

## Bibliography (revised 1981)

The bibliography to the first edition of this book, assembled in 1976, was designed to fulfil two functions: it gave detailed references to the various books and articles cited in the Notes, and it attempted to provide an intelligible and articulated guide to the vast modern literature on the Presocratics. The second aim accounted for the arrangement of the bibliography; the first explained the inclusion of some fairly minor items.

The last five years have seen a steady flow of studies on the Presocratics, many of them of the highest quality. This revised bibliography incorporates a selection from that recent work: the new items have been interpolated at appropriate points, and they are identifiable by the fact that their reference numbers carry a literal suffix (e.g. [181A], [368B]). The additions may, I hope, save the bibliography from premature obsolescence; but I do not pretend to have produced a comprehensive list of new items—nor, indeed, can I even claim to have snouted out all the tastiest truffles.

I use the following abbreviations:

<i>ABG</i>	<i>Archiv für Begriffsgeschichte</i>
<i>AC</i>	<i>Acta Classica</i>
<i>AGP</i>	<i>Archw für Geschichte der Philosophie</i>
<i>AJP</i>	<i>American Journal of Philology</i>
<i>An</i>	<i>Analysis</i>
<i>APQ</i>	<i>American Philosophical Quarterly</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies</i>
<i>BJPS</i>	<i>British Journal for the Philosophy of Science</i>
<i>CP</i>	<i>Classical Philology</i>
<i>CQ</i>	<i>Classical Quarterly</i>
<i>CR</i>	<i>Classical Review</i>
<i>H</i>	<i>Hermes</i>
<i>HSCP</i>	<i>Harvard Studies in Classical Philology</i>
<i>JHI</i>	<i>Journal of the History of Ideas</i>
<i>JHP</i>	<i>Journal of the History of Philosophy</i>
<i>JHS</i>	<i>Journal of Hellenic Studies</i>
<i>JP</i>	<i>Journal of Philosophy</i>
<i>M</i>	<i>Mind</i>
<i>MH</i>	<i>Museum Helveticum</i>
<i>Mnem</i>	<i>Mnemosyne</i>
<i>NGG</i>	<i>Nachrichten van der Gesellschaft der Wissenschaft zu</i>

	<i>Göltingen</i>
<i>PAS</i>	<i>Proceedings of the Aristotelian Society</i>
<i>PCPS</i>	<i>Proceedings of the Cambridge Philological Society</i>
<i>Phlg</i>	<i>Philologus</i>
<i>Phron</i>	<i>Phronesis</i>
<i>PQ</i>	<i>Philosophical Quarterly</i>
<i>PR</i>	<i>Philosophical Review</i>
<i>QSGM</i>	<i>Quellen und Studien zur Geschichte der Mathematik</i>
<i>RE</i>	<i>Pauly-Wissowa's Realenzyklopädie der klassischen Altertumswissenschaft</i>
<i>REA</i>	<i>Revue des Études Anciennes</i>
<i>REG</i>	<i>Revue des Études Grecques</i>
<i>RhM</i>	<i>Rheinisches Museum</i>
<i>RM</i>	<i>Review of Metaphysics</i>
<i>SO</i>	<i>Symbolae Osloenses</i>
<i>TAPA</i>	<i>Transactions of the American Philological Association</i>
<i>WS</i>	<i>Wiener Studien</i>

## **A: GENERAL**

### *I: Texts*

The standard work on the Presocratics, a monument to scholarship and an indispensable aid, is:

- [1] H.Diels and W.Kranz: *Die Fragmente der Vorsokratiker* (Berlin, 1960<sup>10</sup>) The fragments, but not the *testimonia*, are Englished in:
- [2] K.Freeman: *Ancilla to the Pre-Socratic Philosophers* (Oxford, 1948) For the poetical Presocratics it is worth consulting:
- [3] H.Diels: *Poetarum Philosophorum Fragmenta* (Berlin, 1901) The doxography is finely discussed, and the main texts printed, in another magisterial work by Diels:
- [4] H.Diels: *Doxographi Graeci* (Berlin, 1879) Editions of texts of individual Presocratics are listed under the appropriate heading in part B of the bibliography; editions of certain other ancient authors are mentioned in the next section, and in Appendix A.

### *II: Source Criticism*

Most scholars accept the reconstruction of the doxographical tradition which Diels established in

- [4]; but there are some important qualifications in:
- [5] P.Steinmetz: *Die Physik des Theophrasts*, Palingenesia I (Bad Homburg, 1964) and some intemperate disagreements in Gershenson-Greenberg [361].

The historical value of the doxography is a matter of grave dispute. A lengthy denunciation of Aristotle was made in:

- [6] H.F.Cherniss: *Aristotle's Criticism of Presocratic Philosophy* (Baltimore, 1935) and Theophrastus was attacked in similar vein by:  
 [7] J.B.McDiarmid: 'Theophrastus on the Presocratic Causes', *HSCP* 61, 1953, 85–156= Furley-Allen [70]

Most books on the Presocratics contain appreciations of the doxography. Against Cherniss see especially:

- [8] W.K.C.Guthrie: 'Aristotle as an Historian of Philosophy', *JHS* 77, 1957, 35–41= Furley-Allen [70] Guthrie's paper has been examined in turn by:  
 [9] J.G.Stevenson: 'Aristotle as Historian of Philosophy', *JHS* 94, 1974, 138–43 A wealth of relevant material can be found in the classic commentaries of:  
 [10] R.D.Hicks: *Aristotle: de Anima* (Cambridge, 1907)  
 [11] W.D.Ross: *Aristotle's Metaphysics* (Oxford, 1924)  
 [12] W.D.Ross: *Aristotle's Physics* (Oxford, 1936) And there is a brilliant paper on a nice detail by:  
 [13] B. Snell: 'Die Nachrichten über die Lehre des Thales und die Anfänge der griechischen Philosophie-und Literaturgeschichte', *Phlg* 96, 1944, 170–82=Snell [82]=Classen [72A] On Theophrastus see Steinmetz [5], and the Introduction to:  
 [14] G.M.Stratton: *Theophrastus and the Greek Physiological Psychology before Aristotle* (London, 1917) Plutarch's testimony is analysed by:  
 [15] R.Westman: *Plutarch gegen Colotes*, Acta Philosophica Fennica VII (Helsinki, 1955)  
 [16] J.P.Hershbell: 'Plutarch as a Source for Empedocles Re-examined', *AJP* 92, 1971, 156–84 And on Hippolytus consult:  
 [17] J.P.Hershbell: 'Hippolytus' *Elenchos* as a Source for Empedocles Re-examined', *Phron* 18, 1973, 97–114 The major commentaries on the classical authors frequently shed incidental light on the Presocratics; I have found myself most often helped by:  
 [18] U. von Wilamowitz-Moellendorf: *Euripides: Herakles* (Berlin, 1895)  
 [19] T.L.Heath: *The Thirteen Books of Euclid's Elements* (Cambridge, 1926<sup>2</sup>)  
 [20] C.Bailey: *Epicurus* (Oxford, 1926)  
 [21] C.Bailey: *Lucretius: de Rerum Natura* (Oxford, 1947)  
 [22] C.W.Chilton: *Diogenes of Oenoanda* (London, 1971)  
 [23] M.L.West: *Hesiod: Theogony* (Oxford, 1966) Finally, no one should fail to peruse the opening chapters of:  
 [24] R.Pfeiffer: *A History of Classical Scholarship*, I (Oxford, 1968)

### III

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#### *General Histories*

English readers will find a treasury of humane scholarship in the first three volumes of:

- [25] W.K.C.Guthrie: *A History of Greek Philosophy* (Cambridge, 1962, 1965, 1969) Zeller's handbook, *Die Philosophie der Griechen*, has undergone several revisions since its first appearance in 1892; the fullest and most recent edition—still incomplete—is:  
 [26] E.Zeller and R.Mondolfo: *La Filosofia dei Greci nel suo sviluppo storico* (Florence, 1932-) Philosophers will enjoy the relevant chapters of:  
 [27] G.W.F.Hegel: *Lectures on the History of Philosophy*, trans. E.S.Haldane and F.H. Simson (London, 1892; first publishing of German text, 1840) and also:  
 [28] F.Nietzsche: *Die Philosophie im tragischen Zeitalter der Griechen*, in vol. III of Nietzsche's *Werke*, ed. K.Schlechta (Munich, 1956; first published in 1872) Of other general accounts of Presocratic thought, the most influential have been:

- [29] P.Tannery: *Pour 'histoire de la science Hellène* (Paris, 1887)
- [30] K.Reinhardt: *Parmenides und die Geschichte der griechischen Philosophie* (Bonn, 1916)  
 ([30] is, for my money, the most sparkling book in the whole field)
- [31] J.Burnet: *Early Greek Philosophy* (London, 1930<sup>4</sup>)
- [32] H.F.Cherniss: 'Characteristics and Effects of Presocratic Philosophy', *JHI* 12, 1951, 319–45=Furley-Allen [70]=Cherniss [73A] There are sober introductions in:
- [33] G.S.Kirk and J.E.Raven: *The Presocratic Philosophers* (Cambridge, 1962<sup>4</sup>)
- [34] E.Hussey: *The Presocratics* (London, 1972) And a spirited introduction in:
- [35] K.R.Popper: 'Back to the Presocratics', *PAS* 59, 1958/9, 1–24=K.R.Popper: *Conjectures and Refutations* (London, 1969<sup>3</sup>)=Furley-Allen [70] See also:
- [36] T.Gomperz: *Greek Thinkers* (London, 1901–12)
- [37] F.M.Cleve: *The Giants of Pre-Sophistic Greek Philosophy* (The Hague, 1965)
- [38] G.Calogero: *Storia della logica antica* (Bari, 1967)

#### IV: Monographs

I list here a number of books which bear upon particular aspects of early Greek thought: their titles on the whole are adequate guides to their contents.

- [38A] L.Ballev: *Straight and Circular—a Study of Imagery in Greek Philosophy* (Assen, 1979)
- [39] J.I.Beaure: *Greek Theories of Elementary Cognition* (Oxford, 1906)
- [40] F.M.Comford: *The Laws of Motion in Ancient Thought* (Cambridge, 1931)
- [41] F.M.Cornford: *Principium Sapientiae* (Cambridge, 1952)
- [42] D.R.Dicks: *Early Greek Astronomy to Aristotle* (London, 1970)
- [43] E.R.Dodds: *The Greeks and the Irrational* (Berkeley, Cal., 1951)
- [44] H.Fränkell: *Early Greek Poetry and Philosophy*, trans. M.Hadas and J.Willis (Oxford, 1975)
- [45] T.L.Heath: *Aristarchus of Samos* (Oxford, 1913)
- [46] T.L.Heath: *A History of Greek Mathematics* (Oxford, 1921)
- [47] W.W.Jaeger: *Paideia* (Oxford, 1939–45)
- [48] W.W.Jaeger: *The Theology of the Early Greek Philosophers* (Oxford, 1947)
- [49] W.H.S.Jones: *Philosophy and Medicine in Ancient Greece* (Baltimore, 1946)
- [50] G.E.R.Lloyd: *Polarity and Analogy* (Cambridge, 1966)
- [51] H.Lloyd-Jones: *The Justice of Zeus* (Berkeley, Cal., 1971)
- [52] C.W.Müller: *Gleiches zu Gleichen—ein Prinzip frühgriechischen Denkens* (Wiesbaden, 1965)
- [53] S.Sambursky: *The Physical World of the Greeks* (London, 1956)
- [54] B.Snell: *Die Ausdrücke für den Begriff des Wissens in der vorplatonischen Philosophie*, *Philologische Untersuchungen* 29 (Berlin, 1924)
- [55] B.Snell: *The Discovery of Mind* (Oxford, 1953)
- [55A] B.Snell: *Der Weg zum Denken und zur Wahrheit*, *Hypomnemata* 57 (Göttingen, 1978)
- [56] M.C.Stokes: *One and Many in Presocratic Philosophy* (Washington, DC, 1971)
- [57] L.Sweeney: *Infinity in the Presocratics* (The Hague, 1972)
- [58] B.L.van der Waerden: *Science Awakening*, trans. A.Dresden (New York, 1961)
- [59] M.L.West: *Early Greek Philosophy and the Orient* (Oxford, 1971) I append to this section a number of articles of a general scope. The first two are seminal pieces:
- [60] W.A.Heidel: 'Qualitative Change in Pre-Socratic Philosophy', *AGP* 19, 1906, 333–79= Mourelatos [72]
- [61] W.A.Heidel: 'A Study of the Conception of Nature among the Pre-Socratics', *Proceedings of the American Academy of Arts and Sciences* 45, 1910, 77–133

The next article is of wider scope than its title suggests, being a comprehensive account of early notions of cognition:

