Parmenides & Presocratic Philosophy



JOHN PALMER

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OXFORD

Great Clarendon Street, Oxford 0x2 6DP

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide in

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With offices in

Argentina Austria Brazil Chile Czech Republic France Greece Guatemala Hungary Italy Japan Poland Portugal Singapore South Korea Switzerland Thailand Turkey Ukraine Vietnam

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Published in the United States by Oxford University Press Inc., New York

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First published 2009

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British Library Cataloguing in Publication Data

Data available

Library of Congress Cataloging in Publication Data Library of Congress Control Number: 2009934148

Typeset by SPI Publisher Services, Pondicherry, India Printed in Great Britain on acid-free paper by CPI Antony Rowe, Chippenham, Wiltshire

ISBN 978-0-19-956790-4

1 3 5 7 9 10 8 6 4 2

For Elizabeth *Uxori carissimae*

Preface

Parmenides of Elea is the most brilliant and controversial of the Presocratic philosophers. This book aims to achieve a better understanding of his thought and of his place in the history of early Greek philosophy. To this end, I here develop and defend a modal interpretation of the ways of inquiry that define Parmenides' philosophical outlook. He was, on this view, the first to have distinguished in a rigorous manner the modalities of necessary being, necessary nonbeing or impossibility, and contingent being. He himself specifies these modalities as what is and cannot not be, what is not and must not be, and what is and is not. Accompanying this fundamental ontological distinction is a set of epistemological distinctions that associates a distinct form of cognition with each mode of being. With this framework in place, Parmenides proceeds to consider what what must be will have to be like just in virtue of its mode of being and then to present an account of the origins and operation of the world's mutable population. In defending the modal interpretation, it will be necessary to go beyond issues internal to Parmenides' poem and to consider his relation to other Presocratic philosophers. For Parmenides has typically been viewed, in one way or another, as a pivotal figure in the development of early Greek natural philosophy, in that his arguments are supposed to have had a decisive impact on the physical theories of his immediate successors. Showing where such views are mistaken will strengthen the case for the modal interpretation, both by removing external obstacles to its acceptance and by demonstrating how it makes possible a more historically accurate understanding of Parmenides' place in Presocratic philosophy.

I hope this book will be of interest, not only to specialists in ancient philosophy, but also to philosophers and classicists working in other areas, as well as to students, at both the graduate and the more advanced undergraduate levels. I have therefore tried to make the material as accessible as possible to those with only a modest acquaintance with Presocratic philosophy without, however, minimizing the complexities involved in efforts to understand Parmenides' philosophical achievement. Chapter 1 is designed to orient readers without specialist knowledge of Presocratic philosophy so that they will be able to appreciate what is at stake historically and philosophically in the central chapters. After discussing the proem of Parmenides' poem, Chapter 2 focuses in some detail on its all-important fragment 2. What one makes of the two ways of inquiry distinguished in these verses largely determines how one understands Parmenides' philosophy as a whole. Once the case has been made for a modal interpretation of these ways of inquiry, Chapters 3 and 4 then test the interpretation by demonstrating how it enables one to make good internal sense of Parmenides' claims in the remainder of his poem. Chapters 5 to 7, strengthen the case for the interpretation by reconsidering some of the major Presocratics' relations to Parmenides, both by highlighting tensions and problems in current views and showing how the modal interpretation makes possible a more historically accurate understanding of these relations. The concluding Chapter 8 then provides a

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retrospective summary before saying something about Parmenides' place within the main tradition of Presocratic metaphysical and cosmological speculation.

The argumentation here will, of necessity, be at once philosophical and philological. Assessing the significance of any philosopher's ideas evidently requires that one first engage in whatever interpretive work is required to determine just what those ideas were. When dealing with a contemporary or near-contemporary thinker working in roughly the same philosophical tradition as oneself, the interpretive difficulties involved in understanding her views may be no greater, or at least not significantly greater, than those involved in understanding what any other contemporary speaker of one's own language may have to say. The difficulties tend to multiply, however, with cultural and temporal distance. Thus historians of philosophy must bring to bear an array of hermeneutical and even philological skills in addition to philosophical acumen. Although some philosophers may find the hermeneutic dimension of the history of their discipline frustrating, there is no escaping the fact that interpretive reconstruction of the views of earlier thinkers inevitably precedes assessment of the philosophical importance and influence of their views. Of course, a good deal of philosophical skill is typically necessary at the interpretive stage, but the basic point remains: before assessing a historical thinker's views, one must do whatever may be required to determine just what those views were.

If one wishes to judge for oneself what Parmenides' views were and how they contributed to philosophy's early development, one soon encounters all manner of difficulties. Where fortune has preserved portions of Parmenides' work, it is often difficult to determine just what he wrote; for there are numerous places in the fragments of his poem where the vagaries of transmission have left an uncertain text. In an effort not to burden the philosophically minded reader with more philological discussion than is strictly necessary, the appendix presents the text of the fragments of Parmenides' poem, a translation, and accompanying notes on textual issues. Readers may find it useful at least to peruse this appendix before proceeding to the chapters that develop the modal interpretation. The appendix will in any case provide a ready point of reference during development of the modal interpretation in Chapters 2 to 4. Even in places where one can be reasonably certain about what words Parmenides wrote, their syntactical construal and even the sense of individual words can be unclear. This is not surprising, given the partial preservation of his poem, his archaic form of expression, and the challenge of finding a way to express his novel ideas in epic hexameter. Where the construal of his words seems secure, what he was attempting to communicate can still remain opaque so that one may mistake the broader philosophical significance of his claims.

Reading Parmenides requires that one confront interpretive problems at almost every step of the way. It has therefore seemed natural to present the case for the interpretation I have come to find most compelling by recording the interpretive choices made in developing it. This is particularly the case early on, especially in the treatment of fragment 2, since any misstep at this stage inevitably leads to further misunderstanding of Parmenides' claims in the remainder of the poem. The case for adopting the modal interpretation of Parmenides' ways of inquiry thus emerges from considering the key interpretive problems encountered in fragment 2 as well as the

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tensions and unresolved difficulties inherent in some of the most prominent interpretive responses to them, particularly in the Russellian line perhaps most familiar to philosophers today. Although there is extensive discussion of other interpretive options, this discussion is never merely for the sake of exhaustiveness. It is no part of my agenda to provide a comprehensive survey of previous scholarship or to make a display of industry by ensuring that reference is made to as much of the literature as possible. References to others' work is made as the argument requires. Although there will be criticism of others' interpretive choices, I want to make it clear at the outset that I feel deeply indebted to many of the scholars whose views I discuss, even when I disagree with them, for their efforts to understand Parmenides and his place in the development of Presocratic philosophy have given shape to my own engagement with this material.

I hope the book will provoke renewed interest in Presocratic philosophy, if only by showing that major issues remain to be settled. These issues extend beyond particular problems in Parmenides interpretation. In order for work on the particular problems to proceed on more productive lines, it has been necessary to think about the broad type of narrative that has come to define much of the work done on early Greek philosophy. Although this book is not a general history of the Presocratic period, it does have the more modest aim of redirecting and refocusing the philosophical history of this era by developing a line of argument that ranges over much of the period. In the end, of course, it would be naïve to expect that everyone will be convinced by all one has to say, and I understand that the novelty of some of my central contentions will be hard to square with existing preconceptions. My goal has therefore been to present as effective a case as possible for the modal interpretation of Parmenides, in the hope that this may take its place alongside the other major types of Parmenides interpretation.

It remains to express my abiding gratitude to a number of individuals for their inspiration and assistance as well as to those institutions that provided invaluable support during my work on this project. I am most especially grateful to the American Council of Learned Societies for their award of a Frederick Burkhardt Residential Fellowship for Recently Tenured Scholars, Without the ACLS's invaluable and generous fellowship support, it would have been exceedingly difficult to pursue the argument of this book in its present form. As it was, I was able to spend a most stimulating and productive academic year 2004-2005 at the National Humanities Center in Research Triangle Park, North Carolina, during which I drafted the major portion of the work. I am especially grateful to Geoffrey Harpham, the Center's President and Director, and to Kent Mullikin, its Vice President and Deputy Director, for providing such a pleasant environment in which to think and write. Thanks also to Eliza Robertson and Jean Houston, the Center's librarians, for help with accessing some often obscure material. I have fond recollections of the entire cadre of fellows with whom I shared my year at the Center. It was particularly fortunate, though, that James Lesher was among the year's fellows, as I very much enjoyed and profited from many informal discussions with him. Support from the University of Florida's Humanities Scholarship Enhancement Fund prior to the fellowship year enabled the time spent at the Center to be even more productive, and

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support from the fund yet again after that year enabled me to bring the work done there closer to completion.

I would like to thank Rachel Barney and Brad Inwood for inviting me to present what proved to be an early version of some material in Chapter 2 at the University of Toronto in 2003. I would also like to thank Rachel for allowing me to sit in on her Parmenides reading group during my visit. Comments on Sean Kelsey's paper on Aristotle, Physics 1. 8, at the 2004 Eastern Division meeting of the American Philosophical Association wound up becoming an important part of Chapter 3. I remain grateful to Sean and to John Cooper, the session chair, for their discussion. Daniel Graham invited me to participate in a symposium on Presocratic philosophy with himself and Patricia Curd at the 2005 Pacific Division meeting of the APA. I remain grateful to them for their comments and to Dan in particular for his encouragement on that occasion. I am glad for the opportunity to present material that has worked its way into Chapter 7 at the 29th Texas Workshop in Ancient Philosophy held at my alma mater Emory University in 2006. I am particularly grateful for the comments of Alexander Mourelatos, my session chair, as well as those of Patricia Curd, Daniel Graham, Tiberiu Popa, and Stephen White on that occasion, as well as for their informal discussion during the conference. Finally, I am grateful for having been invited to give a pair of lectures on Parmenides, drawing on Chapters 2 to 4, to the philosophy departments of Washington University in St Louis and St Louis University in the Fall of 2007. I remain grateful to Eric Brown and Scott Berman for their comments and hospitality.

I owe a particular debt of gratitude to the two anonymous readers commissioned by Oxford University Press. They each provided extensive sets of comments on the entire manuscript with uniformly judicious and sensible suggestions. Taking due account of their remarks and reactions in the final revision has been quite beneficial. I also owe debts of gratitude to Catherine Berry at the Press for shepherding the manuscript through the review process, to Tessa Eaton for guiding it through production, and to Jane Robson for her careful editing of the copy.

More generally, I remain grateful to the scholars who taught me how to think about the early Greek philosophers, including David Furley, Alexander Nehamas, and André Laks during my years at Princeton and Malcolm Schofield, David Sedley, and Geoffrey Lloyd during my years at Cambridge. I want to express particular thanks to Malcolm Schofield, not only because it was with him that I began studying ancient philosophy in earnest, more than twenty years ago now, but also because discussion with him during his visit to the University of Florida in February 2008 proved to have an important impact on this project at a crucial late stage.

Finally, I would like to express my abiding thanks to my wife, Elizabeth Nason Palmer. She has patiently endured too much talk of Parmenides, Zeno, Melissus, Anaxagoras, and Empedocles over the past few years. More importantly, as the first person to read the manuscript from beginning to end, she confirmed for me that a good philosopher with little prior knowledge of early Greek philosophy will be able to follow and make sense of the book's argument. In recognition of her loving support, it makes me very happy to dedicate this book to her.



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Parmenides' Place in Histories of Presocratic Philosophy

Parmenides of Elea authored a notoriously obscure metaphysical poem that has earned him a reputation as the Presocratic period's most profound and challenging thinker. How historians understand his particular achievement substantially impacts their accounts of the development of early Greek philosophy and science. Parmenides has commonly been cast as the period's pivotal figure, as a thinker who so profoundly challenged the cosmological theories of his predecessors that his major successors were compelled to formulate their theories in response to his arguments. While this basic story has taken various forms, Parmenides has often been represented as concluding that the world of our everyday awareness, with its vast population of entities each changing and affecting one another in all manner of ways, is non-existent and illusory. Zeno of Elea and Melissus of Samos, the remaining members of the 'Eleatic school', have been represented as defending and developing their master's extreme position, and their efforts are supposed to have made it all the more imperative for those who hoped to carry on the nascent tradition of natural philosophy after Parmenides to grapple with his views despite their apparent absurdity. This basic story and the view of Parmenides on which it is based are both purportedly supported by the evidence of Plato and Aristotle.

Having argued in *Plato's Reception of Parmenides* that Plato saw in Parmenides a forerunner of the ontological and epistemological distinctions central to his own philosophical outlook, I now return to Parmenides himself in an attempt to show that a proper understanding of his thought and his place in the development of early Greek philosophy is only possible when one takes account of the fundamental modal distinctions that he was the first to articulate and explore with any precision. Lest the common understanding of the later Presocratics' relation to Parmenides stand as an obstacle to a proper understanding of his own thought, I also undertake to provide a more historically accurate view of Zeno and Melissus' relation to Parmenides, to show how the modern assumption that Empedocles and Anaxagoras developed their physical theories in response to Parmenides has involved distortion of those theories while obscuring the actual structural correspondence between their systems, and to show along the way that the evidence of Aristotle, like that of Plato,

does not in fact support the prevailing views of Parmenides and his relation to these later thinkers.

This introductory chapter provides, for those without specialist knowledge of early Greek philosophy, the orientation necessary to appreciate what is at stake in the chapters to come. It is important in the first instance to recognize Aristotle's continuing influence on historical accounts of this period's philosophical and scientific development. We shall be much concerned with whether his treatment of Parmenides and the Presocratics in fact legitimates those accounts in the ways it has typically been taken to do. One also needs to understand the main features of the narrative that tends to structure accounts of early Greek philosophy's broad development and, in particular, the critical position the narrative accords Parmenides in that development. With respect to Parmenides himself, it is essential to have some appreciation of the divergence of scholarly opinion on central issues pertaining to the character of his monism, his perspective on the world of experience, and the status of his poem's cosmology. For one thing, the emergence of major new types of reading of Parmenides over the past few decades has, in conjunction with other advances, led to various proposals as to how the broader narrative of Presocratic philosophy should be modified or reconceived. Also, we will need to engage with the basic interpretive choices that define the major types of reading as we set about developing in the next chapter an interpretation of Parmenides that takes proper account of the modal distinctions at the heart of his philosophy.

Finally, before providing an overview of the chapters to come, this chapter will say something about the prevailing view of Parmenides in antiquity. The view broadly shared by Plato, Aristotle, and, given their influence, much of the later tradition, provides a noteworthy alternative to most of the major types of reading that currently hold sway. Paying some attention to it at the outset will help us see that too many interpreters, intent upon avoiding anachronism, have gone too far in distancing themselves from the most valuable strains of the ancient reception, while simultaneously failing to recognize the connections their own interpretations of Parmenides have to the sophistic or other equally reductive and distortive strains of the tradition. The impulse towards 'correcting' the testimony of Plato and Aristotle has been excessive. Though their treatments of Parmenides are peculiar in some respects, their views are nonetheless generally perceptive and instructive on several points of fundamental importance. Perhaps most importantly, they both recognize the centrality to Parmenides' system of the distinction between the fundamental modalities or ways of being.

HISTORICAL NARRATIVE AND ARISTOTLE'S INFLUENCE

Histories of early Greek philosophy generally attempt to make what occurred among the thinkers of this era more intelligible by organizing the period's intellectual developments within a certain narrative structure. These histories tend to focus on certain concepts and problems as definitive of the period's inquiries. They attempt to

identify continuities of concern among the period's major thinkers and to trace dynamics of influence and reaction. As they argue for certain patterns of development, historians of early Greek philosophy must remain aware of the imperfect and unruly character of the evidence from which their histories are constructed. Since none of the writings of the Presocratics have survived intact, much of what these early thinkers wrote and thought is lost forever. Where their own words survive, they do so in fragmentary quotations by authors writing many decades or, more often, several centuries later. In many cases these later authors do not quote the Presocratics directly but only paraphrase their words or provide some other secondary evidence for their views. These testimonia, and even the choices of passages for quotation, are inevitably coloured by the philosophical concerns of these later authors, concerns which will have been shaped by the intervening development of philosophy itself. Thus the fragments and testimonia cannot even always be presumed to provide a representative distillation of the Presocratic philosophers' own ideas and interests. The numerous problems arising from the fragmentary and refractory character of the evidence can make reconstruction of Presocratic philosophy very difficult indeed.¹

Any discovery of the kind of trends, developments, and reactions that are the material of broader historical narratives presumes a myriad of more particular interpretive choices, few of which the historian will have made independently. The decisions the historian makes in developing a picture of individual thinkers, in grouping them into schools or movements, and in tracing lines of development within and across these groups are all strongly and inevitably, thankfully or regrettably, conditioned by decisions made by earlier historians, stretching right back to the philosophical historiographers of antiquity. One characteristic feature of the modern era of Presocratic scholarship, in fact, has been a steadily increasing awareness of how deeply our understanding of the period has been shaped by the ancient historiographical tradition. Aristotle, in particular, has had an enormous influence on both the evidence and the narrative that shapes our vision of Presocratic philosophy.

Aristotle is in fact directly or indirectly responsible for the survival and transmission of most of what we now know about early Greek philosophy. Because the examination of earlier views on the problems that interested him was an integral part of his method, Aristotle's extant treatises contain numerous quotations from the Presocratics and even more reports of their views, most often in surveys of what he took to be the earlier opinions on questions with which he was especially concerned. Two works in particular, *Physics* 1 and *Metaphysics* 1, are so filled with reports of Presocratic views that they could easily be mistaken for historical surveys of Presocratic philosophy. There are also extensive discussions of Presocratic positions in many other treatises, most notably *On the heavens, On generation and corruption,* and *On the soul* 1. Aristotle's pupil Theophrastus systematically collected and presented the views of earlier thinkers, including the Presocratics, in his *On the senses* and *Tenets in natural philosophy*, which dealt respectively with cognition and a broad

¹ For authoritative introductions to the issues only touched on here, see Mansfeld 1999*a*; Runia 2008.

range of problems in natural philosophy. The influence of these Theophrastean works on the later historiographical tradition was profound and long-lasting, even if it has sometimes been overestimated. In later antiquity, moreover, the commentators on Aristotle's treatises often included further quotations and paraphrases to illustrate or support points made in their own exposition. Of particular importance here are Simplicius' commentaries on the *Physics* and *On the heavens*. If one counts both his direct and indirect influence, then, Aristotle's concerns can be regarded as the most significant determinant of what has survived from the earliest period of Greek philosophy. In modern times, moreover, Aristotle has continued to influence narratives of the period's history in profound ways. This is in no small part because the authors of the two most important and influential large-scale histories of the period—Eduard Zeller and W. K. C. Guthrie—both self-consciously, though for distinct reasons, relied heavily on Aristotle in approaching their subject.

Zeller's Use of Aristotle

The avowed aim of Zeller's enormously ambitious Die Philosophie der Griechen in ihrer geschichtlichen Entwicklung dargestellt, one of the great monuments of nineteenth-century German historicism, was to portray the formation and development of the ideas of the ancient Greek philosophers with both historic completeness and scientific exactitude.² His scientific approach to history involved him in sharp criticism of those who had sought to impose an a priori construction on the history, philosophical or otherwise, of any period. Zeller is particularly pointed in his criticism of Hegel for having made the disastrous mistake of supposing that the historical succession of philosophical systems is identical with the logical succession of the construction of pure concepts.³ The Hegelian approach to history, Zeller argued, failed to recognize that historical development proceeds according to essentially psychological motives: 'each philosopher makes out of the doctrine inherited from his predecessors, each era out of that passed down to it, what they are able to make of it given their own understanding of this doctrine, given their modes of thought, their experience, knowledge, requirements, and scientific resources; but this may possibly be something altogether different than what we would make of it from our own standpoint. 4 While one can hardly disagree

² First published in Leipzig (1844–52) in three parts as *Die Philosophie der Griechen: Eine Untersuchung über Character, Gang und Hauptmomente ihrer Entwicklung*, this monumental work received its more familiar title with the 2nd edn. of 1856–68 and would subsequently go through several re-editions. Part I of Zeller's history, divided into two halves, contains a general introduction followed by his presentation of the Presocratics and sophists. The references that follow here are to the 6th edn. of the first volume's first half.

³ Zeller 1919: 9–12.

⁴ Ibid. 12: 'jeder Philosoph macht aus der von seinen Vorgängern ererbten, jede Zeit aus der ihr überlieferten Lehre, was sie nach ihrem Verständnis dieser Lehre, nach ihrer Denkweise, ihren Erfahrungen, Kenntnissen, Bedürfnissen und wissenschaftlichen Hilfsmitteln daraus zu machen wissen; dies kann aber möglicherweise etwas ganz anderes sein, als was wir auf unseren Standpunkt daraus machen würden.'

with this statement, the task it sets the historian of a period's philosophy verges on the impossible. Any scientific history in the Zellerian mould can only aspire to approximation of this ideal, especially when the evidence upon which it must be based is as lacunary and indirect as it is for the early period of Greek philosophy.

Zeller thus adopted certain governing principles in his inquiry that enabled him to construct a single, overarching narrative. ⁵ First, he thought it necessary to determine the central organizing principle of each philosopher's system, 'der Gedanke, der die philosophische Eigentümlichkeit seines Urhebers am schärfsten und ursprünglichsten darstellt, der für alle seine Annahmen den verknüpfenden Mittelpunkt bildet'. Next, it would be necessary to determine the relations between individual philosophers and to recognize the groups to which individuals belong, with a view to determining what in the thought of each individual is characteristic of his group, what is peculiar to himself, and wherein lies his own contribution. In the fashion of nineteenth-century German historicism, Zeller also made it part of his task to explain the contribution of individual thinkers and schools to the development of Greek thought as manifestations of their national spirit and culture. This aim was tempered somewhat in Zeller's case by his view of history as essentially the result of the free activity of individuals. Nevertheless, he believed strongly in a universal and providential law governing and fulfilling itself through this activity. Thus paired with the historicist ambition of explaining the rise and development of Greek thought as an outgrowth of the national Geist and Bildung was Zeller's no less typically historicist belief in a law of historical progress, according to which the historic development of humankind is an advance to ever higher culture. As a result, he aimed to produce a narrative structure for his history that would demonstrate how this law is manifested in the character and sequence of the major periods of Greek philosophy as a whole as well as in the particular developments within these periods; and he aimed to produce this narrative, not on any a priori basis, but by the thoroughgoing pursuit of a purely historical method that would build it up from the solid basis of the given empirical phenomena.

What this ambitious programme meant in practice was the collection and collation by Zeller of ancient source material in an effort to produce from it accounts of the individual figures and schools that would find their place within his larger narrative. To combat what he saw as the distortive excesses of historians of the period working within the Hegelian tradition, Zeller often relied on the evidence of Plato and, especially, Aristotle as a corrective. For instance, Zeller approvingly cited Aristotle's statements that dialectical and ethical inquiry began with Socrates and that physical inquiry for a time came to a halt (Arist. *PA* 1. 1. 642°24 ff.), because it provided a basis for rejecting the Hegelian notion of a dialectic between realism and idealism in early Greek philosophy. If neither ethics nor dialectic, wherein the spiritual as such becomes an object of inquiry, properly arises in the Presocratic

period, then, Zeller claimed, this proves that idealism's discrimination of the spiritual and the sensible and its effort to derive the latter from the former was still alien to this period.⁶

Perhaps because he found in Aristotle's treatment of the Presocratics so ready a weapon against Hegelian histories, Zeller tended to reproduce Aristotle's reports without questioning their accuracy or attempting to determine the extent to which they were coloured by Aristotle's own philosophical agenda. Zeller's treatment of Thales as a substance monist provides a good example of this uncritical reliance on Aristotle. When Zeller says that Thales declared water to be the stuff from which everything originates, he means simply to reproduce what one finds at Aristotle, Metaphysics 1. 3. 983^b20–1; and he takes this to be the source of all subsequent reports to the effect that Thales supposed water to be the material substance of things. Zeller entertains no doubts about the accuracy of Aristotle's report. He only doubts our ability to determine why Thales adopted this view. Even in expressing this doubt, however, he is simply following what Aristotle himself says, for the Metaphysics 1 passage goes on to indicate that Aristotle felt one could do little more than speculate on Thales' motives.

Such uncritical reportage of Aristotle is typical of Zeller. It is also his usual practice to resolve contradictions among the ancient testimonia simply by privileging the earlier source, often Aristotle, or sources that can be traced back to such a source. A good example of this practice is provided by Zeller's treatment of an intriguing passage in Cicero's On the nature of the gods, where Thales is said to have posited some form of divine mind as an organizing principle of the cosmos: 'For Thales of Miletus, who first inquired about such matters, said water is the source of things, and god that mind which fashioned everything from water (Thales enim Milesius, qui primus de talibus rebus quaesivit, aquam dixit esse initium rerum, deum eam mentem quae ex aqua cuncta fingeret)' (Cic. N.D. 1. 25).8 Zeller rejects out of hand the last portion of Cicero's testimony, on the grounds, first, that Aristotle denies that any of the early natural scientists distinguished the moving cause from matter and, second, that such reports appear to be influenced by the Stoic conception of the world-soul. The report in Cicero and comparable passages, Zeller concludes, is an error of the post-Aristotelian period. He reasons that Aristotle could not have said what he does about Thales if he had known of the view Cicero attributes to him, but if Aristotle did not know of such a view, it must be an invention of the later tradition. This reasoning is quite typical of how Zeller deals with the often conflicting testimonia of the ancient sources.

⁶ Zeller 1919: 230.

⁷ Ibid. 261. Cf. ibid. 269: 'Alles, was wir von ihr wissen, läßt sich daher im wesentlichen auf den Satz zurückführen, daß das Wasser der Stoff sei, aus dem alles entstanden ist und besteht.'

⁸ Cf. Aët. 1. 7. 11 ([Plu.] Plac. 1. 7. 881 D 8 = Stob. Ecl. 1. 1. 29b): Θαλῆς νοῦν τοῦ κόσμου τὸν θεόν. Likewise Athenag. Ap. 23. 4; Cyrill. c.Jul. 1. 38. 18–19; Gal. Phil.Hist. 8. See Diels 1879: 301–2, 531.

⁹ Zeller 1919: 263-6.

Cherniss and Guthrie on the Reliability of Aristotle's Testimony

While Zeller's privileging of the Aristotelian evidence served his broader purposes of correcting the excesses of philosophical history in the Hegelian mould and developing a more scientific approach to the history of Greek philosophy, scholars would come to understand that Aristotle's evidence for Presocratic philosophy is much more problematic than Zeller had appreciated. A major contribution to this understanding came with the 1935 publication of Harold Cherniss's Aristotle's Criticism of Presocratic Philosophy. Cherniss found it troubling that historians had developed no clear principles for assessing the Aristotelian evidence. He complained of how they generally felt themselves free to excerpt his treatises to provide the building blocks for their histories without appreciating that Aristotle's project is altogether different from that of the modern historian. Aristotle's interest in the Presocratics, Cherniss recognized, is always philosophical and never purely historical. Thus Cherniss cautioned users of Hermann Diels's Die Fragmente der Vorsokratiker, already the standard collection of fragments and testimonia, that—despite the impression given by its excerpting of Aristotelian passages lifted from their contexts to serve as 'A-fragmente' or testimonia pertaining to the lives and doctrines of the Presocratics—there really are no properly doxographical accounts in Aristotle. 10 Cherniss set himself the task of demonstrating, in exhaustive detail, that Aristotle's perspective was so imbued with Platonic ideology and his own repertoire of concepts and analytical tools that he repeatedly distorted and misrepresented the views of the Presocratics so as to find in them confirmation of the truth of his own ideas.

Thus, for example, in approaching Aristotle's remarks on Thales, which Zeller had blithely reproduced, Cherniss emphasized that they must be read in the context of Aristotle's attempt to demonstrate the truth of his theory that there are four main types of causal principle by showing how just these and no other types of causal principle are prefigured in the views of his predecessors (*Metaph.* 1. 3. 983^a24^b6). Cherniss rightly emphasized that Aristotle's discussions of the Presocratics cannot be used as evidence by the historian until Aristotle's own purposes and how they likely shaped his representation of the earlier thinkers have been accounted for. Cherniss thus made it one of his guiding principles that in cases where a Presocratic theory is presented in terms of a peculiarly Platonic or Aristotelian concept or theory, these statements 'can be of use to the historian of philosophy only if Aristotle's process of interpretation can be reversed'. 11 Cherniss's study constituted a crucial advance in the study of the Presocratics in that it marked the end of the naïve reliance on Aristotle characteristic of Zeller and others of his era. The more circumspect and critical treatment of the Aristotelian evidence advocated by Cherniss has ever since remained a constant feature of Presocratic studies.

¹⁰ Cherniss 1935: p. xi; cf. p. 347.

¹¹ Ibid. 347; cf. p. xi. McDiarmid 1953 would extend this methodological principle to Theophrastus' treatment of the Presocratics, with results that were even more critical, often to the point of being dismissive of Theophrastus' value as a source.

One lesson that should have been learnt from Cherniss is that every effort must be made to develop an account of early Greek philosophy that does not present it as progressing teleologically towards the culminating perfection of the Aristotelian system. Unfortunately, however, historians have continued to allow their view of the period to be dominated by the Aristotelian narrative. His influence is evident throughout the two volumes devoted to the Presocratics in Guthrie's A History of *Greek Philosophy.* It is not surprising that Guthrie is generally dismissive of Cherniss. While acknowledging that 'Aristotle was a systematic philosopher first and a historian second' and that 'his examination of his predecessors was explicitly directed towards eliciting how far they had traveled along the path that led to his own conception of reality', Guthrie nevertheless concluded that 'the probable effect of this on the trustworthiness of what he says about them has sometimes been immensely exaggerated'. 12 Guthrie attempted to justify his continued reliance on Aristotle with the arguments that as fine a philosopher as Aristotle must have understood how to handle historical evidence, that he had first-hand knowledge of more of the writings of the Presocratics than we now do, and that the amount of attention he devotes to his predecessors is 'evidence of a genuine historical approach to his subject which, followed out with the powers of an Aristotle, could hardly have such totally misleading results as are sometimes attributed to it'; Guthrie concluded that the general soundness of Aristotle's judgement is guaranteed and that it is easy enough to identify and make allowances for those places where his personal philosophical outlook has coloured his judgement. 13 With such an attitude towards the Aristotelian evidence, it is not surprising that the analysis of change and the successive isolation of material substance, the causal principle of form, and the moving cause should loom so large in the volumes of Guthrie's History devoted to the Presocratics.

THE DEVELOPMENT OF EARLY GREEK PHILOSOPHY IN GUTHRIE'S NARRATIVE

The publication of the first two volumes of Guthrie's A History of Greek Philosophy in 1962 and 1965 marked a significant watershed in Presocratic scholarship. Together they constituted the most comprehensive and detailed history of early Greek philosophy since Zeller's own epoch-making work, a place they have continued to occupy in the decades since. Although subsequent years have seen a good deal of important work on specific questions and individual thinkers, and although there have been some notable surveys of the period, few works have approached the comprehensive scope and detail of these volumes of Guthrie's History. More significant for our

¹² Guthrie 1962: 41-2.

¹³ Ibid. 42–3. See also Guthrie 1957, responding to Cherniss 1951. There Guthrie proposes that, since Aristotle's influence on the subsequent doxographical tradition is so great, we really have no choice but to rely on him: 'if Aristotle's interpretation of the Presocratics is entirely unhistorical, it is scarcely worth while our continuing to study them' (36).

purposes is that Guthrie provides a canonical formulation of the narrative that continues to govern many accounts of early Greek philosophy's development and that subsequent accounts have sought to modify in various ways. It will therefore be worthwhile setting out in some detail the essential features of this narrative. Those less familiar than they might be with the period's main figures may find in this overview a useful orientation or aid to recollection, while those with a more intimate knowledge of the period will, I hope, consider just where the picture they favour differs from Guthrie's. I shall in any case go on to argue that the tensions and problems with Guthrie's narrative that subsequent developments have brought to light are such that the narrative is better abandoned than modified in some of the ways it has been. The remainder of this section, however, will first provide an overview of how Guthrie portrays the development of early Greek philosophy before summarizing, in eight major tenets, his view of Parmenides' place within this development.

Milesian Material Monism

The origins of European science and philosophy may be traced to the Ionian city of Miletus, where, during the sixth century BC, a heretofore unparalleled curiosity about the origins and composition of the natural world led a group of thinkers to abandon religio-mythic accounts for rational and naturalistic ones. The members of this Milesian school 'believed that the world arose out of a primal unity, and that this one substance was still the permanent base of all its being, though now appearing in different forms and manifestations. The changes were rendered possible by an everlasting motion of the primary stuff due, not to any external agent, but to its own essential animation'. ¹⁴ For Thales, the first representative of this school, water was the primal stuff from which all things developed and which persists as their underlying, substantial nature; this substance, moreover, containing within itself the cause of motion and change, is to be understood as the source of life as well. ¹⁵ Thales' successor, Anaximander, having concluded that neither water nor any other element could function as the material principle, settled upon to apeiron or 'the Boundless' as the ultimate source of all things. On his theory, water, earth, fire, and other such stuffs manifest to the senses are secondary manifestations or modifications of the Boundless, generated as the result of a primal separating out of opposites latent within it. 16 Anaximenes, the last of these Milesian material monists, abandoned Anaximander's apeiron and settled upon air as the material principle. Guthrie speculates that he might have done so because he reasoned that to apeiron 'when it had acquired "bounds" and become differentiated into the variously qualified components of a cosmos, was no longer the Boundless, but air could be denser or rarer, hotter or colder and still remain the same substance'. ¹⁷ Anaximenes thus replaced Anaximander's notion of the primitive elements being separated out of

Guthrie 1962: 4.
 Ibid. 57, 62–7.
 Ibid. 77–8.
 Ibid. 116.

an initial condition of the material principle, in which they were indistinguishably fused, with the more naturalistic and still observable generative processes of rarefaction and condensation, thereby introducing a quantitative criterion for qualitative differences.

Pythagoras and the Formal Cause

Early Greek philosophy took a new turn with Pythagoras' migration from Ionian Samos to the regions of southern Italy colonized by the Greeks, for this event inaugurated its idiosyncratic Italian branch. Inquiry among the Pythagoreans, who were in many ways more like a religious sect than a philosophical school, was motivated less by the kind of curiosity about the natural world found among the Milesians than by the deeply felt need to provide intellectual foundations for their novel way of life. For Pythagoras, the essential goal and purpose of human life was assimilation to the divine. He sought to develop a system whereby human life would be governed and regulated in accordance with the principles, typically mathematical, that govern natural phenomena, so as to bring about the same kind of order and harmony in the individual person as is found in the cosmos itself. 18 From the sect's early number-mysticism and Pythagoras' revolutionary insight into the mathematical underpinnings of the musical scale, there developed a deeper interest in mathematics and how numbers themselves and then such principles as unity and limit function as the substances of everything else. Although rightly criticized by Aristotle for conceiving of numbers as the simultaneously formal and material causes of things, the Pythagoreans in fact advanced beyond the Milesians' attempts to account for things and their properties by reference to their material constitution in an effort to define things in terms of their form. With the Pythagoreans, in short, study of matter begins to give way to study of form. 19

Two Iconoclasts: Xenophanes and Heraclitus

A near contemporary of Pythagoras and fellow immigrant from Ionia to the Greek West, Xenophanes of Colophon was a groundbreaking thinker with wide-ranging interests who subsequently came to be seen as the founder of the 'Eleatic school' of philosophy. Estimations of his significance as a philosopher have varied widely, and Guthrie soberly concludes that he provided the germs of ideas that would be brought to fruition by later thinkers:

He provided cogent arguments against anthropomorphism in theology. Though not 'an Eleatic', he abandoned the Milesian tradition for a stricter notion of unity which excluded the possibility of a generated cosmos, taught of a single god who worked by intellection alone, and posited an essential connexion between divinity, eternity, reality, and spherical shape. For

¹⁸ Guthrie 1962: 182 ff.

¹⁹ Ibid. 236–8.

all this the Eleatics, and Heraclitus as well, are much in his debt, as also for the distinction between knowledge and seeming or opinion and the idea that all sensations are relative.²⁰

The hieratic and enigmatic Heraclitus of Ephesus appears as a rather isolated thinker whose relation to his predecessors is either dismissive, as with Pythagoras, whom he criticizes by name, or otherwise negligible. His personal insight into the workings of the world involved the realization that apparent stability and rest are merely temporary equilibria produced by an incessant struggle between opposed forces. Ceaseless flux and change, not rest and stability, is the fundamental and permanent condition of things. In this, Heraclitus stands in stark contrast to Parmenides, who would reason that change and movement are impossible. Nonetheless, there is something everlasting and permanent in the Heraclitean cosmos, namely the Logos, the rational principle governing its changes and ensuring that they operate in a cyclic and thus ceaseless pattern regulated by the divine law of measure and proportion. The Logos, which contains within itself and somehow transcends all oppositions, is of the nature of fire and as such pervades the whole cosmos, which is conceived of as a living organism. Although humans have a share of the Logos's cosmic fire in their souls, their uncritical reliance on sense-perception and concomitant failure to cultivate their own faculty of reason has left them ignorant of their own nature and its intimate connection to this all-governing principle.

Parmenides and the Eleatic School

Active in Magna Graecia at roughly the same time as Heraclitus was taking Ionian speculation in these new directions, Parmenides of Elea distilled his thought in a metaphysical poem that successively described the truth about reality and the erroneous opinions of mortals. Although probably influenced early on by Xenophanes' conception of the one god and by an early brush with Pythagoreanism, Parmenides would break away from them as well as from all previous philosophical systems. His deduction of the nature of reality led him to conclude 'that reality [is], and must be, a unity in the strictest sense and that any change in it [is] impossible' and therefore that 'the world as perceived by the senses is unreal'. The division between reason and the senses, towards which Heraclitus was advancing, thus becomes absolute with Parmenides, and he is harshly critical of the ordinary run of mortals who rely on their senses in supposing that things are generated and undergo various other changes. Finding reason and sensation giving wildly contradictory views of reality, he presumed reason must be preferred and sensory evidence thereby rejected as altogether deceptive.

More particularly, on Guthrie's view, Parmenides begins the Way of Truth by making explicit the implicit starting point of Milesian cosmology: 'from the propositions "It is" and "It is one" (on which Milesian cosmology might be said to have been based: in any case Parmenides argued that the second followed from the first),

the only valid conclusion was an unqualified denial of physical movement and change'. ²³ More fully:

[Parmenides] argues with devastating precision that once one has said that something is, one is debarred from saying that it was or will be, of attributing to it an origin or a dissolution in time, or any alteration or motion whatsoever. But this was just what the Milesians had done. They supposed that the world had not always existed in its present cosmic state. They derived it from one substance, which they asserted to have changed or moved in various ways—becoming hotter or colder, drier or wetter, rarer or denser—in order to produce the present world order.²⁴

A particular focus of Parmenides' criticism was Anaximander's idea that the opposites are initially latent within the *apeiron* prior to being separated out from it: if these opposite characteristics existed prior to being separated out, then the *apeiron* was not a true unity, but if they did not exist prior to being separated out, then how could they possibly come into existence? It is thus illegitimate to suppose that everything came into being out of one thing.²⁵ In addition to criticizing in this way the theoretical viability of the Milesians' monistic material principles, Parmenides also levelled a devastating critique against the Milesian union of the material and moving causes in their principles by arguing that motion and change are impossible and inadmissible conceptions.²⁶

Despite his belief that reason commits him to an uncompromising monism, Parmenides nevertheless proceeded in the second major part of his poem to present an elaborate cosmology on traditional lines. Confronting the inevitable question why he should have bothered to do so when he had already shown that plurality and change are inadmissible conceptions, Guthrie suggests that Parmenides is 'doing his best for the sensible world...by giving as coherent an account of it as he can' on the practical grounds that our senses continue to deceive us about its existence: 'His account of appearances will excel those of others. To ask: "But if it is unreal, what is the point of trying to give an account of it at all?" is to put a question that is not likely to have occurred to him'. ²⁷

Parmenidean monism attracted two staunch defenders in the generation to follow, first in Parmenides' own pupil, Zeno of Elea, and then in the Samian naval commander, Melissus. As Plato says in the opening of his *Parmenides*, Zeno was a faithful disciple who developed a series of ingenious arguments that defended Parmenides' paradoxical thesis indirectly by showing up the absurdities and contradictions inherent in the common notions of plurality and motion.²⁸ Melissus, while

²³ Guthrie 1962: 4–5.

²⁴ Guthrie 1965: 15–16.

²⁵ Guthrie 1962: 86-7.

²⁶ Ibid. 145. Cf. 1965: 119–21, where Guthrie adapts Gilbert 1909 in summarizing his account of the transition from Ionian to Eleatic monism.

Guthrie 1965: 5–6, 52.

²⁸ Ibid. 80; cf. 83, 88, 100. See 83–6 for an instructive review, with accompanying bibliographical note, of the history of views as to Zeno's purposes, particularly for the rise and fall of the idea that his target was Pythagorean number-atomism, the thesis that 'solid bodies, surfaces and lines are...pluralities of points, considered as infinitesimal magnitudes'. This

defending the main tenets of Parmenides, namely that reality is one and undivided, ungenerated and everlasting, homogeneous, motionless and not subject to growth or change, was innovative in producing some new arguments for these theses and in concluding that reality must be infinite in magnitude, not finite as Parmenides had believed.²⁹ Guthrie sees Melissus as reacting in particular against Empedocles' efforts 'to escape the Eleatic objections to generation and destruction by reducing them to processes of mixture and separation of indestructible elements'; but he is more sceptical of the idea that Melissus was also a formative influence on atomism, concluding that for all we know Melissus may post-date the formation of the atomist hypothesis and that, in any case, 'the important thing is that Melissus was firmly in the Eleatic tradition, whereas the atomists were post-Eleatic in the sense that they consciously reacted against Parmenidean doctrine, 30

Parmenides' Pivotal Position

Because of his uncompromising position and his critical exposure of the incoherence of Milesian monism, 'Presocratic philosophy', Guthrie wrote, 'is divided into two halves by the name of Parmenides. His exceptional powers of reasoning brought speculation about the origin and constitution of the universe to a halt, and caused it to make a fresh start on different lines.'31 Before turning to the reactions against it, Guthrie sums up the Eleatic philosophy as follows:

The achievement of Parmenides was to demonstrate by logical argument that Being and Becoming were mutually exclusive. The choice must be made, and its outcome was not in doubt: something must exist. 'It is'; therefore 'becoming and perishing have been driven afar off'. If Being excludes Becoming and Being is one, all plurality is banished to the realm of deceptive appearance....The culmination of this train of thought was to deprive senseperception of any contact with reality, and to demand acceptance of the paradoxical notion that nothing existed save a single undifferentiated entity—spherical (Parmenides) or of infinite magnitude (Melissus)—which filled all space (though their way of expressing this was that empty space did not exist), yet was intangible and invisible and only to be grasped by the intellect. For philosophy to rest there was impossible.³²

The stage is thus set for an account depicting the cosmological systems of the major Presocratic figures of the later fifth century as developed in conscious reaction against Eleatic paradox. Empedocles, Anaxagoras, and the early atomists, Leucippus and Democritus, all advanced pluralist physical theories to restore the project of natural philosophy in the face of the apparently devastating results of Parmenides'

interpretation, which in its various forms had major adherents for much of the first half of the 20th cent., was finally laid to rest by Owen 1958 and Booth 1957a, 1957b, 1957c.

³¹ Ibid. 1.

²⁹ Guthrie 1965: 101–2. ³⁰ Ibid. 115–18. ³² Ibid. 120.

critique of Milesian monism. By positing a plurality of primary substances, each real and everlasting, and by introducing moving causes distinct from their material principles, these later Presocratics sought to circumvent the disastrous conclusions of Parmenides' reasoning while respecting it to the maximal degree consistent with an ability to account for the phenomena.³³

The Post-Parmenidean Pluralists: Empedocles, Anaxagoras, and the Early Atomists

Empedocles of Acragas, the first of these post-Parmenidean pluralists, combined his efforts to rescue the natural world from Eleatic denial with a deeply religious outlook dominated by concern for the fate of the soul. Empedocles evidently studied Parmenides' poem and accepted a number of fundamental Parmenidean principles, including the idea that nothing can come out of nothing and that what exists cannot perish (Emp. frs. 11, 12) and his denial of void (Emp. frs. 13, 14, 17. 33). He nonetheless signalled his disagreement with Parmenides on the status of the world of our ordinary experience when, in speaking of the ultimate plurality that will make a physical world possible, he says, 'Hear thou the undeceiving order of my discourse (λόγου στόλον οὖκ ἀπατηλόν)' (Emp. fr. 17. 26). These words obviously echo Parmenides' prefatory warning to the cosmological portion of his own poem: 'But from this point mortal beliefs | hear, listening to the deceptive ordering of my words (κόσμον ἐμῶν ἐπέων ἀπατηλόν)' (Parm. fr. 8. 51b-2). ³⁴ Thus while obeying Parmenidean principles as far as possible, Empedocles nevertheless had to break with him on two fundamental points: what is real cannot be a unity and it cannot be unmovable.

The first move in his reaction against Parmenides was to substitute four ultimate root-substances or elements—earth, water, air, and fire—for the single material principle of the Milesians, since Parmenides had shown derivation of plurality from an ultimate unity to be impossible.³⁵ Guthrie wrote:

The notion of elements has now for the first time acquired a definite meaning as forms of matter which are (a) ungenerated and indestructible, (b) qualitatively unalterable, (c) homogeneous throughout (fr. 17. 35). In all this they are, as it were, the Parmenidean One multiplied by four, but in other respects they depart from that norm. Although Empedocles accepted the Eleatic denial of empty space, he did not admit as a necessary consequence that local motion was impossible. Given four substances instead of one, they could take one another's places, the last in a series of moving objects slipping into the place of the first, without needing empty space to move into. With motion permitted, his 'beings' take on two characteristics denied by Parmenides to his single Being, which make the genesis of a cosmos possible: they are (a) in motion and (b) divisible. . . . Apparent change is only rearrangement [of these elements]. ³⁶

³³ Guthrie 1965: 121; cf. 115, and Guthrie 1962: 5, 145.

³⁴ Guthrie 1965: 138.

³⁵ Guthrie 1962: 5; 1965: 140, 142.

³⁶ Guthrie 1965: 147-8.

Having thus recognized the necessary conditions for plurality, motion, and change, Empedocles posited the sufficient cause of motion as something distinct from the cosmos's elemental constituents. He in fact posited two such causes, Love and Strife, as responsible for the combinations and separations of the four material elements that lead to the formation of more complex aggregates and organic compounds: 'Since the elements were to be as like the Parmenidean One as possible, Empedocles felt bound to introduce external motivators . . . , Strife and Aphrodite or Love, the powers of repulsion and attraction.'³⁷

The revival of cosmological theorizing in Ionia proper, and its introduction into the heady cultural atmosphere of Periclean Athens, is credited to Anaxagoras of Clazomenae. Like Empedocles, Anaxagoras accepted the Parmenidean principles that there is no empty space and that coming-into-being and perishing into notbeing are impossible. He also followed Empedocles in reconceiving generation and destruction as mixture and separation. Instead of positing four material elements, however, Anaxagoras posited an infinite number of qualitatively different 'seeds' as the ultimate constituents of all matter. The motivation for doing so came from his more uncompromising interpretation of the prohibition against becoming, such that no entity can come to be from what it is not, not merely that no entity can come to be from nothing: 'How can hair come out of not-hair, and flesh out of not-flesh?' he asked (fr. 10). Anaxagoras would develop a remarkably subtle and complex theory of matter to accommodate this more radical idea 'that every natural substance must be assumed to have existence in the full Parmenidean sense. 38 Among these elemental substances Anaxagoras included what he called the 'seeds' (spermata) of all things what Aristotle would identify as the stuffs such as flesh, bone, hair, marrow, etc. that he himself called 'homoeomerous'—and also the traditional opposites such as the wet and the dry, the hot and the cold, the bright and the dark, and so on. In each thing there are seeds of everything else, while each thing appears as or has the qualities of those things that predominate within it. Anaxagoras can thus explain growth, nutrition, and any process wherein one thing apparently comes to be from another while obeying the Parmenidean principle that 'no new thing can come into existence'. 39 Anaxagoras would also appear to have attempted to respond to the challenge of Zeno with the idea that any portion of matter is infinitely divisible into ever smaller pieces, in which there will continue to be seeds of all things, and by disavowing the notion that whatever is composed of an unlimited number of parts must itself be of unlimited magnitude. 40 Finally, Anaxagoras took a step that would be hailed by both Plato and Aristotle in identifying a transcendent Nous or Mind as the distinct moving cause that had become necessary in light of Parmenides' challenge on the subject of motion.⁴¹

³⁷ Ibid. 155; cf. 1962: 6, 145.

³⁸ Guthrie 1965: 281.

³⁹ Ibid 287

Ibid. 289–90 and 293–4, following Gigon 1936: 4, and Raven 1954: 125 ff.
 Guthrie 1965: 320.

The final and most successful attempt to provide a theoretical account that would secure the reality of the physical world in the face of the challenge posed by the Eleatic school was the atomist theory developed by Leucippus and Democritus. Guthrie follows Aristotle in representing Leucippus as accepting that what is must fulfil the Eleatic conditions on existence by being ungenerated and imperishable, unchangeable, incapable of being added to or subtracted from, homogeneous, finite and a plenum, continuous and indivisible. Leucippus was able to do so by supposing that there is not just one but limitlessly many such entities or 'atoms' of microscopic size. The only further condition necessary to satisfy the Eleatic conditions upon being while allowing and accounting for the existence of the physical world of distinct and changing entities was the existence of empty space. This admission of void secured the possibility of both plurality and motion. With a limitless number of atoms surging around in infinite space, aggregates of atoms and large-scale bodies would be sure to arise as the atoms collided and clung to one another. Strictly speaking, however, no new thing is generated when atoms come into contact with one another. In reality, there exists just what existed before, only rearranged in a new way. Unlike Empedocles and Anaxagoras, the early atomists apparently felt no need to posit a separate moving cause alongside their material principles. Although Aristotle would complain that the atomists carelessly neglected this cause, they probably felt they had done enough by identifying the existence of void as a necessary condition of motion and simultaneously positing that their atoms had always been in motion and thus needed no distinct moving cause. 42 The atomist hypothesis was as bold and explanatorily powerful as it was simple, and, remarkably, it was developed on grounds less empirical than logical and metaphysical.

Parmenides' Place in Guthrie's Narrative

More themes, naturally, are pursued across the thousand pages of Guthrie's history of Presocratic philosophy than are represented in this summary. Nevertheless, what he himself identifies as the period's broad lines of development all feature here: the gradual separation of the spiritual from the material apparent in the move from an early hylozoistic outlook to the identification of a moving cause separate from the material upon which it acts; what led to Parmenides' denial of the possibility of motion and change and how later thinkers reacted; the development from early recognition of material and qualitative principles to the later interest, especially among the Pythagoreans, in formal and quantitative principles; and, subjectively, the increasing reliance on reason as the inadequacy of the senses as a guide to reality is more and more appreciated.⁴³ Of more particular importance for our purposes is how Guthrie makes Parmenides the pivotal figure in his history. In doing so, Guthrie is of course not alone but representative of a broadly influential view of the shape of

⁴³ Ibid. 122.

⁴² Guthrie 1965: 390-2, 396-9.

the period's philosophical development, the essentials of which are encapsulated in the following eight tenets.

- (T1) Parmenides was a proponent of strict monism, the metaphysical position that exactly one thing exists, and he held this unique entity to be both spatially and temporally undifferentiated.
- (T2) Parmenides believed the world of our ordinary experience a non-existent illusion and the sensory evidence for its existence radically deceptive.

These two tenets encapsulate the interpretation of Parmenides operative in the traditional narrative of which Guthrie's history is representative. It is best to distinguish them, rather than combine them into a single tenet, since it is possible, as some more recent interpretations have shown, to reject the first while retaining the second.

The next five tenets summarize Parmenides' relation to other thinkers, beginning with his predecessors:

- (T3) Parmenides' advocacy of strict monism was designed to expose the incoherence of Milesian material monism, according to which all things ultimately derive from a single material source or principle that persists as their underlying nature.
- (T4) Parmenides' monism, with its concomitant rejection of motion and change, is diametrically—and possibly deliberately—opposed to Heraclitus' philosophy of flux, the view that all things are constantly changing such that nothing is genuinely permanent and stable.
- (T5) Parmenides' monism was influenced by the monotheistic vision of Xenophanes.
- While (T4) and (T5) had once been the *communis opinio*, by the time Guthrie was writing some were becoming more sceptical about this traditional view of Parmenides' relation to Heraclitus and especially to the supposed 'founder' of the Eleatic school, Xenophanes. While Guthrie does not reject these two tenets outright, his endorsement of them is at best conditional and qualified. Parmenides' influence on his major successors may be encapsulated in two further tenets:
- (T6) Zeno and Melissus were followers of Parmenides who aimed in their own ways to defend and advance his paradoxical metaphysical position of strict monism; together these three figures comprise the 'Eleatic school'.
- (T7) Empedocles, Anaxagoras, and the early atomists, Leucippus and Democritus, attempted to come to grips with the Parmenidean challenge to the possibility of natural philosophy by accepting certain of his metaphysical principles while advocating various forms of substance pluralism and reflecting more deeply on the causes and conditions of change.

Finally,

(T8) The evidence of Plato and Aristotle broadly and reliably supports (T1)–(T7).

This last point is important because Guthrie's narrative is thoroughly and unapologetically shaped by Aristotle's discussion in *Physics* 1 of how the Presocratics grappled

with the problem of change and by his efforts in *Metaphysics* 1 to show that the Presocratics had stumbled upon his own four causal/explanatory principles (and just those four).

While others have properly been much more circumspect than Guthrie about the anachronism of allowing Aristotle's historical argument in *Metaphysics* 1 to shape their narrative, there has been less doubt about the essential accuracy of Aristotle's account of the main arc of development in Presocratic theories of change, especially as represented in a crucial passage at the beginning of *Physics* 1. 8. Having in the previous chapter presented his own analysis of the principles of change or coming to be, Aristotle here announces that his theory makes it possible to avoid the difficulty to which earlier thinkers succumbed:

Next, let us explain why this is also the only way of resolving the problem which faced our predecessors. Those who first tried to discover the truth and to understand the nature of things in a philosophical manner were deflected by their inexperience down a side alley, so to speak. They claimed that nothing comes to be or ceases to be, on the grounds that for anything to come to be it would have to come either from what is or from what is not, but that neither of these is possible. What is cannot come to be because it already is, and nothing can come from what is not because there must be some underlying thing. And then they extrapolated from this to conclude that there cannot be a plurality of things, but only being itself. (Arist. *Ph.* 1. 8. 191^a23–33, tr. R. Waterfield)

This passage, perhaps more than any other passage in Aristotle, has seemed to modern historians to vindicate the broad view of the development of early Greek philosophy and science encapsulated in (T1) to (T7), for Aristotle here seems to be describing the challenge to the young tradition of natural philosophy posed by Eleatic arguments to the effect that nothing comes to be or ceases to be offered in support of their grossly paradoxical position that there actually exists only one thing.

That the view of the historical development of early Greek philosophy represented by these eight tenets has been a broadly influential one will, I trust, be accepted without its being understood as meaning that a majority of scholars will have subscribed to all eight of these tenets or to just these formulations. On the contrary, it seems that few will have held all eight tenets just as formulated here. Since Guthrie comes as close to doing so as perhaps anyone, I shall refer to this view of the development of early Greek philosophy as 'Guthrie's narrative'. Doing so has seemed preferable to speaking of any such fictive entity as 'the critical consensus', 'the conventional narrative', or 'the standard interpretation'. The more one reads of the scholarly literature on Presocratic philosophy, the more one comes to doubt whether such phrases refer successfully—there are so many differences in characterization of the lines of development and intellectual influence and affiliation meant to define this period of thought. I would nonetheless hazard that many readers will be inclined to accept most of the eight tenets that define 'Guthrie's narrative'. Experts will recognize in it a picture of the development of early Greek philosophy and science broadly endorsed not that long ago, for they will know of the ways in which opinion has been shifting in the past four decades with respect to certain of its defining tenets. It will be useful to say something about these developments before outlining the line of argument that will be pursued across the subsequent chapters.

ADVANCES IN PARMENIDES INTERPRETATION AND MODIFICATIONS OF GUTHRIE'S NARRATIVE

The Logical-Dialectical Reading and its Impact

The view of Parmenides' relation to earlier thinkers has been shifting over the past few decades, with the result that there now tends to be a more sceptical attitude towards (T3)-(T5). One major factor in this development has been a move towards understanding the arguments of Parmenides and Zeno as driven by strictly logical considerations rather than by any critical agenda with respect to the theories of their Ionian or Pythagorean predecessors. When Guthrie was composing the first two volumes of his History, a change was already taking shape that would bring to the study of ancient Greek philosophy the kind of rigorous argumentation and conceptual precision associated with analytic philosophy. The two most influential pioneers of this movement, Gregory Vlastos and G. E. L. Owen, were both fascinated with the philosophy of Elea. Although Vlastos's publications on the Presocratics date back to 1946, the novel combination of philosophical and philological analysis that he had brought to the study of Platonic metaphysics and ethics is more evident in his work on Zeno during the mid-1960s, culminating in the masterful exposition of Zeno's arguments in the Encyclopedia of Philosophy. 44 Owen had already published an important study of Zeno's arguments and their purposes in 1958, and both he and Vlastos criticized the idea, popular from Tannery to Raven, that these arguments were designed to expose the conceptual confusion of contemporary Pythagorean mathematics. More than any other single work, however, Owen's 1960 article, 'Eleatic Questions', would influence and inspire the surge of English-language scholarship on Presocratic philosophy in the two decades that followed.

Owen found inspiration in Bertrand Russell for his positive interpretation of Parmenides' argument in fr. 2, the essential point of which Owen took to be that what can be talked or thought about exists. The arguments of fr. 8 were taken to show this subject to be, surprisingly, without variation in time and space, that is, absolutely one and unchanging. Owen adapted an image from Wittgenstein in characterizing the arguments of fr. 8, which 'can only show the vacuousness of temporal and spatial distinctions by a proof which employs them', as 'a ladder which must be thrown away when one has climbed it'. 45 Owen also vigorously opposed the assumption that 'Parmenides wrote his poem in the broad tradition of Ionian and Italian cosmology', arguing that Parmenides claims no measure of truth or reliability for the cosmogony in the latter part of his poem and that his own arguments in the 'Truth' neither derive from this earlier tradition nor depict the cosmos as spherical in shape. 46 On Owen's interpretation, Parmenides' cosmology is

⁴⁴ The studies of individual arguments reflected in the 1967 encyclopedia entry are Vlastos 1966a, 1966b, and 1971 (this last article was written several years before its eventual publication). ⁴⁵ Owen 1960: 67. ⁴⁶ Ibid. 48.

'no more than a dialectical device', that is, 'the correct or the most plausible analysis of those presuppositions on which ordinary men, and not just theorists, seem to build their picture of the physical world', namely 'the existence of at least two irreducibly different things in a constant process of interaction', whereas Parmenides' own arguments earlier in his poem had already shown both the plurality and change this picture presupposes to be unacceptable. 47

With respect to the eight tenets of Guthrie's narrative, then, Owen may be seen as advocating a somewhat stricter version of (T1), according to which the uniquely existing entity revealed by reason is not only spatially and temporally undifferentiated but does not even properly permit characterization in spatial or temporal terms. In denying any measure of truth or reliability for the poem's cosmology, Owen can likewise be seen as endorsing (T2); and yet Owen would not accept (T3), (T4), and (T5), for he decisively rejected earlier efforts to account for Parmenides' strict monism in terms of any particular historical relation to his predecessors. For Owen, Parmenides' motivation was purely logical, not a critical reductio of Milesian material monism or the spurious Pythagorean 'doctrine' of number-point-atomism. Owen's perspective had great appeal for historians of philosophy who at the time were seeking to invest their accounts of earlier thinkers' views with more purely 'philosophical', rather than 'merely historical', rationales and motivations. On Owen's view, Parmenides was driven to embrace the paradoxical thesis of strict monism by perfectly general reflection on a key condition upon successful thought and speech. Parmenides' fundamental assumption, on Owen's view, far from having anything to do with a Milesian or Pythagorean One, is the perfectly general idea that what can be talked or thought about exists.

At the end of next two decades' outpouring of work on the Presocratics there appeared the two most important surveys of Presocratic thought since Guthrie: Jonathan Barnes's *The Presocratic Philosophers* (1979¹, 1982²) and Kirk, Raven, and Schofield's *The Presocratic Philosophers* (1983², revision of Kirk and Raven 1957¹). These two works mark a high point in Presocratic studies. Each in its own way synthesized and incorporated the advances since the publication of the first two volumes of Guthrie's *History*, and there have since been no studies of the period seriously to rival their comprehensive treatment. One of the more significant developments reflected both in Barnes and in Schofield's revision of Raven's chapter on Parmenides is a move, influenced by Owen, away from the idea that Parmenidean monism was a specific reaction to the theories of any of his predecessors. Thus Schofield's account does away with both Raven's opinion that Parmenides refers

⁴⁷ Owen 1960: 50, 54–5.

⁴⁸ Unlike Kirk, Raven, and Schofield, Barnes avowedly does not pretend to present a comprehensive account of Presocratic philosophy and in fact has little to say about the other than strictly philosophical interests of its figures. As its preface clearly states, the thesis of Barnes's massive study is 'that the Presocratics were the first masters of rational thought' (1982a: pp. xi, cf. pp. xv–xvi), a demonstrandum befitting his contribution to Routledge's 'Arguments of the Philosophers' series; and yet it is precisely because he focuses on what marks the Presocratics' various inquiries as recognizably philosophical that his work serves so well as a comprehensive survey of Presocratic philosophy.

critically to Anaximenes in fr. 4 and fr. 8. 22-5 and likewise the claim that, though once a devotee of Pythagoreanism, Parmenides is an apostatic critic of Pythagorean cosmological principles who made them the specific target of many of his arguments. ⁴⁹ In his thoroughly revised version of this chapter, Schofield writes that 'there is little sign that any preoccupation with Pythagorean ideas continued into [Parmenides'] mature thought', 50 and he accordingly scraps Raven's constant reference to Pythagorean notions in expounding the arguments of Parmenides' 'Truth'. Schofield also goes further than Raven's rather non-committal attitude to the notion that Heraclitus is a special target of Parmenides' criticisms of mortal opinions, especially in fr. 6,51 by not even bothering to repeat this old chestnut. In short, Schofield's presentation of Parmenides does not, as once was the fashion, try to explain his monism as born from specific criticism of any of his predecessors, be they Milesian, Pythagorean, or Ephesian. His presentation of Parmenides displays the kind of scepticism towards attempts at this kind of explanation that one finds more plainly stated by Barnes: 'I am sceptical . . . of claims to detect intellectual influences among the Presocratics. The little tufts of evidence which bear upon the chronology of those early publications are, as I observed in more than one connection, too few and too scanty to be woven into the sort of elegant tapestry which we customarily embroider in writing histories of modern philosophy.'52

The attitude towards (T3)–(T5) shared by Barnes and Schofield is the inheritance of Owen's 'logical-dialectical' interpretation of Parmenides, with its rejection of the theretofore common opinion that the arguments of Parmenides' 'Truth' depend on assumptions derived from earlier cosmology and, more specifically, that these arguments were meant to reduce to absurdity a particularly Milesian or Pythagorean conception of the One Being or the One as the ultimate cosmological principle.⁵³ Thus the shift towards understanding Parmenides' monism as motivated primarily by certain logical principles and by an unstinting determination to pursue rational inquiry wherever it might lead involved a concomitant movement away from earlier efforts to explain his philosophy as a critical reaction against (or, with respect to Xenophanes, as an inheritance of) specific developments in earlier Presocratic philosophy and science. This was a welcome consequence, for the earlier efforts at genetic explanations of Parmenidean monism have for independent reasons come to seem ahistorical or otherwise untenable.

As important a factor in the movement away from (T3) and (T4) as Owen's influential interpretation of Parmenides has been how the understanding of the

⁴⁹ Kirk and Raven 1957: 265, 268.

⁵⁰ Kirk et al., 1983: 240.

⁵¹ Kirk and Raven 1957: 272, where Raven writes that one can make good sense of the phrase πάντων δὲ παλίντροπός ἐστι κέλευθος at Parm. fr. 6. 9b without taking it to refer specifically to the doctrines of Heraclitus. Cf. Kirk's non-committal statement at Kirk and Raven 1957: 183 = Kirk et al. 1983: 182, that Heraclitus 'was perhaps indirectly referred to by Parmenides'.

Barnes 1982*a*: p. xvi (preface to rev. edn.).

⁵³ Owen 1960: 49 n. 2 and 55–9, where Cornford 1939, Raven 1948, and Vlastos 1955 come in for pointed criticism.

Milesians and Heraclitus has freed itself from crucial misconceptions. Studies of the Milesians in particular have tended towards attempting to envisage the problems these thinkers were themselves trying to address, so as to free our picture of them from the potentially distortive Aristotelian filter. Two principal factors in this development have been the recognition that Plato and Aristotle's engagement with these early figures was already conditioned by an incipient tradition of philosophical historiography 54 and, second, appreciation that Milesian thought was influenced by cultural commerce with the great Near Eastern civilizations whose trade routes brought them into contact with the Greek-speaking inhabitants of Asia Minor.⁵⁵ The upshot is that the Milesians can no longer reasonably be cast as 'material monists'. If Thales said that water is the archē of all things, or something to that effect, he is much more likely to have meant that things have their source or origin in water than that water somehow persists in things as their underlying nature or substance. Likewise, in Anaximander's system, to apeiron or 'the Boundless' is more likely to have functioned merely as the source or origin of fundamental 'opposites' that thenceforward function as the primary constituents of things.⁵⁶

The only member of the Milesian 'school' who might seem properly represented as a material monist is Anaximenes, with his theory of the transformation of the fundamental aer into all things via condensation and rarefaction. Aristotle seems to have him primarily in mind at the beginning of *Physics* 1. 4, where he first distinguishes one group of natural philosophers as ones who made the underlying body some single thing, 'either one of the three or something else that is denser than fire but lighter than air', ⁵⁷ saying that 'they generate other things via condensation and rarefaction so as to produce multiple things'; and he then contrasts these figures with a second group, in which he includes Anaximander, comprising those who suppose the opposites initially present in the One are subsequently separated out from it (Ph. 1. 4. 187^a12–23). While Aristotle isolates him from Anaximander in this way, his characterization of Anaximenes' theory is actually not incompatible with other evidence that tends to suggest Anaximenes conceived of aer as the merely originative source rather than the persisting substrate of things. At the same time as Theophrastus, Cicero, and Hippolytus describe how Anaximenean aēr when rarefied becomes fire and when progressively condensed becomes, in turn, wind, cloud, water, earth, and stone, all these later authors also say that other things come to be

⁵⁴ See esp. Mansfeld 1983, 1985 a, 1986. This important series of studies has made it abundantly clear that Greek philosophical historiography originated during the sophistic period and that it had a serious impact on Plato and Aristotle that must be taken into account when dealing with their representations of their predecessors. While Mansfeld properly acknowledges that this thesis is not new with him, his work has synthesized, corrected, and extended the piecemeal work of earlier scholars on the phenomenon so as to yield a more synoptic view.

See esp. Burkert 1963, 1992, 1994, 2004, 2008; West 1971, 1994.
 See further Ch. 8, pp. 336–9.

The passage indicates that Aristotle understood Anaximenes' *aēr* as something other than elemental air; and indeed in early Greek texts aēr was normally some kind of obscuring mist, cloud, or vapour. See the detailed and illuminating discussion of the early history of the elemental stuffs, and of $a\eta\rho$ and $a\partial\eta\rho$ in particular, at Kahn 1960a: 134–54.

from these.⁵⁸ The fact that these testimonia describe a two-stage process—first the generation from aer of the cosmos's principal stuffs and then the generation of everything else from these descendants of aer—has prompted a number of interpreters to question the assumption that Anaximenes meant aer to be the persisting substrate of all change. Most recently, Daniel Graham has developed a view according to which 'air in Anaximenes . . . defines the one, undifferentiated state before the cosmos existed. Furthermore, air has special properties associated with life, which can account for the orderliness of the world as well as for animal and human intelligence. But we need not suppose that after air is differentiated into six other stuffs, they are still air: rather, they are products or offspring of air.'59 He goes so far as to argue that material monism is philosophically incoherent absent some criterion for identifying the single substrate apart from its perceptible manifestations, a criterion which requires a formal conception of the underlying material of things. 'No early Ionian', he writes, 'ever proposes any structural account of matter apart from its perceptual qualities. It appears, then, that the early Ionians do not offer us the minimum theoretical machinery needed for a coherent theory based on a continuing material substrate.'60

As (T3) rests on a mistaken representation of the Milesians as material monists, (T4) involves a comparable distortion of Heraclitus' thought in positing that

⁵⁸ Thphr. ap. Simp. in Ph. 24. 26–31, with the key phrase being τὰ δὲ ἄλλα ἐκ τούτων (sc. fire, wind, clouds, etc.). Compare Cic. Acad. 2. 118: 'Anaximenes postulated indeterminate air, though he claimed that the things arising from it were determinate, the order of their generation being first earth, water, and fire, and then everything else from them (tum ex iis omnia)' (tr. Brittain) and Hippol. Haer. 1.7. 1: 'Anaximenes . . . said the archē is unlimited air, from which what is coming to be and what has come to be and what will be and gods and goddesses are born, and the rest from the things produced from its offspring (τὰ δὲ λοιπὰ ἐκ τῶν τούτου ἀπογόνων)'. McDiarmid 1953: 200-3, criticizes Theophrastus for promulgating what he says is Aristotle's tendency to interpret the Ionian principles as substrates of alteration, noting that Anaximenes clearly did not conceive of aer as qualitatively neutral and that Theophrastus himself says that Anaximenes, like Anaximander, explained change in terms of an eternal motion, which suggests that he understood Anaximenean change as emergence rather than alteration. McDiarmid is nonetheless sceptical of Theophrastus' report that other things come from the fire, wind, cloud, water, earth, and stone that are the immediate products of aēr's rarefaction and condensation, thinking it unnecessary for Anaximenes to have posited any secondary process of generation if such a diverse range of stuffs could be generated from $a\bar{e}r$. Only if these stuffs are treated as elemental, as McDiarmid suggests Theophrastus mistakenly supposed them to be, does a secondary process become necessary. Other evidence, however, suggests that processes other than the rarefaction and condensation of aer figured prominently in Anaximenes' cosmogony. Cf. Hippol. Haer. 1. 7. 5 for a report of Anaximenes' account of how the heavenly bodies came to be from exhalations arising from the earth, a report partly paralleled in [Plu.] Strom. 3 ap. Eus. PE 1. 8. 3, according to which Anaximenes held that the sun, moon, and other heavenly bodies 'have the beginning of their generation from earth $(\tau \dot{\eta} \nu \dot{a} \rho \chi \dot{\eta} \nu)$ $\tau \hat{\eta}$ s $\gamma \epsilon \nu \epsilon \sigma \epsilon \omega s$ έχειν $\epsilon \kappa \gamma \hat{\eta}$ s)'. Among those who have drawn attention to these and related texts to call into question the presumption that Anaximenes conceived of aer as the persisting, underlying substance of all things are Klowski 1972, Classen 1977 (cf. esp. 99-100), Wöhrle 1993: 18 ff., and now Graham 2006: 53–4.
⁵⁹ Graham 2003*a*: 13, building on Graham 2003*b*.

Graham 2006: 63. Ch. 3 of this work expands upon his earlier articles in attributing to Anaximenes what Graham calls the 'Generating Substance Theory' and in elaborating the case against casting the Milesians as material monists.

Parmenides' 'philosophy of changelessness' was developed in deliberate opposition to Heraclitus' 'philosophy of flux'. The idea of a fundamental antagonism between the philosophical perspectives of Heraclitus and Parmenides originates, of course, with Plato. At *Theaetetus* 152 E 1-9, Socrates famously ranges all the advocates of the Heraclitean 'secret doctrine' that 'nothing ever is, but everything is coming to be' $(\tilde{\epsilon}\sigma\tau\iota \ \mu \hat{\epsilon}\nu \dots o\tilde{\upsilon}\delta\epsilon' \pi o\tilde{\tau}' o\tilde{\upsilon}\delta\epsilon' \nu, \tilde{\epsilon}\epsilon \hat{\iota} \delta\hat{\epsilon} \gamma (i\gamma\nu\epsilon\tau\alpha\iota)$ against Parmenides, who is represented later in the dialogue as maintaining, with Melissus, that all things are one and unchanging (180 E 2-4, cf. 183 E 3-4). It was once common practice to accept the opposition between Heraclitus and Parmenides as it figures here in Plato as historically accurate in its essentials and to follow its lead by trying to find evidence in Parmenides' own words of his critical attitude towards Heraclitus. In time, however, historians would come to appreciate the inadequacy of the traditional representation of Heraclitus as a radical flux theorist. Not only is there little evidence in the fragments of his book that he advocated anything close to the full-blown Cratylean position of the *Theaetetus*' 'secret doctrine', namely, that everything is always changing in every respect, but his own words make it clear that the changes of the world's mutable entities are directed by something eternal and unchanging, the fixed principle of law-like regularity Heraclitus calls the *logos*, which governs the cosmos through the vehicle of its fiery substance. Guthrie himself, as we have seen, already had his doubts about (T4), and in fact this tenet is more common in older histories than in more recent ones. Thus Kirk in the first edition of The Presocratic Philosophers remarked, when discussing Heraclitus' date and life, only that 'he was perhaps indirectly referred to by Parmenides';61 and then in the second edition Schofield makes nothing of the once commonly drawn connection in his revised chapter on Parmenides, choosing instead to compare the two thinkers' similar attitudes to the gulf between the human and divine perspectives. This is representative of how, once the inadequacy of the representation of Heraclitus as a radical flux theorist was recognized, the idea that he was the particular target of Parmenides' criticisms went into decline, and it even began to be appreciated that there are various commonalities between Parmenides and Heraclitus that the notion of their diametric opposition had obscured.⁶²

By contrast to the revision in attitudes towards (T3) and (T4) spurred by Owen's interpretation of Parmenides, the tenets (T6) that Zeno and Melissus were faithful advocates of the Eleatic system and (T7) that the pluralist physical systems of Empedocles, Anaxagoras, and the atomists were developed in response to Parmenides' challenge to the very enterprise of natural philosophy have persisted in reinvigorated forms. Thus while the influential surveys of Presocratic philosophy presented by Barnes and by Kirk, Raven, and Schofield abandon the idea that Parmenidean monism was a specific reaction to the theories of any of his predecessors, they continue to accord Parmenides a pivotal role in the development of Presocratic thought and to depict his impact on later systems as decisive. On their

⁶¹ Kirk *et al.* 1983: 182.

⁶² See further Ch. 8, pp. 341–5.

Owenian line, the story becomes that the arguments of Parmenides and his Eleatic successors were meant to be generally destructive of all previous cosmological theorizing, in so far as they purported to show that the existence of change, time, and plurality cannot be naïvely presumed. Parmenides' 'Truth' effectively becomes, for advocates of this line, a generalized rather than a specific *reductio* of early Greek cosmological theorizing. Barnes's overarching narrative is thus one marked by Parmenides' break with the early Ionian tradition and by the subsequent 'neo-Ionian' response:

Parmenides of Elea marks a turning-point in the history of philosophy: his investigations, supported and supplemented by those of his two followers [Zeno and Melissus], seemed to reveal deep logical flaws in the very foundations of earlier thought. Science, it appeared, was marred by subtle but profound contradictions; and the great enterprise undertaken by the Milesians, by Xenophanes and by Heraclitus, lacked all pith and moment. The age of innocence was ended, and when science was taken up again by the fifth-century philosophers, their first and most arduous task was to defend their discipline against the arguments of Elea.... Parmenides' influence on later Presocratic thought was all-pervasive. 63

Here, in its essentials, is the modification of Guthrie's narrative to which Owen's seminal work led: the notion that the logical investigations of the Eleatics revealed fundamental flaws in the common notions of change and plurality replaces the more specific historical relations posited in (T3), (T4), and (T5), while providing a new foundation for (T7). This same basic narrative structures Kirk, Raven, and Schofield's *The Presocratic Philosophers*. While there have been certain voices of opposition, now to be discussed, a quarter century after the appearance of the first edition of Barnes's work, Schofield can still plausibly claim, 'Nobody has yet produced a more convincing rival story shifting the focus elsewhere.'⁶⁴

The Meta-Principle Reading and its Impact

Efforts to do so have tended to involve developing a competing alternative to the tenet (T1), that Parmenides advanced the wildly counter-intuitive thesis of strict monism. Barnes himself, in fact, voiced reservations about this long-standing view and suggested that Melissus, rather than Parmenides, should be credited with the invention of 'real' monism, for the fragments of Parmenides' 'Truth', Barnes argued, are compatible with the existence of a plurality of Parmenidean Beings. ⁶⁵ Perhaps the most influential alternative to the view of Parmenides as a strict monist, certainly among scholars working in America, has been that developed by Alexander

⁶³ Barnes 1982*a*: 155.

⁶⁴ Schofield 2005: 32.

⁶⁵ Barnes 1979; cf. Barnes 1982*a*: 204–7. Cordero 1999 presents a comparable if different view of how Melissus concretized Parmenidean Being to produce the 'Eleatic One'. A persistent minority of modern interpreters has in fact long since challenged the general view that Parmenides was a monist, the most prominent antecedents of Barnes's heterodoxy being Bäumker 1886 and Untersteiner 1955 (for further refs., see Barnes 1979: 2 n. 4).

Mourelatos in his 1970 monograph, *The Route of Parmenides*. Mourelatos saw Parmenides as concerned with a specialized, predicative sense of the verb 'to be' used to reveal a thing's nature or essence—what Mourelatos dubbed 'the "is" of speculative predication'. This sense is supposed to feature in statements of the form, 'X is Y', where the predicate 'belongs essentially to, or is a necessary condition for, the subject' and where it thus indicates X's reality, essence, nature, or true constitution. Mourelatos's reading would lead Alexander Nehamas likewise to assume that Parmenides frequently employs 'is' in the very strong sense of 'is what it is to be', such that his concern is with 'things which are F in the strong sense of being what it is to be F'. A variant of the interpretive line inaugurated by Mourelatos and developed by Nehamas, a variant that also incorporates Barnes's proposal that nothing in the 'Truth' precludes there being a plurality of Parmenidean Beings, has more recently been developed by Patricia Curd. Parmenides was on her view not a strict monist but instead a proponent of 'predicational monism', which she specifies as:

the claim that each thing that is can be only one thing; it can hold only the one predicate that indicates what it is, and must hold it in a particularly strong way. To be a genuine entity, a thing must be a predicational unity, with a single account of what it is; but it need not be the case that there exists only one such thing. Rather, the thing itself must be a unified whole. If it is, say F, it must be all, only, and completely F. On predicational monism, a numerical plurality of such one-beings (as we might call them) is possible. ⁶⁹

This family of interpretations I shall refer to as 'the meta-principle reading'. For Mourelatos, Nehamas, and Curd all take Parmenides to be concerned with specifying in an abstract way what it is to be the nature or essence of a thing, rather than simply with specifying what there in fact is, as he is presumed to do on both the logical-dialectical and the more traditional strict monist readings.

The meta-principle reading takes Parmenides' 'Truth' to be programmatic, rather than merely paradoxical or destructive, and thus it suggests a somewhat different

⁶⁶ Cf. Mourelatos 1979 for a succinct presentation of this alternative view, couched as a response to apparent shortcomings in the 'Standard Interpretation' à la Owen.
⁶⁷ See Mourelatos 1970: 56–60.

Nehamas 1981: 107. Although Nehamas cites Owen as well as Mourelatos as an influence, Owen himself took Parmenides' incomplete uses of the verb 'to be' as existential (see Owen 1960: 94). Cf. Nehamas 2002: 50: 'the "signposts" along the way of Being which Parmenides describes in B 8 [may be taken] as adverbs that characterize a particular and very restrictive way of being. The signposts then tell us what conditions must be met if a subject is to be something in the appropriate way, if it is to be really something, and thus be a real subject. And to be really something, *F*, is to be F—B 8 tells us—ungenerably and imperishably, wholly, only and indivisibly, unchangingly, perfectly and completely.... Parmenides uses "being" to express a very strong notion, which Aristotle eventually was to capture with his concept of "what it is to be." To say of something that it is *F* is to say that *F* constitutes its nature.'

⁶⁹ Curd 1998*a*: 66. Cf. Curd 1998*b*: 20: 'if we treat the "is" in Parmenides as predicative, and as a predicative "is" of a particularly strong sort, one that reveals what it is to be something, or its nature, then we can see Parmenides as concerned with developing the metaphysical criteria under which something can be said to be just what a thing is. . . . To be is to be the genuine nature of a thing, to be just what a thing is; to be such a nature, something must be what it is unchangingly, completely, and as a unity. That is, to be the nature of, say, F something must be all, only, and completely F.'

narrative structure for the history of early Greek philosophy. Mourelatos viewed the 'Pluralists'—Empedocles, Anaxagoras, and the atomists—as endorsing what he understood to be the Parmenidean requirements that 'the real' $(\tau \delta \epsilon \delta \nu)$ be ungenerated, imperishable, and absolutely changeless: 'The Parmenidean requirement that what-is should be totally immune to change they *interpreted* as a requirement that ontologically fundamental entities, taken severally or individually, should be immune to any sort of internal change.'70 Curd's 1998 monograph, The Legacy of Parmenides, 71 further developed this line by likewise questioning the prevailing view that Parmenides had presented a radical challenge to the young tradition of cosmology and that subsequent Presocratic natural philosophers had variously attempted to meet this challenge so as to restore cosmology to viability. In opposing this broad view, Curd objects that later Presocratics could not have continued to propose cosmological systems without simply begging the question against Parmenides: since the major responses to Parmenides—the pluralism of Empedocles and Anaxagoras, the atomism of Leucippus and Democritus, and the Platonic theory of Forms—all simply posit without justification a plurality of fundamental entities, Curd suggests that they do not constitute adequate responses to Parmenides as standardly interpreted. Taking the apparent silence about numerical monism among these thinkers as the impetus for developing a meta-principle reading as the foundation for a new account of the subsequent course of Presocratic thought, Curd proposes that Parmenides' subject in the 'Truth' is 'what it is to be the genuine nature of something' and that he is, in this portion of the poem, concerned with specifying the criteria any genuine or fundamental entity must satisfy.

