what Democritus called 'unastoundedness' (*athambiê*).

## EARLY GREEK PHILOSOPHY VII

*Diotimus of Tyre [76 DK] (R76–R78)*

**R76** (76.3) Sext. Emp. *Adv. Math.* 7.140

[. . . = **R108**] Διότιμος δὲ τρία κατ' αὐτὸν ἔλεγεν εἶναι κριτήρια, τῆς μὲν τῶν ἀδήλων καταλήψεως τὰ φαινόμενα—ὅψις γὰρ τῶν ἀδήλων τὰ φαινόμενα, ὥς φησιν Ἀναξαγόρας, ὃν ἐπὶ τούτῳ Δημόκριτος ἐπαινεῖ—, ζήτησεως δὲ τὴν ἔννοιαν—περὶ παντὸς γάρ, ᾧ παῖ, μία ἀρχὴ τὸ εἶδέναι περὶ ὅτου ἔστιν ἡ ζήτησις—, αἵρέσεως δὲ καὶ φυγῆς τὰ πάθη· τὸ μὲν γὰρ ᾧ προσοικιούμεθα, τοῦτο αἵρετόν ἐστιν, τὸ δὲ ᾧ προσαλλοτριούμεθα, τοῦτο φευκτόν ἐστιν.

**R77** (76.1) Aët. 2.17.3 (Stob.) [πόθεν φωτίζονται οἱ ἀστέρες]

Διότιμος Τύριος, ὁ Δημοκρίτειος,<sup>1</sup> τὴν αὐτὴν τούτοις εἰσηνέγκατο γνώμην.

<sup>1</sup> Δημοκρίτειος Diels: διοκρίτιος mss.: διακριτικὸς Heeren

**R78** (76.2) Clem. Alex. *Strom.* 2.130.6

ἔτι πρὸς τούτοις Διότιμος τὴν παντέλειαν τῶν ἀγαθῶν, ἣν εὖεστὸν προσαγορεύεσθαι, τέλος ἀπέφηνεν.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Diotimus of Tyre [76 DK] (R76–R78)*

#### **R76** (76.3) Sextus Empiricus, *Against the Logicians*

Diotimus<sup>1</sup> said that according to him [i.e. Democritus] there are three criteria: for grasping invisible things, the appearances ([. . . = **ANAXAG. D6**] as is said by Anaxagoras, whom Democritus praises for this); for inquiry the concept (*ennoia*) (“On every subject, my child, there is only one starting point: to know what it is that we are seeking” [Plato, *Phaedrus* 237B]); for preferring and avoiding, the passions: for what we have become familiar with is what is to be preferred, while what we remain alien from is to be avoided.

<sup>1</sup> It is generally thought that this Diotimus is the Democritean, but it might instead be a Stoic of the same name.

#### **R77** (76.1) Aëtius

Diotimus of Tyre, the Democritean, introduced the same opinion regarding these [i.e. the fixed stars] as these men [i.e. Metrodorus, cf. **R71**, and Strato].

#### **R78** (76.2) Clement of Alexandria, *Stromata*

Besides these [i.e. Democritus, Hecataeus, Apollodorus, Nausiphanes], Diotimus too indicated as the goal **complete perfection with regard to good things**, which was called ‘well-being’ (*euestô*) [scil. by Democritus, cf. e.g. **ATOM. D229**].

## EARLY GREEK PHILOSOPHY VII

### *Democritus and the Epicureans (R79–R99)*

Cf. **R1d, e**

#### *The Line of Descent (R79)*

### **R79**

**a** (A51) Cic. *Nat. deor.* 1.26.73

quid est in physicis Epicuri non a Democrito? nam etsi quaedam commutavit, ut quod paulo ante de inclinazione atomorum dixi, tamen pleraque dicit eadem, atomos, inane,<sup>1</sup> imagines, infinitatem locorum innumerabilitatemque mundorum, eorum ortus, interitus, omnia fere, quibus naturae ratio continetur.

<sup>1</sup> inane *ed. Ald.*: inanes *mss. plerique*

**b** (< A70) Lact. *Div. inst.* 1.2

[. . .] cuius sententiae auctor est Democritus, confirmator Epicurus.

*Attitude of Epicurus and the Epicureans Toward  
Leucippus and Democritus (R80–R93)  
Epicurus Denies the Existence of Leucippus  
or His Quality as a Philosopher (R80)*

**R80** (67 A2) Diog. Laert. 10.13

ἀλλ' οὐδὲ Λεύκιππὸν τινα γεγενῆσθαι φησι φιλόσο-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Democritus and the Epicureans (R79–R99)*

Cf. **R1d, e**

#### *The Line of Descent (R79)*

### **R79**

**a** (A51) Cicero, *On the Nature of the Gods*

What is there in Epicurus' natural philosophy that does not come from Democritus? For even if he has changed some things, for example regarding the swerve of the atoms about which I spoke a little earlier, nonetheless most of what he says is the same—the atoms, the void, the images, the infinity of space and the infinite number of worlds, the destruction of the place they occupy: almost everything the explanation of nature comprises.

**b** (< A70) Lactantius, *Divine Institutions*

Of this opinion [. . . scil. that all things have been made and are governed by chance] Democritus is the originator, Epicurus the corroborator.

*Attitude of Epicurus and the Epicureans Toward  
Leucippus and Democritus (R80–R93)  
Epicurus Denies the Existence of Leucippus  
or His Quality as a Philosopher (R80)*

**R80** (67 A2) Diogenes Laertius

He himself [i.e. Epicurus] as well as Hermarchus deny

## EARLY GREEK PHILOSOPHY VII

φον [Frag. 232 Usener], οὔτε αὐτὸς οὔτε Ἑρμαρχος [Frag. 13 Longo], ὃν ἔνιοί φασι καὶ Ἀπολλόδωρος ὁ Ἐπικούρειος διδάσκαλον Δημοκρίτου γεγενῆσθαι.

### *Epicurus' Relation to Democritus in General (R81–R85)*

**R81** (A52) Diog. Laert. 10.2

φησὶ δ' Ἑρμιππος [Frag. 60 Wehrli] γραμματοδιδάσκαλον αὐτὸν γεγενῆσθαι, ἔπειτα μέντοι περιτυχόντα τοῖς Δημοκρίτου βιβλίοις ἐπὶ φιλοσοφίαν ᾗξαι [...].

**R82** (A53) Plut. *Adv. Col.* 3 1108E

καίτοι πολὺν χρόνον αὐτὸς ἑαυτὸν ἀνηγόρευε Δημοκρίτειον ὁ Ἐπίκουρος [cf. Frag. 234 Usener], ὥς ἄλλοι τε λέγουσι καὶ Λεοντεύς, εἰς τῶν ἐπ' ἄκρον Ἐπικούρου μαθητῶν, πρὸς Λυκόφρονα γράφων τιμᾶσθαι τέ φησι τὸν Δημόκριτον ὑπ' Ἐπικούρου διὰ τὸ πρότερον ἄψασθαι τῆς ὀρθῆς γνώσεως, καὶ τὸ σύνολον τὴν πραγματείαν Δημοκρίτειον προσαγορεύεσθαι διὰ τὸ περιπεσεῖν αὐτὸν πρότερον ταῖς ἀρχαῖς περὶ φύσεως. ὁ δὲ Μητρόδωρος ἀντικρὺς <ἐν τῷ><sup>1</sup> Περὶ φιλοσοφίας εἵρηκεν [Frag. 33 Körte] ὥς, εἰ μὴ προκαθηγήσατο Δημόκριτος, οὐκ ἂν προῆλθεν Ἐπίκουρος ἐπὶ τὴν σοφίαν.

1 <ἐν τῷ> Menagius

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

that any philosopher Leucippus ever existed, though some people, including Apollodorus the Epicurean, say that he was the teacher of Democritus.

### *Epicurus' Relation to Democritus in General (R81–R85)*

#### **R81** (A52) Diogenes Laertius

Hermippus says that he [i.e. Epicurus] had become an elementary schoolteacher, but then when he ran across the books of Democritus he rushed eagerly toward philosophy [. . .].

#### **R82** (A53) Plutarch, *Against Colotes*

And yet for a long time Epicurus himself called himself a 'Democritean,' as is said by others and in particular by Leonteus, one of Epicurus' chief disciples, in his letter to Lycophron; and he says that Epicurus honored Democritus for having touched upon the correct knowledge before [scil. he had], and that as a whole he called his philosophical approach (*pragmateia*) 'Democritean' because he [i.e. Democritus] had stumbled upon the principles of nature before [scil. he had]. And Metrodorus said directly <in his> *On Philosophy* that if Democritus had not been his guide, Epicurus would not have made progress toward wisdom.



## EARLY GREEK PHILOSOPHY VII

**R83** (A69) Epicur. *Nat.* 25 (p. 41 Laursen)

[οἱ] δ' αἰτιολογήσαντες ἔξ ἀρχῆς ἱκανῶς | καὶ ο[ὐ]  
 μό[ο]ν τῶν πρὸ [α]νθρώ[ο]ν | πολὺ διενέγκαντες ἀλλὰ  
 καὶ τῶν | ὕστερον πολλαπλ[α]σίως ἔλαθον | ἑαυτοῖς,  
 καίπερ ἐν πολλοῖς μεγάλα κουφίσαντες, ἐ[ἰ]ς τὸ<sup>1</sup>  
 τῇ[ν] ἀνάγκην καὶ ταῦτόματ[ο]ν<sup>2</sup> πάντα ἀ[ἰ]τιάσ[θαι].

<sup>1</sup> ἐ[ἰ]ς τὸ Sedley: ENTO apogr. Oxon.: ἔν τὸ Gigante

<sup>2</sup> ταῦτόματον Lucignano, Gomperz: TATTOMEN[3/4]  
 apogr. Neap.: TATTOMEΓ[.]N apogr. Oxon.: ταῦτὸ μέν[ο]ν vel  
 μέν[ει]ν Laursen

**R84** (> 0.9.4 Leszl) Philod. *Lib. dic.* Frag. 20.2–9

διὰ [. . .] τῇ[ν] μεριζομένην συνγ[ν]ώ[μ]ην ἐν οἷς | δι-  
 έπεσον, ὥς ἐν τε τοῖς | πρὸς Δημόκριτον ἴσταται διὰ  
 τέλους Ἐπίκουρος [. . .]

**R85** (A53) Diog. Laert. 10.8

[. . .] Δημόκριτον Ληρόκριτον [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R83** (A69) Epicurus, *On Nature*

The first people to have advanced satisfactory causal explanation, and who greatly surpassed not only their predecessors but also, and even more, their successors, forgot themselves, even though on many points they brought great relief, in attributing the cause of everything to necessity and what is spontaneous.

### **R84** ( $\neq$ DK) Philodemus, *On Frank Criticism*

[. . .] because of the pardon granted in the cases in which they [i.e. probably: the adversaries] were mistaken, as Epicurus maintains from one end to the other not only of his books against Democritus [scil. but also . . .]

### **R85** (A53) Diogenes Laertius

[scil. Epicurus called] Democritus [i.e. ‘the judge of the people’] ‘Lerocritus’ [i.e. ‘the judge of balderdash’].

## EARLY GREEK PHILOSOPHY VII

*Specific Criticisms of Leucippus' and Democritus'  
Doctrines by Epicurus and the  
Epicureans (R86–R93)  
Epicurus (R86–R87)*

**R86** (67 A24) Epicur. *ad Pyth.* 89–90 (= Diog. Laert. 10.89–90)

[. . .] καὶ ὁ τοιοῦτος δύναται κόσμος γίνεσθαι καὶ ἐν κόσμῳ καὶ<sup>1</sup> μετακοσμίῳ, ὃ λέγομεν μεταξὺ κόσμων διάστημα, ἐν πολυκένῳ τόπῳ καὶ οὐκ ἐν μεγάλῳ<sup>2</sup> εἰλικρινεῖ καὶ κενῷ, καθάπερ τινές<sup>3</sup> φασιν [. . .]. οὐ γὰρ ἀθροισμὸν δεῖ μόνον γενέσθαι οὐδὲ δῖνον ἐν ᾧ ἐνδέχεται κόσμον γίνεσθαι κενῷ κατὰ τὸ δοξαζόμενον ἐξ ἀνάγκης, αὔξεσθαί τε, ἕως ἂν ἐτέρῳ προσκρούσῃ, καθάπερ τῶν φυσικῶν καλουμένων φησί τις· τοῦτο γὰρ μαχόμενόν ἐστι τοῖς φαινομένοις.

<sup>1</sup> *κὰν* Usener      <sup>2</sup> *μεγάλῳ <καὶ>* Brieger

<sup>3</sup> *τινὰ* mss., corr. Casaubon

**R87** (< A160) Cic. *Tusc.* 1.34.82

etsi Democritum insimulat Epicurus [Frag. 17 Usener],  
Democritii negant.

*Colotes (R88–R89)*

**R88** (cf. 8.1.Leszl) Plut. *Adv. Col.* 8 1111A–B, E–F

[. . .] ἐγκλητέος οὖν ὁ Δημόκριτος οὐχὶ τὰ συμβαί-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Specific Criticisms of Leucippus' and Democritus' Doctrines by Epicurus and the Epicureans (R86–R93) Epicurus (R86–R87)*

**R86** (67 A24) Epicurus, *Letter to Pythocles*

[. . .] such a world can come about both in a world and in what we call a *metakosmion*, the space between worlds, in a place with much void, and not in a large space that is pure and void, as some people say exist [cf. **D80a**, **D80b**[31]] [. . .]. For it is not enough that an aggregate or a vortex be formed in the void, in which it is agreed that a world can be formed, by necessity, and then grow until it strikes against another one, as one of those who are called natural philosophers says [cf. **D81**]. For this is in contradiction with what is seen to be the case.