- [62] K.von Fritz: 'and their Derivatives in Presocratic Philosophy,' *CP* 40, 1945 223–42 and 41, 1946, 12–34=Mourelatos [72]=Gadamer [71] With Jones [49], compare:
- [63] J.Longrigg: 'Philosophy and Medicine: some early Interactions', *HSCP* 67, 1963, 147–76 With Lloyd [50], compare:
- [64] G.E.R.Lloyd: 'Hot and Cold, Dry and Wet, in early Greek Thought', *JHS* 84, 1964, 92–106=Furley-Allen [70] With Dicks [42], compare:
- [65] D.R.Dicks: 'Solstices, Equinoxes and the Presocratics', *JHS* 86, 1966, 26–40 and the reply by:
- [66] C.H.Kahn: 'On Early Greek Astronomy' *JHS* 90, 1970, 99–116 Finally, note the interesting piece on the Derveni papyrus by:
- [67] W.Burkert: 'Orpheus und der Vorsokratiker', *Antike und Abendland* 14, 1968, 93–114

### V: Anthologies

- [68] V.E.Alfieri and M.Untersteiner (eds.): *Studi di Filosofia Greca* (Bari, 1950)
- [69] J.P.Anton and G.L.Kustas (eds): *Essays in Ancient Greek Philosophy* (Albany, New York, 1971)
- [70] D.J.Furley and R.E.Allen (eds.): *Studies in Presocratic Philosophy* (London, 1970, 1975)
- [71] H.G.Gadamer (ed.): *Um die Begriffswelt der Vorsokratiker* (Darmstadt, 1968)
- [72] A.P.D.Mourelatos (ed.): *The Presocratics* (Garden City, New York, 1974)
- [72A] C.J.Classen (ed.): *Sophistik* (Darmstadt, 1976)
- [72B] R.A.Shiner and J.King-Farlow (eds): *New Essays on Plato and the Presocratics, Canadian Journal of Philosophy* suppt 2 (Guelph, 1976)

### VI: Collected Papers

- [73] J.Bernays: *Gesammelte Abhandlungen* (Berlin, 1885)
- [73A] H.Cherniss: *Selected Papers*, L.Tarán (ed.) (Leiden, 1977)
- [74] F.M.Cornford: *The Unwritten Philosophy* (Cambridge, 1950)
- [75] H.Diller: *Kleine Schriften zurantiken Literatur* (Munich, 1971)
- [76] H.Fränkell: *Wege und Formen frühgriechischen Denkens* (Munich, 1960<sup>2</sup>)
- [77] K.von Fritz: *Grundprobleme der Geschichte der antiken Wissenschaft* (Berlin, 1971)
- [78] O.Gigon: *Studien zurantiken Philosophie* (Berlin, 1972)
- [79] U. Hölscher: *Anfängliches Fragen* (Göttingen, 1968)
- [80] W.Nestle: *Griechische Studien* (Stuttgart, 1948)
- [81] K.Reinhardt: *Vermächtnis der Antike* (Göttingen, 1966<sup>2</sup>)
- [82] B.Snell: *Gesammelte Schriften* (Göttingen, 1966)
- [83] F.Solmsen: *Kleine Schriften* (Hildesheim, 1968)
- [84] M.Untersteiner: *Scritti Minori* (Brescia, 1971)

### VII: Bibliography

There are excellent bibliographies in Guthrie [25], Sweeney [57], and Mourelatos [72]; see also: [85] G.B.Kerferd: 'Recent Work on Presocratic Philosophy', *APQ* 2, 1965, 130–40. And of course most of the books and papers I list here contain a multitude of further references. Bibliographies date quickly. The reader may keep abreast of the tide by consulting *L'Annee Philologique*, *Repertoire bibliographique de la Philosophie de Louvain*, and *The Philosophers Index*, periodicals which, taken together, catch all the new literature on the subject.

## B: PARTICULAR

The second half of this bibliography is divided into sections that correspond to the chapters of the book. Items referred to in one section will often contain material relevant to other sections; and many of the works listed in part A—notably Guthrie [25]—will profitably be consulted in connexion with every chapter.

## Chapter I

On Thales in general see:

- [86] D.R.Dicks: 'Thales', *CQ* n.s. 9, 1959, 294–309  
 [87] M.L.West: 'Three Presocratic Cosmologies', *CQ* n.s. 13, 1963, 154–76  
 [88] C.J.Classen: 'Thales', *RE* suppl. 10, 1965. 930–47 Literature on the notion of *psuchê*, on the stability of the earth, and on early cosmogony, is given on later pages (below, pp. 658, 653, 654). On Thales' mathematical achievements see chapter 4 of Heath [46]; and:  
 [89] B.Gladigow: 'Thales und der διαβίτης', *H* 96, 1968, 264–75 For the sources see the items in part A, section II, especially Guthrie [8] and Snell [13].

## Chapter II

The classic study of Anaximander's thought is:

- [90] C.H.Kahn: *Anaximander and the Origins of Greek Cosmology* (New York, 1960) (I might observe that Kahn's book is crammed with wise and stimulating thoughts on every aspect of early Greek philosophy.) Out of numerous general studies of Anaximander I pick:  
 [91] U.Hölscher: 'Anaximander und die Anfänge der Philosophie', *H* 81, 1953, 255–77 and 385–417=Hölscher [79]=Furley-Allen [70]  
 [92] G.S.Kirk: 'Some Problems in Anaximander', *CQ* n.s. 5, 1955, 21–38=Furley-Allen [70]  
 [93] C.J.Classen: 'Anaximander', *H* 90, 1962, 159–72  
 [94] C.J.Classen: 'Anaximandros', *RE* suppl. 12, 1970, 30–69 Anaximander's 'Darwinism' is discussed ably by:  
 [95] J.H.Loenen: 'Was Anaximander an Evolutionist?', *Mnem* s. 4, 7, 1954, 215–32 and it is worth reading:  
 [96] G.Rudberg: 'Empedokles und Evolution', *Eranos* 49, 1951, 23–30 Anaximander's mathematical astronomy has often been described: see in particular chapter 4 of Tannery [29], and chapter 4 of Heath [45]; and the dispute between Dicks ([65] and [42]) and Kahn ([90] and [66]). See also :  
 [97] N.Rescher: 'Cosmic Evolution in Anaximander', *Studium Generale* 11, 1958, 718–31=N.Rescher, *Essays in Philosophical Analysis* (Pittsburgh, Pa., 1969) And on the stability of the earth:  
 [98] J.Robinson: 'Anaximander and the Problem of the Earth's Immobility', in Anton-Kustas [69] The best discussions of the Anaximandrian fragment are in Kahn [90] and in:  
 [99] H.Schwabl: 'Anaximander—zu den Quellen und seiner Einordnung um vorsokratischen Philosophie', *ABG* 9, 1964, 59–72 See also:  
 [100] F.Dirlmeier: 'Der Satz des Anaximandros', *RhM* 87, 1938, 376–82=F. Dirlmeier, *Ausgewählte Schriften* (Heidelberg, 1970)= Gadamer [71]  
 [101] C.H.Kahn: 'Anaximander and the Arguments concerning ἀπειρον, ἀπειροσ ἀήρ the at *Physics* 203b4–15', *Festschrift Ernst Kapp* (Hamburg, 1958) (Kahn thinks he has discovered a second fragment of Anaximander in the text of the *Physics*.)

- [101A] M.C.Stokes: 'Anaximander's Argument', in Shiner-King-Farlow [72B] There is a full-length study of Anaximander's 'unlimited' principle by:  
 [102] P.Seligman: *The Apeiron of Anaximander* (London, 1962) and several useful papers including:  
 [103] F.Solmsen: 'Anaximander's infinite: traces and influences', *AGP* 44, 1962, 109–31=Solmsen [83]  
 [104] H.B.Gottschalk: 'Anaximander's Apeiron', *Phron* 10, 1965, 37–53  
 [105] P.J.Bicknell: τὸ ἄπειρον ἄπειροσσίτην and *AC* 9, 1966, 27–48

### Chapter III

Less attention has been paid to Anaximenes than to Anaximander. In addition to the general histories, chapter 2 of Stokes [56], and a few studies of detail, I know only:

- [106] J.Klowski: '1st der Aër des Anaximenes als eine Substanz Konzipiert?', *H* 100, 1972, 131–42  
 [106A] C.J.Classen: 'Anaximander and Anaximenes: the Earliest Greek Theories of Change?', *Phron* 22, 1977, 89–102

The topic of ancient cosmogonical thought has been far more intensely discussed; the most comprehensive piece is:

- [107] H.Schwabl: 'Weltschöpfung', *RE* suppt. 9, 1962, 1433–1589 On Pherecydes see especially West [59], chapters 1–2; and on the tantalizing fragment of Alcman:  
 [108] M.L.West: 'Alcman and Pythagoras', *CQ* n.s. 17, 1967, 1–15 For Hesiod see West [23], and:  
 [109] M.C. Stokes: 'Hesiodic and Milesian Cosmogonies', *Phron* 7, 1963, 1–35, and 8, 1963, 1–34  
 [110] J.Klowski: 'Zum Entstehen der Begriffe Sein und Nichts und der Weltentstehungs- und Weltschöpfungstheorien im strengen Sinne', *AGP* 49, 1967, 121–48 and 225–54 Milesian cosmogony is also discussed in Kahn [90] and in Hölscher [91]; and in a classic paper by:  
 [111] G.Vlastos: 'Equality and Justice in early Greek cosmologies', *CP* 42, 1947, 156–78=Furley-Allen [70] Finally, read:  
 [112] F.Solmsen: 'Aristotle and Presocratic Cosmogony', *HSCP* 63, 1958, 265–82=Solmsen [83] The question of the scientific standing of Presocratic thought has produced a large literature. The best general survey is in Sambursky [53]; and there is an invaluable article by:  
 [113] G.E.R.Lloyd: 'Experiment in Early Greek Philosophy and Medicine', *PCPS* n.s. 10, 1964, 50–72 F.M.Cornford more than once advanced the extreme view that the Presocratics were not, and did not mean to be, scientists: see Cornford [41], [74], and :  
 [114] F.M.Cornford: 'Was the Ionian Philosophy Scientific?', *JHS* 62, 1942, 1–7=Furley-Allen [70] Against Cornford see especially:  
 [115] G.Vlastos: review of Cornford [41], *Gnomon* 27, 1955, 65–76=Furley-Allen [70] (And compare the dispute between Dicks and Kahn, above, p. 653). At the other extreme, Sir Karl Popper has lavishly praised Presocratic science: see Popper

[35]. Against Popper:

- [116] G.S.Kirk: 'Popper on Science and the Presocratics', *M* 69, 1960, 318–39=Furley-Allen [70]  
 [117] G.S.Kirk: 'Sense and Common Sense in the Development of Greek Philosophy', *JHS* 81, 1961, 105–17

See also Popper [151]; and:

- [118] G.E.R.Lloyd: 'Popper versus Kirk: a Controversy in the Interpretation of Greek Science', *BJPS* 18, 1967, 21–39 I mention too:  
 [119] J.Stannard: 'The Presocratic Origin of Explanatory Method', *PQ* 15, 1965, 193–206 And see now the splendid treatment in:  
 [119A] G.E.R.Lloyd: *Magic, Reason and Experience* (Cambridge, 1979) Analogy has long been recognized as a characteristic of early Greek thought. See especially Part II of Lloyd [50];  
 [120] H.Diller: ἄπειρος ἀδύλων τιε, *H* 67, 1932, 14–42=Diller [75] and:

- [121] W.Kranz: 'Gleichnis und Vergleich in der frühgriechischen Philosophie', *H* 73, 1938, 99–122 See also:
- [122] H.C.Baldry: 'Embryological Analogies in Presocratic Cosmogony', *CQ* 26, 1932, 27–34 and compare Fränkel [145], and Regenbogen [520]. On Anaximenean details see:
- [123] W.K.C.Guthrie: 'Anaximenes and, ἀρχῶν', *CQ* n.s. 6, 1956, 40–4
- [124] J.Longrigg: 'κρυσταλλοειδῶς', *CQ* n.s. 15, 1965, 249–52
- [125] H.Schwabl: 'Anaximenes und die Gestirne', *WS* 79, 1966, 33–8
- [126] J.Longrigg: 'A Note on Anaximenes fragment 2', *Phron* 9, 1964, 1–5
- [127] K.Alt: 'Zum Satz des Anaximenes über die Seele—Untersuchung von Aëtius περί ἀρχῶν', *H* 101, 1973, 129–64
- [128] G.B.Kerferd: 'The Date of Anaximenes', *MH* 11, 1954, 117–21

#### Chapter IV

The fragments of Heraclitus are best studied in the edition of:

- [129] M.Marcovich: *Heraclitus* (Merida, 1967) That edition can be supplemented by:
- [130] S.Mouraviev: 'New Readings of Three Heraclitean Fragments (B 23, B 28, B 26)', *H* 101, 1973, 114–27
- [130A] S.N.Mouraviev: 'Heraclitus B 31<sup>b</sup> DK (53<sup>b</sup> Mch): an Improved Reading?', *Phron* 22, 1977, 1–9

All other texts pertaining to Heraclitus are collected and annotated in:

- [131] R.Mondolfo and L.Taràn: *Eraclito—testimonianze e imitazione* (Florence, 1972) For bibliography see:
- [132] E.N.Roussos: *Heraklit-Bibliographie* (Darmstadt, 1971) There are three landmarks in modern Heraclitean studies. First:
- [133] J.Bernays: *Heraclitea* (Bonn, 1848)=Bernays [73] (see also papers II-IV in [73]); second, the work of Karl Reinhardt:
- [134] K.Reinhardt: 'Heraclitea', *H* 77, 1942, 225–48=Reinhardt [81]=Gadamer [71]
- [135] K.Reinhardt: 'Heraklits Lehre vom Feuer', *H* 77, 1942, 1–17=Reinhardt [81] as well as chapter 3 of Reinhardt [30]; and, third:
- [136] G.S.Kirk: *Heraclitus: the Cosmic Fragments* (Cambridge, 1962<sup>2</sup>)

The best general account of Heraclitus' thought is perhaps that in Guthrie [25], I, ch. VII. There is a stimulating piece which appears as chapter 3 of volume I of:

- [137] K.R.Popper: *The Open Society and its Enemies* (London, 1966<sup>5</sup>) See also:
- [138] G.Vlastos: 'On Heraclitus', *AJP* 76, 1955, 337–66=Furley-Allen [70]
- [139] C.H.Kahn: 'A New Look at Heraclitus', *APQ* 1, 1964, 189–203
- [140] M.Marcovich: 'Herakleitos', *RE* suppt. 10, 1965, 246–320
- [141] W.J.Verdenius: 'Der Logosbegriff bei Heraklit und Parmenides', *Phron* 11, 1966, 81–99

There is now a comprehensive English edition by:

- [141 A] C.H.Kahn: *The Art and Thought of Heraclitus* (Cambridge, 1979) Idiosyncratically French accounts may be read in:
- [142] C.Ramnoux: *Heraclite, ou l'homme entre les choses et les mots* (Paris, 1959)
- [143] J.Bollack and H.Wismann: *Heraclite ou la Separation* (Paris, 1972) See also:
- [143A] M.Heidegger and E.Fink: *Heraklit* (Frankfurt am Main, 1970) The peculiarities of Heraclitus' style have been analysed by:
- [144] B.Snell: 'Die Sprache Heraklits', *H* 61, 1926, 353–81=Snell [82]
- [145] H.Fränkel: 'A Thought Pattern in Heraclitus', *AJP* 59, 1938, 309–37=Fränkel [76]=Mourelatos [72]
- [146] B.Snell: 'Heraklits Fragment 10', *H* 76, 1941, 84–7=Snell [82] and in Hölischer [79].

On Heraclitean fire see Reinhardt [135] and:

- [147] G.S.Kirk: 'Natural Change in Heraclitus', *M* 60, 1951, 35–42=Mourelatos [72]
- [148] W.J.Verdenius: 'Heraclitus' Conception of Fire', in J.Mansfeld and L.M.de Rijk (eds), *Kephalaion: studies in Greek philosophy and its continuation offered to Professor C.J.de Vogel* (Assen, 1975)
- [149] H.Jones: 'Heraclitus: Fragment 31', *Phron* 17, 1972, 193–7
- [150] R.Mondolfo: 'The evidence of Plato and Aristotle relating to the ekpyrosis in Heraclitus', *Phron* 3, 1958, 75–82
- [150A] A.A.Long: 'Heraclitus and Stoicism', *Φιλοσοφία* 5, 1975–6, 133–56 The Theory of Flux is denied to Heraclitus by Reinhardt and by Kirk; it is vindicated for him by Mondolfo-Tarán [131];
- [151] K.R.Popper: 'Kirk on Heraclitus, and on Fire as the Cause of Balance', *M* 72, 1963, 386–92=K.R.Popper, *Conjectures and Refutations* (London, 1969<sup>3</sup>)
- [152] A.Wasserstein: 'Pre-Platonic Literary Evidence for the Flux Theory of Heraclitus', *Atti di XII Congresso Internazionale di Filosofia* (Florence, 1960), 11, 185–91 Wasserstein's brief discussion of the *de victu* can be supplemented by:
- [153] R.Joly: *Recherches sur le traite pseudo-hippocratique du Regime* (Paris, 1960) The Cratylan texts are examined by:
- [154] G.S.Kirk: 'The Problem of Cratylus', *AJP* 72, 1951, 225–53
- [155] D.J.Allan: 'The Problem of Cratylus', *AJP* 75, 1954, 271–87 Finally, on the Unity of Opposites, see the various works by Reinhardt and Kirk. And also:
- [155A] C.J.Emlyn-Jones: 'Heraclitus and the Identity of Opposites', *Phron* 21, 1976 89–114 Items bearing on Heraclitus' moral theories and on his psychology can be found below, pp. 659 and 672.

### Chapter V

There is an edition of Xenophanes by:

- [156] M.Untersteiner: *Senofane—testimonianze e frammenti* (Florence, 1956) For general accounts of Xenophanes' thought see chapter 2 of Reinhardt [30]. chapter 3 of Stokes [56], and:
- [157] K.Deichgräber: 'Xenophanes *φύσεως*', *RhM* 87, 1938, 1–31
- [158] K.von Fritz: 'Xenophanes', *RE* 9A, 1967, 1541–62
- [159] P.Steinmetz: 'Xenophanesstudien', *RhM* 109, 1966, 13–73 And on his Ionian interests see especially:
- [160] W.A.Heidel: 'Hecataeus and Xenophanes', *AJP* 64, 1943, 257–77 There is a fine paper on Presocratic theology by:
- [161] G.Vlastos: 'Theology and Philosophy in Early Greek Thought', *PQ* 2, 1952, 97–123 = Furley-Allen [70] and useful material can be found in :
- [162] O.Gigon: 'Die Theologie der Vorsokratiker', *Entretiens Hardt* 1, 1954, 127–55 = Gigon [78]
- [163] W.Fahr: *Θεοὺς νομίζειν*, *Spudasmata* 26 (Hildesheim, 1969) It is still worth reading:
- [164] A.B.Drachmann: *Atheism in Pagan Antiquity* (London, 1922) For Milesian theology see chapter 2 of Jaeger [48], and:
- [165] D.Babut: 'Le Divin et le Dieu dans la pensee d' Anaximandre', *REG* 84, 1972, 1–32 and for Heraclitus see:
- [166] H.Fränkell: 'Heraclitus on God and the Phenomenal World', *TAPA* 69, 1938, 230–44 =Fränkell [76]
- The atheists of *Laws* X are rooted out by:
- [167] J.Tate: 'On Plato: Laws-X, 889CD', *CQ* 30, 1936, 48–54

- [168] W.de Mahieu: 'La doctrine des Athees au Xe livre des Lois de Platon', *Revue belge de philologie et d'histoire* 41, 1963, 5–24, and 42, 1964, 16–47
- On Xenophanes' theology see especially chapter 3 of Jaeger [48]; and also:
- [169] W.Pötscher: 'Zu Xenophanes frag. 23', *Emerita* 32, 1964, 1–13
- [170] G.Calogero: 'Senofane, Eschilo e la prima definizione dell' onnipotenza di dio', in Alfieri-Untersteiner [68]
- [171] H.A.T.Reiche: 'Empirical Aspects of Xenophanes' Theology', in Anton-Kustas [69]
- [171A] S.M.Darcus: 'The Phren of the Noos in Xenophanes' God', *SO* 53, 1978, 25–39 On the Synonymy Principle (p. 88) see:
- [171B] A.C.Lloyd: 'The Principle that the Cause is greater than its Effect', *Phron* 21, 1976, 146–55 Finally, the Epicharmus material is all judiciously examined by:
- [172] L.Berk: *Epicharmus*, diss. Utrecht (Groningen, 1964)

### Chapter VI

The study of Pythagoreanism has been advanced to a new level of sanity and scholarship by:

- [173] W.Burkert: *Lore and Science in Ancient Pythagoreanism* (Cambridge, Mass., 1972; first German edition, 1962)
- The main problem of interpretation, that of distinguishing early from late doctrine, should be approached with the help of:
- [174] H.Thesleff: *An Introduction to the Pythagorean Writings of the Hellenistic Age*, Acta Academiae Aboensis Humaniora XXIV.3 (Åbo, 1961)
- [175] H.Thesleff: *The Pythagorean Texts of the Hellenistic Period*, Acta Academiae Aboensis Humaniora XXX. 1 (Åbo, 1965) and see also:
- [176] H.Dörrie: 'Dernachklassische Pythagoreismus', *RE* 24, 1963, 268–77
- There is an excellent introduction to early Pythagoreanism in:
- [177] C.H.Kahn: 'Pythagorean Philosophy before Plato', in Mourelatos [72] Of other general studies I mention:
- [178] J.E.Raven: *Pythagoreans and Eleatics* (Cambridge, 1948)
- [179] K.H.Iltting: 'Zur Philosophie der Pythagoreer', *AEG* 9, 1964, 103–31
- [180] J.A.Philip: *Pythagoras and Early Pythagoreanism* (Toronto, 1966)
- [181] C.J.de Vogel: *Pythagoras and Early Pythagoreanism* (Assen, 1966)
- [181A] B.L.van der Waerden: *Die Pythagoreer* (Zurich, 1979) For Pythagoras himself consult:
- [182] J.S.Morrison: 'Pythagoras of Samos', *CQ* n.s. 8, 1958, 198–218
- [183] K.von Fritz: 'Pythagoras', *RE* 24, 1963, 171–268
- [184] B.L.van der Waerden: 'Pythagoras', *RE* suppt. 10, 1965, 843–64 And see also West [108] Literature on Pythagorean science is given on p. 669.
- On early Greek notions of the *psychê* or soul see the celebrated study by Dodds [43]; and also:
- [185] J.Burnet: 'The Socratic Doctrine of the Soul', *Proceedings of the British Academy* 7, 1915/16, 235–59
- [186] D.J.Furley: 'The Early History of the Greek Concept of Soul', *BICS* 3, 1956, 1–18
- [187] B.Gladigow: 'Zum Makarismos des Weisen', *H* 95, 1967, 404–33
- [187A] D.B.Claus: *Toward the Soul* (New Haven, 1981) There is a thorough survey of Greek texts on metempsychosis in:
- [188] H.S.Long: *A Study of the Doctrine of Metempsychosis in Greece from Pythagoras to Plato* (Princeton, N.J., 1948) and a wealth of material in:
- [189] M.V.Bacigalupo: 'Teriomorfismo e trasnigrazione', *Filosofia* 16, 1965, 267–90 For Plato see:
- [190] R.S.Bluck: 'Plato, Pindar and Metempsychosis', *AJP* 79, 1958, 405–14 and for Pindar:
- [191] K.von Fritz: 'Ἡστροφίς ἐκατέρωθεν' in Pindar's Second *Olympian* and Pythagoras' Theory of Metempsychosis', *Phron* 2, 1957, 85–9

- [192] D.McGibbon: 'Metempsychosis in Pindar', *Phron* 9, 1964, 5–12 The Empedoclean material is edited and discussed in:
- [193] G.Zuntz: *Persephone* (Oxford, 1971) who draws on the study by:
- [194] U.von Wilamowitz-Moellendorf: 'Die *αἰξανόμενος λόγος*', des Empedokles', *Sitzungsberichte der preussischen Akademie*, 1929, 626–61=Wilamowitz-Moellendorf, *Kleine Schriften I* (Berlin, 1935) See also:
- [195] O.Skutsch: 'Notes on Metempsychosis', in his *Studia Emmaniana* (London, 1968)
- [196] M.L.West: 'Notes on newly-discovered fragments of Greek authors', *Maia* 20, 1968, 195–205 and pp. 112–27 of:
- [196A] H.B.Gottschalk: *Heraclides of Pontus* (Oxford, 1980) On the phenomenon of shamanism see Dodds [43], chapter 5; and:
- [197] J.D.P.Bolton: *Aristeas of Proconnesus* (Oxford, 1962) And for the *auxanomenos logos*:
- [198] J.Bernays: 'Epicharmos und der, ' *αἰξανόμενος λόγος*', *RhM* 8, 1853, 280–8=Bernays [73]
- Further material is listed on p. 673; and for Empedocles' natural philosophy see p. 666. There are two long studies of Alcmeon:
- [199] J.Wachtler: *De Alcmaeone Crotoniata* (Leipzig, 1896)
- [200] L.A.Stella: 'Importance di Alcmeone nella storia del pensiero greco', *Memorie della Reale Accademia Nazionale dei Lincei*, s.6. VIII. 4, 1939, 233–87 On the argument for immortality see:
- [201] C.Mugler: 'Alcmeon et les cycles physiologiques de Platon', *REG* 71, 1958, 42–50 Plato's version is analysed in:
- [202] T.M.Robinson: 'The Argument for Immortality in Plato's *Phaedrus*', in Anton-Kustas [69] and there are helpful comments in:
- [203] R.Hackforth: *Plato's Phaedrus* (Cambridge, 1952)
- [204] J.B.Skemp: *The Theory of Motion in Plato's Later Dialogues* (Amsterdam, 1967<sup>2</sup>)
- [205] T.M.Robinson: *Plato's Psychology* (Toronto, 1970) Further literature on Alcmeon is given on pp. 660 and 673.