Curd consequently does not see the later Presocratics as reacting against Parmenides but, rather, as aiming to develop their theories upon the basis of principles deliberately designed to satisfy Parmenides' criteria. The peculiar notion that Parmenides was a 'predicational monist' virtually disappears from Curd's account of the later Presocratics' response to Parmenides. What they are supposed to have inherited from Parmenides is instead the weaker thesis that each real entity 'must be an internal unity..., not subject to coming-to-be, passing away, or any other sort of change'. Curd then concentrates on how each of the pluralist systems accounted for the world's changing phenomena, while obeying Parmenides' injunction against coming-to-be and passing-away, by positing a set of fundamental entities with fixed natures that are supposed to underlie all change. This in itself is not particularly novel. More traditional narratives already depict Empedocles, Anaxagoras, and the atomists as endorsing the Parmenidean injunction and positing a plurality of fundamental entities with the hallmark features of Parmenidean Being to account

Mourelatos 1987: 131. Cf. 133: 'Refusing to accept the Eleatics' conclusions, they nevertheless judged that Parmenides and Melissus had done an impressive job of coming up with a rigorous deduction of the defining criteria of fundamental or ultimate reality.'

⁷¹ This work synthesizes and expands upon Curd 1991, where she introduced the thesis that Parmenides was a 'predicational monist', and the extensions of that thesis in Curd 1992 and 1993. For a succinct presentation of the basic features of her narrative, see Curd 2006.

72 Curd 1998a: 130.

for the phenomena of change. What is new in Curd's account is the idea that these later thinkers were not responding to or reacting against Parmenides but were, instead, developing their physical theories along just the lines that his 'Truth', when regarded as a metatheoretical account, indicates any viable theory would have to be constructed. In other words, Curd takes Parmenides as actually having done what the apparent replication of the characteristics of Parmenidean Being in Empedocles' four elements, Anaxagoras' microscopic stuffs, and Leucippus and Democritus' atoms would seem to suggest they took him to have done—namely, specify in a general way the features any material principle(s) must have and thus set key conditions that any adequate physical theory must satisfy. Whereas other narratives had tended to portray the later Presocratics' reaction to Parmenides as if they took the 'Truth' to have metatheoretical implications, Curd and other advocates of the meta-principle reading take Parmenides' own agenda to have been metatheoretical from the outset.

Daniel Graham has still more recently proposed a new account of the development of Presocratic thought that turns upon a meta-principle interpretation of Parmenides. 73 In his 2006 monograph, Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy, Graham suggests that Presocratic cosmology employed two broad paradigms of explanation: the Generating Substance Theory (GST), according to which the cosmos has come about through the transformation of a single generating substance into all other stuffs, and the Elemental Substance Theory (EST), according to which everything has come to be from a plurality of eternal, immutable, and yet qualitatively distinct elemental substances, all of which existed prior to the initial cosmogonical phase. Graham envisions the major arc of the period's scientific development as a shift from one explanatory paradigm to the other, and he finds the provocation for this paradigm shift in what he takes to be Parmenides' exposure of the flaws inherent in theories of the first type. Graham's story thus self-consciously reverts to the notion, generally accepted prior to Owen's 'Eleatic questions', that Parmenides developed his philosophy in critical reaction against the cosmological theories of his predecessors.⁷⁴ The fundamental problem with GST, which Parmenides is supposed to have articulated, is the theoretical inadequacy of casting as substance any entity that is itself subject to substantial change. On Graham's picture, then, the post-Parmenidean Presocratics

⁷³ See Graham 1999: 166–8, where his criticisms of 'the dominant view' for making Empedocles and Anaxagoras beg the question against Parmenides are directed specifically against Barnes 1982*a* and Kirk *et al.* 1983. Graham summarizes the meta-principle reading of Parmenides he endorses as follows: 'What-is, whatever it is, must conform to the canons of Eleatic being: it must be everlasting, all alike, unchangeable, complete. On this reading, Parmenides is the first metaphysician instead of the latest cosmologist. He is telling what something would have to be like in order to qualify as an explanatory principle.' See also the criticisms of the so-called 'Standard Interpretation' in Graham 2006: 186–94.

of the line of interpretation developed in Cherniss 1935 and 1951 and revised and extended in Stokes 1971, and Graham 2006: 63–5, where he suggests that only if the Milesians, and Anaximenes in particular, are understood as generating substance theorists rather than material monists are they 'dialectically relevant' targets for Parmenidean critique.

who continued the Ionian tradition of philosophical cosmology by advancing versions of EST were not reacting against Parmenides but pursuing an explanatory project that he had been instrumental in defining. To the first phase of this development belongs the 'Eleatic pluralism' of Anaxagoras and Empedocles, whom Graham views as motivated not only by Parmenides' criticisms of the early Ionians but also by understanding the cosmological portion of his poem as offering a positive alternative to the GST. The early atomists belong to a second phase, in so far as they developed their version of the EST in response to Zeno and Melissus' anti-cosmological version of Eleaticism.⁷⁵ This account of the history of the development of Presocratic thought leads Graham to view the 'Ionian tradition' referenced in his subtitle as a unified movement constituting the dominant current in the history of early Greek thought.

While champions of the meta-principle reading of Parmenides have found it a convenient basis for redescribing what was already taken to be his pivotal impact on early Greek cosmological theory, they have found it more difficult to account for the cosmological speculations in Parmenides' own poem. If Parmenides' 'Truth' is in fact a second-order description of the features any proper physical principle must possess, then one naturally expects the cosmology that follows in the remainder of the poem to deploy principles that meet Parmenides' own requirements. The goddess, however, seems to disavow the poem's cosmology when she describes it as an account of 'the notions of mortals, in which there is no genuine conviction' (fr. 1. 30, cf. fr. 8. 50-2) and commences the latter part of her revelation by noting that mortals have wandered astray by isolating two forms, light and night, as the basis for an account of the cosmos's origins and operation (fr. 8. 53-9). Graham takes the view that the meta-principle reading makes it possible to accept the cosmology at something close to face value, namely, as Parmenides' own account of the cosmos, despite the goddess's disclaimer that it will fail to be trustworthy (fr. 8. 50-2) and despite her diagnosis of the error on which it is based (fr. 8. 53–4). ⁷⁶ Graham argues that light and night do in fact satisfy the conditions on principles articulated in the 'Truth':

For Parmenides, problems with the concept of generation point the way to a theory of cosmic generation based on ungenerated substances with permanent properties.... Light and Night are (i) ungenerated and imperishable as substances, being eternally present in the world as far as we can see. They are (ii) wholes of a single kind: each is identical with itself and non-identical with the other. They are (iii) motionless, at least in some sense. And they are (iv) complete, lacking in nothing. Were it not for a few crucial lines of Parmenides' exposition, we might think that his cosmology was a perfect realization of the principles of ontology developed in the *Aletheia*.⁷⁷

⁷⁵ Graham 2008: 344–8, however, proposes that Leucippus belongs instead to the first generation of post-Parmenidean cosmologists. Graham tentatively suggests that via 'a slight modification', Leucippus transformed Parmenides' light and night into atoms and the void.

⁷⁶ Graham 1999: 168–9. 77 Graham 2006: 170–1.

It appears to be forcing the issue to claim in this way that the attributes of Parmenidean Being listed in the programmatic fr. 8. 3–4 all belong to the cosmology's light and night. For while certain attributes of what has been described in the 'Truth' recur in the cosmology, they do not do so in the neat way Graham indicates.

At the level of the elements, the attribute of being 'all alike' $(\pi \hat{a} \nu \dots \delta \mu o \hat{\iota} o \nu)$, fr. 8. 22b) has an analogue in the description of light as 'every way the same as itself' (ξωυτῶ πάντοσε τωὐτόν, fr. 8. 57b). Nowhere in the extant fragments, however, does Parmenides claim that light and night are ungenerated and imperishable or unchanging. As for the attributes of being whole and unchanging, these recur in the description of the cosmos as a whole rather than in the description of light and night individually: as what has been described in the 'Truth' is 'all alike' (fr. 8. 22b) given that 'it is all replete with What Is' $(\pi \hat{a} \nu \delta' \epsilon' \mu \pi \lambda \epsilon \delta \nu \epsilon' \sigma \tau \nu \epsilon' \delta \nu \tau \sigma s$, fr. 8. 24), so in the cosmos 'all is full of light and invisible night together' (πâν πλέον ἐστὶν ὁμοῦ φάεος καὶ νυκτὸς ἀφάντου, fr. 9. 3). There is also a striking parallel between the goddess's description in the 'Truth' of Necessity holding What Is within the bonds of a limit that restrains it all about (fr. 8. 30b-1) and her subsequent promise to reveal how the surrounding heaven grew and how Necessity bound it to furnish the limit of the stars (fr. 10. 5–7). So while Graham correctly recognizes that the meta-principle reading should commit one to maintaining that Parmenides' cosmology posits principles that satisfy the adequacy conditions for physical principles the reading takes the 'Truth' to have articulated, he must strain the evidence to claim that light and night as the goddess describes them actually satisfy these requirements. Graham never finds a satisfactory way, moreover, of negotiating the fundamental obstacle to his view posed by the goddess's deprecation of the cosmology. If in the first phase of her revelation she explains what something must be like to qualify as an explanatory principle, and if she grounds the cosmology in the second phase of her revelation upon principles that meet her own requirements, why does she describe the cosmology as an account of 'the notions of mortals, in which there is no genuine conviction' (fr. 1. 30, cf. fr. 8. 50-2) and then say that mortals 'wandered astray' when they fixed their minds upon naming the two forms, light and night (fr. 8. 53-4)?

Apparently recognizing the prima facie implausibility of any claim that the poem's cosmology functions within the explanatory paradigm her meta-principle reading takes to be defined in the 'Truth', Curd instead holds that the cosmology is actually undermined by the unacceptable character of its fundamental entities.⁷⁸ On her view, since what she calls the 'enantiomorphic' opposition of light and night entails that to be light is to be not-night and to be night is to be not-light, these two principles fail to have the sufficiently separate and independent natures that would qualify them as genuine principles.⁷⁹ She supposes there is nonetheless a positive lesson in the deceptive cosmology in so far as it serves as a model for what a successful

⁷⁸ See Curd 1998*a*: ch. 3.

⁷⁹ Cf. Curd 1998 b: 21 and n. 43: 'Parmenides' claim is that what has no nature, or which seems to have a nature that can be given only in negative terms, cannot be said or thought, for such a "thing" turns out to be nothing at all'; 'Examples of such pseudo-entities are to be found in Parmenides' *Doxa*, in the two opposite forms of Light and Night, each of which turns out to be just what the other is not. The one can be defined as a negation of the other.'

account of the sensible world would look like, if only its basic entities met the criteria detailed in the 'Truth'. One can only wonder, however, why Parmenides should not have based the cosmology of his poem on principles that satisfy his own requirements on being a principle, if he was in fact specifying in the 'Truth' what the adequate principles of any physical theory must be like. Why should he have bothered to present a fundamentally flawed or 'near-correct' cosmology with principles that fail to satisfy his own criteria? Curd recognizes that this is a problem for her view and thus falls back to the position that the cosmology is not really Parmenides' but rather a critical exposé of the improper use of opposites in previous cosmological theories. This claim that the cosmology is not Parmenides' own but a compendium of previous error reflects Curd's attempt to escape from the impasse to which the meta-principle reading leads. If the business of the 'Truth' is to specify what the principles of an adequate physical system must be like, then the principles of Parmenides own physical system should conform to its specifications; but the two principles, light and night, do not in fact possess the range of attributes specified in the 'Truth'. While Curd is more willing than Graham to acknowledge that the promise of the meta-principle reading is not made good in the cosmology, Graham at least recognizes that this type of reading requires that the principles of Parmenides' cosmology conform to the canons it takes the 'Truth' to define. That light and night do not in fact conform to those canons is a strong indication that the meta-principle reading is on the wrong track.

The status of Parmenides' cosmology and, generally, the relation between the two major parts of the goddess's revelation also remain major problems that neither the strict monist nor the logical/dialectical interpretation has satisfactorily resolved. Guthrie, again, sidesteps the question of why Parmenides should have bothered providing the poem's elaborate cosmology, when he has demonstrated that plurality and change are impossible, by saying that this question is one that is unlikely to have occurred to him. Guthrie views the cosmology as Parmenides' best attempt at giving an account of the sensible world, given that we will continue to be deceived into thinking it exists despite his arguments to the contrary. Not only is this an unstable interpretive position, it is one that would prefer to impute radical confusion to Parmenides rather than acknowledge its own difficulties. It is hardly more satisfying to be told by Owen that Parmenides' cosmology has a purpose that is 'wholly dialectical':

Parmenides set himself to give the correct or the most plausible analysis of those presuppositions on which ordinary men, and not just theorists, seem to build their picture of the physical world.... Whittled down to their simplest and most economical they can be seen still to require the existence of at least two irreducibly different things in a constant process of interaction; and both the plurality and the process have now, on Parmenides' view, been proven absurd.⁸⁰

⁸⁰ Owen 1960: 54–5. See Long 1963 for a more detailed development of Owen's line. Tarán's proposal that Parmenides learns from the goddess 'to reduce all phenomenal manifestation to the basic mistake which involves the notion that non-Being is real' (Tarán 1965: 227–8) resembles Owen's line in many ways, even though it is rooted in Tarán's version of the strict monist

Although he repeats the essentials of Owen's view, Schofield ends up honestly acknowledging that the presence of the elaborate cosmology remains problematic for this line of interpretation: 'Why [the cosmology] was included in the poem remains a mystery: the goddess seeks to save the phenomena so far as is possible, but she knows and tells us that the project is impossible.'81 While the meta-principle interpretation raises the expectation, which fails to be met, that the principles of Parmenides' own cosmology will conform to the conditions described in the 'Truth', the strict monist and logical/dialectical interpretations leave one wondering why Parmenides devoted the bulk of his poem to an account of things his own reasoning has shown do not exist. That the status of Parmenides' cosmology and its relation to the 'Truth' remain outstanding problems indicates that a better understanding of his system is still required. We can begin to move towards this by obtaining a clearer view of how Parmenides was understood in antiquity.

FUNDAMENTALS OF THE ANCIENT VIEW OF PARMENIDES

The accounts of the broad development of early Greek philosophy and science that have been built around the strict monist, logical/dialectical, and meta-principle readings of Parmenides all reflect the tendency among historians of the period to favour a narrative structure of challenge and response. Here the Hegelian view that history unfolds via an ongoing dialectic of thesis and antithesis, which Zeller rightly complained of, has been replaced by an extension of Karl Popper's conception of scientific development as a succession of conjectures, refutations, and new conjectures. Guthrie, as we have seen, claimed Plato and Aristotle's support for his narrative's view of how Parmenides' monism constituted a critical reaction to the incipient tradition of cosmological theorizing and one to which subsequent thinkers who sought to continue that tradition were compelled to respond. Some such claim of Platonic-Aristotelian authority appears to be at least implicit in most of the modified versions of Guthrie's narrative. Daniel Graham would seem to be an exception, for he takes it to be a specific achievement of twentieth-century historiography to have added to the ancient historical treatments of early Greek philosophy originating with Aristotle 'a clear recognition that Parmenides was the great watershed of Presocratic thought [whose] arguments forced some kind of a fundamental reaction to his criticism'. 82 Graham is right to see the idea that Parmenides was the period's pivotal thinker as a modern innovation, for, as this section will begin to

interpretation, according to which Parmenides' primary purpose is to 'show that the self-identity of Being precludes the existence of anything else, including the sensible world' (208). Both would seem to have been influenced by what Tarán calls the 'hypothetical' interpretation, which he traces back to Zeller, according to which the cosmology's purpose is to demonstrate how the sensible world, if one were to take it as real, would best be explained.

 $^{^{81}}$ Kirk *et al.* 1983: 262, after having presented the Owenian line on the cosmology's dialectical character at 254–6. 82 Graham 2006: 18–19.

make clear, this organizing idea does not in fact have the ancient support too casual treatment of Plato and Aristotle has led some to suppose. Neither Plato nor Aristotle understood Parmenides as he is understood on the major types of readings canvassed thus far; and neither saw him as challenging the project of natural philosophy in the way the narratives built upon these readings generally presume he did.

Popper memorably saw in the earliest Ionian accounts of the earth's suspension a prime example of how the best theories of the Presocratic natural scientists were developed through a combination of critical reaction against the theories of their immediate predecessors and boldly intuitive leaps of speculation.⁸³ Thales first conjectured that the earth floats on water, thereby simultaneously addressing the problem of the earth's suspension and accounting for phenomena such as earthquakes. Anaximander soon thereafter advanced the brilliant idea that the earth remains stationary because of its position at the centre and its equipoise in relation to this cosmos's extremes (Arist. Cael. 2, 13, 295^b10–16, Hippol. Haer. 1, 6, 3). Popper conjectured that Anaximander arrived at this visionary theory via critical rejection of Thales' theory as leading to an unacceptable explanatory regress. For Popper, Anaximander's theory of the earth's stability was a prime example both of how human knowledge develops via attempts to solve specific problems and of how reasoning, criticism of previous solutions, and intuitive leaps of the imagination are more important to that development than observational experience. 'There can be no doubt whatever', Popper wrote, 'that Anaximander's theories are critical and speculative rather than empirical: and considered as approaches to truth his critical and abstract speculations served him better than observational experience or analogy'. 84

Popper went on to identify the problem of change as the defining preoccupation of Presocratic cosmology. In particular, he saw the problem of how to account for change, such that what changes retains its identity while changing, as emerging as a general problem with Heraclitus, as transformed with Parmenides' argument from the premise that what is not is not to the conclusion that opposition and therefore change are unreal, and as given a solution by the atomists' theory that explains all (qualitative) change in terms of the movement of unchanging bits of matter in the void. 85 Popper insisted that this story of the problem of change 'is the story of a critical debate, of a rational discussion' and that the history of Presocratic natural philosophy illustrated his central contention that the rationalist tradition of critical discussion 'represents the only practicable way of expanding our knowledge'.86 Although Popper does not explicitly refer to Aristotle in this connection, the notion that the problem of change is the central problem of Presocratic philosophy is ultimately supposed to be authorized by Aristotle's discussion of the Presocratics in the course of his own inquiry into the problem in *Physics* 1. Aristotle there formulates and addresses what Popper identifies as the general or philosophical problem of change; and the general solution Popper isolates—that all change presupposes both something that changes and that this something must remain the same while changing—is certainly Aristotelian.

Ropper 1958/9: 137–40.
 Ibid. 143–6.
 Ibid. 149–50, 151.

Whether it is historically accurate to view the development of Presocratic philosophy through this Aristotelian lens is a question of fundamental historical importance. While it would be premature at this juncture to address this broader question as such, I want to point out that Aristotle does not in fact authorize the view that Parmenides marks a radical turning point in this development. I have already mentioned how the beginning of *Physics* 1. 8 (quoted above) has appeared to many to give this view Aristotelian legitimacy. Parmenides is not, however, actually mentioned in the passage, and we shall see in the course of Chapter 3 just why it is mistaken to understand this passage as legitimating the Popperian view of the period's development implicit in Guthrie's narrative and its principal modifications. Here, however, we may simply take note of certain aspects of Aristotle's treatment of Parmenides that tend to be downplayed by those claiming Aristotelian support for some form of the view that Parmenides' metaphysics served as a provocation to the incipient tradition of scientific cosmology.

When Aristotle comes to consider Xenophanes, Parmenides, and Melissus alongside one another in *Metaphysics* 1. 5, he sets aside their thesis that the universe $(\tau \hat{o})$ $\pi \hat{a} \nu$) is of a single nature (*Metaph.* 1. 5. 986^b10–11, cf. 1. 3. 984^b1–2) as irrelevant to his immediate task, that of reviewing the kinds of causal or explanatory principles employed among his predecessors in support of his contention that there are only the four kinds he has identified in the *Physics* (see *Metaph*. 1. 3. 983^a24-^b6, 1. 7. 988^a21-2, 1. 10. 993^a11-13). He justifies setting these three thinkers aside by noting that 'they do not, as do some of those who inquire into nature, propound the thesis, what is is one $(\hat{\epsilon}\nu \tau \hat{o} \ \mathring{o}\nu)$, while providing for generation from this one as from matter, but they speak in a different manner; for the others attribute change [to their principle] in providing for the generation of the universe, but these say that it is unchanging' (*Metaph.* 1. 5. 986^b14–18). 87 The inquiry to which examination of the Eleatic thesis would properly belong Aristotle indicates more clearly in On the heavens 3. 1, saying there that the Eleatic view that certain things are not subject to generation and change belongs 'to another inquiry prior to the inquiry into nature' (298^b19-20). The division of the theoretical sciences in Metaphysics 6. 1 indicates that this higher inquiry is theology or first philosophy, that is, the theoretical science that takes as its domain entities not subject to change and capable of independent existence. This portion of the On the heavens is worth quoting in full:

Some earlier philosophers abolished coming to be and passing away. Melissus and Parmenides, for example, say that none of the things that are either comes to be or perishes but only appears to us to do so. Even if in other respects they say some excellent things, nevertheless one should not suppose them to speak in a manner appropriate to natural science. For that some entities

do not come to be and are completely free from change is a thesis that belongs instead to another inquiry prior to natural science. But since they supposed there is nothing else besides the being of perceptibles, and since they were the first to understand that some natures of this sort are required if there is to be any knowledge or intelligence ($\gamma \nu \hat{\omega} \sigma_{iS} \tilde{\eta} \phi \rho \acute{\rho} \nu \eta \sigma_{iS}$), for these reasons they transferred to these objects descriptions appropriate to higher objects. (Cael. 3. 1. 298^b14-24)

This passage presents a number of problems, 88 many of which can only properly be addressed when its claims are understood in connection with Aristotle's discussions of Parmenides and Melissus elsewhere (particularly in *Physics* 1. 2–3 and also in Metaphysics 1. 5, where he does more to distinguish their positions than is apparent here). Unfortunately, historians like Guthrie who have claimed that Aristotle's evidence reliably supports their narratives have tended to treat that evidence superficially and to isolate statements offering prima facie support for their narratives from the fuller context of Aristotle's reception. They have also generally failed to recognize how Aristotle's understanding of Parmenides was conditioned by intervening developments, categorizations, and representations of the upshot of his philosophy. It is particularly important to appreciate that Melissus' greater prominence as a representative of Eleaticism during the sophistic period, and the reductive assimilation of Parmenides and Melissus encouraged by their grouping in the doxographical preface of Gorgias of Leontini's sophistic tour de force, On nature, or On what is not, 89 both served to obscure what Aristotle would come to recognize as important differences between their positions.⁹⁰

In On nature, or On what is not, Gorgias notoriously argued that (a) nothing is; that (b) even if something is, it is inapprehensible; and that (c) even if something is and is apprehensible, it cannot be communicated to others ([Arist.] MXG 979^a12–13 ≈ S.E. M. 7. 65). Although the first thesis has too often been misunderstood as equivalent to the proposition that nothing exists at all, a clear indication of its target, and thus its sense, comes in the lines immediately following in the MXG:

And that it is not he argues by collecting the things said by others, those who in speaking concerning the things that are $(\pi\epsilon\rho i \tau \hat{\omega}\nu \tilde{\sigma}\nu\tau\omega\nu)$ make apparently contradictory assertions; some showing that they are one and not many, others again that they are many and not one, and some showing that they are ungenerated, and others that they are generated, he draws conclusions against the positions on either side. ([Arist.] MXG 979^a13–18)

Gorgias' original classification seems likely to have included a further dichotomy—either in motion or at rest. 91 The class of $\tau \dot{\alpha}$ $\rlap{o}\nu \tau \alpha$ or 'beings' here does not

⁸⁸ Some of these are well discussed in Kerferd 1991 (though see the caveats at Palmer 1999*a*: 34

n. 3).

89 Indirect access to Gorgias' original treatise is provided by epitomes preserved in two sources,

107 Alchough Diele and Kranz failed to print the [Arist.] MXG 979^a10–980^b21 and S.E. M. 7. 65–87. Although Diels and Kranz failed to print the MXG epitome in their collection, it is now rightly regarded as the more reliable and important source. For the text of the *MXG* version, see Buchheim 1989.

90 See Palmer 2004: 41–52.

⁹¹ This can be inferred from how the arguments of the treatise's first major division follow the pattern of the initial schema. The generated versus ungenerated dichotomy is taken up in the

encompass all entities indiscriminately, but only and specifically whatever entities are somehow fundamental to, or responsible for, the being of all others. ⁹² Thus Gorgias' arguments in this treatise were designed systematically to reject the various efforts of the early Greek philosophers to identify what occupies this ontologically fundamental position. This Gorgianic classification appears to have been broadly influential, for similar classifications are to be found at Xenophon, *Memorabilia* 1. 1. 13–14, Isocrates, *Oration* 15. 268, and Plato, *Sophist* 242 C–D. ⁹³

Gorgias' classification would have its most long-lasting influence via its reworking by Aristotle in the schema that structures his inquiry in *Physics* 1 regarding earlier views on the first principles of natural things:

It is necessary that the $arch\bar{e}$ be either single or plural, and if single, either not subject to change, as Parmenides and Melissus say, or changing, just as the natural philosophers say, some declaring the first $arch\bar{e}$ to be air, and some, water. But if plural, they must be either limited or unlimited in number, and if limited but more than one, they must be either two or three or four or some other number, and if unlimited, they must be so either as Democritus holds, one in kind but differing in shape, or differing or even opposite in form. Those who inquire how many fundamental entities $(\tau a \ \ \delta v \tau a)$ there are are conducting a similar inquiry; for as to what things entities are from primarily, they ask whether these are one or many, and if many, whether limited or unlimited, such that they are inquiring whether the $arch\bar{e}$ and the elemental is one or many. $(Ph. 1. 2. 184^b15-25)$

Comparing his own classification of principles to previous classifications of fundamental entities, Aristotle here as much as acknowledges the influence of Gorgias' ur-classification on his own. While such classificatory schemas are useful tools for organizing the wide-ranging examinations of earlier views that both Aristotle and Gorgias conducted, the pigeonholing of thinkers in the crude categories generated by the set of dichotomies defining these schemas had the unfortunate effect of obscuring important nuances in their views. Nor is Aristotle's own inquiry in *Physics* 1 well served by this kind of schema. Almost immediately, he finds it necessary to qualify or abandon its too simple and restrictive categories when he turns to discussing in earnest the Presocratic principles of change. He moves even further away from these categories in the inquiry of *Metaphysics* 1.

In *Physics* 1. 2, Aristotle introduces Parmenides and Melissus as representing the position that there is a single and unchanging $\partial \rho \chi \dot{\eta}$ or principle (*Ph.* 1. 2. $184^{b}15-16$). Aristotle goes on to say that considering whether what is $(\tau \dot{o})$ $(\dot{o}\nu)$ is

93 Cf. Mansfeld 1985a: 245-7, and 1986: 47 n. 9.

arguments at [Arist.] MXG 979^b20–34 (cf. S.E. M. 7. 68–72), and the one versus many dichotomy in those at MXG 979^b35–8 (cf. S.E. M. 7. 73–4), at which point the text of the MXG becomes corrupt. The text resumes at 980^a1–8 with an argument against the possibility that $\tau \delta \delta v$ might be in motion, suggesting that a corresponding argument against its being at rest has been lost in the lacuna, and consequently that the dichotomy either in motion or at rest featured in the doxographical preface in Gorgias' original.

 $^{^{92}}$ Cf. Mansfeld 1985*a*: 248–9, where it is argued that $\tau \grave{a}$ $\emph{\"ov}\tau a$ here 'are not in the first place the phenomenal things, but the speculative theoretical constructs of the Presocratic philosophers'. Guthrie 1971: 194, draws a similar conclusion on the basis of the treatise's alternative title, *On nature*

one and unchanging is not an inquiry proper to natural science, given that the natural scientist need not argue against those whose position leaves no room for the principles of his science, and he dismisses their views as essentially eristic tenets posited merely for the sake of controversy (184^b25–185^a9). This is not so very different from the comments on Melissus and Parmenides in the first part of the passage from On the heavens 3. 1. After thus introducing the two thinkers in Physics 1. 2, however, Aristotle immediately begins to distinguish them from one another, first by noting that it is really just the cruder Melissus who has adopted an extreme position merely for the sake of controversy (Ph. 1. 2. 185^a10-12, cf. Top. 1. 11. 104^b19–22). The way Aristotle proceeds to differentiate Parmenides from Melissus in the remainder of this chapter and in the next shows that he appreciated the inadequacy of simply grouping Melissus with Parmenides under the rubric 'what is is one and unchanging ($\hat{\epsilon}\nu \kappa \alpha \hat{\iota} \, \hat{\alpha} \kappa (\nu \eta \tau o \nu \tau \hat{o} \, \hat{o}\nu)$), given that it obscures the fact that they meant very different things in claiming that what is $(\tau \delta \ \ \ \ \ \ \ \ \ \)$ is one. ⁹⁴ According to Aristotle, Melissus held that everything is a single and unlimited quantity, that is to say, one continuous or indivisible extension. This position is tantamount to strict monism. Aristotle understands Parmenides, by contrast, as an advocate of a more sophisticated substance monism. Aristotle's representation of Parmenides' reasoning at *Physics* 1. 3. 186^a34–^b4, together with his summary allusion to this passage at Metaphysics 1. 5. 986^b28–31, is in a nutshell as follows. Since Parmenides recognized only a use of 'being' that indicates what something is in respect of its substance or essence, he supposed both that everything that is is substance and that everything is one in that the account of the essence of everything is identical. Furthermore, whatever might differentiate what is cannot do so with respect to its essence but only accidentally; but no accident of what just is can belong to its essence, and since Parmenides admits only a use of 'being' indicating what something is in respect of its substance or essence, no differentiating accident of what is can be said to be. In Metaphysics 1. 5, Aristotle adds the qualification that, being compelled to follow the phenomena, and supposing that what is is one with respect to the account (sc. of its essence) but plural with respect to perception, he posited a duality of principles as the basis for his account of the phenomena (986^b27-34).⁹⁵ This can hardly be regarded a substantial difference between the two treatises, however, for at *Physics* 1. 5. 188^a19–22 Aristotle points to the Parmenidean duality of principles to support his thesis that all previous thinkers made the opposites principles, including those who maintain that everything is one and unchanging. Nonetheless, the representation of Parmenides' position in Metaphysics 1. 5, according to which what is is one with respect to the account of its essence but plural with respect to perception, is more indulgent than the reconstruction of Parmenides' reasoning in *Physics* 1. 3 in that it is more explicit about allowing for a differentiated aspect of what is. By allowing that what is may be differentiated with respect to its phenomenal qualities, Aristotle seems to have recognized at some level the mistake in assuming that Parmenides'

For a more extensive elaboration of the points that follow, see below, Ch. 5, pp. 221–3. Reading $\tau \delta$ $\tilde{\sigma} \nu$ $\epsilon \nu$ $\mu \epsilon \nu$ at 986^b31, as per Alexander's paraphrase.

failure to distinguish explicitly among the senses of 'being' entails that he could only have employed the term in one sense.

Despite the assimilation of Melissus and Parmenides under the rubric inherited from Gorgias, then, Aristotle recognized that grouping the two figures together under the label 'what is is one and unchanging' obscured fundamental differences in their positions. The fact is that 'monism' does not denote a unique metaphysical position but a family of positions. Among its species are strict monism or the thesis that just one thing exists, which is the position that Melissus advocated and that no serious metaphysician should want to adopt. More familiar species include both numerical and generic substance monism, according to which, respectively, there is a single substance or a single kind of substance. Aristotle seems ultimately to have inclined towards attributing this first type of 'generous' monism to Parmenides. In viewing Parmenides as a generous monist, whose position allowed for the non-substantial existence of other entities, rather than as a 'strict' monist holding that only one thing exists, Aristotle is in line with the majority view of Parmenides in antiquity.

There is, admittedly, clear evidence that some ancient thinkers understood Parmenides as denying the very existence of the familiar world of experience. Plutarch's discussion of Parmenides in Against Colotes furnishes one of the most prominent examples in its ascription of such an understanding to the eponymous pupil of Epicurus. This Colotes apparently composed a number of works critical of Plato and, most familiarly, a treatise entitled, Why one cannot live according to the doctrines of other philosophers. In this work he criticized the theories of perception and perceptual objects advanced by Democritus, Parmenides, Empedocles, Socrates, Melissus, Plato, Stilpon, the Cyrenaics, and the New Academy of Arcesilaus. Although what he had to say about Parmenides must be reconstructed from Plutarch's polemical response (Col. 1113 E-1114 F), Colotes' main claim appears to have been that Parmenides prevents us from living by maintaining that 'the universe is one' ($\hat{\epsilon}\nu$ $\tau \hat{\sigma} \pi \hat{a} \nu$). This tag and its companion, 'being is one' ($\hat{\epsilon} \nu \tau \hat{\sigma} \tilde{\sigma} \nu$), had long since become common encapsulations of Parmenides' position. Colotes appears to have understood it to mean that Parmenides denied the existence of fire and water and, indeed, 'the inhabited cities in Europe and Asia'; he may also have claimed that, if one accepts Parmenides' thesis, there will be nothing to prevent one from walking off a precipice, since on his view there are no such things (cf. Plu. Col. 1114 B). In short, as Plutarch reports, Colotes said that 'Parmenides abolishes everything by hypothesizing that being is one' (Col. 1114 D). Thus Colotes can safely be counted as one ancient philosopher who understood Parmenides as a strict monist denying that anything other than his One Being exists.

Plutarch himself, however, takes strong issue with Colotes' view, charging him with imputing to Parmenides 'disgraceful sophisms' (*Col.* 1113 F) and with purposefully misconstruing his words (*Col.* 1114 D). That Parmenides produced his own elaborate cosmogony—wherein he explained all manner of phenomena in terms of the intermingling of two elements, which Plutarch characterizes as the bright and the dark, and wherein he theorized about the origin and operation of everything from the heavenly bodies down to human beings—Plutarch takes to be a straightforward

indication that he could not have intended to deny the existence of these things or anything else Colotes accused him of abolishing (Col. 1114 B-C). Plutarch goes on to reject out of hand what he sees as Colotes' maliciously reductive view by explaining that Parmenides was in fact the first to distinguish between the mutable objects of sensation and the unchanging character of the intelligible. Contrary to Colotes' claim, he says, 'Parmenides . . . abolishes neither nature. Instead, assigning to each what is appropriate, he places the intelligible in the class of what is one and being calling it "being" in so far as it is eternal and imperishable, and "one" because of its likeness unto itself and its not admitting differentiation—while he locates the perceptible among what is disordered and changing' (Col. 1114 D). Plutarch insists what they are at one time, or in one context, but not another should not be misconstrued as an abolition of the latter: 'how could he have let perception and doxa remain', he asks, 'without leaving what is apprehended by perception and doxa?' (1114 E-F). Plutarch's discussion of Parmenides in Against Colotes is particularly significant in that it is a substantial discussion of the relation between his account of Being and his cosmology by a post-Aristotelian author whose view is not overtly influenced by Aristotle's own discussions. In many ways it anticipates the Neoplatonic interpretation represented in Simplicius, according to which, broadly speaking, the two accounts delivered by Parmenides' goddess describe two levels of reality, the immutable intelligible realm and the plural and changing sensible realm. 96

Later Platonists would naturally have understood Parmenides as anticipating Plato in this way, for central features of the broadly Platonist view are already apparent in Plato. I have already argued this point at length in Plato's Reception of Parmenides, which attempted to capture, in something approaching its full complexity, Plato's uses of Parmenides in dialogues ranging from the Republic, Symposium, and Phaedrus through the later Parmenides, Sophist, and Timaeus. This study developed out of frustration with scholars whose pronouncements regarding Parmenides' influence on Plato were rooted in an interpretation of Parmenides there seemed little guarantee Plato would have shared. Plato never simply states how he understands Parmenides. There is nothing like the critical exegesis of Eleatic doctrine one finds in Aristotle, Physics 1. 2-3 and Metaphysics 1. 5; for the Platonic dialogue does not lend itself to this kind of treatment of earlier thinkers. Instead, Plato's understanding is typically reflected in the various uses he makes of Parmenides and so must be deduced from texts where that use is sufficiently clear and sustained. Second, Plato employs Parmenidean ideas and motifs extensively and not without apparent contradictions, so that making sense of these uses as a whole proves to be quite challenging. It is crucially important to try to do so, however, for the casual conclusions regarding Plato's understanding of Parmenides based on passages in the dialogues read in isolation from the context of Plato's broader engagement with Parmenides have fostered the mistaken belief that the Platonic evidence tends to support (T1) and

⁹⁶ On Simplicius' reading of Parmenides, see Bormann 1979 and Stevens 1990. On the citations of Parmenides by Plotinus and Proclus, see Guérard 1987.

(T2). Just as Plato's reception of Parmenides is complex and does not admit of easy assessment, likewise the detailed results of my investigation of the reception do not admit of easy summary. Without attempting a full summary, which would in any case be inappropriate here, I shall merely call attention to a few points that are directly relevant to the present argument.

Aristotle attributes to both Parmenides and Plato a recognition that knowledge requires as its objects certain natures not susceptible to change. In On the heavens 3. 1, as we have seen, Aristotle says that Parmenides (and Melissus) first understood that there must be something free from generation and other types of change if there is to be knowledge or understanding ($\gamma \nu \hat{\omega} \sigma \iota s$, $\tilde{\eta}$, $\phi \rho \dot{\phi} \nu \eta \sigma \iota s$, 298^b22–3). He attributes virtually the same line of thought to Plato in Metaphysics 13. 4, in language remarkably similar to that of the On the heavens passage. 97 Both Parmenides and Plato, according to Aristotle, made it a necessary condition of knowledge in the strict sense that there be some unchanging nature(s) to serve as its object(s). This view presages the more familiar idea that knowledge of necessary truths constitutes a distinct and particularly important kind of understanding. It was still natural for both Parmenides and Plato (at the stage of his development Aristotle has is mind) to think primarily of entities rather than propositions as the objects of knowledge. In any case, Aristotle portrays both Parmenides and Plato as having recognized that there must be certain natures or entities ($\phi \dot{v} \sigma \epsilon \iota s$) not subject to change for there to be knowledge. Plato, moreover, actually has his fictionalized Parmenides present something very close to this line of argument in the dialogue bearing his name:

if someone will not admit that there are general kinds of entities $(\epsilon \tilde{\iota} \delta \eta \ \tau \hat{\omega} \nu \ \tilde{\iota} \nu \tau \omega \nu) \dots$ and will not specify some form $(\epsilon \tilde{\iota} \delta \sigma)$ for each individual thing, he will have nowhere to turn his intellect, since he does not admit that there is a character $(\tilde{\iota} \delta \epsilon a)$ for each of the things that are that is always the same, and in this manner he will destroy the possibility of discourse altogether. (*Prm.* 135 B 5–C 2)

The Platonic 'natures' Aristotle has in mind are clearly the Forms that Plato himself is prone to describing in language that echoes the attributes of Parmenidean Being, most notably at *Symposium* 210 E–211 B and *Phaedo* 78 D and 80 B. That Plato's Forms are made to look like a plurality of Parmenidean Beings might suggest that Plato himself thought Parmenides' metaphysical deduction compatible with a pluralist ontology. However, Plato consistently represents Parmenides as a monist in the *Parmenides, Sophist,* and *Timaeus.* (Note, for instance, the explicit distinction at *Sophist* 249 C 11–D 1 between 'those who speak of the One' and 'those who speak of the many Forms'.) This fact should make one wary about inferring from Plato's cloaking of the Forms with the attributes of Parmenidean Being that he thought Parmenides a pluralist rather than a monist when he wrote the *Symposium, Republic*, and *Phaedrus*.

More important, in any case, is that Plato's distinction between knowledge and *doxa*, and between their respective objects, in these dialogues bears the plain stamp of Parmenidean influence. It is altogether likely that an encounter with the writings

of Parmenides during his initial visits to Magna Graecia influenced the development of the more elaborate metaphysics and epistemology of the dialogues written in the wake of those travels: the appearance of Parmenidean echoes in the dialogues roughly coincides with the emergence of an interest in mathematics and geometry, an interest which has plausibly been thought to reflect Plato's interaction with Pythagorean mathematicians during his travels. Be that as it may, the manner in which Plato in *Republic* 5 distinguishes between knowledge, total ignorance, and the intermediate *doxa*, as well as the way he describes the ontological status of their respective objects, is thoroughly and clearly Parmenidean. ⁹⁸ Aristotle certainly points in the right direction when he says that Parmenides, like Plato, recognized that genuine knowledge requires an altogether unchanging object. Plato's conception of *doxa* and its tie to the mutable entities and states of affairs accessed in perception likewise draws upon Parmenides, without ever suggesting that Plato took Parmenides to have denied the existence of the things we perceive.

The later dialogues, again, consistently represent Parmenides as a monist, typically referencing his metaphysical position with some form of the tag, $\partial v \tau \partial u \partial v$ or 'the all is one' (e.g. Prm. 128 A 8-B 1, D 1, Tht. 180 E 2-4, 183 E 3-4, Sph. 242 D 6, 244 B 6). Just what type of monism Plato means to attribute to Parmenides in these dialogues is a crucial question that requires delving into the intricate examination of his thesis in the latter part of the *Parmenides*. What one thus finds is that the exercise's negative First, Fourth, and Sixth Deductions each reflects, in its own way, one of the various reductive appropriations to which Parmenides had been subjected among the sophists. The First Deduction is recognizably Gorgianic in both its arguments and its conclusions. The Sixth Deduction relies upon an understanding of uses of 'is not' as equivalent to 'is in no way at all' that underlies the sophistic paradox that falsehood is impossible, a paradox that both the Euthydemus and Sophist show was rooted in highly selective uses of Parmenides. The Sixth Deduction, finally, relies upon a model of predication as naming that is very much like the Antisthenean 'predicational monist' conception of predication. Parmenides is portrayed as rejecting the results of each of these negative deductions in part because Plato is concerned with recovering Parmenides from various reductive misunderstandings so as to clear the way for the uses he now wants to make of him.

Plato's own understanding of Parmenides is best reflected in the exploration of his thesis in the Second Deduction. In the course of this deduction the One is shown to have a number of properties that reflect the properties Parmenides himself attributed to Being in the course of fr. 8: that it is in itself and the same as itself, that it is at rest, that it is like itself, that it is in contact with itself, etc. All these properties in the Second Deduction prove to belong to the One in virtue of its own nature and in relation to itself. This deduction also shows that the One has apparently contrary attributes, though these prove to belong to it in other aspects, not in virtue of its own nature and/or not in relation to itself. Plato would have found a model for his complex account of the various and seemingly conflicting properties of the One in

Parmenides' own apparently conflicting accounts of the nature of the cosmos in its aspect qua being and in its aspect as a differentiated world system. More to the point, there are good reasons to suppose that Plato adopted what one may call an 'aspectual' interpretation of Parmenides, which takes the 'Truth' as a description of the cosmos in its intelligible aspect qua being, and that this description is compatible with an alternate description of this selfsame entity as a world system comprised of differentiated and changing objects. These two perspectives are reflected, respectively, in the *Timaeus*' descriptions of the intelligible living creature and of the visible cosmos modelled upon it, both of which are suffused with echoes of Parmenides.

That Aristotle also viewed Parmenides' two accounts as of the same thing in different aspects is perhaps most apparent in his characterization of Parmenides, in the course of the discussion at *Metaphysics* 1. 5. 986^b27-34 , as having supposed that 'what is is one in account but plural with respect to perception'. Theophrastus likewise seems to have adopted this line. Alexander of Aphrodisias quotes him as having written the following of Parmenides in the first book of his $\Pi\epsilon\rho i \tau \hat{\omega}\nu \phi \nu \sigma \iota \kappa \hat{\omega}\nu$ or *On the natural philosophers*:

Coming after this man [sc. Xenophanes], Parmenides of Elea, son of Pyres, went along both paths. For he both declares that the universe $(\tau \dot{o} \, \pi \hat{a} \nu)$ is eternal and also attempts to explain the generation of the things that are, though without taking the same view of them both, but supposing that in accordance with truth $(\kappa a \tau^2 \, \dot{a} \lambda \dot{n} (\theta \epsilon \iota a \nu))$ the universe is one and ungenerated and spherical in shape, while in accordance with the view of the multitude $(\kappa a \tau \dot{a} \, \delta \delta \xi a \nu \dots \tau \hat{\omega} \nu \, \pi o \lambda \lambda \hat{\omega} \nu)$, and with a view to explaining the generation of things as they appear to us, making the principles two, fire and earth, the one as matter and the other as cause and agent. (Thphr. ap. Alex.Aphr. in Metaph. 31. 7–16; cf. Simp. in Ph. 25. 15–16, D.L. 9. 21–2)

Many of Theophrastus' points here can be traced back to Aristotle, including the identification of Parmenides' elemental light and night as, respectively, fire functioning as an efficient principle and earth functioning as a material principle (cf. Arist. *Ph.* 1. 5. 188^a20–2, *GC* 1. 3. 318^b6–7, 2. 3. 330^b13–14, *Metaph.* 1. 5. 986^b28–987^a2). The passage on the whole suggests that, like Plato and Aristotle, Theophrastus understood Parmenides' 'Truth' and 'Doxa' as accounts of the same thing first in its intelligible and then in its phenomenal aspects.⁹⁹

What should one make of the fact that Plato, Aristotle, Theophrastus, and other ancient philosophers understood Parmenides as a generous rather than a strict monist? Should their understanding have any impact on our own? Some would say not, being outright contemptuous of the ancient tradition for running counter to their own view. In his Cherniss-style study of Theophrastus on the Presocratics, for

⁹⁹ Cf. Frère 1987: 193–5, on how Simplicius' citations of Parm. fr. 8. 50–61 show that for him 'ces vers de Parménide . . . n'étaient nullement opinions erronées à critiquer et à refuser, ce n'étaient point jugements mortels de mortels; c'était, au niveau du sensible, ce qui "découle" de la Vérité'; on how Pl. Smp. 178 B and 195 C indicate that Plato saw the second part of Parmenides' poem, not as presenting anyone else's opinions regarding the cosmos, 'mais ce qu'il lui semblait à lui-même essentiel d'affirmer en ce qui concerne le Cosmos et son origine'; and on how Aristotle's remarks on Parmenides in Metaph. 1. 3. 984^b1–8, 1. 4. 984^b23–8, and 1. 5. 986^b31–4 show that Parmenides is not only the thinker of the one Being but also 'penseur de la Génesis, de la pluralité, des phénomènes et du sensible, et plus spécialement penseur de l'Amour'.

example, J. B. McDiarmid wrote that Aristotle and Theophrastus' treatment of Parmenides 'as a pluralist is based on the supposition that the second part of his poem is as much a presentation of his own views as the first is. This supposition is incorrect; for, at the beginning of the second part, he warns that he has come to the end of his trustworthy speech and thought about the truth, and that henceforth he will give the beliefs of mortals in the deceptive ordering of his words.' McDiarmid deserves some credit for at least appreciating, unlike Guthrie, that the evidence of Aristotle and Theophrastus runs counter to interpretation of Parmenides he favours. Less admirable, though entirely typical of many commentators, is how the misdirected confidence in his own understanding of Parmenides causes McDiarmid to peremptorily dismiss the fact that Parmenides' most important ancient readers understood him differently. One finds the same misdirected confidence in Leonardo Tarán's declaration that 'Aristotle's interpretation of the *Doxa* as Parmenides' own system is impossible'. It is in fact perfectly possible to develop a sensible reading of the poem along the lines suggested by the Aristotelian reception.

McDiarmid and Tarán do not really, despite their occasional hyperbole, reject the majority ancient view of Parmenides because it is impossible but because they feel confident that it gets Parmenides wrong. Their contemptuous attitude towards the ancient views for running counter to the orthodoxy of (T1) and (T2) is regrettable. Too many interpreters, intent upon avoiding anachronism, have gone too far in distancing themselves from the most valuable strains of the ancient reception while simultaneously failing to recognize the connections their own interpretations have to the sophistic or other equally reductive and distortive strains of the tradition. Interpretations of Parmenides as a strict monist can trace their pedigree at least as far back as Colotes. The logical-dialectical reading, in so far as it takes Parmenides' key insight to be that one cannot think or say what is not, has clear affinities with the highly selective appropriation of Parmenides underlying the sophistic paradoxes regarding the impossibility of falsehood and contradiction that one sees not only in the Sophist but even more clearly in the Eleaticizing arguments of the sophists Euthydemus and Dionysodorus at *Euthydemus* 283 E 7–286 B 6. The meta-principle reading, especially the 'predicational monist' variant advocated by Curd, has its analogue in the appropriation of Parmenides reflected in the Sophist's first critique of Eleaticism (244 B 6-D 13), which shows the absurdities that result from maintaining that what is can have only one name or predicate. This odd understanding of the Parmenidean thesis that what is is one $(\hat{\epsilon}\nu \tau \hat{o} \ \mathring{o}\nu)$ is subsequently attributed to the 'opsimaths' or late learners (251 A 5 ff.) traditionally and plausibly associated with Antisthenes, and it drives the negative Fourth Deduction of the Parmenides, the results of which Parmenides and Aristoteles decisively reject. A good deal more could be said about how many modern interpretations of Parmenides have unwittingly replicated features of essentially sophistic deformations of Parmenides' philosophy in antiquity.

McDiarmid 1953: 221.
 Tarán 1965: 289.

The most devastating replication of an ancient error has been the failure to observe Parmenides' modal distinctions. Plato, by contrast, in the arguments with the spectacle lovers at the end of *Republic* 5—one of the most recognizably Parmenidean passages in the middle period dialogues—preserves the essential distinctions between what must be (what it is), what cannot be or what is not in any way, and what is (what it is) at one time or in one context but is not (what it is) at or in another. When he returns in the *Sophist* to explore the ontological distinctions hastily drawn in these earlier arguments, Plato is once again careful to preserve the distinction between what is not in any way and what is not only in some way, as in the Parmenidean treatment of what is not at all at *Sophist* 237 B 7–239 C 3; and he is likewise intent upon forestalling the sophistic reduction of what is not to what is not at all, as is evident in his treatment of non-being in the *Parmenides*' Fifth and Sixth deductions.

While it would be going too far to claim that Plato, Aristotle, Theophrastus, and the later ancient philosophers who follow these thinkers' broad view of Parmenides as a generous monist got Parmenides right on all points, nonetheless the impulse towards 'correcting' the ancient evidence for Presocratic thought has in this case gone too far. Certainly, Cherniss was right that Aristotle does not furnish the kind of objective historical evidence that can be excerpted and employed as building blocks for a history of early Greek thought, and the same point obviously applies to Plato. Although the kind of naïve reliance on Aristotle and, to a lesser extent, Plato evident in Zeller and Guthrie is no longer defensible, there is no good reason to reject altogether Plato's and Aristotle's treatment of the Presocratics generally and of Parmenides in particular. A synoptic understanding of the uses and representations of Parmenides among philosophers of the classical period allows us to correct for evident anachronisms and to recognize the influence on Plato and Aristotle of the earliest representations and uses of Parmenides among the sophists. A number of salient points then emerge. Both Plato and Aristotle understood Parmenides as perhaps the first to have developed the idea that apprehension of what is unchanging is of a different order epistemologically than apprehension of things subject to change. More fundamentally, Plato and Aristotle both came to understand Parmenides as a type of generous monist whose conception of what is belongs more to theology or first philosophy than to natural science. This involved understanding Parmenides' cosmology as his own account of the world in so far as it is subject to change, rather than as some epitome of others' erroneous views or as a dialectical exercise in explaining phenomena previously shown non-existent. It also involved understanding the first part of Parmenides' poem as metaphysical, not in the sense of being a higher order account of the conditions upon being an adequate physical principle that the meta-principle reading proposes, but in the proper Aristotelian sense of being concerned with what is both immutable and capable of independent existence. Most importantly, both Plato and Aristotle recognized that a distinction between the fundamental modalities or ways of being was central to Parmenides' system. None of these major points is tainted by the kind of obvious anachronism that rightly makes one suspicious, for instance, about Aristotle's identification of Parmenides' light and night with the elements fire and earth. None of these broad

points, in other words, involves Plato or Aristotle viewing Parmenides through the distortive lens of their own conceptual apparatus.

PROSPECTUS FOR A MODAL READING OF PARMENIDES

We shall see over the course of the next few chapters how attending to Parmenides' modal distinctions and to the epistemological distinctions he builds around them makes for a better understanding of his philosophy. Far from being a trafficker in deliberate paradox who failed to recognize that his argument entails his own non-existence, or a naïve thinker who fell prey to the problem of negative existentials, or a meta-theorist whose own natural philosophy inexplicably fails to carry out his own agenda, Parmenides will emerge as the first philosopher to distinguish in something like a rigorous manner between the basic modalities of necessity, impossibility, and contingency and to have then asked the unprecedented question: what must what must be be like?

Numerous interpreters over the past century or so have variously resisted the idea that Parmenides went so far as to deny the existence of the world we experience, and they have consequently advocated according some more robust status to the cosmological portion of his poem. Unfortunately, too many interpretations of this type deploy the terms 'reality', 'phenomena', and 'appearance' so ambiguously that it can be difficult to tell whether they intend to attribute an objective or merely a subjective existence to the population of the everyday world. ¹⁰² An exception is the interpretive line articulated by Edward Hussey in abandoning his previous adherence to the strict

One sees this e.g. in Curd 1998a: 100, outlining how she will approach the 'Doxa' in light of her meta-principle interpretation of Parmenides as a 'predicational monist': 'although Parmenides argues that the sensible world alone cannot be the source of knowledge, he does not reject it completely. The problem for mortals is that they suppose that the world reported by the senses is the only reality there is and that coming-to-be, passing-away, and change are therefore real; but Parmenides' diagnosis of this problem does not entail that the world reported by the senses is therefore to be rejected entirely.' Talk of the merely 'subjective' reality of the phenomenal world is common among those who wish to attribute some form of existence to the world of the 'Doxa' but do not suppose it is another aspect of what has been described in the 'Truth'. So, essentially, Reinhardt 1916, for whom 'die Welt ist eine Konvention, aus einem sanktionierten Irrtum folgerecht entwickelt' (31) and on whose view the goddess 'bringt Wahrheit über den Wahn' (25) while describing the original error of understanding 'der alle anderen Irrtümer unserer Vorstellungen mit Notwendigkeit nach sich gezogen habe' (26), namely mortals' connection of Being with not-being, an error from which is born the world of appearances and the illusion of plurality, that is, the world that is for us reality (82). In a similar vein, Mansfeld 1964: ch. 3, develops a view according to which the revelation of monism in the 'Truth' makes the plural world's very existence unintelligible, and yet the cosmology based upon the twin principles, Fire and Night, makes the world of appearances intelligible in so far as they resemble truth. Cf. Verdenius 1942: 58-9, for the view that 'we are almost compelled to regard this empirical world as a reality of an inferior order' and are tempted to believe that 'changing reality' amounts to 'absolute reality'. Others who have proposed according some ambiguously positive status to Parmenides cosmology include Wilamowitz-Möllendorf 1899; Calogero 1932: 28 ff., 42 ff.; Riezler 1934: 44 ff.; Fränkel 1946: 169-71; Schwabl 1953, according to which Light and Night have a higher unity in Being (cf. van Loenen 1959: 116 ff.); Gigon 1968: 247 ff., 271 ff.

monist line. Whereas once he had written of how Parmenides' demonstration that 'that which is is a unity, unique, complete, unchanging, homogeneous' entails 'the denial of all reality to all occupants of the ordinary world', such that 'ordinary experience, incompatible as it is with the path "(it) is", cannot be anything but delusion', ¹⁰³ Hussey would come to adopt an altogether different line, writing as follows:

the essential structure of reality, as revealed in the first part [of Parmenides' poem], is certainly unlike the world of ordinary experience, but does not necessarily leave absolutely no place for ordinary experience. Reality is essentially timeless, transcends space, is unified, coherent and homogeneous. There is no room for any competing reality, and therefore for Parmenides the 'opinions of mortals', *if taken as a description of essential reality*, are just false.... But Parmenides may nonetheless leave open the possibility of taking 'mortal opinions', in the second part, in another way: as a 'most probable' opinion about those non-essential features of the world that are really given in sense-experience. And as such they are at least possibly true, and practically adequate. ¹⁰⁴

Although Hussey is somewhat tentatively proposing rather than developing this line, it is in fact not so very far from the kind of 'aspectual' understanding of the relation between the 'Truth' and the 'Doxa' that Plato, Aristotle, and Theophrastus seem to have shared. ¹⁰⁵ Be that as it may, Hussey is certainly now to be counted among the persistent cadre of interpreters who have resisted the common conclusion that the doctrine of the 'Truth' rules the objects of the 'Doxa' out of existence—who have, in other words, rejected (T1) and (T2) in Guthrie's narrative.

There are, it seems, at least two fundamental reasons why modern accounts of Parmenides as a generous monist of some type have not gained broader acceptance, especially among English-speaking historians. First, this kind of reading has not been developed successfully, with the kind of sustained attention to the principal fragments and problems of interpretation necessary to establish its superiority to other readings. Hussey's tentative though promising presentation, for instance, spans only a few pages in a broad-ranging, commissioned article on early Greek epistemology and perforce does not adequately develop or defend its points. (Even article-length attempts to develop readings along this line do not have the space to do so properly.) Still, Hussey and certain others have recognized at least one essential point, namely that the two parts of the goddess's revelation to Parmenides have different epistemic status. ¹⁰⁶ For the most part, however, and here I come to the second fundamental problem with these accounts, they have failed to pay due attention to the critical modal distinctions that define Parmenides' presentation of the major ways of inquiry. In this omission they are not alone, of course, since neither the strict monist

¹⁰³ Hussey 1972: 96-8.

¹⁰⁴ Hussey 1990: 31.

Forms of this type of view are also found in Minar 1949; Woodbury 1958; Chalmers 1960; de Santillana 1967; Clark 1969; Owens 1974; Robinson 1979; Matson 1980; de Rijk 1983; Finkelberg 1986, 1988, 1999. Owens 1974 and Finkelberg 1999 explicitly position their views as heirs to that at Arist. *Metaph.* 1. 5. 986^b27–34.

This point is essential e.g. to both Clark 1969 and Matson 1980.

reading, the logical/dialectical reading, nor the meta-principle reading has recognized that Parmenides was the first philosopher whose work draws something like a rigorous distinction between what must be, what must not be, and what is but need not be. Chapters 2 to 4, therefore, will demonstrate the centrality of this ontological distinction to Parmenides' thought. Although a more careful consideration of the evidence of Plato and Aristotle may motivate reconsideration of the prevailing interpretations of Parmenides, I do not intend to be guided further by their reception in developing the interpretation of Parmenides that follows. Instead, I shall focus exclusively on Parmenides' own words and argue on internal grounds that a reading that gives proper weight to his modal distinctions best enables us to understand the force of his claims, the logic of his major arguments, the relation between the two parts of the goddess's revelation, and ultimately his true contribution to philosophy.

The internal difficulties with developing a modal reading of Parmenides as a general monist are less problematic than the external obstacles posed by common assumptions regarding his relation to the later Presocratics. No matter how well an interpretation of Parmenides as a generous monist makes sense of Parmenides' own words, it would have little chance of gaining acceptance if the two firmly entrenched dogmas were to go unchallenged, according to which Zeno and Melissus were orthodox defenders of Parmenides' legacy and Parmenides himself had a direct and decisive impact on the later Presocratic physical theories. Chapter 5, therefore, will begin by arguing that Parmenides' influence on Zeno's antinomies was essentially negligible (which explains why Aristotle almost never mentions them together) and that, unlike Parmenides, Zeno did present a serious challenge to the incipient project of scientific cosmology, in that his application of a mathematical conception of space and extension to physical bodies naïvely conceived made analysis of both their composition and their movement highly problematic. This chapter will then go on to re-examine Melissus' relation to Parmenides. I have already argued elsewhere against allowing Melissus' deduction to shape one's view of Parmenides' philosophy. 107 I did so somewhat indirectly by reviewing the various respects, both in conception and argumentation, wherein Melissus clearly departs from Parmenides, these for the most part being respects that all interpreters, regardless of how they understand Parmenides, should be prepared to acknowledge. Chapter 5 will be able to take a more direct approach, given that its demonstration of Melissus' critical difference from Parmenides will be rooted in the reading of Parmenides newly developed in Chapters 2 to 4. Melissan monism is strict monism, and it will emerge as an essentially eristic deformation of Parmenidean ontology. Chapter 5 will also consider the evidence suggesting that, for a time, Melissus was actually a more prominent representative of 'Eleaticism' than Parmenides himself. This is an important point since failure to appreciate this fact has been the source of much confusion. Gorgias in particular encouraged assimilation of the two, and this had its effect on both Plato and Aristotle. Both were nevertheless able to distinguish the more philosophically serious views of Parmenides from the crude paradoxes of Melissus.

Chapters 6 and 7 will then reconsider the generally prevailing view of Anaxagoras' and Empedocles' relation to Parmenides, in an effort to demonstrate how the dogma that his argument in the 'Truth' was, in one way or another, critical to the development of their respective physical theories not only distorts the evidence but also disregards more fundamental continuities. Chapter 6 will argue that Anaxagoras' physical theory, with its powerfully complex model of composition, is best understood as responding to problems raised by Zeno's antinomies rather than to anything specifically found in Parmenides. After some preliminaries, Chapter 7 will discuss in detail Aristotle's treatment of Empedocles in On generation and corruption. For Aristotle's evidence has been improperly employed by those who would have it, contrary to the overt sense of Empedocles' own words, that he conceived of matter as having a particulate structure and that his 'roots' or elements retain their specific qualities when entering into compounds. We shall see not only that Aristotle's evidence does not support such a view, but that it suggests an altogether different picture, confirmed by the Empedoclean fragments, wherein his elemental 'roots' actually interact with one another when they combine in compounds in such a way that they to some extent lose their distinctive qualities. In general, in the case of both Anaxagoras and Empedocles, we shall see that we can better understand their theories once we abandon the ultimately groundless assumptions that they intended their elements to replicate as nearly as possible the attributes of Parmenidean Being and that they were endeavouring to respond to some specifically Parmenidean problem regarding change. Once these mistaken assumptions, rooted in misunderstandings of Parmenides' own philosophy, are relinquished, we shall be able to recognize the true structural correspondence and thus the underlying continuity between Parmenides' system and those of both Anaxagoras and Empedocles.

As for Leucippus and Democritus, in so far as their development of the atomist theory was influenced by Eleaticism, it would now seem to have been influenced by Zeno and Melissus more than by Parmenides himself. Aristotle apparently alludes to the Melissan and Zenonian pedigree of Presocratic atomism when he says of the theory's founders, 'Some made concession to both arguments, to the one that all things are one, if "being" signifies one thing, by saying that non-being is, and to the argument from dichotomy, by positing indivisible magnitudes' (Ph. 1. 3. 187^a1–3). Given the context of Aristotle's treatment of Parmenides and Melissus in this and the preceding chapter, it would appear that the characterization of the first argument here alludes to Melissus rather than to Parmenides, for among the possible senses of the thesis that all things are one that Aristotle distinguished given the fact that 'being' is said in many senses (Ph. 1. 2. 185^a20-7), the one relevant to the atomist hypothesis is the one he specifically associates with Melissus, namely that everything is one quantity or extension (Ph. 1. 2. 185^a32-3). The atomists multiply this by interspersing it with non-being. Aristotle's reference to the argument from dichotomy appears more obviously an allusion to Zeno. Histories of the period have in any case long tended to present the Presocratic atomists as rejecting a Zenonian assumption to the effect that every magnitude is limitlessly divisible.

More recent histories also tend now to recognize that Aristotle's evidence suggests Leucippus was far more preoccupied with the arguments of Melissus than those of Parmenides. Leucippus in fact seems to have endorsed Melissus' identification of void as a necessary condition for motion and to have taken non-counterfactually his declaration that if there were many things, they would have to be just as he has shown the One to be. Thus Kirk, Raven, and Schofield write, apropos Aristotle's account of the origins of the atomist theory in On generation and corruption 1. 8. 325^a2-^b5, that the Eleatic positions described in this passage are, where identifiable, 'invariably Melissan', such that 'there is little doubt that in Aristotle's eyes it is particularly Melissus' version of Eleatic doctrine which influenced Leucippus. . . . [T]his is a case in which Aristotle's essential judgement makes such excellent historical sense that we cannot attribute it to over-schematization of the relations between his philosophical forebears'. 108 David Sedley has recently called into question the commonplace that Democritean atomism was formulated in reaction against Zeno's paradoxes, and he has suggested that Democritus is more likely to have been engaging with a neo-Eleatic line of argument preserved by Simplicius. 109 In any case, once the modal interpretation of Parmenides as a generous monist has been developed, it will not be further argued here, by way of supporting the interpretation, that we need to revise the view of Leucippus and Democritus' relation to Parmenides that figures in Guthrie's narrative. For historians have for some time now been retreating from the notion that Parmenides' 'Truth' had a direct impact on the development of the atomist theory.

In the end, I aim to show that the structural weaknesses in Guthrie's narrative are so serious that we should stop trying to repair the edifice and instead mostly abandon it. Parmenides did not advance the wildly paradoxical thesis of strict monism, nor did he mean to specify either what any possible object of inquiry or any properly elemental principles or natures must be like. He was, rather, the first to have explored the fundamental modal distinctions between what must be, what cannot be, and what is but need not be. There is consequently no good reason to saddle him with the view that the everyday world of distinct and changing objects is a non-existent illusion and that we are deluded in believing in its existence. It follows that his metaphysical vision in the 'Truth' was not designed to expose flaws in earlier, broadly Ionian physical theories, that neither Zeno's antinomies nor Melissus' paradoxical deduction were designed to support or develop Parmenides' own position, and that neither Empedocles, Anaxagoras, nor the early atomists developed their physical theories in reaction against or in some other form of response to that position. The

¹⁰⁸ Kirk *et al.* 1983: 408–9, largely following Furley 1967: ch. 6 (cf. Furley 1987: 118–20, on Melissus' influence, and 122–7, on Zeno's). Graham 1999: 179 n. 24, endorsed this now fairly common view, likewise concluding that Aristotle's evidence (at *GC* 1. 2. 316^a13 ff. as well as 1. 8. 325^a2 ff.) suggests 'that atomism is a response to the second generation of Eleatics'; as already noted, however, Graham 2008: 344–8, revises this opinion and recasts Leucippus as responding directly to Parmenides. While the obscurity of our information regarding Leucippus has, perhaps inevitably, led some to argue that Melissus was responding to Leucippus rather than vice versa (e.g. Diller 1941: 363 ff.; Bicknell 1967; Klowski 1971; Graeser 1972: 19–23), this opinion has not been widely accepted (though Graham 2008: 343–4, is a recent exception). Although it seems impossible to establish Leucippus' dates with any certainty, Ferguson 1965: 26, concludes with some plausibility that he was philosophically active sometime between 430 at the earliest and 410 at the latest.

evidence of Plato and Aristotle, if one takes sufficient care to understand it, certainly does not bear out any of these tenets of Guthrie's narrative in either their original or modified forms.

The concluding Chapter 8, in addition to surveying the results of the intervening discussion, will set the true correspondence between the systems of Parmenides, Empedocles, and Anaxagoras in the broader context that will by then have started to become apparent. There something will also be said about why it is mistaken to think of early Greek philosophy as primarily natural philosophy and about where Parmenides actually stands with respect to the period's philosophical development. Historical narratives of the period need to move away from representing its development in terms of a Popperian series of conjectures, challenges, and new conjectures and to move towards a greater emphasis on the important continuities of conception we can still trace among the period's major figures. I do not pretend to provide a definitive new narrative here. My more modest aim is merely to lay some of the groundwork for its development by showing how the pivotal figure in the currently prominent narratives can be better understood and thus providing a basis for thinking along new lines. On the modal interpretation of Parmenides as a generous monist, he emerges as a thinker whose metaphysical and physical speculations did not interrupt but belonged firmly to the ongoing tradition of early Greek philosophy. He earns his place as an important figure in the history of philosophy by being the first thinker to pursue in depth the fundamental distinctions between what must be, what must not be, and what is but need not be.

Parmenides' Three Ways

PARMENIDES GOES TO THE HALLS OF NIGHT

Parmenides' poem opens with a description of a journey he ostensibly once made to the abode of a goddess. He represents her as first greeting him and then commencing an address that apparently comprised the remainder of the poem. While the philosophical significance of the fr. 1 'proem' may appear minimal, its account of Parmenides' journey nonetheless provides an important control on the interpretation of what follows. The proem is our best indication of the cultural context within which Parmenides chose to situate his message, and, as such, it needs to be studied closely by any interpreter who wishes to avoid anachronism and to understand Parmenides' thought in its own place and time. While some of the proem's references and its overall significance may now seem obscure, Parmenides doubtless relied on their being clear enough to his original audience. His description of the path he travelled to the goddess's abode as 'far-fabled' suggests that he presumed it readily recognizable. In both later antiquity and the modern era, however, the proem's references ceased to be understood by many readers, and their incomprehension would typically lead them to treat the proem as some form of allegory. Fortunately, however, an historically adequate, non-allegorical reading of the proem is still

 $^{^{1}}$ πολύφημον, fr. 1. 2. This compound adjective occurs twice in Homer—at Od. 2. 150 modifying $d\gamma o\rho a$ ('the *vociferous* assembly', trans. Lattimore) and at Od. 22. 376 modifying ảοιδός ('a singer with many songs'). Its active sense in both these occurrences (cf. Hdt. 5. 79, Pi. I. 8. 58) has suggested to some that a similarly active sense is also required here in Parmenides. Thus, Tarán 1965: 8 and 10 *ad loc.*, translates δδὸν . . . πολύφημον as 'the resounding road' and follows Verdenius 1942: 12, in specifying the adjective's basic sense as 'uttering many things' (cf. Fränkel 1930: 155 n. 4). Likewise, Mourelatos 1970: 41-4, 'route of much-speaking'; Gallop 1984: 49, 'the much-speaking route'; Coxon 1986: 44, 'way of much discourse'; and O'Brien 1987a: 3, 'the many-voiced way'. However, that $\pi o \lambda i \phi \eta \mu o s$ also had a passive sense where appropriate is attested by a scholium on Pi. O. 1. 8, ὁ πολύφατος ὕμνος, where the adjective πολύφατος is explicated as: πολύφημος, δ ύπὸ πολλῶν φημιζόμενος καὶ λεγόμενος. πολυθρύλλητος. Cf. Philo, De ebrietate 92, where the parallel use of $\pi o \lambda v \dot{\omega} v v \mu o s$ ('many-named') likewise suggests a passive sense for πολύφημος i.e., 'much-reported' or 'many-storied'. Given the obvious awkwardness in describing a road or path (as opposed to persons or their utterances) as having much to report, others have understood $\pi o \lambda \dot{\nu} \phi \eta \mu o \nu$ here in Parm. 1. 2 as having this passive sense. Thus, for instance, Diels 1897: 29 (cf. Diels and Kranz 1951: 228), 'vielgerühmten Weg'; Burnet 1930: 172, Kirk and Raven 1957: 266, and Waterfield 2000: 56, 'the renowned way'; Guthrie 1965: 7, and Kirk et al. 1983: 243, 'the far-famed road'.

possible, for scholarship in recent decades has put us in a good position to reconstruct a fair portion of the proem's original significance and so to understand why Parmenides chose to communicate his philosophical message as he did.

Difficulties with Allegorical Interpretations

Sextus Empiricus' reading of the proem as an epistemological allegory already exemplifies the problematic nature of the resort to allegorical interpretation. According to Sextus, the horses that convey Parmenides (fr. 1. 1) represent the soul's irrational impulses and desires; the 'far-fabled path | of the divinity' (fr. 1. 2b-3a) represents rational inquiry; the maidens who accompany him (fr. 1. 5) are the senses, the wheels of his chariot (fr. 1.7–8) enigmatically represent the ears, and the maidens of the Sun (fr. 1. 9-10) represent sight. Finally, Sextus identifies the goddess who welcomes and instructs Parmenides with the figure of Justice described as holding the keys to the doors through which he enters (fr. 1. 13-14); according to Sextus' allegorical reading, this figure represents the intellect (διάνοια) that furnishes secure apprehension (S.E. M. 7. 112-13). Obviously, many points in Sextus' reading are either anachronistic, such as the Platonizing identification of Parmenides' horses with the irrational impulses, or otherwise forced and implausible, such as the notion that his chariot's wheels represent the ears. In other respects, Sextus's reading seems simply careless, such as in its apparent failure to recognize that the maiden daughters of the Sun (Ἡλιάδες κοῦραι, fr. 1. 9a) are the same maidens (κοῦραι) mentioned just four verses above as guiding Parmenides along the way. Sextus' identification of the goddess as Justice is comparably lax; for Parmenides portrays the figure of Justice as holding the keys to the gates through which he passes, not as the occupant of the abode he enters. The implausible details of Sextus' interpretation are driven by his attempt to read the proem in light of his broader presumption—not in itself absurd—that Parmenides rejected the authority of the senses and 'doxastic reason' while identifying 'scientific reason' (ὁ ἐπιστημονικὸς λόγος) as the criterion of truth (S.E. M. 7. 111, 114).

In modern times, the proem was once widely held to be an allegory of enlightenment. Thus Sir Maurice Bowra could assert with confidence:

Parmenides is plainly allegorizing. The allegory may of course be based on something akin to a mystical experience, but it is nonetheless an allegory. The transition from night to day is the transition from ignorance to knowledge; the sun maidens who accompany the poet are the powers in him which strain toward the light; the horses who know the road are his own impulses toward truth; the way on which he travels is the way of inquiry.²

Hermann Fränkel and Karl Deichgräber also understood Parmenides' journey as an ascent transporting him from darkness to light, to be interpreted allegorically as a journey from error to enlightenment or as the breakthrough of the spirit to clarity.³

² Bowra 1937: 98.

³ Fränkel 1930; Deichgräber 1959. The tradition of allegorical interpretation of the proem continues in Cordero 1984: 176–83; Coxon 1986: 13–17; and Conche 1996: 41–71.

A general problem for the development of readings along these lines is that the presumption that the proem must be an allegory leaves one in the difficult position of having to determine just what it is an allegory of; and since it furnishes no ready clues to the meaning it is presumed to be hiding, allegorizers tend to try to find in its imagery traces and hints of whatever they take Parmenides' message to be in the rest of his poem. However, the imagery of the proem is so richly elaborated that no allegorical interpretation seems capable of properly accounting for all its details. What is the allegorical interpreter to make, for instance, of the complicated description of the gates through which Parmenides passes, with its meticulous account of their mechanism, that takes up almost half of the description of the journey?

Readings of the proem as an allegory of enlightenment were eventually confronted with an insuperable obstacle. The punctuation of fr. 1. 8b-10a in Diels and Kranz's edition—ὅτε σπερχοίατο πέμπειν Ι Ήλιάδες κοῦραι, προλιποῦσαι δώματα Νυκτός, $|\epsilon is \phi \acute{a}os$ —had suggested a translation along the following lines: 'while the maidens of the Sun, having left the halls of Night, were hastening to convey me to the light'. However, Jaap Mansfeld, Walter Burkert, and, following them, David Furley would point out the syntactical awkwardness of construing $\epsilon i s \phi \acute{a} o s$ with $\pi \acute{\epsilon} \mu \pi \epsilon \iota \nu$ and the fact that there are sufficient parallels for the construction $\lambda \iota \pi \epsilon \hat{\iota} \nu \ldots \epsilon \hat{\iota}_S$ to suggest an altogether different construal.⁵ They accordingly suggested punctuating with no comma after Nυκτός and translating along these lines: 'while the maidens of the Sun were hastening to convey me, having earlier left the halls of Night for the light'. The Sun Maidens, that is, have previously *left* the halls of Night to come *into* the light. As the proem opens, however, they are portrayed as taking Parmenides back to the halls of Night. Thus the trajectory described is from the light to the realm of night, the trajectory of a katabasis or underworld descent. When understood in this way, the proem obviously cannot be interpreted as an allegory of enlightenment describing a movement from darkness to light.

In reading the proem, it is desirable in the first instance to abandon the misconception, born of bafflement, that its imagery can only be understood allegorically. For it is actually less difficult than many allegorists have supposed to identify the destination of Parmenides' journey, the 'far-fabled path' he travels and the maidens who guide him along it, the impressive gates through which he passes, and ultimately the goddess who receives and addresses him.⁷

⁴ Cf. Gallop 1984: 7: the gates Parmenides enters 'are a point at which Night and Day meet, a place where opposites are undivided, and where the familiar contrasts of human experience can therefore no longer be drawn. Thus, the youth's encounter with the goddess is located where all difference or contrast has disappeared'. Gallop openly acknowledges reading the proem as an anticipation of the strict monism for which he thinks Parmenides then argues.

⁵ Mansfeld 1964: 238; Burkert 1969: 7–9; Furley 1973: 1–5.

⁶ Something first proposed by Gilbert 1907: 29–35.

In what remains the single best study of Parmenides' proem, Burkert 1969: 2–3, properly notes that '[p]erhaps the "strangeness", deficiencies and obscurities exist only for us, because we are missing the background from which the poem takes its departure'. Burkert then proceeds convincingly to fill in a good deal of that background. More recently, Kingsley 1999 has made a case for contextualizing Parmenides' proem 'in terms of the traditions he inherited and the place he came from' (63, see 49–54 and 61–76 in particular on the proem). Much of what is convincing in

The Figures and Topography of the Proem

The maiden daughters of the Sun who serve as Parmenides' attendants are said to have previously left the halls of Night ($\delta\omega\mu\alpha\tau\alpha$ $N\nu\kappa\tau\delta_s$). What this place is we know from Hesiod's *Theogony*. The epic's account of the triumph of Zeus and the Giants over the Titans concludes with a description of the binding and imprisonment of the defeated Titans in Tartarus, the underworld realm down to which stretch the earth's roots. Tartarus is itself surrounded by a bronze fence with gates of bronze fixed there by Poseidon (*Th.* 726, 732–3, cf. 811–12). Homer similarly describes the entrance to Tartarus as protected by iron gates and a bronze threshold (*Il.* 8. 15). Hesiod's description of this place continues:

A great chasm is there, and not until a whole year is completed | would you reach its floor, if once you were within the gates, | but hither and thither would carry you one troublesome storm blast | after another; and horrible even to the deathless gods | this wonder is. And the horrible dwelling of dark Night | stands there shrouded in black clouds. | Before them the son of Iapetos [Atlas] holds the broad heaven | with his head and unwearying hands, standing | immovably, where Night and Day drawing near | greet one another, as they pass each other by on the great threshold | of bronze; one goes down within, while out the door the other | goes, and the house does not ever contain both of them inside, | but always one of them is outside the house | and passes over the earth, while the other is within the house | and awaits until the time of her journey comes, | the one holding far-seeing light for those upon the earth, | the other holding in her hands Sleep, the brother of Death, | deadly Night, shrouded in misty cloud. (*Th.* 740–57)

In Hesiod, then, the house of Night is the dwelling alternately occupied by the goddesses Night and Day ($N \acute{v} \xi$ and $\acute{H} \mu \acute{e} \rho \eta$, both feminine) while her counterpart traverses the sky. Distinct from the moon and sun, their regular journeys account for the world's alternating periods of darkness and illumination. Any Greek brought up on Hesiod would have readily recognized that Parmenides' proem describes a

⁸ On the Hesiodic background to Parmenides' proem and for other parallels, see Morrison 1955: 59–60; Dolin 1962; Schwabl 1963; Burkert 1969: 8–13; Furley 1973: 3–4; Pellikaan-Engel 1974; Tulli 2000; and Miller 2006: 7–9.

⁹ Cf. Hes. *Th.* 274–5: 'and the Gorgons, who live beyond famed Ocean | in the farthest region by Night, where are the clear-voiced Hesperides'. The Hesperides have already been described at vv. 215–16 as the children of Night who guard the trees with the golden apples 'beyond famed Ocean'.

journey to this 'horrible dwelling of dark Night'. Some of the details are certainly different. Parmenides, significantly, does not mention any of the other abodes Hesiod also locates in this dark realm, namely, those of Sleep and Death (*Th.* 758–66), of Hades and Persephone (*Th.* 767–73), and of the goddess Styx (*Th.* 775–81). Parmenides is not slavishly copying Hesiod. Instead, it appears that both he and Hesiod are elaborating a very old motif with deeper roots in Babylonian mythology.

Wolfgang Heimpel has usefully collected much of the relevant material in a study devoted to clarifying the details of the Babylonian belief that the sun god descended each night into the underworld. From his survey of the Sumerian and Akkadian texts, he concludes that the activities of the sun god (Shamash (Babylonian), Utu (Sumerian)) at night involved: opening and then passing through the western door of heaven into heaven's interior, bringing light to the inhabited regions below the western horizon, judging the dead, entering the White House in heaven's interior and eating the evening meal, sleeping and emerging from his chamber within this house, and finally opening and passing through the eastern door of heaven. Many of these activities are represented in the Sumerian 'Sunset Prayer':

Utu, when you enter heaven's interior, may the pure bolt of heaven greet you. May the door of heaven pray to you. May Law, your beloved vizier, go straight toward you. Let your greatness shine toward the White House, the seat of your royalty. May Sherda, your beloved spouse, meet you happily. May she calm your heart with cool water. May she set before you the meal of your godhead Utu, make straight your way, go the true road to your 'level place'. Utu, you are the judge of the land, the one who straightens out its decisions. (Tr. Heimpel)

Compare the opening lines of the 'Fourth House Prayer', with its greater emphasis on the doors of heaven and their mechanism:

Great lord, when you emerge from pure heaven's interior; hero, youth Utu, when you emerge from pure heaven's interior; when you 'bring close' (Akkadian: lift) the pegs of the key in the bolt of pure heaven; when you untie the latch of pure heaven; when you open the great door of pure heaven... (Tr. Heimpel)

In these texts, the phrase, 'heaven's interior', refers to the region located beneath the horizon. Heimpel catalogues numerous other Babylonian texts with a similar emphasis on the doors of heaven and their bolts, bars, latches, and/or keys. ¹¹ All these texts make it much less surprising that Parmenides should have described in such great detail the mechanism of the gates of the paths of Night and Day.

Heimpel also surveys and tries to make sense of the evidence, like that at the end of the 'Sunset Prayer', indicating that the sun god also functioned as judge of the dead in the underworld. ¹² Although less apparent than the other connections, this element

in the nexus of notions regarding the actions of the Babylonian sun god also has an analogue in Parmenides' proem. For it seems quite likely that the famous path along which he describes himself as travelling to reach the house of Night, naturally identified as the path along which Day and/or Helios himself as well as Night travel, is likewise the path along which the dead travel to reach the underworld and the place of their judgement. This explains why the goddess says in greeting Parmenides: 'a fate by no means ill sent you ahead $(\pi\rhoo\tilde{v}\pi\epsilon\mu\pi\epsilon)$ to travel | this way' (fr. 1. 26–7a). That is, Parmenides has not died prematurely but has been brought down to this place in advance of his appointed time. ¹³

With these Hesiodic and Babylonian antecedents ¹⁴ in mind, it is not so difficult to make sense of the major features of Parmenides' proem. His guides are the maiden daughters of Helios ($\kappa o \hat{v} \rho a \iota$, fr. 1. 5b = $H \lambda \iota d \delta \epsilon_S \kappa o \hat{v} \rho a \iota$, fr. 1. 9a). ¹⁵ In Homer, they tend the herds of immortal sheep and cattle belonging to their father, Helios (Od. 12. 127–36). They figure most prominently in recountings of the legend of their half-brother, Phaethon, whose request to direct his father's chariot led to disaster when his inability to control its horses forced Zeus to destroy him with a thunderbolt so as to prevent the earth being engulfed in flame. The daughters of Helios were transformed into amber-dropping trees as they wept over Phaethon's fallen body. ¹⁶ Parmenides' identification of his guides as the daughters of Helios secures the identification of the chariot and mares conveying him as belonging to Helios. Helios himself must therefore be the 'divinity' mentioned at fr. 1. 3a, ¹⁷ and the 'far-fabled path' (fr. 1. 2) described as his must be the course Helios travels each day across the sky and down into the western regions and below. ¹⁸ On the most plausible restoration of the corrupted text that follows, this path is described as the one 'which carries

¹³ Cf. Burkert 1969: 14 and 25; Mourelatos 1970: 15; Coxon 1986, 10; Kingsley 1999, 61 (with more references at 240). There is perhaps an echo here of Hom. *Il.* 13. 602, where the poet speaks of the 'ill fate ending in death' (μοῦρα κακὴ θανάτοιο τέλοσδε) that led Peisander to engage Menelaus in single combat. By implication, 'a fate by no means ill' would be one not now ending in Parmenides' death.

