

THE PRESOCRATIC
PHILOSOPHERS

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A

CRITICAL HISTORY WITH A
SELECTION OF TEXTS

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To
F. H. SANDBACH

PREFACE

This book is designed primarily for those who have more than a casual interest in the history of early Greek thought ; but by translating all Greek passages, and confining some of the more detailed discussion to small-type notes at the end of paragraphs, we have also aimed to make the book useful for those students of the history of philosophy or science who have no previous acquaintance with this important and fascinating field.

Two points should be emphasized. First, we have limited our scope to the chief Presocratic 'physicists' and their forerunners, whose main preoccupation was with the nature (physis) and coherence of things as a whole. More specialized scientific interests were simultaneously developing throughout the sixth and fifth centuries B.C., especially in mathematics, astronomy, geography, medicine and biology ; but for lack of space, and to some extent of evidence, we have not pursued these topics beyond the interests of the chief physicists. We have also excluded the Sophists, whose

positive philosophical contribution, often exaggerated, lay mainly in the fields of epistemology and semantics. Secondly, we have not set out to produce a necessarily orthodox exposition (if, indeed, such a thing is conceivable in a field where opinion is changing so rapidly), but have preferred in many places to put forward our own interpretations. At the same time we have usually mentioned other interpretations of disputed points, and have always tried to present the reader with the main materials for the formation of his own judgement.

The part of the book dealing with the Ionian tradition, including its forerunners and also the atomists and Diogenes (i.e. chapters i-vi, xv and xvii), with the note on the sources, is by G. S. Kirk, while the part dealing with the Italian tradition, and also the chapters on Anaxagoras and Archelaus (i.e. chapters vii-xvi), are by J. E. Raven. The contributions of each author were of course subjected to detailed criticism by the other, and the planning of the book as a whole is by both.

The scale of different sections of the book is admittedly rather variable. Where the evidence is fuller and clearer particularly where considerable fragments survive, as for example in the case

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of Parmenides the commentary can naturally be shorter;

where
the evidence is sparser and more confusing, as for
example in the
case of Anaximander or the Pythagoreans, our own
explanations
must be longer and more involved. Chapter i in
particular, which
deals with a part of the subject which is often
neglected, is perhaps
more detailed in parts than its ultimate importance
demands, and
non-specialists are advised to leave it until last.

Only the most important texts have been quoted, and
those in
an inevitably personal selection. For a nearly complete
collection
of fragments and testimonies the reader should turn to
H. Diels,
Die Fragmente der Vorsokratiker (5th and later
editions, Berlin,
1934-54, edited by W. Kranz). This fundamental work is
referred
to by the abbreviation DK. Where a DK number (e.g. DK28
A 12)
is appended to the reference of a passage quoted in the
present
work, this means that DK, in the section referred to,
quotes more
of the passage in question than we do. DK references
are omitted
where less, or no more, of the text is given, and also
in the case of
fragments (where the fragment-number, always in Diels'
numera-
tion, is the same as the number in the relevant B-
section in DK).
Where supplements occur in texts quoted, without
further in-
formation, they are usually by Diels, and reference may
be made
to the textual notes in DK.

We are obviously indebted to many friends for
suggestions and
help; and also, as goes without saying, to previous
writers like
Zeller, Burnet, Cornford, Ross and Cherniss. Many of
these debts

are recorded in the text. For typographical advice and assistance we are indebted to the printing staff of the Cambridge University Press. H. Lloyd-Jones and I. R. D. Mathewson read the proofs and made many valuable suggestions. Another outstanding contribution was made by F. H. Sandbach, whose numerous acute and learned comments on the final draft were of the utmost value, and to whom^ as an unworthy offering, we should like to dedicate this book.

G.S.K.
J.E.R.

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May

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ABBREVIATIONS

The following abbreviations may be mentioned ; others should be self-evident :

AJP American Journal of Philology.

ANET Ancient Near Eastern Texts relating to the Old Testament, ed. J. B. Pritchard (Princeton, 2nd edition, 1955).

CP Classical Philology.
CQ Classical Quarterly.

DK Die Fragmente der Vorsokratiker, 5th to yth editions, by H. Diels, edited with additions by W. Kranz. (The 6th and yth editions are photographic reprints, 1951-2 and 1954, of the 5th, with Nachtrage by Kranz.)