**R87** (< A160) Cicero, *Tusculan Disputations*

Even if Epicurus accuses Democritus [scil. of saying that there is sensation after death, cf. **D140–D142**], the Democriteans deny it.

*Colotes (R88–R89)*

**R88** (≠ DK) Plutarch, *Against Colotes*

[. . .] So one must accuse Democritus not of having recog-

νοντα ταῖς ἀρχαῖς ὁμολογῶν ἀλλὰ λαμβάνων ἀρχὰς αἷς ταῦτα συμβέβηκεν. ἔδει γὰρ ἀμετάβλητα μὴ θέσθαι τὰ πρῶτα, θέμενον δὲ δὴ<sup>1</sup> συννορᾶν ὅτι ποιότητος οἷχεται πάσης γένεσις. [. . .] ἢ δ' ἄτομος αὐτὴ τε καθ' ἑαυτὴν ἔρημός ἐστι καὶ γυμνὴ πάσης γονίμου δυνάμεως, καὶ πρὸς ἄλλην προσπεσοῦσα βρασμὸν ὑπὸ σκληρότητος καὶ ἀντιτυπίας ἄλλο δ' οὐδὲν ἔσχεν οὐδ' ἐποίησε πάθος, ἀλλὰ παίονται καὶ παίουσι τὸν ἅπαντα χρόνον, οὐχ ὅπως ζῶον ἢ ψυχὴν ἢ φύσιν ἀλλ' οὐδὲ πλῆθος ἐξ ἑαυτῶν κοινὸν οὐδὲ σωρὸν ἕνα παλλομένων ἀεὶ καὶ δισταμένων δυνάμεναι παρασχεῖν.

<sup>1</sup> δὴ Wytttenbach: μὴ mss.

**R89** (B156) Plut. *Adv. Col.* 4 1108F–1109A

ἐγκαλεῖ δ' αὐτῷ πρῶτον, ὅτι τῶν πραγμάτων ἕκαστον εἰπὼν<sup>1</sup> οὐ μᾶλλον τοῖον ἢ τοῖον εἶναι συγκέχυκε τὸν βίον. ἀλλὰ τοσοῦτόν γε Δημόκριτος ἀποδεῖ τοῦ νομίζειν μὴ μᾶλλον εἶναι τοῖον ἢ τοῖον τῶν πραγμάτων ἕκαστον, ὥστε Πρωταγόρᾳ τῷ σοφιστῇ τοῦτ' εἰπόντι μεμαχῆσθαι καὶ γεγραφέναι πολλὰ καὶ πιθανὰ πρὸς αὐτόν. οἷς οὐδ' ὄναρ ἐντυχὼν ὁ Κωλώτης ἐσφάλῃ περὶ λέξιν τοῦ ἀνδρός, ἐν ᾗ διορίζεται μὴ μᾶλλον τὸ 'δέν' ἢ τὸ 'μηδέν' εἶναι, 'δέν' μὲν ὀνομάζων τὸ σῶμα 'μηδέν' δὲ τὸ κενόν, ὥς καὶ τούτου φύσιν τινὰ καὶ ὑπόστασιν ἰδίαν ἔχοντος.

<sup>1</sup> ἐπιὼν mss., corr. Xylander

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

nized the consequences that follow from his principles but of having posited principles from which these Consequences follow. He should not have assumed that the first [scil. elements] are immutable, but, having posited them, he should have noticed that the generation of any kind of quality had thereby been abolished. [. . .] The atom is by itself deprived and bare of all generative power, and when it collides with another one it receives an agitation because of its hardness and resistance, but it does not receive or produce any other affection; but they are struck and strike the whole time, and, being constantly agitated and dispersed, they are not capable of producing not only an animal, a life, or a nature, but not even a quantity of themselves shared in common nor a single heap.

### **R89** (B156) Plutarch, *Against Colotes*

He [i.e. Colotes] accuses him [i.e. Democritus] first of all of throwing life into total confusion by saying that every thing is not more like this than like that [cf. **D31**]. But Democritus, so far from thinking that every thing is not more like this than like that, fought against Protagoras the sophist, who said this himself [cf. e.g. **PROT. R14**], and he wrote many convincing objections against him. But Colotes, who has not even read these texts in his dreams, is mistaken about this man's formulation, in which he defines that the '**something**' (*den*) does not exist more than the '**nothing**' (*mêden*), calling the body '**something**' and the void '**nothing**,' on the idea that this too possesses a certain nature and its own existence [cf. **D33**].

## EARLY GREEK PHILOSOPHY VII

### *Lucretius (R90–R91)*

**R90** (cf. A61) 2.225–229 et 235–239

- 225      quod si forte aliquis credit graviora potesse  
         corpora, quo citius rectum per inane feruntur,  
         incidere ex supero levioribus atque ita plagas  
         gignere quae possint genitalis reddere motus,  
         avius a vera longe ratione recedit.  
         [. . .]
- 235      at contra nulli de nulla parte neque ullo  
         tempore inane potest vacuum subsistere rei,  
         quin, sua quod natura petit, concedere pergat;  
         omnia quapropter debent per inane quietum  
         aequae ponderibus non aequis concita ferri.

**R91** (A108) 3.370–73

illud in his rebus nequaquam sumere possis,  
Democriti quod sancta viri sententia ponit,  
corporis atque animi primordia singula privis  
apposita alternis variare, ac nectere membra.

372 privis *Bentley*: primis mss.456

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

*Lucretius (R90–R91)*

### **R90** (cf. A61) *On the Nature of Things*

But if by chance someone thinks that heavier bodies, 225  
Because they move more quickly straight through the  
void,

Can fall from above against lighter ones and thereby  
produce blows

That can produce generative motions,

Then he moves far away from correct reason.

[. . .]

But by contrast [scil. with motion through a fluid 235  
medium], nowhere and never

Can the empty void hold up anything at all,

But instead—what its own nature seeks—it  
continually yields place;

And that is why all things move through the tranquil  
void,

Borne along equally even if their weights are  
unequal.

### **R91** (A108) *On the Nature of Things*

By no means could you accept in these matters

What the sacred opinion of that great man Democri-  
tus claims:

That the elements of body and soul, arranged next to  
each other,

Alternate and thereby weave together the limbs.



## EARLY GREEK PHILOSOPHY VII

### *Diogenes of Oenoanda (R92–R93)*

#### **R92** (A50) Diog. Oen. Frag. 54.II–III Smith

[Col. II] ἂν γὰρ[ρ] τῷ Δημόκρίτῳ τις χ[ρ]ήσῃται | [5]  
λόγῳ, μηδεμίαν μὲν | ἐλευθέραν [φ]άσκων | ταῖς ἀτό-  
μ[οι]ς κείνησιν εἶναι διὰ τὴν πρὸς | ἀλλήλας  
σύ[ν]κρουσιν | [10] αὐτῶν, ἔνθεν δὲ φαίνεσθαι κατ[η]-  
γανκασμένως πᾶ[ν]τα κινεῖσθαι, φή[σομ]εν πρὸς |  
αὐτὸν ὥς “οὐκ οἶδας, ὅσ[τι]ς ποτὲ εἶ, καὶ ἐλευθέρ[Col.  
III]ραν τινὰ ἐν ταῖς ἀτόμοις κείνησιν εἶναι, ἥ[ν] | Δη-  
μόκριτος μὲν οὐ[κ] [5]χ εὔρεν, Ἐπίκουρος δὲ | εἰς φῶς  
ἤγαγεν, παρεν[κλιτικὴν] ὑπάρχουσαν, | ὥς ἐκ τῶν φαι-  
νομένων δείκνυσιν;”

Col. II suppl. Cousin (3, 6,7,11, 13), Usener (4, 9, 12), Smith  
(14); Col. III Usener (3)

#### **R93** (8.4 Leszl) Diog. Oen. Frag. 7.II–III Smith

ἐσφάλλη δ' ἀναξίως ἑαυτοῦ | καὶ Δημόκριτος, τὰς | [5]  
ἀτόμους μόνας κατ' ἀλήθειαν εἰπὼν ὑπάρχειν | ἐν  
τοῖς οὖσι, τὰ δὲ λοιπὰ | νομιστεῖ ἅπαντα. κατὰ | γὰρ  
τὸν σὸν λόγον, ὦ Δη[10]μόκριτε, οὐχ ὅπως τὸ ἀλη-  
θὲς εὔρεῖν, ἀλλ' οὐδὲ | ζῆν δυνησόμεθα, μή[τε] τὸ πῦρ  
φυλαττόμενοι [μήτε τ]ὴν σφαγὴν | [Col. III] μήτ' [ἄλ-  
λην τινὰ δύνα]μι[ν] . . .

Col. III.1–2 suppl. Smith

14 suppl. Cousin

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Diogenes of Oenoanda (R92–R93)*

**R92** (A50) Diogenes of Oenoanda, Epicurean inscription

[Col. II] For if someone uses Democritus' argument and says that the atoms do not have any free motion because of their collision with each other, for which reason it seems that all things move under constraint, we shall say to him, "Do you not know, whoever you are, that there is a free motion [Col. III] in the atoms, which Democritus did not discover, but which Epicurus brought to light, and which consists in a swerve, as he demonstrates on the basis of what is seen to be the case?"

**R93** ( $\neq$  DK) Diogenes of Oenoanda, Epicurean inscription

Democritus too erred, in a way unworthy of himself, when he said that only the atoms exist in truth in the things that are, while all other things are by convention. For according to what you say, Democritus, we are not capable not only of discovering the truth but even of living, not being able to protect ourselves against either fire or a wound [Col. III] or any other power . . .

## EARLY GREEK PHILOSOPHY VII

### *Differences between Epicurus and Democritus (R94–R99) Regarding the Atom (R94–R96)*

**R94** (> A47) Aët. 1.3.18 (Ps.-Plut.) [περὶ ἀρχῶν τί εἰσιν]

Ἐπίκουρος [. . .] κατὰ Δημόκριτον φιλοσοφήσας ἔφη τὰς ἀρχὰς τῶν ὄντων σώματα λόγῳ θεωρητά [. . .]. συμβεβηκέναι δὲ τοῖς σώμασι τρία ταῦτα, σχῆμα μέγεθος βάρος. Δημόκριτος μὲν γὰρ ἔλεγε δύο, μέγεθος τε καὶ σχῆμα, ὁ δ' Ἐπίκουρος τούτοις καὶ τρίτον, τὸ βάρος, ἐπέθηκεν· “ἀνάγκη γάρ,” φησί, “κινεῖσθαι τὰ σώματα τῇ τοῦ βάρους πληγῇ· ἐπεὶ οὐ κινηθήσεται.” εἶναι δὲ τὰ σχήματα τῶν ἀτόμων ἀπερίληπτα,<sup>1</sup> οὐκ ἄπειρα· μὴ γὰρ εἶναι μήτ' ἀγκιστροειδεῖς μήτε τριαινοειδεῖς μήτε κρικοειδεῖς· ταῦτα γὰρ τὰ σχήματα εὐθραυστά ἐστίν, αἱ δ' ἄτομοι ἀπαθείς ἄθραυστοι.

<sup>1</sup> ἀπερίληπτα Duebner: περιληπτά MII: -τικά m

**R95** (< 67 A13) Simpl. *In Phys.*, p. 925.13–22

[. . .] Λεύκιππος μὲν καὶ Δημόκριτος οὐ μόνον τὴν ἀπάθειαν αἰτίαν τοῖς πρώτοις σώμασι τοῦ μὴ διαιρεῖσθαι νομίζουσιν, ἀλλὰ καὶ τὸ σμικρὸν καὶ ἀμερές, Ἐπίκουρος δὲ ὕστερον ἀμερῇ μὲν οὐχ ἡγείται, ἄτομα δὲ αὐτὰ διὰ τὴν ἀπάθειαν εἶναί φησι [Frag. 268 Usener]. καὶ πολλοῦ μὲν τὴν Λευκίππου καὶ Δη-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Differences between Epicurus and Democritus (R94–R99) Regarding the Atom (R94–R96)*

#### **R94** (> A47) Aëtius

Epicurus [. . .] who philosophized in conformity with Democritus, said that the principles of the things that are are bodies visible by thought [. . .]. Three properties accompany bodies: shape, size, and weight. For Democritus said [scil. that there were] two, size and shape, but Epicurus added to these a third one, weight. For it is necessary, he says, that bodies move by the striking due to weight; for [scil. otherwise] they will not move. And the shapes of the atoms are in number indefinite, and not unlimited. For there are not any that have the shape of a hook, a trident, or a ring [cf. **D58**]; for these shapes break easily, whereas the atoms are impassible and unbreakable.

#### **R95** (< 67 A13) Simplicius, *Commentary on Aristotle's Physics*

[. . .] Leucippus and Democritus think that impassibility is not the only reason for the indivisibility of the first bodies, but also their smallness and lack of parts; but later, Epicurus does not think that they lack parts but says that they are indivisible (*atoma*) because of their impassibility. Aristotle has refuted the opinion of Leucippus and De-

μοκρίτου δόξαν ὁ Ἀριστοτέλης διήλεγξεν, καὶ δι' ἐκείνους ἴσως τοὺς ἐλέγχους πρὸς τὸ ἀμερές ἐνισταμένους ὁ Ἐπίκουρος ὕστερον μὲν γενόμενος, συμπαθῶν δὲ τῇ Λευκίππου καὶ Δημοκρίτου δόξῃ περὶ τῶν πρώτων σωμάτων, ἀπαθῇ μὲν ἐφύλαξεν αὐτά, τὸ δὲ ἀμερές αὐτῶν παρείλετο, ὥς διὰ τοῦτο ὑπὸ τοῦ Ἀριστοτέλους ἐλεγχομένων.