¹⁴ See further Kingsley 1995: 392–3; and Steele 2002.

¹⁵ Cf. Burkert 1969: 6-7.

The testimonium *ap.* Hyg. *Fab.* 154 regarding the Hesiodic *Phaethon* (Hes. fr. 311) mentions this last detail. The story formed the subject of an Aeschylean tragedy, the *Heliades* (frs. 68–72 at Radt (ed.) 1985: 185–9; discussion at Mette 1963: 181–3), and of Euripides' *Phaethon* (frs. at Diggle (ed.) 1998, 150–60, full-scale edn. with introduction and commentary in Diggle 1970; cf. Eur. *Hipp.* 735 ff.). See also Apollonius's description of the $\kappa o \hat{v} \rho a \iota H \lambda \iota d \delta \epsilon_S$ amidst his telling of the Phaethon legend (4. 596–609), Ovid's memorable recounting (*Met.* 1. 750 ff.), and the elaborate presentation and exegesis of the myth at Procl. *in Ti.* 1. 33 E–35 D, i. 108. 20–114. 21.

¹⁷ So Burkert 1969: 7. Some presume the divinity referred to here must be the goddess who later welcomes Parmenides. Burkert objects that this identification reflects 'the method of the commentators' (4), for one hearing the poem has no reason at this point to make such an identification, whereas everything in the immediate context suggests that the divinity is Helios.

¹⁸ Cf. Guthrie 1965: 7, commenting on v. 3, δαίμονος: 'Several scholars have recognized that Parmenides sees himself as traveling through the sky in the Sun's chariot, as is indeed sufficiently obvious. Like Phaethon he has the Sun's daughters as guides and charioteers (vv. 9, 24), the axle is blazing (v. 7), the starting point is the house of Night It is all the more strange that so few have made the identification.'

over all cities ($\kappa a \tau \lambda \pi \acute{a} \nu \tau ' \check{a} \sigma \tau \eta$) the knowing man' (fr. 1. 3b). ¹⁹ Although many have found the phrase $\kappa a \tau \lambda \pi \acute{a} \nu \tau ' \check{a} \sigma \tau \eta$ incomprehensible, it is easily enough understood once the divinity at the start of this verse is recognized as Helios. The path he travels each day across the sky carries him down over all the cities of men. ²⁰

This identification of the path on which Parmenides travels as that regularly travelled by Helios' chariot finds final confirmation in the description of the daughters of Helios as having previously left the halls of Night for the light (fr. 1. 9–10²¹) and as now returning with Parmenides to this same place, for before these halls are said to stand the magnificent gates of the paths of night and day (fr. 1. 11 ff.). Note how the little touch describing the daughters of Helios thrusting the veils or coverings ($\kappa \alpha \lambda \dot{\upsilon} \pi \tau \rho \alpha s$, fr. 1. 10) from their heads as they leave the halls of Night is reminiscent of Hesiod's description of the dwelling of Night as 'shrouded (κεκαλυμμένα) in black clouds' (Th. 745). Parmenides may have meant the veils to be figurative representations of early morning mist or fog dispelled by the sun's rising. Finally, understanding the topography of Parmenides' journey and identifying the figures and objects in the proem's first ten verses—the horses and chariot, the divinity of verse 3, the path Parmenides travels, the maidens who guide him, and the halls of Night—makes it easy to understand why Justice $(\Delta i \kappa \eta)$ is portrayed as the keeper of the gates so impressively described in accordance with long ancient tradition. This goddess Justice will be the one who maintains the regular order in night and day's successive comings and goings. According to Hesiod, Justice was one of the *Horae* or 'Hours', along with her sisters Order ($E \dot{v} \nu o \mu i \alpha$) and Peace ($E \dot{i} \rho \dot{n} \nu n$), all of them being children of Zeus by Themis (Hes. *Th.* 901–3). In Homer, the *Horae* guard the gates of heaven (*Il.* 5. 749–51 = 8. 393–5),²² and Justice has a similar function here even though the gates in question differ. ²³

While Parmenides depicts himself as travelling along the sun's path in the chariot of Helios, by no means should he be thought of as re-enacting Phaethon's disastrous journey. The language of the proem associates him instead with initiates into mysteries and with the souls of the dead travelling to the underworld. We have

¹⁹ See the textual note on this verse in the appendix. There appears to be a parallel in a few decipherable words amidst the otherwise mostly unintelligible 'Orphic' or 'magical' gold lamella C from Thurii (facsimile at Kern 1922: 117): $HAIE\Pi YP\Delta H\Pi ANTA\Sigma TH$ i.e. ' $H\lambda\iota\epsilon$ $\pi\hat{\nu}\rho$ $\delta\hat{\eta}$ $\pi\acute{\alpha}\nu\tau$ ' $\alpha\sigma\tau\eta$ (' . . . Helios fire indeed all cities . . . '). Here, too, there would seem to be a reference to Helios' daily voyage over the inhabited upper world. Cf. Guthrie 1965: 7, on $\kappa\alpha\tau\hat{\alpha}$ $\pi\acute{\alpha}\nu\tau$ ' $\alpha\sigma\tau\eta$ in Parm. fr. 1. 3: 'He is crossing the sky in the Sun's own chariot, and this path, since it traverses the whole world, naturally carries him "over all cities," while at the same time it is "far from the footsteps of men".'

Thus one common objection to the conjecture $\kappa \alpha \tau \hat{\alpha} \pi \acute{\alpha} \nu \tau' \ \check{\alpha} \sigma \tau \eta$ proves groundless, namely that it is inconsistent with the goddess's subsequent assertion that the way Parmenides has traveled to reach her 'is far from the track of humans' (fr. 1. 27).

²¹ With Parmenides' use of $\pi \rho ο λιποῦσαι$, compare Mimn. fr. 12. 3 (cited at Burkert 1969: 7):... ἐπεὶ ῥοδοδάκτυλος 'Hὼs | 'Ωκεανὸν προλιποῦσ' οὖρανὸν εἰσαναβῆ ('... when rose-fingered Dawn, | having previously left Ocean, ascended into the heaven').

²² On the Near Eastern background to Justice in this role, see Burkert 2004: 59–60 (cf. Burkert 1969: 10–11).

²³ Cf. the description at Heraclit. fr. 94 and *ap. PDerveni* col. 4. 7–10 of how Justice's assistants, the Erinyes, keep watch lest the sun transgress its bounds.

already noted how, in journeying to the halls of Night, he descends to a traditional place of judgement and, also, how the goddess who greets him alludes to this fact herself by reassuring Parmenides that no ill fate has sent him ahead to this place. Likewise, his description of himself as travelling along the way that conveys the $\epsilon i \delta \omega_s$ $\phi \dot{\omega}_{\rm S}$ or 'knowing man' (fr. 1. 3), ²⁴ and the way the goddess subsequently addresses him as κοῦρε or 'youth' (fr. 1. 24), both reflect the language of mysteries and initiation. ²⁵ The language of the way or path ($\delta\delta\delta$ s), furthermore, is also prominent in the texts preserved on the 'Orphic' gold leaves. So, for instance, in the last two lines of lamella H: 'And surely you go along the crowded path $(\delta\delta\delta\nu)$, the sacred path which other glorious initiates and Bacchoi travel. 26 Here we encounter a third major type of comparative material that has been adduced in efforts to understand the proem, the language of initiation found in the 'Orphic' gold plates, the oldest of which come from grave sites in southern Italy. These provide instructions to the departed initiates on how to conduct themselves in the underworld and what to say there so as to secure favourable judgement. Although the underworld topography in these plates differs markedly from what we find in Parmenides' proem and its Hesiodic and Near Eastern precedents, these fascinating little inscriptions nevertheless tend to confirm the presence of initiation motifs in Parmenides' proem. This specific motif is important for Parmenides given how the initiate encounters divinities who impart to him some special knowledge or wisdom.

Who, then, is the goddess Parmenides describes as having revealed all things to him? While there have been a number of different suggestions, 27 the most plausible and readily confirmed view is that the goddess is $N\dot{v}\dot{\xi}$ or Night herself. The first reason for making this identification is simple and straightforward. The daughters of Helios bring Parmenides to the halls of Night ($\delta\dot{\omega}\mu\alpha\tau a\ Nv\kappa\tau\dot{o}s$, fr. 1. 9), and the goddess who greets him upon his arrival there welcomes him to 'our home' ($\eta\mu\dot{\epsilon}\tau\epsilon\rho\sigma v\ \delta\hat{\omega}$, fr. 1. 25). She must therefore be one of the inhabitants of this abode, and since she cannot be Helios (or Themis, or Justice), the most obvious option is to suppose that she is Night herself. Recently, however, Peter Kingsley has

²⁴ As Burkert 1969: 5, points out, there are basically two contexts in which $\epsilon i \delta \omega_s$ is used without an object: in phrases of the type $\pi \rho \delta_s$ $\epsilon i \delta \delta \sigma_a s$ $\delta \epsilon \gamma \epsilon \iota v$, and in contexts where the 'knowing one' is someone who has been initiated into certain mysteries, with the first use being an extension of the second. Cf. Bowra 1937: 109–10; Burkert 1992: 41–6. See also Emp. fr. 129. 1–2: 'There was among them a man exceptionally knowing ($\tau \iota s \ldots \dot{a} \nu \dot{\eta} \rho \pi \epsilon \rho \iota \omega \sigma \iota a \epsilon \dot{\iota} \delta \omega s$), who possessed the greatest wealth of understanding', which is most likely a reference to Pythagoras, the master of much mystical lore.

²⁵ On the κοῦρος motif, see Burkert 1969: 14 and the references at n. 32; Cosgrove 1974; Kingsley 1999: 71–4, and 2002: 377–9.

²⁶ For more on this connection, see Feyerabend 1984; and Sassi 1988. On the gold plates, see Zuntz 1971: 277–393; Kingsley 1995: 256–314 *passim*; Riedweg 1998, with its useful appendix; and Edmonds 2004: ch. 2.

e.g. Δίκη or Justice: Deichgräber 1958: 6, 7, and 37. ' $H\mu\epsilon\rho a$ or Day: Gomperz 1924: 4 and n. 9. Parmenides' muse: Guthrie 1965: 10; Hölscher 1969: 74. *Peitho*: Mourelatos 1970: 161. A personification of the $ai\theta\eta\rho$: Coxon 1986: 14 and 166–7 (where the identification is less straightforward). Mnemosyne: Pugliese Caratelli 1988. Polymorphously personified: Untersteiner 1958: pp. LXVI–LXXVII. Deliberately anonymous: Tarán 1965: 16; Conche 1996: 56.

²⁸ So Morrison 1955: 60. Cf. Mansfeld 1964: 244–7; Gómez-Lobo 1981; West 1983: 109.

proposed that Parmenides' goddess is Persephone. Parmenides does not name his goddess since it was normal practice not to name divinities of the underworld such as Persephone. It is not true, however, that Parmenides does not name the goddess if she is Night herself; and no presumption that he would have been proscribed from naming her should be allowed to obscure the facts that Parmenides goes to the halls of Night and that the goddess who addresses him welcomes him to her home. As already noted, moreover, Parmenides mentions none of the other dwellings Hesiod locates in the underworld hard by the 'horrible dwelling of dark Night', among which is the house of Hades and Persephone guarded by the hound Cerberus (*Th.* 767–73). The imagery of the proem would have differed considerably if this had been his destination. Instead, he describes himself as journeying to the halls of Night, where he received a revelation from the goddess who there welcomes him to her home.

To understand the cultural significance of Parmenides' presenting his teachings as revealed to him by Night obviously requires understanding just who this goddess was. Hesiod mentions among Night's children both Sleep and 'the tribe of Dreams' (*Th.* 213), the portentous character of which makes it unsurprising that Night was herself a goddess of oracles, with oracular shrines at Megara and Delphi. More significant for Parmenides and his southern Italian audience, however, would have been the important role Night played in some of the Orphic theogonies, including that in the early Orphic poem partially preserved in the Derveni papyrus. Gábor Betegh has recently done a masterfully judicious job of reconstructing the theogonic story commented upon in this controversial text, and his conclusions regarding Night's place and function in this story seem fairly secure: Night must have belonged to the first generation of gods, given that the verse describing Ouranos as the first king also identifies him as $E \dot{v} \phi \rho o v \delta \eta_S$ or 'son of Night' (*PDerveni* col. 14. 6). Other

²⁹ Kingsley 1999: 92–100; cf. 2002: 373–5. Cf. Zuntz 1971: 257, for the proposal that Persephone is the speaker in Empedocles' *Katharmoi*.

³⁰ See Burkert 1969: 12–13, for this point.

³¹ The rejection of Mansfeld's identification of the goddess with Night (see n. 28 above) by Kahn 1970: 116, is similarly blind to the appearance of the name, Night, in fr. 1. 9's identification of the goddess's abode as $\delta \omega \mu a \tau a N \nu \kappa \tau \delta s$: 'his goddess may have many names', Kahn says, 'but $N \psi \xi$ is none of them'.

none of them'.

32 Megara: Paus. 1. 40. 6. Delphi: Plu. *De sera num. vind*. 566 B–C. Cf. Herm. *in Phdr*. 147. 20 ff. and 150. 9 ff.

³³ See Betegh 2004: chs. 3 and 4, esp. 153–66. One thing that makes Betegh's reconstruction particularly trustworthy is his principle of generally trying to avoid employing the external evidence of the typically much later Orphic theogonies in reconstructing the events described in the Derveni poem. Contrast this approach with how West 1983 systematically employed the theogony of the Orphic *Rhapsodies* in reconstructing the Derveni poem's theogony. See also the reconstructions in Bernabé 2002 and Burkert 2004: 90–1 (where the continuities with Hesiod are also emphasized). Burkert's reconstruction comes in the midst of an excellent survey discussion (74–98) of the question of early 'Orphism' in light of the evidence provided by the continuing discovery and publication of new gold plates, which lead him to conclude that 'there is no longer any doubt about the existence of Dionysiac mysteries and "Orphics" in the fifth century B.C.' (76), and by the sensational discovery of the Derveni papyrus itself, on the basis of which he concludes that 'Orpheus' theogony, the dating of which has been so controversial, is now pushed back to the first part of the fifth or to the sixth century B.C.' (89).

early theogonies, including that of Epimenides and the probably Orphic theogonies known to Aristotle and his associate Eudemus, also prominently featured Night at the beginning of things. The verse at col. 13. 4 apparently indicates that likewise present at the beginning was Aether, as the 'bright' counterpart and partner of the 'dark' goddess. After gaining power from his father Kronos, Zeus received oracles not only from him (col. 13. 1) but also from Night herself, who had given him refuge and nurtured him. Columns 10–12 preserve traces of Night's oracular instructions to Zeus concerning his creation and subsequent reign. Night's oracular function is especially clear in the author's quotations from the Orphic theogony at col. 11. 1: $[\tau]\hat{\eta}s\ N\nu\kappa\tau \deltas$. " $\xi\xi\ \delta[\delta\dot{\nu}\tau ol]o$ " δ ' $a\tilde{\nu}\tau\dot{\eta}\nu\ [\lambda\dot{\epsilon}\gamma\epsilon\iota]$ " $\chi\rho\dot{\eta}\sigma a\iota$ " ('... of Night. "From the innermost shrine" he says she "prophesied"), and col. 11. 10: " $[\dot{\eta}\ \delta\dot{\epsilon}]\ \xi\chi\rho\eta\sigma\epsilon\nu$ $a\pi a\nu\tau a\ \tau\dot{a}$ oi $b\dot{\epsilon}[\mu\iota s\ \dot{\eta}\nu\ \dot{a}\nu\dot{\nu}\sigma a\sigma]\theta a\iota$ " ('She [sc. Night] prophesied all the things that it was right for him [sc. Zeus] to accomplish').

Subsequently, Zeus swallows something and absorbs into himself the whole world before undertaking a fresh creation of his own. The Orphic poem described this absorption as follows: 'And onto him all | the immortals grew, blessed gods and goddesses | and rivers and lovely springs and all other things, | such as had been born at that time, and he himself became the only one ($\mu o \hat{v} vos \ e vev vo$)' (col. 16. 3b–6). There followed a number of verses in praise of Zeus: '[And now he is] king of all[, and he will be] hereafter' (col. 16. 14); 'Zeus the head, Zeus the middle, and from Zeus all things have been made' (col. 17. 12); 'Zeus the king, and Zeus the ruler of all, god of the flashing bolt' (col. 19. 10). There are echoes of these verses in the corresponding portion of the Orphic *Rhapsodies*, likewise describing Zeus: 'one power, one daimon, great begetter, ruler of all, | and one kingly body, in which all these things revolve' (243 F. 6–7).³⁴

For our purposes, the most interesting portion of the *Rhapsodies* is where Zeus, having absorbed into himself Phanes' previous creation (241 F; cf. PDerveni col. 16. 3b-6), is explicitly concerned with how to preserve, in the ensuing cosmogonical phase, the unity that has thus come about. Conferring with the divine counsellor Night about his new creation, Zeus asks, 'How will all things be for me one and each apart?' (237 F. 3). Night answers by directing Zeus to surround all things with a strong bond of aether and to place within it the heaven, the celestial bodies, and the earth and sea (237 F. 4–8). The depiction of Zeus' concern with somehow preserving the unity of all things, which has been produced by his swallowing and absorption into himself of all that once was, looks like an effort to expand the thought of the genuine archaic verse at PDerveni col. 17. 12 (quoted above). In early Orphic cosmotheogonies like that of the Derveni poem, Zeus' concern with preserving the unity he has achieved during his subsequent creation may have featured less overtly than in the Rhapsodies. Then again, the statement by the Eleatic Visitor in Plato's Sophist that 'the Eleatic tribe that issues from us, beginning with Xenophanes and even earlier, go through their tales on the ground that what is called "all things"

 $^{^{34}}$ The reminiscence of Xenoph. fr. 23 has long since been recognized. Cf. also Aesch. *Hel.* fr. 70: 'Zeus is aether, Zeus is earth, and Zeus is the heaven, | Zeus surely is all things, and not any of these is higher'.

[sc. the cosmos] is one' (Sph. 242 D 4-7)³⁵ suggests that Plato was familiar with accounts concerned with the cosmos's unity even earlier than Xenophanes; and the verses in the Derveni poem describing Zeus' absorption of all things into himself, his subsequent creation of and rule over all things, and the apparent omnipresence attributed to him in the phrases, 'Zeus the head, Zeus the middle' (col. 17. 12a) make it highly plausible that Plato's reference to proto-Eleatics even earlier than Xenophanes for whom the unity of the cosmos was a central concern is an allusion to the Orphic cosmotheogonies.³⁶ Be that as it may, this brief excursus into the Orphic cosmotheogony of the Derveni poem should be sufficient to show that there could be no more appropriate goddess than Night herself to be the source of Parmenides' revelation. As the oracular counsellor for Zeus' creation, she is a most decisive authority on all the topics treated in her ostensible communication to Parmenides.

Preface to Night's Revelation

Neither this identification, however, nor any of the other identifications of the figures and places described in the proem should be taken to furnish the key to interpretation of the message that follows.³⁷ For while the proem undeniably

 $_{36}^{35}$ See Palmer 1999 a: 185–7. For more on the 'One–Many problem' in the Derveni poem, see Betegh 2004: 175–9. See also Palmer 1998: 27-30, on which the present discussion draws.

³⁷ Still less a 'key' to understanding Parmenides' philosophy is the inscription— ΠΑΡΜΕΝΕΙΔΗΣ ΠΥΡΗΤΟΣ ΟΥΛΙΑΔΗΣ ΦΥΣΙΚΟΣ—first discovered at Velia (ancient Elea) in Sept. 1962 on what would prove to be the base of a subsequently unearthed portrait bust of Parmenides. The inscription appears to date from the 1st cent. AD and belongs to a set of Velian inscriptions commemorating a medical cult of Apollo. (See Jucker 1968 for both the inscriptions and plates of the bust; the basic information is also to be found at Coxon 1986: 39-40.) These inscriptions early on sparked a good deal of speculative discussion, mostly among Italian scholars. More recently, Kingsley 1999: 77-86, has connected the obscure epithet, *Phōlarchos*, found on three of the other inscriptions to the practice of 'incubation' in Caria as described at Str. 14. 1. 44, to the inscription 'Apollo Phōleutērios' found in the Istrian temple precinct of Apollo the healer, and to accounts of Epimenides and Pythagoras as practitioners of incubation. He concludes that Parmenides was the founder of 'the line of Oulis healers mentioned on the other inscriptions from Velia', the '"sons" and priests of Apollo, healers belonging to a world of Iatromantis figures concerned with incubation and dreams and ecstasy', and thus that Parmenides belongs to 'a world of magicians who spoke in poetry and oracles and riddles, who used incantations to enter other states of consciousness' (141). He likewise connects Parmenides to the practice of incubation via the report in Sotion fr. 27 ap. D.L. 9. 21 that Parmenides was 'led to stillness (hēsychia)' by the Pythagorean, Ameinias (162, 179-82). Kingsley charges on the basis of such evidence that history, historians, philosophers, and especially Plato have conspired to suppress Parmenides' true message. His claim to have found the key to Parmenides in ancient traditions of mysticism goes hand in hand with a deep antipathy towards philosophy, 'western logic', and even reason itself. Kingsley 2003 sets out to fulfill the promise at the end of Kingsley 1999 to reveal the extraordinary power of Parmenides' suppressed teaching. This proves to amount to the claims that 'whatever we are aware of is, whatever we perceive or notice is, whatever we think of is' (77), that 'the only criterion of reality is thinking and perception, that there is nothing that is not, [that] everything is...linked to itself in a perfect continuum', and that '[t]he whole of existence is one complete, unbroken whole' (78). He goes on to claim that both parts of the goddess's revelation are deceptive (211). In the end, Kingsley is unconcerned about whether these speculations can be given coherent formulation; for, as he hieratically announces at the end of his treatment of Parmenides, 'the time for thinking and for reasoning is over now' (306). Surely this is not Parmenides' message. Caveat lector.

contains important evidence regarding Parmenides' intellectual affiliations and the milieu within which his thought was developed, understanding what we still can of this background is more useful for helping us understand why he says what he does than for helping us understand the precise nature of his claims and the overall position he develops. Given that our knowledge of the philosophical, proto-scientific, and religious currents that prevailed in Greek-speaking southern Italy during the late sixth and early fifth centuries BC is even less secure than our knowledge of Parmenides, inferences based upon the data of the proem about his relation to those currents are risky or tendentious. It is in any case unlikely that, even with fuller knowledge of this background, one would find some key to understanding the major interpretive difficulties in the fragments that follow. These difficulties need to be resolved by concentrating on internal interpretive criteria, and Parmenides' own articulation of his views needs to be understood, before the significance of whatever background context is signalled through the proem can be properly appreciated. The focus here will thus be on developing a coherent interpretation of what we know of Parmenides' own words in accordance with internal criteria of meaningfulness and consistency. The fundamental task is to try to understand the substance of the revelation Parmenides depicts himself as receiving. Only when we have done so will we be in a proper position to understand more fully why it is appropriate that it comes from Night.

After welcoming Parmenides, the goddess describes as follows the scope of the revelation she is about to impart: 'You must needs learn all things, | both the unshaken heart of well-rounded reality³⁸ | and the notions of mortals, in which there is no genuine conviction. Nonetheless these things too will you learn, ... '(fr. 1. 28b-31a). Not only does this programmatic statement signal the major structural division within her ensuing address, but it also creates a certain sense of mystery and expectation by prompting a variety of questions. ³⁹ Just what, for instance, could the 'unshaken heart of well-rounded reality' possibly be? Why is it important that Parmenides learn this? Likewise, just what are 'the notions of mortals'? The rest of the fragment apparently specifies what 'these things' $(\tau \alpha \hat{v} \tau \alpha, \text{ fr. 1. 31a})$ that Parmenides is to learn involve, but the sense of the words that follow here (fr. 1. 31b-32) is so notoriously obscure (perhaps in part because our fragment breaks off at this point) that they can only properly be understood in retrospect. There are more questions. Why does the goddess say there is no genuine conviction in mortal notions? Why must Parmenides nonetheless learn them if they are unreliable? Why, too, must he learn what mortals think from Night, rather than from mortals themselves or even by his own devices? While one expects such questions to be answered in the course of the goddess's exposition, there is no hope of answering them at this initial stage. Only in retrospect, once we have understood as much of the content and import of what follows as we can, will we be in any position to do so. It is therefore best to

³⁸ The reasons for preferring 'reality' to 'truth' and 'genuine' to 'true' in rendering, respectively, $\partial \lambda \eta \theta \epsilon i \eta$ and $\partial \lambda \eta \theta i$ are set out below at pp. 89–93.

³⁹ Cf. Mansfeld 1995 *b*: 230–2, on 'the intentional unclarity' here.

begin developing an understanding of the goddess's revelation by turning immediately to the major interpretive problems of fr. 2.

Before expounding for Parmenides the 'unshaken heart of well-rounded reality' and the 'notions of mortals' as she first promises to do, Night prepares the way by instructing Parmenides on how he should proceed in his search for understanding. While this portion of the poem, between the proem and the apparently complete account of what lies along the Way of Conviction, survives only in the form of shorter fragments, these are nevertheless substantial enough to give one a good idea of the goddess's reasons for urging Parmenides to direct his thought as she requires. The critical texts here are frs. 2, 3, 6, and 7, which present the fundamental 'ways of inquiry' around which Parmenides' philosophy is organized. We will spend a good deal of time trying to get as clear as possible about the ways of inquiry as the goddess describes them in these fragments. Many misconceptions about the overall significance of Parmenides' thought can, in fact, be traced back to misconstruals of his first steps in these fragments, particularly in the crucial fr. 2. Proper understanding of these verses is therefore absolutely critical for a proper understanding of the rest of the poem and, indeed, of Parmenides' philosophy as a whole.

While the goddess here in fr. 2 introduces two possible paths or ways that Parmenides might follow in his inquiries, she hardly affords him any choice as to which path to take. Instead, she warns him off the second path, virtually as soon as she has introduced it. The major interpretive questions initially arising from this fragment thus include the following. What manner of inquiry is Parmenides supposed to be pursuing? What is he meant to be looking for? What, exactly, are the two 'paths' specified at verses 3 and 5? How do they afford Parmenides ways of pursuing what Night directs him to look for? Why does the goddess immediately instruct Parmenides not to pursue the second path? Why does she introduce it at all if she is only to warn against taking it? We will need to develop answers to all these questions, and we can expect further questions to arise as we proceed.

'THE ONLY WAYS OF INQUIRY...'

 attend properly to how the goddess distinguishes the two ways of inquiry she presents in fr. 2 from the third way subsequently presented.

Cornford's Solution

One might suppose that the problem arises only because we do not know how fr. 2 continued. Perhaps whatever originally followed made it clear that the two ways presented in fr. 2 are not the only conceivable ways of inquiry but that what subsequently appears as the third way is also to be included. Such is the response proposed by Francis Cornford:

when the goddess announces 'the only ways of inquiry that are to be thought of', she does not say that there are only two. Since she will proceed to describe three, presumably she intends here to announce three.... In this Fragment the goddess really intends to announce all the three Ways that are logically conceivable ($\epsilon i \sigma \iota \nu o \hat{\eta} \sigma a \iota$). This fact is disguised by the fragmentary condition of the text.

It is always possible, of course, that certain problems that arise from the fragments as we have them would be revealed as merely apparent should new evidence emerge from the sands of Egypt or from some ancient ash pit. As things stand, however, speculative appeal to what there might have been in portions of the poem for which we have no evidence must be an option of last resort, to be taken only when one has failed to discover any other escape from an interpretive crux. Cornford's 'solution', in other words, is little better than an admission of defeat.

The 'solution' also has its internal difficulties. It assumes that the three ways encountered in the poem are all on a par, even though the goddess's execration of mortals and the path they pursue suggests this might not be the case. It also assumes that we are ourselves able to identify all the logically conceivable ways and that we can independently establish that they number exactly three. But how is this possible without our having formed some view of what these are ways for or ways to? Perhaps the logically possible ways of reaching the destination to which the goddess leads Parmenides are more than three—or perhaps they are exactly two. The specifications of the ways at fr. 2. 3 and 2. 5 do, after all, appear to be mutually exclusive contradictories. As such, they might be thought to exhaust the logically available possibilities in some way. While Cornford is right in noting that the goddess does not actually say in fr. 2 that there are only *two* ways, ⁴¹ it seems on the whole unlikely that fr. 2. 3's 'the one...' ($\dot{\eta} \mu \dot{\epsilon} \nu$), soon answered by fr. 2. 5's 'the other...' ($\dot{\eta} \delta$ '), was picked up by another antithetical element at some later point no longer known to us. In the text as we have it, there is a nice balance between the characterizations of the two paths in fr. 2. 4 and 2. 6 that suggests that these are, in fact, the only paths

⁴⁰ Cornford 1933: 99.

⁴¹ This pace Nehamas 1981: 102, who goes too far in saying that 'the goddess states unequivocally that there are only $(\mu o \hat{v} \mu a \omega)$ two ways of inquiry (B2. 2)'; the 'only' may be granted, but not the 'two'.

of inquiry. Most tellingly, though, fr. 8. 15–18's retrospective summary of the decision in fr. 2 mentions only two paths; ⁴² and in this later passage there is no question of the antithesis, 'the one . . . the other' $(\tau \dot{\eta} \nu \ \mu \dot{\epsilon} \nu \dots \tau \dot{\eta} \nu \ \delta$ '), continuing with yet another 'the other' $(\tau \dot{\eta} \nu \ \delta \dot{\epsilon})$. For reasons such as these, then, Cornford's solution must be set aside. He nevertheless deserves credit for squarely facing the problem posed by the translation of fr. 2. 2 he adopted.

Two-Path Solutions

A more recently popular strategy for resolving, rather than dismissing or ignoring, the problem involves denying that Parmenides' goddess ever actually introduces a third path of inquiry. Some now argue that the apparently new way of inquiry that features in frs. 6 and 7 is in fact to be identified with the second of the ways already introduced in fr. 2. On this view, the goddess represents mortals as wildly misguided in their attempts to pursue a path of inquiry along which, as she herself makes clear to Parmenides, nothing at all can be learnt. Although there prove to be ineluctable problems with the resultant 'two-path' reading of the poem, this type of attempted resolution nonetheless merits more serious consideration than Cornford's proposal, for, among other things, it has yielded an improved understanding of a critical point in the text.

Hermann Diels's generally accepted supplement of the lacuna at the end of fr. 6. 3 with $\epsilon l \rho \gamma \omega$ ('I restrain')—based on the presumed analogy with fr. 7. 2's $\epsilon l \rho \gamma \epsilon \nu \delta \eta \mu \alpha$ ('restrain your thought')—presents an obvious obstacle to the development of any such 'two-path' interpretation. For this supplement certainly makes it appear that in fr. 6. 3–5 the goddess means to bar Parmenides from *two* distinct ways, the one she has already warned him against in fr. 2 *plus* a way previously unmentioned. Accepting Diels's proposed supplement makes for a translation of fr. 6. 3–5 along these lines: 'For I restrain you from this first way of inquiry | and next from this way, on which indeed mortals who understand nothing | wander, two-headed'. Having been restrained from two paths, Parmenides is to follow the sole remaining path, the one first introduced at fr. 2. 3.

There are, however, reasons to distrust Diels's supplement. For one thing, it results in the goddess identifying as 'this first way of inquiry' what was originally presented in fr. 2 as the second way. This problem may be minimized by treating the adjective $\pi\rho\dot{\omega}\tau\eta s$ ('first') either as quasi-adverbial⁴³ or as characterizing this way as the first from which she means to restrain Parmenides rather than simply as the first way of inquiry.⁴⁴ While such departures from the most straightforward construal of fr. 6. 3, reflected in the translation above, might be deemed acceptably minimal, it would be preferable not to have to resort to such syntactical manœuvring. A more serious difficulty with Diels's supplement is the following. If the goddess means to

⁴² O'Brien 1987a: 152–3, emphasizes this point against Cornford's proposal.

 ⁴³ So Coxon 1986: 55: 'From this way of inquiry I keep you first of all' (emphasis mine).
 44 So Kirk et al. 1983: 247: 'for this is the first way of inquiry from which I hold you back.'

restrain Parmenides from two paths, and one of these is the path along which mortals wander, then it certainly seems that the other prohibited path must be the one introduced at fr. 2. 5. No other candidate for a prohibited path is to be found in the poem, and the goddess has in fact already indicated to Parmenides in fr. 2 that he must stay off this path. However, it is difficult to find in fr. 6. 1–2 any characterization of a way corresponding to that specified in fr. 2. 5, to which 'from this path of inquiry' in fr. 6. 3 might plausibly be thought to refer. The acuteness of this difficulty and the feebleness of the suggestion that the requisite reference to fr. 2's second path is to be found in the phrase, $\mu\eta\delta\dot{\epsilon}\nu\,\delta'$ $o\dot{\nu}\kappa\,\dot{\epsilon}\sigma\tau\nu$ (fr. 6. 2a, supposedly meaning 'but it is not possible for nothing [to be]'), led Leonardo Tarán to the rather drastic proposal that the lacuna appearing at the end of fr. 6. 3 in the manuscripts of Simplicius in fact extends for at least another full verse. That accepting Diels's $<\epsilon\tilde{\iota}\rho\gamma\omega>$ at the end of fr. 6. 3 drove so sober a scholar to such an extreme solution indicates the need for a more viable supplement for the lacuna.

Nestor-Luis Cordero and Alexander Nehamas, working independently, in fact came to propose quite similar alternatives to Diels's supplement. (Cordero proposed supplementing the lacuna with the verb $\tilde{\alpha}\rho\xi\epsilon\iota$ ('you will begin'). In the earlier portion of the verse he thus prefers the reading τ ', found in some manuscripts of Simplicius, to the majority reading σ ', given that the elision of σ t to σ ' is unlikely. The result is: $\pi\rho\omega\tau\eta s \ \gamma a\rho \ \tau' \ a\phi' \ \delta\delta\sigma\hat{v} \ \tau a\upsilon\tau\eta s \ \delta\iota\zeta\dot{\eta}\sigma\iota\sigma s \ \langle a\rho\xi\epsilon\iota\rangle$, rendered by Cordero as 'car tu commençeras par ce premier chemin de la recherche' ('for you will begin along this first path of inquiry'). On this reading, the two paths mentioned in fr. 6. 3–5 are the two already introduced in fr. 2. That is, the goddess is indicating that the account she will develop for Parmenides in the first major portion of fr. 8, down to verse 50, will proceed along the first path of inquiry introduced in fr. 2, the

⁴⁶ Cordero 1984: ch. 3, expanding parts of Cordero 1979; Nehamas 1981: 103–5. Nehamas seems to have been unaware of the earlier article constituting Cordero's first presentation of his two-path view; likewise, Cordero makes no mention of Nehamas's article in his subsequent book-length development of this line of interpretation.

⁴⁵ See Tarán 1965: 59–61, both for his telling criticisms of the idea that fr. 6. 2a is a reformulation of fr. 2's second path and for his proposal to extend the lacuna. Becker 1964: 256, likewise proposes a lacuna of at least a verse between fr. 6. 3 and 6. 4. Other extreme responses to the problem are adopted by Stokes 1971: 113, who likewise feels driven to posit an extended lacuna, though for the different reason that he thinks fr. 6. 3's $\tau \alpha \dot{u} \tau \gamma \beta$ must (uncharacteristically) point forward to a mention of fr. 2's second path not to be found in what follows in the Simplician manuscripts, and by Sprague 1955, who responds to the difficulty by tentatively proposing that fr. 7. 1–2 be inserted into fr. 6 after verse 2. Nehamas 1981: 98–102, judiciously critiques all these extreme responses, along with the less radical suggestion by Mourelatos 1970: 7 n. 7, that fr. 6. 1–2 refers implicitly rather than explicitly to the way of not being. Cf. Cordero 1979: 6–10, where these avenues of response come in for harsh but fair criticism—he rightly calls the proposals of Tarán and Becker 'désespérés et dangereux'—and where one may find ampler discussion of the scholarly pedigrees of their proposals.

⁴⁷ Cordero 1979: 21–4; and 1984: 168–75 (esp. 174). Cordero (1979: 10–11; and 1984: 138–44) criticizes the supposed parallel between fr. 6. 3 and fr. 7. 2 as merely apparent and also shows that Diels's εἴργω has its roots in the reading εἴργε νόημα in the Aldine edition of Simp. *in Ph.* (Venetus 1526), a reading which was accepted by scholars, with various consequent modifications of the earlier and better attested portion of fr. 6. 3, until Diels's 1882 edition of Simplicius' commentary.

path of being, and that her subsequent account of mortal thoughts will proceed along the second path, the path of non-being. Along similar though slightly different lines, Nehamas proposed the supplement $\mathring{a}\rho \xi \omega$ ('I shall begin') and suggested that σ should be understood as an elision of $\sigma \omega$ instead of $\sigma \varepsilon$ (citing as comparanda Hom. Il. 1. 170–1 and 21. 122–3). The result is: $\pi \rho \acute{\omega} \tau \eta s \ \gamma \acute{\alpha} \rho \ \acute{\sigma} \ \acute{\alpha} \acute{\rho} \ \acute{\sigma} \acute{\omega} \acute{\sigma} \ \acute{\sigma} \acute{\omega} \acute{\sigma} \ \acute{\sigma} \acute{\omega} \acute{\sigma} \ \acute{\sigma} \acute{\omega} \acute{\sigma} \ \acute{\sigma} \acute{\sigma} \acute{\omega} \sim$ 'For, first, I will begin for you from this way of inquiry'. On the basis of this reading, Nehamas concludes: 'B6 does not therefore reject any way of inquiry. On the contrary, it says that the goddess will follow (demonstrate) two methods of inquiring into nature.' These two methods are, again, to be identified with the paths already specified in fr. 2. According to both Cordero and Nehamas, then, since fr. 6 introduces no new path but only reintroduces the paths already presented in fr. 2, this earlier fragment can indeed be understood as specifying the only conceivable paths of inquiry.

Regardless of whether one endorses their two-path interpretations, Nehamas's and Cordero's textual conjectures merit serious consideration. One advantage both have over Diels's εἴργω is that they remove the awkwardness of having to take fr. 6. 3's phrase, 'from this first path of inquiry' $(\pi\rho\dot{\omega}\tau\eta_{S}\dots\dot{a}\dot{\phi}')$ $\delta\delta \hat{o}\hat{v}$ $\tau \hat{a}\dot{v}\tau\eta_{S}$ $\delta \hat{\iota}\zeta\dot{\eta}\sigma \hat{\iota}o_{S}$, as referring to fr. 2's second path when the goddess has just been telling Parmenides in fr. 6. 1–2 to focus on the first path. Again, Diels's conjecture most likely requires that the requisite reference to fr. 2's second path be found in the phrase, 'but nothing is not [to be]' $(\mu\eta\delta\dot{\epsilon}\nu\ \delta'\ o\dot{\nu}\kappa\ \ddot{\epsilon}\sigma\tau\nu$, fr. 6. 2a), whereas it is difficult to understand just how this is supposed to amount to a specification of that path's content. The phrase at fr. 6. 2a is, in fact, in the logically subsidiary position of supporting the principal directive to Parmenides in the previous verse (just how it does so will become clearer as we proceed), and this fact only highlights the awkwardness of trying to understand 'this first path of inquiry' in fr. 6. 3 as referring to fr. 2's second path. Adopting either Cordero's or Nehamas's conjecture enables 'this first path of inquiry' to function much more naturally—namely, as a reference to the first path of inquiry. Likewise, the adjective 'first' $(\pi \rho \dot{\omega} \tau \eta s)$ can be construed straightforwardly, rather than quasiadverbially or in some other less natural manner.

While both conjectures are superior to Diels's, then, Nehamas's proposal— $\sigma[\sigma i] \dots \langle \tilde{\alpha} \rho \xi \omega \rangle$ ('for you...I shall begin')—appears preferable to Cordero's. In the first place, the goddess herself, strictly speaking, and not Parmenides, is the one who will lead the way along the successive paths of inquiry by describing reality and then the notions of mortals. While the second person and future tense of Cordero's $\tilde{\alpha} \rho \xi \epsilon \iota$ are paralleled by $\tilde{\alpha} \pi \sigma \tau \mu \dot{\eta} \xi \epsilon \iota$ (fr. 4. 2) and $\epsilon \dot{\nu} \rho \dot{\eta} \sigma \epsilon \iota s$ (fr. 8. 36), in neither of these other instances does Night describe Parmenides as doing something she herself in fact does for him. What makes Nehamas's reconstruction ultimately so attractive is how the goddess's announcement at fr. 6. 3–5 that she will begin for Parmenides from the first path and then start anew from the path along which mortals wander finds its exact counterpart at fr. 8. 50–2, where she marks her transition from the Way of Conviction to the Way of Mortal Opinion by saying: 'At this point *I cease for*

you⁴⁹ the trustworthy account and thought | about true reality; from this point on mortal notions | learn, listening to the deceptive order of my verses'. Although Nehamas does not note this particular virtue of his proposal, the structural parallelism it produces nonetheless tells strongly in its favour. 50

Despite the ingenuity with which the various two-path readings have been developed, one obvious problem they face is that the specification of the second path at fr. 2. 5 differs prima facie from the specifications of the purportedly identical path at fr. 6. 8–9 and fr. 7. 1.⁵¹ In particular, however one construes the characterization of the backward-turning path in the difficult last verses of fr. 6, it surely seems to involve a mixture of both being and non-being, something that distinguishes it from the absolute non-being specified in fr. 2's second path. Likewise difficult is the identification of the path of inquiry mentioned at the beginning of fr. 7 with this path of absolute non-being; for there is no hint of a supposition that 'things that are not are' ($\epsilon i \nu \alpha \iota \mu \dot{\eta} \dot{\epsilon} \acute{o} \nu \tau \alpha$, fr. 7. 1b) in fr. 2. 5's specification of the second path, 'that [it] is not and that [it] must not be'. 52 One might well have other worries about the feasibility of a two-path interpretation, but the violence to the text required to force an identification between what have traditionally been regarded as the poem's second and third paths perhaps best explains why few have wanted to endorse either Nehamas's or Cordero's broader interpretations. Nehamas attempts to argue for the identity of the way of not being and the way which combines being and not being on the basis of a controversial assumption that 'being' in Parmenides is 'fundamentally predicative', in the sense that 'Parmenides understands "is" in the very strong sense of "is what it is to be". 53 One might well wonder whether Parmenides could have expected any member of his audience to recognize that for him 'is' has this essentialist sense, as Nehamas claims, or to have understood that "the nature of a thing" is the ultimate subject of predication'. Cordero, by contrast, does more to confront the apparent difficulties for his two-path reading posed by the differences between fr. 2. 5 and fr. 6. 8-9 and fr. 7. 1. He follows those who have proposed that fr. 7. 1's rejection of the possibility that 'things that are not are' ($\hat{\epsilon}i\nu a\iota \,\mu\dot{\gamma}\,\hat{\epsilon}\acute{o}\nu\tau a$) amounts to an assertion of the principle of non-contradiction and that '[c]ette contradiction

 $^{^{49}}$ τοι παύω, paralleling fr. 6. 3, $\tau[oi]$... ἄρξω. Cf. τοι ... φατίζω at fr. 8. 60. The most difficult feature of Nehamas's proposal is not the conjectured supplement of the lacuna but the harshness of the elision σ' for $\sigma o \iota$ While generally monosyllables other than those ending in $-\epsilon$ do not suffer elision, epic does rarely admit elision in $\mu o i$, $\sigma o i$, and $\tau o i$. Furthermore, the less well attested reading τ , which Cordero adopts and understands as an elided form of the enclitic $\tau\epsilon$, might equally well be an elision for $\tau o i$, the Homeric enclitic form of the second person singular personal pronoun. The enclitic form is the sole attested reading at fr. 2. 6a: τὴν δή τοι $\phi \rho \dot{a} \zeta \omega$. It is thus possible that the majority reading σ' here in fr. 6. 3 reflects a scribal conversion of an original $\tau[oi]$ to $\sigma[oi]$. (Nehamas's conjecture is likewise judged preferable to Cordero's by Couloubaritsis 1987: 27-8; Couloubaritsis himself goes on to develop a less attractive two-path interpretation.)

Cf. the criticisms of Cordero and Nehamas at O'Brien 1987 a: 216–17.

⁵² Cf. O'Brien 1987*a*: 146: the interdicted way of fr. 7. 1–2 'ne peut s'identifier . . . à le seconde Voie (fr. 2. 5): "il est nécessaire de ne pas être." Cette proposition ne peut se concilier avec l'affirmation "est"/"sont" (εἶναι, fr. 7. 1), même si ce verbe a pour sujet des "non-êtres".' ⁵³ Nehamas 1981: 106-8.

intrinsèque' is the essential characteristic of the second path of inquiry. ⁵⁴ Apart from this being a questionable view of fr. 7. 1, there hardly seems to be any such 'inherent contradiction' in fr. 2. 5. On the contrary, its specification of the second path of inquiry is perfectly consistent in maintaining both [it] is not and [it] must not be. There is no internal contradiction here and no hint of a supposition that what is not and must not be somehow is, notwithstanding Cordero's weak attempt to manufacture semantic contradiction within fr. 2. 5 by pointing out that it consists syntactically of the negation of an affirmation and the affirmation of a negation. ⁵⁵

In the end, despite the weaknesses inherent in their broader two-path interpretations, Cordero and Nehamas must be commended for confronting, when others have not, the interpretive crux posed by fr. 2. 2. If their solutions fail, the problem remains: how can the goddess call the two ways of fr. 2 the only conceivable paths of inquiry and yet proceed to introduce a third way in fr. 6? If this is a further path of inquiry, then the two paths introduced in fr. 2 are not the only conceivable paths of inquiry. Denis O'Brien, an interpreter who acknowledges the difficulty and yet rejects the suggestion that mortals follow the second way, sees only one solution to the paradox: 'en affirmant "être" aussi bien que "ne pas être" (fr. 8. 40), les mortels ne se sont pas aperçus qu'ils devaient choisir'. Although O'Brien is right to point out that mortals are portrayed as unaware of possible ways of inquiry other than the one they follow, the point is not strictly relevant. If mortals are represented as following a third path of inquiry, then surely this third path is a *conceivable* path, and the problem remains.

The Ways of Inquiry for Understanding

An adequate resolution of the problem requires determining just what distinguishes the first two paths from the third. To do so requires a more adequate understanding of fr. 2. 2's description of the paths: $\alpha \tilde{i}\pi\epsilon\rho$ $\delta\delta o \hat{i}$ $\mu o \hat{v} \alpha \iota$ $\delta \iota \zeta \dot{\eta} \sigma \iota \delta s$ $\epsilon \dot{\iota} \sigma \iota$ $\nu o \hat{\eta} \sigma \alpha \iota$. The critical issue here is how to construe the aorist infinitive, $\nu o \hat{\eta} \sigma \alpha \iota$. As already noted,

⁵⁴ Cordero 1984: 146. Cf. 152–4 where Cordero proposes, along similar lines, that the mistake attributed to mortals in fr. 6. 8–9 is to have attributed 'l'être au non-être et le non-être à l'être', which once again is supposed to involve a denial of the principle of non-contradiction.

⁵⁵ Cordero 1984: 154, summarizing the interpretation developed at 79–102. For a critical discussion of how the two-path reading advanced in Cordero 1979 rests on distortive and inconsistent readings of the modal clauses in fr. 2. 3b and 2. 5b, see O'Brien 1987 a: 184–5.

⁵⁶ O'Brien 1987*a*: 142–3; cf. the expanded discussion of the problem at 216–25. O'Brien also suggests that mortals' failure to recognize and follow either of the first two ways does not really mean that they follow a third way but that their way is merely 'une Voie hybride', 'un amalgame absurde, un produit de la confusion qu'engendre l'ignorance', and thus 'une Voie factice', 'une Voie fantôme'. (This is in fact the keynote of the interpretation O'Brien develops in the critical essay accompanying his edition of the fragments.) While this might seem more to the point, it also fails to resolve the problem. A path of inquiry that combines the first two (if that is, in fact, what the path of mortals amounts to) is still another conceivable way to go. Likewise, the goddess herself quite clearly refers to the path mortals follow as a δδὸς διζήσιος in fr. 6 and probably in fr. 7 as well. Mortals may be confused in following this path, but are we to presume that the goddess herself is confused in calling it a path of inquiry? O'Brien acknowledges this apparent incoherence in his interpretation (225), though he does not resolve it.

the verse tends to be translated along the lines of Coxon's 'those ways of enquiry which are alone conceivable' or Kirk, Raven, and Schofield's 'the only ways of inquiry that are to be thought of. ⁵⁷ Coxon makes explicit in his commentary the grammatical construal underlying this translation: The use of tenses of elval followed by a transitive infinitive, the object to which is understood from the subject of the finite verb, is idiomatic in the fifth century and later' (emphasis mine). 58 He cites as comparanda phrases from Aeschylus and the comic poets Eupolis and Ephippus: θ άλασσα δ' οὐκέτ' ἢν ἰδεῖν, 'the sea was no longer there to see' (Aesch. Pers. 419); δ δè Γνήσιππός ἐστιν ἀκούειν, 'Gnēsippos is there to hear' (Eupolis fr. 139. 2); and καν κάραβός τις η λαβείν, 'should some scarab beetle be there to take' (Ephippus fr. 15. 5). The translations here are designed to preserve as far as possible the syntax and sense of the Greek construction. If the syntax of Parmenides fr. 2. 2 were the same, it would then need to be translated: 'just which paths of inquiry alone are there to think', where being there to think amounts to being conceivable. Coxon's comparanda are certainly not decisive on their own. The principal problem with this construal, again, is that the two paths introduced in fr. 2 are not in fact the only conceivable paths of inquiry. One might also wonder, though, what makes it so plain that the infinitive $\nu o \hat{\eta} \sigma a \iota$ is being used transitively and whether this construal of the verb is sufficiently in keeping with the usage of $v \acute{o} o s$ and $v \acute{o} \epsilon i v$ elsewhere in the

More immediately telling, however, is a passage in Empedocles with a more exact parallel to Parmenides fr. 2. 2 than any of Coxon's comparanda that suggests a quite different construal:

But come, observe by every means how each thing is clear, neither counting any seeing as trustworthy⁵⁹ more than hearing, or resounding hearing above the tongue's evidences, nor at all from the other organs, wheresoever there is a passage for understanding $(\pi \acute{o} \rho os \ \acute{e} \sigma \tau \grave{i} \ vo \acute{\eta} \sigma a \iota)$, hold back trust, but think each thing by the way it is clear. (Emp. fr. 3. 9–13)

Empedocles knew Parmenides' poem well. Some even suppose these verses echo Parmenides in a manner designed to underscore the greater credit Empedocles placed in the kind of sensory evidence rudely dismissed by Parmenides' goddess in fr. $7.^{60}$ Of interest at the moment is the construction in Empedocles' phrase, $\pi\delta\rho\sigma s$ $\delta\sigma\tau i \nu o\hat{\eta}\sigma\alpha\iota$ (fr. 3.~10), given that it closely parallels Parmenides' $\delta\delta\sigma i \dots \epsilon i\sigma\iota \nu o\hat{\eta}\sigma\alpha\iota$

⁵⁷ Cf. e.g. Diels 1897: 33; Cornford 1933: 98; Kirk and Raven 1957: 269; Untersteiner 1958: 129; Guthrie 1965: 13; Tarán 1965: 32; Barnes 1982a: 157 and 159; O'Brien 1987a: 16 and 153–4.

⁵⁸ Coxon 1986: 174 ad loc.

⁵⁹ Since there seems no proper parallel for understanding the manuscript reading $\pi i \sigma \tau \epsilon \iota$ to mean 'in trust', I here follow Bergk and Fränkel in reading $\pi \iota \sigma \tau \eta \nu$. Cf. Wright 1981: 161–2 *ad loc.*

⁶⁰ So e.g. Wright 1981: 162; Kirk *et al.* 1983: 285. One needs, however, to take full account of other fragments where Empedocles contrasts modes of understanding before drawing conclusions about how his epistemological stance compares to that of Parmenides.

(fr. 2. 2), both syntactically and semantically. 61 Both $\pi\delta\rho os$ and $\delta\delta\delta \acute{s}$ are used in the sense of 'passage', 'path', or 'way'. Empedocles' use of $\pi\delta\rho os$, while conditioned by his perceptual theory of pores and effluences, actually reinforces the connection with Parmenides. There is no question, however, of construing Empedocles' $\pi\delta\rho os$ $\dot{\epsilon}\sigma\tau i$ $vo\hat{\eta}\sigma\alpha \iota$ as most interpreters have construed Parmenides' $\delta\delta\delta i\ldots \dot{\epsilon}i\sigma\iota$ $vo\hat{\eta}\sigma\alpha\iota$. The sensory passages are not here being described by Empedocles as 'to be thought of' or 'conceivable' but as furnishing inlets or passages for (achieving) understanding. This parallel construction employing the very same form of the verb $vo\epsilon iv$ found in Parmenides suggests that, just as we must take Empedocles to be describing the sense organs as passages for understanding, so we should try to understand Night in Parmenides as indicating just which ways of inquiry there are for (achieving) understanding.

More precisely, the verb $\nu o \hat{\eta} \sigma a \iota$ in each of these two instances is best understood as retaining something of the infinitive's original force as a dative verbal noun. 62 This so-called 'datival infinitive' is common enough in Parmenides, notably with the verb $voe\hat{i}v$ itself. We shall see in the next chapter that the verb is best understood as functioning dativally in fr. 3: $\tau \delta \gamma \dot{\alpha} \rho \alpha \dot{\nu} \tau \delta \dot{\nu} \epsilon \delta \tau \dot{\nu} \tau \epsilon \kappa \alpha \dot{\epsilon} \dot{\epsilon} \dot{\nu} \alpha \iota$ ('... for the same thing is (there) for understanding and for being'). It also retains its dative force in fr. 8. 34: τωὐτὸν δ' ἐστὶ νοεῖν τε καὶ οὕνεκεν ἔστι νόημα ('The same thing is both for understanding and that because of which there is understanding'). The declaration immediately following—'For not without What Is...will you find understanding' (οὐ γὰρ ἄνευ τοῦ ἐόντος ... εὐρήσεις τὸ νοεῖν, fr. 8. 35–36a)—is particularly important. Part of the goddess's reflection upon completion of her account of what lies along the Way of Conviction, this verse make it clear that a principal goal of the inquiry in which she has been directing Parmenides has been understanding ($\tau \dot{o} \nu o \epsilon \hat{i} \nu$, $\nu \acute{o} \eta \mu a$). So much is already implied in fr. 2. 2 when she proposes to tell him 'just which ways of inquiry alone there are for (achieving) understanding'.

This construal of fr. 2. 2 is, of course, not unprecedented. Two notable antecedents are Charles Kahn's proposal to translate the verse as 'what ways of search there are for knowing or understanding' and Alexander Mourelatos's 'what routes of quest alone there are for thinking'. ⁶³ Although it is less apparent from Mourelatos's version, both scholars were at the time of their writing deeply influenced by Kurt von Fritz's classic studies of the pre-Platonic uses of $\nu o \epsilon \hat{\iota} \nu$ and its cognates, particularly by

⁶¹ The parallel is noted by Mourelatos 1970: 56 n. 26.

⁶² Cf. Smyth 1920: §1969: 'The infinitive was originally a verbal noun in the dative (in part possibly also in the locative) case. The use to express purpose . . . is a survival of the primitive meaning, from which all the other widely diverging uses were developed in a manner no longer always clear to us. But the to or for meaning seen in $\mu av\theta \dot{\alpha} \nu \epsilon \nu \psi \dot{\eta} \kappa \rho \mu \epsilon \nu \psi$ we have come to learn (for learning) can also be discerned in $\delta \dot{\nu} \nu a\mu a\nu \dot{\nu} \dot{\delta} \epsilon \dot{\nu} \nu I$ have power for seeing, then I can see.'

⁶³ Kahn 1969: 703 and n. 4, though he explains νοῆσαι as 'loosely epexegetical, or final, with ὁδοί'. Mourelatos 1970: 55 and n. 26. He also construes νοῆσαι as final, and he tries to distinguish this from a possible construal in which the infinitive is 'compared... to a dative'. His comment that 'ἐστι νοείν (final)... says "is for there to be thinking" 'leaves just how he understands fr. 2. 2 somewhat unclear.

his study of how the terms function in Homer. 64 Kahn and Mourelatos endorsed von Fritz's conclusion that in Homer voeîv functions in some contexts as 'a kind of mental perception' that 'penetrates below the visible surface to the real essence of the contemplated object', or that is 'a kind of sixth sense which penetrates deeper into the nature of the object', and likewise his conclusion that this sense would prove centrally important in the development of early Greek philosophy. 65 The analyses by von Fritz have since been subjected to critical reappraisal by James Lesher, who nonetheless reaches the comparable conclusion that often in the Homeric poems $vo\epsilon \hat{i}v$ (and γιγνώσκειν) has the connotation of 'becoming aware of the true identity or nature of the object (or person) one perceives, or the true meaning of the situation one has encountered'. 66 That the semantic range of the verb νοείν already in Homer includes this strongly cognitive sense might seem reason to suppose that it has such a sense in Parmenides, given his evident concern with penetrating beyond mere appearances to gain access to the true reality of things. The fact that Plato also found inspiration in the Parmenidean language of $\nu \delta os$ and $\delta \delta \xi a^{67}$ might also lead one to take Parmenides' uses of $voe\hat{i}v$ as strongly cognitive.

Parmenides' actual usage, however, must outweigh any inferences one might wish to draw from either semantic analyses of the verb's use in other authors or from Parmenides' reception in antiquity. As some have rightly seen, ⁶⁸ certain aspects of his use of $voe\hat{i}v$ and its cognates suggest a more ordinary and less restrictive sense for the verb. First, and perhaps most significantly, the goddess describes mortals as having a 'wandering $\nu \delta o s$ ' (fr. 6. 6), which is tantamount to its being subject to some form of failure or error. If this is the case, then 'know' is certainly too strong a rendering of νοείν since 'know' is what philosophers have sometimes called a 'success verb'. Furthermore, as Jonathan Barnes has emphasized, Parmenides pairs voeîv with ordinary verbs of saying—with $\lambda \acute{\epsilon} \gamma \epsilon \iota \nu$ at fr. 6. 1 and twice with $\phi \acute{a} \sigma \theta a \iota$ at fr. 8. 8. 69 To Barnes's list one can add the pairing of $\lambda \delta \gamma \sigma s$ and $\nu \delta \eta \mu \alpha$ in the goddess's words at fr. 8. 50–1a: 'At this point I cease for you the trustworthy account (λόγον) and $\nu \delta \eta \mu a$ | about true reality.' One needs to understand Parmenides' use of $\nu o \epsilon \hat{\imath} \nu$ and its cognates in a way that makes natural not only the pairing with ordinary verbs of saying but also this reference to the goddess's 'account' or 'discourse' as a $v \acute{o} \eta \mu a$. It is therefore tempting simply to translate $voe\hat{i}v$ as 'to think' and $v\acute{o}os$ and $v\acute{o}\eta\mu\alpha$ as 'thought' in all their occurrences, to avoid imbuing the terms with too strongly cognitive a connotation. Unfortunately, doing so would too often either strain English idiom or otherwise prove unnecessarily confusing. Both problems would

⁶⁴ Von Fritz 1943, and 1945/6; von Fritz shared with Bruno Snell and Hermann Fränkel the aim of promoting a developmental account of the early Greek cognitive vocabulary, according to which what was early conceived of or experienced as something analogous to perception would gradually come to be more internal, intellectual, and reflective. For full references, see Lesher 1994a: ² n. 2. ⁶⁵ Von Fritz 1943: 89–90. Cf. Kahn 1969: 703 n. 4; and Mourelatos 1970: 68–70.

⁶⁶ Lesher 1981: 11.

See Palmer 1999a: ch. 3.

⁶⁸ Cf. Tarán 1959 and 1965: 80–1; Barnes 1982*a*: 158–9; Lesher 1999: 247 n. 19.

⁶⁹ Barnes 1982a: 158–9, where he also notes that νοεῖν most often means simply 'think (of)'.

plague a translation of fr. 2. 2 as 'just which ways of inquiry alone there are for thinking'. Where necessary, therefore, we may adopt 'understand(ing)' as a proximate alternative for 'think(ing)', without, however, intending to imbue the verb $vo\epsilon \hat{\iota}v$ with a strongly cognitive sense. This does not mean that Parmenides is uninterested in achieving the kind of understanding that penetrates to the heart or reality of things. This certainly is his agenda, about which there will be much more to say as we proceed. The point here is simply that this agenda is not driven by the employment of some restricted or strongly cognitive sense of $vo\epsilon \hat{\iota}v$ itself.

Returning, then, to the crux that led to this discussion, we are now well positioned to understand what distinguishes the two ways introduced in fr. 2 from the third way of inquiry presented in fr. 6 and, in so doing, to appreciate why the goddess marks the ways of fr. 2 as, in some respect, the 'only' ways. The datival infinitive $vo\hat{\eta}\sigma\alpha\iota$ at the end of fr. 2. 2 distinguishes the two ways introduced in this fragment from the one subsequently appearing in fr. 6. The two ways of fr. 2, unlike the third way, are marked as ways 'for understanding', that is, for achieving understanding. By contrast, in fr. 7 Night instructs Parmenides to keep his thought (νόημα) away from the third way of inquiry, for already in fr. 6 she has described, in deeply disparaging terms, what results from proceeding along it. There she speaks of mortals who know nothing as helplessly directing their wandering thought or understanding $(\pi \lambda \alpha \gamma \kappa \tau \delta \nu)$ νόον, fr. 6. 6) along this third way. Parmenides' goal is by implication thought that does not wander, and Night indicates that there are only two possibilities for achieving it. 70 Now we must try to get clearer about just what those two ways are. Thus far we have only a partial and preliminary answer to the question of what distinguishes the first two ways from the third, an answer that itself prompts further questions about the relation between the first two. Why, for instance, does the second way of inquiry but not the third qualify as a way for understanding? Why, moreover, does the goddess immediately warn Parmenides off the second way, if it merits being introduced alongside the first as a way for understanding? If the goddess is so adamant about keeping Parmenides off the second way, why bother mentioning it at all? To answer these questions, we need to develop an adequate understanding of the difficult verses in which the goddess describes the first two ways. This task requires navigating some of the most controversial issues in the interpretation of Parmenides, hopefully in a way that will ultimately cast new light on Parmenides' thought without merely rehearsing or becoming mired in stale controversies.

To might therefore seem preferable to translate $\delta\iota\zeta\dot{\eta}\sigma\iota\sigma$ (fr. 2. 2, 6. 3, 7. 2) as 'seeking' rather than 'inquiry', as Coxon 1986: 173, does in commenting on fr. 2. 2, $\delta\delta\sigma\iota$ μοῦναι $\delta\iota\zeta\dot{\eta}\sigma\iota\sigma$ s. The noun $\delta\iota\dot{\zeta}\eta\sigma\iota\sigma$ s is securely attested only in Parmenides. 'Seeking' better preserves not only the connection to the root verb $\delta\iota\dot{\zeta}\eta\mu\iota$ a in both its archaic and early philosophical usages (on which see Mourelatos 1970: 67–8), including Parm. fr. 8. 6, $\tau\iota\nu$ a $\gamma\dot{\alpha}\rho$ $\gamma\dot{\epsilon}\nu\nu$ a $\delta\iota\dot{\zeta}\dot{\eta}\sigma\epsilon\alpha$ 1 að $\tau\sigma\dot{\sigma}$ 0; ('for what birth will you seek of it?'), but also the idea that Parmenides, under the goddess's direction, is in the first place looking for or seeking to attain something, namely thought that does not wander. However, since this search soon develops into an examination of, or inquiry into, the nature of $\dot{\alpha}\lambda\eta\theta\epsilon\dot{\iota}\eta$ (which both Mourelatos and Coxon take to be the direct object of Parmenides' seeking), we may continue to speak of 'ways of inquiry', provided we keep this root sense of $\delta\iota\dot{\zeta}\eta\sigma\iota$ s in mind.

THE RUSSELLIAN LINE

Owen's Identification of Parmenides' Subject

The goddess specifies the two ways of inquiry for understanding as follows: 'the one [sc. way] that [it] is and that [it] is not not to be' ($\hat{\eta} \mu \dot{\nu} \nu \tilde{\sigma} \pi \omega s \tilde{\epsilon} \sigma \tau \iota \nu \tau \epsilon \kappa \alpha i \tilde{\omega} s o \tilde{\nu} \kappa \tilde{\epsilon} \sigma \tau \iota \nu \mu \hat{\gamma} \epsilon \tilde{\iota} \nu \alpha \iota$, fr. 2. 3) and 'the other [sc. way] that [it] is not and that [it] must not be' ($\hat{\eta} \delta' \tilde{\omega} s o \tilde{\nu} \kappa \tilde{\epsilon} \sigma \tau \iota \nu \tau \epsilon \kappa \alpha i \tilde{\omega} s \chi \rho \epsilon \tilde{\omega} \nu \tilde{\iota} \epsilon \sigma \tau \iota \nu \mu \hat{\gamma} \epsilon \tilde{\iota} \nu \alpha \iota$, fr. 2. 5). Identifying the unexpressed subject of the verb $\tilde{\epsilon} \sigma \tau \iota \nu$ ('is') in these verses has been thought crucial to understanding Parmenides' thought, for it would seem that the subject here becomes the subject in the portion of the poem traditionally referred to as the 'Truth'. More simply, one naturally wants to know just what it is that Parmenides is talking about. One of the most influential proposals regarding the subject of the bare 'is' and 'is not' in the goddess's specification of the first two ways has been that it is whatever can be thought and talked about. Considering the interpretive choices on which this proposal rests, its philosophical background, and ultimately its inadequacies will help us identify some of the conditions upon an adequate understanding of the ways of inquiry presented in fr. 2.

The continued influence of this proposal, which goes back to Russell, is largely due to the impact of Gwil Owen's seminal 1960 article, 'Eleatic Questions'. Owen properly rejected the two proposals most commonly endorsed at the time, namely that Parmenides' subject in fr. 2 is $\tau \delta$ $\dot{\epsilon} \delta v$, 'being' or 'what is', and, alternatively, that it is a Pythagorean 'One' or 'One Being'. The details of these proposals need not be reviewed here, for Owen's criticisms proved powerful enough to remove them from serious consideration.⁷² A more direct and decisive objection to the once widespread view that 'being' is Parmenides' subject would be given by Leonardo Tarán: 'there is nothing in the context to suggest such a subject. At such an early stage of the argument there is no reason to suppose that Parmenides assumes his reader to be in a position to supply a definite subject.'⁷³ This simple but forceful criticism has

⁷² See Owen 1960: 55–9.

Tarán 1965: 33, with refs. to those who had taken this line.

been echoed by Jonathan Barnes: 'nothing in the context of [fr. 2] could reasonably suggest to even the most careful reader that by "it is" Parmenides meant "what is, is". The term "what is" does not appear in B1 or in [fr. 2], and it is not the sort of term a reader would naturally supply for himself'. 74 Owen found his subject in the reason given, in the fragment's last two lines, for rejecting the second path: 'What is declared to exist in B 2', he wrote, 'is simply what can be talked or thought about; for the proof of its existence is that, if it did not exist, it could not be talked or thought about.'75 Parmenides would even appear to announce the identity of his subject explicitly at fr. 6. 1a, which Owen took to mean 'what can be spoken and thought of must exist'. As we shall see in more detail momentarily, Owen's proposal revived and developed a line of interpretation propounded earlier by Bertrand Russell.

In time, some who found Owen's proposal philosophically attractive came to recognize that it was subject to an objection that had bedeviled earlier proposals. The identification of the subject as whatever can be talked and thought about derives from the reason at fr. 2. 7–8 for rejecting the second path of inquiry. But an audience could hardly be expected to see that this is what the goddess is talking about upon first hearing her specification of the paths at fr. 2. 3 and 2. 5. Owen's proposal demands of the audience the kind of leaping to and fro that readers with the full text before them may engage in but that no person hearing the poem recited could be expected to perform. Thus Tarán objected that 'there is nothing in the text of fr. [2] to suggest that the subject of ἔστιν is "what can be talked or thought about". ⁷⁶ Tarán would once again be echoed by Barnes, who found the notion that the first path amounts to 'what can be thought of exists' untenable since

nothing in the introductory context of [fr. 2] suggests such a supplement for 'esti' at line 3; reflexion on the subsequent argument may indeed lead us to 'what can be thought of', but it will also lead us to berate Parmenides for a gratuitously roundabout and allusive way of expressing himself; for the most careful reader, on this view, will only understand the crucial lines of [fr. 2] after he has read a quantity of later verses.⁷⁷

This problem led Barnes, not to reject Owen's proposal, but to modify it so that the subject might be found in the immediate context, specifically in the implicit object of $\delta \iota \zeta \dot{\eta} \sigma \iota o s$ in fr. 2. 2.⁷⁸ Thus, according to Barnes, the first path 'says that whatever we inquire into exists, and cannot not exist'. Barnes's modified Owenian line has since been endorsed by influential interpreters. Thus, for example,

⁷⁴ Barnes 1982a: 162, after expressing some doubts about Owen's objections.

⁷⁵ Owen 1960: 60.

⁷⁶ Tarán 1965: 35. See also Tarán's telling criticisms of Owen's detection of this proposed subject in fr. 2. 7-8 and fr. 6. 1.

⁷⁷ Barnes 1982*a*: 163.

An alternative, likewise seeking guidance from the immediately preceding context, is the proposal by Kahn 1969: 710, that the unexpressed logical subject of the thesis ἔστι or '[it] is' is 'the object of knowing, what is or can be known. As already indicated above, however, this requires one to understand $voe\hat{i}v$ in Parmenides as a strong cognitive verb, a requirement which proves untenable.

Malcolm Schofield, in his thoroughly reworked chapter on Parmenides in the revised edition of Kirk and Raven's *The Presocratic Philosophers*: 'What is the "[it]" which our translation has supplied as grammatical subject to Parmenides' verb *estin*? Presumably, any subject of enquiry whatever—in any enquiry you must assume either that your subject is or that it is not.'⁷⁹ More than a decade later, Lesley Brown could propose to accept without discussion 'the prevailing view that Parmenides is talking about *whatever can be enquired into*'. ⁸⁰

While Owen's main objections to earlier attempts at identifying Parmenides' subject in fr. 2 were primarily philosophical, the objection that led to the modified Owenian line now so prevalent is primarily philological. However, both proposals that Parmenides' implicit subject is whatever one can talk or think about, and that it is whatever one may inquire into—encounter a fundamental problem. What sense does it make to suppose that Parmenides took as his starting point the idea that whatever one can think and speak about, or inquire into, must be in the way specified in fr. 2. 3: 'that [it] is and that [it] is not not to be'? Certainly there are innumerable things one can think and speak about, or inquire into, that, for instance, are and yet need not be. Neither Barnes nor Owen, to be perfectly fair, wishes to attribute to Parmenides the implausible view that whatever one can think or speak of necessarily is. Instead, Owen takes the goddess's point to be that whatever can be thought or spoken of exists or (what is taken to be the same thing) must exist when one thinks or speaks of it. In this way, Owen can treat as equivalent the two formulations, 'what can be thought or spoken of exists' and 'what can be talked or thought about must exist. 81 Barnes is less sanguine about Parmenides having distinguished between the claims that any possible object of inquiry exists necessarily and that, necessarily, any possible object of inquiry exists. 82 Both find the modal clause at fr. 2. 3b troubling, and yet their efforts to minimize its significance torture the sense of the clause and saddle Parmenides with a charge of befuddlement. 83 Nevertheless, many of those who adopted this line of interpretation saw the notion that Parmenides believed that whatever one inquires into, or speaks and thinks about, (necessarily) exists as having the merit of representing him as concerned with a philosophical problem that played an important role in the early history of analytic philosophy. This alleged merit should now be seen as a particular cause for concern.

Russell's Treatment of Parmenides

Clearly, Owen's attribution to Parmenides of the supposition that whatever one can think or speak about must exist was deeply influenced by Bertrand Russell's

⁷⁹ Kirk et al. 1983: 245.

⁸⁰ Brown 1994: 217.

⁸¹ Owen 1960: 60.

⁸² See Barnes 1982a: 164.

⁸³ See Goldin 1993 for an effort to develop an interpretation on essentially Owenian lines that avoids imputing this confusion to Parmenides.

treatment of Parmenides against the background of his own abiding concern with the problems of analysis posed by negative existential statements. One must not lose sight of the fact that Owen was developing a line of interpretation Russell advanced in the little chapter devoted to Parmenides in *A History of Western Philosophy*. The essence of Parmenides' argument, according to Russell, is as follows:

When you think, you think of something; when you use a name, it must be the name of something. Therefore both thought and language require objects outside themselves. And since you can think of a thing or speak of it at one time as well as another, whatever can be thought of or spoken of must exist at all times. Consequently there can be no change, since change consists in things coming into being or ceasing to be. 84

Here the unargued identification of the subject of Parmenides' discourse as 'whatever can be thought of or spoken of' prefigures Owen's 'whatever can be thought and talked about'. There follows in Russell's *History* an exposition of the problems involved in speaking meaningfully about non-existent subjects, such as George Washington or Hamlet, after which Russell restates the first stage of Parmenides' argument as follows: 'if a word can be used significantly it must mean *something*, not nothing, and therefore what the word means must in some sense exist.' ⁸⁵

Russell's representation of Parmenides' argument is strikingly reminiscent of his own exposition in *The Principles of Mathematics* of the apparent paradoxes that arise when we attempt to understand negative existential statements:

Being is that which belongs to every conceivable term, to every possible object of thought—in short to everything that can possibly occur in any proposition, true or false, and to all such propositions themselves. Being belongs to whatever can be counted. If A be any term that can be counted as one, it is plain that A is something, and therefore that A is. 'A is not' must always be either false or meaningless. For if A were nothing, it could not be said not to be; 'A is not' implies that there is a term A whose being is denied, and hence that A is. Thus unless 'A is not' be an empty sound, it must be false—whatever A may be it certainly is. Numbers, the Homeric gods, relations, chimeras and four-dimensional spaces all have being, for if they were not entities of a kind, we could make no propositions about them. Thus being is a general attribute of everything, and to mention anything is to show that it is.

At this stage of the development of his thinking on the problem, Russell inclined towards the view that there are non-existent objects such as the present king of France—that is, that such things are even if they do not exist. With the 1905 publication of 'On Denoting' and the first presentation of his theory of descriptions, Russell of course came to reject this idea altogether. But in the 1945 *History*, he treats Parmenides as something like a precursor of his earlier self. At least one of the fallacies Russell attributes to Parmenides, namely that 'words have a constant meaning', ⁸⁷ Russell suggests can be avoided by realizing that in employing a name for a non-existent entity like 'George Washington' one always has in mind

Russell 1945: 49.
 Russell 1903: 449.
 Russell 1945: 50.

some description (for example, 'the first President of the United States') that may be substituted for the name in a truth-preserving manner and that captures the sense in which one is in fact employing the name.

Not surprisingly, given the pedigree of the identification, Russell's view of Parmenides has continued to influence those who identify Parmenides' implicit subject as any possible object of inquiry. The influence is unapologetically manifest in Schofield's summary of fr. 2's argument:

From the unknowableness of what does not exist Parmenides concludes directly that the negative way is 'indiscernible', i.e. that no clear thought is expressed by a negative existential statement. We might put the point thus: 'Take any subject of enquiry you like (e.g. Mr Pickwick). The proposition "Mr Pickwick does not exist" fails to express a genuine thought at all. For if it were a genuine thought, it would have to be possible to be acquainted with its subject, Mr Pickwick. But that possibility does not obtain unless Mr Pickwick exists—which is exactly what the proposition denies.' This line of argument, in one guise or another, has exercised a powerful attraction on many philosophers, from Plato to Russell. Its conclusion is paradoxical, but like all good paradoxes it forces us to examine more deeply our grasp of the concepts it employs—notably in this case the relations between meaning, reference, and existence. 88

So pervasive, in fact, has the Russellian line become in philosophical circles that it is now common practice to refer to the problem of negative existentials as 'Parmenides' Paradox'. For example, in a 1980 article of this title, J. K. Swindler presented 'Parmenides' Paradox' as encompassing two closely related problems: how statements denying something's existence can be true, and how statements predicating properties of what does not exist can be true. The Russellian line has more recently been given a popularizing presentation in Roy Sorensen's *A Brief History of the Paradox*, the third chapter of which begins with the claim that 'Parmenides argued that it is impossible to think about what is not the case.... We can only think about what exists' and proceeds to the conclusion that '[b]y Parmenides' reasoning, there is at most one meaningful statement. For if there were two, then one statement would have a meaning that the other statement does not have '89

Kirk et al. 1983: 246. Cf. Woodbury 1958: 151: 'Parmenides is in search of the right road to the truth about reality. For him a negative existential statement about the world cannot provide such a road, for it can only mean that the real world does not exist. A road that denies the existence of its destination cannot lead anywhere. This is the sense that we must attribute to Parmenides' doctrine that the way of not-being is neither thinkable nor speakable'; Furth 1968: 116–27, on the unintelligibility of negative 'is' statements; Hintikka 1980: 9 (cf. 13 et passim): 'What Parmenides wanted to establish is that a successful thought-act presupposes that its object exists'. Thus Mourelatos 1979: 3, could pronounce it among the points of consensus to have emerged from English-language scholarship on Parmenides in the 1960s and 1970s that '[t]he negative route, ouk esti, "is not," or mē einai, "not to be," is banned because sentences that adhere to it fail to refer (semantically speaking) to actual entities'.

89 Sorensen 2003: 28, 35.

Problems with the Russellian Line

It is a curious feature of the discussion of Parmenides in Russell's History that it makes no mention of Parmenides' introduction of the first two ways of inquiry in fr. 2. Russell's summary of the foundations of the Way of Truth begins instead with fr. 2. 7-8 + fr. 3, translating them as: 'Thou canst not know what is not—that is impossible—nor utter it; for it is the same thing that can be thought and that can be'. 90 What would seem to explain this peculiarity of Russell's presentation is that his understanding of Parmenides was very much influenced by the representation of Parmenides in Plato's Sophist in connection with the problem of falsehood and that he allowed this representation to guide his engagement with the Parmenidean fragments themselves. At any rate, Sophist 236 D-237 A, 241 D, and 258 C-E can certainly appear, when divorced from their fuller context, to lend Platonic authority to the modern view of Parmenides himself as puzzled by the paradoxical character of negative uses of the verb 'to be' and as thereby driven to identify successful reference to what is as a necessary condition of meaningful discourse. 91 I have already endeavoured to show in *Plato's Reception of Parmenides* how these passages need to be understood against the fuller background of Plato's uses of Parmenides, in both this and other dialogues, especially since Plato in dialogues such as the Symposium and Republic seems to have seen Parmenides as anticipating fundamental distinctions of his own metaphysics and epistemology. Not only is it important to consider how the representations of Parmenides in the Sophist relate to Plato's uses of Parmenides in these dialogues⁹² and in the *Parmenides*, ⁹³ but one needs also to appreciate how the uses of Parmenides already current in sophistic circles crucially shaped Plato's engagement. One of the most important of these sophistic uses of Parmenides is in fact reflected in formulations of the paradoxical claim that falsehood is impossible.⁹⁴ The Sophist's appeals to Parmenides in its problematization of the phenomena of appearance and falsehood are properly understood as reflecting

⁹⁰ Russell 1945: 49. The same neglect of the ways of inquiry in fr. 2 is a feature of the presentation of Parmenides' philosophy in Sisko 2003: 87–9, where all he has to say about this crucial fragment is that '[Parmenides'] initial argument centers on the unintelligibility of negation. He argues that no thing can be nothing and no thing can be fruitfully described as not-a-thing (DK 28 B 2).'

⁹¹ While it seems virtually certain that the references to Parmenides in these passages coloured Russell's view of Parmenides, Russell is of course not the only one to have been so influenced, even if in most cases the influence is not overtly acknowledged. See, however, Pelletier 1990: ch. 2.

 $^{^{92}}$ In particular, one needs to take account of how the treatment of what is not at all $(\tau \delta \mu \eta \delta \alpha \mu \hat{\omega} s \delta v)$ at *Sophist* 237 B 7–239 C–3 hearkens back to the use of Parmenides already made in *Republic* 5. Compare esp. the echoes of Parm. fr. 2. 7–8a at Pl. *R.* 5. 477 A 1 and at *Sph.* 238 C 8–11 (cf. 237 B 7–8, 238 B 6–8). See Palmer 1999 a: chs. 3 and 6 (esp. pp. 136–8).

The representation of Parmenides in the ontological 'doxography' at Sph. 242 C–243 A and in

The representation of Parmenides in the ontological 'doxography' at Sph. 242 C–243 A and in the subsequent examination of its monists at 244 B–245 D proves to be a compressed re-enactment of certain portions of the Platonic Parmenides' dialectical examination of his own thesis in the earlier dialogue. See Palmer 1999a: ch. 7.

⁹⁴ See Palmer 1999*a*: 124–34.

recognizably sophistic appropriations of the Eleatic legacy that Plato himself will want to counteract.⁹⁵

One should not, then, take the mention of Parmenides at *Sophist* 237 A as representing Plato's considered view of his predecessor at this time. This is at any rate one of the main points I tried to demonstrate in my earlier monograph, precisely because I had come to be concerned about the way this passage has seemed to many who took it in isolation to confirm broadly Russellian readings of Parmenides. Not only is it mistaken to suppose that Plato's authority sanctions and supports the view of Parmenides as holding that no clear thought is expressed by a negative existential statement and thus that whatever can be thought or spoken of must exist, this modern view of Parmenides (like the often accompanying view that he was a strict monist) in fact mirrors a sophistic appropriation of Parmenides that Plato was intent upon combating.