### Chapter VII

The best introduction to early Greek thought on moral matters is:

- [206] K.J.Dover: *Greek Popular Morality in the Time of Plato and Aristotle* (Oxford, 1974) There is much of value in Dodds [43], Lloyd-Jones [51], and
- [207] A.W.H.Adkins: *Merit and Responsibility* (Oxford, 1960) And it is still worth reading Essay 2 in:
- [208] A.Grant: *The Ethics of Aristotle* (Oxford, 1885<sup>4</sup>) For Empedocles, see the works cited under Chapter VI, especially Zuntz [193].
- Heraclitus is exhibited as a moralist in chapters 4–6 of West [59]; and the main fragment on his ethics is discussed by:
- [209] H.Blass: *Gott und die Gesetze*, *Schriften zur Rechtslehre und Politik* 12 (Bonn, 1958)
- [210] A.P.D.Mourelatos: 'Heraclitus, fr. 114', *AJP* 86, 1965, 258–66 The intricacies of the concept of *nomos* are unravelled by:
- [211] M.Ostwald: *Nomos and the Beginnings of the Athenian Democracy* (Oxford, 1969) and there is further material in Vlastos [111] and Popper [137] On some matters of detail see:
- [212] H.Fränkell: 'Heraclitus on the Notion of a Generation', *AJP* 59, 1938, 89–91 =Fränkell [76]
- [213] G.S.Kirk: 'Heraclitus and Death in Battle (fr. 24 D)', *AJP* 70, 1949, 384–93
- [214] M.L.West: 'A pseudo-fragment of Heraclitus', *CR* n.s. 18, 1968, 257–9

## Chapter VIII

On the popular origins of scepticism see chapter 7 of Snell [55]. Xenophanes' epistemology is discussed in the studies listed under Chapter V, and in a fine piece by:

[215] H.Fränkell: 'Xenophanesstudien', *H* 60, 1925, 174–92=Fränkell [76]=Mourelatos [72] Fränkell is supported by:

[216] A.Rivier: 'Remarques sur les fragments 34 et 35 de Xenophane', *Revue de Philosophie* 30, 1956, 37–61 and ably criticized by:

[217] E.Heitsch: 'Das Wissen des Xenophanes', *RhM* 109, 1966, 193–235

[217A] J.H.Lesher: 'Xenophanes' Scepticism', *Phron* 23, 1978, 1–21

[217B] J.H.Lesher: 'Perceiving and Knowing in the *Iliad* and *Odyssey*', *Phron* 26, 1981, 2–24  
The Hippocratic treatise *On Ancient Medicine* is edited by:

[218] A.J.Festugière: *Hippocrate: L'Antienne Medicine* (Paris, 1948) and it is discussed in Jones [49].

To the literature on Heraclitus given under Chapter IV I add two pieces on minor topics:

[219] K.Reinhardt: 'Κοπίδων Ἀρχηγός', *H* 63, 1928, 107–10=Reinhardt [81]

[220] G.S.Kirk: 'The Michigan Alcidas Papyrus; Heraclitus Fr. 56 D; The Riddle of the Lice', *CQ* 44, 1950, 149–67

The theory of the *Phaedo* was attributed to Alcmeon by:

[221] R.Hirzel: 'Zur Philosophie des Alkmäon', *H* 11, 1876, 240–6 See also:

[222] D.Lanza: 'L' ἐγκέφαλος e la dottrina anassagorea della conoscenza', *Main* 16, 1964, 71–8

[223] D.Lanza: 'Un nuovo frammento di Alcmeone', *Maia* 17, 1965, 278–80

## Chapter IX

The best edition of the fragments of Parmenides is still:

[224] H.Diels: *Parmenides' Lehrgedicht* (Berlin, 1897) More recent editions include:

[225] M.Untersteiner: *Parmenide—testimonianze e frammenti* (Florence, 1958)

[226] L.Tarán: *Parmenides* (Princeton, N.J., 1965)

[227] U.Hölscher: *Parmenides: Vom Wesen des Seiendes* (Frankfurt am Main, 1969) Further suggestions of an editorial nature can be found in:

[228] P.J.Bicknell: 'A New Arrangement of Some Parmenidean Verses', *SO* 42, 1968, 44–50

[229] P.J.Bicknell: 'Parmenides, fragment 10', *H* 98, 1968, 629–31 There are three classic studies of Parmenides: that in Reinhardt [30]; and:

[230] H.Fränkell: 'Parmenidesstudien', *NGG* 1930, 153–92=Fränkell [76]=Furley-Allen [70]

[231] F.M.Cornford: *Plato and Parmenides* (London, 1939) Comprehensive accounts of Parmenides' thought can also be found in:

[232] G.Calogero: *Studisull' Eleatismo* (Rome, 1932)

[233] W.J.Verdenius: *Parmenides* (Gmningen, 1942)

[234] A.H.Coxon: 'The Philosophy of Parmenides', *CQ* 28, 1934, 134–44

[235] W.Brôcker: 'Parmenides', *ABG* 9, 1964, 79–86

[236] U.Hölscher: 'Parmenides', in Hölscher [79]

[237] A.P.D.Mourelatos: *The Route of Parmenides* (New Haven, Conn., 1970) See also chapter 5 of Stokes [56], and the heterodox views of:

[238] J.H.M.M.Loenen: *Parmenides, Melissus, Gorgias* (Assen, 1959) And see:

[238A] K.Bormann: *Parmenides* (Hamburg, 1971)

[238B] J.Jantzen: *Parmenides zum Verhältnis van Sprache und Wirklichkeit*, *Zetemata* 63 (Munich, 1976)

[238C] E.Heitsch: 'Parmenides', *Gymnasium* 84, 1977, 1–18

- [238D] *Parmenides Studies Today*, *The Monist* 62, Jan 1979
- [238E] C.H.Kahn: review of Tarán [226], *Gnomon* 40, 1968, 123–53
- [238F] L.Tarán: review of Mourelatos [237], *Gnomon* 48, 1977, 651–66
- [238G] A.Graeser: ‘Vier Bücher zur Eleatik’ (reviews of Mourelatos [237], Heitsch [249], Bormann [238A], Newiger [264A]), *Göttingische Gelehrter Anzeiger* 230, 1978, 37–69 On the prologue to Parmenides’ poem see:
- [239] C.M.Bowra: ‘The Proem of Parmenides’, *CP* 32, 1937, 97–112
- [240] W.Burkert: ‘Das Proömium des Parmenides und die Katabasis des Pythagoras’, *Phron* 14, 1969, 1–30
- [241] D.J.Furley: ‘Notes on Parmenides’, in E.N.Lee, A.P.D.Mourelatos and R.Rorty (eds), *Exegesis and Argument: Studies in Greek Philosophy presented to Gregory Vlastos*, *Phron* suppl. 1, 1973
- [241A] J.Owens: ‘Knowledge and *Katabasis* in Parmenides’, *Monist* [238D]  
The best discussion of the relation between the Way of Truth and the Way of Opinion is that in chapter 1 of Reinhardt [30]; see also:
- [242] F.M.Cornford: ‘Parmenides’ Two Ways’, *CQ* 27, 1933, 97–111
- [243] H.Schwabl: ‘Sein und Doxa bei Parmenides’, *WS* 66, 1953, 50–75=Gadamer [71]
- [244] G.E.L.Owen: ‘Eleatic Questions’, *CQ* n.s. 10, 1960, 84–102=Furley-Allen [70] And compare:
- [245] A.P.D.Mourelatos: ‘The Real, Appearances and Human Error in Early Greek Philosophy’, *RM* 19, 1965, 346–65
- [245A] T.Calvo: ‘Truth and Doxa in Parmenides’, *AGP* 59, 1977, 245–60
- [245B] F.D.Miller: ‘Parmenides on Mortal Belief’, *JHP* 15, 1977, 253–65
- [245C] W.Bröcker: ‘Parmenides’ ἀλήθεια’, *H* 106, 1978, 504–5 On the content of the Way of Opinion consult, e.g., Popper [35]; and
- [246] J.S.Morrison: ‘Parmenides and Er’, *JHS* 75, 1955, 59–69
- [247] A.A.Long: ‘The Principles of Parmenides’ Cosmogony’, *Phron* 8, 1963, 90–107= Furley-Allen [70]
- The argument about the Three Roads is brilliantly analysed by Owen [244], who is criticized by:
- [248] S.Tugwell: ‘The Way of Truth’, *CQ* n.s. 14, 1964, 36–41 See also:
- [249] E.Heitsch: *Gegenwart und Evidenz bei Parmenides*, *Abhandlungen der Akademie der Wissenschaft und Literatur (Mainz, 1970)* and the interesting paper by:
- [250] G.E.M.Anscombe: ‘Parmenides, Mystery and Contradiction’, *PAS* 69, 1968/9, 125–32  
Also:
- [250A] T.M.Robinson: ‘Parmenides on the Ascertainment of the Real’, *Canadian Journal of Philosophy* 4, 1975, 623–33
- [250B] R.Bosley: ‘Monistic Argumentation’, in Shiner-King-Farlow [72s]
- [250C] A.Graeser: ‘Parmenides über Sagen und Denken’, *MH* 34, 1977, 145–55
- [250D] J.Klowski: ‘Parmenides’ Grundlegung seiner Seinslehre B 2–7 (Diels-Kranz)’, *RhM* 120, 1977, 97–137
- On Parmenides’ conception of *nous* or thought see Snell [54], von Fritz [62], and:
- [251] A.P.D.Mourelatos: ‘φράζω and its derivatives in Parmenides’, *CP* 60, 1965, 261–2 The ‘veridical’ interpretation of *einai* is advanced in several papers by Charles Kahn:
- [252] C.H.Kahn: ‘The Greek Verb “to be” and the Concept of Being’, *Foundations of Language* 2, 1966, 245–65
- [253] C.H.Kahn: ‘The Thesis of Parmenides’, *RM* 22, 1968/9, 700–24
- [254] C.H.Kahn: ‘More on Parmenides’, *RM* 23, 1969/70, 333–40
- [255] C.H.Kahn: *The Verb Be in Ancient Greek* (Dordrecht, 1973)
- [255A] C.H.Kahn: ‘Why Existence does not Emerge as a Distinct Concept in Greek Philosophy’, *AGP* 58, 1976, 323–34 And see Mourelatos [237], Kahn is criticized by:

- [256] E.Tugendhat: 'Das Sein und das Nichts', in *Durchblicke: Festschrift für Martin Heidegger zum 80. Geburtstag* (Frankfurt am Main, 1970)
- [256A] E.Tugendhat: review of Kahn [255], *Philosophische Rundschau* 24, 1977, 161–76
- [256B] U.Hölscher: *Der Sinn von Sein in der älteren Griechischen Philosophie*, Sitzber. Heidelberg. Ak. Wiss., phil.-hist. Kl. 1976. 3 (Heidelberg, 1976)
- A 'fused' account of *einai* is propounded in:
- [257] M.Furth: 'Elements of Eleatic Ontology', *HP* 6, 1968, 111–32=Mourelatos [72] and criticized by:
- [258] B.Jones: 'Parmenides' "The Way of Truth"', *HP* 11.1973, 287–98 See also:
- [259] W.J.Verdenius: 'Parmenides B 2.3', *Mnem* s.4, 15, 1962, 237
- [259A] A.P.D.Mourelatos: 'Determinacy and Indeterminacy, Being and Non-Being, in the Fragments of Parmenides', in Shiner-King-Farlow [72e]
- [259B] D.Gallop: '“Is” or “Is not”?', *Monist* [238o]
- [259C] A.P.D.Mourelatos: 'Some Alternatives in Interpreting Parmenides', *Monist* [238o] For Gorgias' treatise *Concerning What is Not* see, besides Calogero [232] and Leonen [238] :
- [260] W.Nestle: 'Die Schrift des Gorgias "Ueber die Natur oder über das Nichtseiende"', *H* 57, 1922, 551–62=Nestle [80]
- [261] O.Gigon: 'Gorgias' "Ueber das Nichtsein"', *H* 71, 1936, 186–213=Gigon [78]
- [262] W.Bröcker: 'Gorgias contra Parmenides', *H* 86, 1958, 425–40
- [263] G.B.Kerferd: 'Gorgias on Nature or that which is not', *Phron* 1, 1955, 3–25
- [264] J.M.Robinson: 'On Gorgias', in E.N.Lee, A.P.D.Mourelatos and R.Rorty (eds), *Exegesis and Argument: Studies in Greek Philosophy presented to Gregory Vlastos*, *Phron* suppt 1, 1973
- [264A] H.J.Newiger: *Untersuchungen zu Gorgias' Schrift Über das Nichtseiende* (Berlin, 1973)

### Chapter X

There are general accounts of Parmenides' metaphysical deduction in most of the major studies cited under Chapter IX; see also:

- [265] A.H.Basson: '“The Way of Truth”', *PAS* 61, 1960/1, 73–86 And on Parmenides' 'circular' logic consult:
- [266] G.J.Jameson: '“Well-rounded Truth” and Circular Thought in Parmenides', *Phron* 3, 1958, 15–30
- [267] L.Ballew: 'Straight and Circular in Parmenides and the Timaeus', *Phron* 19, 1974, 189–209
- The problems raised by Parmenides' prospectus in B 8.3–5 are discussed by, e.g., Owen [244], Schofield [275], and:
- [268] J.R.Wilson: 'Parmenides, B 8.4', *CQ* 2 n.s. 20, 1970, 32–5 Melissus has been less well served than his master; but there is a first-rate edition:
- [269] G.Reale: *Melisso—testimonianze e frammenti* (Florence, 1970) and useful chapters in Calogero [232] and Loenen [238]. On Melissus' importance see:
- [270] J.Jouanna: 'Rapports entre Melissos de Samos et Diogène d'Apollonie, à la lumière du traité hippocratique de natura hominis', *REA* 67, 1965, 306–23
- [271] J.Klowski: 'Antwortete Leukipp Melissos oder Melissos Leukipp?', *MH* 28, 1971, 65–71
- Studies devoted to Parmenides' arguments against generation and destruction include:
- [272] C.M.Stough: 'Parmenides' Way of Truth, B 8.12–3', *Phron* 13, 1968, 91–108
- [273] J.Wiesner: 'Die Negation der Entstehung des Seienden', *AGP* 52, 1970, 1–35 And Eleatic views on time are discussed by:
- [274] G.E.L.Owen: 'Plato and Parmenides on the Timeless Present', *Monist* 50, 1966, 317–40=Mourelatos [72]
- [275] M.Schofield: 'Did Parmenides discover Eternity?', *AGP* 52, 1970, 113–35
- [276] J.Whittaker: *God, Time and Being*, *SO* suppt. 23, 1971

[276A] P.B.Manchester: 'Parmenides and the Need for Eternity', *Monist* [238D]

[276B] T.M.Robinson: 'Parmenides on the Real in its Totality', *Monist* [238D]

[276C] L.Tarán: 'Perpetual Duration and Atemporal Eternity in Parmenides', *Monist* [238o]

See also:

[277] W.C.Kneale: 'Time and Eternity in Theology', *PAS* 61, 1960/1, 87–109 And on Melissus B 2:

[278] W.J.Verdenius: 'Notes on the Presocratics VII', *Mnem* s.4, 1, 1948, 8–10

### Chapter XI

The interpretation of Parmenides' ball or 'sphere' has much engaged scholars; for a selection of views see Coxon [234], Owen [244], and

[279] G.Rudberg: 'Zur vorsokratischen Abstraktion', *Eranos* 52, 1954, 131–8

[280] J.Mansfeld: 'αἰξανόμενος λόγος', 'Akten des XIV Internationales Kongress für Philosophie (Vienna, 1970), 5, 414–9

[281] J. Bollack and H.Wismann: 'Le moment theorique (Parmenide fr. 8.42–9)', *Revue des sciences humaines* 39, 1974, 203–12

Eleatic monism has, surprisingly, been less discussed; in addition to the commentaries I note only:

[282] F.Solmsen: *The 'Eleatic One' in Melissus*, Mededelingen der koninklijke nederlandse akademie van wetenschappen 32.8 (The Hague, 1969)

[282A] J.Barnes: 'Parmenides and the Eleatic One', *AGP* 61, 1979, 1–21 (But on Parmenides B 8.34–41 see also:

[283] L.Woodbury: 'Parmenides on Names', *HSCP* 63, 1958, 145–60=Anton-Kustas [69])  
Fragment B 4 of Parmenides is scrutinized by:

[284] J.Bollack: 'Sur deux fragments de Parmenide (4 et 16)', *REG* 70, 1957, 56–71 And the Parmenidean attack on motion is discussed in:

[285] M.C.Stokes and G.S.Kirk: 'Parmenides' Refutation of Motion', *Phron* 5, 1960, 1–22

[286] P.J.Bicknell: 'Parmenides' Refutation of Motion and an Implication', *Phron* 12, 1967, 1–6  
See also:

[287] A.H.Coxon: 'The Manuscript Tradition of Simplicius' Commentary on Aristotle's *Physics* i-iv', *CQ* n.s. 18, 1968, 70–5

Finally, on the solidity or corporeality of Melissus' being see:

[288] H. Gomperz: 'ἀσώματος', *H* 67, 1932, 155–67

[289] G.Vlastos: review of Raven [178], *Gnomon* 25, 1953, 29–35=Furley-Allen [70]

[290] N.B.Booth: 'Did Melissus believe in incorporeal being?', *AJP* 79, 1958, 61–5

[291] M.Untersteiner: 'Un aspetto dell' Essere melissiano', *Rivista critica di storia della filosofia* 8, 1953, 597–606=Untersteiner [84]

[291A] R.Renehan: 'On the Greek Origins of the Concepts Incorporeality and Immateriality', *Greek Roman and Byzantine Studies* 21, 1980, 105–38

### Chapter XII

The texts bearing upon Zeno have been edited by:

[292] H.D.P.Lee: *Zeno of Elea* (Cambridge, 1936)

[293] M.Untersteiner: *Zenone—testimonianze e frammenti* (Florence, 1963) See also:

[294] J.Dillon: 'New Evidence on Zeno of Elea?', *AGP* 56, 1974, 127–31

[294A] J.Dillon: 'More Evidence on Zeno of Elea?', *AGP* 58, 1976, 221–2

The history of Zenonian scholarship is recounted in:

- [295] F.Cajori: 'The History of Zeno's Arguments on Motion', *American Mathematical Monthly* 22, 1915, 1–6, 38–47, 77–82, 109–115, 143–9, 179–86, 215–20, 253–8, 292–7 And there is an anthology (with an excellent bibliography) by:
- [296] W.C.Salmon (ed.): *Zeno's Paradoxes* (Indianapolis, Ind., 1970)  
For a lucid introduction to Zeno and his problems see:
- [297] G.Vlastos: 'Zeno of Elea', in P. Edwards (ed.), *Encyclopaedia of Philosophy* (New York, 1967) Compare:
- [298] K.von Fritz: 'Zeno von Elea', *RE* 10 A, 1972, 53–83 It is a pleasure to read:
- [299] P.Bayle: 'Zeno of Elea', in his *Historical and Critical Dictionary*, trans. R.H.Popkin (Indianapolis, Ind., 1965) See also, on a minor matter:
- [300] J.Longrigg: 'Zeno's Cosmology?', *CR* n.s. 22, 1972, 170–1 The crucial passage from the *Parmenides* has recently been thrice examined:
- [301] F.Solmsen: 'The Tradition about Zeno of Elea Re-examined', *Phron* 16, 1971, 116–41 =Mourelatos [72]
- [302] K.von Fritz: 'Zeno of Elea in Plato's *Parmenides*', in J.L.Heller and J.K.Newman (eds), *Studia Turyniana* (Urbana, Ill., 1974)
- [303] G.Vlastos: 'Plato's Testimony concerning Zeno of Elea', *JHS* 95, 1975, 136–63 On the aim of Zeno's paradoxes see:
- [304] N.B.Booth: 'Were Zeno's Arguments a reply to attacks upon Parmenides?', *Phron* 3, 1957, 1–9
- [305] N.B.Booth: 'Were Zeno's arguments directed against the Pythagoreans?'. *Phron* 3, 1957, 90–103
- [306] N.B.Booth: 'Zeno's Paradoxes', *JHS* 78, 1957, 189–201 On the architecture of the paradoxes see especially:
- [307] G.E.L.Owen: 'Zeno and the Mathematicians', *PAS* 58, 1957/8, 199–222 =Salmon [296]=Furley-Allen [70] Owen's thesis is rejected by Stokes [56], chapter 7, and by Furley [387], chapter 5.
- Discussion of the paradox of 'large and small' was put on a sound scholarly footing by:
- [308] H.Fränkell: 'Zeno of Elea's Attacks on Plurality', *AJP* 63, 1938, 1–25 and 193–206 = Fränkell [76]=Gadamer [71]=Furley-Allen [70]
- For further discussion see Owen [307], Furley [387], chapter 5; and:
- [309] G.Vlastos: 'A Zenonian Argument against Plurality', in Anton-Kustas [69]
- [310] W.E.Abraham: 'The Nature of Zeno's Argument against Plurality', *Phron* 17, 1972, 40–53
- [310A] W.J.Prior: 'Zeno's First Argument Concerning Plurality', *AGP* 60, 1978, 247–56
- [310B] N.B.Booth: 'Two Points of Interpretation in Zeno', *JHS* 98, 1978, 157–8
- [310c] S.Peterson: 'Zeno's Second Argument Against Plurality', *JHP* 16, 1978, 261–70 On the issue of geometrically indivisible magnitudes see:
- [311] R.Heinze: *Xenokrates* (Leipzig, 1892)
- [312] A.T.Nicol: 'Indivisible Lines', *CQ* 30, 1936, 120–6 and the papers listed on p. 668.
- Since Russell's persuasive advertisements modern philosophers have taken Zeno seriously. The most sophisticated and exhaustive modern treatment is:
- [313] A.Grünbaum: *Modern Science and Zeno's Paradoxes* (London, 1968) =(in part) Salmon [296] See also the Introduction to Salmon [296] and:
- [314] A.P.Ushenko: 'Zeno's Paradoxes', *M* 55, 1946, 151–65
- [315] H.N.Lee: 'Are Zeno's Paradoxes Based on a Mistake?', *M* 74, 1965, 563–70
- [315A] R.Ferber: *Zenons Paradoxien der Bewegung und die Struktur von Raum und Zeit*, Zetemata 76 (Munich, 1981)

### Chapter XIII

Bertrand Russell more than once gave crisp accounts of Zeno's four paradoxes of motion; see:

- [316] B.Russell: *The Principles of Mathematics* (London, 1903), chapters 42–3
- [317] B.Russell: *Mysticism and logic* (London, 1917), chapter 5
- [318] B.Russell: *Our Knowledge of the External World* (London, 1956<sup>2</sup>) chapter 6=Salmon [296]  
Russell was influenced by the brilliant assessment in chapter 10 of Tannery [29], on which see also:
- [319] F.Cajori: 'The Purpose of Zeno's Arguments on Motion', *Isis* 3, 1920/1, 7–20 Philosophers will enjoy chapter 4 of:
- [320] H.Bergson: *Creative Evolution* (London, 1964) =Salmon [296] And Grünbaum [313] again has much of value to say.
- The best scholarly study of the first two paradoxes, the Dichotomy and the Achilles, is:
- [321] G.Vlastos: 'Zeno's Race Course', *JHP* 4, 1966, 96–108 =Furley-Allen [70] And on all four paradoxes the notes in Ross [12] are invaluable; on Aristotle's interpretation of Zeno see also:
- [322] D.Bostock: 'Aristotle, Zeno and the Potential Infinite', *PAS* 73, 1972/3, 37–53
- [322A] J.Immerwahr: 'An Interpretation of Zeno's Stadium Paradox', *Phron* 23, 1978, 22–6  
There are numerous modern attempts to grapple with the complex issues that Zeno raises:
- [323] C.D.Broad: 'Note on Achilles and the Tortoise', *M* 22, 1913, 318–19
- [324] W.V.Metcalf: 'Achilles and the Tortoise', *AT* 51, 1942, 89–90
- [325] G.Ryle: *Dilemmas* (Cambridge, 1954), chapter 3
- [326] M.Black: 'Achilles and the Tortoise', *An* 11, 1950/1, 91–101=M.Black, *Problems of Analysis* (London, 1954)
- [327] M.Black: 'Is Achilles still Running?', in M. Black, *Problems of Analysis* (London, 1954)
- [328] J.O.Wisdom: 'Achilles on a Physical Racecourse', *An* 12, 1951/2, 67–73=Salmon [296]
- [329] R.Taylor: 'Mr Black on Temporal Paradoxes', *An* 12, 1951/2, 38–44
- [330] J.Watling: 'The Sum of an Infinite Series', *An* 13, 1952/3, 39–46
- [331] J.Thomson: 'Tasks and Supertasks', *An* 15, 1954/5, 1–13=Salmon [296]
- [332] P.Benacerraf: 'Tasks, Supertasks and the Modern Eleatics', *JP* 59, 1962, 765–84= Salmon [296]
- [333] J.Thomson: 'Comments on Professor Benacerraf's Paper', in Salmon [296]
- [334] C.S.Chihara: 'On the Possibility of Completing an Infinite Process', *PR* 74, 1965, 74–87
- [334A] R.Sorabji: 'Aristotle on the Instant of Change', *PAS* suppl 50, 1976, 69–89 On the third paradox, the Arrow, see especially:
- [335] G.Vlastos: 'A Note on Zeno's Arrow', *Phron* 11, 1966, 3–18 =Furley-Allen [70]
- [335A] F.R.Pickering: 'Aristotle on Zeno and the Now', *Phron* 23, 1978, 253–7
- [335B] J.Lear: 'A Note on Zeno's Arrow', *Phron* 26, 1981, 91–104 Among modern studies I mention:
- [336] P.E.B.Jourdain: 'The Flying Arrow—an Anachronism', *M* 25, 1916, 42–55
- [337] L.Greenberg: 'A Note on the Arrow in Flight', *PR* 59, 1950, 541–2
- [338] M.Black: 'The Paradox of the Flying Arrow', in M.Black, *Problems of Analysis* (London, 1954)
- [339] V.C.Chappell: 'Time and Zeno's Arrow', *JP* 49, 1962, 197–213 Finally, for detailed analysis of the Stadium see:
- [340] R.K.Gaye: 'On Aristotle *Physics* Z ix, 239b33–240a18', *Journal of Philology* 31, 1910, 95–116
- [341] P.J.Bicknell: 'The Fourth Paradox of Zeno', *AC* 4, 1961, 39–46
- [342] P.J.Bicknell: 'Zeno's Arguments on Motion', *AC* 6, 1963, 81–105  
And on Diodorus' Zenonian arguments:
- [342A] D.Sedley: 'Diodorus Cronus and Hellenistic Philosophy', *PCPS* 23, 1977, 74–120

## Chapter XIV

For literature relevant to this chapter see the general studies under Chapter IX, and the items on post-Eleatic epistemology under Chapter XXIV.