**R96** (< A43) Dion. Alex. *Nat.* in Eus. *PE* 14.23.3

τοσοῦτον δὲ διεφώνησαν ὅσον ὁ μὲν ἐλαχίστας πάσας καὶ διὰ τοῦτο ἀνεπαισθήτους, ὁ δὲ καὶ μεγίστας εἶναί τινας ἀτόμους ὁ Δημόκριτος ὑπέλαβεν.

*Regarding the Objectivity of the  
Perceptibles (R97–R98)*

**R97** (53.1 Leszl) Sext. *Emp. Adv. Math.* 8.184–185

[. . .] ὁ μὲν Δημόκριτος μηδὲν ὑποκείσθαι φησι τῶν αἰσθητῶν, ἀλλὰ κενοπαθείας τινὰς αἰσθήσεων εἶναι τὰς ἀντιλήψεις αὐτῶν, καὶ οὔτε γλυκύ τι περὶ τοῖς ἐκτὸς ὑπάρχειν, οὐ<sup>1</sup> πικρὸν ἢ θερμὸν ἢ ψυχρὸν ἢ λευκὸν ἢ μέλαν, οὐκ ἄλλο τι τῶν πᾶσι φαινομένων· παθῶν γὰρ ἡμετέρων ἦν<sup>2</sup> ὀνόματα ταῦτα. [185] ὁ δὲ Ἐπίκουρος πάντα ἔλεγε τὰ αἰσθητὰ τοιαῦτα ὑποκείσθαι ὅποια φαίνεται καὶ κατ' αἴσθησιν προσπίπτει [. . .].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

democritus in a number of passages, and it is perhaps because of these objections directed against the lack of parts that Epicurus, who was born later but sympathized with the opinion of Leucippus and Democritus concerning the first bodies, kept them as impassible, but abandoned their lack of parts, on the idea that it was because of this that they had been refuted by Aristotle.

**R96** (< A43) Dionysius of Alexandria, *On Nature*, in Eusebius, *Evangelical Preparation*

They [i.e. Epicurus and Democritus] differed to the extent that the one assumed that they [i.e. the natures] are all extremely small and that this is why they are imperceptible, the other, Democritus, that there are also some indivisible [scil. natures] that are extremely large [cf. **D62**].

### *Regarding the Objectivity of the Perceptibles (R97–R98)*

**R97** (≠ DK) Sextus Empiricus, *Against the Logicians*

[. . .] Democritus says that nothing underlies the sensibles, but that their apprehensions are a sort of affection empty of sensations, and that nothing sweet exists among external things, nor bitter, nor hot or cold, nor white or black, nor anything of what appears to all people: for these are names of our affections. But Epicurus said that all the sensibles exist just as they appear and fall under sensation [. . .].

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<sup>1</sup> οὐτε dub. Kayser

<sup>2</sup> εἶναι dub. Bekker

## EARLY GREEK PHILOSOPHY VII

**R98** (> A110) Sext. Emp. *Adv. Math.* 7.369

[. . .] τῶν φυσικῶν οἱ μὲν πάντα ἀνηγήκασιν τὰ φαινόμενα, ὥς οἱ περὶ Δημόκριτον, οἱ δὲ πάντα ἔθεσαν, ὥς οἱ περὶ τὸν Ἐπίκουρον καὶ Πρωταγόραν.

*Regarding Pleasure (R99)*

**R99** (< A1) Diog. Laert. 9.45

τέλος δ' εἶναι τὴν εὐθυμίαν, οὐ τὴν αὐτὴν οὖσαν τῇ ἡδονῇ, ὥς ἔνιοι παρακούσαντες ἐξεδέξαντο [. . . cf. **D229**].

*Democritus, Predecessor of Arcesilaus'  
Academy (R100–R101)*

**R100** (< 59 A95) Cic. *Acad.* 1.12.44

[. . .] earum rerum obscuritate, quae ad confessionem ignorationis adduxerant Socratem et iam [. . .] Democritum [. . .] omnes paene veteres, qui nihil cognosci nihil percipi nihil sciri posse dixerunt, angustos sensus imbecillos animos brevia curricula vitae et ut Democritus in profundo veritatem esse demersam [. . .].

**R101** (< B165) Cic. *Acad.* 2.23.73

atque is non hoc dicit quod nos qui veri esse aliquid non negamus, percipi posse negamus: ille esse

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

**R98** (> A110) Sextus Empiricus, *Against the Logicians*

[. . .] among the natural philosophers, some have completely abolished all appearances, like Democritus, while others have posited all of them, like Epicurus and Protagoras.

### *Regarding Pleasure (R99)*

**R99** (< A1) Diogenes Laertius

The goal is contentment (*euthumia*), which is not the same thing as pleasure, as some people have taken it, on the basis of a misinterpretation [. . .].

### *Democritus, Predecessor of Arcesilaus’ Academy (R100–R101)*

**R100** (< 59 A95) Cicero, *Posterior Academics*

[. . .] the obscurity of these matters [. . .] which led Socrates to confess his ignorance and already [. . .] Democritus [. . .] and almost all the ancients, who said that nothing can be either recognized, or perceived, or known: that the senses are constricted, the spirit weak, the course of life brief and, as Democritus said, the truth is sunk in an abyss [. . .] [cf. **D21**, **D24**; **EMP. D42**; **ANAXAG. R26**].

**R101** (< B165) Cicero, *Prior Academics*

[Cicero is defending Arcesilaus’ position against Lucullus:]

But he has not said what we say, we who do not deny that **there is** something **true**, but that it could be perceived: he denies completely that there is something true,



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verum plane negat sensusque idem non obscuros dicit, sed tenebricosos: sic enim appellat eos.

*Democritus and the Pyrrhonian  
Skeptics (R102–R108)  
Pyrrho's Admiration for Democritus (R102)*

**R102** (0.8.36 Leszl) Diog. Laert. 9.67

ἀλλὰ καὶ Φίλων ὁ Ἀθηναῖος, γνώριμος αὐτοῦ γεγινώς, ἔλεγεν ὡς ἐμέμνητο μάλιστα μὲν Δημοκρίτου [...].

*Does Democritus Belong to the Line of  
Descent of Skepticism?<sup>9</sup> (R103–R104)*

**R103** (< B117) Diog. Laert. 9.72

[. . .] καὶ Δημόκριτος κατ' αὐτοὺς σκεπτικοὶ τυγχάνουσιν [...], Δημόκριτος δὲ τὰς ποιότητας ἐκβάλλων, ἵνα φησὶ “νόμῳ θερμόν[. . .]”· καὶ πάλιν, “[. . .] ἐν βυθῷ γὰρ ἡ ἀλήθεια” [cf. **D24**].

**R104** (A134) Sext. Emp. *Pyrrh. Hyp.* 2.63

ἀμέλει γοῦν ἐκ τοῦ τὸ μέλι τοῖσδε μὲν πικρὸν τοῖσδε δὲ γλυκὺ φαίνεσθαι ὁ μὲν Δημόκριτος ἔφη μήτε γλυκὺ αὐτὸ εἶναι μήτε πικρόν [...].

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

and he does not say that the senses are obscure, but that they are ‘filled with shadows’<sup>1</sup> [cf. **D20**] – for this is what he calls them.

<sup>1</sup> It is in order to accentuate the contrast between the Academic position and that of Democritus that Cicero renders in this way (*tenebricosus*) the term *skotiê*, which in fact means ‘obscure’ and which is translated so in **D20**.

### *Democritus and the Pyrrhonian Skeptics (R102–R108) Pyrrho’s Admiration for Democritus (R102)*

**R102** (≠ DK) Diogenes Laertius

What is more, Philo of Athens, who was his [i.e. Pyrrho’s] close friend, said that he mentioned Democritus more than anyone else [ . . . ].

### *Does Democritus Belong to the Line of Descent of Skepticism?* (R103–R104)

**R103** (< B117) Diogenes Laertius

According to them [i.e. the Skeptics] [ . . . ] and Democritus are Skeptics [ . . . ]: Democritus when he expels qualities, when he writes, “**by convention hot** [ . . . ],” and again, “[ . . . ] **For truth is in an abyss**” [cf. **D24**].

**R104** (A134) Sextus Empiricus, *Outlines of Pyrrhonism*

From the fact that honey appears to be bitter to some people and sweet to others, Democritus said that it is neither sweet nor bitter [ . . . ].

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### *An Unsatisfactory Definition by Democritus (R105)*

**R105** (B165) Sext. Emp. Adv. Math. 7.265

Δημόκριτος [. . .] ἐπεχείρησε μὲν τὴν ἐπίνοϊαν ἐκθέσθαι, πλείον δὲ ἰδιωτικῆς ἀποφάσεως οὐδὲν ἴσχυσεν, εἰπὼν· “ἄνθρωπός ἐστιν ὃ πάντες ἴδμεν” [cf. **D26b**].

### *Is Democritus Dogmatic? (R106–R107)*

**R106** (58.1 Leszl) Sext. Emp. Pyrrh. Hyp. 1.213–14 [τίνι διαφέρει ἢ σκεπτικὴ ἀγωγὴ τῆς Δημοκριτείου φιλοσοφίας;]

ἀλλὰ καὶ ἡ Δημοκρίτειος φιλοσοφία λέγεται κοινονίαν ἔχειν πρὸς τὴν σκέψιν, ἐπεὶ δοκεῖ τῇ αὐτῇ ὕλῃ ἡμῖν κεχρησθαι· ἀπὸ γὰρ τοῦ τοῖς μὲν γλυκὺ φαίνεσθαι τὸ μέλι τοῖς δὲ πικρὸν τὸν Δημόκριτον ἐπιλογίζεσθαι φασὶ τὸ μήτε γλυκὺ αὐτὸ εἶναι μήτε πικρόν, καὶ διὰ τοῦτο ἐπιφθέγγεσθαι τὴν ‘οὐ μᾶλλον’ φωνὴν σκεπτικὴν οὖσαν. διαφόρως μέντοι χρῶνται τῇ ‘οὐ μᾶλλον’ φωνῇ οἳ τε σκεπτικοὶ καὶ οἳ ἀπὸ τοῦ Δημοκρίτου· ἐκεῖνοι μὲν γὰρ ἐπὶ τοῦ μηδέτερον εἶναι τάττουσι τὴν φωνήν, ἡμεῖς δὲ ἐπὶ τοῦ ἀγνοεῖν, πότερον ἀμφοτέρω ἢ οὐθέτερόν τι ἔστι τῶν φαινομένων. [214] ὥστε καὶ κατὰ τοῦτο μὲν διαφέρομεν, προδηλοτάτη δὲ γίνεται ἡ διάκρισις ὅταν ὁ Δημόκριτος λέγῃ “ἐτεῇ δὲ ἄτομα καὶ κενόν.” “ἐτεῇ” μὲν γὰρ λέγει ἀντὶ τοῦ “ἀληθεία.”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *An Unsatisfactory Definition by Democritus (R105)*

**R105** (B165) Sextus Empiricus, *Against the Logicians*

Democritus [. . .] tried to explain the concept [scil. of man] but he did not succeed in providing anything more than an amateur statement when he said, “**A man is what we all know**” [= **D26b**].

### *Is Democritus Dogmatic? (R106–R107)*

**R106** (≠ DK) Sextus Empiricus, *Outlines of Pyrrhonism*  
[In what regard does the Skeptical school differ from Democritean philosophy?]

Democritean philosophy too is said to have something in common with Skepticism, since it seems to have recourse to the same material as we do. For starting out from the fact that honey seems sweet to some people and bitter to others, these people say that Democritus inferred from this that it is neither sweet nor bitter, and that this is why he pronounced the phrase, “not more than” [cf. **D33**], which is Skeptical. And yet the Skeptics and those who descend from Democritus use the phrase “not more than” in different ways. For the latter assign the phrase to its not being either the one or the other, while we do so to not knowing whether some phenomenon is both the one and the other or is neither the one nor the other. So that in this regard we differ; and the distinction becomes completely evident when Democritus says, “**in reality atoms and void**” [cf. **D24**]. For he says “**in reality**” (*eteê*) instead of “in truth” (*alêtheia*).

**R107** (A114) Sext. Emp. *Adv. Math.* 7.389–90

πάσαν μὲν οὖν φαντασίαν οὐκ <ἄν><sup>1</sup> εἴποι τις ἀληθῆ διὰ τὴν περιτροπὴν, καθὼς ὁ τε Δημόκριτος καὶ ὁ Πλάτων ἀντιλέγοντες τῷ Πρωταγόρᾳ ἐδίδασκον· [390] εἰ γὰρ πᾶσα φαντασία ἐστὶν ἀληθής, καὶ τὸ μὴ πᾶσαν φαντασίαν εἶναι ἀληθῆ, κατὰ φαντασίαν ὑφιστάμενον, ἔσται ἀληθές, καὶ οὕτω τὸ πᾶσαν φαντασίαν εἶναι ἀληθῆ γενήσεται ψεῦδος.