The Russellian line also appears to misrepresent the philosophical concerns of the historical Parmenides. As already noted, some interpreters found this line of interpretation attractive because it presented Parmenides as already at work on a problem that would be important for twentieth-century philosophical analysis. The passage of time, however, has made it less impressive to be told that Russell's problems were Parmenides'. Already in 1970, Alexander Mourelatos could object to the blithe anachronism of Owen's version: 'It is hard to believe,' he protested, 'although Owen appears to welcome this implication, that Parmenides has more in common with philosophers such as Meinong, Frege, Russell, and Moore than with his predecessors and successors in Archaic Greece'. 96 While this is an important point, one is on shaky ground trying to argue anachronism when dealing with a thinker as original and innovative as Parmenides. If one suggests that the paradoxes of negative existential statements are unlikely to have presented themselves to a thinker in his place and time, one can expect the reply that their having done so is a sign of Parmenides' philosophical genius, with the qualification that it is hardly surprising that so early a thinker should have found the problems here so confusing. Fortunately, there is a better way of dealing with the Russellian line, namely by directly demonstrating its interpretive inadequacy. In particular, there are three shortcomings that prove debilitating. First, adherents of the Russellian line either simply ignore or otherwise attempt to minimize a critical feature of the goddess's specifications of the first two paths of inquiry. Second, the line fails to account for the presence of the second path. Third, it misconstrues the significance of the very declaration at the end of fr. 2 that is supposed to constitute the actual prohibition against speaking or thinking of what does not exist. It is also a problem that on the Russellian line Parmenides is judged a fundamentally confused thinker. By contrast, the modal interpretation of Parmenides' ways of inquiry developed in the subsequent section of

Plato raises questions about the legacy of Parmenides in the opening of both the *Parmenides* and the *Sophist* in ways that suggest Plato was well aware of these prior appropriations. See Palmer 1999a: 91–123.
Mourelatos 1970: p. xiv.

this chapter is not only free from these failures but reveals Parmenides to be making philosophical points of lasting importance.

Russellian interpretations of fr. 2 typically take '[it] is' and '[it] is not' in fr. 2. 3a and 2. 5a as more important than the modal clauses in these verses' second halves. As already noted, Russell himself actually passed over Parmenides' characterization of the first two paths of inquiry altogether and in fact began his account of the foundations of the Way of Truth with fr. 2. 7-8 and fr. 3. Others, unwilling to go quite that far, have nevertheless neglected or otherwise minimized the importance of the modal clauses in the goddess's description of the first two ways of inquiry. Since we have already drawn attention to this feature of Owen's and Barnes's readings, 97 here we may note that it is a common feature of a broader range of analytically inspired approaches to Parmenides. Montgomery Furth's 'Elements of Eleatic ontology', for example, identified fr. 2's ways of inquiry as '[it] is (estin)' and '[it] is not (ouk estin)' without even alluding to the modal clauses that feature in Parmenides' original specifications. 98 Charles Kahn's 'The Thesis of Parmenides' at least acknowledged the presence of these clauses, while nonetheless expressing puzzlement as to their significance: 'Why does Parmenides add the modal clauses in 2. 3 and 2. 5? I have no definite solution', Kahn wrote, though he did proceed to offer some speculative solutions to the problem of their presence. 99 In general, however, he preferred to deal with 'the bare choice between ἔστι and its denial' (taking this to be in effect a statement of the principle of non-contradiction). This tendency to ignore or downplay fr. 2. 3b and 2. $5b^{100}$ would be totally unjustifiable were it not for the retrospective that comes a quarter of the way through fr. 8. There the choice presented in fr. 2 is represented simply as: '[it] is or [it] is not' (ἔστιν ἢ οὐκ ἔστιν, fr. 8. 16). Even so, it is presumptive to take this simple dichotomy as a licence to discount the modal clauses in the goddess's first and fullest specifications of the first two paths of inquiry. 101 We need, instead, first to make an attempt to understand these specifications as given in fr. 2 before considering why the two paths are subsequently referred to as they are at fr. 8. 16.

⁹⁷ With which compare Kirk et al. 1983: 246 n. 1.

⁹⁸ Furth 1968: 116. 99 Kahn 1969: 707 n. 9.

¹⁰⁰ Cf. e.g. Hintikka 1980, where the existence of the modal clauses at fr. 2. 3b and 2. 5b likewise goes unacknowledged; MacKenzie 1982: 2, where Parmenides is characterized as adding to the foundational premise 'you can think and speak' 'a further premise: "either *esti* or not-*esti*" (fr. 2)'; and Graham 1999: 165, where an account of Parmenides' influence on Empedocles and Anaxagoras begins with the claim, 'Parmenides had stated that there are two ways of inquiry that can be thought, that (it) is or that (it) is not'.

Denis O'Brien is one recent interpreter who recognizes that that modal clauses are not to be ignored: 'Les deux Voies présentées par la déesse au fr. 2 ne se réduisent pas en effet à ce simple dilemme: "est", "n'est pas". La déesse rattache à l'une at à l'autre de ces deux assertions une proposition modale' (O'Brien 1987a: 140). Even so, O'Brien's interpretation of the modal clauses still tends to minimize their significance. See below, pp. 98–9 with nn. 127–8. Similarly, Ketchum 1990: 174–5, thinks it 'tempting to include the modal phrases as essential parts of the description of the ways' but then quickly finds reasons for ignoring them, none of which are compelling.

Secondly, identification of Parmenides' implicit subject as what can be thought or spoken of fails to explain why the second way is presented as another way of inquiry parallel to the first. Who would ever suppose that there is anything to discover along a way of inquiry according to which whatever one can think or speak of does not exist? Even though the goddess is quick to warn Parmenides off this path, it nevertheless is presented as a possible way of inquiry along which one could conceivably proceed. Russell and Owen's identification of the unexpressed subject makes it impossible to understand why this should be the case. The same problem confronts the proposal that Parmenides' subject is anything one might inquire into. Who would suppose that whatever one proposes to inquire into does not exist? While advocates of the Russellian line have had much to say about why one must stay off the second path, they have considerably less to say about why one would ever be tempted onto it in the first place. The most they can do is speak of how natural it is to assume that we can inquire into things that do not exist. But if the implicit subject of the first path is the more general 'whatever we inquire into' (Barnes) or 'any subject of enquiry whatever' (Schofield), then this has to be the implicit subject of the second path as well, in which case it yields an assumption that one can no longer attribute to any sane inquirer, namely, that whatever we inquire into does not exist. 102

That the Russellian line also misconstrues fr. 2. 7-8, the very lines that give it its impetus, will become clear once we understand the rest of fr. 2, without discounting the modal clauses in its specification of the two paths of inquiry, and once we understand why the second path is presented alongside the first. There are also other questions we may hope to answer. The difficulties encountered by even the best proposals regarding the absent subject of fr. 2. 3 and 2. 5 might well lead to doubts about the legitimacy of attempts to supply one. Before attempting to do so, perhaps one should ask: why do the verbs ἔστιν and οὖκ ἔστιν have no readily identifiable subject? One might expect an interpretation to explain just this fact. Why has Parmenides chosen to express himself in this way? One can say that he expected something he has not said to be understood, or that he was forced by metrical exigencies to leave his subject unexpressed. Before taking this step into the quicksand of speculation regarding what he might have meant but did not say, one might first try to proceed on the assumption that Parmenides could and did say what he meant to say. This interpretive demand can be met if one takes more seriously the organizing metaphor of the paths of inquiry.

¹⁰² The same problem confronts the proposal at Kahn 1969: 710, that Parmenides' subject is 'the object of knowing' or 'what is or can be known'. What seeker after knowledge would ever be tempted to pursue a path of inquiry which involves assuming from the outset that the object of knowing is not (and must not be)? How could *this* be thought a way of inquiry for knowing?

A MODAL INTERPRETATION OF PARMENIDES' WAYS OF INQUIRY

Fr. 2. 3 and 2. 5 as Ways of Inquiry

The goddess directs Parmenides in an inquiry whose goal is understanding (νόημα, $\tau \dot{\rho} \nu o \epsilon \hat{\iota} \nu$). At the outset she indicates two paths along which he might proceed in his search, describing them as the only ways of inquiry there are for (achieving) understanding (ὁδοὶ μοῦναι διζήσιός εἰσι νοῆσαι, fr. 2. 2). She likewise makes it clear at the end of the Way of Conviction that understanding has been a major goal of the inquiry when she announces that her 'trustworthy account and meditation | regarding true reality' (fr. 8. 50b-1a) has come to an end and then reminds Parmenides that he will not find understanding $(\epsilon \dot{v} \rho \dot{\eta} \sigma \epsilon \iota s \tau \dot{o} \nu o \epsilon \hat{\iota} v)$ unless he focuses his attention on τὸ ἐόν or What Is, the attributes of which the Way of Conviction has just demonstrated, given its role as both the proper object and the cause of understanding (fr. 8. 34-7a) That a goal of the inquiry is, more specifically, understanding that does not wander is made clear by Night's presentation of a third path that is followed by 'mortals who know nothing' (fr. 6. 4) and that leads to 'wandering thought' (πλαγκτὸν νόον, fr. 6. 6). Consistent with the oracular setting of revelation, Night thus projects for Parmenides an understanding that surpasses that of ordinary mortals, even if there are other things she accomplishes for him.

The two ways of inquiry that lead to understanding that does not wander are: first, 'that [it] is and that [it] is not not to be' (fr. 2. 3)—that is to say, 'that [it] is and that [it] cannot not be'—and, secondly, 'that [it] is not and that [it] must not be' (fr. 2. 5). It should be unnecessary to insist on presenting these two paths in their entirety and in such a way that both the simple assertoric and the modal clauses are given equal weight, for nothing here indicates that one should suppose otherwise. Nothing here suggests either that '[it] is' ($\epsilon \sigma \tau \nu$) in fr. 2. 3a and '[it] is not' ($o \nu \kappa \epsilon \sigma \tau \nu$) in fr. 2. 5a are the only important elements in these lines, that they are any more important than the modal clauses that follow, or that somehow the significance of the modal clauses is already present in the assertoric clauses. Taken in their entirety, each line appears to demarcate a distinct modality or way of being. We might find it natural to call them, respectively, the modality of necessary being and the modality of necessary non-being or impossibility. While some qualification will be required, these rough characterizations will do for the moment.

Although in fr. 2 the goddess presents two ways of inquiry for achieving understanding, it is best not to identify the supposedly unexpressed subject in fr. 2. 3 and 2. 5 with whatever one is inquiring about in one's search for such understanding. Not only is this quite a lot to get out of fr. 2. 2, but whatever one might identify as the subject in fr. 2. 3 must be able to function as the subject of the parallel constructions in fr. 2. 5; the possibility that the subject here might be whatever one inquires into in one's search for understanding founders on the same difficulty we have seen afflicting similar proposals. Who would ever begin a search for understanding by supposing at the outset that its object is not and must not be?

There is also a more general and important reason to be wary of all such attempts to supply a subject in these lines. Amidst the ongoing controversy over the identity of Parmenides' subject, the presumption that one must supply *some* subject for the bare verb $\ell\sigma\tau\iota$ ('[it] is]') in fr. 2. 3 and 2. 5 has hardly been questioned. I want to suggest, however, that this presumption is misplaced, in so far as it undermines the significance of Night's representation of fr. 2. 3 and 2. 5 as two *ways of inquiry* ($\delta\deltao\delta\delta\iota$) $\delta\iota\zeta\eta\sigma\iota\sigma s$). As such, they are neither presuppositions of inquiry nor assumptions or declarations one makes at the outset of an inquiry. They are, instead, themselves ways of inquiring, in which one presumably persists throughout one's inquiry, just as a traveller remains throughout his journey on the path he is travelling.

What, then, will it mean to inquire along the path, 'that [it] is and that [it] cannot not be'? What is one actually to do in following this path? Even such simple questions can seem difficult to answer, for the following reason. Anyone directed to inquire along this path might well wonder just what he or she is searching for or inquiring after. The answer that one's goal is understanding, or even understanding that is not prone to wander, is not particularly illuminating; for this is only to be told what cognitive state one may expect to achieve through this inquiry. One will still want to know more about just what one is supposed to be looking for and how to search for it. It might even seem necessary to have more of a conception of what one is looking for before embarking on the inquiry. It is possible, of course, that the goddess provided Parmenides with some fuller description of the goal of his inquiry in some lost portion of her address prior to our fr. 2, though we will probably never know if this was the case. It is likely, however, that Parmenides was in fact told no more about the goal of his inquiry at the outset than what one can still glean from fr. 2 itself and from the goddess's opening address at the end of fr. 1. There Night said he is to learn 'the unshaken heart of well-rounded reality' (fr. 1. 29), and her criticism of mortal apprehension implied that he will achieve 'genuine conviction' (fr. 1. 30)—and this rather spare information is precisely reflected in fr. 2. 4's description of the first way of inquiry as the 'path of conviction' that 'attends upon true reality'. An inquirer at this stage might justifiably feel that it is little help to be told that he or she is looking for 'reality'. Particularly since the goddess implies that ordinary human understanding has as yet failed to apprehend it, being told that reality is the goal of one's inquiry will likely leave one at a loss as to how to set about discovering it.

Worries such as these, however, may actually help us understand what it means for 'that [it] is and that [it] cannot not be' to define a way of inquiry. Note, first, that this specification of the first path indicates that what Parmenides is looking for is what is

Mourelatos 1970: 275, likewise objects to the tendency to abandon Parmenides' metaphor of the $\delta\delta\delta$ s (for which he thinks 'route' is the least misleading translation) in speaking of fr. 2. 3 and 2. 5 (and fr. 8. 1–2) variously as 'theses', 'premises', 'assumptions', 'starting points', and 'points of departure'. Cf. Mourelatos 1969: 741, for his particular criticism of Kahn 1969 for quickly abandoning Parmenides' own governing metaphor of the routes of inquiry to talk instead of Parmenides' 'thesis', 'assertion', 'claim', or 'premiss' in fr. 2. 3 and its 'antithesis' in fr. 2. 5: 'The transformation of Parmenides' vocabulary of "routes" into one of "theses," and the related endeavor to second-guess the subject of $\varepsilon\sigma_1$... are clear indications of the discrepancy between Kahn's formulation of the two routes and the Parmenidean conception'.

and cannot not be—or, more simply, what must be. Parmenides might well be anxious to know just what this is, or even to know what, if anything, enjoys the modality of necessary being (and by the same token what, if anything, enjoys the modality of necessary non-being or impossibility). The goddess's enigmatic reticence may seem frustrating. Again, just *how* is he supposed to discover what must be, or even begin searching for it? The answer would seem to be: by staying resolutely on the indicated path while trying to conceive of what such an entity must be like. Pursuing this path of inquiry requires maintaining a constant focus on the modality of the object of his search as he tries to attain a fuller conception of what an entity that is and cannot not be, or that must be, must be like. Conversely, following this path requires that he resolutely reject any conception of the object of his search that proves incompatible with its mode of being.

The goddess in fact leads Parmenides through the development of a progressively more detailed conception of what what must be must be like in the trustworthy account and meditation on reality that comprises the major portion of fr. 8. There, at many points along the path, she will warn Parmenides that he must not admit any conception of the object of his search incompatible with the requirement that it is and cannot not be. For instance, he must not imagine that it came to be from not being, she says, 'for not to be said and not to be thought | is it that it is not' (fr. 8. 8b-9a); and soon thereafter she reminds him of the original choice between the two paths presented in fr. 2 by way of repeating her injunction to stay on the first. These are just two of the most obvious points along the Way of Conviction in fr. 8 where the goddess reminds Parmenides of what the first way of inquiry demands. When in Chapter 4 we come to explore in detail the arguments deployed in fr. 8 in developing a fuller conception of what must be, we shall see the goddess recurring in numerous other ways as well to the fundamental principle articulated in fr. 2. 3's initial specification of this first way, that it is and cannot not be 104

This fact suggests the possibility of understanding fr. 5—'It is a common point for me | from which I shall begin (ἄρξωμαι): for there I shall come back again'—as a comment by the goddess on the recursive character of her argumentation. The 'common point' to which she refers may well be the point from which the first path of inquiry does in fact begin, namely the fundamental principle 'that it is and that it cannot not be'. For her arguments do recur repeatedly to just this point. Cf. Hölscher 1969: 77 and 118. While fr. 5 is so brief, enigmatic, and bereft of context that any interpretation of it can only be speculative, the suggestion here at least has the following merits. (i) It avoids any notion of the goddess's starting point being arbitrary or indifferent, this notion resting on a mistranslation of $\xi v v \acute{o} v$ that is contradicted by the carefully structured character of her subsequent reasoning (cf. Cordero 1984: 172-3; Bodnár 1985: 58-9 and 61). (ii) It identifies the common point to which she says she will return. (iii) It does not take the fragment as a license for Parmenides to engage in circular reasoning (contra Raven in Kirk and Raven 1957: 268 and 276). Finally, (iv) on the proposed interpretation, fr. 5 connects up nicely with fr. 6. 3: 'For I shall begin for you from this specification of a way of being is not only the common point to which her arguments in the Way of Conviction return but also, again, their obvious point of departure, as her uses of ἄρξωμαι (fr. 5. 2) and $\langle \tilde{a}\rho \xi \omega \rangle$ (fr. 6. 3) indicate.

Parmenides' Pre-Logical Conceptions of Modality and Truth

With this understanding of what will be involved in inquiry along the path that it is and cannot not be, we can now proceed to clarify our preliminary characterization of the two paths of fr. 2 as marking the modalities of necessary being and necessary non-being or impossibility. One needs to be careful in employing the language of modality when dealing with Parmenides, for he was not yet in a position to conceive of necessity and impossibility as logical properties, that is, as properties that indicate the relation of predicate to subject in a statement or thought. Parmenides belongs to an early stage in the development of philosophical reflection when thinkers had not yet recognized the role concepts and propositions play in our apprehension of objects and states of affairs. This role only began to be recognized during the age of the sophists, and recognition of it would become the norm among philosophers once Plato had grappled with the confusion and paradox the more complex conception engendered among some of his sophistic predecessors. While it would be impractical here to try to provide anything approaching a detailed account of this transition, I trust historians of Greek philosophy, and readers of Plato in particular, will be familiar with the fact of its occurrence. Here I will merely draw attention to three critical moments in the process in the hope that a brief discussion of them may help us work back into the more archaic framework within which Parmenides operates. We shall then see that not only does he have no conception of necessity and impossibility as logical properties but also, by the same token, that he is not concerned in any philosophically serious manner with truth as a logical property.

Three early advances in the philosophy of language

The first critical moment comes at the point in Plato's Sophist where struggles with the sophistic paradox of the impossibility of falsehood finally lead to the first plain and recorded articulation of a set of fundamental ideas in philosophical logic and the philosophy of language. These include the basic ideas that truth is a logical property, that it is thus derivatively a property of thoughts and beliefs in so far as they are to be understood as unvoiced utterances, and that an account of the nature of truth requires analysing propositions into their subject and predicate components. These ideas emerge in the conclusion of the dialogue's central discussion, at 261 C-264 B, but these pages are of course the culmination of long-standing concerns on Plato's part. Plato's moves in this passage now seem very rudimentary. However, the deliberate and painstaking steps he takes when he marks the distinction between 'names' ($\partial v \delta \mu \alpha \tau \alpha$) and 'verbs' ($\delta \eta \mu \alpha \tau \alpha$) to indicate how their 'interweaving' or combination first generates significant speech or statements (λόγοι), together with the way he then proceeds to analyse truth and falsity each as a certain specific quality (ποιόν τινα, Sph. 262 E 9, 263 A 12) possessed by each λόγος and concomitantly by thoughts and beliefs as the unvoiced analogues of statements, all indicate the originality of these points and thus the difficulty he must have anticipated his contemporaries and perhaps even his pupils in the Academy would have in understanding them. At this point in the history of philosophy, these are all

groundbreaking notions. Plato's pioneering work here is neatly reflected in the first chapter of Aristotle's *On interpretation*, where he writes:

Just as some thoughts in the soul are neither true nor false, while some are necessarily one or the other, so also with spoken sounds. For falsity and truth have to do with combination and separation. Thus names and verbs by themselves—for instance 'man' or 'white' when nothing further is added—are like the thoughts that are without combination and separation; for so far they are neither true nor false. A sign of this is that even 'goat-stag' signifies something but not, as yet, anything true or false—unless 'is' or 'is not' is added. (Arist. *Int.* 1. 16^a9–18, tr. Ackrill)¹⁰⁵

The apparent and utter simplicity of the points Aristotle makes here, as well as the matter-of-fact manner in which he makes them, both tend to obscure the fact that hard work was required to achieve even this much. That these simple points had not always been understood is shown by the fact that the sophistic paradox of the impossibility of falsehood could have become one of the hot philosophical problems of the day.

Not only did Plato essentially have to develop from scratch the elements of a semantic theory represented in the *Sophist* and in the initial sections of Aristotle's *On interpretation*, in doing so he also had to overcome an older way of thinking. He was not quite the first philosopher to recognize that concepts and propositions mediate our cognitive access to the world. Although independent evidence for previous understanding of the problems in this area is sparse, the following excerpt from a summary of Gorgias' *On nature, or On what is not* gives perhaps the best idea of how little development there had been prior to Plato. The passage summarily reports the first set of considerations Gorgias employed in arguing for the third main thesis of this treatise, that even if something is and is knowable, it cannot be made clear to others:

But even if things are knowable, how would one, he says, reveal them to another? For what one has seen, how could one, he says, express this in speech $(\lambda \delta \gamma \varphi)$? Or how could that become clear to the listener without his having seen it? For just as sight does not recognize sounds, likewise hearing does not hear colours but sounds; and *one who speaks speaks, but he does not speak a colour or a thing.*

As for what one does not have a conception of, how will one form a conception of it from someone else's words or any other sign $(\lambda \delta \gamma \psi \eta) \sigma \eta \mu \epsilon (\psi \tau \iota \nu) \epsilon \tau \epsilon \rho \psi$ of the thing, unless one sees it, in the case of a colour, or hears it, in the case of a sound? For in the first place a speaker does not speak a sound or a colour, but words $(\lambda \delta \gamma o \nu)$; so that it is not possible to conceive a colour, but only to see it, nor is it possible to conceive a sound, but only to hear it (Gorg. ap. [Arist.] MXG 980°20– $^{\rm b}$ 9).

 $^{^{105}}$ Cf. Arist. Int. 2. $16^{\rm a}19-21$, 3. $16^{\rm b}6-7$, Po. 20. $1457^{\rm a}10-18$ and 23–7, all passages preserving the basic terminology of $\partial v \dot{o} \mu a \tau a$ and $\dot{\rho} \dot{\eta} \mu a \tau a$ Plato deploys at Sph. 262 A 1 ff. for the principal presignificative components of statements. Note also how closely Arist. Cat. 2. $1^{\rm a}16-19$ echoes the point of Pl. Sph. 261 D 8–E 2.

The translation is based on the text in Buchheim 1989.

The MXG author subsequently distills these considerations as to why we purportedly cannot communicate the things we have apprehended into the simple reason that things are not words ($\delta\iota\dot{a}\ldots\tau\dot{o}$ $\mu\dot{\eta}$ $\epsilon\dot{\ell}\nu a\iota$ $\tau\dot{a}$ $\pi\rho\dot{a}\gamma\mu a\tau a$ $\lambda\dot{o}\gamma o\nu s$, 980^b 19–20). While this point obviously could not have gone unnoticed before him, one nevertheless finds among earlier thinkers nothing remotely resembling the kind of exploration of the problems for communication and understanding Gorgias' reflection on it produced.

To clarify the points made in the passage, let S_1 and S_2 be two persons, and let x be an object S_1 perceives. Gorgias' first major point is that S_1 may attempt to communicate or reveal x to S_2 by means of an utterance containing a linguistic representation of x as S_1 has perceived it. However, since objects are not words, how could S_1 produce an adequate linguistic representation of x in the first place, especially one that will be capable of 're-presenting' x to S_2 in anything like the way x was originally presented to S_1 in his or her actual perception? There are genuinely philosophical problems here, not just trivial sophisms. Gorgias' initial focus is on the inadequacy of the sonic properties of utterances to represent other types of sensory qualities. In the second section of the passage, however, his concern shifts to the broader problem that the words used to pick out or refer to an object are limited in their capacity to do so because they can never be more than signs or indicators. Gorgias wonders how S_2 could ever form a conception of x such as S_1 has obtained by actually perceiving except by perceiving x for himself. In special cases like the one where S_1 attempts to get S_2 to conceive of some colour that S_2 has never actually seen, philosophers even today would be prone to agree with Gorgias that no amount of description of the colour by S_1 is likely to be totally successful. However, Gorgias' negative verdict will be premature if he supposes all cases are like this. While successful communication requires a share of common experiences and concepts among its participants, in most ordinary cases these conditions are satisfied. Whatever we think about the conclusions he apparently tried to draw, the problems here are genuine and important. Gorgias is venturing into unexplored territory properly belonging to the philosophy of language.

What is important for our immediate purposes is, again, that among the Presocratics there is nothing like this problematization of the relation between epistemic agents and the objects and states of affairs in the world. The reason would seem to be that they had yet to take proper account of the fact that our apprehension of the world is mediated by a level of conceptualization and linguistic representation. The transition to the new model of understanding and inquiry is most famously represented in the account of Socrates' intellectual development in Plato's *Phaedo*. One sees the archaic model of the unmediated relation between epistemic agents and the world being abandoned when Socrates describes his decision to stop trying to investigate and examine things themselves and instead to consider things 'in language', that is, via the medium through which we represent things to ourselves conceptually:

... when I had wearied of investigating the things that are $(\tau \hat{\alpha} \ \tilde{o} \nu \tau a)$, I thought that I must be careful to avoid the experience of those who would watch an eclipse of the sun, for some of

them ruin their eyes unless they watch its reflection in water or some such material. A similar thought crossed my mind, and I feared that my soul would be altogether blinded if I looked at things ($\tau \grave{\alpha} \ \pi \rho \acute{\alpha} \gamma \mu a \tau a$) with my eyes and tried to grasp them with each of my senses. So I thought I must take refuge in language ($\tau o \grave{v}_S \ \lambda \acute{o} \gamma o v_S$) and investigate the truth of the things that are by means of it. However, perhaps the analogy is inadequate, for I certainly do not admit that one who investigates the things that are by means of language ($\grave{\epsilon} v \ \lambda \acute{o} \gamma o \iota_S$) is dealing with images any more than one who does so directly. (*Phd.* 99 D 4–100 A 3, after Grube)

Socrates' rejection of any notion that his investigation of things via the intermediary of their linguistic representations is in any way inferior to efforts to grasp things directly is a sign of his recognition that there really is no other option. Since knowledge of objects and states of affairs in the world is always mediated by their conceptual representation in language, there is no way of sidestepping these representations in favour of some more direct mode of inquiry. One important implication of this passage is that earlier philosophers had not yet recognized the inevitability of this form of inquiry. In this instance, the term 'Pre-Socratic' seems altogether apt.

$\dot{a}\lambda\eta\theta\epsilon\dot{i}\eta$ and $\dot{a}\lambda\eta\theta\dot{\eta}s$ in Parmenides

Parmenides' poem reflects throughout the more archaic, 'Pre-Socratic' vision or framework. One sees it perhaps most notably in the way he employs the noun $\partial \lambda \eta \theta \epsilon i \eta$ and the adjective $\partial \lambda \eta \theta \dot{\eta} s$. While in many, including earlier, authors these terms are appropriately translated as 'truth' and 'true', ¹⁰⁷ in Parmenides they are better translated as 'reality' and as 'real' or 'genuine', for reasons that may now be made clear. While there have been numerous studies of the concept of truth in the archaic period, the facts of Parmenides' usage, rather than that of other authors, must be given primacy in an effort to determine the sense and function of the terms in his poem.

 $^{^{107}}$ For an excellent study of the Greek truth vocabulary in Homer and other authors prior to Parmenides, see Cole 1983. Among other things, Cole shows how $d\lambda\eta\theta\eta$'s in its early uses refers almost exclusively to the informational content of communication, marking it as free from $\lambda\eta\theta\eta$, i.e. forgetfulness or some other form of inattentiveness; $d\lambda\eta\theta\epsilon$ (η thus marks a kind of mindfulness displayed in a person's speech. What someone says will be characterized as 'true' when it is recognized as complete and omitting no relevant particular, but also when it is free from irrelevant and thus potentially misleading details (10). Thus while Homer standardly employs $d\lambda\eta\theta\epsilon$ (η and $d\lambda\eta\theta\eta$'s to refer to a feature of things that are said, this feature is distinct from the logical property of truth, primarily because it is something much more subjective. (For refs. to earlier studies of the archaic Greek truth vocabulary, see Germani 1988: nn. 2, 6, and 7.)

about or regarding $\partial \lambda \eta \theta \epsilon i \eta$, and she qualifies the account itself as $\pi \iota \sigma \tau \delta s$ or 'trustworthy'. What does it mean to say the account has been about or regarding $\partial \lambda \eta \theta \epsilon i \eta$? Surely not that she has been expounding some kind of primitive truth theory. It is only slightly less implausible to suppose that she has been providing an account of 'the true' or what is the case. Here the most straightforward and obvious way of understanding the function of the term $\partial \lambda \eta \theta \epsilon i \eta$ is as a designator, almost even a name, for the entity whose properties have been derived in the preceding account. What she has been describing for Parmenides is $\partial \lambda \eta \theta \epsilon i \eta$ itself.

The noun also appears to function in this manner in its two other occurrences in the poem. In the first of these, the goddess tells Parmenides that he must learn 'the unshaken heart of well-rounded $\partial n\theta \epsilon i\eta$ (fr. 1. 29). The adjectives here anticipate properties she subsequently demonstrates belong to her subject in the major deduction of fr. 8. The adjective 'unshaken' $(a\tau\rho\epsilon\mu\dot{\epsilon}_S)$ here in fr. 1. 29 recurs at fr. 8. 4 in the programme for that deduction and is picked up in the argument beginning at fr. 8. 26. Likewise, the epithet 'well-rounded' (εὐκυκλέος) in fr. 1. 29 anticipates the account of this entity's perfection, culminating in the description of it as 'like the bulk of a well-rounded (εὐκύκλου) sphere' (fr. 8. 43). Puzzlement as to what might possibly be meant by describing truth itself as 'well-rounded' has led some to accept the variant reading $\epsilon \vartheta \pi \epsilon \iota \theta \acute{e}os$ in fr. 1. 29 (taking it to mean 'persuasive'), even though it most likely entered the text as a gloss on εὐκυκλέος. ¹⁰⁸ One might perhaps try to understand this term as a metaphorical expression of truth's consistency, were it not that too often the need to resort to interpreting Parmenides' words as metaphorical is a sign of interpretive failure. If, however, one takes $\partial n\theta \epsilon i \eta$ as a designation for the entity whose nature is elucidated when the goddess leads Parmenides along the first path of inquiry, then the epithet 'well-rounded' no longer seems so mysterious—at least not in retrospect. The anticipation of the penultimate and ultimate demonstranda in fr. 8's deduction here in the adjectives of fr. 1. 29 is in keeping with the verse's function as part of the goddess's first programmatic statement. It is likewise consistent with this purpose that she should designate for Parmenides what she will reveal to him as having these attributes, namely $d\lambda\eta\theta\epsilon i\eta$ itself. In a similar vein, the goddess at fr. 2. 4 describes the first path of inquiry as 'the path of conviction' because it 'attends' or 'follows' $\partial \lambda \eta \theta \epsilon i \eta$. This description of the first path of inquiry expresses much the same idea as the goddess's description of the account developed by following that path as an account 'regarding $\partial n\theta \epsilon i \eta$ ' (fr. 8. 51a).

Thus Night consistently employs the noun $\partial \lambda \eta \theta \epsilon i \eta$ as an appellation for the entity Parmenides will come to apprehend by following the first way of inquiry. Given this function, the term is better, because less ambiguously, translated as 'reality' rather than 'truth'. To translate $\partial \lambda \eta \theta \epsilon i \eta$ as 'truth' can imply that Parmenides is somehow interested in isolating the conditions of true speech and thought, when in fact his inquiry is directed towards apprehension of whatever is in the manner specified in fr. 2. 3, that is, whatever is and cannot not be. This is what the goddess calls $\partial \lambda \eta \theta \epsilon i \eta$.

¹⁰⁸ See the appendix's textual note on fr. 1. 29: εὐκυκλέος.

It is 'truth' only in the sense of what truly is, 'true reality'. The point here is not a new one, but it is essential for avoiding some of the more anachronistic misinterpretations of Parmenides' philosophy. Coxon gets the point right in his comment on the use of $\dot{a}\lambda\eta\theta\epsilon\dot{i}\eta$ at fr. 1. 29: 'P[armenides] uses the word $\dot{a}\lambda\eta\theta\epsilon\dot{i}\eta$ thrice in the extant fragments...; in each case the context shows that it denotes not truth as an attribute of thought or language but objective reality'. 109 Likewise, Thomas Cole has described how with Parmenides the term $\partial \lambda \eta \theta \epsilon (\eta)$ comes to have 'a purely or primarily objective sense'; he speaks perceptively of 'the tendency of Greek thinkers, beginning with Parmenides, to assume that the truly real must display the same qualities as the content of strict and careful (alēthēs) discourse.... the earliest passage in which the extension of meaning has clearly taken place is Parmenides' famous account...of journeying along a path which is simultaneously that of reality, investigation and truth'. 110 It is thus off the mark to describe the first way of inquiry and/or the major deduction of fr. 8 as either 'the Way of Truth' or, simply, the 'Truth', as many commentators have done. This point, too, has been made before, by Alexander Mourelatos when he rightly points out that the goddess never in fact refers to this central portion of Parmenides' poem as the 'Way of Truth' but instead calls it the 'path of conviction' $(\pi \epsilon \iota \theta \circ \hat{v}_S \dots \kappa \epsilon \lambda \epsilon \nu \theta \circ S, \text{ fr. 2. 4a}).^{111}$

The goddess, again, at fr. 8. 50–1a does not describe her account about true reality as $\partial \lambda \eta \theta \dot{\eta} s$ but instead as $\pi \iota \sigma \tau \dot{\sigma} s$, 'trustworthy' or 'reliable'. This usage is consistent throughout the fragments. She never once describes anything she says to Parmenides as $\partial \lambda \eta \theta \dot{\eta} s$ or 'true'. By the same token, she never describes her account of mortal views as $\psi \epsilon \nu \delta \eta s$ or 'false'. Instead, she marks it as unreliable or 'deceptive' $(\partial_{\mu} \pi \tau \eta \lambda \delta \nu)$, fr. 8. 52). When Parmenides employs the adjective $\partial_{\mu} \eta \delta \eta$, it always has the sense of 'real' or 'genuine'. For instance, at fr. 8. 17–18 the goddess describes the first path of inquiry as $\epsilon \tau \acute{\eta} \tau \nu \mu o \nu$ and the second, in parallel fashion, as a way that is not $\partial \lambda \eta \theta \dot{\eta} s$. Here the two adjectives, to all appearances synonymous in this context, may be translated as 'true' but only if this is understood as having the sense of 'real' or 'genuine'. The English adjective 'true' is so used in phrases like 'the true cross' or 'a true connoisseur'. Likewise, in post-Homeric Greek it is possible to speak, for example, of an $\partial \eta \theta \dot{\eta} s \phi i \lambda \sigma s$ or 'true friend' (cf. Eur. Or. 424), though this sense is somewhat more common with the adverb $\partial \lambda \eta \theta \hat{\omega}_{S}$, 'truly', that is to say, 'really' or 'genuinely' (so e.g. Hdt. 1. 11, 2. 174, 3. 17; Simon. 542. 1). When the goddess describes the first path as $\epsilon \tau \dot{\eta} \tau \nu \mu o \nu$, she means that it is real or genuine, a 'true way' in just this sense. Likewise, when she describes the second way as one that

¹⁰⁹ Coxon 1986: 168.

¹¹⁰ Cole 1983: 25. Ibid. 24 and 26 for examples of the objective sense's emergence in Pindar and Sophocles. Cole sees the possibility of Parmenidean influence, esp. on Pindar, noting in particular the possible echo of Parmenides in Pi. P. 3. 103–4: $\epsilon i \delta \dot{\epsilon} \nu \dot{\epsilon} \omega \tau \iota s \xi \chi \epsilon \iota \theta \nu a \tau \dot{\omega} \nu \dot{\alpha} \lambda a \theta \epsilon \dot{\iota} a s \delta \dot{\delta} \dot{\kappa} \nu, \chi \rho \dot{\eta} \tau \rho \dot{\delta} s \mu a \kappa \dot{\alpha} \rho \omega \nu \mid \tau \nu \gamma \chi \dot{\alpha} \nu \nu \nu \tau' \dot{\epsilon} v \tau \dot{\omega} \tau \dot{\alpha} \alpha \chi \dot{\epsilon} \mu \epsilon \nu$ ('But if any mortal has in his thought the path of truth, he must fare well since he has met favour with the blessed ones'). Useful discussion of $\dot{\alpha} \lambda \eta \theta \dot{\epsilon} \dot{\eta} \dot{\gamma} s$ early history as well as its use by Parmenides may also be found in Mourelatos 1970: 63–7. Unfortunately, Mourelatos reintroduces the idea that the first way of inquiry is the 'veridical route' or the route of truth by mistaking the sense of $\dot{\epsilon} \tau \dot{\eta} \tau \nu \mu \sigma \nu$ at fr. 8. 18.

is not $\partial \lambda \eta \theta \dot{\eta} s$, she means that it is not a true way, again in this sense, for the reason she then goes on to state, namely that it leads nowhere. It is worth noting that although she says at fr. 8. 17b–18a that the second way is not a real or genuine one, she does not mean that it is not a way at all, for she has herself presented it as one in fr. 2. To say that x is not a true, real, or genuine x is not to say that it is not an x at all or that it is only an ersatz x. In this respect, Parmenides' use of $\partial \lambda \eta \theta \dot{\eta} s$ differs from typical English uses of 'real' and 'genuine'. This will be an important point to bear in mind as we consider how Parmenides conceives of the distinction between reality and appearance.

The adjective $\partial \lambda \eta \theta \eta s$ is elsewhere twice used by Parmenides as modifying $\pi i \sigma \tau \iota s$. In the first instance, the goddess says there is no $\pi i \sigma \tau i s$ $\partial n \theta \eta s$ in the notions of mortals (fr. 1. 30); later, after arguing that what must be can suffer neither generation nor destruction, she says that $\pi i \sigma \tau i s \ a \lambda \eta \theta \eta s$ has driven them both off (fr. 8. 28). One sometimes finds the phrase translated as 'true belief', but this is inappropriate if taken to indicate an agent's state of holding certain propositional content true when it is in fact true. In the first passage, the point is not that there is no true belief in mortal notions, in this sense of 'true belief', but that there is no genuine trustworthiness or conviction in the portion of her account that will follow after her account of true reality. Not just a generic term for belief, $\pi i \sigma \tau \iota s$, in subjective uses like the one here, has the sense of 'trustworthiness'; in its more typical, objective sense it means 'trust', 'faith', 'confidence', or 'assurance'. Confidence, trust, and assurance are 'true' when they are the kind that will not be disappointed, when they are reliable, when they are worthy of the name—in short, when they are real or genuine. Although this is anticipating our argument somewhat, the goddess says there is no genuine trustworthiness in the notions of mortals because they are focused on entities other than that just described in the Way of Conviction, that is, the entity whose permanent and perfect nature makes it an altogether trustworthy object of apprehension.

'True belief' is likewise a poor means of rendering $\pi i \sigma \tau \iota s$ $d\lambda \eta \theta \eta s$ at fr. 8. 28, where it has a more objective sense. Here Night's assertion that $\pi i \sigma \tau \iota s$ $d\lambda \eta \theta \eta s$ has driven off generation and destruction comes as part of a reiteration of the conclusion reached in fr. 8. 5–21, that what must be is ungenerated and deathless. We have already seen how following the path of conviction will involve refusing to admit any conception of whatever enjoys the modality specified at fr. 2. 3 inconsistent with its way of being. Just as following this path yields genuine conviction, comprising the apprehension of true reality or what must be, likewise $\pi i \sigma \tau \iota s$ $d\lambda \eta \theta \eta s$ has, by the time we reach fr. 8. 28, 'driven off' generation and destruction as possible attributes of what must be because the goddess has shown how their attribution would involve conceiving of what must be as not being, which following the path of conviction prohibits one from doing (cf. fr. 8. 8b–9a, 8. 15–18). Thus 'genuine conviction' reflects the sense of the phrase $\pi i \sigma \tau \iota s$ $d\lambda \eta \theta \eta s$ here at fr. 8. 28 much better than 'true belief'.

Consideration of the remaining occurrence of $\partial \lambda \eta \theta \dot{\eta} s$ at fr. 8. 39 will be best postponed until we are in a better position to understand the goddess's analysis of mortal error. It will prove consistent with the conclusion we can already draw from examining Parmenides' uses of $\partial \lambda \eta \theta \epsilon \dot{\eta} \eta$ and his other uses of $\partial \lambda \eta \theta \dot{\eta} s$, namely, that he

is not much concerned with truth as a logical property. Parmenides consistently employs the term $\partial n\theta \epsilon i \eta$ to designate the entity whose nature is progressively revealed in fr. 8 as Night leads Parmenides along the first way of inquiry— $d\lambda\eta\theta\epsilon i\eta$ here is 'truth' in the sense of 'true' or 'genuine reality.' Likewise, $d\lambda\eta\theta\eta$'s always means 'true' in the sense of 'real' or 'genuine'. Never once does the goddess qualify her statements to Parmenides as $\partial n\theta \eta s$. Instead, she describes them as trustworthy or reliable and as furnishing $\pi i \sigma \tau i s$ $\partial \lambda \eta \theta \eta s$ or 'genuine trustworthiness'. His use of these terms is perfectly consistent with the broader point that thinkers of his era had yet to develop a concern with logical properties as such. We ought thus to set aside as anachronistic readings of Parmenides that represent his thought as dominated by issues in truth-theoretical semantics or by a concern with isolating the general features of sentence-forms that have the logical property of truth. The anachronism of such readings should have always been apparent. At the very least, some of the wild conclusions they generated should have been recognized as deeply suspect-for instance, that all that can be said of what is is 'it is', that there can be at most one true sentence, that all true sentences mean the same thing, and other such absurdities. 112 Unfortunately, in the 1960s and 1970s there was such excitement among certain Anglo-American philosophers working on Presocratic philosophy about bringing the tools of logical analysis to the study of Parmenides in particular that some of the normal canons of interpretation were suspended. It should now be apparent, however, that Parmenides was not concerned with truth as a logical property and, a fortiori, that he was not concerned with isolating the conditions of true statements. Parmenides was not, in short, an archaic logician.

Parmenidean modality and the verb 'is'

What I have thus far spoken of as the Parmenidean modalities of necessary being and necessary not-being or impossibility are likewise not to be understood as logical properties. They are instead modes of being or ways for entities themselves to be. For instance, an entity that is in the way specified in fr. 2. 3 is and cannot not be. Being in such a way that it cannot not be is a way in which an entity can exist or be what it is. I will avoid calling such a thing a 'necessary entity' or a 'necessary being', even though one might well adopt such an idiom. Instead, I will refer to this less technically as 'what must be' or even, reflecting Parmenides' own idiom, simply as 'what is'. This locution, however, must not be understood as indicating what must be the case but, instead, always as indicating what one might otherwise describe as a necessary being or entity. In other words, Parmenides is not concerned with necessary truths as much as with what exists and is what it is necessarily. With this point, our exposition has

¹¹² Such e.g. are the principal claims attributed to Parmenides at Furth 1968: 129–30: 'the statement that something is asserts the same as the statements that [ostensibly] something else is', 'Of what is, only one thing can be said', and 'The only true thought is that thought that it is'. That these are patent absurdities Furth as much as acknowledges when he admits that Parmenides must have been mad if he really thought these things (131). They are all generated by Furth's relentless pursuit of what he took to be the 'central Parmenidean doctrine', namely that 'it cannot be said that anything is not' (111). It will become clearer as we proceed that Parmenides held no such 'doctrine'.

reached a stage where an issue that has dominated discussion of fr. 2, and thereby discussion of Parmenides' philosophy more generally, can no longer be avoided, namely that of the sense of the verb $\epsilon i \nu a \iota$ in its description of the first two paths. For this issue bears crucially on how we are to understand the first two ways of inquiry as specified in fr. 2. 3 and 2. 5. Fortunately, enough of a consensus has emerged in the past few years that it will not be necessary to rehearse the issues here at too great a

At one time, it was thought that a more accurate and exacting analysis would result from reading ancient philosophical texts through the lens of Frege and Russell's distinctions among uses of the verb 'is'. Thus, for a time, historians laboured over such questions as whether Plato and Aristotle relied on a distinction between the socalled 'is' of identity and the 'is' of predication. Likewise, it was once fashionable to accuse Parmenides of confusing the 'is' of existence with the predicative 'is'. 114 However, the extensive work by Charles Kahn in this area would show that Frege and Russell's distinctions could not so easily be mapped onto uses of the Greek verb εἶναι, for it was used in ways that correspond to none of the uses Frege and Russell distinguished in developing first order predicate logic. Of particular importance for our purposes is Kahn's description of a complete use of $\epsilon i \nu \alpha \iota$, a use that does not require a complement, according to which it means, not 'exist', but 'is true', 'is the case', or even 'is real'.

Kahn argued that this 'veridical' sense of the verb features most prominently in Parmenides, Ignoring the modal clauses in fr. 2. 3b and 2. 5b, Kahn read the fragment as offering a choice between two options: 'it is true' and 'it is not true', interpreting this as an articulation of the principle of non-contradiction. 115 As others would point out, however, the effort to develop a 'veridical' reading of Parmenidean being encounters intractable difficulties. 116 One major problem is the following. When the original decision of fr. 2 to follow the path 'it is' and to reject 'it is not' is recalled in fr. 8's first major argument, this is in order to furnish the major premise for the argument that what is cannot have come to be. The essence of the argument (which we will analyse in due course) is that if what is comes to be, prior to its

¹¹³ Brown 1994 provides an excellent overview and discussion that will bring the reader up to

date. 114 This charge ultimately goes back to John Stuart Mill. It is still to be found in e.g. Kirk and Raven 1957: 269–70.

115 Kahn 1969. Cf. Kahn 1966: 251.

e.g. O'Brien 1987a: 157–8, points out that none of the conditions Kahn himself identifies (1973: 337) as indicating that the verb is employed veridically are in fact satisfied in Parm. fr. 2. 3 and 2. 5. O'Brien contrasts these verses with Pl. Hp.Ma. 282 A 4: ἔστι μὲν ταῦτα, ὧ Σώκρατες, $o\tilde{v}\tau\omega_{S}$ $\dot{\omega}_{S}$ $\sigma\tilde{v}$ $\lambda\epsilon\gamma\epsilon\iota_{S}$, where the verb has an enunciative subject $(\tau\alpha\hat{v}\tau\alpha)$ referring to a previous utterance and is accompanied by a single determinative, the adverb $o\tilde{v}\tau\omega s$, which here establishes the relation between what has been uttered ($\dot{\omega}_S \sigma \dot{v} \lambda \dot{\epsilon} \gamma \epsilon_{iS}$) and what is the case ($\ddot{\epsilon} \sigma \tau_i$). O'Brien then mounts a more extended critique of Kahn's proposal (158-63), where he concludes that the decision to adopt a veridical understanding of Parmenides' ἔστιν and οὖκ ἔστιν must be judged arbitrary and unauthorized by anything in the context of the fragment. Cf. Mourelatos 1969: 738–40, for the objections that on Kahn's veridical reading much of the argument in fr. 8 becomes redundant and that he 'exploits the interpretive possibilities of the veridical etvat only halfheartedly'.

generation it must not be, but it is illicit to suppose that it is not; therefore, what is is ungenerated. Here it certainly seems that $\epsilon \sigma \tau \iota$ must have some existential force. If so, it must also have some existential force in the original specification of the two paths in fr. 2; for fr. 8. 16–18 remind Parmenides that it is not possible for what is not to be by recalling the choice first made there.

To be perfectly fair, it is possible to construe $\ell\sigma\tau\iota$ veridically even in this argument of fr. 8, though at the cost of having to understand much of Parmenides' language metaphorically. 117 One could try to read the argument just summarized as saying that what is the case cannot have come to be the case, for if it comes to be the case, then previously it must not have been the case, whereas it is illicit to suppose that it is not the case; therefore, what is the case cannot have come to be the case but must have always been the case. Reading $\xi \sigma \tau \iota$ veridically here makes it sound as if Parmenides is concerned with what is always the case, with invariable or necessary truths. If one were to take into account the modal clause in fr. 2. 3b while reading $e^{i}\sigma\tau\iota$ veridically in that verse, one might even suppose that such a concern is evident from the outset, for the first path would then be: 'it is the case and it cannot not be the case'. The problem with this is that if one construes $\epsilon \sigma \tau \iota$ veridically in the parallel specification of the second way of inquiry, the reasons the goddess gives for barring Parmenides from this path cease to be compelling, for one can know and speak of or indicate what is not the case. For example, one can know and indicate that it is not snowing, or that Socrates is not in the agora, even though he was there earlier. One can even know and indicate what is not the case and must not be the case. For instance, that there cannot possibly be such a thing as a round square. If the objects of Parmenides' inquiry were necessary truths or necessarily true propositions, he should have realized that as many truths await discovery along the second path as along the first. That a square is not round and that it must not be round is a truth that might have been taken to lie along the second way of inquiry. There would be countless other truths of this type. It thus tells strongly against the possibility of a sensible veridical reading that if one does not ignore the modal clauses in the original specification of the first two paths of inquiry (and ignoring them is, of course, indefensible), then one must accept the possibility of meaningful inquiry along the second path, contrary to what the goddess indicates. 118

Gradually, it has come to be appreciated that the existential and predicative senses are effectively 'fused' in the Greek verb $\epsilon lval$. ¹¹⁹ One way of expressing what this

Kahn himself was unwilling to go so far. He acknowledged that $\epsilon \sigma \tau_{\iota}$ needs to be understood existentially in much of fr. 8, prompting Mourelatos 1969: 740, to remark, 'It is surprising how close Kahn remains to the traditional view that Parmenides' $\epsilon \sigma \tau_{\iota}$ has basically existential force.'

Although Mourelatos 1969: 735–7, also criticizes Kahn's veridical reading for failing to

¹¹⁸ Although Mourelatos 1969: 735–7, also criticizes Kahn's veridical reading for failing to account for the character and presence of the second path, his criticisms are undermined somewhat by his apparent presumption that Parmenides means to deny that we can know truths involving non-existent objects or states of affairs.

Both Kahn 1966 and Furth 1968 recognized this fused usage but did not give it the prominence it has since come to have. Kahn has now admitted this defect in his earlier work on the Greek verb 'to be' and acknowledges that 'the copula use is implicitly existential, and ... most if not all existential uses of *einai* are potentially predicative' (1973/2003: p. ix). Cf. how Ketchum 1990: 168–9, proposes to treat many of Parmenides' syntactically incomplete uses of $\epsilon i \nu a \iota$ what

means is to say that complete uses of $\ell\sigma\tau\iota$ in the existential sense have implicit in them something of the incomplete or predicative sense, such that 'x is' or 'x exists' should be understood as meaning that x is F for some value of F, and, in parallel fashion, 'x is not' and 'x does not exist' amounts to x's not being F for any value of F. Conversely, an assertion of existence will be implicit in statements of the form 'x is F. Another way of expressing the point is to say, as Lesley Brown has nicely put it, that there is 'a continuous spectrum of uses with no sharp boundary between the complete and the incomplete, and a fortiori no boundary to which a semantic distinction could correspond'. 120 When we come to analyse the arguments along the path of conviction, we will find at least one point where the boundary between the existential and the predicative sense is blurred in just the way Brown suggests: in his arguments that what is does not come to be, Parmenides seems to want to argue both that it cannot come into existence and that it cannot come to be what it is not. In other words, Parmenides claims both that it must be (i.e. exist) and that it must be what it is. It is thus best to understand the description of the first path of inquiry that it is and that it cannot not be-as meaning both that it exists and cannot not exist, and that it is what it is and cannot not be what it is. A simpler way of reflecting the fusion of the complete and incomplete senses of the verb in the specification of the first path will be to include the complement parenthetically, as follows: 'that it is (what it is) and that it cannot not be (what it is)'. Either of these complementary senses may be brought to the fore, as the argument and exposition requires. For the most part, however, the existential sense remains more prominent. Even so, I shall continue to translate $\ell\sigma\tau\iota$ as 'is' even when this is the case. This is because, as Brown has so usefully argued, the Greek verb $\tilde{\epsilon}\sigma\tau\iota$ in its complete use, unlike the English verb 'exist', does in principle allow for completion. It is always possible in principle to respond to an assertion of the form 'x ἔστι' by asking 'x ἔστι what?' An appropriate answer in many cases will be 'x ἔστι what it is'.

If earlier efforts to draw a sharp line between complete and incomplete uses of $\epsilon\sigma\tau\iota$ can now be recognized as misguided, it should likewise be recognized that efforts to interpret Parmenides' philosophy as a whole based on any exclusive understanding of the verb are also misguided. We have already seen that a reading based on the socalled 'veridical' sense of the verb proves implausible. There remains the class of interpretations based on understanding the verb as exclusively incomplete or predicative. No one seems to have proposed an unqualified predicative reading. Instead, the prominent predicative readings advanced by Alexander Mourelatos, Alexander Nehamas, and Patricia Curd all see Parmenides as concerned with some restricted type of predication that reveals a thing's nature or essence. 122 Mourelatos speaks of

he calls 'uses of the incomplete copula', such that "x is" is to be understood in the proper context as "x is something or other." "x is not" is to be understood as "x is not anything at all or "x is nothing whatsoever"'.

Brown 1994: 225. This is what Brown means when she refers to $\epsilon\sigma\tau\iota$ as a 'verb of variable polyadicty'.

121 Ibid. 225, 236.

122 See Mourelatos 1970: ch. 2; Nehamas 1981: 106–8; Curd 1991 1998*a*.

the 'is' of 'speculative predication', such that in a statement of the form 'A is B', B gives the nature or essence of A. 123 Sufficient grounds for rejecting this idiosyncratic proposal to construe the first way's ἔστιν as picking out the proposition-form '_ is _____' or 'φx' and the second way's οὐκ ἔστιν as picking out the proposition-form is 'or ' $-\phi x$ ' were presented by David Furley and Leonardo Tarán, both of whom emphasized that Parmenides hardly could have expected any audience to understand ἔστιν and οὐκ ἔστιν as open sentences of these forms involving this socalled 'speculative predication'. 124 Furley thus reinforced what had rightly been the majority opinion all along, namely that $\epsilon \sigma \tau \iota$ in Parmenides must be understood as having some existential force. Nehamas would nevertheless try to revive Mourelatos's proposal by arguing that Parmenides understands 'is' in the very strong sense of 'is what it is to be', such that his concern is with 'things which are F in the strong sense of being what it is to be F'. 125

Against both Mourelatos and Nehamas, however, it should be pointed out that in those instances when a predicate may be thought to reveal the essence of its subject, it is neither necessary nor desirable to think of such cases as involving some special sense of the verb. Does one really want to say that the verb 'is' itself has different senses in the statements 'ice is frozen water' and 'ice is slippery'? While one will want to say that these predicates are of different types, and that they function differently in picking out aspects of their subject, one should not want to say that the verb itself has different predicative senses in these instances. (Unless, perhaps, one wants to say that the first statement contains the 'is' of identity, but neither Mourelatos nor Nehamas appears willing to go so far as to propose that Parmenides' $e^{\sigma \tau \iota}$ is the 'is' of identity.) Curd's suggestion that Parmenides advocated the position she terms 'predicational monism'—'that each thing that is can be only one thing; it can hold only the one predicate that indicates what it is, and must hold it in a particularly strong way, 126 is a more recent variant of the Mourelatos-Nehamas line. In the end, efforts to construe Parmenides' more significant uses of $\ell \sigma \tau \iota$ as exclusively predicative appear misguided. For, to repeat, the effective fusion of the existential and predicative senses in the Greek verb elvai entails that it is a mistake to base an interpretation of Parmenides on either sense exclusively. Given the unlikelihood, moreover, that Parmenides could realistically have expected his audience to recognize that his claims rely on the essentialist 'is' of speculative predication, or any other unusual and restrictive sense of the verb, it will be preferable if we can avoid having to imbue Parmenides' 'is' with such a sense.

Returning, then, to the Parmenidean modalities as they figure in fr. 2, we can now make it clearer just how 'that [it] is and that [it] cannot not be' (fr. 2. 3) picks out the

This proposal is heralded in Mourelatos 1969: 742-4, where it is presented it as 'a species of what might be broadly called the veridical "is." It is a peculiar hybrid of the predicative and (strictly) identifying uses of "is," and preserves elements of the grammar of both.'

¹²⁴ See Furley 1973: 11–14; Tarán 1977: 661. 125 Nehamas 1981: 107.

¹²⁶ Curd 1998a: 66, where this specification of what predicational monism amounts to is elaborated more fully. The very conception of a predicational monad, however, verges on incoherence. See further Palmer 1999b.

mode of necessary being. Whatever is in this way not only exists but cannot not exist, that is, must exist; and it not only is what it is but cannot not be what it is, that is, must be what it is. There is both a weaker and a stronger way in which this formulation might be understood. The weaker reading takes the modal clause as more or less epexegetic, as restating in a stronger form what is already stated in the first part of the verse. This is how the clause appears to be understood at one point by Denis O'Brien when he writes that fr. 2. 3b 'is probably intended as an assertion of the obvious. If something "is," then obviously it "cannot not-be". 127 In what sense, though, might this be thought obvious? Only if the two clauses are understood synchronically, such that at the time x is, x cannot not be at that very same time. For, clearly, that x is at one time is no guarantee that it is at some other time. Even if the modal clause is given this synchronic interpretation, it is unclear how the modality can be interpreted so as to make the inference valid. If I may momentarily adopt the less archaic conception of modality, the actuality of p does not entail the impossibility of not-p, for that p is the case in the actual world does not mean that there is no possible world in which not-p. All one can infer, with respect to the other modal properties of p, from the actuality of p is that it is possible that p, in so far as the actual world counts as a possible world. But the actuality of p is compatible with the contingency of p, that is, with p's being possible but not necessary.

One can always say, of course, that Parmenides was confused and did in fact suppose that 'it is' is equivalent to 'it cannot not be', but once again even this could only be the case if he meant the modal clause to be understood in a restricted or synchronic manner. Nothing suggests that this is the case. Particularly if $o v \kappa \, e \sigma \tau \iota$ in fr. 2. 3b is construed potentially, as the use of $\chi \rho e \omega v \, e \sigma \tau \iota$ at the same position in fr. 2. 5b suggests it should, the force of the modal clause would seem perfectly general. So it is when Achilles declares that it is not possible to fight against Zeus $(o v \kappa \, e \sigma \tau \iota \, \Delta \iota \iota) \, K \rho o v \iota \omega \iota \mu \dot{\alpha} \chi e \sigma \theta \alpha \iota$, Hom. Il. 21. 193) and again when Hesiod says that it is not possible to rob or evade Zeus' understanding $(w s \, o v \kappa \, e \sigma \tau \iota \, \Delta \iota \iota) \, \kappa \lambda \dot{\epsilon} \psi \alpha \iota \, v \dot{\epsilon} \sigma \tau \iota \, \Delta \iota \iota \dot{\epsilon} \, \kappa \lambda \dot{\epsilon} \psi \alpha \iota \, v \dot{\epsilon} \sigma \tau \iota \, \Delta \iota \dot{\epsilon} \, \kappa \lambda \dot{\epsilon} \, \psi \alpha \iota \, v \dot{\epsilon} \sigma \tau \iota \, \Delta \iota \dot{\epsilon} \, \kappa \lambda \dot{\epsilon} \, \psi \alpha \iota \, v \dot{\epsilon} \, \sigma \tau \iota \, \Delta \iota \dot{\epsilon} \, \kappa \lambda \dot{\epsilon} \, \psi \alpha \iota \, v \dot{\epsilon} \, \sigma \tau \iota \, \Delta \iota \dot{\epsilon} \, \lambda \dot{\epsilon} \, \Delta \iota \dot{\epsilon} \, \lambda \dot{\epsilon} \, \lambda \dot{\epsilon} \, \Delta \iota \, \lambda \dot{\epsilon} \, \Delta \iota$

¹²⁷ O'Brien 1987 a: 312. It is hard to find how this point, made in the English summary, figures either in O'Brien's presentation of the text or in the critical essay accompanying it. There he suggests that the modal clauses serve to make it clear that fr. 2's two paths of inquiry are incompatible and that there can be no intermediary path in which being and non-being are combined (mortal error consists in supposing the contrary): 'Certes, les deux assertions, "est", "n'est pas", sont bien contradictoires, mais l'emploi insolite de ces deux assertions seraient possibles sous des rapports différents, par exemple à des temps differents. Or, les deux propositions modales excluent cette possibilité de rapprochement' (219); 'Au début de son discours, la déesse s'en tient à une simple opposition: "est"/"n'est pas" (fr. 2). L'addition de propositions modales fait que ces deux assertions s'excluent.—L'affirmation "est" s'accompagne d'une proposition modale: "il est impossible de ne pas être." Cette impossibilité contredit l'assertion de la seconde Voie: "n'est pas."—De façon parallèlle mais inverse, l'assertion "n'est pas" s'accompagne d'une seconde proposition modale: "il est nécessaire de ne pas être." Cette necessité exclut l'affirmation de la première Voie: "est"' (224).

understood as perfectly general—as spanning all times rather than as restricted to the time of the assertion 'it is'.

So understood, the modal clause adds something both new and crucial. 128 The connective particles $\tau \in \kappa \alpha i$ already indicate that the second clause is not somehow subordinate to the first; their use is even compatible with the second clause being stronger than the first. Furthermore, as we shall see in more detail in Chapter 4, the additional modal specification is actually required for the inferences of fr. 8 to work. For instance, the goddess will argue that what lies along the first path of inquiry cannot have come to be, by pointing out that it could only come to be from a condition of not being, but that this is impossible since 'not to be said and not to be thought | is it that it is not' (fr. 8. 8b–9a). Here she appeals to a fundamental point already articulated in the specification of the first path of inquiry, though only in the modal clause: it is inconceivable that what lies along the first path of inquiry is not, precisely because 'it cannot not be' (fr. 2. 3b). It may be objected that this prohibition in fr. 8 against saying or thinking that it is not derives from the prohibition against embarking on the second path of inquiry, given that the goddess says at fr. 2. 7–8 that you could neither apprehend nor indicate 'what is not' $(\tau \hat{o} \mu \hat{\eta} + \hat{e} \hat{o} \nu)$. However, the goddess's point in the argument in question is not that 'what is not' is inconceivable, but that it is illicit to suppose that what lies along the first path of inquiry, that is to say, what is in the manner specified in fr. 2. 3, is not. It is the original specification of this mode of being, of which she repeatedly reminds Parmenides, that makes the supposition illicit.

It is regrettable that one has to belabour the point that the modal clauses in the goddess's specification of the first two paths of inquiry should not be ignored. Unfortunately, ignoring them or otherwise minimizing their significance has become so common in Parmenidean scholarship that many interpreters hardly feel the need to justify their disregarding the latter halves of the two most important verses in the poem. I would nevertheless hope that anyone not conditioned by previous instruction or acquaintance with the literature to ignore fr. 2. 3b and 2. 5b would realize that 'that it is and that it cannot not be' amounts to a specification of some kind of necessity and that 'that it is not and that it must not be' specifies some kind of impossibility. How, exactly, one should understand this necessity and impossibility is the only real issue, not whether they are present in the first place. I have therefore spent some time arguing that the Parmenidean modalities should not be understood as characterizing statements or propositions. Instead, they should be understood as ways things can be. Inquiry along the first path requires entertaining only such ideas about the object of one's search as are compatible with its particular way of being, in accordance with which it is and it cannot not be. What one looks for along this path

¹²⁸ A parallel analysis is to be given of the second path and its modal clause. A weak reading of the modal clause 'it must not be' (fr. 2. 5b) is available, a reading reflected in the suggestion at O'Brien 1987*a*: 312, that 'if something "is not", then obviously it cannot be,—it "must not-be"'. Again, this is hardly obvious, even when the modal clause is read in the restricted, synchronic fashion. Not-*p* does not entail necessarily not-*p*. Here, too, it is best to take the modal clause as more than merely epexegetic.

of inquiry is what is and cannot not be, or, more simply, what must be. It is therefore appropriate to think of the first path as the path of necessary being and of what lies along it as necessary being or what is (what it is) necessarily. Even here one must be careful, however, for Parmenides' conception of modality is likely to have been an 'actualist' one, where possibility and necessity range not over possible worlds but over states of affairs at different times in the actual world. Thus what is and cannot not be will be whatever is (what it is) actually throughout the history of this world. Likewise, what is not and must not be will be whatever is not (any thing) actually at any moment in the world's history.

The Second Way of Inquiry

There are of course other ways for things to be, but not, according to Parmenides, other ways for things to be such that apprehension of them will figure as understanding that does not wander. This point brings us back to questions arising from the distinction between the first two ways of fr. 2 as 'the only ways of inquiry for (achieving) understanding' and the subsequent way of inquiry mortals are said to follow. Why is 'that [it] is not and that [it] must not be' (fr. 2. 5) presented as a way of inquiry at all? And how can it be presented as a way to achieve the goal of understanding when the goddess says one can have no apprehension of what is not? On just about any reading, it is difficult to understand why the goddess presents the second way of inquiry, given that she immediately warns Parmenides off it (fr. 2. 6-8) and later characterizes it as not a true or genuine way (fr. 8. 16-18). This second way appears to serve primarily as a formal alternative to the first, for Parmenides recognized that there are two stable modes of being, necessary being and necessary non-being. That mortals apparently recognize neither makes it appropriate for the goddess to mention both necessary modes. The second path is introduced alongside the first, then, as a 'way of inquiry for understanding' because the modality of necessary non-being or impossibility specified in fr. 2. 5 is just as constant and invariable as the modality of necessary being specified in fr. 2. 3 and, consequently, the understanding that results from pursuing it is, even if entirely negative, unwavering and, as such, in contrast with the wandering thought typical of mortals. To pursue an inquiry along the second path would be to consider what what is not and must not be must be like. The entirely negative result would be that it is not now or at any other time anything whatsoever.

If Parmenides had conceived of the necessary non-being or impossibility in question either as a logical property or as a way in which things might not be the case, rather than conceiving of it as a mode of being, then one might have expected him to have realized that there is a great deal of understanding to be acquired by inquiry along this second path. For there are innumerable necessary truths to be discovered regarding what is impossible or necessarily not the case: that it is impossible for a bachelor to be married, for instance, or that it is impossible for the interior angles of a quadrilateral to sum to 180°, that it is impossible for God to be the cause of evil, and so on. If inquiry along the second way involved looking for

what cannot possibly be true or the case, one would have to wonder why the goddess bars Parmenides from it. The question would only be aggravated by the fact that many of the points he discovers in fr. 8, as he is directed along the first way of inquiry, state what cannot be the case with respect to the proper object of his inquiry. For instance, the impossibility of its suffering either generation or destruction seems to be the point of the goddess's figurative conclusion at fr. 8. 13b-15a: 'neither to be born | nor to die has Justice allowed it, having loosed its bonds, | but she holds it fast'. In other words, it is impossible for it to be born or perish. But isn't this something Parmenides might have discovered by pursuing the second way? The answer, of course, has to be that it is not. The reason is that inquiry along the second way is not properly conceived of as looking for what is impossible or what is necessarily not the case. Again, the Parmenidean modalities are ways of being rather than logical properties. Failure to recognize this essential point will make inquiry along the second way seem possible and even worthwhile. That squares are not round and that they must not be round is a truth that might be taken to lie along Parmenides' second path of inquiry. What one will never discover, however, is any such thing as an actual round square, so that from Parmenides' somewhat archaic perspective it appropriate to describe the second way as one along which nothing may be discovered.

Inquiry along the second way involves, first, keeping in mind that what one is looking for is not and must not be, and thereby trying to discover what an entity that is in this way must be like. It is immediately evident, though, what an entity that is not and must not be is like: nothing at all. It is therefore perfectly intelligible that the goddess should warn Parmenides not to set out on the second path. One will never find what must not be. The goddess accordingly tells Parmenides at fr. 2. 6 that this is a path where nothing at all can be learnt by inquiry $(\pi a \nu a \pi \epsilon \nu \theta \acute{\epsilon} a \dots \mathring{a} \tau a \rho \pi \acute{\nu} \nu$, fr. 2. 6). There are no round squares, and it would be extremely foolish to go looking for one. There is something important in knowing, however, that one's inability to find or even conceive of a round square is not merely a temporary failure subject to reversal. The case of attempting to think about a round square is unlike the case of attempting to think about the present king of France. At the present moment, neither is there to be thought about. But in the latter case, unlike the former, one's failure of apprehension may change just in case there should ever again be a king of

130 Regarding impossible objects like the round square, Parmenides can be credited with the straightforward view that they are not and cannot be. By no stretch of the imagination could he be saddled with the Meinongian view that there somehow 'are' objects that cannot be.

¹²⁹ The adjective $\pi a \nu a \pi \epsilon \nu \theta \acute{e}a$ is commonly translated with a passive conative sense, as, for instance, in 'a path that none can learn of at all' (Burnet 1930: 173), 'altogether inconceivable' (Kirk and Raven 1957: 271), 'a path wholly unknowable' (Tarán 1965: 32), 'an altogether indiscernible track' (Kirk et al. 1983: 245), and 'a path wholly unlearnable' (Gallop 1984: 55). The point is surely not, however, that the way itself is unthinkable or indiscernible, for the goddess has just described it. Her point must be that there is nothing to be found along this way (cf. Mourelatos 1970: 24 n. 37). The sense of the phrase is thus better captured in a translation such as 'a path from which no tidings ever come' (Mourelatos 1970: 55) or 'a path wholly without report' (Coxon 1986: 52), which I have adopted. Coxon notes that while $\pi a \nu a \pi \epsilon \nu \theta \acute{e}a$ occurs only in Parmenides, $\partial \pi \epsilon \nu \theta \acute{\eta} s$ and $\partial \pi \nu \sigma \tau \sigma s$ occur in Homer with both active and passive sense (10).

France. In this case, unlike in that of the round square, one's non-apprehension may be only temporary, and there is no guarantee that it is not only temporary. One's non-apprehension is not fixed or determined, in that what is not available to be apprehended at this moment might well be there to be apprehended at some future time. The difference between these two cases helps us see why it is appropriate for the goddess to introduce the second way, that it is not and that it must not be, as a way of inquiry for understanding even though she immediately pronounces this a path along which one can learn nothing. Those who set out on this path will get nowhere, for their efforts to form a conception of what what must not be is like will inevitably fail. Their inability to apprehend what is in this way will persist, moreover, no matter how long they might press ahead in their inquiry. They will always be at the same point where they started. Their objectless thought will not wander, as mortal thought is ordinarily wont to do. It is appropriate, therefore, and not just poetic variation, that the goddess uses the term $a\tau a\rho\pi \delta s$ when referring to the second path in fr. 2. 6, for this synonym of δδός has the more specific sense of a path that does not turn (epic and Ionic $\partial \tau \alpha \rho \pi \delta s = \text{Attic } \partial \tau \rho \alpha \pi \delta s < \tau \rho \delta \pi \omega$, 'turn'). By contrast, the path of mortals who know nothing and who are ever subject to wandering thought is famously described as turning back upon itself ($\pi \alpha \lambda i \nu \tau \rho o \pi o s$, fr. 6. 9). We will have occasion in the next chapter to say more about why it is so described, but the contrast with the first two ways is plain enough. Each of the ways presented in fr. 2 is straight and unbending, in so far as the mode of being specified in each is necessary and invariable. In parallel fashion, the thought that thinks what is in each of these ways will not wander. It just so happens that thinking about what lies along the second path will remain invariably empty or objectless.

As difficult as it may be to understand why the second path is introduced alongside the first as a path of inquiry for understanding, the line we have developed thus far has the decided advantage of making it possible to understand the fragment's last two verses as making a sound philosophical point rather than as containing a fallacy, however famous or interesting that fallacy might be. As we have seen, fr. 2. 7–8 are the key verses for those who follow Russell in supposing that the paradox of negative existential statements occupied a central place in Parmenides' thought. Now we can finally dispense with that disastrous notion. ¹³¹ In doing so, we will also see how the excessive attention devoted to isolating the sense of the verb that must be recognized if we are to understand what is still to come. This will become a point of major importance for the subsequent development of the modal interpretation across the next two chapters. After introducing the two principal ways

 $^{^{131}}$ Kahn 1973/2003: p. xi, goes further and claims that Greek philosophers *generally* 'do not seem to have worried much about negative existentials', on the grounds that 'they did not thematize existence in our sense' but thought of X's existing as its being Y for some value of Y; those who have detected a concern with the problem of negative existentials in Plato's treatment of non-being Kahn sees as 'misguided by the desire to modernize Plato's problems in order to make them seem more interesting for a contemporary reader'. Those who have detected such a concern in Parmenides appear similarly insensitive to the anachronism this involves.

of inquiry by providing full specifications of their defining modes of being, it would be all but impossible for Parmenides to repeat 'that [it] is and that [it] cannot not be' and 'that [it] is not and that [it] must not be' whenever he subsequently wishes to refer to these ways of being. It would be equally cumbersome to employ such formulae as 'what is and cannot not be' and 'what is not and must not be' whenever he wishes to refer to whatever is in either of these ways. Parmenides copes with this problem just as one might have expected he would, by employing forms of the verb 'to be' in more concise or abbreviated expressions when referring to these modes of being and whatever partakes in them.

The first use of such a shorthand expression occurs within fr. 2 itself, when in its final two lines the goddess tells Parmenides that he could neither apprehend nor indicate $\tau \delta \mu \dot{\eta} \epsilon \delta \nu$ or 'what is not'. Since she is here warning him against proceeding along the second way, it should be clear that $\tau \delta \mu \dot{\eta} \epsilon \delta v$ is the goddess's way of referring to what is in the way just specified two lines above. She declares that Parmenides could neither know nor indicate 'what is not' by way of explaining note the presence of $\gamma \acute{a}\rho$ or 'for' at fr. 2. 7—her assertion in the preceding line that the second way is a way wholly without report. For this explanation not to rely on the mistaken idea that it is impossible to refer to non-existent entities, $\tau \delta \mu \dot{\eta} \epsilon \delta v$ cannot mean simply 'what does not exist'. What the argument requires is what should have been obvious in any case, namely that $\tau \delta \mu \dot{\eta} \epsilon \delta v$ is used here as shorthand for 'what is not and must not be'. Given the awkwardness of having to deploy the phrase 'what is not and must not be' whenever referring to what enjoys the second way's mode of being, one would expect Parmenides to have employed such a device even if he had written in prose. That he should do so is as natural as it is necessary. 132 When understood in this manner, one that is properly sensitive to the context of the goddess's warning, Parmenides can be seen to make a sound philosophical point. One cannot, in fact, form any definite conception of what is not and must not be, and a fortiori one cannot indicate 133 it in any way. (Try to picture for yourself a round square or to point one out to someone else.) Parmenides has not here fallen prey to the apparently paradoxical character of negative existential statements but

132 Ketchum 1990: 171–3, comes close to what I am here proposing when he offers as one of his primary reasons for treating certain of Parmenides' uses of $\epsilon \tilde{\ell} \nu a \iota$ as 'uses of the incomplete copula' Parmenides' apparent equation of $\tau \delta \mu \dot{\eta} \delta \nu$ [sic] at fr. 2. 7 with $\mu \eta \delta \epsilon \nu$ at fr. 6. 1–2, on the grounds that 'what is not anything at all' is more obviously equivalent to 'nothing' than 'what does not exist'.

¹³³ The ancient grammarian Aristarchus says that in Homer the verb $\phi\rho\dot{\alpha}\zeta\omega$ never means merely 'say' or 'tell' but always has the sense of 'point out', 'show', or 'indicate'. Even later, it never becomes just an ordinary verb for 'speak' or 'say' like $\lambda\dot{\epsilon}\gamma\omega$ or $\phi\eta\mu\dot{\iota}$ but always has a more emphatic sense. Coxon 1986: 177 ad loc., declares that its sense in Parmenides is 'explain', but this hardly fits the present context where what is not (and must not be) is its object; nor is 'I explain' the best option for $\phi\rho\dot{\alpha}\zeta\omega$ at fr. 2. 6, where it seems meant to be emphatic, like 'I declare' or 'I tell'. Mourelatos 1965 rightly recognizes $\phi\rho\dot{\alpha}\zeta\omega$ is more concrete than 'say' but is then sidetracked by his attempt to explain its use at fr. 2. 8 within the context of the goddess's travel instructions. His proposal for translation of fr. 2. 6–8, 'this path I point out to you as being totally misguided; for you could not come to know that which "is not" (for there is no getting to it) nor could you point the way to it', effectively has the goddess say that one could not point the way to what is not just after she has in fact done so. The object of $\phi\rho\dot{\alpha}\sigma as$ is the same as that of $\gamma\nu oi\eta s$, namely $\tau\dot{o}$ $\mu\dot{\eta}$ è $\delta\nu$. The goddess's point is that one can neither apprehend nor indicate what is not (and must not be).

makes a perfectly acceptable point about the inconceivability of what necessarily is not. While Parmenides' conception of modality is archaic, any philosopher with an interest in the relation between conceivability and possibility should be prepared to recognize in Parmenides' assertion that you could neither apprehend nor indicate what is not (and must not be) one of the earliest instances of a form of inference—that from inconceivability to impossibility—that continues to occupy a central position in metaphysical reasoning.

The goddess is therefore correct in telling Parmenides that apprehending what is not (and must not be) 'is not to be accomplished' (fr. 2. 7). 134 By contrast, understanding $\tau \delta \mu \dot{\eta} \epsilon \delta \nu$ simply as what does not exist means attributing to Parmenides a possibly interesting but nevertheless mistaken point, for one certainly can think about and speak of or indicate what does not exist. Note in particular that even if one understands the verb 'to be', in the specification of the two ways of inquiry and in its relevant uses thereafter, as having primarily existential force, this need not lead one to see Parmenides' motivating concern as the problem of negative existentials. One also has to be willing to ignore the modal qualifications in fr. 2. 3b and 2. 5b and thereby suppose that the contrast he marks in distinguishing the initial two paths of inquiry is simply that between existence and non-existence. Not only is the reductive reading of fr. 2's two paths that strips them down to the bare 'it is' and 'it is not' unjustified, it leads to a host of problems. Most significantly, it makes Parmenides' subsequent introduction of a third way of inquiry seem highly problematic. As those who would like to see in the stripped down contrast the first articulation of the principle of non-contradiction are wont to say, there can be no tertium quid between these two options. One of the challenges of Parmenides interpretation has thus been to account for the presence of the third way. The ingenuity deployed in attempting to resolve or explain away this problem has, however, been misplaced since the problem is itself the result of misguided interpretive moves. In the next chapter, we shall see how a modal reading of Parmenides' ways of inquiry makes it possible to understand the third way's place in a manner that is at once straightforward and of genuine philosophical interest.

As of this point, then, we have been able to develop answers to most of the central questions that emerge from fr. 2. The two ways introduced here are ways of inquiry for (achieving) understanding and are, as such, distinguished from a third way, which if pursued results in wandering understanding rather than true conviction. One of the traditional questions regarding this fragment—what is the subject of the verbs $\ell\sigma\tau\nu$ in fr. 2. 3a and $0\nu\kappa$ $\ell\sigma\tau\nu$ in fr. 2. 5a?—is misguided or at best premature. When pressed upon the text, it generates readings that neglect such important elements as the modal qualifications in fr. 2. 3b and 2. 5b and the representation of these two verses as ways of inquiring. The absolute modality of the second way earns it a place alongside the first as a way of inquiry for understanding, but at the same time the goddess must warn Parmenides not to pursue this path for there is

 $^{^{134}}$ For evidence that Plato understood Parmenides' point, see *R*. 5. 476 E 4–477 A 5 and *Sph.* 237 B 7–239 C 3, together with the commentary on these passages at Palmer 1999*a*: 30–3 and 136–8.

quite literally nothing to discover along it. Finally, the warning to stay off the second path indicates that Parmenides did not conceive of necessity as logical property, and there are other good reasons, both historical and internal, to understand the Parmenidean modalities as ways entities or things themselves might be. We have also seen how recognizing that $\tau \delta$ $\mu \dot{\gamma}$ $\dot{\epsilon} \delta v$ or 'what is not' functions at the end of the fragment as a shorthand expression for what is in the manner specified in fr. 2. 5 gives Night a perfectly good reason for warning Parmenides off the second path. Recognizing that $\tau \dot{\delta}$ $\dot{\epsilon} \delta v$ or 'what is' functions analogously in the remainder of the poem as a shorthand expression for what enjoys the mode of being specified in fr. 2. 3 will prove equally important for understanding the arguments to come.

The Way of the Goddess and the Way of Mortals

After presenting the first two ways of inquiry and straight away warning him off the second, Night reinforces her injunctions to Parmenides to pursue the first path before embarking on her account of what one actually finds when one does. Her instructions to Parmenides here involve cautioning him against straying from the first path and lapsing into the kind of wandering thought she portrays ordinary mortals as incapable of transcending. This chapter will focus on the most important fragments that survive from this portion of the original poem, frs. 3, 6, and 7. We shall see how the modal interpretation of the ways of inquiry developed in the previous chapter enables us to understand these three difficult fragments.

These fragments complete for us Night's prelude to the substantive portion of her joint revelation regarding the nature of true reality and regarding the origins and operations of the physical cosmos. While emphasizing the need for Parmenides to remain on the first way, Night also introduces a third way of inquiry. This is distinguished from the Way of Conviction because no genuine trustworthiness is to be found along it. Nevertheless, she declares that she will be going down this path herself in unfolding the cosmology that follows her account of true reality. One of the most significant results of Nehamas's proposed supplement of the lacuna at the end of fr. 6. 3 is to have made this clear: 'For I shall begin for you', she says, 'from this first way of inquiry, | then yet again from that [sc. way] along which mortals who know nothing | wander...' (fr. 6. 3-5). Despite her admonitions to Parmenides, then, not to stray onto the path along which mortals normally wander, it is apparently not altogether wrong to follow it. A correct understanding of frs. 3, 6, and 7 will take us a long way to explaining how so, and thus to understanding the character, relation, and status of the goddess's two accounts.

¹ Fr. 5, already discussed above at Ch. 2 n. 104, likely also came somewhere between fr. 2 and fr. 8. The position of fr. 4 is less certain. Less obviously anticipatory than frs. 5, 6, and 7, it could just as easily have figured in a coda to Night's revelation as in the prelude. Since this fragment is in any case more readily understood in retrospect, discussion of it will be postponed until the latter stages of Ch. 4.