## Chapter XV

Neo-Ionian history and chronology are discussed in all the General Histories; see also:

- [343] A.E.Taylor: 'On the Date of the Trial of Anaxagoras', *CQ* 11, 1917, 81–7  
 [344] J.A.Davison: 'Protagoras, Democritus and Anaxagoras', *CQ* n.s. 3, 1953, 33–45  
 [345] E.Derenne: *Les Procès d'Impiété intentés aux philosophes à Athènes au V<sup>me</sup> et au IV<sup>me</sup> siècles avant J.C.* (Liège, 1930)  
 [346] J.Ferguson: 'On the Date of Democritus', *SO* 40, 1965, 17–26  
 [347] H.de Ley: 'Democritus and Leucippus: two notes on ancient Atomism', *L'Antiquité classique* 37, 1968, 620–33  
 [348] D.O'Brien: 'The Relation of Anaxagoras and Empedocles', *JHS* 88, 1968, 93–114  
 [348A] J.Mansfeld: 'The Chronology of Anaxagoras' Athenian Period and the Date of his Trial', *Mnem* s.4, 32, 1979, 39–69; 33, 1980, 17–95

For Anaxagoras, the Atomists and Philolaus see the bibliographies to Chapters XVI–XVIII. The most recent edition of Empedocles' poem *Concerning Nature* is:

- [349] J.Bollack: *Empedocle* (Paris, 1965–9) The classic study is:  
 [350] E.Bignone: *Empedocle* (Turin, 1916) And there is a full-scale treatment in:  
 [351] D.O'Brien: *Empedocles' Cosmic Cycle* (Cambridge, 1969) See also:  
 [352] C.E.Miller: *On the Interpretation of Empedocles* (Chicago, 1908)  
 [352A] N.van der Ben: *The Proem of Empedocles' Peri Phuseōs* (Amsterdam, 1975)  
 [352B] M.R.Wright: *Empedocles—the Extant Fragments* (New Haven, 1981)  
 [352C] D.O'Brien: *Pour interpreter Empedocle* (Paris, 1981) The orthodox account of the cosmic cycle is stated at length in Bignone [349] and O'Brien [351], and more concisely by:  
 [353] D.O'Brien: 'Empedocles' Cosmic Cycle', *CQ* n.s. 17, 1967, 29–40 For various heterodoxies see Bollack [349]; and also  
 [354] E.Minar: 'Cosmic Periods in the Philosophy of Empedocles', *Phron* 8, 1963, 127–45 = Anton-Kustas [69]  
 [355] F.Solmsen: 'Love and Strife in Empedocles' Cosmology', *Phron* 10, 1965, 109–48 = Furley-Allen [70]  
 [3.56] U.Hölscher: 'Weltzeiten und Lebenszyklus', *H* 93, 1965, 7–33 = Hölscher [79]  
 [357] J.Mansfeld: 'Ambiguity in Empedocles B 17.3–5', *Phron* 17, 1972, 17–40 There is a judicious survey by:  
 [358] A.A.Long: 'Empedocles' Cosmic Cycle in the 'Sixties', in Mourelatos [72] Finally, on Empedoclean atomism see Reinhardt [491], and:  
 [359] J.Longrigg: 'Roots', *CR* n.s. 17, 1967, 1–5

## Chapter XVI

There is an edition of Anaxagorean texts by:

- [360] D.Lanza: *Anaxagora—testimonianze e frammenti* (Florence, 1966) and the Greek is Englished in:  
 [361] D.E.Gershenson and D.A.Greenberg: *Anaxagoras and the Birth of Physica* (New York, 1964) On textual matters see also:

- [362] H.Fränkell: review of Ciurnelli, *La Filosofia di Anassagora*, CP 45, 1950, 187–91= Fränkell [76]
- [363] A.Wasserstein: ‘A note on fragment 12of Anaxagoras’, CR n.s. 10, 1960,4–6  
There are comprehensive papers on Anaxagoras’ thought by:
- [364] O.Gigon: ‘Zu Anaxagoras’, Phlg 91, 1936, 1–41=Gigon [78]
- [365] M.C.Stokes: ‘On Anaxagoras’, AGP 47, 1965, 1–19 and 217–50 See also:
- [366] M.E.Reesor: ‘The Meaning of Anaxagoras’, CP 55,1960, 1–8
- [367] M.E.Reesor: ‘The Problem of Anaxagoras’, CP 58, 1963, 29–33=Anton-Kustas [69]
- [368] D.Bargrave-Weaver: ‘The Cosmogony of Anaxagoras’, Phron 4, 1959, 77–91
- [368A] D.J.Furley: ‘Anaxagoras in Response to Parmenides’, in Shiner-King-Farlow [72s]
- [368a] M.Schofield: *An Essay on Anaxagoras* (Cambridge, 1980)
- The problem of Anaxagoras’ ontology has aroused a massive literature: see the Appendix to Bailey [383]; and:
- [369] F.M.Cornford: ‘Anaxagoras’ Theory of Matter’, CQ 24, 1930, 14–30 and 83–95
- [370] I.R.Mathewson: ‘Aristotle and Anaxagoras: An Examination of F.M.Cornford’s Interpretation’, CQ n.s. 8, 1958, 67–81
- [371] A.L.Peck: ‘Anaxagoras: Predication as a Problem in Physics’, CQ 25, 1931, 27–37 and 112–20
- [372] G.Vlastos: ‘The Physical Theory of Anaxagoras’, PR 59, 1950, 31–57=Furley-Allen [70]=Mourelatos [72]
- [373] J.E.Raven: ‘The Basis of Anaxagoras’ Cosmology’, CQ n.s. 4, 1954, 123–37
- [374] C.Strang, ‘The Physical Theory of Anaxagoras’, AGP 45, 1963, 101–18=Furley-Allen [70]
- [375] W.Schwabe: ‘WelchessinddiemateriellenElemente bei Anaxagoras?’, Phron 20, 1975, 1–10  
On homoiomerics in particular see:
- [376] A.L.Peck: ‘Anaxagoras and the Parts’, CQ 20, 1926, 57–62
- [377] D.Lanza: ‘Le Omeomerie nella tradizione dossografica Anassagorea’, Parole del Passato 18,1963, 256–93
- But the clearest and the best paper on the whole topic is:
- [378] G.B.Kerferd: ‘Anaxagoras and the Concept of Matter before Aristotle’, Bulletin of the John Rylands Library 52, 1969, 129–43=Mourelatos [72] And see now:
- [378A] W.E.Mann: ‘Anaxagoras andthe homoiomerê’, Phron 25, 1980, 228–49
- The biological slant of Anaxagoras’ thought has often been remarked upon; see Vlastos [372], Müller [52], Longrigg [63];
- [379] P.Kucharski: ‘Anaxagore et les idees biologiques de son siècle’, Revue philosophique de la France et de l’ Étranger 89, 1964, 137–66
- [379A] J.Mansfeld: ‘Anaxagoras’ Other World’, Phron 25, 1980, 1–4 Finally note the detailed study of B 10 by:
- [380] M.Schofield: ‘Doxographica Anaxagorea’, H 103, 1975, 1–24 On nous see under Chapter XIX below.

### Chapter XVII

Atomist texts have been edited (with a Russian commentary which may be of more use to some readers than it is to me) in:

- [381] S.Luria: *Demokrit* (Leningrad, 1970) On the vocabulary and style of Atomism see:
- [382] K.von Fritz: *Philosophie und sprachlicher Ausdruck bei Demokrit, Platon und Aristoteles* (New York, n.d.) There are general surveys of atomism by:
- [383] C.Bailey: *The Greek Atomists and Epicurus* (Oxford, 1928)
- [384] V.E.Alfieri: *Atomos Idea* (Florence, 1953)
- [385] H.Steckel: ‘Demokritos’,. RE suppt 12, 1970, 191–223 See also chapter 5 of Sambursky [53]; and:

- [386] H.Langerbeck: *Δόξαι ἐπιρυσμῆ*, Neue Philologische Untersuchungen 10 (Berlin 1935)
- [387] D.J.Furley: *Two Studies in the Greek Atomists* (Princeton, NJ, 1967)=(in part) Mourelatos [72] And it is still worth reading:
- [388] K.Marx: *The difference between the Democritean and the Epicurean Philosophy of Nature*, in K.Marx and F.Engels, *Collected Works*, I (London, 1975) On Abderite cosmology see:
- [389] J.Kerscheneiner: 'ZuLeukippos A 1', *H* 87, 1959, 444–8 On the historical continuity of the philosophy of atomism see especially:
- [390] M.Capek: *The Philosophical Impact of Contemporary Physics* (Princeton, NJ, 1961) There is fascinating historical matter in:
- [391] A.van Melsen: *From Atomos to Atom* (Pittsburgh, Pa., 1952)
- [392] D.M.Knight: *Atoms and Elements* (London, 1967)
- [393] R.H.Kargon: *Atomism in England from Harriot to Newton* (Oxford, 1966) And read the essay by an eminent modern physicist:
- [394] W.Heisenberg: *Natural Law and the Structure of Matter* (London, 1970) Atomic motions are discussed by:
- [395] J.B.McDiarmid: 'Phantoms in Democritean Terminology: *περιπάλαξις* and *περιπαλάσσεισθαι*', *H* 86, 1958, 291–8
- [396] S.Sambursky: 'A Democritean Metaphor in Plato's *Kratylos*', *Phron* 4, 1959, 1–4
- [397] J.Bollack: 'Deux figures principales de l'atomisme d'après Aristote: l'entrecroisement des atomes et la sphère du feu', in I. Düring (ed.), *Naturphilosophie bei Aristoteles und Theophrast* (Heidelberg 1969)
- [397A] D.O'Brien: 'Heavy and Light in Democritus and Aristotle: two conceptions of change and identity', *JHS* 97, 1977, 64–74
- [397B] D.O'Brien: 'L'atomisme ancien: la pesanteur et le mouvement des atomes chez Democrite', *Revue philosophique de la France et de l'Étranger* 169, 1979, 401–26 The issue of theoretical indivisibility is subtly treated by:
- [398] S.Luria: 'Die Infinitesimaltheorie der antiken Atomisten', *QSGM* B 2, 1932, 106–85 and the discussion was advanced by:
- [399] J.Mau: *Zum Problem des Infinitesimalen bei den antiken Atomisten* (Berlin, 1954) and by Furley [387], and:
- [400] D.J.Furley: 'Aristotle and the Atomists on Infinity', in I.Düring (ed.), *Naturphilosophie bei Aristoteles und Theophrast* (Heidelberg, 1969) See also Heinze [311], Nicol [312];
- [401] G.Vlastos: 'Minimal Parts in Epicurean Atomism', *Isis* 56, 1965, 121–47
- [402] J.Mau: 'Was there a Special Epicurean Mathematics?', in E.N.Lee, A.P.D. Mourelatos and R.Rorty (eds), *Exegesis and Argument: Studies in Greek Philosophy presented to Gregory Vlastos*, *Phron* suppl 1, 1973
- [403] D.E. Hahm: 'Chrysippus' Solution to the Democritean Dilemma of the Cone', *Isis* 63, 1972, 205–20
- [403A] D.Sedley: 'Epicurus and the Mathematicians of Cyzicus', *Cronache Ercolanesi* 6, 1976, 23–54
- Finally, for a special study of one Abderite account of a sensible quality see:
- [404] J.B.McDiarmid: 'Theophrastus *de Sensibus* 66: Democritus' Explanation of Salinity', *AJP* 80, 1959, 56–66
- [404A] M.Okál: 'Le sens des expressions utilisées par Democrite pour désigner les goûts', *Listy Filologicke* 92, 1969, 208–22
- [404B] R.W.Baldes: 'Democritus on the Nature and Perception of "black" and "white"', *Phron* 23, 1978, 87–100
- Later pages give reading on the Atomists' account of explanation (see Chapter XIX), of anthropology (XX), of the soul (XXII), of morals (XXIII) and of knowledge (XXIV).