EGP John Burnet, Early Greek Philosophy, 4th edition, 1930 (a reprint with corrections of 3rd edition, 1920).

GGN Nachrichten v. d. Gesellschaft zu Gottingen (Phil.-hist. Klasse).

JHS Journal of Hellenic Studies.

J. Phil. Journal of Philology.

LSJ Liddell and Scott, A Greek-English Lexicon, gth edition, 1925-40, revised by H. Stuart Jones and R. McKenzie.

Rh. M. Rheinisches Museum.

1. Scholium or scholiast.

SB Ber. Sitzungsberichte d. preussischen Akademie d. Wissenschaft.

SVF Stoicorum Veterum Fragmenta, ed. H. von Arnim (Leipzig,

References to the commentators on Aristotle (e.g. Simplicius and Alexander) are by page-number and line-number in the appropriate volume of the Berlin Academy Commentaria in Aristotelem Graeca.

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INTRODUCTORY NOTE

THE SOURCES FOR PRESOCRATIC PHILOSOPHY

A. DIRECT QUOTATIONS

The actual fragments of the Presocratic thinkers are preserved as quotations in subsequent ancient authors, from Plato in the fourth century B.C. to Simplicius in the sixth century A.D., and even, in rare cases, to late Byzantine writers like John Tzetzes. The date of the source in which a quotation occurs is not, of course, a reliable guide to its accuracy. Thus Plato is notoriously lax in his quotations from all sources ; he often mixes quotation with paraphrase, and his attitude to his predecessors is frequently not objective but humorous or ironical. The Neoplatonist Simplicius, on the other hand, who lived a whole millennium after the

Presocratics, made long and evidently accurate quotations, in particular from Parmenides, Empedocles, Anaxagoras and Diogenes of Apollonia; not for the sake of literary embellishment, but because in his commentaries on the Physics and de caelo of Aristotle he found it necessary to expound Aristotle's views on his predecessors by setting down their actual words. At times Simplicius did this at greater length than was essential because, as he tells us, a particular ancient work had become so rare.

Aristotle, like Plato, gave comparatively few direct quotations, and his main value is as a summarizer and critic of earlier thinkers. Apart from Plato, Aristotle, and Simplicius, the following notable sources of verbatim extracts may be singled out for special mention:

(i) Plutarch, the Academic philosopher, historian and essayist of the second century A.D., in his extensive Moral Essays made hundreds of quotations (often expanded, interpolated or partly reworded by himself) from the Presocratic thinkers.

(ii) Sextus 'Empiricus', the Sceptic philosopher and physician of the late second century A.D., expounded the theories of Aenesidemus, who lived some two centuries earlier and himself relied to a great extent on Hellenistic sources. Sextus quotes many early passages bearing on cognition and the reliability of the senses.

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(iii) Clement of Alexandria, the learned head of the Catechetical school, lived in the second half of the second century A.D. and the early years of the third. A convert to Christianity, Clement nevertheless maintained his interest in Greek literature of all kinds, and used a wide knowledge and a remarkable memory to point his comparisons between paganism and Christianity with frequent quotations from the Greek poets and philosophers (chiefly in his *Protrepticus* and the eight books of *Stromateis* or *Miscellanies*) .

(iv) Hippolytus, bishop of Rome in the third century A.D., wrote a *Refutation of all Heresies* in nine books, which attacked Christian heresies by claiming them to be revivals of pagan philosophy. For example, the Noetian heresy was a revival of Heraclitus' theory of the coincidence of opposites a contention which Hippolytus attempted to substantiate by the quotation of no less than seventeen sayings of Heraclitus, many of them otherwise unknown.

(v) Diogenes Laertius compiled, probably in the third century A.D., a trivial but from our point of view important *Lives of Famous Philosophers* in ten books. In his biographical and doxographical notices, derived mainly from Hellenistic sources, he included occasional short quotations.

(vi) John Stobaeus, the fifth-century A.D. anthologist, assembled in his *Anthologium* educative extracts from the whole range of Greek literature, but with special emphasis on ethical

sayings. Many Presocratic fragments (notably of Democritus) are preserved by him, often in a somewhat impure form. Stobaeus' main sources were the handbooks and compendia which proliferated in the Alexandrian period.