More generally, consideration of the goddess's directions to Parmenides and critique of the cognitive failings of ordinary mortals will bring into greater focus the basic framework of ontological and epistemological distinctions that defines Parmenides' philosophical outlook. These distinctions are centred, first, upon the realization that there is something that is (what it is) and cannot not be (what it is), that is to say, something that not only is (what it is) for some time or in some other limited way but that must be (what it is), and, second, upon the concomitant idea that apprehension of what is in this way is somehow more important, and certainly more reliable, than apprehension of all the objects of our ordinary human awareness, objects that are (what they are) only for some time or in some other limited way. These distinctions follow naturally upon Night's specification of the modes of necessary being and necessary non-being or impossibility in fr. 2. For, having ruled out the possibility of inquiry along the second path, given that there is nothing which is in the manner specified in fr. 2. 5, she completes the set of basic modalities by bringing into the picture all those things that are (what they are) and yet are subject to not being (what they are), in so far as they are subject to the various forms of change and non-identity. She roundly abuses ordinary humans for having been beguiled by the senses into focusing their attention solely on these mutable or contingent entities when there is in fact something available to think of that is in a more perfect way.

An important element in the Parmenidean language of modality is a restrictive use of the verb $\epsilon \hat{\imath} \nu a \iota$ that would continue to feature prominently in Greek philosophy for some time to come. This is a use of the participle $(\tau \delta)$ $\dot{\epsilon} \delta \nu$, plus even occasionally indicative forms of the verb, that exactly parallels the use we have already seen of $\tau \delta \mu \dot{\eta}$ $\dot{\epsilon} \delta \nu$ ('what is not') at fr. 2. 7. There the goddess was seen to be making a sound philosophical point when it was recognized that this phrase was functioning as an abbreviated way of referring to what is in the manner specified at fr. 2. 5, that is, as shorthand for 'what is not and must not be' or, more simply, 'what must not be' or 'what *only* is not'. This use of $\tau \delta \mu \dot{\eta} \dot{\epsilon} \delta \nu$ leads one to expect a parallel shorthand use of the participial phrase $\tau \delta \dot{\epsilon} \delta \nu$ ('what is') for what is in the manner specified at fr. 2. 3, that is, for 'what is and cannot not be' or, more simply, 'what must be' or 'what *only* is'.

Parmenides employs the phrase $\tau \delta \epsilon' \delta \nu$ five times in the extant fragments—twice at fr. 4. 2 and then at fr. 8. 32, 8. 35, and 8. 37. In fr. 8, $\tau \delta \epsilon' \delta \nu$ becomes, alongside $\epsilon' \delta \lambda \eta \theta \epsilon' \delta \eta$ or 'true reality', one of the goddess's preferred means of referring to the object of her principal discourse; as such, it can easily be understood as designating what is in the manner specified in the first way of inquiry, which she clearly states she is pursuing here. Putting this hypothesis to the test in the next chapter, we shall find that understanding $\tau \delta \epsilon' \delta \nu$ as her shorthand designation for what is in the manner specified in the first way of inquiry enables one to make good sense of the goddess's argumentation in the Way of Conviction. As for the two uses of $\tau \delta \epsilon' \delta \nu$ in fr. 4, while the fragment is admittedly too brief and its point thus too uncertain to allow for a definitive conclusion, it seems reasonable to suppose that $\tau \delta \epsilon' \delta \nu$ here is the same entity referred to as $\tau \delta \epsilon' \delta \nu$ in fr. 8. There is, in fact, a parallel between the goddess's declaration that 'you will not cut off what is $(\tau \delta \epsilon' \delta \nu)$ from holding fast

to what is $(\tau o \hat{\nu} \ \acute{e} \acute{o} \nu \tau o s)$ ' (fr. 4. 2) and the points made along the Way of Conviction, at fr. 8. 22–5, that what is may not be divided or prevented from holding together, and that it is all full of being and continuous. Thus it is a reasonable hypothesis that the designation $\tau \grave{o} \ \acute{e} \acute{o} \nu$ ('what is') functions in just the way we have already seen $\tau \grave{o} \ \mu \mathring{\eta} \ \acute{e} \acute{o} \nu$ ('what is not') functioning in fr. 2. As $\tau \grave{o} \ \mu \mathring{\eta} \ \acute{e} \acute{o} \nu$ ('what is not') at fr. 2. 7 is quite clearly Night's way of picking out what is in the manner specified in fr. 2. 5, it is reasonable to expect Parmenides' uses of $\tau \grave{o} \ \acute{e} \acute{o} \nu$ to pick out what is in the manner specified in fr. 2. 3. Once again, these abbreviated or shorthand references are as natural as they are necessary. If $\tau \grave{o} \ \acute{e} \acute{o} \nu$ does thus designate what is and cannot not be, it will be useful and will help avoid confusion to employ capitalization and render the phrase as 'What Is'. Likewise, since what is and cannot not be is equivalent to what is and must be, or, more simply, what must be, it will be useful to employ 'what must be' as an equivalent alternative when the modality of What Is requires emphasis.

Before turning to the details of frs. 3, 6, and 7, something must also be said about the fact that some interpreters have reconstructed a single chain of argument from the materials of fr. 2. 7–8, fr. 3, and fr. 6. 1–2.2 There are numerous reasons why such efforts seem misdirected. Most obviously, perhaps, is that even if one supposes that fr. 3 originally completed the part verse at fr. 2. 8, nothing indicates whether fr. 6 followed closely enough to continue the line of argument being advanced at the end of fr. 2. That an interpreter of sufficient ingenuity can trace a single line of argumentation through these verses is no sure sign that they originally constituted a single chain of reasoning. Certainly, Night's injunction to 'judge by reason the strifefilled critique | I have delivered' at fr. 7. 5b-6 indicates that by this point she has explained why Parmenides must follow only the first path of inquiry. (It will be made clear presently why 'critique' is here adopted as a translation of $\tilde{\epsilon}\lambda\epsilon\gamma\gamma\sigma$, the sense of which here has become a matter of some controversy.) We do not know, however, whether her explanation took the form of the kind of tightly structured argumentation found in fr. 8. Even if it did, there is no way of knowing how much of that argument we still possess. Given the fragmentary state of this portion of the poem, and given how tight and rapid fr. 8 shows Parmenidean argumentation tends to be, the most responsible conclusion is that our knowledge of the goddess's critique is incomplete. It therefore seems ill-advised to try to reconstruct a single argument from some of the verses in the goddess's prelude. Our knowledge of this portion of the original poem is not poor, by any means, but neither is it as good as some would like to suppose.

² So e.g. Barnes 1982*a*: 165 ff.; Furley 1973: 9 ff. Wiesner 1996 represents the most involved effort at such a reconstruction. Wiesner contends, via elaborately detailed argumentation, that fr. 6. 1–2 is the real point of departure for Parmenides' reasoning, not fr. 2 as almost universally assumed, and that this reasoning proceeds from fr. 6. 1–2, through fr. 3, and then to fr. 2. This hypothesis is predicated on his assumption that fr. 6. 1a and fr. 2. 7–8, fr. 6. 1b and 6. 2a, and fr. 2. 3 and 2. 5 comprise the three major antitheses from which Parmenides' reasoning is constructed. The third antithesis is plain enough, but, as we shall see, frs. 2. 7–8 and 6. 1a make their own distinct points, the latter of which is then supported by fr. 6. 1b–2a.

The reasons just given apply regardless of one's overall reading. However, if one takes seriously Parmenides' organizing description of fr. 2. 3 and 2. 5 as ways of inquiry, then there is an even more basic reason why no attempt should be made to construct a single argument from frs. 2, 3 and 6. If fr. 2. 3 and 2. 5 specify ways of inquiry, then these two verses are not to be understood as advancing any definite claims whatsoever; and, consequently, there can be no argument supporting their claims running through the rest of fr. 2 and the fragments generally thought to follow it. In indicating that the first way of inquiry for (achieving) understanding is 'that [it] is and that [it] is not not to be' (fr. 2. 3), the goddess is instructing Parmenides in how to direct his thought in an effort to achieve a conception of $\dot{a}\lambda\eta\theta\epsilon\dot{i}\eta$ or true reality. What one might expect to come, then, is some explanation of why he must stay on this first path to achieve understanding or unerring thought. Night might also be expected to provide further guidance on how to keep his mind firmly fixed on this path as his inquiry proceeds, and perhaps some description of what would result were he to ignore her orders. We have in fact already seen Night at the end of fr. 2 explaining her restriction against pursuing the second way of inquiry, something which makes it only more natural to expect some parallel justification of her directive to follow the first path. All these expectations are in fact borne out in frs. 3, 6, and 7, via a combination of rhetorical abuse of a new alternative to the first path and clarification of why there really is no other option for Parmenides in his search for understanding.

Since the ways of inquiry in fr. 2. 3 and 2. 5 advance no claims and thus cannot be treated as demonstranda (and this point applies, as we shall see, to the presentation of the third way of inquiry as much as to the first two), 'refutation' will not do as a translation of the goddess's retrospective description of what she has said, by way of exhortation and clarification, as an $\tilde{\epsilon}\lambda\epsilon\gamma\gamma os$ (fr. 7.5b); nor will any other translation implying that some specific claim has been argued, proved, or disproved. At the time Parmenides was writing, this term had not yet acquired the formal sense of 'refutation' or argument to a contradictory conclusion (as Aristotle defines it at APr. 2. 20. 66^b11). Instead, both the noun $\epsilon \lambda \epsilon \gamma \chi \sigma s$ and the verb $\epsilon \lambda \epsilon \gamma \chi \omega$ at this time typically involve the notion of putting something or someone to the test, cross-examining it, or putting it to the proof, almost always with something of the negative or critical attitude towards what is so tested or examined that betrays a certain lingering of the terms' epic senses of 'reproach' or 'disgrace'. I have settled on 'critique' for ἔλεγχος at Parmenides fr. 7. 5b since it not only conveys the requisite notion of putting something to the test but also carries something of the negative connotation evidently required here.

³ On the relevant range of uses of $\epsilon \lambda \epsilon \gamma \chi o_S$ and $\epsilon \lambda \epsilon \gamma \chi o_S$, see Lesher 1984: 1–9. If the modification of $\epsilon \lambda \epsilon \gamma \chi o_V$ at Parm. fr. 7. 5b by $\delta \eta \theta \epsilon v \tau a$ in fr. 7. 6 indicates that the $\epsilon \lambda \epsilon \gamma \chi o_S$ in question is completed, then the complex argument of fr. 8 cannot be the $\epsilon \lambda \epsilon \gamma \chi o_S$ to which the goddess here refers. Lesher himself understands this $\epsilon \lambda \epsilon \chi \chi o_S$ as 'the orderly examination of each of the available ways of thinking. It is a test or testing of each of them for their capacity to lead us to truth and knowledge about *to eon*. It can perhaps be termed . . . a critique of their merits and deficiencies' (16–17).

FRAGMENT 6: INSTRUCTIONS AND ADMONITION

The Imperative to Say and to Think that What Is is

Parmenides appears on occasion to employ the participle $\epsilon \delta \nu$ without the article in the way he elsewhere seems to employ $\tau \delta \epsilon \delta v$, though the bare participle is not universally so employed. He appears to do so, for instance, in two of the poem's more difficult verses, fr. 6. 1–2: 'It is necessary to say and to think that What Is $(\epsilon \delta \nu)$ is; for it is to be, | but nothing it is not. These things I bid you ponder' $(\chi \rho \dot{\eta} \tau \dot{\delta} \lambda \dot{\epsilon} \gamma \epsilon \iota \nu)$ τὸ νοεῖν τ' ἐὸν ἔμμεναι: ἔστι γὰρ εἶναι, Ι μηδέν δ' οὐκ ἔστιν: τά σ' ἐγὼ φράζεσθαι ἄνωνα). Translating the verses in this manner is preferable, for grammatical, interpretive, and philosophical reasons, to the construal that has, due to Owen's advocacy, exerted the most influence among English-language commentators: 'What can be spoken and thought of must exist; for it can exist, whereas nothing cannot ... '4 In the first place, it is simply false that whatever can be meaningfully spoken of or thought of must exist. The fact that Russell at one time inclined to such a view is no reason to attribute it to Parmenides. Second, the reasoning attributed to Parmenides when the verses are thus understood is evidently fallacious. Others have been less content than Owen with an interpretive line maintained by saddling Parmenides with the fallacious supposition that what can be must be. This translation is also difficult grammatically. 6 It involves an intolerable hyperbaton in the separation between $\tau \delta$ and $\delta \delta \nu$ in the first verse. Moreover, $\lambda \delta \gamma \epsilon \iota \nu$ and $\nu o \epsilon \hat{\iota} \nu$ here can hardly be construed as datival infinitives with $\dot{\epsilon}\acute{o}\nu$, as is necessary if $\tau\grave{o}$ $\lambda\acute{e}\gamma\epsilon\iota\nu$ $\tau\epsilon$ $\nu o\epsilon\hat{\iota}\nu$ τ $\dot{\epsilon}\acute{o}\nu$ is to mean 'what can be spoken and thought of' or, to be absolutely literal, 'what is [there] to speak and to think'. When Parmenides utilizes the infinitive with its original dative force, he employs the construction, $\epsilon \sigma \tau \iota$ + infinitive. Nowhere else in the poem does he employ a datival infinitive with the substantival participle, and I venture to say one will not find examples of this putative Greek construction anywhere else. Finally, as others have noted, there seems to be no parallel for the potential use of the participle Owen's version requires.8

⁴ The various ways of construing fr. 6. 1a and fr. 6. 1b–2a are usefully surveyed by Wiesner 1996: 8–18 and 74–6. The construal of Owen 1960: 94–5 (cf. Burnet 1930: 174; Guthrie 1965: 20; Furley 1973: 11; Kirk *et al.* 1983: 247) is the first type of construction Wiesner discusses (and rejects).

^{'5} A rather too vehement attack on Owen's understanding of fr. 6 is made by O'Brien 1987 a: 187–206.

As is acknowledged by Barnes 1982a: 611 n. 5: 'The grammar is horrid'.

⁷ This is the text Owen and all other exegetes assumed to be correct until Leonardo Tarán and Nestor-Luis Cordero brought to light the fact that $\tau \delta$ $\nu o \epsilon \hat{\iota} \nu$, not $\tau \epsilon$ $\nu o \epsilon \hat{\iota} \nu$, is the unanimous manuscript reading and explained how this fact came to be suppressed. See further the appendix's textual note on this verse.

⁸ So Tarán 1965: 55; O'Brien 1987a: 207–9. (Tarán's full commentary on fr. 6. 1 provides a most useful survey of the often tortured construals of this difficult verse that had been proposed prior to the time of his writing.)

The uses of voeliv in the summary statement at fr. 8. 34–6a furnish an instructive comparandum: 'The same thing is both for understanding (ἐστὶ νοεῖν) and that because of which there is understanding. For not without What Is $(\tau o \hat{v} \stackrel{?}{\epsilon} \acute{o} \nu \tau o s) \dots$ | will you find understanding $(\tau \delta \nu o \epsilon \hat{\iota} \nu)$. These statements confirm that a major goal of Parmenides' inquiry is understanding, and they specify as a necessary condition of its successful achievement that his thought be directed towards $\tau \delta \epsilon \delta \nu$ or What Is. $\tau \delta$ $vo\epsilon \hat{i}v$ at fr. 8. 36a is clearly an articular infinitive, functioning as the object of the verb $\epsilon \hat{v} \rho \hat{\eta} \sigma \epsilon \iota s$. Contrast the datival use of the same infinitive without the article in the previous verse. In fr. 6. 1a, τὸ λέγειν and τὸ νοεῖν should likewise be understood as articular infinitives, and this part of the verse should accordingly be translated: 'It is necessary to say and to think that What Is is'. Here the bare ἐόν functions as τὸ ἐόν does at fr. 8. 35 and elsewhere. This translation is essentially along the lines proposed by Walter Kranz in his revised edition of Diels's Die Fragmente der Vorsokratiker. 'Nötig ist zu sagen und zu denken, daß nur das Seiende ist'. (As Tarán has rightly pointed out, however, there is of course nothing in Parmenides' verse corresponding to Kranz's 'nur'; Parmenides does not say that only What Is is, and his words should not be so supplemented. 10) This version involves construing $\tau \delta \lambda \epsilon \gamma \epsilon \iota \nu \tau \delta \nu o \epsilon \hat{\iota} \nu \tau'$ as the compound subject of the verb $\chi\rho\dot{\eta}$. It is, in fact, normal enough for $\chi\rho\dot{\eta}$ to function quasi-impersonally when its subject may be derived from the context, and it is likewise normal for the infinitive to be used as subject with such quasi-impersonal verbs. All that is meant by saying that $\chi\rho\dot{\eta}$ here is quasi-impersonal and that the articular infinitives function as its compound subject is that one might equally well translate: 'To say and to think that What Is, is, is necessary'; but there should be no confusion if we preserve the translation already given. 11

So what point is being made in fr. 6. 1a, when the goddess tells Parmenides that it is necessary to say and to think that What Is is? Let us approach this question by considering the statement's conjunction of saying and thinking. The pairing may (improperly) suggest that Parmenides is concerned with isolating a necessary condition of meaningful speech and thought. To understand the actual function of the conjunction of saying and thinking in fr. 6. 1a, it will help to consider the other

⁹ Alternatively, if Karsten's emendation of the second τ 6 to τ 6 is accepted, the whole phrase τ 6 λ 6 γ 6 ι 1 ν 1 τ 6 in accepted, the whole phrase τ 8 construed by Heidel 1913: 721, though he translated fr. 6. 1a quite differently, as 'speech and thought must be real', which involves taking ϵ 6 ν 10 as a predicate adjective after ϵ 6 μ 1 μ 2 ν 10. Tarán 1965: 57 (cf. 55).

places we find this conjunction in the goddess's subsequent exposition. At the culmination of her description of what lies along the Way of Conviction, she says to Parmenides: 'At this point I cease for you the trustworthy account and meditation $(\lambda \delta \gamma o \nu \ \dot{\eta} \delta \dot{\epsilon} \ \nu \delta \eta \mu a)$ | regarding true reality' (fr. 8. 50–1a). What the goddess has produced for Parmenides is a $\lambda \delta \gamma o s$, an account (most basically, something said), and a $\nu \delta \eta \mu a$, something brought before the mind in thinking, which is to say, a thought, conception, or, somewhat more naturally, a meditation. This account and meditation regarding true reality are what result from following the goddess's instruction at fr. 6. 1a as to how to proceed along the first path of inquiry. They result from never losing sight, first, of the fact that the entity to be apprehended by proceeding along this path is and cannot not be and, second, of the consequent necessity to speak and think of this entity only as being (that is, as both existing and as being what it is). To lapse into speaking or thinking of what must be as not being, as failing to be, would be to stray from the first path.

Night reinforces her instruction at fr. 6. 1a later on in very similar terms during the first major argument along the Way of Conviction. There, in arguing that What Is must be ungenerated, she asks Parmenides to try to conceive of whence it might have originated. She then tells him that he can neither say nor think that it might have originated from a condition of not being: 'From not being I shall not allow | you to say $(\phi \acute{a} \sigma \theta a \iota)$ or to think $(\nu o \epsilon \hat{\iota} \nu)$ [sc. that it was born or grew]: for not to be said $(\phi \alpha \tau \acute{o} \nu)$ and not to be thought $(\nu o \eta \tau \acute{o} \nu)$ | is it that it is not' (fr. 8. 7b–9a). The pairing of speaking and thinking occurs here twice, in such a way as to make it clear that the concern is with ensuring that Parmenides stays firmly on the first path as he seeks to learn what attributes What Is possesses. To conceive of it as not being at some previous time would involve forgetting that it cannot not be. Thus comparison with how the conjunction of saving and thinking functions at these points in fr. 8 suggests that the goddess's instruction to Parmenides at fr. 6. 1a is to be understood as indicating what he must do to stay firmly on the first path. Such instruction makes good sense at the opening of fr. 6, for she next proceeds to tell Parmenides that she will begin for him from this first path of inquiry (fr. 6. 3).

Once the goddess's instruction to Parmenides in fr. 6. 1a is properly understood, the otherwise difficult clauses that immediately follow can be seen to provide reasons why one must say and think that What Is is. The necessity of saying and thinking that What Is, is, finds immediate support in the two clauses: for it is to be' $(\xi\sigma\tau\iota\gamma\dot{\alpha}\rho\epsilon\dot{\nu}\alpha\iota, \, fr. \, 6. \, 1b)$ and but nothing it is not' $(\mu\eta\delta\dot{\epsilon}\nu\,\delta'\,\sigma'\iota\kappa\,\xi'\sigma\tau\iota\nu, \, fr. \, 6. \, 2a)$. The particle, $\gamma\dot{\alpha}\rho$ or for', that marks the connection between these clauses and what precedes them is sufficient indication that they are meant to support the principal instruction of

Likewise, the objection at Kahn 1988: 260, to the type of grammatical construal of fr. 6. 1a advocated here will be recognized as misdirected. He objects that such a construal makes $\hat{\epsilon}\hat{o}\nu$ $\check{\epsilon}\mu\mu\epsilon\nu\alpha\iota$ a logically vacuous tautology 'since participle and infinitive will have the same strong ontological value, sc. being is'. Only because he fails to appreciate how $\hat{\epsilon}\hat{o}\nu$ functions here can he suppose the participle and infinitive have the same force. Although 'What Is is' still sounds tautologous (cf. the entailment from necessarily p to p), it is hardly vacuous as part of the goddess's instruction to Parmenides regarding what he must do to remain on the first path.

fr. 6. 1a. The fact that they must be capable of serving this purpose provides a constraint on our understanding of the two clauses. This is useful since their enigmatic brevity has, not surprisingly, occasioned a variety of interpretations, with many interpreters trying to find in the latter clause a reference to fr. 2's second path of inquiry. As we have already noted, however, when discussing the weakness of two-path interpretations, 'nothing is not' hardly seems an apt encapsulation of this path. Alternatively, it is perhaps just possible, though still a stretch, to suppose that an unexpressed datival infinitive $\epsilon i \nu a \iota$ is to be understood after $o \dot{v} \kappa \, '' \sigma \tau \iota \nu$. If this were the case, then fr. 6. 2a would mean 'nothing is not (to be)', with $\mu\eta\delta\epsilon\nu$ or 'nothing' designating what must not be, just as 'what is not' $(\tau \delta \mu \dot{\eta} \epsilon \delta \nu)$ does at fr. 2. 7. The goddess's point would then be that what must not be cannot be. While it is certainly true, however, that what must not be cannot be, it is difficult to see how this point would support the main claim in fr. 6. 1a. In fact, fr. 6. 2a so construed would seem to introduce something else that it is necessary to say and think. As such, these words would do little by way of confirming the point they are clearly meant to support. Some other understanding of fr. 6. 2a must be found.

First, we need to understand the point that is made in fr. 6. 1b. One might suppose that $e^{\sigma \tau}$ in fr. 6. 1b is being used potentially and thus that the clause is to be translated as 'for it can be'. Taken in this way, however, the clause cannot support the main assertion in fr. 6. 1a: from $(\tau \dot{o}) \epsilon \dot{o} \dot{v}$'s possibly being it by no means follows that one must say and think that it is. With this negative point in mind, we can perhaps make sense of the simpler translation, 'for it is to be'. Let the subject of this $\epsilon \sigma \tau \iota$ be 'What Is', picking up $\dot{\epsilon} \dot{\delta} \nu$ from the immediately preceding clause, and let $\dot{\epsilon} \hat{\imath} \nu \alpha \iota$ be understood as a datival infinitive with ἔστι. Saying that '(What Is) is to be' or 'is for being' seems simply equivalent to saying that it is (or is only for being, or only to be). Thus understood, ἔστι γὰρ εἶναι recalls the first ἔστιν of fr. 2. 3a in the original specification of the first way of inquiry. It seems, furthermore, that the phrase $\mu\eta\delta\dot{\epsilon}\nu$ δ' οὖκ ἔστιν that follows at fr. 6. 2a is a variation upon fr. 2. 3b. I propose translating as 'nothing it [sc. What Is] is not' (rather than as the more conventional 'nothing is not'). In this way, there is no shift of subject when we pass from $e\sigma\tau$ at fr. 6. 1b to οὖκ ἔστιν at fr. 6. 2a; and the predicate substantive $\mu\eta\delta$ έν functions in much the same way as it does at fr. 8. 10. To say that What Is is not nothing is as much as to say that it is not not being or that it cannot not be. That is to say, again, that just as fr. 6. 1b's ἔστι γὰρ εἶναι replicates that of fr. 2. 3a's ἔστιν. The goddess

¹³ After telling Parmenides that he must not say or suppose that What Is originated from not being (ἐκ μὴ ἐόντος, fr. 8. 7b) since it is neither to be said or thought that it is not, the goddess asks: 'And indeed what need could have aroused it | later rather than before, beginning from nothing (τοῦ μηδενός), to grow?' (fr. 8. 9b–10). Here in fr. 8. 7b the negated participle without article, μὴ ἐόν, is not functioning as τὸ μὴ ἐόν does in fr. 2. 7; i.e. μὴ ἐόν here does not designate what is not and must not be. The possibility first envisioned and then rejected here is that What Is might have originated from a state of affairs in which it was not or did not exist, from *its* not being, not from any condition of necessary not being or from what must not be. In this passage, furthermore, μηδέν ('nothing') plainly serves as the equivalent of μὴ ἐόν ('not being'); and it in fact makes sense enough for the subject's not being and its nothingness to be treated as equivalent.

underscores the necessity of saying and thinking that What Is is, then, by recalling with some variation the original specification of the first path of inquiry. There is a slight distinction, in that what enjoys the modality specified there is now specifically under discussion and has come to be designated as $(\tau \grave{o})$ $\grave{e}\acute{o}\nu$ or 'What Is'. But then it can only be the case that what is and cannot not be 'is to be' and 'is not nothing', in which case the necessity of saying and thinking that What Is is follows. One must say and think that What Is, is, because, as was originally specified in fr. 2. 3, it is and it cannot not be (or be nothing).

In the first two verses of fr. 6, then, Night instructs Parmenides on how to keep his thought fixed firmly on the first path. She does so by asserting the necessity of saying and thinking that What Is, or what is in the manner defined in the original specification of this path, is (what it is). She supports this directive by appealing to the two clauses of that original specification in fr. 2. 3, which are here recast with minor variations as reasons supporting the requirement to say and think that What Is, is. Inquiry along the first path will essentially involve trying to attain a fuller conception of the character of What Is by pursuing the implications of its particular mode of being. This is what she instructs Parmenides to ponder as she guides him along the Way of Conviction.

The Inadequacy of Mortal Understanding

Night bids Parmenides ponder her instructions in fr. 6. 1–2 because it is important for him, as he is about to embark under her guidance along the first way of inquiry, to keep fixed in his mind that what he hopes to apprehend can only be conceived of as being (what it is). Inquiring along this path will involve trying to determine what attributes something that must be must possess just in virtue of its mode of being. As the opening verses of fr. 6 are part of the preface to fr. 8's revelation of the nature of what must be, so the remainder of fr. 6 serves as a preface to the second part of Night's revelation, in which she will endeavour to explain in broad terms the origin and nature of the world's major mutable entities. The remarks here in fr. 6 pertaining to the poem's cosmology consist largely of warning Parmenides not to stray onto a third way in his search for understanding. The goddess indicates that what Parmenides is looking for—understanding that does not wander—is not to be found by pursuing the way of inquiry humans ordinarily follow. The goddess emphasizes this point by disparaging ordinary humans or 'mortals' in the harshest possible terms for the ignorance and confusion that has resulted from their travelling this third way in their search for understanding. She describes this way as the one 'along which mortals who know nothing $(\epsilon i\delta \delta \tau \epsilon s \ o i \delta \epsilon v)$ | wander two-headed: for helplessness in their | breasts directs wandering thought $(\pi \lambda \alpha \gamma \kappa \tau \delta \nu \nu \delta \sigma \nu)$. They are borne along | deaf and blind at once, bedazzled, undiscriminating hordes' (fr. 6. 4-7). Virtually every element in this pejorative description points to ordinary mortals' cognitive failure.

To understand just why their cognitive condition comes in for such abuse, we must try to understand the goddess's characterization at fr. 6. 8–9 of the path their

thoughts follow. There are no transmitted textual variants in these verses, and they are not that difficult to construe grammatically. There is, in fact, a relatively high degree of agreement about how they are to be translated, as something along the lines of: 'who suppose that being and not being are the same | and not the same; but the path of all these turns back on itself'. There are nonetheless certain grammatical difficulties with this translation, particularly with its construal of the phrase $\tau \delta \pi \epsilon \lambda \epsilon \omega$ τε καὶ οὐκ εἶναι in fr. 6. 8. First, if the infinitives here are to be understood as articular infinitives and the conjunction $\tau \in \kappa \alpha \hat{i}$ as joining coordinate elements, one would have expected τὸ οὖκ εἶναι rather than simply οὖκ εἶναι. Metrical exigency may fairly be pleaded in this instance, but this does not explain the odd use of our rather than $\mu \dot{\eta}$ with $\epsilon i \nu a \iota$. As Burnet rightly recognized, $(\tau \dot{o})$ où κ $\epsilon i \nu a \iota$ is altogether too awkward as a Parmenidean expression for 'not-being'. 14 Thus it appears that the two infinitives in fr. 6. 8 are not articular infinitives. This point finds confirmation in the fact that in Greek the negative ov occurs with the infinitive only in indirect discourse governed by a verb of saying or thinking. In such instances, où is 'preserved' from the direct discourse. The presence of νενόμισται confirms that here we have such a construction: $\tau \grave{o} \pi \acute{\epsilon} \lambda \epsilon \imath \nu \tau \epsilon \kappa \alpha \grave{i} o \mathring{v} \kappa \epsilon \mathring{i} \nu \alpha \imath \tau \omega \mathring{v} \tau \grave{o} \nu \ldots \kappa o \mathring{v} \tau \omega \mathring{v} \tau \acute{o} \nu$ is what the goddess reports mortals have supposed.

The problem then becomes how to understand $\tau \delta$ in fr. 6. 8, if it is not the article with articular infinitive. The suggestion here is that it is functioning demonstratively. What would become simply the definite article in classical Greek (δ , $\dot{\eta}$, $\tau \dot{\sigma}$) was originally a demonstrative pronoun and, as such, served as a third person personal pronoun¹⁵ This is in fact its primary use in the Homeric poems and one that features as well in the lyric poets and tragic lyric. This demonstrative use of δ , $\dot{\eta}$, $\tau \dot{\delta}$ is still very common in Parmenides. ¹⁶ Thus there is no difficulty with $\tau \dot{\delta}$ in fr. 6. 9 functioning likewise, in this case as the accusative subject in the indirect discourse. As noted, this construction also accounts for the infinitive forms and for the negation of $\epsilon i \nu a \iota$ by ουκ. Translate: 'who have supposed that it (τό) is and is not the same | and not the same'. Just what is it, then, that mortals think of in this way? To what does 'it' $(\tau \delta)$ refer? Apparently, to ἐόν in fr. 6. 1, for there is no nearer neuter noun that might conceivably serve as $\tau \delta$'s antecedent. Compare the use of $\tau \delta$ in fr. 8. 44b–5: $\tau \delta \gamma \dot{\alpha} \rho$ οὔτε τι μείζον | οὔτε τι βαιότερον πελέναι χρεών ἐστι τῆ ἢ τῆ ('for that it be neither any greater | nor any smaller in this place or in that is necessary'). In this passage one must go back four verses, to fr. 8. 32, to find the referent of $\tau \acute{o}$, which happens likewise to be $\tau \delta \epsilon \delta \nu$ (as also for $\tau \delta$ at fr. 8. 37). While admittedly in this passage

¹⁴ Burnet 1930: 174 n. 2. Tarán 1965: 64, notes several substantive uses of the infinitive by contemporary or near-contemporary authors; yet all he does to counter Burnet's objection to the negation of the supposed articular infinitive by οὐκ rather than μή is cite the uses of οὐχί at Parm. fr. 8. 11 and 40, which are hardly adequate counter-examples. One of Tarán's own examples of the early use of the articular infinitive, Pi. O. 8. 59–60, obeys the rule that the negative of the articular infinitive, as of the infinitive generally, is μή: το διδάξασθαι δέ τοι εἰδότι ῥάτερον ἄγνωμον δὲ τὸ μὴ προμαθεῖν.

¹⁵ See Smyth 1920: §\$1099–1117.

¹⁶ So $\tau \hat{\eta}$ ('on it') at fr. 1. 4, $\tau \hat{\eta} \nu$ ('her') at fr. 1. 15, $\tau \hat{\eta} \nu$ ('this') at fr. 2. 6, $\tau \hat{\alpha}$ ('these things') at fr. 6. 2, $\hat{\alpha} \pi \hat{\sigma} \tau \hat{\eta} \hat{s}$ ('from that') at fr. 6. 4, oi ('they') at fr. 6. 6, $\kappa \tau \lambda$.

 $\tau \delta \epsilon' \delta \nu$ has remained the subject of the intervening verbs in fr. 8. 33 and 8. 42–3, the passage still mitigates the difficulty there might seem to be in taking $\tau \delta$ at fr. 6. 8 as picking up $\epsilon' \delta \nu$ from fr. 6. 1. As far as the sense goes, this is easy enough. For the goddess begins here by impressing upon Parmenides that in the inquiry he is embarking on he must consistently maintain that What Is, is, and she ends up contrasting this way of inquiry with the one mortals pursue, which essentially involves failing to recognize the possibility of the kind of inquiry Parmenides is undertaking and supposing that What Is is subject to both being and not being.

An apparent difficulty with understanding $\tau \delta$ at fr. 6. 8 as picking up $\delta \delta \nu$ from fr. 6. 1 is that doing so seems to imply that mortals have some grasp, though an imperfect one, of what must be; yet they seem to be represented as unaware of either absolute mode of being introduced in fr. 2. The goddess's description of them at fr. 6. 7 as $\tilde{\alpha}\kappa\rho\iota\tau\alpha$ $\phi\hat{\nu}\lambda\alpha$ or 'undiscriminating hordes' seems designed to contrast them with one like Parmenides himself who, under the goddess's direction, has made the fundamental choice or $\kappa\rho\iota\sigma\iota s$ (cf. fr. 8. 15–18) between fr. 2's only two paths of inquiry for (achieving) understanding. How can mortals suppose that $\tau\delta$ $\delta\delta\nu$, or what is and cannot not be, 'is and is not the same | and not the same' (fr. 6. 8–9a) when, in their hapless befuddlement, they have failed altogether to recognize that anything might be in the way specified at fr. 2. 3? Surely they do not think of What Is, as such, that it is and is not the same and not the same. Their error surely does not consist in misapprehending or misconceiving What Is, for they seem to have no apprehension or conception of it at all.

This is as much as to say, however, that they do not follow the first path of inquiry in their efforts to achieve understanding. The goddess effectively represents the wandering understanding of mortals as what Parmenides would lapse into if he failed to obey her direction at the beginning of the fragment to say and to think that What Is is. One strays from the first path whenever one thinks of what one is looking for as not being, that is to say, as ever failing to exist or to be what it is. Of course, ordinary mortals, as Night represents them, were never on the first path at all. She characterizes them as content to pursue understanding along a path where the entities considered are subject to variableness of being and identity. As such, these mortals are blind to what the goddess has already revealed to Parmenides, namely, that there are ways of being that do not involve such variability.

Their error, then, consists in supposing that a proper object of understanding may be subject to the variableness of being bound up in their conception of it as being and not being the same and not the same. This is in effect their path of inquiry. Note how the goddess refers to it as a $\kappa \epsilon \lambda \epsilon \nu \theta o s$ or 'path' at fr. 6. 9, even though she discounts it as one that 'turns back on itself'. What following this path involves, it would seem, is focusing one's thought on things that persist in some respects for some time while changing in others. (To get something other than blatant contradiction from 'it is and is not the same and not the same', the clause apparently must be understood in this manner.) To this class will belong whatever is subject to any kind of change.

Perhaps one reason the description of this path here is so abstracted and thus confusing is that it is supposed to encompass distinct types of variation and change, presumably including variation of attribute without change of identity as well as the more substantial changes of generation and destruction. What results from following this path, the goddess insists, is 'thought that wanders' $(\pi \lambda a \gamma \kappa \tau \delta \nu \nu \delta o \nu)$, fr. 6. 6), evidently because Parmenides thinks the mutability of the entities along this path belongs to apprehension of them as well.

We should now be able to appreciate why the goddess characterizes the way of inquiry mortals pursue as one that turns back on itself ($\pi \alpha \lambda i \nu \tau \rho o \pi o s$, fr. 6. 9b). Whatever apprehension one has of entities that come to be and perish, that are and are not the same and not the same (at various times and in various respects)—of, in short, entities that only mutably or contingently are (what they are)—will eventually fail. One may, for example, apprehend the moon as full for so long as it is full; one may then apprehend the moon as waning when it is no longer full but waning. The moon that changes in this way is just one of the vast multitude of entities that are and are not the same and not the same: in this instance, it is the same in so far as it continues to be the moon, and yet it is not the same in so far as it changes from full to waning and is thus no longer what it was before. Parmenides seems to think of cognitive states as subject to the same degree of variance as their objects. Thus when the moon changes from full to waning, one's prior apprehension of it as full must likewise alter and thus proves not to have been trustworthy or reliable. Not only is one's apprehension unstable and as mutable as its objects, but, what is worse, it can seem to change to non-apprehension. In this way, one's apprehension 'wanders' or is impermanent. A path of inquiry that yields such unstable apprehension is well described as one that 'turns back on itself', given that the path actually does 'backtrack' by leading those who focus their attention on mutable entities in one direction at one moment and then in another direction at another.

Broadly speaking, mortals' ignorance is a function of their total failure to recognize the modalities of necessary being and necessary non-being or impossibility. Because of this failure, they fail even to realize that it is possible to experience a more stable form of cognition than they do. They thus continue to suppose that the only objects available to cognition are things that are (what they are) only mutably or contingently. Certainly, one can think about things that are at one time but not at another, or that have certain properties at one time but not at another. The goddess, note, never says that one cannot think about such things. More than that, she herself proposes to go down the path mortal thinking typically wanders along, in the cosmological portion of her revelation, which promises to be a superior account of the nature, origin, and operation of the world's major mutable entities. What she does say, nonetheless, is that focusing one's thought on such things will at best result in thought that wanders $(\pi \lambda \alpha \gamma \kappa \tau \dot{o} \nu \nu \dot{o} o \nu$, fr. 6. 6), which is in a way tantamount to knowing nothing (cf. $\epsilon i \delta \delta \tau \epsilon_S o i \delta \delta \epsilon_V$, fr. 6. 4). The imagery in fr. 6. 4–7 that paints mortals as wandering blind and helpless portrays them as having failed entirely to realize that there is something that must be (what it is) and that this is available for them to apprehend if only they could awaken from their stupor. Even so, the goddess

does not say that mortals have no apprehension. Thought that wanders is still thought.

The goddess's major revelation to Parmenides, however, extends to him the promise of achieving thought that does not wander, thought that is stable and unqualified, νόος or νόημα pure and simple. The third way of inquiry can never lead to this, and thus it is not presented by the goddess as a path of inquiry for understanding, because it directs the inquirer's attention to things that are (what they are) only contingently or temporarily. The problem with this path is not, as too many have mistakenly taken it to be, that nothing exists along this way. There are innumerably many things that are in the manner specified at fr. 6. 8-9a (and fr. 8. 40-1). However, since their being is merely contingent, Parmenides thinks there can be no stable apprehension of them, no thoughts about them that remain steadfast and do not wander, and thus no knowledge, no true or reliable conviction. According to Parmenides, genuine conviction cannot be found by focusing one's attention on things that are subject to change. It comes only from focusing on what is not subject to change. This is a powerful idea, which, in one form or another, has had a long and important history in philosophy. Parmenides deserves credit for its first articulation and development.

FRAGMENT 3: THE AVAILABILITY OF WHAT IS FOR UNDERSTANDING

We are now well positioned to understand one of the shortest and superficially most enigmatic of all the Parmenidean fragments: . . . $\tau \dot{o} \gamma \dot{\alpha} \rho \ a \dot{v} \tau \dot{o} \nu c \epsilon \dot{\nu} \nu \dot{\epsilon} \sigma \tau i \nu \tau \epsilon \kappa \alpha \dot{\iota} \epsilon \dot{\ell} \nu \alpha \iota$ (fr. 3). The controversy that has arisen over this scrap of text furnishes an important object lesson in how exegetes are too prone to attribute to Parmenides extreme, historically improbable, or simply nonsensical positions. One of the modal interpretation's virtues, already seen in the interpretation of fr. 2. 7–8, is that it allows us to avoid saddling Parmenides with blatantly fallacious or otherwise implausible positions that do him discredit as a thinker.

No significant textual variants are transmitted in fr. 3, and one can have all possible confidence that these words are Parmenides'. Unfortunately, the ancient authors who quoted and thereby preserved the fragment for us give no reliable indication either of its original position and context in Parmenides' poem¹⁹ or of

¹⁸ For a survey discussion of some of the older interpretations of the fragment not canvassed here, see Tarán 1965: 41–4, and Untersteiner 1958: pp. CII–CVI. Cf. Cassin 1998: 122–34, where discussion of the varying interpretations of fr. 3 serves to illustrate the divide between 'analytic' and 'hermeneutic' approaches to Parmenides.

Some interpreters have followed Hermann Diels's suggestion in attaching it like a puzzle piece to the end of fr. 2. The putative restoration is defended on the grounds that it produces a complete and metrical hexameter and that fr. 3 purportedly makes good sense in this context. However, since the declaration of fr. 2. 6 finds its support in fr. 2. 7–8 (as indicated by the $\gamma \alpha \rho$ at fr. 2. 7a), and since the reason is complete as given and thus does not require the further 'support' of fr. 3, it is best to treat fr. 3 as an independent piece of text to be understood as best one can on its own.

what he may have meant by these words. Its brevity and uncertain position are factors one might well expect to make understanding the fragment more difficult. This difficulty is exacerbated by fundamental disagreement over its syntax. These words' connection to whatever originally preceded them is indicated by the particle, 'for' $(\gamma \acute{a} \rho)$, which typically occupies the second position in its clause, and which indicates that the clause somehow explains what comes before. The remainder of the clause consists of a neuter article and intensive pronoun $(\tau \delta \dots \alpha \vartheta \tau \delta)$, which is apparently a subject phrase, followed by a predicate construction consisting of the third person singular present indicative of the verb 'to be' $(\epsilon \sigma \tau i \nu)$ and a pair of present infinitives, of the verb 'to think' $(\nu o \epsilon \hat{\iota} \nu)$ and of the verb 'to be' yet again $(\epsilon \hat{\iota} \nu \alpha \iota)$, linked by the conjunction 'and' ($\tau \epsilon \kappa \alpha i$). The disagreement over the construal of these elements has resulted in two distinct types of translation. Some have considered it most natural to translate fr. 3 as (i) 'for it is the same thing to think and to be' or, what amounts to the same, as 'for to think and to be are the same'; others have argued for translating the fragment as (ii) 'for the same thing is there to think (of) and to be'. ²⁰ Both types of translation are grammatically possible, though advocates of each like to claim that the other is difficult. Against (i) it is sometimes pointed out that the substantival use of the infinitive without article would be unparalleled in Parmenides' time and even later. 21 Advocates of (i), on the other hand, find problematic the so-called 'datival' use of the infinitive in (ii), supposing this somehow unnatural or tortured, 22 despite the fact that the construction is common enough in Parmenides and in other fifthcentury authors. 23 Here we are dealing with a genuine impasse, at least at the level of the possible construals of the clause. Neither can be rejected solely on syntactic grounds. In this instance, then, one needs to consider what thought the fragment can be understood to express on each construal and try to decide which of these makes the best sense within the broader context of Parmenides' thought.

The decision should be easy enough given that the first type of reading yields something that is, philosophically speaking, utter nonsense. Unfortunately, not everyone has found this consequence sufficient reason to abandon the reading. Others before me have complained of this problem. Jonathan Barnes, for example, who renders fr. 3 'the same thing is both for thinking of and for being', confesses his inability to make any sense of type-(i) translations unless they are glossed as semantic equivalents of his own type-(ii) translation.²⁴ Presumably, he can make no sense of the type-(i) translation because it expresses a nonsensical thesis, the purportedly 'idealist' thesis its advocates have traditionally attributed to Parmenides. One such

²⁰ See Long 1996: 132–4, and Conche 1996: 88–9, for refs. and discussion of variations. Long dubs the main options, respectively, the 'mind/being identity reading' and the 'mind/being nonidentity reading'. Dalfen 1994 emphasizes the Plotinian pedigree of the view that fr. 3 asserts that thinking and being are identical, and he goes on to argue that the requisite construal is so difficult grammatically that only Plotinus' influence has made it appear a viable option.

21 So Coxon 2003: 210–11. Cf. Dalfen 1994: 198–9.

²² So Sedley 1999: 120 and 132 n. 9.

²³ Cf. Dalfen 1994: 200 ff.

²⁴ Barnes 1982*a*: 157 and 611 n. 4.

advocate, Gregory Vlastos, understood fr. 3 as asserting 'the identity of thinking and being'. He took this to mean that Eleatic Being must be mind, reasoning as follows:

the thought which knows being could hardly be denied existence. If it exists at all, it is at least a part of being, since 'nothing exists or will exist besides Being' [fr. 8. 36-7]; and since being is 'all alike' [fr. 8. 22], if thought is any part of being, all being must be thought. . . . This is most certainly idealism—a kind of idealism which obviously must not be confused with any of the later systems that bear this name, but which shares with all of them the dogma that thought and reality are coextensive.²⁵

One might take issue with the idealist reading by making a broad-based case, as Myles Burnyeat, following the lead of Bernard Williams, has done, that idealism is 'one of the very few major philosophical positions which did not receive its first formulation in antiquity'. 26 Since others have persisted, since Burnyeat's argument, in defending the 'idealist' interpretation of fr. 3, I want to focus more directly on the tensions within the kind of position Vlastos and others attribute to Parmenides.

Vlastos does well to try to insulate the 'idealist' thesis he attributes to Parmenides from comparison with later idealist systems, for no philosopher who has held that the physical somehow derives from or depends on the mental has ever entertained the simple identity of thinking and being Vlastos wants to attribute to Parmenides. Simply put, it is an odd form of idealism indeed that leaves no room for ideas. Contrast how Berkeley's idealist ontology is minimally dualist in that it admits two types of entity, minds or 'spirits' and ideas. What it is for an idea to be is to be perceived by a spirit—for ideas, esse est percipi. Spirits themselves are more complicated in that they are defined not only by a faculty of understanding, by which they perceive ideas, but also by a faculty of will, by which they can produce ideas or otherwise operate about them. Thus what it is for spirits to be is in part to perceive or be capable of perceiving—for spirits, esse est percipere. Even so brief an encapsulation of Berkeley's idealist ontology is sufficient to point up the impoverished character of the monistic 'idealism' insinuated by Parmenides' supposed identification of thinking and being (esse = intellegere). The apparent difficulty for this position is that it leaves the entity (or entities) whose essence is thinking with nothing to think about. If thinking and being are identical, then nothing can be that is not thinking.

This difficulty has driven at least one recent interpreter to argue that the entity whose being is thinking is the object of its own thought. Ian Crystal, whose reading of Parmenides is in other respects a fairly conventional representative of the strict monist interpretation, has argued that Parmenides' monism 'entails the strict

²⁵ Vlastos 1953: 168. Cf. Vlastos 1946: 67: 'the identity of subject and object of thought applies no less to the knowledge of Being than to the knowledge of sensible things: "to think (sc. Being) and to be are the same thing".' Cf. Kahn 1969: 721, where Parmenides' monism is said to entail 'the identification of Mind and Being, that is, of cognition with its object'.

26 Burnyeat 1982: 3–4. Cf. Williams 1981. Compare, likewise, Cornford 1939: 34 n. 1: 'I cannot believe that Parmenides meant "To think is the same thing as to be." He nowhere

suggests that his One Being thinks, and no Greek of his date or for long afterwards would have seen anything but nonsense in the statement that "A exists" means the same thing as "A thinks".'

identification of the epistemic subject and object'. ²⁷ Since Parmenides' arguments in fr. 8 rule out any division or differentiation in what is, there is, according to Crystal, no option for Parmenides but to maintain that there is no 'differentiation between thinking and what is thought'. 28 Essentially, Crystal is just highlighting a necessary consequence of taking Parmenides to have been a strict monist: 'the distinction between the thinker and the object is a distinction that cannot be maintained in light of the monism outlined in Fragment 8 because the account on offer there prohibits all forms of differentiation'. 29 Crystal's concluding formulation is that Parmenides 'identifies the cognitive act with what it apprehends'. 30 This purported position is incomprehensible because incoherent. If Parmenidean Being is at once thinking and the object of its own thought, then it already violates the principle of the identity of thinking and being. In so far as it is thought, it is not thinking, so that its being cannot be identical with its activity of thinking but must also consist at least in part in its being such as to be thought. Within any coherent idealist system, the presence of entities whose esse is percipere, in whole or in part, requires the companion presence of entities whose esse is perciperi, in whole or in part. That all being is thought is not, pace Vlastos, a variant of idealism, since no version of idealism holds that there are minds without objects or contents, for the simple reason that this notion cannot be developed coherently.31

²⁷ Crystal 2002a: 207.

²⁹ Crystal 2002*a*: 217.

³⁰ Ibid. 218–19.

²⁸ Crystal (ibid. 217), suggests that fr. 8. 34 ff. interrupt the main sequence of argumentation because, once Parmenides has completed his argument for the qualitative homogeneity of what is, he needs to rule out the possibility of this particular form of differentiation. The point is supposedly made in fr. 8. 34, tr. Crystal as 'Thinking and that for the sake of which thought is is the same' and glossed as '[t]he relation between thinking and being . . . is one of identity'. However, the arguments of Ebert 1989 (reviewed in the textual appendix), which Crystal fails to take account of, seriously undermine this already implausible suggestion.

³¹ Long 1996: 134–6, confronts head-on the challenge of extracting an intelligible idea from the 'mind/being identity' reading of fr. 3. He might seem to hit upon an intelligible formulation of the identity thesis when he says: 'If thinking and Being are the same—the mind/being identity reading of fr. 3—and if all thinking must be of "what is," which is the only being, then thinking must think Being, and Being must think itself' (138). That something can think about itself is certainly an intelligible idea. However, this is no longer the thesis that thinking and being are the same. (Thus Crystal 2002b: 22 and 47–8, rightly acknowledges that the purportedly Parmenidean identification of thought and being is incompatible with self-intellection.) Long remained true to that thesis in arguing earlier that 'if "what is not" is not thinkable, in the requisite sense of not being available to be thought (or known), and if "what is" and the activity of thinking as well as the object of thought are the same, it follows that being qua thinking must think "what is." On the mind-being identity reading, there can be no gap between being qua thinking subject, and being qua thought object' (135). With its collapse of the act/object distinction, the formulation in the conclusion here fails to meet the challenge of intelligibility. Ultimately, Long is more interested in the possibility that Parmenidean Being is a thinking entity rather than the mindless and lifeless entity it is normally taken to be, and he acknowledges the need to go for this beyond fr. 3 (and the similar-sounding fr. 8. 34-6), turning to Parmenides' relation to other Presocratic thinkers to argue the point. That the entity Parmenides describes in his account of truth or reality is a thinking mind is intelligible (and maybe even correct, even though Parmenides does not directly argue the point); but this is, again, different from the thesis that thinking and being are identical.

The incoherence of the claim that thought and being are identical (*esse = intellegere*) does not automatically entail that Parmenides did not mean to advance it, and some interpreters will continue to view as central to the Parmenidean system this nonsensical thesis. That anyone should be willing to do so, however, when there are sound interpretive alternatives available seems remarkable.

There is a more plausible, albeit more mundane, alternative to the thought/being identity reading. Moreover, although the fragment's isolation means that we can no longer know its precise context and function, this alternative shows Parmenides making a point we find him making elsewhere.

It seems reasonable to suppose that 'for the same thing is... to be' $(\tau \dot{\rho} \gamma \dot{\alpha} \rho)$ $\alpha \vec{v} \rightarrow \cdots \vec{\epsilon} \vec{v} \vec{v} \cdots \vec{\epsilon} \vec{v} \vec{v} \vec{v}$ here in fr. 3 is to be construed in the same way as 'for it is to be' ($\epsilon \sigma \tau \iota \gamma \lambda \rho \epsilon \iota \nu a \iota$) at fr. 6. 1b. Fr. 3's other infinitive, 'to understand' ($\nu o \epsilon \iota \nu$), will also function like its companion, 'to be' ($\epsilon i \nu \alpha \iota$), namely as a datival infinitive with the main verb 'is' $(\vec{\epsilon}\sigma\tau'\nu)$, the subject of which is 'the same thing' $(\tau\dot{\alpha}\dots\alpha\dot{\nu}\tau\dot{\alpha})$. One should therefore translate the fragment as: 'for the same thing is (there) for understanding and for being'. Much the same point is made in Parmenides' summary conclusion at fr. 8. 34–6a. The clause 'the same thing is for understanding' $(\tau \delta \dots$ αὐτὸ νοεῖν ἐστίν) here in fr. 3 is almost exactly replicated by fr. 8. 34a's 'the same thing is for understanding' $(\tau \omega \dot{v} \tau \dot{v} v \delta' \dot{\epsilon} \sigma \tau \dot{v} v o \epsilon \hat{v})$. In this latter instance, the words that follow make it plain that what 'is for understanding' is what must be or τὸ ἐόν: 'For not without What Is', the goddess declares, 'will you find understanding $(\tau \delta)$ $\nu o \epsilon \hat{i} \nu$)' (fr. 8. 35–6a). Her assertion in fr. 3, therefore, that the same thing (evidently, What Is) is there for understanding and for being, not only can be understood as making just the same point as is made more fully here in fr. 8, but it also seems to replicate the point made in fr. 6. 1b.

The original context and purpose of this declaration unfortunately remain unclear. Perhaps, though this must remain speculation, fr. 3 served to counter an unwelcome possibility that had to be addressed before proceeding to fr. 8's demonstration of the attributes of What Is. While understanding that does not wander requires that its object enjoy one of the stable modalities specified in fr. 2, the goddess indicates that no actual entity can enjoy the modality of necessary nonbeing. This might make one concerned about a parallel possibility—that no entity enjoys the modality of necessary being, that is, that no entity must be. Fr. 3 could have served as Night's declaration countering this possibility. Perhaps Parmenides represented the goddess elsewhere in the prelude as presenting more reasons than she does here for accepting that there actually is something that is and cannot not be, but the only place in the extant fragments where there would seem to be even the bare bones of such an argument is fr. 3.

FRAGMENT 7: FURTHER ADMONITION

The goddess continues her admonitions to Parmenides in fr. 7, before turning to her account of what one finds by pursuing the first path of inquiry. This fragment's first

two verses contain yet another warning not to allow one's mind to stray into a wrong direction: '... for this may never be made manageable, that things that are not are. But you from this path of inquiry restrain your understanding'. The opening demonstrative 'this' $(\tau o \hat{v} \tau o)$ is usually taken to refer to the ensuing phrase, 'that things that are not are' ($\epsilon \hat{i} \nu \alpha \iota \mu \dot{\eta} \dot{\epsilon} \acute{o} \nu \tau \alpha$), but the loss of what originally preceded makes it impossible to know whether this is legitimate. ³² Fortunately, despite the loss of context, the goddess's ensuing instruction to Parmenides to restrain his understanding (νόημα) 'from this way of inquiry' seems enough indication that this particular phrase is meant to characterize a way of inquiry. Some have supposed that it refers to the second way of fr. 2. 33 However, it is extremely difficult to see how 'things that are not are' $(\epsilon i \nu a \iota \mu \dot{\eta} \epsilon' \delta \nu \tau a)$ could ever be mistaken for a description of the mode of being that defines the second way. The goddess's description of that way involved no hint of a supposition that what is not is. On the contrary, whatever lies along the second way is not and must not be. Alternatively, one might try to understand the phrase as a reference to the second way by taking 'things that are not' $(\mu \dot{\eta} \dot{\epsilon} \acute{o} \nu \tau a)$, like 'what is not' $(\tau \dot{o} \mu \dot{\eta} \dot{\epsilon} \acute{o} \nu)$ at fr. 2. 7, as shorthand for what enjoys the modality that defines the second way, such that 'things that are not' here would be tantamount to 'things that are not and must not be'. But then it is hard to imagine anyone ever actually supposing that things that are not and must not be in fact are. How could anyone coherently suppose that what must not be is? Even if this were possible, such a supposition would involve straying from the second path of inquiry rather than following it.

If the goddess's words in fr. 7. 1–2 are not a renewed warning against fr. 2's second way, then they must be a warning against some other way of inquiry. This is in fact the more natural way to understand her warning, given how she continues in

So Coxon 1986: 190 ad loc: since 'the sentence is introduced by $\gamma \alpha \rho$ and justifies or explains an assertion now missing, the reference of $\tau o \hat{v} \tau o$ is uncertain'. The loss of what preceded and thus of whatever point the opening of fr. 7 was originally meant to support has also left the sense of $\delta a\mu\hat{\eta}$ less clear than it might otherwise be. (This now generally accepted reading—3rd s. aor. pass. subj. of δάμνημι (cf. δαμάζω)—goes back to Stein 1867: 785. See Conche 1996: 116, for a defence against the few who have objected to it.) Translations of fr. 7. 1a thus vary fairly widely. Some follow Stein's suggestion that $\delta a\mu\hat{\eta}$ here has the sense of *cogatur*, based on supposed analogies with certain Platonic uses of $a\nu a\gamma\kappa a\zeta\epsilon_{\nu}$ and $\beta\iota a\zeta\epsilon_{\nu} a\epsilon_{\nu}$. Thus e.g. Burnet 1930: 174: 'For this shall never be proved'; Kirk and Raven 1957, 271: 'For never shall this be proved'; Barnes 1982a: 158: 'For never will this be proved'. But δαμάζω with this sense would be unparalleled. Other translations acknowledge this point while trying to preserve the connection to the supposed parallels in Plato. Thus, for instance, Tarán 1965: 73: 'For never shall this be forced'; Kirk et al. 1983: 248: 'For never shall this be forcibly maintained'; cf. Conche 1996: 116-17. Stein's purported parallels in Plato are, however, red herrings. Still others try to stay closer to the sense of the verb in its passive uses as specified by LSJ. Thus e.g. Coxon 1986: 58: 'For this principle shall never be vanquished' or 'be defeated' (so 190 ad loc.); Waterfield 2000: 59: 'For never shall this be overcome'. The fundamental sense of δαμάζω is 'to tame'—the Greek and English words are in fact etymologically connected. The translation adopted here attempts to preserve the connection to the verb's root sense, in that something-be it a wild animal, a piece of metal or land, a young bride, or one's enemy or opponent—is 'tamed' when it is made manageable, workable, governable, or otherwise subject to one's control. Cassin 1998: 85, likewise preserves the verb's root sense in translating, 'Car jamais ceci ne sera dompté'. ³³ Though not Plato, pace Coxon 1986: 190 ad loc.

fr. 7. 3-5a to caution Parmenides against straying from the way he must follow: 'and do not let habit born of much experience force you along this way, | to employ aimless sight and echoing hearing | and tongue'. Those who take fr. 7. 1-2 as warning Parmenides once again off the second way understand the phrase 'along this path' $(\delta\delta\delta\nu \kappa\alpha\tau\dot{\alpha} \tau\dot{\eta}\nu\delta\epsilon)$ in verse 3 as referring to another way, that followed by mortals, which is distinct from the way referred to in verse 2, 'from this path of inquiry' $(\tau \hat{\eta} \sigma \delta' \ \hat{a} \phi' \ \hat{o} \delta o \hat{v} \ \delta \iota \zeta \dot{\eta} \sigma \iota o s)$. However, verses 3–5a are on their own insufficient to define a way of inquiry. They are more naturally seen as warning Parmenides against the excessive reliance on ordinary perception and language that leads mortals astray down their particular wrong way. It is thus best to understand fr. 7. 1-2 as referring to the third way of inquiry and as warning Parmenides not to let his mind stray onto it (lest he end up, like ordinary mortals, with wandering and unstable thought). There is little apparent reason, that is, to suppose that the paths mentioned in verses 2 and 3 are distinct. Contrast how Night clearly signals a distinction between two ways both in fr. 2 and in fr. 6. 3-5a. Furthermore, if it is right to assume that fr. 7 came between frs. 6 and 8, it makes more sense to see it as continuing to warn Parmenides against the mistake mortals make, rather than as returning to the second way, which was dismissed as a viable path of inquiry as soon as it was introduced. Since no one actually can or does follow that way, there is little the goddess need say to keep Parmenides off it. By contrast, people not only can but do pursue inquiry along the third path. It is in fact overwhelmingly tempting to do so for those who have never envisaged any other possibility. The goddess therefore has much more to say by way of warning Parmenides off this very conventional way of inquiry, even though her own cosmology will be an account of the most important things lying along it.

How, then, are we to understand fr. 7. 1b's condensed but evidently important phrase 'things that are not are' $(\epsilon \hat{i} \nu a \iota \mu \dot{\gamma} \dot{\epsilon} \acute{o} \nu \tau a)$? Given how the goddess proceeds to warn Parmenides against relying on the senses and ordinary ways of speaking, it seems reasonable to take it as referring in some way to the things humans ordinarily experience and speak about. If we keep Parmenides' modal distinctions properly in focus, so as not to misrepresent the choice in fr. 2 as one between existence and nonexistence, there should be no temptation to suppose that the goddess attributes to mortals the mistake of supposing that things that do not exist exist. Furthermore, we have already seen the goddess referring to a mixed mode of being in characterizing the objects of ordinary mortals' attention. Their inquiries are focused on things that 'are and are not the same and not the same' (fr. 6. 8-9a). Later they will be similarly represented as focused on things that involve 'both coming to be and perishing, both being and not (being)' (fr. 8. 40). The principal error of ordinary mortals, as Night characterizes it, has been to suppose that focusing on things that only mutably or contingently are (what they are) will furnish them with trustworthy thought and understanding. Something like this appears to be the point of the goddess's admonition here in fr. 7. 1. In rough terms, she seems to be warning against supposing that things that ever fail to be (what they are) 'really' are or are in the way a genuinely trustworthy object of understanding needs to be. All things that 'are and are not the same and not the same', that is all things that are subject to the various forms of change and non-identity so that they are whatever they are only temporarily and contingently—all these seem to be what the goddess here refers to as 'things that are not' $(\mu\dot{\eta} \ \hat{\epsilon} \acute{o} \nu \tau a)$. Given Parmenides' actualist conception of modality, the phrase is perhaps best understood as picking out those entities that are (what they are) at one time but not at another. Understanding the subject phrase 'things that are not' in this way, as indicative of entities whose mode of being involves not being as well as being, is preferable to understanding it as a way of referring to 'non-entities' or things that fail to be or exist altogether. For the phrase needs to pick out the kinds of things on which mortals focus their attention, and, again, the goddess has already referred to these as involving the mixed mode of being and not being at the end of fr. 6 and will do so again at fr. 8. 40.

The goddess seems to be warning Parmenides not to suppose that the mutable entities he has heretofore encountered might be suitable objects for his νόημα or understanding. She seems to be warning him not to suppose that any of these things are in the fixed and permanent manner required of a proper object of unerring thought. Thus the sense of the dense little phrase, 'things that are not are' $(\epsilon \hat{i} \nu \alpha \iota \mu \dot{\eta})$ $\vec{\epsilon} \acute{o} \nu \tau a$), might be made explicit by expanding it as follows: Parmenides is not to allow himself to suppose that things that are (what they are) only contingently or mutably in fact are in the manner required of the proper objects of understanding. He is not to suppose that things whose being sometimes fails 'really' or 'genuinely' are. If this seems a lot to extract from these three words, how we actually translate them remains simple enough: 'things that are not are' or even 'things that are not really are'. By 'really are' here I of course mean to indicate more than merely existing. I want to suggest that the infinitive 'to be' ($\epsilon l \nu a \iota$) at fr. 7. 1b is an instance of the verb being used in the way we have only seen the participle $(\tau \delta) \vec{\epsilon} \delta \nu$ functioning until now. One might be inclined to object that while it is reasonable to expect Parmenides to employ the participle as a shorthand way of referring to what enjoys the modality specified in fr. 2. 3, it is too much to suppose that an audience could be expected to recognize a parallel use of other forms of the verb. Parmenides nevertheless does appear to use the verb in this manner, perhaps most notably, as we shall see in the next chapter, when he encapsulates the choice between the two ways introduced in fr. 8 in the simple opposition, '[it] is or [it] is not' (fr. 8. 16a). Although such shorthand use of non-participial forms of the verb remain relatively rare, this new use of the verb is so significant philosophically that something must be said about it before we proceed to fr. 8's demonstration of what what must be must be like.

PARMENIDEAN BEING

It must be emphasized at the outset that we are dealing with an unusual and philosophically motivated *use* of the verb $\epsilon l \nu a \iota$ ('to be') by Parmenides and certain other Greek thinkers. By no means am I proposing the need to recognize another 'sense' or grammatical function of the verb, to be set alongside the 'existential', 'predicative', 'veridical', and other senses it has been thought to have. This

philosophical use of $\epsilon i \nu a \iota$ is a revisionary one that neither corresponds to, nor functions as a simple extension of, any common use of the verb. This philosophical use of elvat came about because Parmenides and certain subsequent thinkers found the verb as ordinarily employed inadequate for the expression of a basic metaphysical distinction. The motivating philosophical concern can be explained at the most general level as follows. Consider two entities, x and y, each of which is (what it is) for some span of time, t. Suppose x and y differ, however, in that x is (what it is) everlastingly and invariably, which is to say not only during t but for all time spans earlier and later, while y is (what it is) only during t. While it is true to say during t both that x is (what it is) and that y is (what it is), these statements fail to reflect the fact that x, but not y, is (what it is) everlastingly and invariably. Thus when speaking of x and y each as being (what it is), it will sometimes be useful to have a way of marking the difference between their modes of being, the difference that consists of x being (what it is) everlastingly and invariably and γ being (what it is) only mutably and temporarily. It might seem misleading or otherwise inadequate to class x and ytogether as being (what they are) without somehow indicating this difference in the ways they are.

Some Modally Restricted Uses of elvai in Plato

Now, the easiest way to mark this distinction would seem to be by the use of adverbs. This is how I have in fact been marking the distinction just now in describing x as being (what it is) everlastingly and invariably and in describing y as being (what it is) variably and temporarily. This is also, for example, how the common epic formula, '[the] gods who always are' $(\theta \epsilon o i \alpha i \hat{\epsilon} \nu \hat{\epsilon} \acute{o} \nu \tau \epsilon s)$, distinguishes the way the gods are from the way mortal creatures are. Use of adverbial markers is likewise common enough among philosophical authors when they wish to distinguish between the modes of being of certain entities. For instance, Plato famously does this in the Symposium when he has Diotima describe the Form of Beauty, in contrast to particular beautiful things, as 'always being and neither coming to be nor passing away' ($\hat{a}\hat{\epsilon}\hat{i}$ $\hat{o}v$ $\kappa a\hat{i}$ $o\tilde{v}\tau\epsilon$ γιγνόμενον οὔτε ἀπολλύμενον, Smp. 211 A 1) and then, with even more elaborate modification, as 'being always itself in itself with itself of a single kind' $(\alpha \dot{v} \tau \dot{o} \kappa \alpha \theta)$ ' αύτὸ μ εθ' αύτοῦ μ ονοειδὲς ἀεὶ ὄν, Smp. 211 μ 1–2). ³⁴ Towards the end of Republic 5, in a passage where Parmenides' influence is also apparent, Plato likewise marks a distinction between ways of being adverbially when he has Socrates speak of 'what perfectly is' $(\tau \delta \dots \pi \alpha \nu \tau \epsilon \lambda \hat{\omega}_S \ \sigma \nu)$ and of 'what absolutely is' or 'what unqualifiedly is' (τοῦ εἰλικρινῶς ὄντος), after which he then has him distinguish this both from what is and is not and from 'what is not in any way' ($\mu \dot{\eta} \ddot{\partial} \nu \, \mu \eta \delta a \mu \hat{\eta}, \tau o \hat{\nu} \dots \mu \eta \delta a \mu \hat{\eta} \ddot{\partial} \nu \tau o s$) (R. 5. 477 A 2–7, cf. 478 D 5–7, 479 D 5). Here in the *Republic*, the adverbs employed by Plato come closer than those at Symposium 211 A-B to carving out a special, unrestricted, or absolute sense of the verb 'to be' itself. The distinction between what

³⁴ The parallels between Diotima's descriptions of the Form of Beauty and Parmenides' account of What Is have been often noted. See Palmer 1999*a*: 3–5 and, for refs. to earlier discussions, 3 n. 1.

completely or unqualifiedly is, on the one hand, and what is and is not, is just the kind of modal distinction we considered at the end of the preceding section. Also, the adverbs $\pi a \nu \tau \epsilon \lambda \hat{\omega}_S$ ('perfectly', 'completely', or 'absolutely') and $\epsilon i \lambda \iota \kappa \rho \iota \nu \hat{\omega}_S$ ('purely', 'simply', 'absolutely', or 'without qualification') here suggest that for something only to be (what it is) without also, whether in some other respect or at some other time, not being (what it is) amounts to being absolutely, without qualification, really, or genuinely. Still, these phrases only approach the special, modally restrictive use of $\epsilon i \nu a \iota$ I wish to draw attention to, for the distinction between modes of being continues to be marked adverbially in these instances rather than being built into use of the verb itself.

At numerous points in the remainder of *Republic* 5, however, Plato employs the verb $\epsilon \hat{\iota} \nu a \iota$ without any adverbial modifier to refer to what only or genuinely is or otherwise to pick out its mode of being. First, he uses the participial phrase $\tau \delta$ $\delta \nu$ or, even, simply $\delta \nu$ ('what is' or 'being') (477 A 9, B 10, 11, 478 A 6, B 3–4, C 6) as the equivalent of $\tau \delta \dots \pi a \nu \tau \epsilon \lambda \hat{\omega} s$ $\delta \nu$ ('what perfectly is') or $\tau \delta \epsilon \hat{\iota} \lambda \iota \kappa \rho \iota \nu \hat{\omega} s$ $\delta \nu$ ('what absolutely is'). He also employs the participial phrase $\tau \delta \mu \dot{\eta}$ $\delta \nu$ or simply $\mu \dot{\eta}$ $\delta \nu$ ('what is not' or 'not-being') (477 A 10, 478 B 6, 9, C 3, 6, 479 D 5) as the equivalent of $\tau \delta \mu \eta \delta a \mu \dot{\eta}$ $\delta \nu$ or $\mu \dot{\eta} \delta \nu \nu \eta \delta a \mu \dot{\eta}$ ('what is not in any way'), sometimes identifying this as 'nothing' ($\mu \eta \delta \epsilon \nu$, 478 A 8, B 9). All these substantival uses of the participle parallel Parmenides' own uses of $\tau \delta \mu \dot{\eta} \epsilon \delta \nu$ and ($\tau \delta$) $\epsilon \delta \nu$ as 'shorthand', respectively, for what is not and must not be, and for what is and cannot not be. Not coincidentally, the Platonic passage involves extensive appropriation of Parmenidean distinctions. Further along, at 479 C 7, Plato uses the abstract noun $\sigma \delta \sigma a$, which in philosophical parlance comes to be the normal term for 'substance', in place of $\tau \delta \delta \nu$ and in the equivalent sense of '(unqualified) being' or 'what (only or genuinely) is'.

In the latter part of *Republic* 5, Plato also seems to employ non-substantival forms of the verb in this modally restricted manner. At one point he has Socrates characterize the objects of doxa as 'what partakes of both, of both being and not being, and would properly $(\partial_{\rho}\theta\hat{\omega}_{S})$ be called neither without qualification $(\epsilon i\lambda\iota\kappa\rho\iota\nu\epsilon_{S})$ (478 E 1–3, cf. 479 C 3-D 5). The explanatory clause highlighted here suggests that entities that are (what they are) yet are also subject to not being, whether by not being (what they are) in some different respect or at some different time, are only in a limited and qualified sense. Strictly speaking, such things neither are absolutely and without qualification, nor is it the case that they are not absolutely and without qualification. The explanatory clause, furthermore, suggests that for something to be (what it is) in the strict or proper sense is for it only to be, without ever being subject to not being (what it is). The language of participation in this passage, moreover, suggests that things that are (what they are) in only a limited or qualified way 'are' in a derivative sense. Plato seems prepared to identify the modally restricted use of $\epsilon i \nu a \iota$ as fundamental, even though this use originates in philosophical reflection on the different ways of being. This is a radical and revisionary perspective. It is not one

³⁵ Ibid., chs. 3 and 4. The connections to Parmenides in the latter part of *Republic* 5 had theretofore been less widely noted than those in the *Symposium*'s description of the Form of Beauty. See, however, Kahn 1988: 255; Crystal 1996.

Plato (or modern scholars of ancient philosophy) ever could have reached via empirical analysis of the syntax and semantics of the verb 'to be' ($\epsilon i \nu a \iota$) among everyday speakers of the Greek language or in non-philosophical authors. Plato's view that talk of being where one is referring to things that are (what they are) invariably and everlastingly is fundamental, and that talk of being when referring to other things is somehow derivative, involves a willingness to allow that ordinary usage is an imperfect guide to the actual articulation of conceptual space. In particular, from a philosophical perspective, it might well seem inappropriate that the same verb should be used of things that are (what they are) necessarily and things that are (what they are) only contingently. Nonetheless, although this passage and others one might cite indicate that Plato thought of the objects of ordinary experience as being (what they are) in a derivative sense, in that they are not (what they are) perfectly, everlastingly and invariably, he is not prepared to go so far, here in *Republic* 5, as to suggest that some verb other than 'to be' should be used instead when speaking of things that are in the derivative or limited manner.

Plato does seem willing to take this further step in the *Timaeus*' famous account of the distinction between being and becoming in the preface to the dialogue's cosmology:³⁶

'Έστιν οὖν δὴ κατ' ἐμὴν δόξαν πρῶτον διαιρετέον τάδε· τί τὸ ὂν ἀεί, γένεσιν δὲ οὐκ ἔχον, καὶ τί τὸ γιγνόμενον μὲν ἀεί, ὂν δὲ οὐδέποτε; τὸ μὲν δὴ νοήσει μετὰ λόγου περιληπτόν, ἀεὶ κατὰ ταὐτὰ ὄν, τὸ δ' αὖ δόξη μετ' αἰσθήσεως ἀλόγου δοξαστόν, γιγνόμενον καὶ ἀπολλύμενον, ὄντως δὲ οὐδέποτε ὄν. (Τί. 27 D 5–28 A 3)

Now, in my opinion, first one must make the following distinctions. Is there something that is always though not subject to coming-to-be, and something that is becoming always though never being? The former is to be apprehended by understanding assisted by reason, since it is always the same; while the latter is to be opined by opinion assisted by unreasoning perception, since it is becoming and perishing though never really being.

The network of distinctions here closely resembles that articulated in the latter part of *Republic* 5. The major difference is that what is everlastingly and genuinely is contrasted, no longer with the intermediate class of entities that are and are not, but with entities that are only ever coming to be. The distinction among cognitive states corresponding to the ontological distinction remains much the same here as in the *Republic*. If those entities Plato here now refers to as 'becoming always though never being' are identical with those he previously had described as both being and not being, then the *Timaeus*' description of them as 'becoming always though never being' does not in fact amount to saying that none of them is (what it is) in some context or for some stretch of time—at least not if such pedestrian uses of 'is' were still preserved. Here, however, Timaeus effectively proposes abandoning the more common uses of 'is' so as to restrict use of the verb exclusively to what Plato in *Republic* 5 had marked as its strict, unqualified, and non-derivative use, namely to instances where what is spoken of as 'being' is (what it is) invariably and everlastingly. For the things one might otherwise speak of as 'being', though only

³⁶ For an excellent and more nuanced discussion of this passage, see Frede 1988: 37–41.

in the derivative sense, Plato here imports another verb altogether—'become' or 'come to be' $(\gamma i \gamma \nu \epsilon \sigma \theta a \iota)$ —so as no longer to subsume the two ways of being under a common term. Thus in the phrase 'though never being' $(\partial \nu \delta \hat{\epsilon} \ o \hat{\nu} \delta \hat{\epsilon} \ no \tau \hat{\epsilon})$, at the end of the *Timaeus* passage's second sentence, the verb is used in its modally restrictive sense. Failing to appreciate this feature of the passage, and consequently trying to construe the verb's sense as existential, predicative, veridical, or as some fusion thereof, can only have disastrous results. For Timaeus' distinction is neither between what always exists and what never exists, nor between what always is F and what never is F, nor between what always is the case and what never is the case, nor anything else along such lines. When Timaeus says things subject to coming-to-be never 'are', he means they never are in the absolute and unqualified manner of things that are (what they are) invariably and everlastingly. This point is easy enough to recognize from the way the phrase at the end of the passage, 'though never really being' $(\partial \nu \tau \omega_S \delta \hat{\epsilon} \ o \hat{\nu} \delta \hat{\epsilon} \pi \sigma \tau \hat{\epsilon})$, functions as the equivalent of the earlier phrase, 'though never being' $(\partial \nu \delta \hat{\epsilon} \ no \tau \hat{\epsilon})$.

There is every reason to think that Plato's impulse towards qualifying and restricting the verb 'is' in ways that mark the difference between entities that are invariably or necessarily and entities that are only mutably or contingently should be traced back to Parmenides, with whom this use of the verb originated.

Modally Restricted Uses of $\epsilon lval$ in Aristotle, *Physics* 1. 8

Plato is not the only ancient philosopher of the classical period to employ restricted uses of the verb 'is' comparable to the modally restricted uses we see in Parmenides. We have already in Chapter 1 pointed out the restricted uses of the verb in Gorgias' On nature, or On what is not, in the treatise's doxographical survey of previous views regarding the things that are $(\pi\epsilon\rho)$ $\tau\hat{\omega}\nu$ $\ddot{o}\nu\tau\omega\nu$), where the class of $\tau\hat{\alpha}$ $\ddot{o}\nu\tau\alpha$ extends only and specifically to whatever entities are purportedly fundamental to, or responsible for, the being of all others. This survey functions as a preface to the arguments of the treatise's first major division, where Gorgias argued for the thesis that 'nothing is' $(oi\delta \hat{\epsilon} \nu \ \text{\'e}\sigma \tau \iota, \text{ cf. [Arist.] } MXG 979^{a}13, 21, 31, 32-3, ^{b}37, 980^{a}2, 9)$ or against the claim that 'something is' $(\tau i \epsilon \sigma \tau i, 979^{a}20, 21, {}^{b}35)$. The role of the doxographical survey in providing the background for the claim that 'something is' indicates that 'is' has a restricted range in both these formulations, that is to say, that their sense is not that nothing exists, but that nothing occupies the ontologically fundamental position the early Greek philosophers had proposed to give the purportedly fundamental entities in their systems. Gorgias' exploration of the problems of being was as deeply indebted to Parmenides as Plato's, even if Gorgias' restricted uses of 'is' here are not quite identical to modally restricted uses Parmenides pioneered. The sense Gorgias gave to $\tau \dot{\alpha}$ $\ddot{o}\nu\tau\alpha$ is well reflected in Aristotle's remark in *Physics* 1. 2, immediately after setting out a schema for classifying earlier views regarding the number and nature of $\mathring{a}_{\rho \chi a \iota}$ or principles that itself owes much to Gorgias (184^b15–22), that those who inquire into the number of the things that are $(\tau \dot{\alpha} \ \ddot{o} \nu \tau \alpha)$ conduct a similar inquiry (184^b22–3). In both cases, the range of $\tau \hat{\alpha}$ $\ddot{o}\nu \tau a$ is clearly restricted to just those entities that 'are' more fundamentally or unqualifiedly than all the other entities that depend on them.

Aristotle prominently employs forms of the verb $\epsilon \hat{\imath} v a \iota$ in a similarly restricted manner in a crucial passage at the beginning of *Physics* 1. 8 generally taken to provide the main evidence of Aristotle's support for the representation, in Guthrie's narrative and certain of its descendants, not only of Parmenides as a strict monist but also of the later Presocratic pluralists' reaction to the challenge to traditional cosmology posed by this doctrine. It will thus be important both for the present chapter's argument and for our broader rejection of Guthrie's narrative to demonstrate how this view of the passage involves significant misunderstanding.

Physics 1. 8 opens with Aristotle claiming that a difficulty or problem to which earlier thinkers succumbed can only be resolved by adopting the analysis of the principles of change that he has himself developed in the previous chapters. Precisely what that difficulty is supposed to have been is left rather vague by the chapter's initial sentence, but the difficulty becomes clearer as the passage progresses:

That only in this way is the difficulty $(\partial \pi o \rho i a)$ of the earlier thinkers resolved let us speak of next. For the first philosophers to inquire into reality and the nature of the things that are $(\tau \dot{\eta} \nu \ \partial \lambda \dot{\eta} \theta \epsilon \iota a \nu \ \kappa a \iota \ \tau \dot{\eta} \nu \ \phi \dot{\nu} \sigma \iota \nu \ \sigma \dot{\nu} \tau \omega \nu)$ veered off, so to speak, onto a different path and were driven off course by their inexperience, and they say that none of the things that are $(\tau \dot{\omega} \nu \ \sigma \nu \tau \omega \nu \ o \dot{\upsilon} \delta \dot{\epsilon} \nu)$ either comes to be or perishes because it is necessary that what comes to be comes to be either from what is or from what is not $(\ddot{\eta} \ \dot{\epsilon} \xi \ \sigma \nu \tau o s \ \ddot{\eta} \ \dot{\epsilon} \kappa \ \mu \dot{\eta} \ \sigma \nu \tau o s)$, and it is impossible on either option. For what is $(\tau \dot{\sigma} \ \sigma \nu)$ cannot come to be (for it is already), and nothing can come to be from what is not; for there must be something underlying. And thus magnifying the consequences of this, they deny that many things are but say only what is itself [is] $(o \dot{\upsilon} \delta v) = (a \nu v) (a \nu$

To understand the passage, one must first be clear about what thinkers Aristotle has in mind when he writes, 'they say that none of the things that are either comes to be or perishes because it is necessary that what comes to be comes to be either from what is or from what is not, and it is impossible on either option'. It is tempting, of course, to suppose that he has in mind the 'Eleatics', Parmenides and Melissus, for this certainly sounds like an argument with an Eleatic pedigree. There are compelling reasons, however, to resist this exclusive identification. First, Aristotle begins by saying that his theory of principles provides the only way of resolving the older thinkers' aporia. If he thinks this is the case, then he cannot suppose that those thinkers often grouped together as the post-Parmenidean pluralists can themselves have solved the problem he is identifying. Aristotle must think that they too went down the blind alley. Second, the description of these thinkers is quite general: 'the first philosophers to inquire into reality and the nature of the things that are'. Aristotle cannot have intended this description to pick out only the Eleatics. It apparently encompasses all those early thinkers whose views he has been surveying earlier in the book. The impasse he now speaks of is where the Presocratics generally

³⁷ Aristotle's argument here is reminiscent of the argument in Gorgias' *On nature, or On what is not* as to why τ ò $\delta \nu$ cannot be generated. See [Arist.] MXG 979 b 27–34 \approx S.E. M. 7. 71.

ended up, or so Aristotle supposes. We thus require an understanding of the problem at the heart of this passage that explains why Aristotle would have thought all the early thinkers wound up succumbing to it.