## Chapter XVIII

- Of the scientific achievements—or alleged achievements—of the Pythagoreans by far the best account is that in Burkert [173]. There is also much of value in Heath [45], chapters 6 and 12; in Heath [46], chapter 5; in van der Waerden [58], and in:
- [405] F.M.Cornford: 'Mysticism and Science in the Pythagorean Tradition', *CQ* 16, 1922, 137–50 and 17, 1923, 1–12=(in part) Mourelatos [72]
- [406] W.A.Heidel: 'The Pythagoreans and Greek Mathematics', *AJP* 61, 1940, 1–33= Furley-Allen [70]
- [407] K.von Fritz: 'The Discovery of Incommensurability by Hippasus of Metapontum', *Annals of Mathematics* 46, 1945, 242–64= von Fritz [77]=Furley-Allen [70]
- [408] B.L.van der Waerden: 'Pythagoreische Wissenschaft', *RE* 24, 1963, 277–300
- There is a clear account of 'number philosophy' in chapter 5 of volume I of Guthrie [25], a somewhat credulous account in Raven [178], and a hard-headed account in Burkert [173]. See also:
- [409] A.Delatte: *Études sur la littérature pythagoricienne* (Paris, 1915)
- [410] A.J.Festugière: 'Les memoires pythagoriques cites par Alexandre Polyhistor', *REG* 58, 1945, 1–65
- On Philolaus see, again, Burkert [173]; and also de Vogel [181], Kahn [177] and:
- [411] K.von Fritz: 'Philolaus', *RE* suppl. 13, 1973, 453–84
- [412] A.Burns: 'The Fragments of Philolaus', *Classica et Mediaevalia* 25, 1964, 93–128
- [413] J.A.Philip: 'Aristotle's Source for Pythagorean Doctrine', *Phoenix* 17, 1963, 251–65
- [413A] W.Hübner: 'Die geometrische Theologie des Philolaus', *Phlg* 124, 1980, 18–32
- [413B] M.C.Nussbaum: 'Eleatic Conventionalism and Philolaus on the Conditions of Thought', *HSCP* 83, 1979, 63–108

## Chapter XIX

Most of the literature relevant to this Chapter has already been cited under Chapters XV–XVI On the central and fascinating notion of *antiperistasis* I know of no special literature; but the minor matter of Empedocles' account of the clepsydra has been massively studied. See e.g. :

- [414] H.Last: 'Empedocles and his Clepsydra Again', *CQ* 18, 1924, 169–74
- [415] D.J.Furley: 'Empedocles and the Clepsydra', *JHS* 77, 1957, 31–5
- [416] N.B.Booth: 'Empedocles' Account of Breathing', *JHS* 80, 1960, 10–16
- [417] D.O'Brien: 'The Effect of a Simile: Empedocles' theories of seeing and breathing', *JHS* 90, 1970, 140–80
- The void, and motion therein, has been scarcely better treated than *antiperistasis*. See:
- [418] A.C.Moorhouse: 'Δέν in Classical Greek', *CQ* n.s. 12, 1962, 235–8
- [419] W.I.Matson: 'Democritus, fragment 156', *CQ* n.s. 13, 1963, 26–30
- [420] D.McGibbon: 'The Atomists and Melissus', *Mnem* s.4, 17, 1964, 248–55. And consult Kłowski [272] and Jouanna [270]. The standard piece on Anaxagoras' *nous* is:
- [421] K. von Fritz.: 'Der *νοῦς* des Anaxagoras', *ABG* 9, 1964, 87–102= von Fritz [77] See also:
- [421A] D.Babut: 'Anaxagore jugepar Socrateet Platon', *REG* 91, 1978, 44–76 On the textual problem of B 14 see:
- [422] D.Sider: 'AnaxagorasFr 14DK', *H* 102, 1974, 365–7
- [423] M.Marcovich: 'Anaxagoras B 14 DK', *H* 104, 1976, 240–1 The Atomists' notion of causation, and their adherence to the Principle of Causality, are discussed by:
- [424] J.Kłowski: 'Die historische Ursprung desKausalprinzips', *AGP* 48, 1966, 225–66 And the role of chance and necessity in Abderite physics is examined in:

- [425] L.Edmunds: 'Necessity, Chance and Freedom in the Early Atomists', *Phoenix* 26, 1972, 342–57

### Chapter XX

I have already listed items that bear upon the neo-Ionian accounts of explanation, locomotion, alteration, and generation. On Empedoclean ontology I may add:

- [426] F.Solmsen: 'Eternal and Temporal Beings in Empedocles' Physical Poem', *AGP* 57, 1955, 123–45  
 [426A] N.van den Ben: 'Empedocles' fragments 8, 9,10 DK', *Phron* 23, 1978, 197–215 For Ion of Chios see:  
 [427] A. von Blumenthal: *Ion von Chios: die Reste seiner Werke* (Stuttgart, 1939)  
 [428] F.Jacoby: 'Some Remarks on Ion of Chios', *CQ* 41, 1947, 1–17  
 [429] G.Huxley: 'Ion of Chios', *Greek, Roman and Byzantine Studies* 6, 1965, 29–46

### Chapter XXI

Texts bearing upon the Sophists have been edited by:

- [430] M.Untersteiner: *Sofisti—testimonianze e frammenti* (Florence, 1949–62) And they are translated in:  
 [431] R.K.Sprague: *The Older Sophists* (Columbia, SC, 1972) The most celebrated account of the sophistic movement is the one in Chapter 67 of volume 7 of:  
 [432] G.Grote: *A History of Greece* (London, 1888) There are two full-length studies, each somewhat bizarre in its general conclusions:  
 [433] H.Gomperz: *Sophistik und Rhetorik* (Leipzig, 1912)  
 [434] M.Untersteiner: *The Sophists*, trans. K.Freeman (Oxford, 1954) There is an expanded version of [434]:  
 [435] M.Untersteiner: *I Sofisti* (Milan, 1967<sup>2</sup>) For a full and sober description of the Sophists consult the second half of volume III of Guthrie [25]; and see the notes by:  
 [436] G.B.Kerferd: 'The First Greek Sophists', *CR* 64, 1950, 8–10  
 [437] E.L.Harrison: 'Was Gorgias a Sophist?' *Phoenix* 18, 1964, 183–92 See also:  
 [437A] F.Solmsen: *Intellectual Experiments of the Greek Enlightenment* (Princeton, 1975) On Protagoras in general see:  
 [438] K.von Fritz: 'Protagoras', *RE* 23, 1957, 908–23 And on his attitude to the gods:  
 [439] T.Gomperz: 'Das Götterbruchstück des Protagoras', *WS* 32, 1910, 4–6  
 [440] C.W.Müller: 'Protagoras über die Cötter', *H* 95, 1967, 140–59=Classen [72A]  
 [441] C.W.Chilton: 'An Epicurean View of Protagoras', *Phron* 7, 1962, 105–9 There is much excellent matter on early anthropology:  
 [442] E.Norden: *Agnostos Theos* (Leipzig, 1913)  
 [443] W.von Uxkull-Gyllenband: *Griechische Kulturentstehungslehre* (Berlin, 1924)  
 [444] A.Kleingümher: **Πρῶτος Εὐρητής**, *Phlg* suppt. 26, 1933  
 [445] F.Heinimann: *Nomos und Phusis* (Basle, 1945)  
 [446] L.Edelstein: *The Idea of Progress in Classical Antiquity* (Baltimore, 1967)  
 [447] E.R.Dodds: *The Ancient Concept of Progress* (Oxford, 1973) Democritus' views on the origins of man and the growth of civilization are expansively analysed in:  
 [448] T.Cole: *Democritus and the Sources of Greek Anthropology*, *Philological Monographs* 25(n.p., 1967) And on Protagoras see the notes in:  
 [449] C.C.W.Taylor: *Plato: Protagoras* (Oxford, 1976) The special issue of the Diodoran anthropology has aroused passionate controversy; the most interesting items are:  
 [450] K.Reinhardt: 'Hekataios von Abdera und Demokrit', *H* 47, 1912, 492–513 = Reinhardt [81]

- [451] G.Vlastos: 'On the Pre-History of Diodorus', *AJP* 67, 1946, 51–9
- [452] W.Spoerri: *Späthellenistische Berichte über Welt, Kultur und Götter* (Basle, 1959)
- [453] W.Spoerri: 'ZuDiodor von Sizilien I. 7–8', *MH* 18, 1961, 63–82
- [454] A.Burton: *Diodorus Siculus, Book I* (Leiden, 1972) On Critias there is a rare but good book by:
- [455] D.Stephens: *Critias, his life and Literary Remains* (Cincinnati, Ohio, 1939) and a useful article by:
- [456] A.Battegazzore: 'Influssi e polemiche nel fr (DK) 25 di Crizia', *Dioniso* 21, 1958, 45–58
- [456A] A.Dihle: 'Das Satyrspiele "Sisyphos"', *H* 105, 1977, 28–42
- [456B] D.Sutton: 'Critias and Atheism', *CQ* n.s. 31, 1981, 33–8 The texts bearing on Diagoras of Melos are splendidly edited by:
- [457] F.Jacoby: *Diagoras ὁ Ἀθῆναιος*, Abhandlungen der Akademie der Wissenschaften, Berlin, 3, 1959 And Diagoran problems are discussed by:
- [458] L.Woodbury: 'Diagoras of Melos', *Phoenix* 19, 1965, 178–213 On Euripides' theology there are two informative studies by Wilhelm Nestle:
- [459] W.Nestle: *Euripides der Dichter dergriechischen Erklärung* (Stuttgart, 1901)
- [460] W.Nestle: *Untersuchungen über die philosophischen Quellen des Euripides*, *Phlg* suppt. 8, 1900
- Some reading on ancient atheism has already been given under Chapter V: see especially Drachmann [164], Fahr [163], and de Mahieu [168].
- Finally, on Democritus' attitude to the gods see:
- [461] V.E. Alfieri: 'Il concetto del divino in Democrito e in Epicure', in Alfieri-Untersteiner [68]
- [462] D.McGibbon: 'The Religious Thought of Democritus', *H* 93, 1965, 385–97
- [463] H.Eisenberger: 'Demokrits Vorstellung vom Sein und Wirken der Götter', *Rhm* 113, 1970, 141–58
- [463A] A.Henrichs: 'Two Doxographical Notes: Democritus and Prodicus on Religion', *HSCP* 79, 1975, 93–123 And, on a related issue:
- [464] P.J.Bicknell: 'Democritus' Theory of Precognition', *REG* 82, 1969, 318–26
- The linguistic studies of the Sophists are the subject of a delightful paper by Hermann Diels:
- [465] H.Diels: 'Die Anfänge der Philologie bei den Griechen', *Neue Jahrbuch für Philologie* 25, 1910, 1–25 More recent papers include:
- [466] C.J.Classen: 'The Study of Language among Socrates' Contemporaries', *Proceedings of the African Classical Association* 2, 1959, 33–49 = Classen [72A]
- [467] D.Fehling: 'Zwei Untersuchungen zur griechischen Sprachphilosophie', *Rhm* 108, 1965, 212–29 = Classen [72A]
- [468] W.Burkert: 'La genèse des choses et des mots', *Les études philosophiques* 1970, 443–55
- And see also the early pages of Pfeiffer [24].
- On Prodicus' invention of 'semantics' there are some helpful remarks in Taylor [449], and a monograph by:
- [469] H.Mayer: *Prodikos van Keos und die Anfänge der Synonymik bei den Griechen* (Paderborn, 1913) See also:
- [470] K.von Fritz: 'Prodikos', *RE* 23, 1957, 85–9 Early rhetorical fragments are collected and edited in:
- [471] L.Radermacher: *Artium Scriptores*, Sitzungsberichte der österreichische Akademie der Wissenschaft, 227, 1951
- Under Chapter IX I listed some items touching on Gorgias' metaphysics, or antimetaphysics; his *Helen* is admirably edited by:
- [472] O. Immisch: *Gorgiae Helena* (Berlin, 1927) On the aesthetic theory of *apatê* see especially:
- [473] M.Pohlenz: 'Die Anfänge der griechischer Poetik', *NGG* 1920, 142–78 Compare:
- [474] T.G. Rosenmeyer: 'Gorgias, Aeschylus and ἀπάτη', *AJP* 76, 1955, 225–60

- [475] C.P.Segal: 'Gorgias and the Psychology of the Logos', *HSCP* 66, 1962, 99-156 Finally, on Democritus B 26, on meaning, see:  
 [476] R.Philippson: 'Platons Kratylos und Demokrit', *Philologische Wochenschrift* 49, 1929, 923-7

### Chapter XXII

Some bibliography on Presocratic psychology has already been given under Chapter VI; and the book by Beare [39] is uniformly informative.