<sup>1</sup> <ἄν> Bekker

*The Context of the Citations of Democritus’  
Epistemological Fragments in Sextus Empiricus  
(R108)*

**R108** (ad B9, 6, 7, 8, 11) Sext. Emp. *Adv. Math.* 7.135–39

[135] Δημόκριτος δὲ ὅτε<sup>1</sup> μὲν ἀναιρεῖ τὰ φαινόμενα ταῖς αἰσθήσεσι καὶ τούτων λέγει μηδὲν φαίνεσθαι κατ’ ἀλήθειαν, ἀλλὰ μόνον κατὰ δόξαν, ἀληθές δὲ ἐν τοῖς οὖσιν ὑπάρχειν τὸ ἀτόμους εἶναι καὶ κενόν· “νόμῳ,” γάρ φησι, “γλυκὺ καὶ νόμῳ πικρόν, νόμῳ θερμόν, νόμῳ ψυχρόν, νόμῳ χροιή· ἐτεῇ δὲ ἄτομα καὶ κενόν” [D14]. ὅπερ <ἔστι>.<sup>2</sup> νομίζεται μὲν εἶναι καὶ δοξάζεται τὰ αἰσθητά, οὐκ ἔστι δὲ κατ’ ἀλήθειαν ταῦτα, ἀλλὰ τὰ ἄτομα μόνον καὶ τὸ κενόν. [136] ἐν δὲ τοῖς Κρατυνητρίοις, καίπερ ὑπεσχημένος ταῖς αἰσθήσεσι τὸ κράτος τῆς πίστεως ἀναθεῖναι, οὐδὲν ἥττον εὐρίσκεται τούτων καταδικάζων. φησὶ γὰρ “ἡμεῖς δὲ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R107** (A114) Sextus Empiricus, *Against the Logicians*

One should not say that every representation (*phantasia*) is true, and this is because of self-refutation (*peritropê*), as Democritus and Plato have taught [cf. **PROT. R9–R10**], contradicting Protagoras in this way. For if every representation is true, it will also be true [scil. to say] that every representation is not true, since it results from a representation, and in this way [scil. to say] that every representation is true will be false [= **PROT. R22**].

### *The Context of the Citations of Democritus’ Epistemological Fragments in Sextus Empiricus (R108)*

### **R108** (ad B9, 6, 7, 8, 11) Sextus Empiricus, *Against the Logicians*

[135] As for Democritus, he sometimes abolishes what appears to the senses, and says that none of these things appears according to truth but only according to opinion, and that what is true among the things that are is the fact that atoms exist and the void—for he says, “**By convention sweet and by convention bitter, by convention hot, by convention cold, by convention color, but in reality atoms and void**” [D14], which means: one accepts and one has the opinion that the objects of the senses exist, but these do not exist in truth, but only the atoms and the void. [136] And in the **Confirmations**, although he has promised to attribute to the sensations the force of belief (*pistis*), nonetheless we discover that he is con-

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vid. app. ad **D15–D21**

<sup>2</sup> <ῥῶτι> Bekker

<sup>1</sup> ῥῶτι mss., corr. Usener

τῷ μὲν εἶντι οὐδὲν ἀτρεκὲς συνίμεν, μεταπίπτουν δὲ κατὰ τε σώματος διαθήκην καὶ τῶν ἐπεισιόντων καὶ τῶν ἀντιστηριζόντων” [D15]. καὶ πάλιν φησὶν· “ἐτεῆ μὲν νυν ὅτι οἶον ἕκαστον ἔστιν <ἧ> οὐκ ἔστιν οὐ συνίμεν, πολλαχῇ δεδήλωται” [D16]. [137] ἐν δὲ τῷ Περὶ ἰδεῶν “γιγνώσκειν τε χρή,” φησὶν, “ἄνθρωπον τῷδε τῷ κανόνι, ὅτι ἐτεῆς ἀπήλλακται” [D17], καὶ πάλιν· “δηλοῖ μὲν δὴ καὶ οὗτος ὁ λόγος, ὅτι ἐτεῆ οὐδὲν ἴσμεν περὶ οὐδενός, ἀλλ’ ἐπιρυσμὴν ἐκάστοισιν ἢ δόξιν” [D18], καὶ ἔτι· “καίτοι δῆλον ἔσται, ὅτι ἐτεῆ οἶον ἕκαστον γινώσκειν ἐν ἀπόρῳ ἐστί” [D19]. καὶ δὴ ἐν μὲν τούτοις πᾶσαν σχεδὸν κινεῖ<sup>3</sup> κατάληψιν, <εἰ><sup>4</sup> καὶ μόνον ἐξαιρέτως καθάπτεται τῶν αἰσθήσεων. [138] ἐν δὲ τοῖς Κανόσι δύο φησὶν εἶναι γνώσεις, τὴν μὲν διὰ τῶν αἰσθήσεων τὴν δὲ διὰ τῆς διανοίας, ὧν τὴν μὲν διὰ τῆς διανοίας γνησίην<sup>5</sup> καλεῖ,<sup>6</sup> προσμαρτυρῶν αὐτῇ τὸ πιστὸν εἰς ἀληθείας κρίσιν, τὴν δὲ διὰ τῶν αἰσθήσεων σκοτίην ὀνομάζει, ἀφαιρούμενος αὐτῆς τὸ πρὸς διάγνωσιν τοῦ ἀληθοῦς ἀπλανές. [139] λέγει δὲ κατὰ λέξιν· “γνώμης δὲ δύο εἰσὶν ιδέαι, ἡ μὲν γνησίη, ἡ δὲ σκοτίη· καὶ σκοτίης μὲν τάδε σύμπαντα, ὅψις ἀκοή ὁδμὴ γεῦσις ψαῦσις· ἡ δὲ γνησίη, ἀποκεκριμένη δὲ ταύτης” [D20]. εἶτα προκρίνων σκοτίης τὴν γνησίην ἐπιφέρει λέγων· “ὅταν ἡ σκοτίη μηκέτι δύνηται μήτε ὀρῆν ἐπ’ ἔλατ-

<sup>3</sup> κρίνει Usener  
corr. Fabricius

<sup>4</sup> <εἰ> Bekker  
<sup>6</sup> καλεῖ Bekker: κατάγει mss.

<sup>5</sup> γνῶσιν mss.,

demning them. For he says, **“We grasp in actuality not anything that is certain, but something that changes according to the disposition both of the body and of what penetrates and repels”** [D15]. And again he says, **“That thus in reality we do not grasp what each thing is or is not, has been made clear in a number of ways”** [D16]. [137] And in *On the Forms* he says, **“It is necessary to recognize that man by virtue of this criterion is separated from reality”** [D17]; and again, **“Certainly this argument too makes it clear that in reality we know nothing about anything, but for each person opinion is a rhythmic afflux”** [D18]; and again, **“And yet it will be clear that in reality to recognize of what sort each thing is, belongs to what is impracticable”** [D19]. In these passages he virtually uproots all apprehension, even if it is only the sensations that he attacks in particular. [138] But in his *Criteria*, he says that there are two kinds of knowledge, one that passes through the senses and another that passes through thought; and of these he calls the one that passes through thought **“genuine,”** testifying to its credibility with regard to the decision of truth, while the other one, the one that passes through the senses, he terms **“obscure,”** refusing to accord it infallibility with regard to the recognition of what is true. [139] For he says verbatim, **“There are two forms of knowledge, the one genuine, the other obscure. And to the obscure one belong all of these: sight, hearing, smell, taste, touch. The other is genuine, and is separated from this one”** [D20]. And then, giving his preference to the genuine one over the obscure one, he continues, saying, **“When the one that is obscure is no longer able either to see what**



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τον μήτε ἀκούειν μήτε ὀδμᾶσθαι μήτε γεύεσθαι  
μήτε ἐν τῇ ψαύσει αἰσθάνεσθαι, ἀλλ' ἐπὶ λεπτότε-  
ρον < . . . >” [D21]. οὐκοῦν καὶ κατὰ τοῦτον ὁ λόγος  
ἐστὶ κριτήριον, ὄνγνησίην γνώμην καλεῖ [. . . = R76].

### *Arguments of a Stoic Origin Against Democritus (R109–R110)*

Cf. R1f, g

R109 Cic. *Acad.*

**a** (< 46.1 Leszl) 2.18.56

primum quidem me ad Democritum vocas, cui non  
adsentior potiusque refello<sup>1</sup> propter<sup>2</sup> id quod dilucide  
docetur a politioribus physicis, singularum rerum singulas  
proprietas esse. [. . .].

<sup>1</sup> potiusque A<sup>2</sup>, refello V<sup>2</sup>: potius quale fallor *vel. sim. cett.*

<sup>2</sup> propter V<sup>2</sup>: potest *cett.*

**b** (> 46.2 Leszl) 2.40.125

sin agis verecundius et me accusas non quod tuis rationibus  
non adsentiar sed quod nullis, vincam animum cuique  
adsentiar deligam—quem potissimum, quem? Democri-  
tum; semper enim, ut scitis, studiosus nobilitatis fui. ur-  
gebor iam omnium vestrum convicio: “tune aut inane

**is smaller or to hear or to smell or to taste or to perceive by touching, but toward something that is finer < . . . > (?)” [D21].** And so, according to him too, the criterion is reason (*logos*), which he calls “**genuine**” thought [. . .].

*Arguments of a Stoic Origin Against  
Democritus (R109–R110)*

Cf. **R1f, g**

**R109** Cicero, *Prior Academics*

**a** (≠ DK) [Lucullus, attacking the Academics, addresses Cicero, who shares some of their views]

First of all, you call me before Democritus, with whom I do not agree, indeed I refute him on the basis of what is lucidly taught by more refined natural philosophers [i.e. the Stoics], that there are singular properties of singular things.

**b** (≠ DK) [Cicero replies to Lucullus]

But if you do behave more modestly and accuse me not of not agreeing with your own arguments but of not agreeing with anyone’s, I will force myself to choose, to whom I can give my assent—whom especially? whom? Democritus: for, as you know I have always been a fan of nobility. I shall now be assailed by reprimands by all of you: “Can

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quicquam putes esse, cum ita completa et conferta sint omnia, ut et<sup>1</sup> quod<sup>2</sup> movebitur <corpus><sup>3</sup> corporum<sup>4</sup> cedat et qua quidque cesserit aliud ilico subsequatur, aut atomos ullas, e quibus quidquid efficiatur illarum sit dissimilimum, aut sine aliqua mente rem ullam effici posse praeclaram; et, cum in uno mundo ornatus hic tam sit mirabilis, innumerabilis supra infra dextra sinistra ante post alios dissimiles alios eiusdem modi mundos esse; et ut nos nunc simus ad Baulos Puteolosque videamus sic innumerabiles paribus in locis esse isdem nominibus honoribus rebus gestis ingeniis formis aetatibus isdem de rebus disputantes; et, si nunc aut si etiam dormientes aliquid animo videre videamur, imagines extrinsecus in animos nostros per corpus inrumpere? tu vero ista ne asciveris neve fueris commenticiis rebus adsensus; nihil sentire est melius quam tam prava sentire.”

<sup>1</sup> ut et *dett Rom.*: et AB: ut *F<sup>2</sup>N*      <sup>2</sup> quidquid *Reid*

<sup>3</sup> <corpus> *Lambinus*: post <corpus> *lac. pos. Plasberg* <ei aliquid e numero vicinorum>      <sup>4</sup> corporeum *Reid*

**R110** (≠ DK) Plut. *Comm. not.* 39 1079E–F, 1080A

[. . . **D213**] ἐνταῦθα δὴ τὸν Δημόκριτον ἀποφαίνων ἀγνοοῦντα τὰς μὲν ἐπιφανείας φησὶ [Chrys. SVF 2.489] μήτ' ἴσας εἶναι μήτ' ἀνίσους, ἄνισα δὲ τὰ σώματα τῷ μήτ' ἴσας εἶναι μήτ' ἀνίσους τὰς ἐπιφανείας. [. . .] “ὡς γὰρ ὑφορᾶται περὶ τὸν κῶνον ἀναχαράξεις ἢ τῶν σωμάτων ἀνισότης δῆπουθεν οὐχ ἢ τῶν ἐπιφανειῶν ἀπεργάζεται.”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

you really suppose that the void is something, when the totality of things is so filled and stuffed that, whatever bodies moves a body, it yields and another body immediately moves into the place it left? Or that there are atoms to which, whatever is made from them, it is completely dissimilar? Or that anything magnificent can be produced without any mind? And that when in a single world there is this order that is so marvelous, there are innumerable worlds above, below, to the right, to the left, in front, behind, some dissimilar to it and others of the same kind? And that just as we are now at Bauli and are looking at Puteoli, in the same way there are innumerable [scil. other people] in the same places [scil. as ours], with the same names, honors, achievements, minds, appearances, and ages, discussing the same subjects? And that, if now or also while we are sleeping we seem to see something with our mind, it is because there are images that burst into our mind from outside through our body? As for you, you must not ascribe to such ideas, or assent to fictitious things: to have no opinion is better than to have such mistaken opinions!”

**R110** (≠ DK) Plutarch, *On Common Conceptions*

[. . .] It is at this point that Chrysippus, asserting that Democritus is ignorant, says that the surfaces are neither equal nor unequal, but that the bodies are unequal by reason of the fact that the surfaces are neither equal nor unequal. [. . .] “for the incisions in the cone that he views with suspicion are produced by the inequality of bodies, doubtless, and not by that of surfaces” [cf. **D213**].

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### *Democritus Among the Christians (R111–R114)*

**R111** (> A26) Tert. *Apol.* 46.11

Democritus excaecando semetipsum, quod mulieres sine concupiscentia aspicere non posset et doleret, si non esset potitus, incontinentiam emendatione profitetur. at Christianus salvis oculis feminas non videt; animo adversus libidinem caecus est.