Surely, conventionalists will say, the thesis that nothing comes to be or perishes is a distinctively Eleatic thesis, to which the later Presocratics all attempted to respond. So Aristotle cannot mean to ascribe it to the Presocratics generally. I agree that Aristotle cannot mean to ascribe this thesis to the Presocratics generally. He means to ascribe to them a different thesis, as more careful attention to his actual words should show. The thesis in question is not simply that 'nothing comes to be or passes away' but that 'none of the things that are $(\tau \hat{\omega} \nu \ \mathring{o} \nu \tau \omega \nu \ o \mathring{v} \mathring{o} \acute{v} \nu)$ either comes to be or passes away'. These two statements will seem equivalent only if one takes 'the things that are' $(\tau \hat{\omega} \nu \ \mathring{o} \nu \tau \omega \nu)$ to refer to all entities unrestrictedly. I want to pursue the alternative possibility, suggested by some of Aristotle's own uses of $\tau \hat{o} \ \mathring{o} \nu$ and $\tau \hat{a} \ \mathring{o} \nu \tau a$ earlier in the treatise, that $\tau \hat{a} \ \mathring{o} \nu \tau a$ here are not all entities whatsoever but just those fundamental entities that occupied a privileged position in the systems of the Presocratic natural philosophers. Aristotle used $\tau \hat{a} \ \mathring{o} \nu \tau a$ in this way in *Physics* 1. 2 when he commented as follows on his initial classification of earlier views regarding the number and nature of $\mathring{a} \rho \chi a \nu$ or principles:

Those who inquire into the number of the things that are $(\tau \grave{\alpha} \ \check{o} \nu \tau a)$ conduct a similar inquiry; for they investigate whether the primary entities from which entities are [constituted] ($\grave{\epsilon} \xi \ \check{\omega} \nu \dots \tau \grave{\alpha} \ \check{o} \nu \tau a \ \check{\epsilon} \sigma \iota \iota \ \pi \rho \check{\omega} \tau \omega \nu$) are one or many, and if many, whether they are limited or unlimited in number, such that they are investigating whether the first principle or element is one or many. (Ph. 1. 2. $184^b 22-5$)³⁸

This passage shows how Aristotle will in certain contexts employ the nominalized form $\tau \grave{a}$ $\delta \nu \tau a$ ('the things that are') to pick out those entities that are fundamental to the being of all entities more generally (which he also, somewhat confusingly, will refer to as $\tau \grave{a}$ $\delta \nu \tau a$). When, in *Physics* 1. 8, Aristotle says that his predecessors were driven to the conclusion that 'none of the things that are $(\tau \hat{a} \nu \ \delta \nu \tau \omega \nu \ o \hat{v} \delta \acute{e} \nu)$ either comes to be or passes away', $\tau \hat{a} \nu \ \delta \nu \tau \omega \nu$ has this sense. Thus the difficult position Aristotle sees the majority of the Presocratics as having naïvely allowed themselves to be driven to is that no fundamental entity—we may go ahead and say no 'substance'—comes to be or perishes.

If Aristotle is here criticizing earlier thinkers for the inability of their systems to allow, much less account for, the generation of substances, then the passage is in line with his criticisms of the Presocratics elsewhere. In *Physics* 1. 4, Aristotle speaks of how adherence to the principle that there is no generation of anything from what is not—a view he ascribes to all the Presocratic natural philosophers (*Ph.* 1. 4.

³⁸ Compare Plato's classification at *Sph.* 242 C–243 A of earlier views on the number and nature of $\tau \dot{\alpha}$ ὄντα, according to which either there is a limited plurality of such entities, there is one such entity, or $\tau \dot{\alpha}$ ὄν is both one and many. Here $\tau \dot{\alpha}$ ὄντα are obviously not just things that exist but that subclass of entities, in the Presocratic systems represented in the classification, somehow basic or fundamental to the existence of other things. Such, again, is how $\tau \dot{\alpha}$ ὄντα functions in the doxographical preface to Gorgias' *On nature, or On what is not* as reported at [Arist.] *MXG* 979°13–18, quoted and discussed above at pp. 35–6.

187°27–9)—led such thinkers as Empedocles and Anaxagoras to analyse coming to be something of a certain kind $(\tau \dot{o} \gamma i \gamma \nu \epsilon \sigma \theta a \iota \tau o \iota o i \sigma \delta \epsilon)$ as mere alteration or recombination of underlying substantial elements (*Ph.* 1. 4. 187°29–31). Aristotle himself finds altogether inadequate this reduction of substantial change to the alteration of constitutive materials. He wants a non-reductive analysis of coming to be something of a certain kind—an analysis of what occurs when a human being, for instance, or an oak tree comes to be, which does not treat the organism as a temporary disposition of some material stuff and that does not treat that stuff as the only substance involved. A non-reductive analysis would allow that human beings and oak trees are themselves substantial entities and would have at its disposal conceptual tools sufficient to explain how these substances are generated. From Aristotle's perspective, the conceptual poverty of the Presocratic theories led to denial of the very phenomenon he thinks most needs explaining, namely the generation of substances.

There follows soon after in *Physics* 1. 4 a passage whose language is very nearly echoed in our passage from *Physics* 1. 8. Aristotle is imagining the line of reasoning that led Anaxagoras to his theory:

For if it is necessary that everything that comes to be comes to be either from things that are or from things that are not, and of these options coming to be from things that are not is impossible (for regarding this view all who concern themselves with nature are agreed), they supposed that the remaining option automatically follows, that everything that comes to be comes to be from things that are and already present, though from things imperceptible to us because of the smallness of their bulk. (*Ph.* 1. 4. 187^a32–^b1)

This would also be a fair reconstruction of some of the reasoning that led Empedocles and the atomists to develop their physical systems. The resemblances between this passage and the first paragraph of *Physics* 1. 8 are striking. More telling, though, are the slight differences, for they tend to confirm that the Physics 1. 8 passage is particularly concerned with the possibility of substantial generation. Here in *Physics* 1. 4, Aristotle is describing why the early philosophers explained generation as the alteration or recombination of imperceptible substantial stuffs. In Physics 1. 8, however, he is explaining why they felt compelled to deny that any of these substantial stuffs could themselves have been generated. Note, in particular, how what is essentially the same dilemma leads to two very different conclusions in the two passages: in *Physics* 1. 4, the conclusion is that everything that comes to be comes to be from things already present; in *Physics* 1. 8, the conclusion is that none of the things that are, that is, no substances, can come to be. Each of these related points plays a central role in the Presocratic physical systems: if there is no generation ex nihilo, then everything that comes to be must do so from things already present, which in turn must themselves be ungenerated so that the analysis may stop somewhere and not proceed indefinitely.

The last sentence of the *Physics* 1. 8 passage—where Aristotle says that early thinkers got carried away with the consequences of this line of thought and so wound up denying that many things are and saying that only what is, is—will only seem problematic for this line of interpretation if it is read as an articulation of the strict monism that is supposed to define Eleaticism. To read it in this way

requires understanding $\epsilon i \nu a \iota$ existentially, as if it meant: 'they deny that many things exist but say that only being itself exists'. This is almost certainly not what Aristotle means. It is much more likely that he finds this conclusion unacceptable because it violates a principle he insists upon throughout *Physics* 1, namely that 'being is said in several senses' (πολλαχῶς λέγεται τὸ ὄν). Aristotle discerns among earlier thinkers a disturbing trend towards restricting application of 'being' to the fundamental entities, substances, or things that 'really' are. Aristotle certainly sees Parmenides as one who held that only substance is and thus aimed to avoid the conclusion 'many things are' $(\pi o \lambda \lambda \dot{\alpha} \tau \dot{\alpha} \ddot{o} \nu \tau \alpha)$ that results from allowing that substance and quality and quantity are (Ph. 1. 2. 185^a27-9), and he criticizes Parmenides for assuming that 'being' (τὸ ου) is univocal when it is in fact a πολλαχώς λεγόμενον or something said in several ways (Ph. 1. 3. 186^a23–5; cf. 186^a32–^b4). He also thinks this confused way of thinking extends more broadly. For instance, he sees it as at the heart of the misguided efforts to reform normal linguistic practices he describes at the end of Physics 1. 2. Likewise, at the end of Physics 1. 3 he says that atomists succumbed to the way of thinking according to which 'being' signifies one thing $(\tau \delta \ \partial \nu \ \hat{\epsilon} \nu$ σημαίνει, 187^a2), that is, has a single sense. It is also an error Aristotle commonly ascribes to Plato, apparently with some justification.

Thus the difficulty canvassed at the beginning of *Physics* 1. 8, to which Aristotle believes all those who first inquired into reality and the nature of things succumbed, is to have supposed that none of their fundamental entities or substances either comes to be or perishes. Indeed, if one attempts to analyse substantial change as the rearrangement of imperceptible material stuffs that are themselves not subject to change, it can become tempting to say that these entities are the only things that really are. Aristotle concludes his diagnosis by pointing to this tendency as symptomatic of his predecessors' confusion. For Aristotle, this way of thinking is a dead end.

The reading of the beginning of *Physics* 1. 8 we have developed not only provides further evidence of the modally restricted use of the verb 'is' in philosophical contexts but also shows that only by being misinterpreted could it have been thought to lend the weight of Aristotle's authority to Guthrie's narrative and its descendants. The misinterpretation rests on misconstruing the passage's more important uses of $\tau \delta$ őv as 'what exists' (regardless of whether one actually translates it this way) and consequently mistaking the difficulty Aristotle indiscriminately attributes to the early philosophers for a specifically Parmenidean or Eleatic difficulty.

The Metaphysical and Epistemological Framework of Parmenides' System

Just as it is necessary to recognize the restrictive uses of the verb $\epsilon \hat{\iota} v a \iota$ in this and the other passages discussed in this section so as not to mistake their true philosophical significance, likewise one must recognize Parmenides' shorthand uses of the verb's participial form and his other modally restrictive uses of $\epsilon \hat{\iota} v a \iota$ to make proper sense of his philosophy. As already noted, the fundamental failure of interpretation in far too many studies of Parmenides has been to neglect, or otherwise to downplay the

significance of, the modal clauses in his specification of the first two ways of inquiry in fr. 2. Making this mistake inevitably leads to misconstrual of the function of $\tau \delta \mu \dot{\eta}$ $\vec{\epsilon} \acute{o} \nu$ or 'what is not' at fr. 2. 7–8 and of the subsequent uses of $(\tau \acute{o})$ $\vec{\epsilon} \acute{o} \nu$ as Parmenides' principal way of referring to what is in the manner specified at fr. 2. 3, which is to say, what is and cannot not be or, more simply, what must be. Ignoring the modal elements in Night's specification of the first two ways of inquiry also encourages misunderstanding of their relation to the third way introduced in fr. 6 and how it, too, is defined by the modality of what lies along it. Blindness to Parmenides' groundbreaking concern with the metaphysics of modality has also led to unfortunate misconstruals of his reasoning in the series of arguments in fr. 8 that comprise the Way of Conviction. As we shall see in the next chapter, the carefully structured arguments there typically require something more than the mere existence of the object of the inquiry. Approaching the Way of Conviction as a demonstration of the characteristics What Is can be shown to have simply in virtue of its necessary mode of being will allow us both to appreciate that his reasoning is generally valid and to avoid the lapse into construing his claims ever more metaphorically that is a significant failure of so many other interpretations.

This is an appropriate point, however, before we turn to fr. 8's meditation on the nature of What Is, to pause and reflect on the metaphysical and epistemological framework that has emerged from these first few fragments. One of Parmenides' central insights was to recognize that there is a way something might be that differs fundamentally from the way things encountered in everyday experience are. All these latter things are subject to various changes. Their conditions, attributes, and even their very existence will eventually be seen to have been merely temporary. It takes no great stock of experience to realize that change is a constant and characteristic feature of the things we normally encounter. As a result, it might well seem that nothing one encounters will ever permanently and reliably be what it is. Part of Parmenides' achievement was to transcend the data of experience, particularly perceptual experience, to envisage a mode of being that is permanent and reliable. Despite experience seeming to teach that whatever is will someday cease to be, he imagined the possibility of there being something that is and cannot not be, something that not only is (what it is) but *must* be (what it is). It is hardly surprising that he should have chosen the term $\partial \lambda \eta \theta \epsilon i \eta$ or 'reality' to designate what is in this way.

It is also understandable that he should have held apprehension of what is in this way to be of a different order than apprehension of the mutable objects of ordinary experience. For all that, however, he does not draw as radical an epistemological distinction between the two orders of being as he might have done. Although frs. 6 and 7 do strongly imply that mortals' general failure to recognize the availability of what must be is due to their exclusive reliance on perceptual capacities incapable of putting them in contact with it, at the same time these texts suggest that mortals' cognition of things that are but once were not and will not be is an activity or function of the same mental faculty that, if properly directed, can apprehend what must be. This faculty Parmenides calls 'understanding' ($v\acute{o}os$ or $v\acute{o}\eta\mu\alpha$). Apprehension of what need not be is an activity of understanding as much as apprehension of what must be. The difference, it seems, is that in the former case one's apprehension

will eventually fail, when what one apprehends changes or ceases to be what one apprehends it as being, whereas in the latter case one's apprehension will never fail since its object will never change. Because Parmenides allows that understanding may be directed variously towards both what must be and what is but need not be, the distinction between reason and perception as modes of apprehension that figures most prominently in fr. 7 is only one aspect of his epistemological framework.

Perhaps more interesting, though the subject of less attention, is how he contrasts apprehension of what must be and apprehension of what is but need not be. Although he views the latter as an activity of understanding every bit as much as the former, he does employ a term for the cognitive state or condition constituted by apprehension of what is but need not be that he never employs for the apprehension of what must be. This term is $\delta \delta \xi a$. The English epistemological vocabulary, generally poorer than the Greek, has no word that captures the sense of this term, at least as it is used by Parmenides. The reason for this, I suggest, is that before long the concern with justification would come to occupy a central position in the epistemological tradition, with the result that it would become ordinary practice to distinguish between cognitive states in terms of the kind and degree of justification accompanying them. By contrast, the principal epistemological distinctions Parmenides aims to draw are determined by the ontological distinction he has discovered. One can understand why the common English translation of $\delta \delta \xi a$ in Parmenides as 'belief' is potentially so misleading when one appreciates that it implies a different kind of defeasibility than the one with which Parmenides is actually concerned. Broadly speaking, if one says that S merely believes p, implying that S does not know p, then this will likely be understood to entail that S might be wrong in believing that p, probably because S's justification for believing p is not sufficient to preclude this possibility. When Parmenides speaks of mortal δόξαι in which there is no genuine conviction, his conception of the epistemic status of their thoughts seems to be on altogether different lines. The point of this designation is not that mortals' thoughts might, for all they know, be mistaken but that, given what those thoughts are about, mortals will inevitably fail to maintain their cognitive grasp of whatever they happen to be apprehending at any moment. Such is the distinction that seems to be implied by saying that there is no genuine trustworthiness ($\pi i \sigma \tau \iota_S \ a \lambda \eta \theta \eta_S$, fr. 1. 30) in mortal $\delta \delta \xi a \iota$ and, likewise, that the first way of inquiry is 'the path of conviction, for it attends upon true reality' (fr. 2. 4). The differing degrees of conviction envisioned here are not primarily determined by different modes of justification but by the essential trustworthiness or reliability of the objects of apprehension. When one apprehends something that not only is (what it is) but must be (what it is), then one's apprehension is altogether reliable and in it there is genuine conviction. But when one apprehends something that is (what it is) but need not be (what it is), then one's apprehension is only reliable for some time and will eventually lapse when its object changes or ceases to be (what it is). In such apprehension, there can be no genuine conviction, no true trust, for the conviction one has, even if one is as justified as possible in having it on empirical grounds, will eventually be disappointed.

Even if the rest of Parmenides' poem were lost and only frs. 1 through 7 survived, we could still discern this much of the metaphysical and epistemological framework

that defines his philosophical outlook. As we proceed now to consider the goddess's developed account of what is (what it is) and cannot not be (what it is) and her subsequent account of mortal $\delta \delta \xi a\iota$ in her elaborate cosmology, we will see that the reading we have developed thus far both finds further confirmation and makes it possible to resolve some of the thorniest problems that have baffled those who have followed other interpretive routes.

What Must Be and What Is and Is Not

THE WAY OF CONVICTION

Introduction

Simplicius famously prefaces his quotation of fr. 8's first fifty-two verses by remarking that he has decided to transcribe the verses of Parmenides on the one being not only to confirm points raised in his own treatment but also 'because of the scarcity of Parmenides' treatise' (Simp. *in Ph.* 144. 25–9). Had he not done so, we would still be able to piece together substantial portions of the fragment from shorter quotations in other authors and elsewhere in Simplicius. Much would have remained unknown, however, and we would not have had the whole transcribed from the fine copy of the text Simplicius had at his disposal.

The fragment divides into two major, albeit unequal, portions. In the first (fr. 8. 1–33, 42–51a), the goddess leads Parmenides along the first path of inquiry through a progressive revelation of the attributes of $\tau \delta \epsilon \delta \nu$ —what is in the manner the goddess initially specifies in fr. 2. 3, that is to say, what is and cannot not be, or, more simply, what must be. There follow in the remainder of the fragment (fr. 8. 51b–2, 34–41, 53–61) the initial stages of her broad account of the entities populating the cosmos that are but need not be and that one finds along the path experience has taught mortals to follow. This structure is plainly marked by the programme for the Way of Conviction presented at the very beginning of the fragment, together with the goddess's announcement at fr. 8. 50–2 that she is concluding her account of true reality and embarking on the account of mortal notions: 'At this point I cease for you the trustworthy account and thought | regarding true reality; from this point on mortal notions | learn,

Again, Parmenides' use of $\tau \delta$ $\mu \dot{\gamma}$ è δv at fr. 2. 7 to indicate what is in the manner specified in the second way of inquiry at fr. 2. 5—namely, what is not and must not be—leads one to expect a parallel use of $\tau \delta$ è δv to indicate what is in the manner specified in the first way of inquiry at fr. 2. 3—namely, what is and cannot not be. The capitalized 'What Is' is employed here in rendering $\tau \delta$ è δv as a reminder that the phrase thus designates what is and cannot not be. Likewise, since what is and cannot not be is equivalent to what is and must be, or, more simply, what must be, it is often useful to refer to what is in the manner specified in fr. 2. 3 as 'what must be', particularly when it is important to emphasize the necessity of What Is's being (what it is). 'What must be' is not, however, here adopted as an alternative translation of $\tau \delta$ è δv but merely employed where appropriate as a semantic equivalent. That is to say, when Parmenides speaks of $\tau \delta$ è δv , he is speaking of what is in the manner specified in fr. 2. 3, namely, what is and cannot not be, or what is and must be, or, most simply, what must be.

2 On the sense of $\delta \lambda \eta \theta \epsilon (\eta)$ here and elsewhere in the poem as 'true reality', see above pp. 89–91.

listening to the deceptive order of my verses'. This announcement is in keeping with her earlier programmatic remarks at fr. 1. 28–32 and again at fr. 6. 3–5a. Simplicius' comments prefacing his quotation of fr. 8. 1–52 likewise indicate that he has reproduced the critical portion of Parmenides' discourse, the Way of Conviction, in its entirety. The heart of the goddess's revelation to Parmenides thus occupies a mere forty and a half verses.

The Way of Conviction is, in essence, a meditation on the nature of what must be. The goddess will lead Parmenides to develop an understanding of the characteristics what must be has to have just in virtue of its modality or way of being. That at any rate appears to be the strategy of the goddess's revelation, even if its later stages may seem to go beyond what can legitimately be inferred on this basis. Nevertheless, that this should be the basic strategy accords with the goddess's instruction to Parmenides at fr. 6. 1 that he must say and think that What Is is, so as to admit nothing into his conception of What Is incompatible with fr. 2. 3's fundamental specification of its mode of being.

Having understood what the first way, and inquiry along it, amount to, we are prepared to reconstruct the chain of reasoning that comprises the Way of Conviction. The modal interpretation of Parmenides' three ways developed in the previous two chapters will help us better to understand, not only the details of Parmenides' reasoning here, but also the relation between the two major parts of the goddess's revelation. More generally, it will enable us to avoid two major failings of many earlier interpretations. One is the unnecessary attribution to Parmenides of absurd and unoccupiable positions, among which is certainly to be counted the strict monist thesis that only one thing exists, when there are viable alternatives available. The other failing is evident in the prevailing claims that much of fr. 8's description of What Is cannot be taken literally. Certainly, taking Parmenides' subject to be some vaguely conceived 'Being', or any possible object of inquiry, or a 'predicational monad' will impel one to view much of this subsequent account as mere metaphor. This is because, as one pursues the hypothesis that any of these is the goddess's subject, it becomes increasingly difficult or even impossible, as one proceeds further into the Way of Conviction, to understand her claims in any literal sense. It would seem preferable, however, to be able to explain what the goddess says about What Is without feeling that one has to explain it away as merely metaphorical. Another virtue of a modal interpretation will prove to be, in short, that it allows Parmenides to mean what he says.

The goddess begins her account of What Is by announcing, 'a single tale of a way | remains, that it is $(\dot{\omega}_s \dot{\epsilon} \sigma \tau \nu)$ ' (fr. 8. 1–2a). In other words, for reasons she has already articulated, there is only one way for Parmenides to follow in his search for understanding that does not wander. This way is clearly supposed to be the way of inquiry specified at fr. 2. 3, that it is and that it cannot not be; yet here we seem to find the goddess repeating only the assertoric but not the modal clause from that initial specification. Why? Possibly, $\dot{\epsilon} \sigma \tau \iota \nu$ or 'it is' here in fr. 8. 2a is an instance of the modally restrictive use of $\epsilon \dot{\iota} \nu a \iota$, but we need not take it as such. Recall how the goddess has been preparing Parmenides to travel along this path by pressing upon him the need to say and to think of $(\tau \dot{o})$ $\dot{\epsilon} \dot{o} \nu$ or What Is only that it is (what it is), for

if he lapses into speaking or thinking of it as somehow failing to be (what it is), it will have eluded his grasp altogether. To form a conception of What Is, Parmenides must try to understand what its way of being entails regarding its nature, and the only way to do this is to persist resolutely in thinking that it is and that it is what it is. Thus the bare $\dot{\omega}_S \in \sigma \tau w$ or 'that it is' is an apt way for the goddess to pick out what will be involved in telling the tale $(\mu \hat{v}\theta os)$ of the first way. What lies along this way only is. It is not something that is and yet is not, like what lies along the third way (cf. fr. 6. 8–9), and it is certainly not something that only is not, in the manner of what notionally lies along the second way. The goddess has instructed Parmenides on the need to speak and think of What Is only as being (what it is). By characterizing the way of inquiry as she does here in fr. 8. 2, she emphasizes again that only statements and thoughts that take it to be (what it is) are acceptable.

There follows a programmatic description of what lies along the path now to be followed. This programme or map of the way consists of a list of $\sigma \acute{\eta} \mu a \tau a$, 'signs' or 'markers': 'along this path markers are there | very many, that What Is³ is ungenerated and deathless, whole and uniform, and still and perfect' (fr. 8. 2b-4). In other contexts, $\sigma \dot{\eta} \mu a \tau a$ are distinguishing marks or signs by which something may be identified or recognized. Here the goddess's catalogue of $\sigma \dot{\eta} \mu a \tau a$ functions with some degree of ambiguity, in that they can be understood both as markers or 'signposts' defining the way to come and also as the attributes under which Parmenides will come to conceive of What Is itself. The succession of adjectives at fr. 8. 3-4 provides a succinct and definite programme for the goddess's ensuing arguments along the Way of Conviction. Some have found it difficult to match the attributes listed here to the arguments that follow. Some, moreover, have supposed the programme extends through fr. 8. 6a and that timelessness figures as a further attribute of Parmenidean Being.⁵ Confusion may be avoided, however, by recognizing that the goddess in fr. 8. 5-33 and 42-9 takes up just the attributes, in just the same order, listed in fr. 8. 3-4. Although Theodor Ebert's restoration of the block of text at fr. 8. 34-41 to its proper and original position after verse 52 makes this somewhat easier to see, 6 it should have been evident enough all along. The goddess begins by deploying various considerations at fr. 8. 5-21 designed to secure that What Is is 'ungenerated and deathless' (fr. 8. 3b). Fr. 8. 5-6a do not introduce a

³ Since Parmenides has already in fr. 6. 1 employed the bare participle ἐόν as he elsewhere employs $\tau \delta \epsilon \delta v$, namely, as a designation for what is in the manner specified in fr. 2. 3, we may take him to be doing so here as well (so also at fr. 8. 25, 47). The alternative is to understand ϵόν circumstantially (as at fr. 8. 33) and translate: 'that, in so far as it is ungenerated, it is also deathless'. This is not, however, how Parmenides actually argues. The reasons What Is is not susceptible to destruction parallel, rather than depend on, the reasons it is not subject to generation. Furthermore, if $\epsilon \acute{o}\nu$ were not the subject here, then What Is would have to be understood as such.

While the $\sigma \dot{\eta} \mu \alpha \tau \alpha$ are likely just meant to be the attributes following in this list, which signal or mark what What Is is like, it is also possible that $\sigma \eta \mu a \tau a$ refers instead to the indicators in the arguments that follow that What Is has these attributes.

So e.g. Cornford 1939: 35–6; Guthrie 1965: 28 and 34 n. 1.

See Ebert 1989. His compelling arguments for supposing the text has suffered this

transposition are fully reviewed below in the textual appendix, at pp. 352-4. See Tarán 1965: 191, for an example of the confusion engendered by the text as transcribed by Simplicius.

further attribute of timelessness but, as will presently be made clear, commence the deduction of the programme's first pair of attributes. Next, in fr. 8. 22–5, she argues that it is 'whole and uniform' (fr. 8. 4a). Then, in fr. 8. 26–33, she argues that it is 'still' (fr. 8. 4b), that is, motionless and unchanging. Finally, in fr. 8. 42–9, which on Ebert's transposition follow uninterruptedly from the previous argument, she concludes by arguing that What Is is 'perfect' (fr. 8. 4b).

Once we consider the arguments of each stage, and thereby develop a better understanding of what each of these attributes amounts to, it will become clear that the programme of attributes is logically and systematically generated. What Is both must be (or exist), and must be what it is, both temporally and spatially. For What Is to be (or exist) diachronically is for it to be ungenerated and deathless. For it to be what it is diachronically is for it to be 'still' or unchanging. For What Is to be (or exist) throughout space is for it to be 'whole'. For it to be what it is everywhere internally is for it to be uniform. Finally, for it to be what it is everywhere at its extremity is for it to be perfect. Since the attributes of the Way of Conviction's main programme are systematically generated in this manner—by considering what what must be must be like if it both is (or exists), and is what it is, both temporally and spatially—the catalogue is therefore exhaustive, in the sense that nothing more can be inferred about the nature of What Is simply from the specification of its mode of being.

Ungenerated and Deathless (fr. 8. 5-21)

The goddess's demonstration of these attributes begins with a rather opaque declaration that has often been understood as rejecting the applicability of at least some temporal predicates to the entity being described: 'but not ever was it, nor yet will it be, since it is now together entire, | single, continuous' $(o\vec{v}\delta\epsilon' \pi o\tau' \hat{\eta}\nu o\vec{v}\delta' \tilde{\epsilon}\sigma\tau a\iota, \hat{\epsilon}\pi\epsilon\hat{\iota}\nu\hat{\nu}\nu \hat{\epsilon}\sigma\tau\iota\nu \hat{\delta}\mu o\hat{\nu}\pi\hat{a}\nu, | \tilde{\epsilon}\nu, \sigma\nu\nu\epsilon\chi\dot{\epsilon}s)$ (fr. 8. 5–6a). The view that these words amount to a declaration of the timelessness of Parmenidean Being has two principal species. One camp sees Parmenides as denying the reality of past and future to maintain that his subject exists in an eternal present. The other has him dispensing with time

⁷ Burnet 1930: 174 n. 4, and Kranz in Diels and Kranz 1951: 235, rejected the reading μουνογενές at fr. 8. 4a, in large part because they took it to mean something like 'once' or 'only begotten' and saw that this sense is incompatible with What Is being ἀγένητον or 'ungenerated'. In defending μουνογενές, Tarán 1965: 92, argued that it should be understood as 'unique', 'the only thing of its kind', or 'single'; but his defence of this understanding by comparison with the phrase μουογενές τέκνον πατρί at Aesch. Ag. 898 is forced, and there are difficulties in finding an argument for uniqueness at the appropriate point. The arguments that What Is is ungenerated and deathless extend through fr. 8. 21, and the reasons given for taking What Is to be ἀτρεμές or 'still' begin at fr. 8. 26. Since Parmenides' exposition follows the order of this initial programme, fr. 8. 22–5 must be where he argues that What Is is οδλον and μουνογενές. But there is certainly no argument there for the uniqueness of What Is. It is therefore best to understand μουνογενές as 'of a single kind' or 'uniform'.

⁸ While οὖκ ἀτελεύτητον at fr. 8. 32 can suggest that the transition to the final attribute of perfection is made here, we shall see that the section devoted to the unchanging character of what must be in fact extends through fr. 8. 33. So also e.g. Owen 1960: 76–7.

altogether, having supposedly realized that temporal predicates have no application when what exists perdures without change. Each view has its share of problems. The stronger, 'atemporal' interpretation must hold that Parmenides does not say what he meant, for while he denies that his subject was or will be, he also states that 'it is now'. 10 The 'perpetual present' view, by contrast, makes no attempt to get around the apparently plain sense of this declaration, but at the cost of attributing to Parmenides a view that verges on incoherence. 11

On either view, moreover, it is hard to see how what follows $\epsilon \pi \epsilon i$ ('since') at fr. 8. 5b-6a constitutes an adequate reason for the preceding claim that the object of Parmenides' inquiry neither was nor will be. 12 The connective clearly indicates that from 'it is now, together entire, | single, continuous' (fr. 8. 5b-6a), it is supposed to follow that 'not ever was it, nor yet will it be' (fr. 8. 5a). If one takes this stretch of text as asserting the timelessness of Parmenidean Being, it is difficult to make sense of the connection. One cannot legitimately infer from the fact that an entity is now either that it has no past and future or that talk of its past and future being is meaningless. An inference in the other direction would be more plausible, but the connective makes plain what is supposed to support what. It is equally important to appreciate that fr. 8, 5-6a should not be taken to constitute an isolated bit of reasoning. The connective particle $\gamma \acute{a}\rho$ in fr. 8. 6b clearly indicates that the goddess's ensuing questions—'for $(\gamma \acute{a} \rho)$ what birth will you seek of it? | How, whence increased?'—introduce a line of thought intended to support the pronouncements at fr. 8. 5–6a. 13 Likewise, at fr. 8. 19–21, in the conclusion of the first major stage of the goddess's demonstration, the rejection of the possibilities that What Is might 'be hereafter' and that it 'might have been' at some time past are clearly intended to support the general conclusion that it is not subject to either birth or death. Before taking fr. 8. 5-6a in isolation, then, and leaping to the conclusion either that Parmenidean Being is a perpetually present or a completely atemporal entity, one ought to try to understand just how the goddess's assertions that What Is was not and will not be function as part of the argument that it is ungenerated and deathless.

As others have recognized, the assertions 'but not ever was it, nor yet will it be' (fr. 8. 5a), are properly understood in context as introducing two possibilities that will be ruled out by the subsequent argument: that What Is was once but is no longer, and that What Is will be at some time in the future although it is not yet. 14 This

⁹ See the survey of interpretations in Sorabji 1983: 99–108, as well as Tarán 1965: 175 n. 1, for refs. The succinct statement of the case against atemporal interpretations in Gallop 1984: 13-16, has led to a critical exchange between two defenders in Groarke 1985; Matthen 1986; Groarke 1987.

So objects Gallop 1984: 13–14.

See the criticisms of this view at Sorabji 1983: 100–1.

¹² Cf. Gallop 1984: 14.

¹³ Cf. Schofield 1970: 118.

So Fränkel 1930: 46 n. 86; Tarán 1965: 89 (cf. 175–88): $o\dot{v}\dot{\delta}\dot{\epsilon}$ $\pi o\tau'$ $\dot{\eta}\nu$ $o\dot{v}\dot{\delta}$ ' $\dot{\epsilon}\sigma\tau a\iota$ 'means that Being was not once [not being now] nor will it once be [not being now]'. Fränkel was criticized by Owen 1966: 320-2; Tarán, by Kahn 1968: 127-9. The case for the contextually integrated reading was taken up and argued more successfully by Schofield 1970 (though he appears more circumspect in Kirk et al. 1983: 250 n. 1). Tarán 1979: 47–50, renews defence of his earlier line while criticizing

understanding would be easier if $o \dot{v} \delta \dot{\epsilon} \pi o \tau' \dot{\eta} \nu$, thus far translated as 'but not ever was it', could instead be taken to mean 'nor was it once' or 'at one time'. However, as Parmenides' own use of $o\dot{v}\delta\dot{\epsilon}$ $\pi o\tau'$ at fr. 8. 12 and certain Homeric parallels¹⁵ indicate, $o \dot{v} \delta \dot{\epsilon} \pi o \tau'$ means 'but not ever' or 'nor even ever'. Even so, the point of $o\dot{v}\delta\dot{\epsilon} \pi o \tau' \dot{\eta} v$ is not that the entity in question has no past being or no past-tensed predicates. Consider how $o\vec{v}\delta\epsilon' \pi o\tau'$ actually functions at fr. 8. 12–13a: 'Nor ever $(oi\delta\epsilon' \pi o \tau')$ from not being will the force of conviction allow | something to come to be beyond it'. Even without considering the fuller context of these words, it is evident that the future possibility here rejected as counterfactual would constitute a change from what is presently supposed to be the case: 'nor ever $(oid\delta \epsilon \pi o \tau')$ p' implies notp now. This subsequent use bears on the understanding of the difficult $\partial i \delta \epsilon \pi \sigma \tau' \hat{\eta} \nu$ οὐδ' ἔσται at fr. 8. 5a as follows. First, allowing that the scope of $\pi o \tau$ ' ('ever') extends into the phrase $oi\delta'$ $\xi\sigma\tau\alpha\iota$, so that its sense is 'nor yet (ever) will it be', the implication is: it is not the case that it will be but is not now, in other words, that it is going to be but as yet is not. Likewise, the implication of 'but not ever was it' is: it is not the case that it was but is not now, in other words, that it once was but is no longer. The clear advantage of this understanding is that the goddess's claim that 'it is now' does go some way towards ruling out these possibilities: an entity that presently is cannot have ceased to be in the past, nor is it yet to be. The inference will be secure just in case the entity in question does not exist intermittently. That Parmenides recognized as much is suggested by how he supplements the premise that it is now with the further premises that it is also single and continuous, that is to say, not intermittent.

What right, however, does the goddess yet have to assert anything beyond the necessary being of What Is? What right does she have to claim at this point that it is also 'together entire, | single, continuous' ($\delta\mu o\hat{v} \pi \hat{a}v$, | ξv , $\sigma v v \epsilon \chi \epsilon s$, fr. 8. 5b–6a)? The answer—that she has none, as yet—points to the fact that these terms are all picked up, in one way or another, in the arguments that follow. The words 'together entire, | single, continuous', in fact, constitute a subsidiary programme for the arguments deployed to show that What Is must be ungenerated and imperishable. As such, they are to be distinguished from the Way of Conviction's main programme presented in fr. 8. 3–4. Of course, 'it is now' (fr. 8. 5b) is not part of this subsidiary programme, for the phrase does not introduce an interim demonstrandum but instead a premise that has already been established: the necessity of maintaining that What Is is, and consequently its present existence, is secured in fr. 3 and fr. 6. 1-2. The present existence of What Is, however, is an insufficient basis for establishing that it neither came to be nor will perish. For this it needs to be shown that its present existence is merely part of its full and continuous existence. This argumentative strategy is succinctly announced in fr. 8. 5-6a: since it (sc. What Is) is now, all together, one and continuous, not ever was it nor yet will it be. The sense of this may be expanded as follows. The present existence of What Is, or what is and cannot not be, entails

Owen's atemporal reading. See also O'Brien 1980 (reprised in O'Brien 1987c) and Gallop 1984: 13–14.

¹⁵ Cited by Schofield 1970: 122–3, bolstering the objections to understanding $\pi o \tau$ as 'once' at Owen 1966: 320.

that it exists fully developed and without interruption (as is to be shown). Thus it cannot be the case that it once was but has since ceased to be, nor can it be the case that it will come to be at some time in the future. Therefore, What Is suffers neither generation nor destruction.

To show that the arguments in the first stage of the Way of Conviction in fact proceed in accordance with the subsidiary programme, it will help to display the passage's major articulations. Fr. 8. 5–21 contain a statement of the demonstrandum (D) and subsidiary programme (SP), then five distinct sections (a) through (e), which lead to this stage's principal conclusion (C), as follows:

- (D) 5a: 'but not ever was it, nor yet will it be,'
- (SP) 5b-6a: 'since it is now together entire, | single, continuous;'
 - (a) 6b–9a: 'for what birth will you seek of it? | How, whence increased? From not being I shall not allow | you to say or to think: for not to be said and not to be thought | is it that it is not.'
 - (b) 9b-11: 'And indeed what need could have aroused it | later rather than before, beginning from nothing, to grow? | Thus it must either be altogether or not at all.'
 - (c) 12–15a: 'Nor ever from not being will the force of conviction allow | something to come to be beyond it: on account of this neither to be born | nor to die has Justice allowed it, having loosed its bonds, | but she holds it fast.'
 - (*d*) 15b–18: 'And the decision about these matters lies in this: | it is or it is not; but it has in fact been decided, just as is necessary, | to leave the one unthought and nameless (for no true | way is it), and that the one that it is indeed is genuine.'
 - (e) 19–20: 'And how could What Is be hereafter? And how might it have been? | For if it was, it is not, nor if ever it is going to be:'
- (C) 21: 'thus generation is extinguished and destruction unheard of.'

There should be nothing contentious about this division. ¹⁶ The structure is largely paratactic, with each new stretch of thought in (a) to (e) introduced by either $\delta \epsilon$ or $ov\delta \epsilon$, these particles in each instance having a mildly adversative sense, setting off what follows from what has come before. Each of these subsidiary arguments, moreover, develops a self-contained line of thought, while of course their effect is cumulative. The subsidiary programme (SP), furthermore, is presented in a clause introduced by $\epsilon \pi \epsilon i$ or 'since' indicating the grounds that will be given for asserting the principal demonstrandum (D), which is then itself reasserted at the end in the form of a conclusion (C) marked by $\tau \omega s$ or 'thus'.

The basic structure of the passage is as follows. The goddess first states in (D) what she aims here to show, and she then in (SP) identifies a set of interim demonstranda, which if secured would in turn secure the principal demonstrandum (D). She next presents in (a) through (e) a series of arguments for the interim demonstranda in (SP). Finally, the principal demonstrandum (D) is restated

¹⁶ Coxon 1986 197 *ad* fr. 8. 16–21, sees the structure of the argumentation in more or less the same terms, even though he takes a decidedly different view of the argument's subject and broader import.

in the form of a conclusion (C). This basic structure is, as we shall see, characteristic not only of this stage but of each of the three remaining stages along the Way of Conviction. In each case, recognizing this characteristic structure is essential to understanding, and appreciating the force of, the goddess's concise argumentation.

We are now ready to consider in detail this first section's central arguments, designed to show that What Is must be ungenerated and deathless. The arguments in (a) and (b) advance distinct considerations leading to the interim conclusion, marked by $o \tilde{v} \tau \omega s$, at fr. 8. 11 that What Is 'must be altogether' or 'entirely' $(\pi \dot{a} \mu \pi a v)$ πελέναι χρεών ἐστιν). The conclusion here quite clearly picks up 'together entire' $(\delta\mu o\hat{v} \pi \hat{a}v)$ from the subsidiary programme. But what does it mean to say that What Is is 'altogether' or 'together entire'? Apparently, the idea is that What Is must be conceived of as existing completed and fully formed. That is to say, not only does What Is not undergo any absolute genesis, but it is also implied that it undergoes no type of growth, maturation, or increase. While the argument in (b), with its notable early appeal to the principle of sufficient reason, rejects the possibility of What Is's generation ex nihilo, the argument in (a) seems effectively to target both such absolute genesis and the possibility of gradual growth or increase. The reasoning in (a) draws a simple consequence from the subject's modal identity as what is and cannot not be. The premise here (marked by $\gamma \acute{a}\rho$ or 'for') that it is not to be said or thought that What Is is not (fr. 8. 8b-9a) simply reformulates the directive already given at fr. 6. 1a, namely that it is necessary to say and to think that What Is is. If the generation of What Is involves its prior not-being, then it cannot have come to be. Simply put, what must be cannot have come to be. This is so both in the sense that what must be cannot have come to exist and in the sense that what must be cannot have come to be what it is from some previous condition of not being what it is. That is to say, the participle of $\epsilon i \nu a \iota$ in the phrase 'from not being' $(\epsilon \kappa \mu \dot{\gamma})$ ¿όντος, fr. 8. 7b) would appear to exemplify the fused existential-predicative sense of the verb. The argument, moreover, actually requires both senses to be operative if it is successfully to secure the conclusion that What Is must be altogether or entirely. For this conclusion requires, not only that the absolute genesis of What Is be ruled out, but also the possibility that it has grown or developed to become what it is. It thus is argued in (a) and (b) that What Is is 'together entire' $(\delta\mu\sigma\hat{v})$ $\pi \hat{a} \nu$). The interim conclusion drawn at fr. 8. 11, recalling those words from the subsidiary programme, strongly suggests that this phase of the argument has been completed.

At this point, therefore, one expects arguments for the next elements in that programme, namely, arguments designed to show that What Is is also 'single' and 'continuous'. Numerous interpreters, however, have supposed that $\tilde{\epsilon}\nu$, $\sigma\nu\nu\epsilon\chi\dot{\epsilon}s$ at fr. 8. 6a look ahead to the next stage along the Way of Conviction, the argument at fr. 8. 22–5. This mistaken supposition makes a hash of the carefully articulated

 $^{^{17}}$ e.g. Schofield 1970: 118: 'the lines which *follow* $6^{\rm b}$ –21, 22–25, pretty obviously constitute the proof of the other properties mentioned in the premiss of $5^{\rm b}$ – $6^{\rm a}$, viz. *one* (or *indivisible*) and

development of Parmenides' argumentation. As already noted, the considerations at fr. 8. 22–5 serve to secure the main programme's attributes of wholeness and uniformity $(o\hat{v}\lambda o\nu \ \mu o v v o \gamma \epsilon v \epsilon' s \ \tau \epsilon$, fr. 8. 4a). This comes after the preceding arguments at fr. 8. 5–21 have secured the main programme's first pair of attributes by showing that What Is is 'ungenerated and deathless' (fr. 8. 3b, cf. fr. 8. 21). The argumentation of this first stage, outlined above, proceeds in two phases that are announced in the subsidiary programme at fr. 8. 5–6a. First, as just seen, the goddess in (a) and (b) deploys a pair of arguments designed to secure the conclusion that What Is is 'together entire' $(\delta \mu o \hat{v} \ \pi \hat{a} v)$. There follows in (c) a consideration we shall examine momentarily designed to support attribution to What Is of the subsidiary programme's next two properties, 'single, continuous' $(\epsilon v, \sigma v v \epsilon \chi \epsilon_s)$. While Parmenides' argumentation is certainly rapid and compact, it nevertheless has a systematic and carefully demarcated structure that can be readily recognized if only one pays proper attention both to his use of particles in articulating his reasoning and also to his own programmatic statements.

One can nevertheless understand why so many have mistakenly thought $\tilde{\epsilon}\nu$, συνεχές at fr. 8. 6a look ahead to the Way of Conviction's second stage. Part of the confusion seems due to the fact that Parmenides conceives of What Is as both temporally and spatially continuous. Furthermore, the adjective συνεχές/ξυνεχές ('continuous') occurs at both fr. 8. 6a and fr. 8. 25a (cf. $\sigma v \kappa \chi \epsilon \sigma \theta a \iota$ at fr. 8. 23b), and it is easy enough to assume that the first occurrence points ahead to the second, which comes in the conclusion of the argument at fr. 8. 22-5. It should be clear, however, that the considerations deployed at fr. 8. 22-5 are designed to support the attribution of spatial continuity to What Is. The vocabulary here is overtly spatial throughout: 'Nor is it divided ($\delta\iota\alpha\iota\rho\epsilon\tau\delta\nu$), since it is all alike; | and it is not any more there $(\hat{\tau \eta})$, which would keep it from holding together, | nor any worse, but it is all replete $(\ddot{\epsilon}\mu\pi\lambda\epsilon\acute{o}\nu)$ with What Is. | Therefore it is all continuous $(\xi\upsilon\nu\epsilon\chi\acute{\epsilon}s)$: for What Is draws $(\pi \epsilon \lambda \acute{a} \zeta \epsilon \iota)$ to What Is'. While one can try to maintain that the prima facie spatial language of indivisibility, homogeneity, and fullness here really have a temporal sense, as Owen has in fact done, 18 such a reading is unnecessarily strained and requires understanding Parmenides' language as more metaphorical than literal. No such move is needed once one recognizes that these verses function to support the main programme's characterization of What Is as 'whole and uniform', since these terms likewise have a prima facie spatial sense: to be uniform ($\mu o \nu v \circ \gamma \in \nu \in S$), in particular, is to be everywhere the same.

Perhaps the most tempting, though still ultimately mistaken, reason to take fr. 8. 22–5 as supporting the attribution of temporal continuity is the recognition that

continuous'. Here Schofield is simply following the communis opinio of Zeller, Diels, Coxon, Deichgräber, Owen, and Guthrie.

¹⁸ See Owen 1960: 64 n. 1. Even Owen, however, finds it difficult to rid the adverb $\tau \hat{\eta}$ of its normal spatial connotation: 'I doubt if Parmenides wants wholly to lose the spatial metaphor in $\tau \hat{\eta}$, for not only this passage but the whole treatment of temporal variation is couched in spatial metaphor...; and Parmenides wants to keep open the possibility of a spatial application of the same arguments'. Cf. the criticisms of Owen on this point at Guthrie 1965: 34 n. 1.

Parmenides, if he is going to maintain successfully that his subject is ungenerated and imperishable, needs to rule out the possibilities that it might exist only intermittently or that there might be a succession of temporally discrete entities. Owen is forthright about this being one of his main reasons for supposing that fr. 8. 22-5 argue in favour of temporal continuity: 'when it has been argued that the subject has neither beginning nor end in time it still remains to draw the corollaries, that there can be neither a succession of separate entities nor internal change in any one entity; and these corollaries are drawn in B 8. 22 and 23-4 respectively'. While I agree that Parmenides needs the corollaries to secure his point that What Is is ungenerated and imperishable, I think it should be sufficiently clear that these corollaries are drawn, not at fr. 8. 22-5, but at just the point where the argument requires them. We have already seen how (a) and (b) rule out the possibility that What Is has grown or developed at the same time as they rule out its generation ex nihilo. Now I want to suggest that an argument against the intermittent existence of What Is, or its existence as a series of temporally discrete entities, is given in (c), just where it is needed, and just where the subsidiary programme leads one to expect it will occur, namely, after the conclusion that What Is is 'altogether' ($\pi \acute{a}\mu \pi a \nu$, fr. 8. 11), picking up the subsidiary programme's interim demonstrandum that What Is is 'together entire' ($\delta\mu o\hat{v} \pi \hat{a}\nu$, fr. 8. 5b).

Immediately after this conclusion, the goddess declares: 'Nor ever from not being will the force of conviction allow | something to come to be beyond it' (fr. 8. 12-13a). The main difficulty in this admittedly obscure statement lies in determining the contextual relevance of the counterfactual possibility it entertains. Some have supposed that Parmenides is advocating the uniqueness of What Is, picking up $\tilde{\epsilon}\nu$ ('one') from fr. 8. 6a. Why, however, should he be asserting the uniqueness of his subject just here? More to the point would be an assertion of diachronic unity. The subsidiary programme's coupling of $\tilde{\epsilon}\nu$ ('one') with $\sigma \nu \nu \epsilon \chi \dot{\epsilon}s$ ('continuous') in fact indicates that this is how to understand the statement; and one can actually discern an argument in fr. 8. 12-13a for the diachronic unity and continuity of What Is. First, one must try to make sense of the envisioned generation of another entity besides What Is from non-being ($\epsilon \kappa \mu \dot{\eta} \epsilon \acute{o} \nu \tau o s$) rather than from What Is itself. The apparent oddity of this scenario has led some to propose emending $\frac{\partial \kappa}{\partial \nu} \mu \dot{\eta} \frac{\partial \nu}{\partial \nu} \cos t$ έκ τοῦ ἐόντος ('from What Is').²⁰ But why could something else not be generated from What Is? What would rule out this possibility? It would violate neither the prohibition against generation ex nihilo nor that against an entity's coming to be from what it is not; for the latter prohibition reasonably applies only to What Is, given that its mode of being entails that it cannot not be. It is better, therefore, to try to make sense of the text without the proposed emendation. What initially seems puzzling, so that some were tempted to emend, in fact proves the key to understanding. The imagined generation of another entity besides What Is from non-being,

¹⁹ Owen 1960: 63.

See the appendix's textual note on fr. 8. 12. Austin 1983 defends $\partial \kappa \mu \eta \partial \nu \tau \sigma s$ at some length against various rationales that have been given for emending to $\partial \kappa \tau \sigma v \partial \sigma s$, though his analysis of the argument naturally proceeds along different lines than the analysis here.

rather than from What Is itself, suggests that What Is has vanished from the scene and so is no longer available as a source for the generation of other entities. That is, the counterfactual possibility being entertained here is that What Is has perished and is succeeded by a new entity generated from non-being or nothing. In the phrase $\gamma i \gamma v \epsilon \sigma \theta \alpha i \dots \pi \alpha \rho$ and $\tau \delta$ (fr. 8. 13a)—here translated as 'to come to be beyond it'—the context requires that $\pi \alpha \rho$ ('beyond') be understood in a temporal, not a spatial, sense. Again, there is no apparent reason why Parmenides should at this point be denying that there is something else spatially alongside or next to What Is, whereas the larger argument that What Is is ungenerated and imperishable does require that he rule out the possibility of What Is being succeeded temporally by another entity, or other entities, such as itself. At this point, the triad of mutually supporting arguments deployed to show that What Is is ungenerated and unperishing have been completed, and the goddess marks this appropriately with the conclusion: 'on account of this neither to be born | nor to die has Justice allowed it, having loosed its bonds, | but she holds it fast' (fr. 8. 13b–15a).

One might have expected the proof of the main programme's first pair of attributes to be more straightforward. If What Is undergoes generation or comes to be, then before its generation or coming to be it is not or does not exist. Likewise, if What Is perishes or ceases to be, then after its perishing or ceasing to be it is not or does not exist. But What Is, as what is and cannot not be, by stipulation cannot not be. Therefore, What Is cannot be generated or perish. This is in fact the core of Parmenides' reasoning, though it is expanded in ways that indicate the careful and subtle nature of his thought. He returns to the fundamental point in (d), by explicitly recalling the choice in fr. 2 between the first and second paths of inquiry. Since these verses function to recapitulate that original choice, it is plain enough that 'it is or it is not' ($\ell \sigma \tau \iota \nu \eta \circ \partial \kappa \ell \sigma \tau \iota \nu$) here at fr. 8. 16a is Parmenides' abbreviated or shorthand way of referring to the paths fully specified in fr. 2. 3 and fr. 2. 5.²² The verbs here would appear to be modally restricted, in so far as 'it is' recapitulates 'it is and it cannot not be', and 'it is not' recapitulates 'it is not and must not be'. The goddess means to ensure that Parmenides keeps firmly in mind what she directed him in fr. 6 not to lose sight of, namely, the necessity of both saying and thinking that What Is, is; for this directive is critical to Parmenides' ability to form a fuller conception of what What Is must be like. It allows him to see, in the first place, that What Is must be ungenerated and imperishable; for if it were either to be generated or to perish, it would not be, and not being is

²¹ For γίγνεσθαί τι παρ' αὐτό to mean 'to come to be beside it', αὐτό would have to be in the dative case rather than the accusative.

²² Some confirmation of the interpretation of that fragment developed in Ch. 2, and particularly of the place of the second path, is to be found in the present description of the second as 'no true path' (οὐ γὰρ ἀληθης | ἔστιν ὁδός, fr. 8. 17b–18a). The use of ἐτήτυμον at fr. 8. 18b in a manner paralleling the use of ἀληθης in the previous verse suggests that the latter means 'true' in the sense of 'genuine' or 'real'. This assertion that the second path is not a true, i.e. real or genuine, path fits well with the idea that it is introduced more as a formal counterpart to the first path of inquiry than as a path one could actually pursue.

incompatible with its mode of being. As indicated, this is the basic point underlying the more subtle reasoning of fr. 8. 6b–15a.

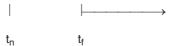


Figure 4.1

This possibility, that What Is might come to be in the future, is rejected for just the reason fr. 8. 5b would lead one to expect, namely that, if it is going to be, it is not $(o\partial \kappa \ \ e \sigma \tau)$, fr. 8. 20a).

One should thus expect the remaining clauses in these chiastically structured verses to round off the other possibility introduced in fr. 8. 5a—that What Is was but is no longer. This expectation initially seems belied, however, by what one actually finds in fr. 8. 19b–20a: $\pi\hat{\omega}_S$ δ' ἄν κε γένοιτο; | εἰ γὰρ ἔγεντ', οὖκ ἔστ'. If this is construed as 'And how could it come to be? | For if it came to be, it is not', then indeed it seems not to hearken back to the earlier 'and not ever was it' (οὖδέ ποτ' $\hat{\eta}\nu$) of fr. 8. 5a. It appears instead to introduce an as yet unheralded possibility and, what is worse, one that appears less than coherent. We may depict the possibility envisioned in fr. 8. 19b–20a as just translated in Figure 4.2, with t_p marking an unspecified point of past time:

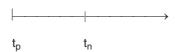


Figure 4.2

That is, 'if it came to be' $(\epsilon i ... \epsilon \gamma \epsilon \nu \tau')$, fr. 8. 20a) introduces the possibility that What Is came to be at some time in the past and continues to be now and into the future. Thus far, however, it has seemed most natural to understand fr. 8. 5a's 'ever was it' $(\pi \sigma \tau' \hat{\eta} \nu)$ in a way that would be represented as in Figure 4.3.

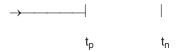


Figure 4.3

This represents What Is as having been for some time in the past but then ceasing to be, so that now it is not.

Thus far it appears that the conclusion at fr. 8. 19–20, though it picks up one possibility introduced in the subsidiary programme commencing the demonstration that What Is is ungenerated and imperishable, unfortunately fails to pick up the other and instead introduces an entirely new possibility. Given the careful structure Parmenides has imposed on his exposition to this point, this divergence right at the end of the Way of Conviction's first stage strikes a discordant and unwelcome note. This discrepancy, moreover, is not the only problem with rendering fr. 8. 19b–20a as 'And how could it come to be? For if it came to be, it is not.' For the proper implication of 'it came to be' is surely that it *was* not prior to its generation—and not, as stated, 'it is not'. As the depiction of this scenario in Figure 4.2 above makes plain, if What Is had come to be at some past point in time, then it should continue to be at the present time. The present tense of oik $\epsilon \sigma \tau$ in fr. 8. 20a thus seems wrong for the interior argument of fr. 8. 19b–20a, and yet it is in fact what the exterior argument of fr. 8. 19a and 20b requires.

We therefore need to see whether there is another way of understanding fr. 8. 19b-20a that avoids the problems encountered when one translates it as we just did. The first thing to appreciate is that it is ordinary enough for the past tenses of $\gamma i \gamma \nu \epsilon \sigma \theta a \iota$ to signify being rather than becoming, for to have become is equivalent to being. Compare the uses of this form of the verb at, for example, Hesiod, Theogony 705, τόσσος δοῦπος ἔγεντο θεῶν ἔριδι ξυνιόντων ('so great a din there was when the gods joined in strife'), and Pindar, Pythian 3. 86-8, αίων δ' ἀσφαλής Ιουκ ἔγεντ' ουτ' Aιακίδα παρὰ Πηλεῖ | οὔτε παρ' ἀντιθέω Κάδμω ('But a life assured from danger | was not either for Peleus son of Aiakos | or for godlike Kadmos'). Thus $e^{i}\gamma e\nu \tau'$ at Parmenides fr. 8. 20a may just as well have the sense 'it was' rather than 'it came to be'. If it does, then the previous verse's corresponding question— $\pi\hat{\omega}_{S}$ δ' $\alpha' \kappa \epsilon$ γένοιτο—should mean 'And how might it have been?' Uses of the optative γένοιτο in clauses expressing a wish or counterfactual are common enough. However, in these instances it tends to have a present sense, as for example at Homer, *Iliad* 22. 41–2, αἴθε θεοῖσι φίλος τοσσόνδε γένοιτο | ὅσσον ἔμοι ('Would that he were as dear to the gods | as to me'), and *Iliad* $\overline{22.287}$, καί κεν έλαφρότερος πόλεμος $T \rho \omega \epsilon \sigma \sigma \iota$ γένοιτο ('Indeed war would be lighter for the Trojans'). Such cases would appear to

tell against the possibility that γένοιτο at Parmenides fr. 8. 19b might mean 'it might have been' and suggest that it should instead mean simply 'it might be'. However, in the particular context we are dealing with, the contrast of the aorist $\gamma \epsilon \nu o \iota \tau o$ with the present $\pi \in \lambda_{0i} \tau_0$ is enough to cause it to retain its past tense; and, in any case, $\pi \hat{\omega}_s \delta$ ἄν κε γένοιτο cannot mean 'And how could it be?' since the possibility in question is supposed to entail 'it is not' ($o\dot{v}\kappa \ \ddot{\epsilon}\sigma\tau$ ', fr. 8. 20a). Keeping in mind, also, that the Greek verb εἶναι ('to be') has no past tense optative forms helps explain the occurrence of $\gamma \acute{e}\nu o\iota \tau o$ rather than some form of $\acute{e}i\nu a\iota$ in the question at fr. 8. 19b. This in turn helps explain the use of $\ell \gamma \epsilon \nu \tau$ rather than $\ell \nu$ in the next clause. The proposal, then, is to understand fr. 8. 19-20 as: '(i) And how could What Is be hereafter? (ii) And how might it have been? | (ii') For if it was, it is not, (i') nor if ever it is going to be.' This has the obvious advantage of preserving the parallel one expects with fr. 8. 5: the counterfactual possibility announced earlier with 'but not ever was it' is picked up here in (ii) and rejected for the reason given in (ii'), while that envisioned in the earlier 'nor yet will it be' is picked up here in (i) and rejected for the reason in (i'). The possibilities rejected are those represented in Figures 4.1 and 4.3 above, (i) that What Is might come to be in the future and (ii) that What Is was for some time in the past but then ceased to be. These two possibilities amount, respectively, to What Is being subject to generation in the future and destruction in the past. They are both rejected for the same reason, namely, that they entail that What Is is not, whereas this cannot be the case given the necessity of What Is being. Among the advantages of this reading are that no heretofore unannounced possibility is introduced, that the apparent contradiction in the idea that what has become is not is removed, and that Parmenides' careful articulation of his argument is not lost or obscured. Night concludes the first major stage of the Way of Conviction by asserting in fr. 8. 19-20 the principal demonstrandum announced in fr. 8. 5a, and she then announces that the first two attributes in the Way of Conviction's main programme at fr. 8. 3 have been secured: 'thus generation is extinguished and destruction unheard of (fr. 8. 21).

Whole and Uniform (fr. 8. 22–5)

The claims of these lines have often seemed obscure and their reasoning difficult. Many of the problems that have plagued interpretation are attributable to the unwarranted rejection of the lines' overt spatial connotations as merely metaphorical. We have already seen, however, that these lines develop the main programme's characterization of What Is as 'whole and uniform' $(o\hat{v}\lambda ov \mu ov v o \gamma e v \epsilon s) \tau \epsilon$, fr. 8. 4a), and we will see now that the wholeness and uniformity in question are spatial attributes. The wholeness and uniformity of What Is amount to its being everywhere what it is. The basic structure of the argumentation here resembles that of the preceding stage, with the same series of elements here coming in much briefer compass. First, there is an announcement of the principal demonstrandum: 'Nor is it divided' (fr. 8. 22a). 'Divided' here translates $\delta\iota a\iota \rho e\tau \delta v$, a verbal adjective formed from $\delta\iota a\iota \rho e\delta \omega$ ('take apart', hence 'divide', 'breach', or 'break open'; only later

'distinguish', 'determine', and 'decide'). While verbal adjectives of this type either have the sense of a perfect passive participle or express possibility, 'divided' seems preferable to 'divisible' since διαιρετόν picks up 'whole and uniform' from the main programme. After the principal demonstrandum comes a supporting reason that itself awaits argument: 'since $(\vec{\epsilon}\pi\epsilon \hat{\iota})$ it is all alike' (fr. 8. 22b). Here $\vec{\epsilon}\pi\epsilon \hat{\iota}$ functions just as it did earlier at fr. 8. 5b, and once again the supporting reason it introduces becomes the interim demonstrandum that provides the agenda for the section's central argument. In this instance, that argument occupies less than two verses: 'And it is not any more there, which would keep it from holding together, | nor any worse' (fr. 8. 23-4a). The dismissal of such possibilities is apparently considered sufficient to secure the interim demonstrandum that What Is is all alike; for this point is now reformulated as 'but it is all replete with What Is' in the functionally equivalent clause at fr. 8. 24b. Finally, the principal demonstrandum is restated, now in the form of a conclusion explicitly marked as such: 'Therefore it is all continuous' (fr. 8. 25a, cf. fr. 8. 21 and note the identical function of $\tau \hat{\omega}$ and $\tau \hat{\omega}$ s). This conclusion is accompanied by a brief restatement of its warrant: 'for What Is draws to What Is' (fr. 8. 25b, cf. fr. 8. 19–20). There is therefore nothing mysterious about the argument's structure. On the contrary, the careful ordering of ideas is remarkable for repeating the basic pattern of argumentation established in the previous stage.

Due attention to the structure of the argument shows that a number of the claims here are functionally equivalent, and this fact proves invaluable for helping one understand the sense of some of these claims. There are two sets of equivalences, focused around the principal and interim demonstranda. 'Nor is it divided $(\delta\iota a\iota\rho\epsilon\tau\delta\nu)$ ' (fr. 8. 26) both picks up the main programme's 'whole and uniform $(o\tilde{\upsilon}\lambda o\nu\ \mu o\upsilon\nu o\gamma\epsilon\nu\dot{\epsilon}s\ \tau\dot{\epsilon})$ ' (fr. 8. 4a) and is reformulated as the conclusion, 'Therefore it is all continuous $(\xi\upsilon\nu\epsilon\chi\dot{\epsilon}s)$ ' (fr. 8. 25a). This set of functional equivalences indicates that it is the same thing for What Is to be whole and uniform, not divided, and continuous. Likewise, the interim demonstrandum, that What Is 'is all alike $(\delta\muo\hat{\iota}o\nu)$ ' (fr. 8. 22b) is reformulated first as an interim conclusion on the basis of the central argument in 'it is all replete with What Is $(\ddot{\epsilon}\mu\pi\lambda\epsilon o\nu\ldots\dot{\epsilon}\acute{o}\nu\tau\sigma s)$ ' (fr. 8. 24b) and then again in the restatement of the warrant for the conclusion in 'What Is draws $(\pi\epsilon\lambda\dot{a}\zeta\epsilon\iota)$ to What Is' (fr. 8. 25b). This latter set of equivalences is especially important, given how opaque the latter two claims would be otherwise.

Obviously, the goddess cannot mean to claim in fr. 8. 25b that What Is actually moves towards What Is, since she will go on to argue that it is motionless. It is easy enough, though, to understand her words here as another way of expressing the self-similarity of What Is. The goddess in fact uses the same verb here that figured in the proverbial expression 'like is always drawn to like' ($\delta\mu\omega\omega$ $\delta\mu\omega$ $d\epsilon$ $\pi\epsilon\lambda d\zeta\epsilon\iota$, Pl. Smp. 195 B 5). By the same token, then, when she says that What Is is 'all replete' with itself, this is just another way of expressing its self-similarity, which is as much to say that What Is is what it is wherever it is. The ground for asserting the interim demonstrandum, of course, has been that What Is is not any more nor any worse in one location than another. Since the self-similarity thus asserted is in turn intended to provide the ground for asserting the principal demonstrandum, both it and its

equivalent expressions must be understood in a way that permits this entailment. That is to say, the divisibility in question must be qualitative indistinguishability from one region to the next (and not some type of impenetrability). This notion is already implicit in the term $\mu o \nu v \sigma \gamma \epsilon \nu \epsilon_S$ or 'uniform' (fr. 8. 4a), which clearly has a qualitative connotation. By the same token, the final conclusion that What Is is 'continuous $(\xi \nu \nu \epsilon \chi \epsilon_S)$ ' (fr. 8. 25a) must be meant to express the kind of qualitative self-similarity or continuity already implicit in the claim that What Is is not any more nor any worse in one location than another; that $\xi \nu \nu \epsilon \chi \epsilon_S$ has this sense is already suggested by the use of the verb $\sigma \nu \nu \epsilon \chi \epsilon \sigma \theta a \nu$ in the clause at fr. 8. 23b that supports this claim.

The claims and argumentation in this stage of the Way of Conviction therefore seem more focused on the main programme's attribute of uniformity than on the accompanying attribute of wholeness. The characterizations of What Is as not divided, alike, holding together, not any more nor any worse in one location than another, replete with What Is, continuous, and drawing near to itself are all various ways of describing the qualitative self-similarity or uniformity of What Is. The companion attribute of being οὖλον or 'whole' seems to figure much less prominently, mainly in the repeated uses of $\pi \hat{a} \nu$ or 'all'. This apparent imbalance reflects the fact that the mode of being of What Is as what is (what it is) and cannot not be (what it is) does not entail that What Is is a spatially extended entity, though if this is presumed, then its mode of being does entail its uniformity. Strictly speaking, of course, neither does its mode of being entail that What Is is temporally extended. Once this is assumed, however, it is right to argue that what must be can neither come to be nor cease to be. Nowhere does Parmenides ever argue that What Is exists in space and time. Instead, he seems simply to presume that it does so and then considers what follows from its mode of being given that this is the case. At the time he composed his poem, Parmenides would hardly have felt any need to argue that What Is is a spatio-temporally extended entity, for no philosopher prior to Plato appears to have recognized that the class of existents might also include entities that do not exist in space and time. It was one of Plato's most critical achievements as a philosopher to take this great step; that no one before him had done so explains the lengths to which he often must go in the dialogues to make the concept of immaterial existence intelligible. Aristotle, therefore, appears correct when he says that Parmenides (and Melissus) supposed that there was no other substance apart from the substance of perceptibles, that is, no immaterial substance (*Cael. 3. 1. 298*^b21–2). Since Parmenides would not have done otherwise than presume that whatever exists, including What Is, exists in space and time, he does not argue but simply presumes that it does so. In this stage of the Way of Truth, therefore, the main programme's attribute of wholeness receives much less attention than the attribute of uniformity, for the wholeness of What Is amounts to its being spatially extended, while the uniformity of What Is amounts to its being uniformly distributed throughout that space, which is something he rightly thinks can be argued from its mode of being.

The actual argument that What Is is whole and uniform essentially amounts to pursuing the point that what must be must be what it is wherever it is. This is, at any rate, the most charitable way of looking at the argument, since as stated it may

initially appear guilty of circularity. For that it cannot be prevented from 'holding together' appears to be given as the reason why 'it is not any more there... nor any worse, but it is all replete with What Is'. This is in turn the reasoning in support of the point that it is 'all alike', which is meant to entail that it is not 'divided' but is 'all continuous'. The worry is that the attributes of indivisibility and continuity are already present in the presumption that it cannot be prevented from holding together, thus the circularity. It need not be seen as a vicious circularity, however, for the point that what must be must be what it is wherever it is can be seen as one to which Parmenides is entitled, once his assumption is granted that it is a spatially extended entity. The argument here may be taken as his way of expressing the point. That the argument here is so much briefer than the argument for the main programme's first pair of attributes reflects the fact that it is a very short distance from the point that What Is is everywhere what it is and cannot not be what it is to the point that it is uniformly extended throughout space. This uniform extension, note, is compatible with the existence of other things at various regions within the same space. Nowhere in this stage of the Way of Conviction (or anywhere else) does Parmenides say that What Is occupies all points of space or is a plenum. Instead, as we have seen, he here claims only that What Is is qualitatively self-similar. This is an important point to which we shall return at the end of this chapter.

Still (fr. 8. 26-33)

The next stage of the Way of Conviction develops the main programme's specification of What Is as $a\tau \rho \epsilon \mu \dot{\epsilon}_S$ or 'still'. The connections with fr. 8. 5–21 are strong and pervasive, and such argumentation as is found here depends heavily on recalling points from this earlier stage. At the same time, these verses point forward to the Way of Conviction's culminating stage by bringing to the fore the conception of What Is as contained or enclosed within some kind of limit. The goddess begins in a manner now familiar: a programmatic announcement of the principal demonstrandum hearkening back to the main programme, followed by a statement introduced by $\epsilon \pi \epsilon i$ ('since') of the reason that will be shown to secure it: 'And unmoved within the limits of great bonds | it is unbeginning unending, since $(\hat{\epsilon}\pi\epsilon\hat{\iota})$ generation and destruction | have wandered quite far away, and genuine conviction has expelled them' (fr. 8. 26–8). In this case, however, what is given in the $\epsilon \pi \epsilon i$ -clause as grounds for the principal claim has already been established: fr. 8, 27b-8 simply reformulate the conclusion already stated at fr. 8. 21. In thus introducing this third stage, Parmenides appears to set himself the task of demonstrating how the first stage's result that What Is is subject to neither generation nor destruction makes it possible to infer the further attributes listed at the beginning of this third stage—that it is not only 'unmoved' but also 'within the limits of great bonds' and 'unbeginning unending'. In actual fact, however, of these attributes only 'unmoved' (ἀκίνητον, fr. 8. 26a) is new. Clearly, 'unbeginning' and 'unending' (ἄναρχον ἄπαυστον, fr. 8. 27a) are not new demonstranda, for they follow immediately from What Is not being subject to generation (i.e. without beginning) nor being subject to destruction (i.e. without end). Likewise, the current stage's characterization of What Is as 'within the limits of great bonds' ($\mu\epsilon\gamma\dot{\alpha}\lambda\omega\nu$ è ν $\pi\epsilon\dot{\nu}\rho\alpha\sigma\iota$ $\delta\epsilon\sigma\mu\dot{\omega}\nu$, fr. 8. 26b) recalls an image from the goddess's earlier conclusion that What Is suffers neither generation nor destruction: 'on account of this neither to be born | nor to die has Justice allowed it, *having loosed its bonds*, | but she holds it fast' (fr. 8. 13b–15a).

When this idea that What Is is held in bonds of some kind is taken up at fr. 8. 26, it apparently becomes the basis for such argument as there is here for What Is being ἀκίνητον, the proper demonstrandum of the third stage. The exposition continues: 'And remaining the same, in the same place, and on its own it rests | and thus steadfast right there it remains; $for(\gamma \acute{a}\rho)$ powerful Necessity | holds it in the bonds of a limit, which encloses it all around' (fr. 8. 29-31). What Is being held in encompassing bonds is, apparently, supposed to be sufficient reason for its remaining 'the same' $(\tau\omega v \tau \delta v)$, that is, self-identical and unaltering, and 'in the same place' $(\vec{\epsilon}v \ \tau\omega\vec{v}\tau\hat{\omega})$, that is, unmoving. Denials of both alteration and change of place are apparently meant to be encompassed in the description of What Is as ἀκίνητον or 'unmoved', and the same would seem to be the case with the original $a\tau\rho\epsilon\mu\dot{\epsilon}s$ or 'still' in the main programme. That is, the paired elements in the phrase $\tau\omega\dot{v}\tau\acute{o}\nu$ τ ' ἐν τωὐτῷ τε (fr. 8. 29a) appear an expansion of fr. 8. 26a's ἀκίνητον, clarifying the range of this generic term by specifying the kinds of change denied What Is. How, then, does What Is being held in limiting bonds entail this denial that it either alters or moves? Here it helps to recall how the image of Justice holding What Is tight within bonds first occurred in the context of drawing the conclusion that it is neither generated nor destroyed. When discussing the preceding arguments for this conclusion, recall, we noted that, although they are primarily concerned with the absolute generation and destruction of What Is, the possibility that What Is might undergo less radical forms of change such as growth or increase also received some attention. The interim conclusion that What Is 'must either be altogether or not at all' (fr. 8. 11) required ruling out the possibilities both of its genesis *ex nihilo* and of its growing or increasing to become what it is from a condition of having been otherwise. Since, in this earlier context, the image of being held within bonds had been a way of expressing the invariance of What Is with respect to growth as well as generation, it is not surprising to find the conception of What Is as bound fast employed to support its lack of variance or alteration.

The goddess concludes the third stage by declaring: 'wherefore it is right that What Is be not unfulfilled ($o\dot{v}\kappa$ $\dot{a}\tau\epsilon\lambda\epsilon\dot{v}\tau\eta\tau\sigma\nu$); | for it is not lacking ($\dot{\epsilon}\pi\iota\delta\epsilon\nu\dot{\epsilon}s$): if it were, it would lack everything' (fr. 8. 32–3). The sense of this declaration should be clear enough, provided one does not succumb to the temptation to construe $o\dot{v}\kappa$ $\dot{a}\tau\epsilon\lambda\epsilon\dot{v}\tau\eta\tau\sigma\nu$ as simply synonymous with $\tau\epsilon\tau\epsilon\lambda\epsilon\sigma\mu\dot{\epsilon}\nu\nu$ or 'perfected' two lines down (fr. 8. 42b, picking up $\tau\epsilon\lambda\epsilon\sigma\tau\dot{\epsilon}\nu$ from fr. 8. 4b). The argument requires that the adjective $\dot{a}\tau\epsilon\lambda\dot{\epsilon}\dot{\nu}\tau\eta\tau\sigma\nu$ retain its normal epic sense of 'unfinished', 'unaccomplished', or 'unfulfilled'. Such a sense is entirely appropriate in the present context of arguing for the invariant identity of What Is. It allows for a straightforward understanding of the otherwise opaque consideration presented in fr. 8. 33, for it makes it easy to see that $\dot{\epsilon}\pi\iota\dot{\delta}\epsilon\nu\dot{\epsilon}$ or 'lacking' is the functional equivalent of $\dot{a}\tau\epsilon\lambda\dot{\epsilon}\nu\dot{\tau}\eta\tau\sigma\nu$ or 'unfulfilled': what is lacking would in fact be unfulfilled or unfinished. The reason given in these

concluding verses for why What Is is not lacking—namely that, if it were to be lacking, it would lack everything—can be understood as hearkening back to the section of the first stage that functions as the backdrop throughout this third stage. This reason amounts to much the same point already made at fr. 8. 11, that What Is 'must be altogether or not at all'. This stage's argument, such as it is, for What Is being unmoved $(\hat{a}\kappa i\nu\eta\tau\sigma\nu)$ and still $(\hat{a}\tau\rho\epsilon\mu\dot{\epsilon}s)$ has developed the lesser concern of the first stage that What Is cannot be thought to have undergone any growth or increase. Here the reasons for positing this type of invariance are apparently extended to rule out all kinds of change.

Although its reliance on earlier arguments causes the third stage's argumentation to be less transparent and more rhetorical than one might like, Parmenides is nevertheless entitled to the fundamental point that what must be cannot be subject to change of any form, provided the specification of its modality is understood to entail not only its necessarily being or existing but also its necessarily being what it is. What remains worrisome is the detectable shift in fr. 8. 26-33 from use of the image of being held fast in bonds as a way of expressing invariance to its use in a more strictly spatial sense, so that the limit or bond is apparently conceived of as physically enclosing or surrounding What Is. This shift is most apparent in the description of the bonds' limits as enclosing it (sc. What Is) all around (τό μιν ἀμφὶς ἐέργει, fr. 8. 31b). This more literal or physical binding and limitation is apparently conceived of as primarily responsible for What Is remaining fixed in the same place. Perhaps this shift seemed necessary given that the impossibility of What Is not being what it is did not obviously entail the impossibility of it not being where it is. What Is might well continue to be what it is, in some significant sense, while not always being where it is. One could argue the contrary, on the grounds that a change in location would in fact be enough of a change to undermine the self-identity of What Is. Parmenides, however, does not argue in this manner but opts instead to develop the image of bonds and limit in the manner just described. In so doing, he anticipates the Way of Conviction's next stage.

Perfect (fr. 8. 42-9)

The structure of the path's fourth and final stage follows the same pattern seen in each previous stage. First comes a statement of the demonstrandum, accompanied by an $\epsilon \pi \epsilon i$ -clause presenting its as yet to be established rationale, which then becomes the focus of what follows: 'But since $(\epsilon \pi \epsilon i)$ there is a furthest limit, it is perfected | from every side, like the bulk of a well-rounded globe, | from the middle equal every way' (fr. 8. 42–4a). This introduction picks up the main programme's final attribute, $\tau \epsilon \lambda \epsilon \sigma \tau \delta v$ or 'perfect' (fr. 8. 4b), and expands on it in climactic fashion. The goddess presents Parmenides with a much clearer vision of what the 'perfection' of What Is amounts to—it is a perfection of spatial extension and shape that is a function of the necessity of its being what it is invariantly everywhere at its extremity. The only body extended in the three dimensions of space that is invariant or uniform in this way is the sphere, and thus Parmenides says that What Is is 'like the bulk of a well-rounded globe', that is, spherical in shape.

Now, numerous interpreters have been made uncomfortable by this claim, generally because it fails to accord with their preconceptions regarding the identity of Parmenides' subject, and they have therefore felt compelled to dismiss the clear sense of this comparison by treating it as a mere façon de parler. These tend to be interpreters for whom Parmenidean Being has neither temporal nor spatial existence but exists abstractly as, for instance, some vaguely conceived 'Being', as Owen's 'what can be talked and thought about', or as Curd's 'predicational monad'. 23 The need to take Parmenides' argumentation ever less literally as the Way of Conviction progresses, so that when its fourth and final stage is reached virtually nothing he says can be taken at face value, should have been recognized as indicating that the function and sense of his arguments had not been properly understood. The fundamental mistake, responsible for this progressive deliteralization, is to have neglected the modal clause in the goddess's original specification of the first way of inquiry. If one fails to recognize that the goddess directs Parmenides to focus his thought on what is and cannot not be (this being equivalent to what must be), then one cannot but fail to misconstrue the function and sense of the arguments in fr. 8 via which the goddess leads Parmenides through a progressive revelation of what what must be must be like. While the confusions have been compounded by the displacement in fr. 8 now corrected by Ebert's restoration of its transposed text, there has also been a less forgivable inattention to how Parmenides' particles clearly mark the structure of his arguments and to how this structure is essentially repeated in each of the four stages. Once one understands the purpose and structure of his reasoning in the Way of Conviction, one can take Parmenides to mean what he says. Otherwise, one will have to take much of what he says in fr. 8 as mere metaphor, in much the same way as those who have failed to understand the topography and other details of the proem have had to resort to treating it as mere allegory. In this final stage of the Way of Conviction, Parmenides does in fact mean to show that What Is is perfect with

²³ So Coxon 1986: 214 ad loc. (cf. Coxon 1935: 140): 'P. does not say that Being is spherical, but that the totality of its perfection is like that of a sphere...[The sphere] is an appropriate analogue for the universal perfection of Being.' Likewise, Owen 1960: 65-8, where Parmenides' talk of $\pi\epsilon i \rho a \tau a$ or limits is construed metaphorically as 'the mark of invariancy' and the words of fr. 8. 42–3 are said to 'mean, in effect, "Moreover, since it is utterly unchanging". Owen likewise tries to explain away the overtly spatial language that pervades the remainder of this stage. He comforts the reader who might be worried that, as Owen has reconstructed it, '[t]he very proof which rules out all variation in time and space has to use language which implies temporal and spatial distinctions' by comparing it, à la Wittgenstein, to the ladder to be thrown away once one has climbed it. Kirk et al. 1983: 253, advocate a more eirenic stance that tries to allow the passage's language of limits and its other spatial language to be both literal and metaphorical. Curd 1998a: 93-4, makes it more purely metaphorical: 'The image of what-is lying "equally in the bounds" [fr. 8. 49b] gives us a picture of the contained, unchanging, complete character of what-is; the bounds are a metaphorical device for indicating that what-is cannot wander away into what-is-not, nor can what-is-not invade the proper sphere of what is . . . [Fr. 8. 43] is a comparison rather than an assertion that what-is is a sphere [T]he comparison is apposite . . . , for a sphere is the only one of the regular solids that presents the same appearance no matter from what angle we view it. This is also a mark of what-is; to be a genuine instance of what-is [i.e. a predicational monad], a thing must be always the same, no matter how we consider it, no matter from what direction we contemplate it.... the image of the sphere illustrates the predicational monism that Parmenides has argued for throughout B8. Cordero 1984: 188-90, likewise insists on Parmenides' language here being merely metaphorical.

respect to spatial extension since it must be invariant everywhere at its extremity. He does mean, in other words, that it is like a well-rounded globe or ball precisely in respect of being spherical. In taking this as tantamount to its being perfect $(\tau \epsilon \tau \epsilon \lambda \epsilon \sigma \mu \epsilon \nu \nu)$, fr. 8. 42b $\approx \tau \epsilon \lambda \epsilon \sigma \tau \delta \nu$, fr. 8. 4b), Parmenides seems to share with the early Pythagoreans the idea that the sphere is the finest or most beautiful $(\kappa \delta \lambda \lambda \iota \sigma \tau \nu)$ of solid figures. ²⁴ Here perfection, self-identity, and invariance coincide.

Turning now to the actual argumentation of this final stage, the $\partial \pi e i$ -clause at fr. 8. 42a indicates that the argument that What Is is perfected by being spherical will concentrate on demonstrating that it has a furthest limit or boundary. This does in fact prove the focus of the body of the argument in fr. 8. 44b–8a. There the careful sequence of particles precisely marks the structure of the argumentation as consisting of a general reason (R) why What Is must have an outermost boundary, which is then supported by two reasons, (a) and (b), that recur to the fundamental conception of the entity in question: '(R) for $(\gamma \acute{a} \rho)$ that it be neither any greater | nor any smaller in this place or in that is necessary; | (a) for neither $(o \rlap/v \tau \epsilon \gamma \acute{a} \rho)$ is there non-being, which would stop it reaching | to its like, (b) nor $(o \rlap/v \tau)$ is What Is such that it might be more than What Is | here and less there.' With the core of the argument thus complete, there now follows, in fr. 8. 48b–9, a retrospective summary and conclusion.