In addition to the main sources noted above, quotations from the Presocratics occur here and there in many other ancient writers : in Stoics like Marcus Aurelius and eclectics like Maximus of Tyre; in Christian writers other than Clement and Hippolytus, for example in Origen; occasionally in Aetius (see B, 4, b; direct quotations in Aetius are rare) ; in technical authors like Galen the doctor, Strabo the geographer and Athenaeus the anthologist of food and drink; and, not least important, in Neoplatonic writers from Numenius, Plotinus, Porphyry and Iamblichus (the last two of whom wrote on Pythagoras) down to Proclus and, of course, the invaluable Simplicius.

SOURCES FOR PRESOCRATIC PHILOSOPHY

To conclude these notes on the sources of direct quotations, it must be emphasized that the author of a direct quotation need not have seen the original work, since summaries, anthologies and compendia of every kind, produced in large numbers in the three centuries following the foundation of Alexandria, were regarded as an adequate substitute for most prose originals of a technical nature.

B. TESTIMONIA

(1) PLATO is the earliest commentator on the Presocratics (though there were occasional references in Euripides and Aristophanes). His comments, however, are for the most part only casual ones, inspired, like many of his quotations, by irony or amusement. Thus his references to Heraclitus, Parmenides and Empedocles are more often than not light-hearted obiter dicta, and one-sided or exaggerated ones at that, rather than sober and objective historical judgements. Provided this is recognized, Plato has much of value to tell us. One passage, Phaedo 96 ff., gives a useful but brief survey of fifth-century physical preoccupations.

(2) ARISTOTLE gave more serious attention to his philosophical predecessors than Plato had done, and prefaced some of his treatises with formal surveys of their opinions, notably in *Metaphysics A*. However, his judgements are often distorted by his view of earlier philosophy as a stumbling progress towards the truth that Aristotle himself revealed in his physical doctrines, especially those concerning causation. There are also, of course, many acute and valuable criticisms, and a store of factual information.

(3) THEOPHRASTUS undertook the history of previous philosophy, from Thales to Plato, as part of his contribution to the encyclopaedic activity organized by his master Aristotle just as Eudemus undertook the history of theology, astronomy and mathematics and Menon that of medicine. According to Diogenes

Laertius 5 list of his works, Theophrastus wrote sixteen (or eighteen) books of Physical Opinions (or Opinions of the Physicists; the Greek genitive is ΟΥΚΤΙΚΟΝ ἔσοπον) ; these were later epitomized in two volumes. Only the last book, On sensation, is extant in its greater part ; but important extracts from the first book, On material principles, were copied down by Simplicius in his commentary on Aristotle's Physics. (Some of these extracts Simplicius derived from lost commentaries by the important Peripatetic commentator Alexander

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of Aphrodisias.) In this first book Theophrastus treated the different thinkers in roughly chronological order, adding their city, patronymic, and sometimes date or mutual relationship. In the remaining books the order was chronological only within the main logical divisions. In addition to the general history Theophrastus wrote special works on Anaximenes, Empedocles, Anaxagoras, Archelaus, and (in several volumes) Democritus. These have unfortunately perished; presumably Theophrastus went to greater pains to consult the original sources for these thinkers. From the available evidence, however, his judgements even on them were often derived directly from Aristotle, without much attempt to apply a new and objective criticism.

(4) THE DOXOGRAPHICAL TRADITION. (a) Its general nature. Theophrastus' great work became the standard authority for

the ancient world on Presocratic philosophy, and is the source of most subsequent collections of 'opinions' (86ai, ccp&TKOVTCC or placita). These collections took different forms, (i) In close reproductions of Theophrastus' arrangement each major topic was considered in a separate section, the different thinkers being treated successively within each section. This was the method of Aetius and his source, the ' Vetusta Placita' (see p. 5).

(ii) Biographical doxographers considered all the opinions of each philosopher together, in company with details of his life supplied, to a large extent, by the febrile imaginations of Hellenistic biographers and historians like Hermippus of Smyrna, Hieronymus of Rhodes and Neanthes of Cyzicus. The result is exemplified in the biographical medley of Diogenes Laertius. (iii) Another type of doxographical work is seen in the AiaBoxoci, or accounts of philosophical successions. Its originator was the Peripatetic Sotion of Alexandria, who around 200 B.C. wrote a survey of previous philosophers arranged by schools. The known thinkers were related to each other in a descending line of master and pupil (here Sotion was extending and formalizing a process begun by Theophrastus) ; in addition, the Ionian school was clearly distinguished from the Italian. Many of the patristic doxographical summaries (notably those in Eusebius, Irenaeus, Arnobius, Theodoretus who, however, also made direct use of Aetius and St Augustine) were based on the brief accounts in the Succession-writers.