There is a fine paper on Heraclitus by:

- [477] M.C.Nussbaum: in 'Ψυχή in Heraclitus', *Phron* 17, 1972, 1-16 and 153-70 On two points of detail see:  
 [478] W.J.Verdenius: 'A Psychological Statement of Heraclitus', *Mnem* s. 3, 11, 1943, 115-21  
 [479] S.Tugwell: 'Heraclitus: fragment 98 (DK)', *CQ* n.s. 21, 1971, 32 Democritus' theory of perception is discussed by:  
 [480] R.W. Baldes: 'Democritus on Visual Perception: Two Theories or One?', *Phron* 20, 1975, 93-105  
 [481] K.von Fritz: 'Democritus' Theory of Vision', in E. A.Underwood (ed.). *Science, Medicine and History* (Oxford, 1953)= von Fritz [77]  
 [481A] I. Avotins: 'Alexander of Aphrodisias on Vision in the Atomists', *CQ* n.s. 30, 1980, 429-54  
 [481B] M.M. Sassi: *Le teorie dellapercezione in Democrito* (Florence, 1978) And on Democritean thought see:  
 [482] P.J. Bicknell: 'The Seat of the Mind in Democritus', *Eranos* 66, 1968, 10-23  
 [482A] L.Couloubaritsis: 'Considerations sur la notion de chez Democrite', *AGP* 62. 1980, 129-45 Alcmeon, Empedocles and Parmenides may be taken together. On their physiological psychology see:  
 [483] F.Solmsen: 'Greek Philosophy and the Discovery of the Nerves', *MH* 18, 1961, 150-97 =Solmsen [83]  
 [484] J.Mansfeld: "Alcmaeon: "Physikos" or Physician? With some remarks on Calcidius' "On Vision" compared to Galen, Plac, Hipp. Plat. VII", in J.Mansfeld and L.M.de Rijk (eds), *Kephalaion: Studies in Greek Philosophy and its continuation offered to Professor C.J.de Vogel* (Assen, 1975)  
 [485] W.J.Verdenius: 'Empedocles' Doctrine of Sight', in *Studia Carolo Guglielmo Vollgraff Oblata* (Amsterdam, 1948) —but consult O'Brien [417]. On Empedocles B 110 see in particular:  
 [486] H.Schwabl: 'Empedokles Fr B 110', *WS* 69, 1956, 49-56 And on Parmenides B 16:  
 [487] G.Vlastos: 'Parmenides' Theory of Knowledge', *TAPA* 77, 1946, 66-77  
 [488] J.A.Philip: 'Parmenides' Theory of Knowledge', *Phoenix* 12, 1958, 63-6  
 [489] J.P.Hershbelt: 'Parmenides' Way of Truth and B 16', *Apeiron* 4, 1970, 1-23. And also Bollack [284].

For literature on Philolaus see above, under Chapter XVIII. The *harmonia* theory of the soul is discussed by:

- [490] H.B.Gottschalk: 'Soul as Harmonia', *Phron* 16, 1971, 179-98 The commentaries of Hicks [10] and Bailey [21] contain remarks on the objections to the theory put forward by Aristotle and by Lucretius; see too Gladigow [187] and Gomperz [288].  
 Empedocles' intellectual schizophrenia has been widely discussed:  
 [491] K.Reinhardt: 'Empedokles, Orphiker und Physiker', *CP* 45, 1950, 170-9=Reinhardt [81]=Gadamer[71]  
 [492] H.S.Long: 'The Unity of Empedocles' Thought', *AJP* 70, 1949, 142-58

- [493] C.H.Kahn: 'Religion and Natural Philosophy in Empedocles' Doctrine of the Soul', *AGP* 42, 1960, 3–35—Anton-Kustas [69]=Mourelatos [72]
- [494] A.A.Long: 'Thinking and Sense-Perception in Empedocles: Mysticism or Materialism?', *GQ* n.s. 16, 1966, 256–76
- [494A] F.Solmsen: 'Empedocles' Hymn to Apollo', *Phron* 25, 1980, 219–27
- [494B] D. Babut: 'Sur l' unitedelapenseed' Empedocle'. *Phlg* 120, 1976, 139–64 See also Wilamowitz-Moellendorf [194], and chapter 8 of Jaeger [48].
- Empedocles' theology and 'demonology' are treated in several of the studies I have just listed; in addition see:
- [495] M.Detienne: 'La "Demonologie" d'Empédocle', *REG* 72, 1959, 1–17
- [495A] S.M.Darcus: 'Daimon parallels the holy *phrên* in Empedocles', *Phron* 22, 1977, 175–90 The accounts of the Cosmic Cycle catalogued on p. 666 will contain matter touching on the theory of Eternal Recurrence; for more detailed studies see:
- [496] B.L.van der Waerden: 'Das Grosse Jahr und die ewige Wiederkehr', *H* 80, 1952, 129–55
- [497] M.Capek: 'The theory of Eternal Recurrence in Modern Philosophy of Science', *JP* 57, 1960, 289–96
- [498] M.Capek: 'Eternal Return', in P.Edwards (ed.), *Encyclopaedia of Philosophy* (New York, 1967)
- [498A] J.Barnes: 'La doctrine du retour eternel', in J.Brunschwig (ed.), *Les stoiciens et leur logique* (Paris, 1978)

### Chapter XXIII

- Various studies in early Greek ethical theory have been given under Chapter VII: in particular, see Dover [206], Adkins [207], and Grant [208]. Chapter 6 of Lloyd-Jones [51] is useful too. On Antiphon's personal problems see:
- [499] J.Stenzel: 'Antiphon', *RE* suppt 4, 1924, 33–43
- [500] J.S.Morrison: 'Antiphon', *PCPS* n.s. 7, 1961, 49–58
- [501] S.Luria: 'Antiphon der Sophist', *Eos* 53, 1963, 63–7=Classen [72A] Antiphon's moral—or amoral—doctrines are examined by:
- [502] G.B.Kerferd: 'The Moral and Political Doctrines of Antiphon the Sophist', *PCPS* n.s. 4, 1956/7, 26–32
- [503] J.S.Morrison: 'The Truth of Antiphon', *Phron* 8, 1963, 35–49=Classen [72A]
- [504] C.Moulton: 'Antiphon the Sophist, *On Truth*', *TAPA* 103, 1972, 329–66
- [504A] M.Gagarin: 'The Prohibition of Just and Unjust Homicide in Antiphon's *Tetralogies*', *Greek, Roman and Byzantine Studies* 19, 1978, 291–306
- [504B] T.J.Saunders: 'Antiphon the Sophist on Natural Laws (B 44 DK)', *PAS* 78, 1977/8, 215–36 And a connexion between Antiphon and Democritus is discerned by:
- [505] C.Moulton: 'Antiphon the Sophist and Democritus', *MH* 31, 1974, 129–39 On the alleged moral relativism of Prodicus see:
- [506] G.B.Kerferd: 'The "Relativism" of Prodicus', *Bulletin of the John Rylands Library* 37, 1954, 249–56 On the moral relativism of Protagoras see:
- [507] S.Moser and G.L.Kustas: 'A Comment on the "Relativism" of the *Protagoras*', *Phoenix* 20, 1966, 111–15 and refer to the general literature on Protagorean relativism cited under Chapter XXIV. Out of various articles on the *Dissoi Logoi* I select:
- [508] C.Trieber: 'Die Διαλέξεις', *H* 27, 1892, 210–48
- [509] W.Kranz: 'Vorsokratisches IV', *H* 72, 1937, 223–32=Classen [72A]
- [510] A.E.Taylor: 'The *Dissoi Logoi*', in his *Varia Socratica* (Oxford, 1911)
- [511] A.Levi: 'On Twofold Statements', *AJP* 61, 1940, 292–306 There is an edition of the tract in Untersteiner [430], and a translation in Sprague [431]; and see now the comprehensive edition by:

- [511A] T.M.Robinson: *Contrasting Arguments—an edition of the Dissoi Logoi* (New York, 1979) There are helpful remarks on Gorgias' account of responsibility in Immisch [472]; and it is worth consulting the relevant pages of Adkins [207]. See also:
- [512] G.Calogero: 'Gorgias and the Socratic Principle *Nemo sua sponte peccat*', *JHS* 77, 1957, 12–17=Anton-Kustas [69]=Classen [72A]
- Democritean ethics are treated in Bailey [383], and in Langerbeck [386]; and there is a classic paper by:
- [513] G.Vlastos: 'Ethics and Physics in Democritus', *PR* 54, 1945, 578–92 and 55, 1946, 53–64=Furley-Allen[70] and a monograph by:
- [514] S.Luria: *Zur Frage der materialistischen Begründung der Ethik bei Demokrit* (Berlin. 1964) See also:
- [515] D.McGibbon: 'Pleasure as the "Criterion" in Democritus', *Phron* 5, 1960, 75–7
- [516] S.Luria: 'Heraklit und Demokrit', *Das Altertum* 9, 1963, 195–200
- [517] C.C.W.Taylor: 'Pleasure, Knowledge and Sensation in Democritus', *Phron* 12, 1967, 6–27
- [517A] R.Müller: 'Naturphilosophie und Ethik im antiken Atomismus', *Phlg* 124, 1980, 1–17 And on Democritus' political viewpoint:
- [518] G.J.D.Aalders: 'The Political Faith of Democritus', *Mnem* s. 4, 3, 1950, 302–13
- [519] A.J.Cole: 'The Anonymus lamblichi', *HSCP* 65, 1961, 127–63

#### Chapter XXIV

- Anaxagoras' 'methodology', *opsis adêlôn*, is treated in two classic papers: Diller [120] and:
- [520] O.Regembogen: 'Eine Forschungsmethode antiker Naturwissenschaft', *QSGM* B 2, 1930, 131–82 See also:
- [521] H.Gomperz: 'ὄψις τῶν ἀδήλων τὰ', *H* 68, 1933, 341–3 and Lloyd (50), part II. On Protagoras' slogan, 'Man the Measure', consult:
- [522] L.Versenyi: 'Protagoras' Man-Measure Fragment', *AJP* 83, 1962, 178–84=Classen [72A]
- [523] D.K.Glidden: 'Protagorean Relativism and the Cyrenaics', *APQ* monograph 9, 1975
- [524] D.K.Glidden: 'Protagorean Relativism and Physis', *Phron* 20, 1975, 209–27 The reliability of Plato's report of Protagoras' views is discussed in:
- [525] G.B.Kerferd: 'Plato's Account of the Relativism of Protagoras', *Durham University Journal* n.s. 11, 1949/50, 20–6
- [526] J.McDowell: *Plato: Theaetetus* (Oxford, 1973)
- [527] J.P.Maguire: 'Protagoras or Plato?', *Phron* 18, 1973, 115–39 On the 'new fragment' of Protagoras see:
- [528] M.Gronewald: 'Ein neues Protagoras-Fragment', *Zeitschrift für Papyrologie und Epigraphik* 2, 1968, 1–2
- [529] J.Mejer: 'The Alleged New Fragment of Protagoras', *H* 100, 1972, 175–8=Classen [72A] On the Impossibility of Contradiction consult:
- [530] G.Binder and L. Lieseborghs: 'Eine Zuweisung der Sentenz οὐκ ἔστιν ἀντιλέγειν an Prodikos von Keos', *MH* 23, 1966, 37–43=Classen [72A] And on *theperitropê* or 'about-turn' see:
- [531] M.F.Burnyeat: 'Protagoras and Self-Refutation in Later Greek Philosophy', *PR* 85, 1976, 44–69
- [532] M.F.Burnyeat: 'Protagoras and Self-Refutation in Plato's *Theaetetus*', *PR* 85, 1976, 172–95 The Democritean *Ou Mallon* Principle is treated in:
- [533] S.Luria: 'Zwei Demokrit-Studien', in J.Mau and E.G.Schmidt (eds), *Isonomia* (Berlin, 1964)
- [534] C.Diano: 'Mallon Hetton e Isonomia', in J.Mau and E.G.Schmidt (eds.), *Isonomia* (Berlin, 1964)

- [535] P.de Lacey: 'οὐ μᾶλλον the Antecedents of Ancient Scepticism', *Phron* 3, 1958 59–71
- [536] P.de Lacey: 'Colotes' First Criticism of Democritus', in J.Mau and E.G.Schmidt (eds), *Isonomia* (Berlin, 1964)
- Democritus' epistemology is discussed in the general studies of his thought. See in particular Langerbeck [386], and the criticisms in:
- [537] E.Kapp: review of Langerbeck [386], *Gnomon* 12, 1936, 65–77 and 158–69=E.Kapp, *Ausgewählte Schriften* (Berlin, 1968) See also:
- [538] H.Weiss: 'Democritus' Theory of Cognition', *CQ* 32, 1938, 47–56
- [539] H.de Ley: 'Δόξαι ἐπιρυσμ— a critical note on Democritus Fr. 7', *H* 97, 1969, 497–8

### Chapter XXV

- Diogenes of Apollonia has not excited the scholars. But he is given a decent place in history by Jouanna [207] and by:
- [540] H.Diller: 'Die philosophiegeschichtliche Stellung des Diogenes von Apollonia', *H* 76, 1941, 359–81=Diller [75] And his teleology is debated in Chapter 9 of Jaeger [48], and by:
- [541] W.Theiler: *Zur Geschichte der teleologischen Naturbetrachtung bis auf Aristoteles* (Zurich, 1925)
- [542] F.Huffmeier: 'Teleologische Weltbetrachtung bei Diogenes von Apollonia?', *Phlg* 107, 1963, 131–8