Unfortunately, the typical punctuation of these verses obscures both their function and the fact that Parmenides here again employs his now canonical structure of argumentation. The two verses tend to be punctuated: $\tau \hat{\eta} \mu \hat{a} \lambda \lambda o \nu \tau \hat{\eta} \delta \hat{\eta} \sigma \sigma o \nu$, $\hat{\epsilon} \pi \epsilon \hat{\iota}$ there, since it is all inviolate; | for equal to itself from every side, it extends uniformly within limits'). When the verses are thus punctuated, the $\epsilon \pi \epsilon i$ -clause in fr. 8. 48b looks as if it provides a supporting reason for what has preceded; in turn, the $\gamma \acute{a} \rho$ at the beginning of fr. 8. 49 makes it look as if this entire verse is meant to underwrite the claim made in the $\epsilon \pi \epsilon i$ -clause. There are several reasons why this is unsatisfactory. In the first place, the final verse must, on this construal, be the ultimate reason for the passage's major claims. For the sequence of connective particles and this punctuation indicate that fr. 8. 49 supports fr. 8. 48b and that this latter clause in turn must be construed as supporting fr. 8. 47b-8a, which itself contains one of the two arguments for the idea presented at fr. 8. 44b-5 as the immediate ground for the initial claims of fr. 8. 42-4a. If this is the structure of the passage—a sequence of claims followed by supporting claims, which are themselves in turn followed by their own supporting claims—then the last verse becomes the ultimate ground for all the preceding claims. If this is its structure, however, Parmenides' argument then becomes circular.²⁶ For 'equal to itself from every side, it extends uniformly within

²⁴ See D.L. 8. 35, where Diogenes' report of this view draws, probably indirectly, on Aristotle's lost *On the Pythagoreans.*

²⁵ So Diels and Kranz and virtually all recent editors, with the exceptions of Heitsch 1974 and Coxon 1986, both of whom omit the comma after $\hat{i}\sigma\sigma\nu$ in fr. 8. 49, and Conche 1996, who punctuates with a full stop rather than comma after $\hat{j}\sigma\sigma\sigma\nu$ in fr. 8. 48.

²⁶ Some, unfortunately, find attributions of circular reasoning to Parmenides unobjectionable. So, for example, Gallop 1984: 19, justly criticized at Wright 1986: 64. Although Gallop takes fr. 5

limits' (fr. 8. 49) simply reformulates the main elements in the introductory statement of this stage's demonstrandum: 'But since there is a furthest limit, it is perfected | from every side, like the bulk of a well-rounded globe, | from the middle equal in every way' (fr. 8. 42–4a). In addition to this serious problem, it remains unclear, first, what is meant by the characterization of What Is as 'inviolate' ($\alpha \sigma \nu \lambda \sigma \nu$, fr. 8. 48b), exactly how this is supported by what follows in fr. 8. 49, and how this inviolacy is in turn supposed to support what has come before.²⁷

These problems all disappear if fr. 8. 48–9 is punctuated as follows: $\tau \hat{\eta} \, \mu \hat{a} \lambda \lambda o \nu \, \tau \hat{\eta}$ $\delta' \, \hat{\eta} \sigma \sigma o \nu$. $\hat{\epsilon} \pi \epsilon \hat{\iota} \, \pi \hat{a} \nu \, \hat{\epsilon} \sigma \tau \iota \nu \, \check{\alpha} \sigma \upsilon \lambda o \nu$, $| o\hat{\iota} \, \gamma \hat{a} \rho \, \pi \acute{\alpha} \nu \tau \sigma \theta \epsilon \nu \, \hat{\iota} \sigma o \nu$, $\delta \mu \hat{\omega}_S \, \hat{\epsilon} \nu \, \pi \epsilon (\rho \alpha \sigma \iota \, \kappa \acute{\nu} \rho \epsilon \iota \, (` here and less there. Since it is all inviolate, | for [it is] equal to itself from every side, it extends uniformly in limits'). With a full stop after <math>\hat{\eta} \sigma \sigma o \nu$ in fr. 8. 48, the ensuing $\hat{\epsilon} \pi \epsilon \ell$ -clause in the verse's second half no longer has to support what has come before but provides, by way of summary, a reason for what follows. Together with fr. 8. 49, it can now be seen to function as the kind of summary conclusion found in each of the preceding stages. The heretofore puzzling adjective 'inviolate' $(\check{\alpha} \sigma \nu \lambda o \nu)$ is now readily intelligible as encapsulating the central argument's key idea that not-being does not intrude or force itself upon What Is. That it is neither violated by not-being nor fails to be what it is anywhere are, as already seen in the analysis of this stage's central argument, the two premises that ultimately secure the conclusion that it extends uniformly within limits. Not only is Parmenides' argument not circular, it has its proper foundation in the goddess's instructions regarding how to pursue his inquiries along the first way.

Retrospect

Looking back now at the Way of Conviction, we can see that the fundamental question guiding Parmenides' inquiry along the first path is: what must what must be be like? What can be inferred, that is to say, about the nature or character of What Is simply from its mode of being? We can also see that Parmenides is in fact entitled to many of the inferences he draws along the way, given his presumption that What Is, like any other entity, must exist in time and space. Certainly what must be cannot have come to be, nor can it cease to be. Both possibilities are incompatible with its mode of being. Likewise, what must be cannot change in any respect, for this would involve its not being what it is, which is also incompatible with its mode of being

²⁷ Because of problems such as these in construing the logical sequence of the thought at the end of the passage, Diels at one point went so far as to posit corruption at the beginning of the last verse, printing \dagger oi γὰρ πάντοθεν ἶσον in his 1882 edn. of Simp. in Ph. (at 146. 22) and conjecturing 'εί γὰρ vel ἢ γὰρ' in his apparatus. Even earlier, Zeller had recognized that the echoes of fr. 8. 42–4a in fr. 8. 49 suggest that it is the conclusion of the passage rather than its ultimate premise and so proposed the emendation $\tau o\iota \gamma \acute{a}\rho$ at the beginning of fr. 8. 49; although this proposal found some favour (see Tarán 1965: 148), editors now generally agree in accepting Diels's simple correction ôt for the major manuscripts' ôt. In also accepting Diels's punctuation, however, they have left unresolved the problems motivating Zeller's proposal.

since what must be must be what it is. What must be must also be free from any internal variation. Such variation would involve its being something or having a certain character in some place(s) while being something else or having another character in others, which is incompatible with the necessity of its being what it is. For much the same reason, it must be free from variation at its extremity. Since the only solid that is uniform at its extremity is a sphere, what must be must be spherical. It is difficult to see what more Parmenides could have inferred regarding the character of what must be simply on the basis of its modality as a necessary being.

In fact, the attributes of the main programme have an underlying systematic character suggesting they are meant to exhaust the logical possibilities: What Is both must be (or exist), and it must be what it is, not only temporally but also spatially. For What Is to be (or exist) across time is for it to be ungenerated and deathless. For it to be what it is across time is for it to be 'still' or unchanging. For What Is to be (or exist) throughout space is for it to be 'whole'; and for it to be what it is wherever it is internally is for it to be 'uniform'. Finally, for What Is to be what it is everywhere at its extremity is for it to be 'perfect' or 'complete'. Taken together, the attributes shown to belong to what must be amount to a set of perfections: everlasting existence, immutability, the internal invariances of wholeness and uniformity, and the invariance at its extremity of being optimally shaped. What Is has thus proven to be not only a necessary but, in many ways, a perfect entity.

THE COSMOLOGY

Introduction

In her preparatory instructions to Parmenides at fr. 6. 3–5a, the goddess says she will begin from the first way of inquiry and then begin again from the way along which mortals ($\beta\rho\sigma\tauo\iota$) wander. What she here refers to as the first way of inquiry is clearly identical with the first way specified in fr. 2, which she describes there as 'the path of conviction' that 'attends upon true reality' (fr. 2. 4). By following this first way, Parmenides learns the first of the things Night said in her welcome he must learn, namely, 'the unshaken heart of well-rounded reality' (fr. 1. 29). This initially bewildering description proves to encapsulate well what reality ($\partial \lambda \eta \theta \epsilon i \eta$) or What Is ($\tau o \epsilon \delta v$) is shown to be like by the end of the Way of Conviction in fr. 8. At the conclusion of this first major revelation, the goddess clearly marks the transition to her account of what lies along the path mortals follow: 'At this point I cease for you the trustworthy account and meditation | regarding true reality; from this point on mortal notions ($\delta \delta \xi as ... \beta \rho o \tau \epsilon i as$) | learn, listening to the deceptive order of my verses' (fr. 8. 50–2). With these words the goddess fulfils, not only the promise of

²⁸ Frère 1987: 198–9, proposes to take $\epsilon \mu \hat{\omega} \nu \epsilon \pi \epsilon \omega \nu$ as a complement of $\delta \kappa \alpha \delta \omega \nu$ rather than as a genitive phrase dependent on $\kappa \delta \sigma \mu \rho \nu$, and thus to translate 'entendant, de mes dires, un ordre du monde où l'on peut se tromper', so that $\kappa \delta \sigma \mu \rho \nu$ here may mean 'cosmos' in the sense of 'world order', rather than merely the 'order' or 'arrangement' of the goddess's verses. This proposal is

fr. 6. 3–5a to recommence with the way of mortals once she has finished with the first way of inquiry, but also her original welcome's assurance that Parmenides must also learn 'the notions of mortals ($\beta\rho\sigma\tau\hat{\omega}\nu$ $\delta\delta\xi\alpha_s$), in which there is no genuine trustworthiness' (fr. 1. 30). The remainder of fr. 8 is taken up with a complex explanation of just why mortal notions are unreliable. There followed a major cosmology that may reasonably be estimated to have accounted for roughly 80 per cent of the original poem. While some have questioned the identification of the cosmology with the way of mortals, the goddess's declaration in fr. 8. 50–2 that she has concluded the first part of her teaching and is about to embark on the second, just as she has twice previously indicated she would, confirms that the identification is correct.²⁹

We have only partial knowledge of Parmenides' cosmology. The direct evidence provided by the end of fr. 8 and by the other fragments plausibly assigned to this portion of the poem (frs. 9–19) originally accounted for perhaps 10 per cent of the cosmology's original length. Since a number of these fragments are programmatic, we still have a good idea of some of the major subjects it treated. From frs. 8–15a we know that these included accounts of the cosmos's two basic principles, light and night, 30 and then of the origin, nature, and behaviour of the heavens and their population, including the stars, sun, moon, the Milky Way, and the earth itself. A few fragments, including one (fr. 18) known only in a Latin translation, show that Parmenides also dealt with the physiology of reproduction (frs. 17–18) and with human thought (fr. 16). Fortunately, the sketchy picture of the cosmology furnished

untenable both syntactically, given the attributive position of $\epsilon \mu \hat{\omega} \nu \ \epsilon \pi \epsilon \omega \nu$, and semantically, given that a direction to 'hear the cosmos' makes little sense. The parallels standardly cited for Parmenides' $\kappa \delta \sigma \mu \rho \nu \ \epsilon \pi \epsilon \omega \nu \ \epsilon \omega \nu \ \epsilon \pi \epsilon \omega \nu \ \epsilon \omega \nu$

²⁹ See Owen 1960: 49 and n. 2, for justification of the identification against older proposals to the contrary. A good deal of the confusion on this point is attributable to the long acceptance of Diels's conjectured supplement $<\epsilon \tilde{\iota} \rho \gamma \omega >$ ('I restrain') at the end of fr. 6. 3. This conjecture made it seem that the goddess bars Parmenides from two ways of inquiry, including that 'along which mortals who know nothing | wander two-headed' (fr. 6. 4b–5a); for if the goddess bars Parmenides from the way mortals follow, it then seemed hard to understand how she herself could follow that way in the cosmology. Diels's conjecture thus made it seem that the cosmology should not be identified with the way of mortals described in fr. 6. Nehamas's superior conjecture $<\tilde{\alpha}\rho\xi\omega>$ ('I shall begin') removes this unnecessary obstacle to recognizing that the cosmology is the goddess's account of what lies along the mortal way of inquiry.

Why two such principles? While Parmenides offers no clear rationale, his choice of light and night as principles likely reflects elaboration of a traditional cosmological motif. Compare the intriguing report *ap.* Hippol. *Haer.* 1. 2. 12 that, according to Diogenes of Eretria and Aristoxenus of Tarentum, Pythagoras received from Zoroaster the teaching that there are from the beginning two principles of things, a father and a mother, the father being light $(\phi \hat{\omega} s)$, and the mother being darkness $(\sigma \kappa \delta \tau \sigma s)$; that the portions of light are hot, dry, light, and fast, while those of darkness are cold, moist, heavy, and slow; and that from these the whole cosmos is constituted. Betegh 2004: 168 no. 149, likewise draws attention to how Parmenides' two cosmic principles are reminiscent of the first generation deities present at the beginning of the theogony of the Derveni papyrus's poem, namely Night and Aether.

by the fragments is significantly improved by the testimonia, or second-hand reports in works by later ancient authors, pertaining to the contents of the poem's lost portions. The impression given by the fragments of the range of subjects is confirmed by both Simplicius, who comments after quoting fr. 11 that Parmenides' account of the genesis of things extended down to the parts of animals (Simp. in Cael. 559. 26-7), and likewise by Plutarch's judgement that Parmenides' cosmology has so much to say about the earth, heaven, sun, moon, and stars right down to the genesis of human beings that it omits none of the major subjects typically treated by ancient natural philosophers (Plu. Col. 1114 B-C). A particularly important testimonium stemming from the doxographer Aëtius paraphrases, explicates, and supplements fr. 12 in ways that give us a better picture of the structure of Parmenides' cosmos (Aët. 2. 7. 1 (Stob. Ecl. 1. 22. 1a)). ³¹ Likewise, Theophrastus' comments on fr. 16 at On the senses 1-4 appear to provide more information about Parmenides' views on cognition.³² Generally, the testimonia tend to confirm that Parmenides sought to account for an incredibly wide range of natural phenomena, including especially the origins and specific behaviours of both the heavenly bodies and the terrestrial population.³³

The details of the poem's cosmological story concern us less here than certain basic questions regarding its function, given that Night's warnings about the deceptiveness and unreliability of mortal notions have made the status of the cosmology as a genuine part of Parmenides' system seem problematic. When she tells Parmenides at fr. 8. 50-1a that her 'trustworthy account and meditation | regarding true reality' has ended and then immediately at fr. 8. 51b-2 describes the account of mortal notions yet to come as 'deceptive', many have taken her to be marking the cosmology that follows as an account, either simply false or somehow hypothetical, of all those things normal awareness indicates exist that are however actually non-existent. Such views are rooted, of course, in the fundamental failure to recognize the modal distinctions that define Parmenides' system. This heedlessness leads to the erroneous supposition that the goddess has already given an account in the Way of Conviction of all that is or exists, when she has in fact focused to this point on the characteristics of what is and cannot not be. Of course, if one mistakenly supposes she has already described all that exists, one will be left puzzling over the resulting problem of why Parmenides should have bothered to develop so lengthy and detailed an account of a world his own reasoning has shown does not really exist. This is the problem the cosmological portion of the poem presents for strict monist interpretations.

A once popular response to the problem, now generally and rightly rejected, was to maintain that the poem's cosmology is a compendium of theories propounded by contemporary Pythagoreans—supposedly the 'mortals' to whom the goddess keeps referring—who are here targeted for criticism by Parmenides. That the details of the

³¹ Finkelberg 1986 attempts to reconcile the apparent discrepancies between Parm. fr. 12 and Aëtius' report.

See further Laks 1988; Mansfeld 1999*b*.

On the details of Parmenides' cosmology, see Morrison 1955: 60–5; Guthrie 1965: 57–66; Finkelberg 1986; Bollack 1990.

poem's cosmology are substantially adopted from earlier systems cannot, however, be established; and it is difficult to imagine why Parmenides should have devoted the majority of his poem to expounding the cosmological theories of other thinkers in such elaborate detail only in order to reject them. What tells most strongly, however, against the hypothesis that the cosmology is a digest of contemporary cosmological theorizing is the goddess's own declaration that she is relating to Parmenides this 'ordering of things, fitting and entire,³⁴ | so that no understanding of mortals may ever surpass you' (fr. 8. 60–1). These words mark the goddess's cosmology as superior to any Parmenides might encounter and lend it her own authority.³⁵ As part of her revelation, it cannot be substantively identical to theories Parmenides might already have known. Thus it is now generally and rightly recognized that the cosmology must be judged the product of Parmenides' own reflection on the world's origin and operation.

That the cosmology is Parmenides' own has, again, seemed problematic primarily because the Way of Conviction has too often been misunderstood as his account of all that there is or that exists. The logical-dialectical development of the strict monist interpretation attempted to account for the presence of the cosmology in the poem by proposing that it is merely a 'dialectical device', that is, the best possible account of a phenomenal world Parmenides believes on theoretical grounds does not exist, with which he may nevertheless test and trump other attempts to explain the nature of reality on the basis of sensory evidence. ³⁶ One influential advocate correctly saw as a serious problem for this line 'the denial of reality to Parmenides himself and all men if the sensible world is entirely false', though he supposed that the obvious untenability of his position seems not to have troubled Parmenides. ³⁷ Guthrie would likewise express, and dismiss, a similar concern about the implications of his own more traditional strict monist reading: '[Parmenides'] account of appearances will excel those of others. To ask "But if it is unreal, what is the point of trying to give an

 $^{^{34}}$ See Cherubin 2005: 9–10, for a useful survey of the various proposals regarding the sense of ϵ οικότα, here rendered as 'fitting'. The goddess does not mean to qualify her account as provisional, as those who would translate the term as 'likely', 'plausible', or 'probable' aim to suggest (refs. at Cherubin 2005: 10 n. 19). The use of ϵ οικώs in this sense in any case post-dates Parmenides. Instead, she means to mark its superiority to other accounts as 'fitting', 'appropriate', or even 'accurate' (cf. those cited at Cherubin 2005: 10 n. 20) and as 'entire' or 'whole' $(\pi \acute{\alpha} \nu \tau a)$, i.e. complete and exhaustive. Compare the use of ϵ οικότα in Helen's introduction to her tale at Menelaus' court of her encounter with Odysseus undercover within the Trojan walls: 'As you sit now and feast in the great halls, | enjoy my story $(\mu \acute{\nu} \theta o \iota s)$ as well—for the things I shall relate are fitting $(\epsilon \acute{o}\iota \kappa \acute{o}\tau a)$ ' (Hom. Od. 4. 238–9). Menelaus' subsequent comment at Od. 4. 266 that she has told everything $\kappa a \tau \acute{\alpha} \mu o \acute{\iota} \rho a \nu$, 'in order' or 'rightly', indicates that $\epsilon \acute{o}\iota \kappa \acute{o}\tau a$ here verges on 'accurate', that is, in conformity with what actually occurred.

The goddess likewise indicates that the cosmology has her authority when she declares at fr. 6. 3–4 that, after beginning with the first way of inquiry, she will make a new beginning from the way along which mortals typically proceed. This point was obscured, however, by Diels's supplement of the lacuna at the end of fr. 6. 3.

³⁶ See Owen 1960: 48–55, for the interpretation of the cosmology as 'no more than a dialectical device'. Long 1963: 106 presented a modified version of this line, pronouncing the cosmology 'the best possible account of [the appearances]' and thus 'a criterion against which any conception of reality based on the senses may be measured and found wanting'.

³⁷ Long 1963: 106.

account of it at all?" is to put a question that is not likely to have occurred to him.'38 These are both good examples of how influential interpreters have been willing to paint Parmenides as blissfully unaware of the devastating consequences of the position their interpretations wrongly impute to him. More importantly at the moment, interpretations of the cosmology as a dialectical device, no less than interpretations of it as an amalgam of contemporary theories targeted for critique, can now both be recognized as responses to a non-existent problem that arises only due to basic misunderstanding of Parmenides' metaphysics. The Way of Conviction is not an account of all that is, that exists, or that is the case. It is, instead, an account of what what must be has to be like, that is, of what can be inferred regarding the nature of what enjoys the mode of being specified at fr. 2. 3 simply from the fact that it is and cannot not be.

It is important to be clear, moreover, that the existence of something that must be in no way entails that there are not other entities that are but need not be. Parmenides' cosmology is his broad account of the genesis and behaviour of the most notable and important of these other entities. Why Parmenides needs to learn not only about what must be but also about these mutable entities, even though no genuine conviction is to be had in thinking about them, the goddess explains when she says she presents him with this cosmology 'so that no understanding of mortals may ever surpass you' (fr. 8. 61). Parmenides is thus effectively claiming that his cosmology is the most comprehensive and systematic account of the natural world he has been able to develop and that, as such, it is superior to all other explanations of natural phenomena. While there is a certain value in having the best possible account of the natural world, it pales in comparison with the value of understanding the nature of what is not subject to change. This distinction is consistent with the metaphysical and epistemological framework we have already in Chapter 3 seen emerge from the goddess's directions and warnings to Parmenides prior to fr. 8. The account of reality developed in the first part of fr. 8 is 'trustworthy' (fr. 8. 50) because its object is itself reliably not subject to change. Mortal notions, by contrast, are not trustworthy and the goddess's account of their objects is 'deceptive' (fr. 8. 52) because apprehension of these objects varies just as they themselves do. Her account is also deceptive because the constant and ready availability to perception of the things it describes has misled ordinary mortals to suppose that such things are in fact all there is and thus inevitably that they are the most worthy objects of their attention. Calling her cosmology 'deceptive' is another way of warning Parmenides that ultimately he must fix his thoughts upon what must be.

What Is is the Proper Object of Understanding (fr. 8. 34-8a)

Theodor Ebert's restoration of the block of text transposed within fr. 8 makes it once again possible to see that fr. 8. 34–8a functions as the goddess's own comment on her description of the cosmology as 'deceptive' in the immediately

³⁸ Guthrie 1965: 52.

preceding verse (fr. 8. 52). The cosmology is deceptive, she indicates, for the straightforward reason that no matter how successful one is in understanding the things on which mortals typically focus their cognitive attention, one will never achieve the kind of trustworthy understanding that comes from focusing one's mind on what is and cannot not be. Although we have touched briefly upon fr. 8. 34–8a in Chapter 2, it will be worth discussing these verses in more detail before proceeding.

As always, it is important to note the particles Parmenides employs to mark the structure of his reasoning. The passage consists of four principal claims. The mildly adversative 8' introduces the first claim in fr. 8. 34. The next two, at fr. 8. 35-6a and 36b-7a, are each introduced by $\gamma \acute{a}\rho$ ('for') and are thus each intended to support the preceding claim. Finally, with the claim at fr. 8. 37b–8a, introduced by $\epsilon \pi \epsilon i$ ('since'), the goddess comes to a point already demonstrated in the Way of Conviction that provides the ultimate ground for all the previous claims here. The first claim is: 'The same thing is both for understanding and that because of which³⁹ there is understanding' (fr. 8. 34). The sense of this should by now be plain enough. Even without looking to the next verse's assertion that you will not find understanding without What Is, we should have been able to identify $\tau \delta \epsilon \delta \nu$ or What Is as what is there for understanding and as 'that because of which there is understanding', that is, the necessary condition of understanding. What now follows in support nonetheless confirms the identification: 'For $(\gamma \acute{a} \rho)$ not without What Is $(\tau o \hat{v} \acute{e} \acute{o} \nu \tau o s)$, depending on which it has been expressed, 40 will you find understanding (fr. 8. 35-6a). The difficulty of the subordinate clause in fr. 8. 35b does not obscure the sense of

 $^{^{39}}$ οὕνεκεν = οὖ ε̈νεκα, as at Hom. *Il.* 9. 505 and *Od.* 3. 60. Cf. Parmenides' use of οὕνεκεν at fr. 8. 32 and of τ οῦ εἵνεκεν at fr. 8. 13.

There seems to be no truly satisfying explication of the clause, ἐν ῷ πεφατισμένον ἐστίν (fr. 8. 35b). Tarán 1965: 123-7 (cf. Conche 1996: 163-4) isolates the weaknesses of various proposals, but his own proposal to render it as 'in what has been expressed' is barely defended and leaves the clause oddly disconnected from its context. The most plausible antecedent of $\hat{\psi}$ is $\tau \circ \hat{v} \in \hat{v} \tau \circ \hat{v}$ in the preceding clause, in which case $\epsilon \sigma \tau i \nu$ must anticipate $\tau \delta \nu o \epsilon \hat{\imath} \nu$ in fr. 8. 36a as its subject. Thus, for instance, Kranz in Diels and Kranz 1951, ad loc.; Verdenius 1942: 40; Fränkel 1962: 407. But how to construe the preposition, ϵv ? It seems hardly possible to make sense of the notion that understanding has been told of, related, or expressed (πεφατισμένον) in What Is. It is thus tempting to accept the variant $\dot{\epsilon}\phi'$ $\dot{\hat{\omega}}$, which, though not reported in Diels and Kranz, is the unanimous manuscript reading ap. Procl. in Prm. 6. 1152. 35 (so Cordero 1984: 116-17, followed by Couloubaritsis 1986: 238 n. 82; cf. Conche 1996: 164). The sense would thus be 'upon which...', 'in reference to which...', or 'in dependence on which it (sc. understanding) has been expressed', meaning that understanding has been expressed in the just completed account of What Is (note how the goddess has just before, at fr. 8. 50, referred to her account as a $v \acute{o} \eta \mu a$). One might be reluctant, however, to rely too heavily on Proclus, given his less than reliable quotations of other portions of the poem. Fortunately, there is an idiomatic use of $\dot{\epsilon}_{\nu}$ + dative with $\dot{\epsilon}_{\sigma\tau\iota\nu}$ that suggests how to preserve the reading found in Simplicius and still make sense of the clause. One sees it, for example, in the phrase ἐν σοὶ γάρ ἐσμεν (Soph. OT 314, cf. Eur. Alc. 278), meaning 'for we depend on you', and in έν τούτω είσιν πάσαι αι ἀποδείξεις (Pl. Prt. 354 Ε 7-8), meaning 'all the proofs depend on this'. This suggests the possibility of understanding the difficult Parm. fr. 8. 35b as depending on which it (sc. understanding) has been expressed'. The clause would thus have much the same sense as it would if one accepted Proclus' $\dot{\epsilon}\phi$, $\dot{\phi}$, which could then be explained as having entered the text as a gloss.

these words: if one's search for understanding proceeds along any way other than the one leading to What Is $(\tau \hat{o} \in \delta \hat{o} \nu)$, then one's search will be fruitless. The reason would appear to be that only understanding that involves apprehension of what must be will not wander and will thus be the kind of understanding Parmenides' primary inquiry is meant to achieve. The subordinate clause underscores this basic point by emphasizing that the account just concluded, which the goddess has referred to as a 'thinking' or 'meditation' $(\nu \delta \eta \mu a, \text{ fr. } 8.50)$, has depended on What Is. Now that the goddess has guided Parmenides to a more complete conception of what must be, the force of her assertion in these verses is in fact somewhat stronger—if his search for understanding that does not wander is to succeed, Parmenides must restrict his attention to the perfect entity whose nature has just been described.

Thus far, then, the initial claims in fr. 8. 34 that the same thing is both '(there) for understanding', or the *object* of understanding, and that it is also 'that because of which there is understanding', or the necessary condition of understanding, have been underwritten by the further assertion in fr. 8. 35-6a that without What Is one will not find or achieve understanding, which clearly implies that What Is is the only proper object of understanding. This further assertion and its implication are, in turn, supported by a claim that is all too easily misconstrued without proper attention to its context: 'for $(\gamma \acute{a}\rho)$ nothing else either is or will be | except What Is' (fr. 8. 36b-7a). Taken in isolation and out of context, these words could look like an assertion that nothing else exists except What Is. In context, however, they serve to explain the preceding claim that one will not achieve the goal of understanding $(\tau \dot{o} \nu o \epsilon \hat{\iota} \nu)$ without What Is $(\tau \dot{o} \epsilon \acute{o} \nu)$. This is because only What Is $(\tau \dot{o} + \dot{e} \dot{o} \nu)$ is (what it is) in the way required of a proper object of unerring understanding. That is, here the verbs 'is' ($\ell\sigma\tau\nu$) and 'will be' ($\ell\sigma\tau\alpha$) do not have the simple sense of 'exist' and 'will exist' but are instances of the restricted use of 'to be' $(\epsilon i \nu a \iota)$ we have already seen elsewhere. We might paraphrase the goddess's point here by saying that only What Is only or really is. Other entities, which, though they are (what they are), are subject to not being (what they are), should not strictly speaking be spoken of as being lest this obscure the distinction between how they are and how What Is is.

Why, however, accept that the only entity that necessarily is (what it is) is the one just described in the Way of Conviction? Might there not be other entities that necessarily are (what they are)? The final point here addresses this potential worry with the claim made at fr. 8. 36b–7a, and thus grounds the whole chain of reasoning by returning to points already demonstrated in the foregoing account of What Is. The declaration that 'Fate bound it | to be whole and unmoved $(o\hat{v}\lambda o\nu\ a\kappa(i\nu\eta\tau o\nu\ \tau')$ ' clearly hearkens back to the arguments that What Is is whole and uniform (the main programme's $o\hat{v}\lambda o\nu\ \mu o\nu\nu o\gamma \epsilon\nu \acute{e}s$ $\tau \epsilon$, argued at fr. 8. 22–5) and unmoved (the main programme's $a\hat{\tau}\rho\epsilon\mu\acute{e}s=a\kappa(i\nu\eta\tau o\nu)$, argued at fr. 8. 26–33). The image here of Fate's binding or constraining What Is to be whole and unmoved is particularly reminiscent of the beginning of the Way of Conviction's third stage: 'And unmoved within the limits of great bonds | it is unbeginning unending' (fr. 8. 26–7a). The previously

demonstrated character of What Is, then, ensures that there could be no other entity like it. 41

The four and a half verses of fr. 8. 34-8a thus display the kind of tight argumentative structure we have come to expect from Parmenides. Restored to their proper position at the point of transition to the goddess's account of mortal notions, they serve to remind Parmenides that the kind of understanding she has helped him achieve is only to be found by pursuing the Way of Conviction. This reminder goes hand in hand with her earlier warnings in fr. 6 about pursuing the way of inquiry along which mortals wander. Understanding that is prone to wander is all that can be expected from following this path, not the kind of understanding in which genuine conviction resides. Even before actually embarking on her account of mortal notions, then, the goddess has already indicated why the ordering of her words will be deceptive. The kind of understanding to which she has led Parmenides, in her meditation upon the nature of What Is, is not to be found in the cosmological account that now follows. Thus she admonishes Parmenides to take care lest he, like the ordinary run of mortals, be deceived into believing genuine conviction is to be found by pursuing this more familiar path. The possibility of deception is exacerbated by the natural proclivity of humans to rely on their senses, but the senses, the goddess has warned in frs. 6 and 7, are incapable of guiding one's understanding to any apprehension of what is and cannot not be. While they may deceive one into supposing that their objects are (what they are) in a steady enough fashion that genuine conviction could be had from contemplating them, their essential mutability means that they will eventually slip away from whatever cognitive grasp of them one might have.

Night's insistence here in fr. 8. 34–8a, as she turns from the Way of Conviction to her cosmological revelation, upon the fundamental point that Parmenides will find genuine understanding only by focusing his thought upon What Is is consistent with her previous admonitions in frs. 6 and 7 against allowing his thought to stray onto the path where the entities considered are subject to variableness of being and identity. Nothing the goddess says at either point indicates that the familiar objects of our everyday experience do not exist, nor should her description of the cosmological part of her revelation as 'deceptive' (fr. 8. 52) be taken to imply that it is an account of things that do not exist. Presumptions to the contrary are, once again, rooted in a failure to take account of the modal distinctions involved in the goddess's descriptions of the principal paths of inquiry. The things that lie along the path mortal understanding typically follows are and are not the same and not the same (cf. fr. 6. 8–9a), which is tantamount to saying that they are subject to variableness of being and identity and, as such, are what they are only temporarily, mutably, or contingently. Since Night has warned Parmenides not to pursue this path in his search for understanding, it is hardly surprising that she reprises her warnings as she now embarks on her own, superior account of the perceptible cosmos with its vast

⁴¹ The demonstrated character of What Is may likewise seem to preclude the existence of the familiar, mutable entities apprehended through perception and accounted for in the poem's cosmology. This 'problem of co-presence' will be considered in the final section of this chapter.

population of things that have come to be, that are subject to destruction, and that while they exist undergo various changes of attribute.

Light, Night, and How Mortals Wander Astray (fr. 8. 38b-41, 53-9)

In the remainder of fr. 8, the goddess lays the foundations for the cosmology to follow by introducing its two basic principles or elements, light and night. Then in fr. 9, as we shall see, she provides an interim summary of what she has just said in fr. 8. 38b–59. The way Simplicius quotes fr. 9 certainly suggests that it followed quite soon after the end of fr. 8: after quoting fr. 8. 53–9, Simplicius says only 'and again a little further' ($\kappa\alpha i \mu\epsilon \tau' \delta\lambda i \gamma a \pi d\lambda v$, in Ph. 180. 8; cf. in Cael. 558. 8) before quoting the four verses of fr. 9. Since Simplicius quotes the two passages as evidence that even Parmenides, when he came to offer an account of the natural world, posited a plurality of principles comparable to the opposites of the natural philosophers, he may simply have skipped fr. 8. 60–1 as not directly relevant to his purpose. In any case, since fr. 9 must have followed quite soon after fr. 8 and can be seen to summarize fr. 8. 38b–59, it will provide a useful control on the interpretation of these difficult verses. Furthermore, as $\gamma a \rho$ ('for') at fr. 8. 53 indicates, what follows at this point is somehow meant to ground the points just made at fr. 8. 38b–41.

Throughout these passages, the motif of *naming* is prominent—it features in fr. 8. 38b–41, in the explanatory fr. 8. 53–9, and again in the retrospective fr. 9. Just what the naming in question amounts to, however, may well seem mysterious. One peculiar feature of the motif's deployment is that mortals ($\beta\rho\sigma\tauol$) are represented as having performed this naming, and yet the cosmology is clearly an account of the goddess's (or Parmenides') own devising. It is also peculiar that the mortals in question are described as naming or picking out light and night themselves, the two principles of the goddess's cosmology. This description is surely not to be understood as referring to some primordial event in the cosmos's history, when the elements were created or brought into being via some act of naming. Instead, the goddess's description of mortal naming is apparently meant to express the way mortals typically, though misguidedly, conceive of things. This alternative will prove to be consistent with the way we shall see naming actually functioning in this portion of the poem.

There is a related difficulty in the goddess's indications that the second major phase of her revelation will teach Parmenides 'the notions of mortals' $(\beta\rho\sigma\tau\hat{\omega}\nu\,\delta\delta\xi\alpha s,$ fr. 1. 30) and 'mortal notions' $(\delta\delta\xi\alpha s...\beta\rho\sigma\tau\epsilon i\alpha s,$ fr. 8. 51) when the cosmology's explanations of natural phenomena appear to be original with Parmenides rather than attributable to any of his contemporaries. As has already been made clear, the cosmology has the goddess's authority. It, too, forms part of her revelation to Parmenides, and it is meant to give him an account of natural phenomena superior to any other he might encounter (cf. fr. 8. 61). Even if genuine understanding is not to be had from attending to the cosmos's mutable population, there is nevertheless much to learn and understand about the natural world's origins and operations, and certainly some views here are better than others. What sense is there, then, in her

referring to the cosmology as 'mortal notions'? How can she call what no mortals have ever imagined or believed the notions of mortals? To answer these questions one needs to be clear about what, exactly, the goddess is referring to when she speaks of mortal notions or $\delta\delta\xi a\iota$. While one may casually take it as a designation for the whole cosmological portion of the poem, the phrase 'mortal notions' appears to refer, in the first instance, to the specific sets of suppositions attributed to mortals at fr. 8. 38b-41 and at fr. 8. 53-9, with the latter set of suppositions supporting the former set. These verses also diagnose the error of these suppositions, and this diagnosis is surely relevant to explaining why the goddess, upon her first reference to 'the notions of mortals', had indicated that in them 'there is no genuine trustworthiness' (fr. 1. 30). We already have some idea, from frs. 6 and 7, of why mortals' understanding is unreliable, given how the goddess there abused mortals for the exclusive reliance on the senses that leads them to focus their thoughts solely on things that are (what they are) mutably rather than necessarily. Now the goddess is turning to her most detailed and specific explanation in the extant fragments of how mortals have wandered astray in focusing on such things. This explanation involves an account of the suppositions that define the perspective of ordinary mortals, that is to say, of mortal notions or $\delta \delta \xi a \iota$.

In starting to consider that explanation, it is worth noting an instructive parallel in a particular Homeric use of the verb for 'naming', ὀνομάζειν, that will forestall much of the confusion that has plagued discussion of the naming motif in Parmenides. Most often in Homer, as in other early authors, the verb is used when some person is addressed, spoken of, or called by name, as in the formula that frequently introduces one person's address to another: 'he spoke a word and called him out' ($\epsilon \pi \sigma \sigma \tau$ ' $\epsilon \phi \sigma \tau$ ' ἔκ τ' ὀνόμαζε, Il. 1. 361, 3. 398, κτλ., Od. 2. 302, 4. 311, κτλ.). However, there are two occasions in Homer where the verb ονομάζειν has an impersonal, rather than a personal, object. The first of these uses occurs in the midst of Phoenix's speech to Achilles. If Agamemnon were not offering gifts and *naming* others yet to come $(\tau \dot{\alpha} \, \delta)$ ὄπισθ' ὀνομάζοι, Il. 9. 515), says Phoenix, then he would not be asking Achilles to set aside his anger. Here the verb is used of naming these gifts, not by giving their proper names (they have none), but by specifying what they are. The second of these Homeric uses of ὀνομάζειν with an impersonal object occurs in the *Iliad* when Thetis, in recalling this earlier scene for Hephaestus, describes how the Greek ambassadors had pleaded with Achilles to return to battle and 'were naming many glorious gifts' (πολλὰ περικλυτὰ δῶρ' ὀνόμαζον, Il. 18. 449). Again, naming the gifts in question is simply a matter of indicating or specifying what they are.

⁴² Nowhere does she ever call the cosmos's population (sun, moon, stars, earth, humans, etc.) $\delta \delta \xi a\iota$, so as to imply that they are all somehow unreal or merely apparent phenomena, or otherwise refer to her cosmological account as 'the $\Delta \delta \xi a$ ' (as later authors would). There is, in any case, nothing in the mere use of the term $\delta \delta \xi a$ itself that determines whether the belief, opinion, notion, or other attitude to which it refers is correct or mistaken, reliable or deluded (see further n. 58 below). It would thus be wrong to suppose that the mere designation of the views discussed in the second stage of the goddess's revelation as 'mortal beliefs' ($\beta \rho \sigma \tau \hat{\omega} \nu \delta \delta \xi a_s$, fr. 1. 30 $\approx \delta \delta \xi a_s \dots \beta \rho \sigma \tau \hat{\epsilon} (a_s, fr. 8. 51)$ in itself implies anything one way or another about the status of those beliefs or their objects.

All Parmenides' uses of $\partial \nu o \mu \dot{\alpha} \zeta \epsilon \iota \nu$ likewise have impersonal objects: What Is or $\tau \dot{\delta}$ $\vec{\epsilon} \acute{o} \nu$ itself (as the antecedent of $\tau \acute{\omega}$) at fr. 8. 38b, the two forms that prove to be light and night at fr. 8. 53, and 'all things' $(\pi \acute{a}\nu \tau a)$ at fr. 9. 1. In each instance, the naming the goddess describes amounts to indicating or specifying what the nominata are. It comes very close to conceiving of the things so named in a certain way. This aspect of the Parmenidean naming motif is perhaps clearest in fr. 19, where the goddess says humans established names that assigned a distinguishing mark or characteristic to each thing named, where these comprise all the things that have grown, that now are, and that will eventually come to an end. The key words, 'a name giving its mark to each' (ὄνομ' . . . ἐπίσημον ἐκάστω, fr. 19. 3), indicates that naming functions as a means of bestowing on the nominata distinguishing 'marks' or 'signs' $(\sigma \eta \mu a \tau a)$ that allow the things in question to be identified and thus known in some way. 43 The naming that features at fr. 8. 53-9 has the same function and is in fact described in very similar terms. The goddess expands upon her initial description of mortals as having 'fixed their minds on naming two forms'⁴⁴ (fr. 8. 53) by saying that 'they distinguished things opposite in form and assigned them marks $(\sigma \dot{\eta} \mu \alpha \tau' \ddot{\epsilon} \theta \epsilon \nu \tau o)$ distinct from one another' (fr. 8. 55-6a). What follows in fr. 8. 56b-9 is an account of how mortals conceived of these two forms. All the terms of this account function as the 'marks' or 'signs' that mortals are represented as assigning in 'naming'—that is to say, specifying the nature of or conceiving—the two entities in question.

Note that the goddess does not actually criticize the way mortals 'name', conceive of, or specify the nature of these two entities. They do not go astray in the way they conceive of the two entities as light and night. Indeed, the specification of these entities and their distinct and opposed characteristics will provide the basis for the cosmology to follow and is largely responsible for its superiority to other accounts. It is not *how* they specify the two forms but *that* they have done so in their search for understanding that the goddess criticizes. She quite deliberately isolates the critical error in their beliefs or suppositions in the verse we momentarily passed over in the preceding paragraph: 'For they fixed their minds on naming two forms, | *one of which*

⁴³ See Palmer 1999*a*: 208, on the particular force of the adjective $\epsilon \pi i \sigma \eta \mu o \nu$ here modifying $ο \nu o \mu(a)$.

On κατέθεντο...γνώμας as 'they decided', see Woodbury 1986: 3. Woodbury himself makes a case for rendering μορφάς γὰρ κατέθεντο δύο γνώμας ὀνομάζειν as 'for, as to forms, they came to two decisions (put themselves into two minds) concerning their naming'. He finds the verse as traditionally construed to exhibit 'a structure of quite extraordinary complexity' and is impressed by how it appears to be normal Greek idiom to employ the singular γνώμην even with plural subjects to express the sense of 'they decided', by other Greek expressions of duality of determination, and by Parmenides' own description of mortals as δίκρανοι at fr. 6. 3a. While thus arguing at length for taking $\delta \dot{\nu} o$ to modify $\gamma \nu \dot{\omega} \mu a_S$ in support of his translation, Woodbury says nothing to mitigate the fact that it leaves μορφάς and ὀνομάζειν unmoored grammatically. The proposal by Furley 1973: 5, to accept the reading γνώμαις, which is about as well attested in the manuscripts as γνώμας, provides a better way to deal with the first and most serious of Woodbury's objections to traditional construals, for the line reads much more smoothly when understood to mean, as Furley translates it, 'they set up two forms in their minds for naming'. Although there is no compelling case against understanding the line in this way (so long as it is understood as a way to describe mortal conceiving and not as an indication that the two forms exist only in the minds of mortals), I have nevertheless tried to make sense of the line with the somewhat better attested $\gamma\nu\omega\mu\alpha s$.

it is not right to name, wherein they have wandered astray' (fr. 8. 53-4). The crucial clause highlighted here is difficult grammatically, though not fatally so, 45 and even when properly translated, its sense remains rather obscure. Fortunately, one need not build one's entire account of Parmenides' analysis of mortal error on this verse, for the description of mortals as having wandered astray in their naming of the two forms suggests a connection to earlier elements in the goddess's characterization. Moreover, fr. 8. 54a may seem to imply that mortals would have been better off naming just one of the forms, perhaps light alone rather than night. 46 This superficial implication cannot be correct, however, since it suggests a better cosmology could be had by positing just one principle or element, whereas the goddess makes it clear that the cosmology she imparts to Parmenides is superior to any other he might encounter. So rather than leaping to any conclusion that mortals would have been right to name just one of the forms they name, it will be better to pursue the implications of the image of wandering here in fr. 8. 54, since it evidently recalls the goddess's earlier description of mortals as possessed of 'wandering understanding' (fr. 6. 6) and as following a path that turns back upon itself (fr. 6. 9).

This important connection suggests that mortals err or 'wander' because they think of things as essentially two things locked in permanent opposition to one another. The subsequent statement that 'all is full of light and invisible night together, | of both alike, since nothing is with neither' (fr. 9. 3–4) is a clear indication that all things described in the cosmology are supposed somehow to consist of these two principles, light and night. Their continuing opposition within the things constituted by them may indeed be ultimately responsible for these things' unstable or mutable character, or, recurring to the language employed at the end of fr. 6, for their being and not being the same and not the same. Note in particular how the description of fire or light as 'every way the same as itself, | yet not the same as the other' (fr. 8. 57b–8a) recalls the description of mortals as supposing 'it is and is not the same | and not the same' (fr. 6. 8–9a). In considering the meaning of these

Although the words $\tau \hat{\omega} \nu \ \mu \hat{\iota} a \nu \ o \hat{\upsilon} \ \chi \rho \epsilon \hat{\omega} \nu \ \hat{\epsilon} \sigma \tau \iota \nu$ (fr. 8. 54a) have been subjected to diverse construals and interpretations, the following points nevertheless seem certain enough and are sufficient to indicate how the clause must be understood. First, $\tau \hat{\omega} \nu \mu i \alpha \nu$ means 'one of these', i.e. one of the two forms mortals have just been described as fixing their minds on naming. The feminine gender of $\mu i \alpha \nu$ is accounted for by $\mu o \rho \phi \dot{\alpha} \dot{\alpha}$ in fr. 8. 53. Hdt. 9. 122 furnishes an instructive parallel: Είσι δὲ πολλαὶ μὲν ἀστυγείτονες, πολλαὶ δὲ καὶ ἐκαστέρω, τῶν μίαν σχόντες πλέοσι ἐσόμεθα θωμαστότεροι ('There are many lands next to us, and many further off, and if we take *one* of these we shall be more admired for more things', tr. D. Grene). This parallel undermines the objection often raised against construing $\tau \hat{\omega} v \ \mu (av)$ as 'one of which', namely that idiomatic Greek would have required $\epsilon \tau \epsilon \rho \eta \nu$ rather than $\mu i \alpha \nu$ in such a context (so Schwabl 1953: 52 ff., followed by Mansfeld 1964: 126 ff.; cf. Tarán 1965: 218). Second, the modal phrase χρεών ἐστιν must be supplied with a complementary infinitive. Parmenides supplies this phrase with a complement in each of the other places he employs it (fr. 2. 5, fr. 8. 11 and 45), in accordance with the normal Greek construction whereby $\chi \rho \epsilon \dot{\omega} \nu$ ($\epsilon \sigma \tau \iota \nu$) functions like the simple $\chi \rho \dot{\eta}$, with the sense 'it is necessary'. While it might seem that the infinitive 'to be' could be simply understood, fr. 2. 5, fr. 8. 11 and fr. 8. 45 show that Parmenides normally supplies the complement $\epsilon i \nu a \iota$ or $\pi \epsilon \lambda \epsilon \nu a \iota$ with χρεών ἐστιν. A more ready complement is to be found in the previous verse's ὀνομάζειν, which can then function as the transitive verb required to account for $\mu i \alpha \nu$'s accusative case. ⁴⁶ Or night alone, as Popper 1992 proposed.

difficult words in the previous chapter, we found fr. 6 to imply that mortals mistakenly suppose that the objects of sensation are capable of functioning as objects of genuinely reliable thought or understanding. Their error, as diagnosed in fr. 6's last two verses, was said to consist in supposing that the object of true understanding is subject to the variableness of being bound up in their conception of it as being and not being the same and not the same. The diagnosis of their error here at the cosmology's outset supplements this earlier diagnosis by pinpointing how their effort to develop an understanding of the world, to explain the natural phenomena they regularly perceive, is ultimately rooted in the positing of underlying principles that themselves are and yet are not the same and yet not the same.

Considering the end of fr. 8 in light of the retrospective of fr. 9 will help bring these points into clearer focus. 'But since', the goddess begins, 'all things have been named light and night | and things in virtue of their powers have been given as names to these things and to those . . . ' ($a \dot{v} \tau \dot{a} \rho \ \dot{\epsilon} \pi \epsilon \iota \delta \dot{\eta} \ \pi \dot{a} \nu \tau a \ \phi \dot{a} o s \ \kappa a \dot{\iota} \ \nu \dot{\nu} \dot{\xi} \ \dot{\sigma} \dot{\nu} \dot{\rho} \mu a \sigma \tau a \ | \kappa a \dot{\iota} \ \tau \dot{a} \kappa a \tau \dot{a} \ \sigma \phi \epsilon \tau \dot{\epsilon} \rho a s \ \delta \nu \nu \dot{\mu} \mu \epsilon \iota s \ \dot{\epsilon} \pi \dot{\iota} \ \tau o \hat{\iota} o i \ \tau \epsilon \ \kappa a \dot{\iota} \ \tau o \hat{\iota} s$, fr. 9. 1–2). It is important to recognize not only that these two verses summarize the more detailed description of mortal naming in fr. 8 but also that both descriptions specify two distinct levels of naming: fr. 9. 1 recapitulates the fundamental specification of the two forms, light and night, recounted more fully in fr. 8. 53–9; fr. 9. 2 then looks further back to the description of mortal naming in fr. 8. 38b–41. The structure of the exposition in fr. 8. 38b–41 and 8. 53–9 resembles that of some of the arguments in the stages along the Way of Conviction, in that the link between the terms in an initial assertion is explained in a passage introduced by a particle (here $\gamma \dot{a} \rho$ in fr. 8. 53a) that marks its supporting function.

The initial assertion is: 'to it all things have been given as names, | all that mortals have established in their conviction that they are genuine: | both coming to be and perishing, both being and not, | and altering place and exchanging brilliant colour' (fr. 8. 38b–41). Opinions diverge starkly on both the text⁴⁷ and translation of fr. 8. 38b. The main problem of translation is whether $\tau\hat{\omega}$ is employed absolutely, in the sense of 'therefore' (as at fr. 8. 25), or as a relative pronoun (as $\tau \acute{o}$ is at fr. 6. 8, fr. 8. 37, and 8. 44, where in each case its antecedent is $[\tau \delta] \vec{\epsilon} \delta \nu$). When $\pi \dot{\alpha} \nu \tau' \delta \nu \dot{\delta} \mu \alpha \sigma \tau \alpha \iota$ is understood to mean 'it has been named all things ...', $\tau \delta \epsilon' \delta \nu$ is already the implicit subject of $\partial v \delta \mu \alpha \sigma \tau \alpha \iota$, making it superfluous to suppose that $\tau \hat{\omega}$ is also picking it up; thus the inclination to suppose that $\tau\hat{\omega}$ is employed absolutely. However, it is virtually impossible to see how the description of mortal naming at fr. 8. 38b ff. could be meant to follow as a conclusion from the previous verses' claims regarding the relation between thinking and $\tau \delta \epsilon \delta \nu$, as would have to be the case if $\tau \hat{\phi}$ in fact meant 'therefore'. 48 Comparison with the nearly identical construction at Empedocles fr. 8. 4—φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν ("phusis" is given as a name to these by humans')—helps make sense of the alternative, that $\tau\hat{\omega}$ is here used as a

 $^{^{47}}$ For defence of $τ\hat{\phi}$ πάντ' ὀνόμασται as the correct reading, see the appendix's textual note ad loc.

⁴⁸ Cf. e.g. Woodbury 1958: 149: 'the institution of names is not a consequence of the exclusion of not-being'.

relative pronoun. The verb is the same as at Parmenides fr. 8. 38b, differing only in tense, and $\phi \dot{\nu} \sigma \iota s$ is clearly its subject. Notice, now, that *phusis* here in Empedocles is not what is named or given a name by mortals. Rather, *phusis* is itself the name given by mortals 'to these' $(\dot{\epsilon}\pi\dot{\iota}\ \tau o\hat{\iota}s)$, namely, to the processes Empedocles analyses as mingling and interchange $(\mu i \xi \iota s \ \tau \epsilon \ \delta \iota \dot{a} \lambda \lambda a \xi \dot{\iota}s \ \tau \epsilon$, the antecedents of $\tau o\hat{\iota}s$). The comparison suggests that the sense of $\tau \dot{\omega} \ \pi \dot{a} \nu \dot{\tau} \ \dot{\sigma} \nu \dot{\sigma} \mu a \sigma \tau \dot{a}\iota$, $|\ddot{\sigma}\sigma\sigma a\ \beta \rho \sigma \tau o\dot{\iota}\ \kappa a \tau \dot{\epsilon}\theta \epsilon \nu \tau \sigma$, $\kappa \tau \lambda$. at Parmenides fr. 8. 38b–9 is best represented by a translation along the lines give here, 'to it $(\tau \dot{\omega})$ there have been given as names all things | such as mortals have established...' or 'to it all things have been given as names, | all that mortals have established...'

What then follow in fr. 8. 40–1 are the names mortals have given to What Is: 'both coming to be and perishing, both being and not, | and altering place and exchanging brilliant colour'. By saying that mortals have given all these as names to What Is, the goddess indicates that mortals have misconceived the trustworthy object of thought and understanding as something that comes to be and perishes, that is and is not, and that changes place and appearance. How can mortals misdescribe or misconceive What Is when they in fact have no grasp of it? Apparently because mortals are represented by the goddess as searching, along their own way of inquiry, for trustworthy thought and understanding, but they mistakenly suppose that this can have as its object something that comes to be and perishes, is and is not (what it is), and so on. Again, the goddess represents mortals as fixing their attention on entities that fall short of the mode of being she has indicated is required of a proper object of thought. Note once again how the oppositions of fr. 8. 40 are directly reminiscent of the misguided supposition specified at fr. 6. 8–9.

The grounds upon which mortals have 'named', described, or conceived of What Is as undergoing these various forms of change are then given in the detailed account at fr. 8. 53–9 of how mortals distinguished and specified the two fundamental forms, light and night. Again, the connective $\gamma \acute{a} \rho$ or 'for' at the beginning of fr. 8. 53 indicates that the stretch of text that follows is meant to indicate the grounds of mortals' description of What Is as susceptible to the various types of change indicated at fr. 8. 40–1: things come to be and perish, are (what they are) and cease to be (what they are), and change place and appearance *in virtue of* the interaction within them of the constitutive principles, light and night, each of which possesses its own powers and properties. In short, mortals have gone astray in their search for understanding, and so have achieved only thought that wanders, because they have in the first place supposed that the object of thought and understanding can be something subject to change. This supposition depends on the more fundamental mistake of conceiving of things only as they are constituted by two forms joined to one another in permanent opposition.

Precisely this relationship among levels of 'naming', description, or conception is indicated by fr. 9. 1–2, to which we may now return for confirmation of the reading

⁴⁹ The only difficulty, a minor one, is that the comparison with Empedocles might lead one to expect the preposition $\hat{\epsilon}\pi\hat{\iota}$ with $\tau\hat{\varphi}$, but it is not necessary. See Woodbury 1958: 149, for further examples of the construction, $\delta vo\mu \hat{\alpha} \hat{\zeta} \epsilon w$ (or $\kappa \alpha \lambda \epsilon \hat{\nu}v$) $\hat{\epsilon}\pi\hat{\iota}$ τινι.

of the end of fr. 8. The summary in these two verses reflects the fundamental identification of things that makes possible the further identification of them as changing in the ways specified at fr. 8. 40-1. Here in the summary all things are said straight away to have been named or identified as light or night (πάντα φάος καὶ νὺξ ονόμασται, fr. 9. 1), thus giving pride of place to the fundamental identification. To understand the difficult next verse—'and things in virtue of their [sc. light and night's] powers have been given as names to these and to those'50 (fr. 9. 2)—one must properly identifying the referents of its various elements. If 'their' $(\sigma\phi\epsilon\tau\dot{\epsilon}\rho\alpha s)$ in the subject phrase refers to light and night, as seems virtually certain, then 'their powers' (σφετέρας δυνάμεις) apparently must be the attributes of light and night given in fr. 8. 55–9. The 'things in virtue of $(\tau \dot{\alpha} \kappa \alpha \tau \dot{\alpha})$ their powers' must then be properties other things have in virtue of the more fundamental properties of their constitutive principles, light and night. These further properties are apparently ones associated with the various types of change enumerated at fr. 8, 41-2. The complex conception that emerges from this verse is one where the principles light and night are 'named', specified, or conceived via a set of opposed properties—fiery, gentle, and light versus dark, dense, and heavy—that together constitute a sort of 'matrix' for change, such that changes at the level of everyday phenomena can be explained in terms of changes occurring at the level of the interactive properties of these two underlying principles.⁵¹ The mortal conception of things as subject to various types of change is grounded in their conception of things as ultimately comprised of two principles or elements defined in opposition to one another. These two basic levels of naming, which the goddess begins her cosmology by describing, are thus both succinctly represented in the summary of fr. 9. 1-2: the first verse picks up the fundamental naming or specification of the natures of the principles light and night, and the second verse picks up the naming or specification of things as subject to all

⁵⁰ τὰ κατὰ σφετέρας δυνάμεις functions as a subject phrase, while ὀνόμασται from the previous verse continues to function as the verb and governs ἐπὶ τοῖσί τε καὶ τοῖς according to normal idiom. See the discussion of Emp. fr. 8. 4, φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν above.
⁵¹ It seems impossible to determine with certainty whether Parmenides envisioned light and

night as themselves altering or as retaining their distinct natures when they mingle and interact in forming other things and then as those things subsequently develop and change. While this lack of clarity may be due to so little of the cosmological portion of the poem having survived, it may also be that Parmenides had no very clear model of the mechanics of elemental interaction. There are nonetheless some indications that Parmenides conceived of light and night's interaction, in the generation of all other things, in terms of a biological or sexual mingling of a male and female principle. The term Plutarch employs in speaking of Parmenides μιγνύς or 'mingling' the elements to produce all the phenomena (Col. 1114 B) echoes Parmenides' own language in fr. 12, where, just after referring to fire and night in some of their most important cosmic manifestations, he speaks of the goddess who governs the cosmos's development as everywhere ruling over 'hateful birth and mingling ($\mu(\xi \iota o_s)$, | directing female to mingle ($\mu \iota \gamma \hat{\eta} \nu$) with male and the opposite in turn, | male with female' (fr. 12. 4b-6a). This same goddess appears to be the one described in fr. 13 as having 'devised Eros the very first of all the gods', evidently so as to function in a cosmogonical role. If Parmenides did conceive of cosmogonical processes in terms of a biological interaction of the two basic principles, then he may well have conceived of the principles themselves (or their contributions) as altered by their mutual desire and interaction in mingling with one another.

manner of change in virtue of being constituted by these opposite and interacting principles.

The fundamental error the goddess attributes to mortals is thus in the first place to have focused in their search for understanding on things subject to change and, at a deeper level, to have conceived of all things in terms of two principles whose natures can only be specified in terms of their fundamental opposition to one another. Mortals have no inkling of following the way of inquiry that focuses upon what is and cannot not be and that seeks to understand its nature by determining what can be inferred about it merely from the fact of its necessary mode of being. Instead, mortals are represented as adopting as their starting point a conception of the world as formed from two fundamentally opposed principles, light and night. Neither of these principles is in the way specified at fr. 2. 3. Instead, each seems to be in the way first specified at the end of fr. 6, where the goddess disparages mortals for supposing 'that it is and is not the same | and not the same' (fr. 6. 8–9). Light is explicitly described as being 'the same as itself, yet not the same as the other [sc. night])' (fr. 8. 57b–8a), and presumably the same is true mutatis mutandis of night as well.

The mode of being of these principles extends to the manifold things formed out of them, that is, to all the population of the cosmos whose origins and behaviour are explained in the cosmology. Mortals go astray, at a basic level, by failing to recognize that there are other ways to be, in particular, that there is a way to be such that whatever is in this way not only is but must be (what it is). When the goddess pinpoints where mortals have gone astray by saying, 'they fixed their minds on naming two forms, one of which it is not right to name' (fr. 8. 53-4a), the point, again, is not that it would have been right for them to name one of the forms they did. Given how light and night are essentially specified and conceived of in terms of their opposition to one another, it would in fact be impossible to name or identify either of these forms in isolation. 52 It is not right for mortals to name either one of these forms in their search for genuine understanding because doing so inevitably involves naming the other. Having taken as fundamental, to their conception of things generally, two principles each of which 'is and is not the same and not the same', mortals make it inevitable that their understanding will be prone to wander, for the objects of their understanding are subject to being and not being and thus to all manner of changes. Mortals are not supposed to be deluded, however, in thinking of light and night as the underlying principles of natural phenomena. On the contrary, the avowed superiority of the goddess's (or Parmenides') cosmology appears to be in part a function of how its novel hypothesis of multiple material principles made possible better explanations of the nature of things and the changes they undergo. There is no implication that light and night and all the manifold

⁵² Cherubin 2005: 4–9, likewise stresses the interdependence of light and night and how 'naming one form involves at least implicitly acknowledging what is associated with the other' (7), albeit she thinks the whole 'Light–Night scheme' is meant to be problematic because it offers a way of explaining mortals' sensory experience and their beliefs that there are discrete identifiable things (8) even though $\tau \delta \epsilon \delta \nu$ is 'something entirely incompatible with a world of Light, Night, and distinct things' (13).

things they comprise do not exist. None of them, however, is in the manner required of an object of understanding that does not wander, and thus mortals have gone astray, or failed even to set foot on the path that leads to unerring understanding, by focusing their attention at the outset on things that are and are not the same and not the same.

Prolepsis and Retrospect (fr. 1. 28-32 and fr. 19)

We are now ready to return to the goddess's initial declaration, at the end of fr. 1, of what she promises to teach Parmenides. By now we should have a good understanding of the first thing she says Parmenides must learn, 'the unshaken heart of well-rounded reality' (fr. 1. 29), for this description, at first both puzzling and aweinspiring, proves in retrospect to have been a perfectly good description of What Is as it has been shown to be in fr. 8. As for fr. 1's initial description of the second stage of her revelation, the portentous declaration that there is no genuine trustworthiness in mortal beliefs is likewise easy enough to understand in retrospect, for it anticipates both the indications in frs. 6 and 7 that mortals' exclusive reliance on the senses leaves them with only understanding that wanders and also fr. 8's deeper analysis of where they have gone astray. More difficult, though, even in retrospect, are the verses of fr. 1 just before it breaks off: 'Nonetheless these things too will you learn, how what they resolved | had actually to be, all through all pervading' (fr. 1. 31-2).⁵³ Despite the efforts of numerous interpreters to detect some signal of the irreality of phenomena in these words, they actually contain nothing of the sort. The goddess has already indicated that genuine trustworthiness is not to be found in the notions of mortals (fr. 1. 30). While apprehension of What Is is the supremely valuable form of understanding, there is nevertheless some value in understanding the origins and operation of things subject to change. For there is also, it seems, a certain necessity in the origin and operation of mutable things.

So much seems implied, at any rate, by the use at fr. 1. 32a of the impersonal expression, $\chi\rho\hat{\eta}\nu$ ($\chi\rho\hat{\eta}+\hat{\eta}\nu$), denoting necessity, which is reflected in the 'had' of the translation's 'had actually to be'. We have already noted in Chapter 1, moreover, the goddess's reference at fr. 10. 5–7 to the operation of a personified Necessity in binding the heavens to furnish the limits of the stars, and we noted the parallel with how Necessity was said to hold What Is within the bonds of a limit at fr. 8. 30b–1. Furthermore, the goddess described in fr. 12 as governing all things and as ruling over both the mingling of male and female principles and the consequent generation of all things is identified by Aëtius as 'the holder of the keys, Justice and Necessity' (Aët. 2. 7. 1 (Stob. *Ecl.* 1. 22. 1a)); this minimally suggests that Necessity may have

 $^{^{53}}$ Mansfeld 1999b: 230, pronounces the translation of $\dot{\omega}_S$ $\tau \dot{\alpha}$ δοκε $\hat{\nu}\nu\tau \alpha$... $\pi \alpha p \hat{\omega}\nu\tau \alpha$ 'desperately difficult' and counsels admitting 'that these lines are intentionally obscure and can only be understood, if at all, by someone who has understood the doctrine of the poem as a whole'. While Mansfeld supposes that the portion of the poem that would clarify the sense of these words has been lost with the loss of most of the cosmology, enough of the beginning of the goddess's cosmology survives in frs. 8 and 9, I think, for us still to grasp their meaning.

played a more extensive role in Parmenides' cosmology than we are now in a position to know.⁵⁴ Compare Aëtius' equally suggestive attribution to Parmenides (and Democritus) of the view that 'all things are according to necessity (πάντα κατ' ἀνάγκην); and that fate, justice, providence, and the world's creation are the same thing' (Aët. 1. 25. 3 ([Plu.] *Plac.* 1. 25. 884 € 3–5 ≈ Stob. *Ecl.* 1. 4. 7c)). Whatever kernel of reliable information there may be in Aëtius' testimonia, there remains the evidence of the fragments themselves that Parmenides had at least an incipient conception of a necessity governing natural phenomena. This natural necessity, such as it is, is distinct from the logical or perhaps metaphysical necessity with which the demonstrated attributes of what is follow from the specification of its modality. It differs, that is, from the necessity that defines the mode of being of What Is, for What Is is essentially a necessary being, whereas nothing else in Parmenides' system enjoys this kind of necessity. The goddess suggests, nonetheless, that there is a way the things that are but need not be had to be, apparently in virtue of how their birth, development, and death were conceived of as governed by Necessity and, perhaps, Justice as well.

Thus the goddess requires Parmenides to learn what she has to reveal to him about both kinds of entity. Here in fr. 1. 31–2 she simply specifies the content of the second part of her revelation, with the same kind of tantalizing brevity just employed in fr. 1. 29 to describe the content of its first part. Now that we have seen, in the previous section, how the phrase 'mortal notions' appears to refer in the first instance to the specific suppositions attributed to mortals at fr. 8. 38b–41 and 8. 53–9, we can also see that 'what they resolved' $(\tau \dot{\alpha} \delta \delta \kappa \epsilon \hat{v} v \tau a)$ likely refers to the two forms, light and night, that mortals will be described as having made the basis for such understanding of the world as they do possess. Compare how the goddess here says Parmenides must learn how these things 'had actually⁵⁵ to be, all through all pervading' (fr. 1. 32) with how she subsequently declares that 'all is full of light and invisible night together' (fr. 9. 3–4). By learning just this, how all natural phenomena ultimately can be explained in terms of the interaction of their constituent principles, light and night, Parmenides will come to have a superior understanding of the things

⁵⁴ Morrison 1964: 49–51, finds in Aëtius' identification an explanation of Agathon's remark at Pl. *Smp*. 195 B–C that 'the ancient divine affairs which Hesiod and Parmenides tell of came about, if we are to trust their report, as a result of Ananke and not of Eros'. With Parmenides' description of Necessity's cosmological role in frs. 10 and (apparently) 12, compare the Platonic myth of Er's description of the spindle of Necessity hanging from the column of light that binds the heavens (*R*. 10. 616 B–C). For more on the connections between these texts, see Morrison 1955.

to which mortal cognition is restricted. Not a few interpreters have taken the designation of the things to be described in the cosmology as τὰ δοκεῦντα to be evidence of the illusory character of the things so designated, understanding $\tau \dot{\alpha}$ δοκεῦντα as 'things that are (merely) believed to be'. 56 Elsewhere, however, the phrase $\tau \dot{\alpha} \delta o \kappa o \hat{\nu} \nu \tau a$ often has the sense of what someone thinks, believes, supposes, or resolves with nothing like the implication of irreality some have wrongly detected in Parmenides' use of the phrase. Especially relevant are the uses of $(\tau \dot{\alpha})$ $\delta o \kappa o \hat{\nu} v \tau \alpha$ in the herald's words at Aeschylus, Seven Against Thebes 1005–6: δοκοῦντα καὶ δόξαντ' ἀπαγγέλλειν με χρὴ | δήμου προβούλοις τῆσδε Καδμείας πόλεως ('I must announce the resolutions and prior judgements of this Cadmaean city to the people's counselors'), and in the exchange between Teucer and Menelaus at Sophocles, Ajax 1049-50: ΤΕΥ. Τίνος χάριν τοσόνδ' ἀνήλωσας λόγον; | ΜΕ. Δοκοῦντ' ἐμοί, δοκοῦντα δ' δς κραίνει στρατοῦ (Teucer: Why have you employed so strong a statement? | Menelaos: This is my resolution, and the resolution of the one who commands the army.). 57 For mortals will conspicuously be described as 'fixing their minds' or resolving 'to name two forms' (fr. 8. 53). The objects of their resolution are thus appropriately, if rather opaquely, referred to here in fr. 1's prospective programme as $\tau \dot{\alpha} \delta o \kappa \epsilon \hat{\nu} \nu \tau \alpha$ or 'what they resolved'. It should thus be clear that Parmenides employs neither $\tau \dot{\alpha}$ δοκεῦντα (fr. 1. 31) nor δόξας (fr. 1. 30a, fr. 8. 51) in the sense of 'fancies' or 'mere opinions': $\tau \dot{\alpha} \delta \delta \kappa \epsilon \hat{\nu} \nu \tau a$ or 'what they resolved' will be seen in retrospect to refer to the principles of the cosmology, light and night; and what the goddess refers to in the programmatic remarks, both of her welcoming address and of her transition from the Way of Conviction to the cosmology, as the 'notions ($\delta\delta\xi\alpha$ s) of mortals' correspond to the suppositions introduced as foundational to the cosmology (fr. 8. 38b-41, 53-61, fr. 9). These suppositions we have seen marked as erroneous, not because light and night do not exist, but because apprehension of these principles and the things generated from them alters as all these things themselves do. Parmenides' use of $\tau \dot{\alpha} \delta o \kappa \epsilon \hat{\nu} \nu \tau a$ and $\delta \delta \xi a s$ certainly need not be taken as indicating that the objects of ordinary experience are either unreal, non-existent, or merely the deluded imaginings of ordinary mortals.⁵⁸ Only if one has misunderstood the first part of the goddess's

⁵⁶ So e.g. Coxon 1986: 170, where one will find no comparative evidence to support this understanding.

 57 Cf. Soph. OT 126, Xen. HG 3. 1. 19, 6. 3. 5, Pl. Cri. 54 D 6, Sph. 242 B 10, $\kappa\tau\lambda$. These passages are more relevant to fixing the sense of Parmenides' $\tau\dot{a}$ δοκε \hat{v} ν τa than the commonly cited Heraclit. fr. 28.

⁵⁸ Uses of the verb $\delta ο κ ε \hat{\iota} v$ range from contexts where one rightly believes what is in fact the case to contexts where what one believes merely seems to be the case but is not or is even a dream or other illusion. 'Believe' is often the English term that best captures the sense of the Greek verb; for with 'believe' just as with $\delta ο κ ε \hat{\iota} v$, it is not the verb itself, but the context of its use, that indicates whether the attitude it picks out is reliable or not. One may believe that ice is frozen water, and one may believe that Santa resides at the South Pole. The attitude in both cases is the same, namely belief, and whether the belief is correct or mistaken is a function of factors beyond the mere having of the attitude. This is also the case with the Greek verb $\delta ο κ ε \hat{\iota} v$, not only when it is used with a personal subject to mean 'think', 'suppose', or 'believe', but also when it is has an impersonal subject and means something more on the order of 'seem' or 'appear'. Whether the seeming or appearing in question is reliable or not depends on the circumstances and is not indicated by the mere use of the verb. All this applies in much the same way to the noun, $\delta \delta \xi a$. The mere use of the term does not

revelation as a description of what exists (having failed to see that it is in fact an account of what is and cannot not be) will one feel impelled to saddle Parmenides with the preposterous and literally untenable view that nothing in one's experience, not even one's own self, exists.

Parmenides employs the term $\delta \delta \xi \alpha$ once more, in verses with which the goddess apparently concluded the cosmology: 'Thus just as expected ($\kappa \alpha \tau \dot{\alpha} \delta \delta \xi \alpha \nu$) these things grew and now are | and hereafter from this point will end once developed: | and upon them humans placed a name giving its mark to each' (fr. 19). Although it is fairly typical for commentators to render $\kappa \alpha \tau \dot{\alpha} \delta \delta \xi \alpha v$ as something like 'according to belief and to take the phrase as signalling that all that has been described in the cosmology is mere mortal fancy or imagining, $\delta\delta\xi\alpha$ in this phrase would appear to preserve something of the verb $\delta o \kappa \epsilon \hat{\iota} v$'s basic sense of 'expect'. ⁵⁹ Such is its sense in the phrase, $\pi\alpha\rho\dot{\alpha}$ $\delta\delta\xi\alpha\nu$ or 'contrary to expectation' (e.g. Hdt. 1. 79), and in the Homeric $o\vec{v}\delta'$ $d\pi\dot{o}$ $\delta\delta\xi\eta s$ or 'not otherwise than as expected' (Il. 10. 324, Od. 11. 344). In the same way, $\kappa \alpha \tau \dot{\alpha} \delta \delta \xi \alpha \nu$ can have the sense of 'according to expectation' or 'just as expected', for example in 'the work was accomplished faster than expected $(\theta \hat{a} \tau \tau \sigma \nu \eta^2 \kappa \alpha \tau \hat{a} \delta \delta \xi \alpha \nu)$ (D.H. 9. 15. 5). In later philosophical contexts, however, it would come typically to be used in marking some significant contrast between reality and appearance, between what is so 'in truth' $(\kappa \alpha \tau' \ a \lambda \eta' \theta \epsilon \iota a \nu)$ or 'in reality' $(\kappa \alpha \tau' \ a \lambda \eta' \theta \epsilon \iota a \nu)$ $o\dot{v}\sigma(av)$ and what seems so 'according to (mere) opinion' ($\kappa a \tau \dot{a} \delta \delta \xi a v$). 66 Theophrastus would even characterize the two parts of Parmenides' poem in these terms:

Parmenides . . . went along both ways. For he both asserts that the universe is eternal and tries to explain the genesis of things, though he does not think the same way about the two, but while supposing in accordance with truth $(\kappa\alpha\tau^*\,\hat{a}\lambda\acute{\eta}\theta\epsilon\iota\alpha\nu)$ that the universe is one, ungenerated, and spherical in shape, in accordance with the opinion of the many $(\kappa\alpha\tau\grave{a}\,\hat{\delta}\delta\acute{\xi}\alpha\nu\,\,\delta\grave{\epsilon}\,\tau\acute{\omega}\nu\,\,\pio\lambda\lambda\acute{\omega}\nu)$ he accounted for the generation of the phenomena, producing the two principles fire and earth, the one as matter, the other as cause and agent. (Thphr. ap. Alex.Aphr. in Metaph. 31. 7–14)

This passage appears to lie behind Diogenes Laertius' report that Parmenides 'said philosophy has two parts, one according to truth $(\kappa \alpha \tau' \dot{a} \lambda \acute{\eta} \theta \epsilon \iota a \nu)$, the other according to opinion $(\kappa \alpha \tau \dot{a} \delta \acute{o} \xi a \nu)$ ' (Thphr. ap. D.L. 9. 22). Proclus will likewise refer to the cosmological part of Parmenides' poem as that 'according to belief' $(\dot{\epsilon} \nu \tau o \hat{\iota} s \kappa \alpha \tau \dot{a} \delta \acute{o} \xi a \nu$, in Prm. 2. 723. 12–13).

Parmenides' actual usage of $\dot{a}\lambda\eta\theta\epsilon i\eta$, 'truth' in the sense of 'reality' rather than what is true or is the case, hardly licenses Theophrastus' characterization of the first part of the goddess's revelation as what is the case 'according to truth'. As we have

alone indicate whether the belief, opinion, or notion in question is correct, mistaken, reliable, or deluded.

they are not hoping for and do not *expect'*).

60 Cf. Pl. R. 7. 534 C 2, Arist. *Top.* 8. 13. 162^b32–4, GC 1. 3. 318^b27–8, EN 4. 9. 1128^b23–4, D.Chr. Orat. 67. 1 (cf. 53. 4), S.E. M. 7. 135 (re. Democr.), Alex.Aphr. *in Top.* 577. 11–12, Phlp.

in GC 58. 3.

⁵⁹ The root meaning of 'expect' is still apparent, for example, in Heraclit. fr. 27: $\frac{\partial v}{\partial \rho \omega \pi o v s}$ $\frac{\partial v}{\partial \rho \omega \sigma v s}$ ('Things await humans when they die that they are not hoping for and do not expect').

seen, $\partial \lambda \eta \theta \epsilon i \eta$ functions in the poem virtually as a name for what must be. The goddess's own way of characterizing her account of what must be is to describe it as fregarding true reality' ($\partial \mu \phi i s \partial \lambda \eta \theta \epsilon i \eta s$, fr. 8. 51), and she never describes this account as 'true' or 'in accordance with truth' but instead as 'trustworthy' (fr. 8. 50). The first path, likewise, is not the path 'according to truth' but 'the path of conviction' $(\pi \epsilon \iota \theta \circ \hat{v}_S \dots \kappa \epsilon \lambda \epsilon \upsilon \theta \circ s)$ that 'attends upon true reality' (fr. 2. 4). Likewise, the cosmology could properly be described as 'according to opinion' ($\kappa \alpha \tau \dot{\alpha} \delta \delta \xi \alpha \nu$) only in the sense that it proceeds on suppositions meant to reflect how mortals typically conceive of things. This may even be what Theophrastus meant when he wrote that Parmenides accounted for the generation of the phenomena in accordance with the opinion of the many. Still, while Parmenides' use of $\kappa \alpha \tau \dot{\alpha} \delta \delta \xi \alpha \nu$ in fr. 19. 1 may have encouraged later philosophers like Theophrastus to characterize the cosmological portion of Parmenides' poem as how things are 'according to opinion', in their context within the poem these words seem more likely to have the indicated sense of 'just as expected', marking the completion of the explanations she has promised Parmenides in the programmatic frs. 10 and 11.

Again, the urge to find in Parmenides' talk of 'mortal δόξαι' (fr. 1. 30, fr. 8. 51b) and $\tau \dot{\alpha}$ $\delta o \kappa \epsilon \hat{v} v \tau \alpha$ (fr. 1. 31b), and even in the phrase $\kappa \alpha \tau \dot{\alpha}$ $\delta \delta \xi \alpha v$ (fr. 19. 1), intimations of the total irreality of phenomena, that is, of their existing not in truth but only in the minds of deluded individuals, ultimately stems from the failure to take proper account of the ontological distinctions that are the cornerstone of his system, for this fundamental failure leads to a disastrous misunderstanding of how he distinguishes reality from appearance. For Parmenides, what must be is 'reality' $(\partial \lambda \eta \theta \epsilon i \eta)$, precisely because its mode of being sets it apart from other entities and endows it with various perfections they do not possess. If other things are and yet are not, or are but need not be, and thus fall short of the necessary mode of being reality enjoys, this in no way entails that they are illusory or 'merely' apparent phenomena in the sense that they do not really exist at all. If Parmenides had meant what he calls 'reality' to be the only thing that exists, then he would indeed have had to hold that the objects of everyday experience are appearances in this sense. Since what he calls 'reality' is instead what is and cannot not be, and not simply what is or exists, his ontology has room for all the familiar objects of experience that are what they are only contingently since they are all subject to change. These are 'appearances' only in the sense that they are the things apparent to us in perception. The goddess does not criticize mortals merely for believing that these things exist but for supposing that conviction and understanding that does not wander can have such entities as their objects. This supposition is only natural given mortals' reliance on the senses, for sensation put them in touch only with things that are but need not be. Reliance on sensation encourages them to think this is the only way for things to be and thus that mutable entities exhaust the world's population. The goddess reveals to Parmenides that this supposition is false by leading him to think about other ways to be and, in particular, to think about what what must be must be like. While this is meant to be by far the most important thing to understand, it is nevertheless important also to understand the origin and behaviour of entities of the mutable kind. Thus Night does not hesitate to speak of the knowledge Parmenides will acquire from her account of the cosmos's origins and operation:

You will know $(\epsilon i \sigma \eta)$ the aether's nature, and in the aether all the signs, and the unseen works of the pure torch of the brilliant sun, and from whence they came to be, and you will learn $(\pi \epsilon i \sigma \eta)$ the wandering works of the round-eyed moon and its nature, and you will know $(\epsilon i \delta \eta \sigma \epsilon \iota s)$ too the surrounding heaven, both whence it grew and how Necessity directing it bound it to furnish the limits of the stars. (fr. 10)

Such knowledge is possible given that the natural world's ever-changing inhabitants are governed by their own kind of necessity and because they have underlying principles in terms of which their diverse origins, character, and behaviours are explicable.

THE CO-PRESENCE OF WHAT IS AND WHAT IS AND IS NOT

Parmenides' metaphysics and epistemology are founded upon his demarcation of the modalities of necessary and contingent being. The goddess instructs him to focus his thought on what must be so that he may attain the genuine trustworthiness of understanding that does not wander. Once set on the proper path, he follows it to a conception of what must be by considering what its modality entails with respect to its attributes. The goddess then recommences from the path mortals follow and completes her revelation with a broad and elaborate account of the principles, origins, and characteristics of the cosmos's contingent or mutable entities. She warns Parmenides, however, that no genuine conviction can be had by focusing his thought on entities of this kind, since apprehension of them will vary just as these things themselves do. Nothing in this framework implies that contingent or mutable entities are somehow illusory or that the things experience teaches us exist do not actually exist. Nor does any such paradoxical conclusion follow from anything in either the goddess's scathing description of mortals' cognitive frailty or the way she begins the cosmology. To suppose otherwise is, in effect, mistakenly to treat entities that are but need not be as if they must not be. We have seen, however, that it is wrong in principle to identify the way along which mortals wander, and which the goddess pursues in the cosmological portion of her revelation, with fr. 2's second way of inquiry: whatever is and yet is not is modally altogether different from what is not and must not be. Parmenides' distinction among modes of being not only allows for, but actually presumes, the existence of contingent or mutable entities, and the epistemological distinctions he builds upon this ontological framework allow for some understanding of such entities and the necessity that governs them.

The demonstrated attributes of what must be may nevertheless appear to leave no room, literally, for there to be anything else. This may especially seem the case if, as I have argued one should, one takes most of the details of Parmenides' description of

What Is in a literal rather than a metaphorical sense, for this means conceiving of it as a spatially extended material entity. The presence of an entity both 'whole' and 'uniform' extending, apparently, throughout all available space may seem physically to preclude the presence and thus existence of other entities. This is what I shall call 'the problem of co-presence': does Parmenides' necessary being preclude the existence of all other entities? Or does his account of what must be allow that its presence is compatible with the presence of the contingent and mutable entities that populate the world we know? Certainly, the existence of what must be is *formally* compatible with the existence of things that are (what they are) at certain times but not at others, in that the existence of the first type of entity in no way precludes the existence of things of the latter type. Parmenides, moreover, devoted most of his poem to an account of the origin and nature of things that are but need not be. The problem of co-presence, then, concerns whether and how all these things can exist alongside What Is, given the specific attributes Parmenides has shown it to have. There are in fact two distinct aspects of the problem. First, are the attributes of What Is such that its existence precludes the presence of other entities? We shall see that they are not. But then how is one to understand the simultaneous presence of What Is and all the things that are and are not? If the existence of these modally distinct entities is not mutually exclusive, what was Parmenides' view of their relation to one another? In other words, if he was not a strict but a generous monist, what kind of generous monist was he, given the variety of options?