(iv) The chronographer Apollodorus of Alexandria

composed, in
the middle of the second century B.C., a metrical
account of the

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dates and opinions of the philosophers. This rested partly on Sotion's division into schools and masters, partly on the chronology of Eratosthenes, who had sensibly assigned dates to artists, philosophers and writers as well as to political events. Apollodorus filled in the gaps left by Eratosthenes, on very arbitrary principles : a philosopher's acme or period of chief activity was assumed to be at the age of forty, and was made to coincide with the nearest of a number of major chronological epochs, for example the capture of Sardis in 546/5 B.C. or the foundation of Thurii in 444/3. Further, a supposed pupil was always made forty years younger than his supposed master.

(b) Aetius and the 'Vetusta Placita' Two extant doxographical summaries, closely resembling each other, were independently derived from a lost original the collection of Opinions made by Aetius, an otherwise unknown compiler, probably of the second century A.D., whose name is known from a reference in Theodore tus. These extant summaries are the Epitome of physical opinions, in five books, which falsely claims to be by Plutarch; and the Physical extracts which appear in book i (for the most part) of Stobaeus' Anthologium. (From the former, which was widely read, are derived notices in pseudo-Galen, Athenagoras,

Achilles and
Cyril.) Diels in his great Doxographi Graeci arranged
these two
sources in parallel columns as the Placita of Aetius.
This forms our
most extensive, if not always our most accurate,
doxographical
authority.

Aetius' work was based, not directly on Theophrastus*
history,
but upon an intermediate summary of it produced,
probably, in
the Posidonian school in the first century B.C. This
lost work was
named by Diels the Vetusta Placita. In it Stoic,
Epicurean and
Peripatetic opinions were added to those recorded by Theo-
phrastus, and much that was derived from Theophrastus
was
subjected to Stoic re-formulation. Aetius himself added
further
Stoic and Epicurean opinions, as well as a few
definitions and
introductory comments. A direct use of the Vetusta
Placita was
made by Varro (in Censorinus' de die natali), and is
seen also in the
brief doxography in Cicero, Academica priora n, 37,
118.

(c) Other important doxographical sources, (i)
Hippolytus. The first
book of his Refutation of all Heresies, the so-called
Philosophoumena
once attributed to Origen, is a biographical doxography
containing
separate accounts of the main philosophers. The
sections on

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Thales, Pythagoras, Empedocles, Heraclitus, the
Eleatics and the
Atomists come from a trifling biographical summary and
are of

small value, unlike those on Anaximander, Anaximenes, Anaxagoras, Archelaus and Xenophanes, which come from a fuller and much more valuable biographical source. At many points the comments of the second group are more detailed, and less inaccurate, than the corresponding ones in Aetius. (ii) The pseudo-Plutarchean Stromateis. These short 'Miscellanies' (which must be distinguished from the Epitome, from Aetius, also ascribed to Plutarch) are preserved by Eusebius; they come from a source similar to that of the second group in Hippolytus. They differ in that they concentrate on the subject-matter of the earlier books in Theophrastus, those that dealt with the material principle, cosmogony, and the heavenly bodies; and they contain much verbiage and pretentious interpretation. However, some important details are preserved which do not occur elsewhere, (iii) Diogenes Laertius. Apart from biographical details culled from many sources, some useful chronological data from Apollodorus, and deplorable epigrams from the pen of Diogenes himself, the opinions of each thinker are usually set out in two distinct doxographical notes: the first (what Diogenes called the Ke9ccAccicb5r|\$ or summary account) from a worthless biographical source like that used by Hippolytus in the first group, and the second (the ETT! nepou\$ or detailed account) from a fuller and more reliable epitome like that used by Hippolytus for his second group.

(5) CONCLUSION. It must be remembered that many writers who were independent of the direct Theophrastean tradition are

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