**R112** (9.4 Leszl) Dion. Alex. *Nat.* in Eus. *PE* 14.24.1 et 14.25.1–2

πὼς αὐτῶν ἀνασχόμεθα τυχηρὰ λεγόντων εἶναι συμπτώματα τὰ σοφὰ καὶ διὰ τοῦτο καλὰ δημιουργήματα; [. . .] ἢ τὸν μέγαν τοῦτον οἶκον τὸν ἐξ οὐρανοῦ καὶ γῆς συνεστῶτα καὶ διὰ τὸ μέγεθος καὶ πλήθος τῆς ἐπιφαινομένης αὐτῷ σοφίας καλούμενον κόσμον ὑπὸ τῶν σὺν οὐδενὶ κόσμῳ φερομένων ἀτόμων κεκοσμήσθαι καὶ γεγονέναι κόσμον ἀκοσμίαν; πὼς δὲ κινήσεις καὶ ὁδοὺς εὐτάκτους ἐξ ἀτάκτου προάγεσθαι φορᾶς; πὼς δὲ τὴν παναρμόνιον τῶν οὐρανίων χορείαν ἐξ ἀμούσων καὶ ἀναρμόστων συνάδειν ὀργάνων;

**R113** (9.5 Leszl) Lact. *Ira Dei* 32–33

tanta ergo qui videat et talia, potest existimare nullo effecta esse consilio, nulla providentia, nulla ratione divina, sed ex micis subtilibus et exiguis concreta esse

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Democritus Among the Christians (R111–R114)*

#### **R111** (> A26) Tertullian, *Apology*

Democritus blinded himself [cf. **P33–P35**] because he was not capable of looking at women without lust and suffered distress if he could not possess them, and by this remedy he confesses his intemperance. By contrast, a Christian can preserve his eyes and still does not see women: he is blind in his soul toward lust.

#### **R112** (≠ DK) Dionysius of Alexandria, *On Nature*, in Eusebius, *Evangelical Preparation*

How can we endure that they [i.e. Democritus and the Epicureans] say that the works produced by wisdom, which for this very reason are beautiful, are accidents due to chance? [. . .] Or that this great habitation, composed out of the heaven and the earth, and called ‘world order’ (*kosmos*) on account of the magnitude and abundance of the wisdom manifested in it, has received its order on the basis of atoms moving without any order, and that the absence of order has become order? How is it possible for well-ordered movements and trajectories to be produced out of a disordered motion? How can the harmonious chorus of the heavenly bodies sing together using unmusical and dissonant instruments?

#### **R113** (≠ DK) Lactantius, *On the Wrath of God*

So whoever sees such great things and ones of such a nature [scil. as the world is composed of]—can he believe that they have been produced without plan, without providence, without divine reason, but that such great wonders

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tanta miracula? nonne prodigio simile est aut natum esse hominem qui haec diceret aut extitisse qui crederent, ut Democritum qui auditor eius fuit, vel Epicurum in quem vanitas omnis de Leucippi fonte profluxit?

**R114** (112.5 Leszl) Aug. *Ad Dioscor. Epist.* 118.27–28

quanto enim melius ne audissem quidem nomen Democriti quam cum dolore cogitarem nescio quem suis temporibus magnum putatum, qui deos esse arbitraretur imagines, quae de solidis corporibus fluerent solidaeque ipsae non essent, easque hac atque hac motu proprio circumeundo atque illabendo in animos hominum facere ut vis divina cogitetur, cum profecto illud corpus unde imago flueret quanto solidius est, tanto praestantius quoque esse iudicetur!

*Two Examples of Apocryphal  
Writings (R115–R116)*

*A Fictitious Autobiographical Statement about  
His Travels and Education (R115)*

Cf. **P16–P22**

**R115** (B299) Clem. Alex. *Strom.* 1.69.4–6 (et al.)

Δημόκριτος γὰρ τοὺς Βαβυλωνίους λόγους ἠθικοὺς<sup>1</sup>  
πεποιήται· λέγεται γὰρ τὴν Ἀκικάρου στήλην ἔρμη-

<sup>1</sup> ἠθικοὺς ms.: ἑλληνικοὺς Diels, alii alia

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

are the result of the aggregation of tenuous, tiny particles? Is it not almost a monstrosity, that a man capable of saying these things was born or that people capable of believing them existed, like Democritus, who was his [i.e. Leucippus'] student, or Epicurus, into whom this whole vacuity flowed down from the fountain of Leucippus?

**R114** (≠ DK) Augustine, *Letter to Dioscorus*

How much better it would have been if I had never even heard the name of Democritus than that I would have to think with pain that in his times someone was considered to be a great man who believed that gods were images that flowed from solid bodies without being solid themselves [cf. **D154**], and that such images, wandering here and there by their own motion and slipping into men's souls, made them think of divine power, for surely that body from which the image flows, the more solid it is, is considered to be more excellent too.

*Two Examples of Apocryphal  
Writings (R115–R116)  
A Fictitious Autobiographical Statement about  
His Travels and Education (R115)*

Cf. **P16–P22**

**R115** (B299) Clement of Alexandria, *Stromata*

For Democritus has made the discourses of the Babylonians ethical (?). For he is said to have inserted a transla-



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νευθείσαν τοῖς ἰδίοις συντάξαι συγγράμμασι κᾶστιν ἐπισημήνασθαι <τὰ><sup>2</sup> παρ' αὐτοῦ, “τάδε λέγει Δημόκριτος” γράφοντος.<sup>3</sup> [5] ναὶ μὴν καὶ περὶ αὐτοῦ<sup>4</sup> σεμνυνόμενός φησί που ἐπὶ τῇ πολυμαθία· “ἐγὼ δὲ τῶν κατ' ἑμαυτὸν ἀνθρώπων γῆν πλείστην ἐπεπλανησάμην, ἱστορέων τὰ μήκιστα, καὶ ἀέρας τε καὶ γέας πλείστας εἶδον, καὶ λογίων ἀνθρώπων πλείστων ἐπήκουσα,<sup>5</sup> καὶ γραμμέων συνθέσι<sup>6</sup> μετὰ ἀποδείξεως οὐδεὶς κώ με παρήλλαξεν, οὐδ' οἱ Αἰγυπτίων καλεόμενοι Ἄρπεδονάπται,<sup>7</sup> σὺν τοῖς δ'<sup>8</sup> ἐπὶ πᾶσιν ἐπ' ἔτε' †ὀγδώκοντα†<sup>9</sup> ἐπὶ ξείνης ἐγενήθην.” [6] ἐπήλθε γὰρ Βαβυλῶνά τε καὶ Περσίδα καὶ Αἴγυπτον τοῖς τε Μάγοις καὶ τοῖς ἱερεῦσι μαθητεύων.

<sup>2</sup> <τὰ> Jackson <sup>3</sup> κᾶστιν . . . γράφοντος ms.: κᾶτα . . . γράφων Bernays <sup>4</sup> ἦ hab. ms. post αὐτοῦ, del. Stählin: δὴ Schwartz <sup>5</sup> ἐπήκουσα Eus. PE 10.4.23: ἐσ- ms. <sup>6</sup> συνθέσι Dindorf: συνθέσιος ms.: καὶ <περὶ> γρ. συνθέσιος Schwartz <sup>7</sup> ἄρπεδοναύται Eus. <sup>8</sup> σὺν τοῖς δ' ms.: οἷς Eus.: post τοῖς lac. stat. Wilamowitz <sup>9</sup> ὀγδώκοντα mss.: πέντε coni. Stählin e Diod. Sic. 1.98.3

### *A Letter to Hippocrates (R116)*

**R116** (< C6) Ps.-Hipp. *Epist.* 23 (9.392–93 Littré)

Δημόκριτος Ἱπποκράτει περὶ φύσιος ἀνθρώπου.

χρὴ πάντας ἀνθρώπους ἱητρικὴν τέχνην ἐπίστασθαι, ὦ Ἱππόκρατες, καλὸν γὰρ ἅμα καὶ

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

of the stela of Akikaros<sup>1</sup> into his own writings; and one can distinguish what derives from him by his writing, “Democritus says the following.” Indeed, he also says somewhere, putting on airs about his polymathy, “I myself, of all the men of my times, have traveled through the most of the world, investigating the farthest, and I have seen the most airs and lands and have listened to the most men of learning, and in the composition of demonstrative writings no one has ever surpassed me, not even the so-called Harpedonapts [i.e. the ‘Cord-Stretchers’ or geometers] of the Egyptians. With these I spent as many as †eighty† years abroad on all subjects.”<sup>2</sup> For he went to Babylon, Persia, and Egypt, studying with the Magi and the priests.

<sup>1</sup> A legendary Babylonian sage to whom many proverbs were attributed in a number of ancient cultures. <sup>2</sup> The sentence is obscure and probably corrupt. In any case it is easy to correct ‘80’ to ‘5’ in Greek.

### *A Letter to Hippocrates (R116)*

**R116** (< C6) Ps.-Democritus, *Letter to Hippocrates*

Democritus to Hippocrates on the nature of man.

All men ought to know the art of medicine, Hippocrates, for it is a fine thing and at the same time

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ξυμφέρουν ἐς τὸν βίον, τουτέων δὲ μάλιστα τοὺς παιδείας καὶ λόγων ἰδρίας γεγεννημένους. ἱστορίην σοφίης γὰρ δοκέω ἱητρικῆς ἀδελφὴν καὶ ξύνοικον· σοφίη μὲν γὰρ ψυχὴν ἀναρύεται παθέων, ἱητρικὴ δὲ νούσους σωμάτων ἀφαιρέεται [. . .].

*Democritus and Bolus of Mendes (R117–R120)*

**R117** (< B300.3) *Colum. Agric.* 7.5.17

sed Aegyptiae gentis auctor memorabilis Bolus Mendesius, cuius commenta quae appellantur graece *Χειρόκμητα* sub nomine Democriti falso produntur [. . .].

**R118**

**a** (B300.1) *Suda* B.482

Βῶλος, Μενδήσιος, Πυθαγόρειος. Περὶ τῶν ἐκ τῆς ἀναγνώσεως τῶν ἱστοριῶν εἰς ἐπίστασιν ἡμᾶς ἀγόντων, Περὶ θαυμασίων, Φυσικὰ δυναμερά· ἔχει δὲ περὶ συμπαθειῶν καὶ ἀντιπαθειῶν λίθων κατὰ στοιχείον· Περὶ σημείων τῶν ἐξ ἡλίου καὶ σελήνης καὶ ἄρκτου καὶ λύχνου καὶ ἱριδος.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

useful for life, and belongs most of all to those men who have become expert in education and discourses. For I think that the search for wisdom is the sister and housemate of medicine. For wisdom rescues the soul from passions, while medicine removes illnesses from bodies [. . .].

### *Democritus and Bolus of Mendes*<sup>1</sup> (R117–R120)

<sup>1</sup> A Neopythagorean philosopher, probably active in Egypt in the third century BC, to whom numerous esoterical and paradoxographical treatises were attributed. He was said to have been a Democritean, and some of his writings were attributed to Democritus himself.

#### **R117** (< B300.3) Columella, *On Agriculture*

But the celebrated Egyptian author Bolus of Mendes, whose treatises, entitled *Artifices* (*Kheirokmêta*) in Greek, circulate under the pseudonym of Democritus [. . .].

#### **R118**

##### **a** (B300.1) *Suda*

Bolus of Mendes, Pythagorean. *On Passages from Reading Histories That Attract Our Attention; On Marvels; Potent Natural Remedies* (it contains [scil. material] on sympathies and antipathies of stones, arranged alphabetically); *On the Signs from the Sun, the Moon, the Great Bear, the Lantern* (?), *and the Rainbow*.

**b** (B300.1) *Suda* B.481

Βῶλος, Δημοκρίτειος,<sup>1</sup> φιλόσοφος. Ἱστορίαν καὶ Τέχνην ἰατρικήν. ἔχει δὲ ἰάσεις φυσικὰς ἀπὸ τινων βο-  
ηθημάτων τῆς φύσεως.

<sup>1</sup> Δημόκριτος mss., corr. Holstenius

**c** (78. vol. II, p. 251.21–23) *Apoll. Mir.* 31

ἄψυθος [. . .] ἔστι καὶ εἶδος φυτοῦ, περὶ οὗ Βῶλος ὁ  
Δημοκρίτειος [. . .].

**R119**

**a** (B300.4) *Schol. in Nic. Ther.* 764a

Βῶλος<sup>1</sup> δὲ ὁ Δημοκρίτειος ἐν τῷ Περὶ συμπαθειῶν καὶ  
ἀντιπαθειῶν [. . .].

<sup>1</sup> Ῥῶλος codd., corr. Holstenius

**b** (B300.10) *Tat. Orat. ad Graecos* 16.17

[. . .] περὶ γὰρ τῶν κατὰ τὸν Δημόκριτον ξυμπαθειῶν  
τε καὶ ἀντιπαθειῶν τί καὶ λέγειν ἔχομεν ἢ τοῦθ' ὅτι  
κατὰ τὸν κοινὸν λόγον ἀβδηρολόγος ἐστὶν ὁ ἀπὸ τῶν  
Ἀβδήρων ἄνθρωπος;

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **b** (B300.1) *Suda*

Bolus, Democritean, philosopher. *History* and *The Art of Medicine* (it contains natural remedies deriving from certain resources provided by nature).

### **c** (78. vol. II, p. 251.21–23) Apollonius, *Wonders*

*Apsynthus*: [. . .] there is also a species of plant about which Bolus the Democritean [scil. speaks] [. . .].

## **R119**

### **a** (B300.4) Scholia on Nicander's *Theriaca*

Bolus the Democritean in his work *On Sympathies and Antipathies* [. . .].<sup>1</sup>

<sup>1</sup> There are many other testimonia to the extraordinary popularity of the work on sympathies and antipathies that was attributed to Democritus.

### **b** (B300.10) Tatian, *Oration to the Greeks*

[. . .] For with regard to the sympathies and antipathies according to Democritus, what can we say except that that man from Abdera is, to use the common expression, a prattler of stupidities (*abdêrologos*)?<sup>1</sup>

<sup>1</sup> A play on words on the name of Abdera, Democritus' native city.

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### **R120** (B300.7)

**a** Plin. *Nat. hist.* 28.112

[. . .] chamaeleonem, peculiari volumine dignum existimatum Democrito [. . .].

**b** Aul. Gell. *Noct.* 10.12.6–8

his portentis atque praestigiis a Plinio Secundo scriptis non dignum<sup>1</sup> esse cognomen Democriti puto [. . .]. multa autem videntur ab hominibus istis male sollertibus huiusmodi commenta in Democritii nomen data nobilitatis auctoritatisque eius perfugio utentibus.

<sup>1</sup> indignum B

### *Democritus the Doctor* (R121–R124)

**R121** (188.5 Leszl) Ruf. Ephes. in Oribas. *Coll. med.* 44.14.1

[. . .] περὶ τούτου Δημόκριτός φησιν ὅτι μολύβδου μετὰ φοινικείου<sup>1</sup> περιαφθέντος ἢ τὸ παράπαν ἀφλέγματος γίνεται ἢ πολλῶ δὴ ῥηίζει.

<sup>1</sup> φοινικίου R, corr. Raeder

**R122** (B300.7) Aul. Gell. *Noct.* 4.13.3

viperarum morsibus tibicinium scite modulateque adhibitum mederi refert etiam Democriti liber, qui inscri-

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### **R120** (B300.7)

**a** Pliny, *Natural History*<sup>1</sup>

[. . .] the chameleon, which was deemed by Democritus to merit his dedicating a whole volume to it [. . .].

<sup>1</sup> This is only one of numerous references by Pliny to ‘Democritus’ = (Ps.-) Democritus, cf. B300.8 DK.

**b** Aulus Gellius, *Attic Nights*

I think that the name of Democritus is unworthy of these marvels and delusions of which Pliny the Elder speaks in his writings [. . .]. But many forgeries seem to have been published in this way under the name of Democritus by men lacking in intelligence who wanted to take advantage of the safety provided by his celebrity and authority.

### *Democritus the Doctor (R121–R124)*

**R121** (≠ DK) Rufus of Ephesus in Oribasius, *Medical Collections*

[. . .] about this [i.e. a kind of swelling sometimes accompanied by fever], Democritus says that if lead is applied around the area together with the fruit of a date palm, he [i.e. the patient] is completely freed of fever or certainly is very much relieved.

**R122** (B300.7) Aulus Gellius, *Attic Nights*

A book of Democritus too, entitled <. . .>, reports that snakebites can be cured if pipes are played expertly and



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bitur <. . .><sup>1</sup> in quo docet plurimis hominum morbidis  
medicinae fuisse inctiones tibiaram.

<sup>1</sup> <Περὶ λοιμῶν> Hertz: <Περὶ συμπαθειῶν> Diels

**R123** (cf. B300.10) Cael. Aurel. *Celer. pass.*

**a** 3.15.120

[. . .] Democritus [. . .] non solum hanc memoravit  
esse passionem, sed etiam eius causam tradidit, cum de  
opisthotonicis scriberet.

**b** 3.14.112

vicina etiam quaestio est supradictae, quisnam in hydro-  
phobicis locus corporis patiat. e<t> quidem<sup>1</sup> Democritus,  
cum de emprosthotonicis diceret, nervos inquit, coniciens  
hoc ex corporis conductione atque veretri<sup>2</sup> tentigine.

<sup>1</sup> equidem *ed. Guinterii, corr. Bendz*  
*Rovilliana: veteri ed. Guinterii*

<sup>2</sup> veretri coni. *ed.*

**c** 3.16.132–33

antiquorum autem medicorum nullus istius passionis  
tradidit curationem. [. . .] Democritus vero iubet origani  
decoctionem dari atque ipsum poculum, quod<sup>1</sup> bibunt, in  
sphaerae rotunditatem formari. [133] est autem hoc genus

<sup>1</sup> quo *ed. Rovilliana*

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

rhythmically; in this book he explains that for many sick men the melodies of pipes were medicinal.<sup>1</sup>

<sup>1</sup> **R122** and **R123** are both assigned by DK to Bolus.

**R123** (cf. B300.10) Caelius Aurelianus, *Acute Maladies*

**a**

[. . .] Democritus [. . .] not only mentioned this disease [i.e. hydrophobia], but he also indicated its cause when he wrote about those who suffer from a general contraction of the extensor muscles (*opisthotonos*).

**b**

A question closely connected with the one mentioned above [scil. whether hydrophobia is a disease of the soul or of the body] is which part of the body is affected in hydrophobic patients. And Democritus, when he wrote about those who suffer from a general contraction of the flexor muscles (*emprosthotonos*), said it was the nerves, inferring this from the contraction of the body and from the tension of the penis.

**c**

Of the ancient medical writers, no one has indicated a treatment for this disease [i.e. hydrophobia]. [. . .] But Democritus says that a decoction of oregano should be administered and that the cup itself from which they drink should have the shape of a sphere. But this kind of decoc-

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decoctionis acerrimum atque stomachum vexans et incendens. in quo etiam idem sibi repugnare perspicitur: ait enim hydrophobiam esse incendium nervorum.

**R124** (B300.20) P. Lugd. Bat. J 384 (PGM 12.351–64)

Δημοκρίτου Σφαῖρα. προγνωστικὸν ζωῆς καὶ θανάτου.  
 γνῶθι πρὸς τίνα<sup>1</sup> σελήνην ἀνέπεσε νοσῶν καὶ τὸ  
 ὄνομα τὸ ἐκ γενετῆς<sup>2</sup> συνψήφισον τῇ σελήνῃ καὶ  
 βλέπε, πόσαι<sup>3</sup> τρικυακάδες γίνονται, καὶ τὰ περιλει-  
 πόμενα τοῦ ἀριθμοῦ κατανόησον εἰς τὴν 'σφαῖραν'.  
 καὶ ἂν ᾗ ἄνω ἢ ψῆφος, ζήσῃ, ἐὰν δὲ κάτω, τελευτή-  
 σῃ.

α	ι	ιθ
β	ια	κ
γ	ιγ	κγ
δ	ιδ	κε
ζ	ις	κς
θ	ιζ	κζ
ε	ιε	κβ
ς	ιη	κη
η	κα	κθ
ιβ	κδ	λ

<sup>1</sup> τήν pap., corr. Diels

<sup>2</sup> γεννετῆς pap., corr. Leemans

<sup>3</sup> ποσταια pap., corr. Dieterich

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is very sharp, and it irritates and inflames the stomach. So one sees that he contradicts himself on this point: for he says that hydrophobia is an inflammation of the nerves.

### **R124** (B300.20) Leiden Magical Papyrus

Democritus' *Sphere*. Prognostic for life and death. Find out at what moon [i.e. on which day of the month] he took to bed sick, add [scil. the number represented by the letters of] his birth name<sup>1</sup> to the moon, see how many periods of thirty are produced [i.e. how many times 30 can be divided into the result], and check the remainder of the number in the 'sphere': if the number calculated falls in its higher part he will live, but if in the lower one he will die.

1	10	19
2	11	20
3	13	23
4	14	25
7	16	26
9	17	27
5	15	22
6	18	28
8	21	29
12	24	30

<sup>1</sup> In ancient Greece, numbers were represented by letters, and hence the numerical values of the letters in a name could be added up to produce a sum.

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### *Democritus the Alchemist (R125–R127)*

#### *Alleged Egyptian Sources (R125)*

#### **R125**

**a** (< B300.16) Sync. *Chron.*, pp. 297–98

ἐν Αἰγύπτῳ μνηθεὶς ὑπὸ Ὅστανου τοῦ Μήδου [. . .] ἐν τῷ ἱερῷ τῆς Μέμφεως σὺν ἄλλοις ἱερεῦσι καὶ φιλοσόφοις, ἐν οἷς ἦν καὶ Μαρία τις Ἑβραία σοφὴ καὶ Παμμένης, συνέγραψε περὶ χρυσοῦ καὶ ἀργύρου καὶ λίθων καὶ πορφύρας λοξῶς, ὁμοίως δὲ καὶ Μαρία. ἀλλ' οὗτοι μὲν Δημόκριτος καὶ Μαρία ἐπηνέθησαν παρὰ Ὅστανου<sup>1</sup> ὥς πολλοῖς καὶ σοφοῖς αἰνίγμασι κρύψαντες τὴν τέχνην, Παμμένους δὲ κατέγνωσαν ἀφθόνως γράψαντος.

<sup>1</sup> παρὰ στάνου mss., corr. Goar

**b** (B300.17) Ps.-Synes. *ad Diosc. Comm. in Democritum* (p. 57.6–8, 8–15 *Coll. Alchim.*)

Δημόκριτος ἐλθὼν ἀπὸ Ἀβδήρων φυσικὸς ὢν καὶ πάντα τὰ φυσικὰ ἐρευνήσας καὶ συγγραψάμενος τὰ ὄντα κατὰ φύσιν. [. . .] ἐγένετο δὲ ἀνὴρ λογιώτατος, ὃς ἐλθὼν ἐν Αἰγύπτῳ ἐμυσταγωγήθη παρὰ τοῦ μεγάλου Ὅστανου ἐν τῷ ἱερῷ τῆς Μέμφεως σὺν καὶ πᾶσι τοῖς ἱερεῦσιν Αἰγύπτου. ἐκ τούτου λαβὼν ἀφορμὰς συνεγράψατο βίβλους τέσσαρας βαφικὰς, περὶ χρυσοῦ καὶ ἀργύρου καὶ λίθων καὶ πορφύρας. λέγω

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Democritus the Alchemist (R125–R127)*<sup>1</sup>

<sup>1</sup> We provide only a few brief excerpts in order to give some sense of the nature of these texts. Cf. Martelli, *Scritti alchemici* (see the introduction to this chapter).

### *Alleged Egyptian Sources (R125)*

#### **R125**

##### **a** (< B300.16) Syncellus, *Chronicle*

He [i.e. Democritus], having been initiated into the mysteries in Egypt by Ostanēs<sup>1</sup> the Mede [. . .] in the temple of Memphis, together with other priests and philosophers, among whom was also a wise Jewish woman named Maria, and Pammenes, wrote about gold, silver, precious stones, and purple dye, in a riddling style, just as Maria did too. But whereas Democritus and Maria were praised by Ostanēs for having concealed their craft by means of many wise enigmas, they condemned Pammenes for having written about it unreservedly.

<sup>1</sup> A legendary Persian mage and alchemist.

##### **b** (B300.17) Ps.-Synesius, *To Dioscorus, Commentary on Democrates*

Democritus, who came from Abdera, was a natural philosopher and investigated all natural phenomena and wrote treatises about the things that exist according to nature [. . .]. He became a most learned man: he came to Egypt and was initiated into the mysteries by the great Ostanēs in the temple of Memphis, together with all the priests of Egypt. Taking his inspiration from him, he composed four books on dyes, on gold, silver, precious stones,

δή, τὰς ἀφορμὰς λαβὼν συνεγράψατο παρὰ<sup>1</sup> τοῦ μεγάλου Ὀσπάνου. ἐκεῖνος γὰρ ἦν πρῶτος ὁ γράψας ὅτι “ἡ φύσις τῇ φύσει τέρπεται καὶ ἡ φύσις τὴν φύσιν κρατεῖ καὶ ἡ φύσις τὴν φύσιν νικᾷ [ . . ].”

<sup>1</sup> συνεγράψατο γὰρ Fabricius

c (B300.18) Ps.-Democr. *Lib. 5 ad Leucippum* (pp. 53.18–54.11 *Coll. Alchim.*)

ἰδοὺ μὲν ὁ ἦν, ὃ Λεύκιππε, περὶ τουτέων τῶν τεχνῶν τῶν Αἰγυπτίων <ἐν ταῖς τῶν><sup>1</sup> προφητέων Περσικαῖς<sup>2</sup> βίβλοις, ἔγραψα τῇ κοινῇ διαλέκτῳ, πρὸς ἣν δὴ μάλιστα ἀρμόζονται· ἡ δὲ βίβλος οὐκ ἔστι κοινή. αἰνίγματα γὰρ ἔχει μυστικὰ παλαιά τε καὶ ὠγύγια<sup>3</sup> ἅπερ οἱ πρόγονοι καὶ θεοὶ<sup>4</sup> Αἰγύπτου βασιλεῖς τοῖς Φοίνιξι ἀνέθεντο.<sup>5</sup> ἐγὼ δὲ ὁ φίλος σου ὠγυγίοις<sup>6</sup> αἰνίγμασιν χρήσομαι ἃ δὴ γεγράφαται<sup>7</sup> μοι τοῖς Αἰγυπτίων παισίν. ἀλλὰ σοί, ἰατρέ, καὶ δι’ ἐρμηνέως<sup>8</sup> πάντα οὐ παύσομαι ἀναφανδὸν ἐνεξηγούμενος. περιέχει δὲ ἡ συγγραφὴ λεύκωσιν τε καὶ ξάνθωσιν ἢ χαλκολίθου τε μαλάξιας καὶ ἐψήσιας καὶ ἕως βαφικῆς, ὕστερον δὲ ὅσα πάλιν παράδοξα γίγνεται ἐξ αὐτοῦ τοῦ χαλκοῦ καὶ κινναβάρεως, ἔχε ποιῆσαι χρυσὸν <ἐκ τῆς><sup>9</sup> καδμίας τε καὶ ἄλλων εἰδῶν, καὶ καύσεων πάλιν <καὶ><sup>10</sup> ἐπιπλοκῶν ὅσα παράδοξα γίγνεται.

<sup>1</sup> <ἐν ταῖς τῶν> Ruelle      <sup>2</sup> προφήταις Περσικοῖς ms., corr. Diels      <sup>3</sup> ὅσα ὠγιά ms., corr. dub. Diels      <sup>4</sup> θεία ms., corr. Diels      <sup>5</sup> τῆς πηλιξοὶ ἀνταιθήντο ms., corr. Ruelle

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

and purple dye. And I say indeed that he wrote them under the inspiration of the great Ostanēs. For he [i.e. Ostanēs] was the first one to write that “nature takes pleasure in nature and nature is stronger than nature and nature conquers nature” [cf. **R127b**].

**c** (B300.18) Ps.-Democritus, *Book 5, Addressed to Leucippus*

Look, Leucippus, at what there was about all those crafts of the Egyptians <contained in the> Persian books of the prophets: I have written them in the common dialect, which is the most appropriate one for them. But the book is not common. For it contains ancient and primeval mystical enigmas, which the ancestral and divine kings of Egypt bestowed upon the Phoenicians. I myself, your friend, shall make use of the primeval enigmas that the sons of the Egyptians wrote down for me. But for you, doctor, I shall not cease to explain them all clearly by interpreting them. The treatise includes dyeing white and dyeing yellow, and ways to soften copper and to boil it and even to dye it, and then all of the astonishing things that are produced in turn out of the bronze itself and cinnabar: be able to make gold <out of> cadmia<sup>1</sup> and other varieties, and again all the astonishing things that are produced out of burnings <and> alloyings.

<sup>1</sup> An oxide of zinc.

<sup>6</sup> ὥς ὑγείης ms., corr. dub. Diels

ms., corr. Diels

τῆς> Ruelle

<sup>8</sup> διηγεργμένος ms., corr. Diels

<sup>10</sup> <καὶ> Ruelle

<sup>7</sup> οὐδεὶς γεγράφαι

<sup>9</sup> <ἐκ



## EARLY GREEK PHILOSOPHY VII

### *Renown for His Magical Practices (R126)*

#### **R126**

**a** (B300.6) Petron. *Sat.* 88.2

priscis enim temporibus, cum adhuc nuda virtus placeret, vigeabant artes ingenuae summumque certamen inter homines erat, ne quid profuturum saeculis diu lateret. itaque hercule herbarum omnium sucos Democritus expressit, et ne lapidum virgultorumque vis lateret, aetatem inter experimenta consumpsit.

**b** (B300.14) Sen. *Epist.* 90.32–33

“Democritus” inquit [scil. Posidonius, cf. Frag. 284 Edelstein-Kidd] “invenisse dicitur fornicem, ut lapidum curvatura paulatim inclinatum medio saxo alligaretur.” hoc dicam falsum esse: necesse est enim ante Democritum et pontes et portas fuisse, quarum fere summa curvantur. excidit porro vobis eundem Democritum invenisse quemadmodum ebur molliretur, quemadmodum decoctus calculus in zmaragdum converteretur, qua hodieque coctura inventi lapides <in><sup>1</sup> hoc utiles colorantur.

1 <in> Schweighäuser

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Renown for His Magical Practices (R126)*

#### **R126**

**a** (B300.6) Petronius, *Satyricon*

In ancient times, when naked virtue was still pleasing, the liberal arts flourished and the greatest contention among men was to prevent anything that might benefit the ages from remaining hidden for long. And so, by god, Democritus extracted the juice of all the herbs and spent his whole life performing experiments in order to prevent the power of stones and bushes from remaining hidden.

**b** (B300.14) Seneca, *Letters to Lucilius*

“Democritus,” he [i.e. Posidonius] says, “is reported to have invented the arch, whereby the curvature of stones leaning little by little would be held fast by a keystone.” This I would declare to be false: for of necessity there existed before Democritus both bridges and gates, the top parts of which are generally curved. Furthermore, you seem to have forgotten that this same Democritus discovered how ivory could be softened, how a pebble could be transformed into an emerald by being boiled—the very same procedure by which even today stones are colored that have been found to be useful for this purpose.

## EARLY GREEK PHILOSOPHY VII

### *A Few Sample Recipes (R127)*

#### **R127**

**a** (< B300.19) Δημοκρίτου Παίγνια (P. Lond. 121 = PGM 7.167–75)

[1] τὰ χαλκῇ χρυσᾷ ποιῆσαι φαίνεσθαι· θείον ἄπυρον μετὰ τῆς<sup>1</sup> κρητηρίας μείξας ἔκμασσε.

[2] ὠδὸν ὄμιον μήλω<sup>2</sup> γενέσθαι· ζέσας τὸ ὠδὸν χρεῖε κρόκῳ μείξας μετ' οἴνου.

[3] μάγειρον μὴ δύνασθαι τὴν πυρὰν ἀνάψαι· βοτάνην αἰί[ζω]ον<sup>3</sup> θὲς αὐτοῦ εἰς τὴν ἐστίαν.

[4] φαγόντα σκόρδον μὴ ὄζειν· [ρ]ίξας <σ>εύτλου<sup>4</sup> ὀπτήσας φάγε.

[5] γραῦν μήτε πολλὰ λαλεῖν μήτε πολλὰ πίνειν· πίτυν κόψας βάλε αὐτῆς εἰς τὸ κράμμα.<sup>5</sup>

<sup>1</sup> γῆς Wessely      <sup>2</sup> μηλον pap., corr. Wessely      <sup>3</sup> suppl. Wessely  
<sup>4</sup> ]ιζασενγλου pap., suppl. et corr. Wessely et Dieterich      <sup>5</sup> κρᾶμα Dieterich

**b** (p. 192.97–107 Martelli) Δημοκρίτου περὶ πορφύρας καὶ χρυσοῦ ποιήσεως· φυσικὰ καὶ μυστικὰ 9–10

[9] τὴν κιννάβαριν λευκὴν ποίει δι' ἐλαίου ἢ ὄξους ἢ μέλιτος ἢ ἄλμης ἢ στυπτηρίας· εἶτα ξανθὴν διὰ μίσσος ἢ σώρεως ἢ χαλκάνθου ἢ θείου ἀπύρου ἢ ὡς ἐπινοεῖς. καὶ ἐπίβαλλε ἀργύρῳ· καὶ χρυσὸς ἔσται, ἐὰν χρυσὸν καταβάπτῃς.<sup>1</sup> ἐὰν χαλκόν, ἥλεκτρον. ἢ φύσις τῇ φύσει τέρεται.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *A Few Sample Recipes (R127)*

#### **R127**

**a** (< B300.19) *Democritus' Games*

[1] To make bronze seem to be gold: mix unburned sulfur with chalk (?), then wipe it off [scil. after having smeared it on].

[2] An egg to become similar to an apple: boil the egg, then smear it with egg yolk mixed with wine.

[3] To make a cook unable to light his fire: put some house-leek into his hearth.

[4] To eat garlic without stinking: cook beetroots and eat them.

[5] So that an old woman neither talks a lot nor drinks a lot: chop up some pine and throw it into her mixed wine.<sup>1</sup>

<sup>1</sup> The papyrus goes on to provide seven other (partially illegible) recipes.

**b** (≠ DK) Democritus, *On the Fabrication of Purple and Gold: Natural and Mystical Matters*

[9] Make cinnabar white with oil, vinegar, honey, brine, or alum; then make it yellow with copper ore, melanterite, chalcanthite, unburned sulfur, or as you please. And throw it on silver: and gold will be formed if you dip gold into it;<sup>1</sup> or electrum, if you dip copper. Nature takes pleasure in nature.

<sup>1</sup> The expression is strange and the text may be corrupt: cf. Martelli, *Scritti alchemici*, pp. 312–13, n. 55.

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<sup>1</sup> *καταβάπτει* mss., corr. Martelli

## EARLY GREEK PHILOSOPHY VII

[10] τὴν δὲ Κυπρίαν καδμίαν, τὴν ἐξωσμένην λέγω, λεύκαινε ὡς ἔθος. εἶτα ποιεῖ ξανθίνην· ξανθώσεις δὲ χολῇ μωσχαία ἢ τερεβινθίνη ἢ κικίνῳ ἢ ῥαφανίνῳ ἢ ῥῶν λεκίθοις, ξανθῶσαι αὐτὴν δυναμένοις, καὶ ἐπιβαλλε ἀργύρῳ· χρυσὸς γὰρ ἔσται διὰ τὸν χρυσὸν καὶ διὰ τὸ χρυσοζώμιον. ἢ γὰρ φύσις τὴν φύσιν νικᾷ.

### *Two Aphorisms Attributed to Democritus in Syriac (R128)*

## R128

a (B303) *Studia Sinaitica* 1, pp. 34–35

[illegible]

**b** (B304) *Studia Sinaitica* 1, p. 38

והנחיתו עליהם את המטה, ונאמרו להם: הנה אנחנו נאמרים לכם, ואתם תאמרו: לא נאמור לכם, ואתם תאמרו: לא נאמור לכם.

<sup>1</sup> Translated from the French translation by Henri Hugonnard-Roche.

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

[10] Whiten Cyprian cadmia, I mean that which has been expelled [scil. from the mineral], as is customary. Then make it yellow: turning it yellow with calf's bile, terebinth resin, castor oil, beet juice, or egg yolk, substances that possess the property of turning it yellow, and throw it on silver. For gold will be formed thanks to the gold and the gold liquor. Nature conquers nature.

### *Two Aphorisms Attributed to Democritus in Syriac (R128)*

**R128** From a Syriac collection of Greek sayings

**a** (B303)

Democritus said, "Wise people, when they go to a foreign country that is not their own, should gather information silently and tranquilly, watching and listening to the reputation belonging to the condition of the sages who live there: how they are, and whether they themselves can measure up to these sages, by secretly weighing their words in comparison with their own. And when they have weighed them and seen which group is better than the other one, only then should they reveal the wealth of their wisdom, in order to be praised for the treasure that they possess, enriching the others by its means. And when their own is too small for them to be able to spend anything from it, then they take from the others and leave."

**b** (B304)

Democritus said, "I myself know that I do not know anything."<sup>1</sup>

## EARLY GREEK PHILOSOPHY VII

### *Leucippus and Democritus in The Assembly of Philosophers (R129)*

**R129** (≠ DK) *Turba Phil.* Sermo VI, p. 362.5-18 Lacaze

ait Lucas: “vos non nisi de his quatuor naturis loquimini, et unumquemque vestrum iam aliquid video dixisse. ego autem vobis notifico omnia quae Deus creavit ex his esse quatuor naturis, et quae ex his creata sunt, ad eas revertuntur; in quibus creaturae et generantur et moriuntur, et omnia prout Deus praedestinavit.”

inquit Democrites qui Lucae est discipulus: “bene dixisti, magister, cum de quatuor naturis tractavisti.”

ait Arisleus: “quoniam, Democrites, a Luca scientiam habuisti, non deberes praesumere cum magistri tui paribus loqui.”

respondit Lucas: “quamvis naturarum scientiam a me Democrites habuisset, habuit tamen ab Indorum philosophis et Babiloniensibus; puto etiam contemporaneos suos hac ipsum scientia superare.”

respondit Turba: “perveniens hic in illam aetatem non parum placebit; nunc autem iuvenili constitutus aetate, fari non debet.”

## ATOMISTS (LEUCIPPUS, DEMOCRITUS)

### *Leucippus and Democritus in The Assembly of Philosophers (R129)*

#### **R129** (≠ DK) *The Assembly of Philosophers*

Lucas [i.e. Leucippus] said: “You all speak about nothing except about these four natures, and I see that each one of you has already said something. But I inform you that God created all things from these natures and that what is created from them returns to them; it is in these things that creatures are both generated and destroyed, and all as God has predestined them.”

Democritus, who is Lucas’ student, said: “You have spoken well, Master, when you discussed the four natures.”

Arisleus [i.e. Archelaus] said: “Since, Democritus, you have your knowledge from Lucas, you should not make so bold as to speak with the peers of your teacher.”

Lucas answered: “Although Democritus has obtained the knowledge of natural things from me, nonetheless he has also received it from the philosophers of the Indians and Babylonians. I even believe that he surpasses his contemporaries in this knowledge.”

The Assembly answered: “When he arrives at maturity he will be pleasing in no small measure; but for the time being, since he is of a youthful age, he should not speak.”



The first edition of the Loeb *Early Greek Philosophy* contained errors of various kinds – inconsistencies, inconcinnities, typographical slips, errors in orthography and punctuation, larger and smaller omissions, mistaken or outdated references, minor and more serious outright mistakes in translation, but also decisions regarding the text, translation, and/or interpretation of extremely difficult and controversial passages on which we have come in the meantime, after further reflection and advice, to adopt a somewhat different view from that reflected in the first edition. The editors, André Laks and I, expect that these errors will all be corrected in a forthcoming second edition. In the meantime, we are making available here the list of corrigenda of all sorts that we and others have noted so far. We have also taken the opportunity provided by the forthcoming second edition to update references to new critical editions of some of the authors involved and to add to the bibliographies a very few significant works of secondary scholarship that have appeared recently.

The list will be updated periodically.

These corrigenda are intended to be understood as André Laks' and my wholly self-published and preliminary plans for the second edition, and not as official supplements. Should scholars wish to cite them, they may of course do so as they would any other document posted on a personal website, specifying the date of the list and the date retrieved.

The corrections take the following form:

- volume, page, line number(s);
- then the erroneous version, with the erroneous letters indicated by highlighting and strikethrough;
- then the symbol >;
- then the correct version, with the correct letters indicated by highlighting.

We are deeply grateful to numerous friends and colleagues who have pointed out errors to us, and we would welcome any and all further corrections, which should be sent to both [most@sns.it](mailto:most@sns.it) and [laks.andre@gmail.com](mailto:laks.andre@gmail.com).

A corresponding list for the Fayard edition *Les Débuts de la philosophie* will be posted on the academia.edu site of André Laks.

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## LOEB CORRIGENDA POST PUBLICATION 2018.02.21

Vol. 7, p. 6, line 6:

*Sinesi.*

>

*Sinesio.*

Vol. 7, p. 14, line 2:

*Epicuruse*

>

*Epicurus*

Vol. 7, p. 25, P16a, line 3:

Herodotus reports

>

Herodotus too reports

Vol. 7, p. 40, line 6:

ὁδοῦ

>

ὁδοῦ

Vol. 7, p. 43, line 6 from the bottom:

a smile, <sup>2</sup>for

>

a smile, “for

Vol. 7, p. 46, P46 lemma:

**P46** (A21) Sotion ~~ἦρα 2~~ in Stob. 3.20.53

>

**P46** (A21) Sotion ~~ἦρα 2~~ in Stob. 3.20.53

Vol. 7, p. 47 middle, end of note 1:

**R59**).

>

**R99**).

Vol. 7, p. 48, P48a, app. crit.:

aliqui

>

aliqua

Vol. 7, p. 50, 2<sup>nd</sup> line from bottom:

~~αὐτοῦ~~

>

αὐτοῦ

Vol. 7, p. 51, line 4 from the bottom:

never comes second –

>

is never inferior to himself –

Vol. 7, p. 62, 2 lines from the bottom:

~~οἷκαυ~~

>

οἷκαυ

Vol. 7, p. 62, last line:

continens

>

continentem

Vol. 7, p. 64, line 9 from bottom:

continens

>

continentem

Vol. 7, p. 66, line 6:

continens

>

continentem

Vol. 7, p. 66, lines 8-9:

Ἄστρονομίη,  
>  
Ἄστρονομίη,

Vol. 7, p. 67, last line:

continentem  
>  
continentem

Vol. 7, p. 68, line 8:

<sup>1</sup> Γεωργικὸν Menagius: -κῶν Wellmann: -κά Diels  
>  
<sup>1</sup> Γεωργικόν Menagius, cf. **D9**: -κῶν Wellmann: -κά Diels

Vol. 7, p. 68, line 10 from bottom:

5. Χαλδαϊκὸς λόγος  
>  
5. Χαλδαϊκὸς λόγος  
PLEASE NOTE THAT ON THE COLORED IOTA THERE SHOULD  
BE A DIAERESIS OR UMLAUT “.

Vol. 7, p. 86, line 5 from bottom:

διὰ τε  
>  
διὰ τε

Vol. 7, p. 92, D32 lemma:

p. 28.4-27  
>  
p. 28.4-27( = Theophr. Frag. 229 FHS&G)

Vol. 7, p. 93, D32 lemma:

Simplicius, *Commentary*

>

Theophrastus in Simplicius, *Commentary*

Vol. 7, p. 101, lines 5-3 from the bottom:

For this is the reason why ~~the volume is often superior while the~~ bodies  
~~are~~ composed of solids in the same number or even fewer.

>

For this is the reason why bodies composed of solids in the same number  
or even fewer ~~are often superior in volume~~.

Vol. 7, p. 114, D60, line 4 of the text:

θερμανικώτατα

>

θερμαντικώτατα

Vol. 7, p. 123, [66] last line:

why ~~they are~~ friable.

>

why ~~what is salty is~~ friable.

Vol. 7, p. 134, lines 7-8:

ἔχο-  
τα

>

ἔχον-  
τα

Vol. 7, p. 156, D95 app. crit.:

Plut. ἐφ' οἷς

>

Plut. ἐφ' (ἐν E. A. Schmidt) οἷς

Vol. 7, p. 157, lines 5 and 6-7:

bodies are set ~~ablaze~~ by ... the sun is ~~set completely ablaze~~ by

>

bodies are set ~~alight (purousthai)~~ by ... the sun is ~~made incandescent~~  
~~(ekpurousthai)~~ by

Vol. 7, p. 157, note to D95, last line:  
one.

>

one, or there may be a textual corruption.

Vol. 7, p. 161, D100, lines 3-4:

name, since the revolutions of the five heavenly bodies have not

>

name — the revolutions of the five heavenly bodies [i.e. the planets] had  
not

Vol. 7, p. 162, lines 1-2:

σν-

εχῶς,

>

σνν-

εχῶς,

Vol. 7, p. 185, D126, lemma:

Aphrodisias, *Problems and Solutions (Questions) on Nature*

>

Aphrodisias (?), *Natural Questions*

Vol. 7, p. 196, D138 app. crit., line 2:

αμ'

>

αμ'

Vol. 7, p. 213, D160 lines 4 and 5

(oxu) ... (oxu)

>

(oxus) ... (oxus)

Vol. 7, p. 216, D166, line 2 of lemma:

προενται

>

προενται

PLEASE NOTE THAT ON THE COLORED IOTA THERE SHOULD BE BOTH AN ACUTE ACCENT ´ AND A DIAERESIS OR UMLAUT ¨.

Vol. 7, p. 216, D166, line 1 of text:

προ~~ι~~εσθαι  
>

προ~~ι~~εσθαι

PLEASE NOTE THAT ON THE COLORED IOTA THERE SHOULD BE BOTH AN ACUTE ACCENT ´ AND A DIAERESIS OR UMLAUT ¨.

Vol. 7, p. 225, D179, 4 lines from bottom:

Libyans' ~~m~~ules, which  
>

Libyans' asses, which

Vol. 7, p. 252, D212, next to last line:

~~u~~el  
>

vel

Vol. 7, p. 264, lines 6-7:

αὐτήν  
>

το-  
σάυτην

Vol. 7, p. 266, D233a lemma:

**D233** ~~Plut.~~

**a** (B159) *Libid. et aegrit.* 2  
>

**D233**

**a** (B159) ~~Ps.-Plut.~~ *Libid. et aegrit.* 2

Vol. 7, p. 267, D233a lemma:

**D233** ~~Plutarch~~

**a** (B159) *On Desire and Grief*

>

**D233**

**a** (B159) **Ps.- Plutarch,** *On Desire and Grief*

Vol. 7, p. 268, line 4:

**b** (< B159) *Sanit. praec.* 24 135E

>

**b** (< B159) **Plut.** *Sanit. praec.* 24 135E

Vol. 7, p. 269, line 6:

**b** (< B159) *Advice about Keeping Well*

>

**b** (< B159) **Plutarch,** *Advice about Keeping Well*

Vol. 7, p. 274 ATOM. D249 lemma:

**D249** (B127) Hdn. *Prosod. cath.* **in Eust. *In Od.* 11.428**

>

**D249** (B127) Hdn. *Prosod. cath.* **vol. 3.1, p. 445.9-11**

Vol. 7, p. 274 ATOM. D249 text line 1:

καὶ Δημόκριτος ξύόμενοι

>

**[...]** καὶ Δημόκριτος ξύόμενοι

Vol. 7, p. 275 ATOM. D249 lemma:

**D249** (B127) Herodian, *General Prosody*, in Eustathius, *Commentary on Homer's Odyssey*

>

**D249** (B127) Herodian, *General Prosody*

Vol. 7, p. 275, D249 text line 1:

**And Democritus: When**

>

**[...]** and Democritus **When**

Vol. 7, p. 283, lines 3-4:

to crave beautiful things without arrogant excess.



>

to crave beautiful boys without violence.

Vol. 7, p. 284, lemma D274:

**D274** (< B119) ~~Dion. Alex. Nat. in Eus. PE 14.27.5~~ (cf. Stob. 2.8.16)

>

**D274** (< B119) Stob. 2.8.16 (cf. ~~Dion. Alex. Nat. in Eus. PE 14.27.5~~)

Vol. 7, p. 285, lemma D274:

**D274** (< B119) ~~Dionysius of Alexandria, On Nature, in Eusebius, Evangelical Preparation~~

>

**D274** (< B119) Stobaeus, *Anthology*

Vol. 7, p. 296, D299 app. crit., line 1:

~~ἀνδάνουσι~~

>

ἀνδάνουσι

Vol. 7, p. 301, D309, line 1:

everything, ~~do not~~ be ignorant

>

everything, ~~lest you~~ be ignorant

Vol. 7, p. 323, D361:

preferable to what the powerful ~~call~~ happiness as

>

preferable to what ~~among~~ the powerful ~~is called~~ happiness as

Vol. 7, p. 325, D366, line 2 of the text:

(kosmion).

>

(kosmion). [Or: Also for one who is wiser, it is orderly to submit to a law and to a magistrate. Or: It is orderly to submit to law, to something that both rules and is wiser.]

Vol. 7, p. 343, line3:

[...] Democritus and [...]

>

[...] Democritus [and ...]

Vol. 7, p. 346, D410, line 1:

οὐκ

>

οὐκ

Vol. 7, p. 347, D408, lines 1-2:

*In a certain way, understanding belongs to young men and lack of understanding to old men.*

>

*Surely there is understanding among young men and lack of understanding among old men.*

Vol. 7, p. 363, R10, note 1, line 2:

**ATOM. P25)**

>

**ATOM. P23)**

Vol. 7, p. 384, R32a, line 3:

παρεκβασιν

>

παρεκβασιν

Vol. 7, p. 388, line 7:

**d 362b5-27**

>

**d 362b6-27**

Vol. 7, p. 395, line 1:

regarding external things is

>

regarding qualities (*hekta*) is

Vol. 7, p. 402, R44, lines 1-2:

ἀνά-  
γκη  
>  
ἀνάγκη

Vol. 7, p. 404, R46, line 3 from the bottom of the text:

καὶ ψυχρὸν  
>  
καὶ ψυχρὸν

Vol. 7, p. 409, R50, lemma:

*Problems and Solutions (Questions) on Nature*  
>  
*Natural Questions*

Vol. 7, p. 418, line 9 from the bottom:

τις ἤ  
>  
τις ἤ

Vol. 7, p. 418, lines 9-8 from the bottom:

ὥπου  
>  
σώπου  
προ-

Vol. 7, p. 424, line 4:

φορᾶς,<sup>3</sup>  
>  
διαφορᾶς,<sup>3</sup>

Vol. 7, p. 424, first app. crit., line 2:

Mullach  
>  
Mullach: φορᾶς mss.

Vol. 7, p. 432, R64, line 2 from the bottom of the text:

ὁμοιόσχῆματα

>

ὁμοιοσχήματα

Vol. 7, p. 432, R64, app. crit., line 3:

ὁμοιόσχῆματα

>

ὁμοιοσχήματα

Vol. 7, p. 439, R68b, lemma:

*On Philosophy,*

>

*On Philosophy,*

Vol. 7, p. 464, R101, line 1 of the text:

[... = **P44a**] *atque*

>

*atque*

Vol. 7, p. 465, R100, last line:

**D24; ANAXAG. R26**].

>

**D24; EMP. D42; ANAXAG. R26**].

Vol. 7, p. 465, R101, on a new line between the lemma and the beginning of the text, add:

[Cicero is defending Arcesilaus' position against Lucullus:]

Vol. 7, p. 465, R101, line 1 of the text

[...] *But*

>

*But*

Vol. 7, p. 465, line 2 from the bottom:

that something ~~might be~~ true,

>

that ~~there is~~ something ~~true~~,

Vol. 7, p. 467, line 2:

**D20**].

>

**D20**] – for this is what he calls them.

Vol. 7, p. 496, lines 11-12:

αὶνί-

γματα

>

αὶνίγ-

ματα

Vol. 7, p. 502, line 2:

ξανθῶν

>

ξανθῶν

Vol. 7, p. 504, line 3:

**R129** (≠ DK) *Turba Phil.* Sermo VI, p. 63.1-13 Plessner

>

**R129** (≠ DK) *Turba Phil.* Sermo VI, p. 362.5-18 Lacaze

Vol. 7, p. 504, R129, lines 3-4 of text:

notifico quod Deus creavit omnia ex his naturis

>

notifico omnia quae Deus creavit ex his esse quatuor naturis

Vol. 7, p. 504, R129, line 7 of text:

Democrites

>

Democrites

Vol. 7, p. 504, R129, line 8 of text:

dixisti, magister.”

>

dixisti, magister, cum de quatuor naturis tractavisti.”

Vol. 7, p. 504, R129, line 9 of text:

Luca habuisti,

>

Luca **scientiam** habuisti,

Vol. 7, p. 504, R129, line 10 of text:

praesumere magistri tui **sociis te miscere.**"

>

praesumere **cum** magistri tui **paribus loqui.**"

Vol. 7, p. 504, lines 6-3 from the bottom:

**respondit Lucas: "non solum a me scientiam habuit Democritus, immo ab Indorum et Babilonicorum philosophis. Et puto ipsum suos contemporaneos in scientia posse superare.**

>

**respondit Lucas: "quamvis naturarum scientiam a me Democritus habuisset, habuit tamen ab Indorum philosophis et Babiloniensibus; puto etiam contemporaneos suos hac ipsum scientia superare."**

Vol. 7, p. 504, lines 2-1 from the bottom:

respondit Turba: "veniens **ad** aetatem non parum placebit; **non tamen adhuc** fari debet."

>

respondit Turba: "**perveniens hic in illam** aetatem non parum placebit; **nunc autem iuvenili constitutus aetate,** fari **non** debet."

Vol. 7, p. 505, R129, line 9 of text:

well, Master."

>

well, Master, **when you discussed the four natures.**"

Vol. 7, p. 505, R129, line 11 of text:

have **this** from

>

have **your knowledge** from

Vol. 7, p. 505, R129, line 8 from the bottom:

**join in** with the **comrades** of

>

speak with the peers of

Vol. 7, p. 505, lines 7-4 from the bottom:

Lucas answered: ~~“Not only from me has Democritus obtained knowledge, but also from the philosophers of the Indians and Babylonians. And I believe that he is capable of surpassing his contemporaries in~~ knowledge.”

>

Lucas answered: “Although Democritus has obtained the knowledge of natural things from me, nonetheless he has also received it from the philosophers of the Indians and Babylonians. I even believe that he surpasses his contemporaries in this knowledge.”

Vol. 7, p. 505, last line:  
being he should not speak.

>

being, since he is of a youthful age, he should not speak.