What I am here calling 'the problem of co-presence' is one that not just the modal interpretation but any interpretation of Parmenides as a generous monist needs to address. Of course, every major type of interpretation encounters its own type of problem when it comes to explaining the relation between the subjects of the two stages of the goddess's revelation. For the strict monist interpretation, in both its more traditional and logical guises, the mere presence of the cosmology is problematic, given that the revelation's first stage is taken to have already given an account of what exists. Even more problematic, of course, is that such interpretations attribute to Parmenides a view that entails his own non-existence. For meta-principle interpretations, the problem becomes how to address the expectation, arising from the claim that the revelation's first stage stipulates the criteria any genuine or fundamental entity must satisfy, that the ensuing cosmology will carry through on the agenda with an account actually based upon such principles. If Parmenides' 'Truth' were in fact a second-order description of the features that must belong to any proper physical principle, then one would naturally expect the cosmology that follows to deploy principles that meet Parmenides' own requirements. We have already seen in Chapter 1, however, that advocates of the meta-principle interpretation have proved unsuccessful in addressing this expectation, for the simple reason that light and night do not in fact fulfil the criteria for being a genuine entity supposedly stipulated in the revelation's first stage. 61 The problem of co-presence may seem just as intractable as the problems that arise on these other types of interpretation, for it may seem

⁶¹ See above, pp. 29–31.

impossible for distinct physical entities to be in the same place at the same time. This is the case, however, only if the place in question is a point of space. While it is true that distinct physical entities cannot be at the same point of space at the same time, since any region of space itself comprises limitless points of space, it is certainly possible for distinct physical entities to be in the same place or region of space simultaneously. Running throughout the space occupied by the visible and tangible material objects in this room are invisible and intangible particle and energy waves. Today one also hears of a stuff called 'dark matter' that scientists think is everywhere and yet totally imperceptible given that it emits no electromagnetic radiation. There is also a long tradition of thinking of God as omnipresent though unperceived by us.

Not only is it theoretically possible for distinct physical entities to be in the same place, there are at least two important declarations among the Presocratics that this is in fact the case. Anaxagoras asserts in no uncertain terms that Nous or Mind, which he definitely conceives of as a physical entity, 'is now where also all the others are $(v\hat{v}v)$ $\epsilon \sigma \tau \nu \tilde{\nu} \alpha \kappa \alpha \tilde{\nu} \tau \tilde{\alpha} \tilde{\alpha} \lambda \lambda \alpha \pi \tilde{\alpha} \nu \tau \alpha$, in that which surrounds many things and in those which have accreted and in those which have separated out' (fr. 14). 62 Empedocles, likewise, speaks of a 'a mind divine $(\phi \rho \hat{\eta} \nu i \epsilon \rho \hat{\eta})$ and beyond the power of description . . . , | darting throughout the entire cosmos with swift thoughts' (fr. 134). We will return to each of these conceptions in the chapters that follow. At the moment, however, each statement shows-Anaxagoras' perhaps more clearly than Empedocles'—that Presocratics in the generation after Parmenides were more than ready to countenance the possibility of distinct physical entities existing in the same place at the same time. Anaxagoras' physical theory, moreover, is such that it can explain just how this co-presence is possible. The question at the moment, then, is whether the co-presence of What Is and everything else is likewise a theoretical possibility given Parmenides' particular conception of the nature and attributes of What Is. The remainder of this chapter will be devoted, first, to reviewing the options for responding to the problem of co-presence as it manifests itself in Parmenides, and then to making it clear that the demonstrated character of What Is is such that it may in fact interpenetrate all other things while yet maintaining its own identity distinct from theirs.

One way to respond to the Parmenidean problem of co-presence would be to pronounce it incapable of resolution and thus to accept that What Is does in fact rule everything else out of existence. This response, however, should be only an option of last resort, given that it involves accepting that Parmenides' thought is plagued with various tensions and contradictions. It is incongruous, for instance, that he should conclude that only what must be exists when his ontology formally includes what must be, what cannot be, and what is but need not be. What must be need not be all that is. What seems worse, Parmenides himself would have to be included among all the things ruled out of existence by the presence of what must be, and this unpalatable consequence is best avoided, if possible, since it saddles Parmenides with

⁶² See Sider 2005: 144–7, for good discussion of the textual and basic interpretive problems in this fragment.

a literally untenable position (and would thus be no better than taking him to be a strict monist). Again, it is strange that he should have devoted so much effort in his cosmology to explaining the origin and nature of the most important things that are but need not be if he in fact believed they do not exist. Another problem with this response is that the goddess never criticizes mortals for believing there is a developed cosmos, only for supposing the mutable things in it might be objects of unerring thought. She in fact commits herself to their existence in undertaking to present the best account of their origins and operations.

Another way to respond to the problem of co-presence would be to reject the assumption that What Is and the mutable entities populating the world of our experience are in fact supposed to occupy the same spatial region. Thus the existence of the one entity would do nothing to preclude the existence of all the others. The fragments, however, strongly suggest that Parmenides envisaged What Is and the visible cosmos as coterminous. Note the striking similarity between the goddess's description of how Necessity holds What Is within limits—'powerful Necessity | holds it in the bonds of a limit, which encloses it all around' (fr. 8. 30b-1)—and her promise to teach Parmenides how Necessity bound the heavens to provide the limit of the astral region—'and you will know too the surrounding heaven, | both whence it grew and how Necessity directing it bound it | to furnish the limits of the stars' (fr. 10. 5-7). Parmenides appears to envision both What Is and the cosmos as spherical in shape. The heaven (οὐρανός) mentioned here in fr. 10 is the cosmos's outermost rim or shell limiting its expanse, the familiar vault of the fixed stars one still seems to see when observing the night sky; and Parmenides, we have already seen, conceives of What Is as a spatially extended entity with its own outermost limit (fr. 8. 42) and extending equally in every direction from its middle like a ball (fr. 8. 43-4). The similarities in the descriptions of Necessity's respective binding of What Is and the outermost heaven strongly suggest that the two are coterminous and, therefore, that What Is and the perceptible cosmos are envisioned as occupying the same space.

The only way for this to be the case, it may seem, is if What Is and the entities of the perceptible cosmos are not absolutely distinct. What must be, and the things that are but need not be, might be consubstantial, in either of two ways: either they could both be distinct aspects of the same substance, or what must be could function as the underlying substance of everything else. There might seem to be support for one or the other of these options in the fact that certain attributes of What Is also feature in Parmenides' description of the principles of his cosmology: as What Is is 'all alike' (fr. 8. 22b), so light is 'every way the same as itself' (fr. 8. 57b). Likewise, as What Is is 'replete with What Is' (fr. 8. 24b), so 'all is full of light and invisible night together' (fr. 9. 3). The consubstantiality of What Is and the differentiated cosmos would also account for the parallels between the goddess's description of how Necessity holds What Is within limits and her promise to teach Parmenides how Necessity bound the heaven to provide the limit of the astral region. Finally, and perhaps most

⁶³ Cf. the parallels laid out at Chalmers 1960: 15 and 19, and the more exhaustive table of 'similarities-with-a-difference' between 'Doxa' and 'Truth' at Mourelatos 1970: 248–9.

promisingly, if What Is and the differentiated cosmos are consubstantial, this would help account for the goddess's otherwise somewhat difficult declarations that 'to it [sc. What Is] all things have been given as names, | all that mortals have established in their conviction that they are genuine' (fr. 8. 38b–9) and that mortals 'have supposed that it [sc. What Is] is and is not the same | and not the same' (fr. 6. 8–9a). For she could then be understood as claiming that mortals have managed to apprehend What Is only in its mutable aspect, without penetrating to its underlying nature.

Among the things I tried to show in *Plato's Reception of Parmenides* was that Plato's representations and uses of Parmenides in the Parmenides, Sophist, and Timaeus indicate that he read Parmenides in something like this way, that is to say, that Plato understood the two parts of the goddess's revelation as accounts of the selfsame object, the cosmos itself, first in its intelligible, immutable, and undifferentiated aspect and then again in its perceptible, mutable, and differentiated aspect. Here we have seen in Chapter 1, moreover, that Aristotle also seems to have understood the relation between the two parts of the goddess's revelation in this way. In his discussion of Parmenides, along with Xenophanes and Melissus, in Metaphysics 1. 5,64 Aristotle first notes that Parmenides seems to have had a conception of formal unity (986^b18–19), then gives a compressed account of the reasoning by which he takes him to have arrived at such a conception (986^b27–31), and finally remarks that Parmenides, being compelled to go with the phenomena, and supposing that what is is one with respect to the account (sc. of its essence) but plural with respect to perception, posited a duality of principles as the basis for his account of the phenomena (986^b31–4). We have also seen in Chapter 1 that Theophrastus appears to have followed Aristotle in offering this type of aspectual analysis of the relation between the two major parts of Parmenides' poem. We noted, too, how a persistent strain of modern interpreters have advocated some type of aspectual reading. It certainly represents one way for Parmenides to have been a generous monist.

Although pursuing the possibility that What Is could be consubstantial with the cosmos's perceptible and mutable population undoubtedly offers a better way of responding to the problem of co-presence than either of the other two options considered thus far, this third option also faces serious problems. An apparently insurmountable difficulty for this response comes in the suggestive verses of fr. 4: 'but behold things that, while absent, are steadfastly present to thought: | for you will not cut off What Is from holding fast to What Is, | neither dispersing everywhere every way in a world order $(\kappa \alpha \tau \hat{\alpha} \ \kappa \acute{o} \sigma \mu o \nu)^{65}$ | nor drawing together'. The fragment's loss of context poses numerous problems. We can no longer tell, for instance, where

 $^{^{64}}$ This discussion not coincidentally echoes and amplifies elements of Plato's brief representation of the Eleatic position at *Sophist* 242 D 4–7. See further Palmer 1998: 1–2.

There is no good reason to suppose $\kappa \delta \sigma \mu o s$ cannot have such a sense at the time Parmenides was writing. Against the frequent claim to the contrary, see Tarán 1965: 47–8, where it is rightly pointed out that $\kappa \delta \sigma \mu o v$ $\tau \delta v \delta e$ in Heraclit. fr. 30 clearly has the sense of 'this world order'. (Tarán nevertheless ends up rejecting the possibility that $\kappa \delta \sigma \mu o s$ has this sense in Parmenides' phrase, though with little apparent reason.) Note also the report that Pythagoras was the first to use the term $\kappa \delta \sigma \mu o s$ to refer to the expanse of the whole universe due to the order apparent within it (Aët. 2. 1. 1 ([Plu.] *Plac.* 2. 1. 886 в 6–7 \approx Stob. *Ecl.* 1. 21. 6c), cf. D.L. 8. 48).

in the poem these verses might have come, just what things the first verse is referring to, or what point the rest of the fragment is meant to support, since the point in question seems to have preceded the first verse. Even without knowing such things, however, one can still see that these verses tell against an aspectual understanding of the relation between What Is and the cosmos's mutable entities. For the goddess here appears expressly to rule out the possibility that What Is might have a differentiated aspect, or in any way undergo the kind of differentiation it would have to suffer to function as the cosmos's underlying substance. This interdiction is consistent with, and in many respects reminiscent of, the reasons given in the Way of Conviction for taking What Is to be whole and uniform: 'Nor is it divided, since it is all alike; | and it is not any more there, which would keep it from holding together $(\sigma v \nu \epsilon \chi \epsilon \sigma \theta a \iota)$, | nor any worse, but it is all replete with What Is. | Therefore it is all continuous $(\xi v \nu \epsilon \chi \dot{\epsilon} s)$: for What Is draws to What Is' (fr. 8. 22–5). Here we encounter the same basic point as fr. 4's assertion that What Is cannot be kept from 'holding fast' ($\tilde{\epsilon}_{\chi}\epsilon\sigma\theta\alpha\iota$) to What Is, along with a similar rejection of the counterfactual possibility that What Is might undergo any kind of differentiation or variation. New in fr. 4 is the point that What Is cannot undergo this differentiation or variation 'in a world order'.

Parmenides has no reason to suppose that only What Is—that is to say, what is (what it is) and cannot not be (what it is), or more simply what must be (what it is) is the only thing that exists. Since his ontology has a place for other things that are (what they are) though only mutably or non-necessarily, and since he has a good deal to say about these entities, it seems wrong to conclude that the existence of What Is precludes or is otherwise incompatible with the existence of the world's mutable entities. The fragments suggest, moreover, that Parmenides supposed What Is to exist coterminously with these mutable entities, in the same spherical space bounded by Necessity, and yet that he did not suppose What Is to be the underlying substance of the rest of the cosmos's population. The problems with the possible ways of responding to the problem of co-presence considered thus far already suggest how Parmenides appears actually to have envisioned the relation between What Is and the cosmos's mutable population, namely, that he regarded them as coterminous but not consubstantial. If there is something that is and cannot not be, as the goddess indicates there is, and if it both exists and is what it is not only temporally but spatially, in the manner demonstrated in the Way of Conviction, then it can only be where all the familiar entities of our everyday experience already are. If What Is is not the underlying substance of these other entities, as fr. 4 suggests, then the remaining possibility is that What Is imperceptibly interpenetrates or runs through the entire cosmos while yet maintaining its own identity distinct from the cosmos's mutable population. If it seems astounding that What Is is supposed to be everywhere around us even though we do not perceive it, then we must recall the goddess's directive, evidently pertaining to What Is, for Parmenides to 'behold things that, while absent, are steadfastly present to thought' (fr. 4. 1).

The goddess's representation of What Is as both whole and uniform constitutes the only potential problem for this option. None of the other demonstrated attributes of What Is could seem to prevent the coterminous existence of other entities. The fact that What Is is (what it is) at all times, such that it is eternal and unchanging,

certainly does not preclude the simultaneous existence of other entities that are (what they are) only mutably and for only a limited time; nor does the fact that What Is is what it is everywhere at its extremity, that is, spherical. Only its existence throughout space, which is what it is for What Is to be 'whole', and its being what it is at every place internally, which is what it is for What Is to be 'uniform', might appear to preclude the existence of anything else. We have already seen, however, when considering the argument at fr. 8. 22–5 for the initial programme's attributes 'whole and uniform' $(o\hat{v}\lambda ov \mu ovvoy \epsilon v \epsilon s)$ $\tau \epsilon$, fr. 8. 4a), that the descriptions of What Is as not divided, all alike, holding together, not any more nor any worse in one location than another, replete with What Is, continuous, and drawing near to itself are, again, all ultimately ways of describing the qualitative self-similarity or uniformity of What Is.

Attention to how the structure of the argument indicates the functional equivalence of a number of these descriptions helped clarify their significance. The details of this point bear repeating. The argument's interim demonstrandum, that What Is 'is all alike (δμοῖον)' (fr. 8. 22b), is reformulated first as an interim conclusion in 'it is all replete with What Is $(\epsilon' \mu \pi \lambda \epsilon o \nu \dots \epsilon' \delta' \nu \tau o s)$ ' (fr. 8. 24b) and then again in the restatement of the warrant for the conclusion in 'What Is draws $(\pi \epsilon \lambda \acute{a} \zeta \epsilon \iota)$ to What Is' (fr. 8. 25b). These equivalences indicate that it is the same thing for What Is to be all alike, to be all replete with What Is, and to draw to What Is. That is to say, these are all ways of signifying the self-similarity of What Is, or of indicating that What Is is what it is wherever it is. The point that What Is is not any more nor any worse in one location than another functions to secure this claim regarding its self-similarity, which is then in turn supposed to entail the principal demonstrandum: 'Nor is it divided ($\delta\iota\alpha\iota\rho\epsilon\tau\acute{o}\nu$)' (fr. 8. 26). This claim both picks up the main programme's 'whole and uniform ($o\hat{v}\lambda o\nu \mu o\nu v o\gamma \epsilon v \epsilon' s$)' (fr. 8. 4a) and is reformulated as the conclusion, 'Therefore it is all continuous ($\xi v v \epsilon \chi \epsilon s$)' (fr. 8. 25a). This set of functional equivalences indicates that it is the same thing for What Is to be whole and uniform, not divided, and continuous. Since the feature in question is supposed to follow from the self-similarity of What Is, the divisibility and continuity at issue must be qualitative indistinguishability from one region to the next, something already implicit in the term μουνογενές or 'uniform' (fr. 8. 4a).

It should therefore be clear enough that the goddess is imputing qualitative self-identity, indistinguishability, or homogeneity to What Is throughout the spherical region it occupies when she here justifies the initial programme's description of it as whole and uniform. Again, it is important to keep in mind, not only that the wholeness and uniformity argued for at fr. 8. 22–5 are qualitative attributes, but also that the argument itself develops the thought that what must be must be what it is wherever it is. Although statements that What Is is all 'replete' ($\xi \mu \pi \lambda \epsilon \delta v$) with What Is and that it is 'all continuous' ($\xi v v \epsilon \chi \epsilon s \pi \hat{a} v$) can easily be misunderstood as implying that What Is occupies all available space to the exclusion of anything else, attention to their roles within Parmenides' tightly structured argument, and especially to the other terms in the argument to which this structure shows they are meant to be equivalent, shows that the fullness and continuity in question are those involved in What Is being all alike and indistinguishable, that is, in its being what it is

wherever it is. The same point applies to the passage's final claim, recapitulating the grounds of its main conclusion, that 'What Is draws to What Is' $(\partial \nu \gamma \dot{\alpha} \rho \partial \dot{\nu} \tau \iota \pi \epsilon \lambda \dot{\alpha} \zeta \epsilon \iota$, fr. 8. 25b). Clearly, these words cannot indicate that any part of What Is actually draws near or moves towards any other part, for Parmenides will go on to show in the next stage that What Is neither moves nor changes in any way but remains the same and in the same place. What Is can 'draw to' itself only in the sense of being like itself wherever it is or throughout its extension. This is in fact the point the goddess makes in formulating the claim that is meant to ground all the others in this section—'it is not any more there, which would keep it from holding together, | nor any worse' (fr. 8. 23–4a). Such internal variance would amount to a failure of What Is to be what it is wherever it is, for it would involve What Is having a certain character in one region and another (or others) in other regions. The lack of such variation of character is what the continuity here amounts to—the continuity involved in the lack of differentiation, which is to say, uniformity.

Something may be uniformly present somewhere without precluding the presence of other things there. That is to say, something may be uniformly present in a region without occupying every point of space within that region. This seems, again, to be how Anaxagoras envisaged the omnipresence of Nous when he said that it 'is now where also all the others are, in that which surrounds many things and in those which have accreted and in those which have separated out' (fr. 14). Anaxagoras, moreover, has a sophisticated theory of material composition that makes it clear just how there can be this kind of co-presence without consubstantiality. As will become clearer over the course of the next three chapters, Anaxagoras was the first Presocratic to have anything more than a rudimentary or common-sense model of material structure. Earlier theories were more 'chemical' than 'physical', by which I mean that they conceived of how things are constituted and the changes they undergo primarily in qualitative rather than quantitative terms. The problem of co-presence, therefore, would not have presented itself to Parmenides in the same way as it did to Anaxagoras. It is hard to say whether the lack of a quantitative model of material structure would have made it easier or more difficult for Parmenides to conceive of What Is as being where everything else is. It may well have been easier, for there are everyday cases where two things are both in the same place at the same time. When one pours both wine and water into a cup, for example, it is natural to say that they come both to occupy the same place, namely the inside of the cup, and even that each one is everywhere the other is.

In any case, the terms Parmenides employs in arguing that What Is is whole and uniform are meant to have an essentially qualitative rather than quantitative sense. Thus the arguments at fr. 8. 22–5 designed to establish that What Is is 'whole and uniform', that is, alike and undifferentiated throughout, in no way entail that the presence of What Is leaves no room for the existence of other entities. Parmenides never says that What Is occupies all available space. Unlike Melissus, who will explicitly deny the existence of void (Meliss. fr. 7. 7), Parmenides never claims that What Is is a plenum. Parmenides merely claims that, given its mode of being and its existence in space, what must be *must be what it is wherever it is.* But this allows there to be other things also that are what they are (ultimately, light and night) wherever

they are (cf. Parm. fr. 9). With respect to the problem of co-presence, then, the best option seems to be to understand Parmenides as intending for What Is and the cosmos's mutable population to be coterminous or present together within the spherical region of the cosmos without, however, being consubstantial. If we find it startling to discover that Night reveals to Parmenides the existence of a necessary being that, as such, is everlastingly, immutably, uniformly, and omnipresently, we would do well to recall her injunction to 'behold things that, while absent [sc. nonapparent], are steadfastly present to thought' (fr. 4) and likewise her warnings in frs. 6 and 7 not to be misled by exclusive reliance on sensory evidence. It is also worth recalling Night's traditional role as the counsellor of Zeus. For in the comparison with the omnipresence of Anaxagorean Nous there looms a question that should already have presented itself when it became clear that What Is is not only a necessary but in many ways a perfect entity. This is the question, to which we shall return, of whether What Is should be regarded as divine.

Zeno, Melissus, and Parmenides

The presumption that Parmenides, Zeno, and Melissus together constitute an 'Eleatic school' in virtue of their collective advocacy of strict monism is standard fare in most histories of early Greek philosophy. Long familiarity with depictions of Zeno and Melissus as the rightful heirs to Parmenides' philosophical legacy might itself engender resistance to any view of Parmenides as a generous monist and, more particularly, to the modal interpretation developed across the previous three chapters. We know that Parmenides could not have been a generous monist, the reasoning might run, because Zeno and Melissus were faithful defenders of the master's philosophy, and each in his own way advocated the paradoxical metaphysical thesis of strict monism. In this chapter we shall see how this view crumbles under the pressure of interrogation, and a more historically accurate view of Zeno's and then Melissus' relation to Parmenides will emerge.

ZENO AND PARMENIDES

Zeno the Controversialist

Zeno of Elea developed a number of ingenious paradoxes. The most famous of these—the stadium or dichotomy, the Achilles, the arrow, and the moving rows—purport to show that motion is impossible by variously bringing to

On some of the problems, though, raised by the notion of an Eleatic school, see Cordero 1991.

Recall the point from Ch. 1 that 'monism' refers, not to a unique metaphysical position, but to a family of positions. The designation 'generous monism' has been used to draw a contrast with so-called 'strict monism', the extremely counter-intuitive position that just one thing exists. A monism is generous, in the first instance, if it is compatible with the existence of other entities. Generous monism thus encompasses such familiar varieties of monism as numerical and generic substance monism, according to which, respectively, there is a single substance or a single kind of substance. The aspectual reading of Parmenides essentially regards him as a numerical substance monist. The 'predicational monism' attributed to Parmenides in Curd 1991, 1998, can be seen as a type of generic substance monism, in that it permits a plurality of Parmenidean beings (cf. Barnes 1979). The modal interpretation developed here also views Parmenides as a generous monist, in that the existence of What Is, i.e. what is and cannot not be, is compatible with the existence of things that are and are not, though it does not regard the immutable and uniform entity What Is is shown to be as the substance of other entities.

light latent contradictions in ordinary assumptions regarding its occurrence. Zeno also argued against the common-sense assumption that there are many things by showing in various ways how it, too, leads to contradiction.³ Just what led Zeno to develop his famous paradoxes is less than clear. Here is how Plato has the youthful Socrates of the *Parmenides* interrogate Zeno regarding the purpose of his arguments:

If there were many things, they would incur impossible consequences [e.g. being at once like and unlike]. Is this what your arguments intend, nothing other than to contend, against all that's maintained, that there are not many things? Indeed, do you suppose each of your arguments to be a proof of this very point, so that you would consider yourself as furnishing as many proofs as you have written arguments for the conclusion that there are not many things? (Pl. *Prm.* 127 D 7–128 A 1)

Zeno answers that Socrates has grasped the purpose of his book quite well (128 A 2–3). Despite the doubts sometimes voiced about the reliability of the *Parmenides'* fictional exchange between Socrates and Zeno as a guide to the historical Zeno's purposes, there remains no more plausible view of the general thrust of Zeno's arguments. The youthful Socrates' analysis need only be broadened to encompass the arguments against motion and place. This is easily enough done if his account of Zeno's target is expanded to the slightly more complex thesis that there are many things that move from place to place. In general, though, it seems perfectly appropriate for Plato to have Zeno endorse this analysis since what we know of Zeno's arguments accords with the notion that they were meant to challenge ordinary assumptions about plurality and motion. His arguments are 'paradoxes' in the Greek sense, arguments for conclusions contrary to (*para*) what people ordinarily believe (*doxa*).

Plato's Socrates goes on, however, to speculate about the ulterior motives of Zeno's book, which Socrates thinks he tried to conceal from the public. Now addressing Parmenides, he says:

In a way, he has written the same thing as you, but he's changed it around to try to fool us into thinking that he's saying something different. For you say in the verses you've composed that the all is one $(\mathring{\epsilon}\nu\dots \epsilon \hat{\ell}\nu a\iota \ \tau \hat{o} \ \pi \hat{a}\nu)$, and you do a fine and good job of providing proofs of this. He, on the other hand, says there are not many things, and he too provides numerous and powerful proofs. Given that one says 'one' and the other 'not many', and that each speaks in

³ Good presentations of Zeno's extant arguments include Vlastos 1967; Barnes 1982a: chs. 12–13; Kirk et al. 1983: ch. 9; Sainsbury 1988: ch. 1; Makin 1998; McKirahan 1999; and Palmer 2008a: §2. Given the ready availability of these presentations, it seems unnecessary to present reconstructions of Zeno's arguments here; those unfamiliar with the paradoxes may wish to consult one or more of these expositions. Attempts such as that in Owen 1958 to provide an account of the overarching structure of Zeno's book and the place the extant arguments occupied within it remain essentially speculative; see the remarks of Barnes 1982a: 233–4; Kirk et al. 1983: 265; and, on earlier architectonic reconstructions, Booth 1957a: 187, 195–6. Caveing 1982 nevertheless attempted to revive the thesis, made popular for a time by Tannery 1887, that Zeno's adversaries were certain contemporary Pythagorean mathematicians, and his reconstructions, though developed with more than common attention to the full range of ancient source material, tend to be coloured by this outmoded thesis. Matson 1984: 185–95, likewise endeavours to resuscitate Tannery's thesis.

this way so as to appear to have said none of the same things, when you are in fact saying virtually the same thing, the pronouncements made by the two of you appear beyond the rest of us. (Prm. 128 A 6–B 6)

The youthful Socrates, in short, accuses Zeno and Parmenides of having plotted to conceal the fact that their conclusions are essentially identical. It is not surprising, then, that the authority of this passage has so often been appealed to in support of the received opinion that Zeno was a direct inheritor and defender of the Parmenidean legacy. Zeno goes on, moreover, to describe his book as having been intended to defend Parmenides against those who ridiculed his position for its purportedly absurd consequences. This assertion, too, is easily accommodated by those who understand Parmenides as a strict monist.

Not sitting so well with this view, however, is the way Zeno tries to disabuse Socrates of his suspicions about the book's ulterior purpose. Zeno says right away that Socrates has not altogether grasped the truth about his book. In the first place, he says, the book had nothing like the kind of lofty pretensions Socrates has ascribed to it (Prm. 128 c 2–5). That is, Zeno rejects the claims that in arguing that there are not many things he was saying virtually the same thing as Parmenides and that the different formulation of the thesis was part of an attempt to conceal this from the general populace. Zeno explains his actual motivation as follows:

The treatise is in truth a sort of support for Parmenides' doctrine against those attempting to ridicule it on the ground that, if one is $(\tilde{\epsilon}\nu \ \hat{\epsilon}\sigma\tau\iota)$, the doctrine suffers many ridiculous consequences that contradict it. This treatise, therefore, argues against those who say the many are, and it pays them back with the same results and worse, intending to demonstrate that their hypothesis—if many are $(\epsilon i \ \pi o \lambda \lambda \acute{a} \ \hat{\epsilon} \sigma \tau \iota \nu)$ —suffers even more ridiculous consequences than the hypothesis of there being one, if one pursues the issue sufficiently. (*Prm.* 128 C 6–D 6)

It is important to recognize that Zeno's account of how he defended Parmenides against those who attempted to ridicule his doctrine does not imply that the upshot of his arguments was a position identical to Parmenides'. This impression on Socrates' part is in fact what Zeno is portrayed as trying to correct, since it is born of a superficial understanding of Parmenides' doctrine. Zeno's arguments against plurality will seem to entail Parmenides' monistic doctrine only if his thesis 'one is' $(\tilde{\epsilon}\nu\ \hat{\epsilon}\sigma\tau\iota)$ is understood as tantamount to an assertion that only one thing exists. However, the elaborate examination of this very thesis, 'one is' $(\tilde{\epsilon}\nu\ \hat{\epsilon}\sigma\tau\iota)$, by Parmenides himself in the latter part of the dialogue shows that Plato thinks it is not to be understood in any such trivial sense. For not only does Parmenides end up examining the relation of his One to other things, which would have been impossible if his doctrine entailed their non-existence, the relation other things have to the One actually proves responsible in a way for their existence. Zeno cannot be supposing that his arguments against plurality entailed the doctrine of Parmenides when that

 $^{^4}$ σὺ δ' οὖν τὴν ἀλήθειαν τοῦ γράμματος οὖ πανταχοῦ ἤσθησαι (Prm. 128 B 7–8). LSJ s.v. π ανταχοῦ gives the sense of οὖ πανταχοῦ here as 'not at all', but wrongly so, since Zeno does not reject everything in Socrates' characterization but points out where it needs correction.

doctrine is represented in this same dialogue by Parmenides himself as something altogether more involved than the simple thesis that only one thing exists. Nevertheless, Zeno's description of the persons who attempted to ridicule Parmenides is perfectly compatible with *their* having understood the thesis 'one is' ($\tilde{\epsilon}v \ \tilde{\epsilon}\sigma\tau\iota$) as an assertion that only one thing exists. Zeno's arguments constitute an *indirect* defence of Parmenides—'a sort of support' ($\beta o \hat{\eta} \theta \epsilon \iota \hat{a} \tau\iota s$, 128 c 6)—because they do nothing to disabuse his detractors of their superficial understanding of his doctrine. Instead, as Zeno says, he tried to show that the assumption that there are many things has consequences every bit as unpalatable as those Parmenides' critics supposed his position entails. One can thus understand why Zeno accepts Socrates' point that his own arguments aim to show that there are not many things and yet tries to correct Socrates' impression that, in arguing this point, he was upholding the same position as Parmenides in a different form.

The evidence of Plato, then, does not support the conventional view that Zeno's arguments against plurality and motion were intended to support the strict monism of Parmenides, contrary to what is commonly claimed. Instead, Plato suggests that Zeno's arguments were designed to show those whose superficial understanding of Parmenides had led them to charge him with flying in the face of common sense that common-sense views are themselves riddled with latent contradictions. Whether the historical Zeno was actually involved in anything like the dialectical context Plato envisages for him must remain uncertain. For even if there were already in Zeno's day individuals who mistook Parmenides' position for the thesis that only one thing

⁵ Proclus' reading is properly sensitive to the passage's dynamic: 'Parmenides is reported to have maintained that what is is one $(\tau \dot{o} \ddot{o} \nu \ \ddot{e} \nu)$ and to have advanced this as his own particular view. Those who took hold of these words in too crude a sense $(\phi o \rho \tau \iota \kappa \dot{\omega} \tau \epsilon \rho o \nu)$ ridiculed the view, making fun of it in various ways, including saying that if what is is one, then Parmenides and Zeno do not both exist at the same time, but if Parmenides exists, then Zeno does not, and if Zeno exists, Parmenides does not. With other arguments of this sort they debased the view, knowing nothing of its truth' (in Prm. 1. 619. 15–21). That Proclus is not merely inventing the kind of argument used to ridicule Parmenides is suggested by Aristotle's passing reference to the absurd position some have maintained for controversy's sake that one human being is what there is (Ph. 1. 2. 185^a7, cf. ^a24). The possibility that Protagoras is lurking behind the reports of Aristotle and Proclus is suggested by Porphyry's reference (Porph. fr. 410 ap. Eus. PE 10. 3. 25) to a treatise by Protagoras entitled On what is (Περὶ τοῦ ὀντος), in which he is said to have deployed various arguments against those who held that what is is one (ἐν τὸ ὄν). Cf. Capizzi 1988: 56–60.

⁶ The selective and often distortive use of the Platonic evidence in Fränkel 1942, Solmsen 1971, von Fritz 1974, Vlastos 1975, and Prior 1978 is critically reviewed at Palmer 1999a: 95–8. The most pernicious distortion has been the tendency, particularly evident in Vlastos's study, to privilege Socrates' analysis of Zeno's purposes over Zeno's own qualifications and corrections, apparently on the presumption that Socrates is Plato's authentic mouthpiece. For a more judicious assessment of what the *Parmenides* may tell us about Zeno's purposes, see Barnes 1982a: 231–7, esp. 235. See also Cordero 1988: 118–19; Matson 1988 (with the caveat that the discussion here is often quite rhetorical).

⁷ So, essentially, Barnes 1982a: 236: 'Zeno was not a systematic Eleatic solemnly defending Parmenides against philosophical attack by a profound and interconnected set of reductive argumentations. Many men had mocked Parmenides: Zeno mocked the mockers. His *logoi* were designed to reveal the inanities and ineptitudes inherent in the ordinary belief in a plural world; he wanted to startle, to amaze, to disconcert. He did not have the serious metaphysical purpose of supporting an Eleatic monism.'

exists, the idea that Zeno's arguments were motivated by a desire to respond to such individuals in kind is as historically unverifiable as the claim Plato puts in his mouth that his book was stolen and circulated before he could decide for himself whether to make his arguments public (*Prm.* 128 D 7–E 1). Plato has his own purposes in structuring the *Parmenides'* opening exchange between Socrates and Zeno as he does, notably to put the significance of Parmenides' philosophical position itself at issue.

Nevertheless, just as Socrates' initial analysis of Zeno's arguments, as aiming to show that there are not in fact many things, remains, with some slight qualification and extension, imminently plausible, so there are elements in Zeno's ensuing account of his purposes that have the ring of historical truth and that square well with other evidence. For instance, there is the repeated point that Zeno's book was written in a spirit of youthful contentiousness or 'love of victory' (φιλονικία, 128 D 7, E 2). The more mature Zeno seems a little embarrassed by the combative manner evident in the arguments of his younger days,8 as well he might since that spirit would have come to be seen as typical of the eristic controversialists who sprang up in the sophistic era. Plato gives yet another nod to the idea that Zeno was a forerunner of eristic contentiousness when he has him say that his book 'contradicts those who say the many are' $(\alpha \nu \tau \iota \lambda \epsilon \gamma \epsilon \iota \ldots \pi \rho \delta s \tau \delta \iota \tau \delta \tau \delta \lambda \delta \lambda \epsilon \gamma \rho \nu \tau \alpha s$, 128 D 2-3). This suggestion that Zeno was a practitioner of what came to be known as 'antilogic', or the art of contradiction, is consistent with Plato's representation of him in other dialogues as something of a sophist. In the First Alcibiades, Socrates reports that Pythodorus and Callias are said to have each paid Zeno a hundred minae to become clever and skilled in argument (Alc.1 19 A 3-6; cf. Prm. 126 B-C). Teaching for payment is of course one hallmark of the professional educators who styled themselves experts in wisdom. That Plato saw Zeno as a practitioner of the specific brand of argument known as antilogic is evidenced by the *Phaedrus*' famous description of him as the 'Eleatic Palamedes' for his ability to make the same things appear to his audience both like and unlike, one and many, moving and at rest (261 D 6–8). Again, at the beginning of the Sophist, when Theodorus introduces the Eleatic Visitor as an associate of Parmenides and Zeno and their followers, Socrates expresses concern that the Visitor may be 'some god of refutation' until Theodorus reassures him that the Visitor is more moderate than those who spend their time in eristic and competitive disputation (Sph. 216 A-B). Plato's references thus consistently connect Zeno with the rise of eristic disputation, and it is perfectly plausible that his arguments against plurality and motion would have been well-known examples of making the weaker case seem the stronger.

The portrait of Zeno and his tactics that emerges from Plato's references makes it seem natural that Aristotle, in his lost dialogue *Sophist*, spoke of Zeno as the inventor of dialectic (D.L. 8. 57, cf. 9. 25, S.E. *M.* 7. 7), though precisely what Aristotle meant by this must remain a matter of speculation. There is also the question of

⁸ With this passage compare Pl. R. 7. 539 B 1–C 8 on why the young should not be trained in dialectic.

⁹ In addition to Zeno, Aristotle attributes the invention of dialectic to Socrates (*Metaph.* 13. 4. 1078^b25–30), Plato (*Metaph.* 1. 6. 987^b31–3), and even himself (*SE* 34. 183^b34–184^b8). On the

whether Aristotle viewed Zeno's arguments as more eristic than properly dialectical. The difference, according the Aristotle, is that dialectical argumentation proceeds from endoxa or 'views held by everyone or by most people or by the wise, that is, by all, most, or the especially famous and respected of the wise', whereas eristic argumentation proceeds from what only seem to be, or what follows from, endoxa (Top. 1. 1. 100^a29-30, ^b22-5). Aristotle clearly believes that some of Zeno's assumptions have only a specious plausibility. For example, Aristotle takes issue with the axiom, on which Zeno relies in the antinomy of large and small, that what has no magnitude is nothing or non-existent, since what makes neither what it is added to larger nor what it is taken away from smaller cannot be anything that is (Zeno fr. 2 ap. Simp. in Ph. 139. 11–15, paraphrased at Arist. Metaph. 3. 4. 1001^b7– 9). This is to argue 'crudely' ($\phi o \rho \tau \iota \kappa \hat{\omega} s$), Aristotle says, since the addition of incorporeal entities is capable of increasing the number, if not the magnitude, of that to which they are added (1001^b13–16). Again, Aristotle speaks of Zeno's argument that it is impossible to move or to traverse the stadium as an example of an argument contradicting normal views, with an evidently false conclusion, in which the error is nevertheless difficult to isolate (Top. 8. 8. 160^b7-9, SE 24. 179^b17–21). Nonetheless, Aristotle thinks this argument depends on a speciously plausible assumption, namely that it is impossible to traverse infinite things in a finite time, since while it is in fact impossible for anything to come in contact with an infinite number of things in such a time, it nevertheless is possible for something to come in contact with things infinite in respect of divisibility (Ph. 6. 2. 233^a21–31). Since these arguments, in Aristotle's view, proceed from premises that seem plausible and worthy of endorsement and yet are exposed as false by a little reflection, they would by Aristotle's own criteria be examples of eristic rather than properly dialectical argumentation. For Aristotle, then, Zeno was a controversialist and paradoxmonger, whose arguments were nevertheless both sophisticated enough to qualify him as the inventor of dialectic and important for forcing clarification of concepts fundamental to natural science. Aristotle's view of Zeno thus seems largely in accordance with Plato's portrayal of him as a master of the art of contradiction. 10

Should we, then, think of Zeno as a sophist?¹¹ Certainly Isocrates, the rhetorician and contemporary of Plato, did not hesitate to lump Gorgias, Zeno, and Melissus

problem of how these various attributions are to be resolved, see Wilpert 1956/7; Evans 1977: 17–30; Kerferd 1981: ch. 6. That Zeno's method corresponds fairly precisely to Aristotle's conception of dialectic is maintained e.g. by Burnet 1930: 313–14; Lee 1936: 7 and 113 ff. Moraux 1968: 293, is more careful in identifying a particular feature of dialectic for which Aristotle could have seen an antecedent in Zeno's argumentation, namely his proceeding from the beliefs or $\epsilon\nu\delta\sigma\xi\alpha$ of Parmenides' adversaries; cf. Berti 1988: 19–24; Kirk *et al.* 1983: 278.

"So, essentially, Barnes 1982a: 294: 'negative, critical, destructive, Zeno was the first of the "Sophists". Such a conclusion is resisted by Cordero 1988: 119–23, aligning himself instead with the view of Caveing 1982: 18, that Zeno first recognizes how a viable ontology requires a principle

This view would be neatly distilled by Timon of Phlius, the follower of Pyrrho, in his Lampoons: 'And the great inexhaustible strength of Zeno, able to speak on both sides, the censurer of all (ἀμφοτερογλώσσου τε μέγα σθένος οὖκ ἀλαπαδνόν | Ζήνωνος πάντων ἐπιλήπτορος)' (Timon fr. 45. 1–2a ap. D.L. 9. 25 and Plu. Per. 4. 5; cf. schol. in Iamb. VP 198 [ap. 31A19 DK] and Elias in Cat. 109. 6–15).

11 So, essentially, Barnes 1982a: 294: 'negative, critical, destructive, Zeno was the first of the

together as 'sophists' flourishing in the era of Protagoras and bequeathing to later generations the most laborious and tedious treatises maintaining the most outrageous claims (Isoc. Orat. 10. 2-3). Nonetheless, while there are difficulties giving precise definition to the term 'sophist', one feature common to those normally classed as such that Zeno lacks is an interest in the interrogation of cultural norms and values. His influence, however, on the great sophists who were his contemporaries and, more generally, on the techniques of argumentation promulgated among the sophists seems undeniable. Protagoras' development of the techniques of antilogic, rooted in his claim that there are two opposed arguments on every matter (D.L. 9. 51), seems likely to have been inspired by Zeno's novel forms of argumentation as well as by his advocacy of the most counter-intuitive of theses. Zeno's influence is especially clear, moreover, in Gorgias' On nature, or On what is not, both in its penchant for argumentation via antithesis and reductio and in its direct use of Zenonian premises (cf. MXG 979^a23, ^b25, ^b37). It is even possible that the famous circle of contemporary intellectuals the great Athenian statesman Pericles gathered around himself provided a major conduit for Zeno's impact on the first generation of sophists. Plutarch, at any rate, records that 'Pericles heard Zeno of Elea discoursing on nature like Parmenides, and practising a kind of skill in cross-examination and in driving one's opponent into a corner by means of contradictory argument (ἐλεγκτικὴν δέ τινα καὶ δι' ἀντιλογίας εἰς ἀπορίαν κατακλείουσαν έξασκήσαντος έξιν)' (Plu. Per. 4. 5). The skill Plutarch attributes to Zeno, still evident in the fragmentary remains of his arguments, is just the kind of skill in argument manifested in a great deal of sophistic practice. Although doubts have been raised about the reliability of Plutarch's report that Zeno, like Damon and Anaxagoras, was one of the many contemporary intellectuals whose company was avidly pursued by Pericles, there is little that seriously tells against it. Thus George Kerferd has argued both that the patronage of Pericles and his keen interest in the intellectual developments of his day must have been critically important to the sophistic movement and that Zeno's paradoxes were a profound influence on the development of the sophistic method of antilogic, which Kerferd sees as 'perhaps the most characteristic feature of the thought of the whole period'.12

The evidence surveyed here thus far suggests that Zeno's paradoxes were designed as provocative challenges to the commonsensical view that our world is populated by numerous things that move from place to place. His apparent demonstrations of how this view is fraught with contradiction made him an influential precursor of sophistic

of individuation. Cordero (and Caveing) take quite seriously Eudemus' report *ap.* Simp. *in Ph.* 97. 12–13 = Eudem. fr. 37a (discussed below). Unable to find the principle he required, Zeno becomes for Cordero a 'nihilist' comparable to Gorgias. Cf. Sen. *Ep.* 88. 44: *Zeno Eleates omnia negotia de negotio deiecit. Ait nihil esse.* Cordero thus argues that Zeno's arguments that there are not many things do not *eo ipso* constitute an affirmation of a Parmenidean One, and that Parmenides and Zeno ultimately neither agree nor disagree but are simply different, given that the objects with which they are respectively concerned are fundamentally different (see esp. 124–6).

¹² Kerferd 1981: 18–23, 59 ff., 85.

antilogic and eristic disputation.¹³ It is not surprising that someone like Isocrates should have viewed Zeno as a sophist to be classed with Protagoras and Gorgias. To ask whether Zeno was in fact a sophist, a practitioner of antilogic, an eristic controversialist, or a proper dialectician is to some extent inappropriate, for these designations all acquired their normal sense and range of application only after Zeno's time. While he perhaps does not fit exactly into any of these categories, still his development of sophisticated methods of argumentation to produce apparent proofs of the evidently false conclusions that motion is impossible and that there are not in fact many things made it quite natural for Plato, Aristotle, Isocrates, and others to refer to him under all these labels. Again, if this evidence seems to leave unanswered the question of Zeno's own intention and motivation, one cannot try to fill this gap by relying on young Socrates' remarks in Plato's Parmenides about how he was just saying the same thing as Parmenides in a different way. For Plato also has Zeno correct Socrates on just this point, characterizing his own treatise as an indirect defence of Parmenides against his detractors. If we look to the account of his purposes given Zeno by Plato in the Parmenides, we find that it is in line with the other evidence we have considered. The mistake of privileging young Socrates' account of Zeno's purposes over the account he himself is made to give has caused too many to cast Zeno as an orthodox 'Eleatic' and uncritically to embrace the very assimilation of the conclusions of his contentious argumentation and Parmenides' own philosophical stance that Plato has Zeno himself reject. Since there is no more reliable evidence regarding Zeno's actual purposes than this fictional exchange in the opening pages of the *Parmenides*, on which so much of the later tradition regarding Zeno evidently relies, ¹⁴ there is no alternative but to try to determine for ourselves the nature and extent of Zeno's inheritance from Parmenides. To do so, we must consider Zeno's own words, where we have them, along with the extant paraphrases of his arguments, with a view to determining where, if anywhere, his repertoire of concepts and his patterns of argumentation suggest specific use of Parmenides' own concepts and arguments. Unfortunately, the old shibboleth of Zeno's orthodox Eleaticism has tended to make actual investigation of the relation between his arguments and Parmenides' seem beside the point.

Zeno's Problematization of Spatial Extension

Consider first the only Zenonian antinomy that appears to be preserved whole:

If there are many things, it is necessary that they be just so many as they are and neither greater than themselves nor lesser. But if they are just as many as they are, they would be limited $(\pi\epsilon\pi\epsilon\rho\alpha\sigma\mu\acute{\epsilon}\nu\alpha)$. If there are many things, entities are unlimited; for there are always other

¹³ Cf. Gal. *Phil.Hist.* 3: 'Zeno of Elea is recorded as having been the founder of eristic philosophy'; Epiphan. *Adv. Haer.* 3. 505. 30: 'Zeno of Elea, the eristic, . . . '

¹⁴ The ancient tradition variously identifying Zeno as Parmenides' pupil, associate, or favourite (see, in addition to passages already cited, Plu. *Col.* 1126 D, D.L. 9. 25, S.E. *M.* 7. 7, *Suda s.v.* 'Parmenides' and 'Zeno') either explicitly or otherwise evidently relies upon the depiction of their relation in Plato's *Parmenides* and therefore has no independent authority.

entities between entities, and again others between those. And thus entities are unlimited $(\tilde{\alpha}\pi\epsilon\iota\rho a)$. (Zeno fr. 3 ap. Simp. in Ph. 140. 29–33)¹⁵

The complex pattern of argumentation evident here, and typical of Zeno, is not one employed by Parmenides. For while we have seen that Parmenides does employ tightly structured arguments, none prefigure Zeno's use of the specific *reductio* technique wherein contradictory consequences are derived from a single thesis targeted for refutation. As for the key concepts deployed in Zeno's argument, there is a significant contrast between the notions of limit at work here and in Parmenides. The concept of limit figures in Parmenides in the sense of an actual physical bond or boundary that secures What Is in a way that is at once expressive of, and responsible for, its invariance as well as its perfection (fr. 8. 26–33, 42–9). By contrast, Zeno's notion of limit (and limitlessness) in this argument is the strictly quantitative notion of numerical finitude (and infinitude). The contrast here is merely one instance of a pattern we find throughout Zeno's arguments, namely, that when he employs terms that might appear adopted from Parmenides, Zeno almost invariably employs them in a clearly quantitative sense that contrasts with the typically more qualitative or otherwise non-quantitative sense evident in Parmenides.

Zeno also tried to show how the assumption of a plurality leads to contradiction by arguing that if there are many things, they must be so small as to have no magnitude and at the same time so large as to have unlimited magnitude. The argument for unlimited magnitude recorded by Simplicius (in Ph. 141. 2-6, cf. 139. 16-18) relies on the infinite divisibility of any magnitude and, apparently, on the assumption that the sum of an infinite number of parts of some magnitude will be an infinite magnitude. Neither the concepts employed in this argument, nor its novel quantitative conception of magnitude and spatial extension, nor its iterated application of a key premise to generate a regress has any analogue in Parmenides. Likewise, the lemma Zeno applies in making the transition from the conclusion that each of the many is of no magnitude to the argument that each is of unlimited magnitude, namely that what has no magnitude is nothing, has no discernible analogue in Parmenides and should also be seen as original with Zeno. It, too, depends on Zeno's quantitative conception of magnitude and spatial extension. The novelty of Zeno's articulation of this particular principle is suggested by the fact that he apparently felt the need to argue for it, in a typically ingenious piece of reasoning, which we find reported by Simplicius:

what has neither magnitude nor solidity nor bulk would not even exist. 'For', he says, 'if it were added to something else that is, it would make it no larger; for if it were of no magnitude, but were added, it [sc. what it was added to] could not increase in magnitude. And thus what was added would in fact be nothing. If when it is taken away the other thing is no smaller, and again when it is added will not increase, it is clear that what was added was nothing nor again what was taken away.' (fr. 2 ap. Simp. in Ph. 139. 11–15, cf. Arist. Metaph. 3. 4. 1001^b7–9)

¹⁵ On the reconstruction of the argument, see, in addition to the studies cited above at n. 2, Peterson 1978. A simple reconstruction appears below in Ch. 7, at p. 245.

Simplicius' condensed report of Zeno's argument in the antinomy's first arm is, however, vaguely reminiscent of Parmenides: '[each of the many] has no magnitude since each of the many is the same as itself and one ($\epsilon a v \tau \hat{\phi} \tau a \mathring{v} \tau \partial v \dots \kappa a \mathring{\epsilon} v$)' (Simp. in Ph. 139. 18–19). Parmenides himself had described light, the first of the two principles of his cosmology, as 'every way the same as itself' ($\epsilon \omega v \tau \hat{\phi} \pi \acute{a} v \tau o \sigma \epsilon \tau \omega \mathring{v} \tau \acute{o} v$, fr. 8. 57b). However, the self-similarity Parmenides envisages is plainly qualitative, not quantitative. Light has just the qualities it has and is distinguished from the other principle, night, in terms of the opposite qualities that define the two. The self-similarity that figures in Zeno's argument is more spatial and quantitative than qualitative: being 'the same as itself' is what it means for something to be 'one' in the strict sense Zeno envisages, whereas any magnitude, which will have distinguishable parts in virtue of being spatially extended, will fail to be strictly one and self-identical.

That Parmenides also speaks of What Is as 'one' (fr. 8. 6) and as 'all alike' (fr. 8. 22) could lead one to suppose that Zeno's arguments here would have been as applicable to it as to any other entity. There is interesting evidence that certain Aristotelians in antiquity pursued this implication, apparently by way of following up on Aristotle's own remarks, towards the end of Metaphysics 3's eleventh aporia, on problems Zeno's arguments raised for 'the one itself' $(\alpha \dot{v} \tau \dot{o} \tau \dot{o} \epsilon v)$. The eleventh aporia addresses the difficult but important question of whether being $(\tau \delta \ \mathring{o} \nu)$ and unity $(\tau \delta \ \tilde{\epsilon} \nu)$ are in their own right substantial principles of entities, a position Aristotle associates with Plato and the Pythagoreans, or whether being and unity function as principles in so far as they belong to some more fundamental entity or entities, a view he associates with the naturalists (oi $\pi\epsilon\rho$ i $\phi\acute{\nu}\sigma\epsilon\omega$ s) and finds exemplified among those who posited fire, air, or a plurality of elements as principles (Metaph. 3. 4. 1001^a4–19). Aristotle marks certain difficulties in the apparent consequences for each option, thus identifying problems for further inquiry and discussion. The position of the naturalists, he explains, entails that neither numbers nor universals can exist in their own right as substances (1001^a19-27). On the other hand, it is all but impossible, he suggests, for Plato and the Pythagoreans to explain just how there will be things other than being and unity with these as their principles (1001^a29-^b6). ¹⁶ Aristotle finally presses two points against the Platonic

and, especially, the Pythagorean position: first, that if the one is itself one and thus indivisible, then it looks as if the one will in fact be nothing (1001^b7-16), and, second, that it is impossible for anything of any magnitude to be constituted by, or derived from, the one or many such ones (1001^b17-25). In developing the first of these problems, Aristotle draws upon considerations Zeno deployed in the antinomy of large and small: Further, if the one itself is indivisible ($\frac{\partial \delta\iota a\ell}{\partial \epsilon\tau o\nu}$), then according to the principle of Zeno it would be nothing. For what neither makes something larger when added to it nor smaller when taken away from it, this he denies belongs among the things that are' (1001^b7-9). Although Aristotle's criticism here is not directed against Parmenides, Aristotle's formulation of the criticism and the fact that Parmenides had in fact denied that What Is is 'divided' ($\delta\iota a\iota \iota \rho \epsilon\tau \acute{\nu} \nu$, fr. 8. 22b) may have led certain later philosophers to wonder whether Zeno's arguments would not be as damaging to Parmenides' conception as to any other.

Simplicius preserves the following excerpt from the *Physics* by Aristotle's student, Eudemus of Rhodes:

Indeed, they say Zeno said that if someone could inform him what in the world the one is, he could talk about the many entities $(\tau \grave{\alpha} \check{o} \nu \tau a)$. He was at a loss, as it seems, on account of each of the perceptibles being said to be many both in terms of its predicates and in virtue of division, while he supposes the point is nothing. For what neither produces an increase when added nor results in a decrease when taken away he did not think was an entity at all. (Eudem. fr. 37a ap. Simp. in Ph. 97. 11–16 = 138. 32–139. 3)

While it is impossible to tell whether Zeno himself ever made the remark attributed to him at the beginning of this passage, the way it was reported by Eudemus shows that from fairly early on there was an alternative view of Zeno's purposes than the one Plato presented in the *Parmenides*. Eudemus analyses Zeno's primary quandary as the product of two points he clearly utilized: every spatially extended magnitude is infinitely divisible, and what is not a spatially extended magnitude is nothing. The result is that it is very difficult, if not impossible, to understand the composition of spatially extended objects. They cannot be composed of entities with no extension, for putting together any number of unextended entities

Deduction, which considers what must be the case, if the One is, with respect to things other than the One (*Prm.* 159 B 2–160 B 2). The fact that Plato can be seen to have developed a 'response' to Aristotle's criticism in the *Parmenides*' Third Deduction—which likewise considers what must be the case, if the One is, with respect to things other than the One and yet allows that the others are not altogether deprived of unity, just because they are different from the One, but that they somehow participate in it—should serve as a reminder of just how preliminary and basic the problem-raising of *Metaphysics* 3 actually is. Aristotle would well have known that Plato at least had thought seriously and deeply about this apparent difficulty. Thus the way Aristotle here generates problems is itself problematic.

¹⁷ Curd 1993: 3, improperly cites this passage as evidence that 'Aristotle linked the arguments of Zeno with those of Parmenides' and that he 'connects the theories of Parmenides and Zeno'. Although Aristotle has made reference to the 'doctrine' of Parmenides previously in the chapter, that reference is part of a different line of criticism of the Platonic-Pythagorean position. Nowhere in this chapter does Aristotle link or connect the arguments and theories of Zeno and Parmenides. It is in fact notable that Aristotle almost never mentions Zeno when discussing Parmenides. On the sole exception, see n. 24 below.

will fail to yield an extended entity. On the other hand, any spatially extended entity thought basic to the composition of other entities will itself be found to be composed of parts. Thus on Zeno's assumptions it seems impossible to identify any basic unit in the composition of spatially extended entities. Even if the remark attributed here to Zeno is not authentic, it still nicely captures a serious problem arising from principles on which his arguments rely. One of these principles, that any spatially extended magnitude is infinitely divisible, would appear to run directly counter to Parmenides' claim that What Is is not divided. Alexander of Aphrodisias, at any rate, might seem to have thought as much, for Simplicius attributes to him the following line of reasoning with respect to Zeno's use of the argument from dichotomy: 'if what is $(\tau o \ \tilde{o}v)$ has magnitude and is divided, what is will be many and no longer one, and by this means he shows that the one does not at all belong among the things that are $(\mu \eta \delta \hat{e}v \ \tau \hat{o}v \ \tilde{v} v \tau \omega v \ \tilde{e} \sigma \tau \iota \ \tau o \ \tilde{e}v)$ ' (Alex.Aphr. ap. Simp. in Ph. 138. 4–6).

Whether Eudemus and Alexander meant to suggest that Zeno's arguments were actually designed to target Parmenides' monism as well as everyday pluralism, Simplicius took this to be his predecessors' point; he countered by insisting repeatedly that in Zeno's book he has found him arguing only against the hypothesis that there are many things (Simp. in Ph. 138. 20). Simplicius certainly seems to have had access to a collection of arguments by Zeno, 18 and he says that all the arguments in that work were designed to show that the assumption that there are many things leads to contradiction (in Ph. 138. 20, 139. 5-7). Although willing to countenance the idea that Zeno may have invented and even published arguments raising problems regarding the One for purely dialectical purposes (in Ph. 139. 3-5), Simplicius identifies Zeno's intention as indirect confirmation of the Parmenidean thesis that all things are one, so that he thinks Zeno hardly could have intended his arguments against common-sense pluralism to be equally effective against Parmenides' One (in Ph. 138. 21-2, 25-7, cf. 139. 16). His discussion of the issue he thinks is raised by the treatment of Zeno by Eudemus and then Alexander indicates that Simplicius knew of no Zenonian arguments explicitly targeting a monistic hypothesis. Simplicius also doubts that Zeno ever argued directly for monism, although he was familiar with another view to the effect that he did: he ascribes to Themistius the view that the first limb of Zeno's antinomy of large and small establishes that what is is one, in virtue of its premise that whatever is divisible into parts is not strictly speaking one but many 19 (Them. ap. Simp. in Ph. 139. 19–22,

Note in particular the way he introduces the antinomy of limited and unlimited: 'And what more need be said, when indeed it is transmitted in Zeno's very treatise? For showing that if there are many things, these same things are both limited and unlimited, Zeno explicitly writes the following $(\gamma\rho\dot{\alpha}\phi\epsilon\iota \tau a\hat{v}\tau a \kappa a\tau\dot{a} \lambda\dot{\epsilon}\xi\nu)\ldots$ ' (Simp. in Ph. 140. 27–9).

Although Simplicius' report of this limb of the antinomy of large and small is extremely elliptical, presumably Zeno's argument would have proceeded along some such lines as the following. Assume that there is a plurality of things, and let M_n be any member of this plurality. M_n must be the same as itself and therefore one thing. If M_n is one, it cannot be divided. For what is divisible into parts is not one but many. If M_n is one, indivisible, and without parts, M_n cannot be a spatially extended magnitude. For every spatially extended magnitude is (infinitely) divisible into parts. What is true of M_n is true of each member of the plurality of things. Therefore, each of the many has no magnitude.

cf. Them. *in Ph.* 12. 1–4). Simplicius himself, however, properly recognizes that Zeno's demonstrandum was that there are not multiple things, in so far as their existence was the assumption actually targeted for *reductio*. Nevertheless, it is possible that Themistius' line was part of a reaction against Eudemus and those who endorsed his analysis.

In fact, however, Simplicius (along with possibly others like Themistius) appears mistaken in supposing that Eudemus and, following him, Alexander went so far as to suggest that Zeno took aim at Parmenides as well as at ordinary pluralism. As already indicated, Eudemus was focused on the difficulty Zeno's arguments raise for attempts to provide an analysis of the composition of spatially extended physical bodies. Another passage from Simplicius, reporting Alexander on Eudemus, tends to confirm this point: 'He [Alexander] says: "As Eudemus records, Parmenides' associate Zeno attempted to show that it is not possible for entities to be many because of there being in entities nothing that is one, while the many are a mass of units" (Simp. in Ph. 99. 13-16). Again, the evidence suggests that Eudemus was particularly concerned, not with Zeno's relation to Parmenides, but with pointing out how Zeno's assumptions make it impossible to identify any basic unit in the composition of spatially extended entities. ²⁰ Eudemus had a fair point, moreover, for if one accepts the Zenonian assumptions that every spatially extended magnitude is infinitely divisible and that what is not a spatially extended magnitude is nothing, then, as already noted, it does in fact become impossible to identify a basic stratum of incomposite bodies from which other bodies are composed.

It would be wrong, of course, to think that Parmenides' account of $\tau \delta \epsilon' \delta \nu$ or What Is was an attempt to identify the basic unit of material composition, for it is wrong to think that $\tau \delta \epsilon' \delta \nu$ or What Is is some material principle manqué. Parmenides' cosmology has its own physical principles, light and night, and he is sufficiently clear that everything else (apart from What Is) is ultimately comprised of these. What Is is not the substance of the rest of the cosmos but occupies an altogether different place in his system. Still, Parmenides does conceive of What Is as a spatially extended entity (too much of his language has to be dismissed as merely metaphorical for this to be denied), and it will as such be subject to the kind of destructive analysis Zeno performs on the plural objects of experience. ²¹ Now, one way of trying to forestall

²⁰ So Kirk et al. 1983: 278-9 n. 2.

²¹ Kirk et al. 1983: 269, rightly acknowledge that the arguments of the antinomy of large and small are 'equally effective against Parmenides' conception of reality' and reject some of the suggestions that have been made to try to avoid this conclusion: 'In order to save Parmenides it has been said that Zeno thought infinite divisibility a consequence not of extension only ($\mu \acute{e}\gamma \epsilon \theta o s$) but of solidity ($\pi \acute{a}\chi o s$) or bulk ($\delta \gamma \kappa o s$). But his argument plainly and correctly assumes that mere extension is sufficient to generate the regress. It has been claimed that Eleatic monism denies extension to reality. But this seems plainly false.' For the first way of trying to avoid the implication that defenders of Zeno's orthodox Eleaticism find so unpalatable, see Furley 1967: 63–4; Furley himself already rejects the suggestion of Booth 1957b: 7, that Zeno failed to realize the full force of his own argument. For a critical review of these and other attempts to elude the implication, see Cordero 1988: 109–13 (cf. Leszl 1983: 26). Makin 1982: 223, makes it a principle of his reconstruction of Zeno's arguments that 'they should pose no threat to the Eleatic theory', counters the anticipated charge that 'seeking consistency with the Eleatic position will place an

the application of Zeno's destructive reasoning to Parmenidean Being would be to point to the passage where Parmenides himself denies that What Is is divided: 'Nor is it divided ($\delta\iota\alpha\iota\rho\epsilon\tau\delta\nu$), since it is all alike; | and it is not any more there, which would keep it from holding together, | nor any worse, but it is all replete with What Is. | Therefore it is all continuous ($\xi\nu\nu\epsilon\chi\dot{\epsilon}s$): for What Is draws to What Is' (fr. 8. 22–5). Themistius may well have had these lines in mind when he claimed that Zeno tried to prove the unity of what is from its being continuous and indivisible ($\epsilon\kappa$) $\tau o\hat{\nu}$ $\sigma\nu\nu\epsilon\chi\dot{\epsilon}s$ $\tau\epsilon$ $\epsilon \ell\nua\iota$ $\kappa\alpha\iota$ $\delta\iota\alpha\iota\rho\epsilon\tau\sigma\nu$, Them. Ph. 12. $2\approx$ Simp. in Ph. 139. 20–1).

If so, however, he would have had to neglect the fact that Parmenides and Zeno had altogether different conceptions of what it means to be subject to diairēsis. For Zeno, this was physical divisibility. For Parmenides, by contrast, it was the more qualitative conception of distinguishability. What licenses Parmenides' conclusion that What Is is not 'divided' ($\delta\iota\alpha\iota\rho\epsilon\tau\acute{o}\nu$) is the uniformity and self-similarity in virtue of which he describes it as continuous. His summation of what makes the entity he is describing not thus divided—'What Is draws to What Is $(\vec{\epsilon} \hat{o} \nu \dots \vec{\epsilon} \acute{o} \nu \tau \iota \pi \epsilon \lambda \acute{a} (\vec{\epsilon} \iota)$ ' (fr. 8. 25b)—would from Zeno's perspective justify precisely the opposite conclusion, since for him the spatial extension this conception implies entails being subject to division. The same kind of contrast is evident in Parmenides' and Zeno's conceptions of what it means to be $\frac{\partial \kappa}{\partial \nu} \eta \tau o \nu$. For Zeno, this is literally to be unmoving, and his most famous paradoxes are designed to demonstrate that motion is theoretically impossible. When Parmenides, however, speaks of What Is as $\alpha \kappa i \nu \eta \tau o \nu$ (fr. 8. 26), he apparently has qualitative immutability in mind at least as much as, and probably more than, change of place. Even so, in this third stage of the Way of Conviction, we find the Parmenidean conception that Zeno is most likely to have drawn on in framing his own arguments, if he did so at all. In the first limb of the Zenonian antinomy arguing that 'what is in motion moves neither in the place where it is nor in the place it is not' (D.L. 9. 72), where Zeno seems to have deployed his argument that the moving arrow is always at rest,²² he may have been inspired to some degree by elements in Parmenides' description of the changelessness of What Is at fr. 8. 29–30a: 'And remaining the same, in the same place, and on its own it rests, | and thus steadfast right there it remains' $(\tau\omega\dot{v}\tau\acute{o}v\ \tau'\ \acute{e}v\ \tau\omega\dot{v}\tau\acute{\omega}\ \tau\epsilon\ \mu\acute{e}vov\ \kappa\alpha\theta'\ \acute{e}av\tau\acute{o}\ \tau\epsilon$ κεῖται | χοὔτως ἔμπεδον $a\mathring{v}\theta$ ι μένει). These words vaguely anticipate Zeno's premise

unnecessary constraint on the interpretation of the arguments' (ibid.) by uncritically endorsing the conclusions of Vlastos 1975 as 'a thorough and convincing defense of Plato's testimony' (Makin 1982: 234 n. 5), and responds at some length to Barnes's opposing view (ibid. 234–5 n. 6). Makin's attempt to show that Zeno's arguments against plurality depend ultimately on the premise 'it is alike in every way' $(\pi \acute{\alpha} \nu \tau \eta)$ $\delta \mu o i\acute{\omega} \nu$ equires that we accept as genuinely Zenonian the argument from dichotomy to the conclusion $\delta \nu \tau \delta$ $\delta \nu$ quoted from Porphyry at Simp. in Ph. 139. 26–140. 6. Porphyry himself, however, attributes the argument to Parmenides, and it in fact appears to be a piece of imaginative reconstruction inspired by Plato's Parmenides rather than anything that can safely be attributed to Zeno. See also Curd 1993: 3–11, for a more recent attempt to avoid having Zeno's arguments undermine Parmenides, based on her thesis that Parmenides conceived of whatever is as an incorporeal 'predicational unity' (cf. Curd 1998a: 177 n. 132, and the somewhat different view of Zeno's relation to Parmenides presented at 178–9).

²² On the reconstruction of this argument, see, in addition to the general studies cited above at n. 2, Lear 1981; White 1982; Waterlow 1983.

that 'everything always is at rest when it is against what is equal $(\kappa\alpha\tau\dot{\alpha}\ \tau\dot{\alpha}\ \tau\dot{\alpha}\$

Zeno's Originality

In Zeno one finds something really quite different from anything one finds in Parmenides—a mathematical conception of space and extension, which, when applied to physical bodies naïvely conceived, makes both their composition and motion highly problematic. The importance of Zeno's achievement in supposing that the composition and motion of physical bodies can be mathematically modelled cannot be overstated, even if his applications of the infinity of the natural number series and its inversion to the analysis of space and extension led to paradox. His paradoxes opened the way to subsequent progress, for they compelled natural philosophers to advance beyond essentially qualitative models of composition to more quantitative models.

Parmenides' physical theory definitely belongs to the earlier phase of thought, as is evident when one tries, for instance, to apply Zeno's antinomy of limited and unlimited to the principles of Parmenides' cosmology. It may seem simple enough to run them through the antinomy's first arm, so as to conclude that the principles, light and night, must be just as many as they are, namely two. One might wonder even here, however, about the fact that one is apparently counting kinds of stuff rather than actual and determinate entities. It is difficult, though, even to apply the antinomy's second arm to light and night, for the way Parmenides conceives of them purely qualitatively rather than quantitatively makes it hard to imagine other things between them, as Zeno's argument requires. It likewise proves difficult to apply the antinomy of large and small to Parmenides' light and night, for the same simple reason that they are not conceived of as quantifiably extended magnitudes. 23

Zeno's mathematical model of space and extension, with its clearly quantitative concepts, presents an altogether new set of problems for the analysis of material constitution and for any account of the elements from which things are composed. Prior to Zeno, it had seemed enough to think of things as composed of stuffs the qualitative characteristics of which could, with varying degrees of plausibility,

²³ It is perhaps worth noting that Parmenides explicitly describes light as 'every way the same as itself, | yet not the same as the other [sc. night]' (fr. 8. 57b–8a), since he thus appears willing to countenance something Zeno might have thought intolerable. This description of light would seem to run afoul of the argument Plato quotes from Zeno against the hypothesis that there are many things: 'if entities are many, then they must be both like and unlike, but indeed this is impossible' (Prm. 127 E 1–3). There is, of course, no real contradiction in saying that light is the same as itself and not the same as night; and in the Parmenides Socrates counters Zeno's argument by making just the point that the appearance of contradiction may be removed by preserving the relevant qualifications. Still, if genuinely Zenonian, the argument Plato reports may perhaps have been inspired in part by an apparent contradiction Zeno detected in Parmenides' description of his own plural principles.

be claimed sufficient to account for the qualities of the things they comprise. Empedocles' four element theory is the most advanced theory of this type developed among the Presocratics, and we shall have more to say about its essentially qualitative character in Chapter 7. These early thinkers might be thought of as trying to do chemistry without physics, that is to say, as theorizing the formation of compounds from some elemental stuffs whose basic qualities are meant to be sufficient to account for the complex qualities of those compounds without as yet, however, having anything more than a rudimentary or everyday conception of how those compounds are actually composed from their primary constituents. After Zeno, this was no longer possible, for no one could ignore the problems of material structure and composition raised by his ingenious paradoxes, whether or not it was his intention to expose the inadequacy of his predecessors' purely qualitative models. The later physical theories of both Anaxagoras and the early atomists can each be seen as attempting to provide the account of the structure and composition of physical objects capable of meeting the challenge of Zeno's arguments and thereby providing natural philosophy the more adequate basis in a quantitative physical theory that Zeno had shown it required. Atomism involved rejecting the Zenonian principle that every spatially extended magnitude is infinitely divisible. Anaxagoras' physical theory accepts this Zenonian principle but rejects other principles on which his paradoxes rely. Since it is less generally accepted that Anaxagoras was responding to Zeno, and since the issues here relate directly to the important question of Parmenides' influence on Anaxagoras, we shall return to this claim in more detail in Chapter 6. There we shall see that Anaxagoras' physical theory is better understood as responding to the Zenonian rather than to any purportedly Parmenidean challenge to cosmology.

What, then, was Parmenides' influence on Zeno? Do any of the competing views canvassed in antiquity seem accurately to reflect what we have found by considering their own arguments? Probably Plato's *Parmenides* presents the most charitable view of the relation, namely, that Zeno's exposure of the problems inherent in unreflective pluralism provided indirect support for Parmenides, in so far as Zeno's arguments demonstrated, to those whose lack of understanding made them think Parmenides' ideas absurd, that their own views could also be made to seem ridiculous. Others in antiquity worried that Zeno's arguments would be as damaging to Parmenides' One Being as to common-sense pluralism. Aristotle's treatment of Zeno, like the little we know of Eudemus' treatment, suggests that Zeno's arguments actually had very little to do with Parmenides' poem. Aristotle never mentions Zeno in any of his extended discussions of Parmenides, whose views he discusses instead alongside Xenophanes' and Melissus', nor does Aristotle make any mention of Parmenides when analysing Zeno's paradoxes.²⁴ The view of the historical connection between the two figures

²⁴ The sole exception is a brief passage in the *Sophistical Refutations* where, while commenting on how the frequent disputes over terms, such as whether 'being' and 'unity' indicate the same thing in all cases, show that some fallacies based on homonymy are difficult even for experts to detect, Aristotle notes that 'some solve the *logos* of Zeno and of Parmenides by saying that "one" and "being" are said in many ways' (*SE* 33. 182^b26–7). Just what common *logos* Aristotle means to impute to Zeno and

reflected in this silence is most likely correct: Parmenides would seem to have had negligible influence on Zeno's new quantitative conception of space and magnitude and on his sophisticated methods of reductio. If Zeno's arguments would have been as effective against Parmenides' position as against the ordinary pluralism he seems explicitly to have targeted, if his argumentative methods were unprecedented, and if his willingness to argue for theses contradicted by our everyday experience was itself a departure from Parmenides' more traditional insistence that there is more to the world than what is presented in perception, then one must conclude that Zeno was an 'Eleatic' by birth only. Furthermore, unlike Parmenides, Zeno did present a radical challenge to the incipient project of philosophical cosmology. For his mathematical conception of the structure of space and his powerful combination of the principles that every spatially extended magnitude is infinitely divisible, and what is not a spatially extended magnitude is nothing, posed serious problems for how to understand the composition of spatially extended objects. The spur to the development of viable physical theories provided by his innovative arguments owes little to Parmenides. Either Parmenides' impact on Zeno's arguments was tangential and indirect, as Plato's fictionalized account of their visit to Athens suggests, or it was essentially non-existent, as the absence of any substantive association between the two in Aristotle indicates.

MELISSUS AND PARMENIDES

Melissus is famous for the tactical prowess he exhibited when in 441 BC he captained the navy of his native Samos to victory over the Athenian fleet (Plu. *Per.* 26. 2–3). His dialectical prowess was channelled into a prose treatise, *On nature, or On what is.*²⁵ In this work, Melissus argued that what is is ungenerated, sempiternal or

Parmenides is unclear, though it may be just the view he here takes as encapsulated in the tag, $\epsilon \nu \tau \delta \ddot{o} \nu$ ('being is one'), namely that 'being' and 'one' always have the same sense. What is more notable than the passing mention of Zeno and Parmenides together here is that when Aristotle himself comes to charge Parmenides with having assumed that 'being' is used in one sense only when it is in fact a $\pi o \lambda \lambda a \chi \dot{\omega} s \lambda \epsilon \gamma \dot{\omega} \mu \epsilon v o \nu$ (Ph. 1. 3. $186^{\circ}24-5$), he does so in the context of discussing Parmenides alongside Melissus, making no mention of Zeno in the extensive treatment of their views in Ph. 1. 2–3. See further discussion at Palmer 2004: 48–51, and pp. 221–3 below.

²⁵ Simplicius reports that Melissus entitled his treatise Π ερὶ φύσεως η περὶ τοῦ ὅντος (in Ph. 70. 16–17). The authenticity of this title has often been questioned, primarily on the grounds that the later tradition indiscriminately foisted the title Π ερὶ φύσεως onto the works of various Presocratics and that only in the sophistic period did it become common practice to give independent titles to works of prose. See Untersteiner 1956: pp. CCXLII ff., and esp. Schmalzriedt 1970. Schmalzriedt's negative verdict regarding the authenticity of the Melissan title reported by Simplicius requires him to be equally sceptical about the reported title of Gorgias' treatise (71–2, 128); but on this latter point Schmalzriedt's scepticism appears unwarranted and improperly motivated (cf. Huby 1973: 208). Many of the points made over the course of Schmalzriedt's study actually tend to support the authenticity of the Melissan title: for instance, that only in the sophistic period did it become common practice to give independent titles to prose works and that only then did the sense of the term ϕ ύσις reflected in the title Π ερὶ φύσεως emerge. Furthermore, the title Simplicius reports is not in fact the one commonly retrojected on the works of the early Presocratics. We may with some

everlasting, spatially unlimited, unique, and homogeneous; that it is prone to neither alteration, rearrangement, pain, nor anguish; and that it is a motionless plenum free from any division or variation in density. Because his vision of what is and the arguments he employed were in certain respects reminiscent of Parmenides, Melissus came to be associated with Parmenides from an early date as a proponent of the thesis that 'what is is one' ($\hat{\epsilon}\nu$ τ ò $\delta\nu$). Because of this association, Plato would mention Parmenides together with Melissus in the *Theaetetus*, and Aristotle would discuss their views together in *Physics* 1 and *Metaphysics* 1. Melissus is consequently often grouped with Parmenides among the later doxographers, historiographers, and commentators. It is no surprise, therefore, that association of Parmenides and Melissus has long been standard in modern histories of early Greek philosophy and that the derivation of the attributes of what is in Melissus' treatise has tended to be seen as a relatively faithful reworking of Parmenidean metaphysics, minus the poetic trappings and the cosmology.

The evidence of Plato, however, hardly legitimates the assimilation of Parmenides and Melissus (nor does Aristotle's evidence, as we shall see in due course). Plato's representation of Melissus' relation to Parmenides contrasts with both the *Parmenides*' depiction of Zeno as Parmenides' close friend and affiliate and the *Sophist*'s identification of Xenophanes as the patriarch of the 'Eleatic tribe'. One does not find in Plato the identification of Melissus as Parmenides' pupil that becomes a standard element in the later biographical and doxographical tradition, ²⁶ and in fact Plato seems not to regard Melissus as a typical Eleatic. ²⁷ Despite what would appear to be similarities in their systems, Plato remains wary about associating the two thinkers too closely. This concern is most evident in the remarks he has Socrates make at *Theaetetus* 183 E–184 A. Earlier in the dialogue, Socrates has set the various partisans of the secret doctrine in opposition to the 'Melissuses' and 'Parmenideses' who maintain 'that everything is one and that it stands at rest in itself since it has no space in which it might move' (180 E 2–4). ²⁸ After the ensuing refutation of the Heraclitean position, Theaetetus says he will not let Theodorus and Socrates off

measure of confidence conclude that Gorgias, who was in any case clearly familiar with the content of Melissus' treatise, already knew it by this title; this is in turn a strong indication that Melissus himself gave his work this title. The title is defended as authentic by Reale 1970: 22–4; more recently it has been pronounced 'probably authentic, despite some scholars' hesitations' by Sedley 1999: 125.

Cf. e.g. D.L. 9. 24; Eus. PE 10. 14. 15, 14. 3. 9, 14. 17. 10; Thdrt. Gr.aff.cur. 4. 8–9.
 Cf. Kirk and Stokes 1960: 3.

The odd plurals, M ελισσοί τε καὶ Παρμενίδαι, which might equally well be translated 'people like Melissus and Parmenides', as well as the order of mention, may already be some indication of Plato's sense that the inherited εν τὸ ὅν (εν τὸ πᾶν rubric is ill-suited as an encapsulation of Parmenides' philosophy. Although Plato at Tht. 180 D 7–E 1 quotes a version of Parm. fr. 8. 38 which asserts that What Is is unchanging (ἀκίνητον) and at Sph. 249 C 10–D 1 (cf. 252 A 5–10) indiscriminately attributes to Eleatic advocates of the One the thesis that the all is at rest (τὸ πᾶν εστηκόs), the supporting reason given here, that there is no space in which it might move, reflects the specifically Melissan argument for the immobility of what is. Cf. Simp. in Ph. 112. 7–10, and Kirk and Stokes 1960: 2–3.

the hook until they have dealt with these other parties 'who declare that the all is at rest' (183 \subset 8-D 2).

Socrates, however, begs off having to deal with the partisans of this view. When pressed by Theodorus to explain why he will not honour Theaetetus' request, Socrates excuses himself on the ground that a proper treatment of these thinkers would be an unmanageably vast task and thus too great a detour from their main inquiry into the nature of knowledge. Socrates prefaces this explanation with the following personal aside:

Although I would be ashamed if we were to examine in a crude way $(\phi o \rho \tau \iota \kappa \hat{\omega} s)$ Melissus and the others who say that the all is one at rest, I would be less ashamed than if we were thus to examine that singular being Parmenides. Parmenides seems to me, to quote Homer, both 'venerable and awe-inspiring'. For I encountered the man when he was quite old and I quite young, and he struck me as having a certain depth that was altogether noble. Therefore I fear that we might not understand his words and that we might fail even further in attempting to understand what he meant when he uttered them. (*Tht.* 183 E 3–184 A 3)

Plato is, of course, having the character Socrates allude to the fictionalized encounter with Parmenides that provides the dramatic setting for the Parmenides' extended examination of the Eleatic thesis. Socrates' reluctance to explore that thesis, particularly as expressed in the last sentence of this passage, quite clearly signals the difficulties Plato recognizes are involved in understanding what Parmenides meant when he maintained that the all is one. Plato would presumably not have marked Parmenides' position as so difficult, and at the same time so profound, if he thought it simply equivalent to the strict monistic thesis that only one thing exists. While this may accurately encapsulate the upshot of Melissus' arguments, Socrates' greater respect for Parmenides and his hesitation about misunderstanding the thought behind Parmenides' words together suggest a resistance to any reductive assimilation of Melissus' and Parmenides' positions, despite the apparent similarities that made it possible for them to be grouped together under such rubrics as 'the all is one at rest'. There is, moreover, reason to suppose that Socrates' indication here that he would be more ashamed to examine Parmenides' thought than Melissus' 'in a crude way $(\phi o \rho \tau \iota \kappa \hat{\omega} s)$ ' was taken by Aristotle as suggesting that Melissus' position is itself crude in comparison to Parmenides'. For in *Physics* 1. 2 Aristotle echoes the language of this passage in distinguishing Melissus' conception from Parmenides' as being rather crude (φορτικός, 185^a10–11). Whatever Plato's own judgement may have been about the merits of Melissus' thought, he at any rate has Socrates make it quite plain that he takes Parmenides much more seriously. Plato certainly seems uncomfortable about associating Melissus too closely with Parmenides.

Although the reading of Parmenides we have developed differs in some significant respects from the Platonic reading suggested by the evidence of the dialogues, the two are sufficiently close to make it clear that Plato was right to have had his reservations about the association of Parmenides and Melissus. Given our modal interpretation of Parmenides, it might seem hardly necessary to argue the distinction between Melissus' metaphysical stance and that of Parmenides. For Melissus does seem to have been an advocate of strict monism, the thesis that exactly one thing exists, while

Parmenides' view that there is just one entity that is (what it is) and cannot not be (what it is) is perfectly compatible with the existence of the vast array of mutable entities comprising the remainder of the world's population. That said, our recognition of Parmenides' shorthand use of the phrase $\tau \delta \stackrel{?}{\epsilon} \acute{\epsilon} \acute{\epsilon} \upsilon$ ('what is' or 'being') to signify what enjoys the mode of being specified in fr. 2. 3—namely, what is and cannot not be—and of how this use prefigures the use of $\tau \delta$ $\delta \nu$ ('what is' or 'being') by Aristotle and other philosophers to designate what really or only is,²⁹ means that some argument is now required to reinforce the normal understanding of Melissus as a strict monist and thus to show that this distinction between his position and Parmenides' is correct. For it now seems at least possible that Melissus, in arguing that 'only one thing is' (ἐν μόνον ἔστιν, fr. 8. 1), meant that there is only one thing that is in just this way, that is, only one thing that really or only is. If this is the case, then his monism might, like Parmenides', also be of the generous variety. What will actually emerge from considering this possibility, however, is that while it makes sense to understand his metaphysical stance as involving the claim that there is only one thing that really or only is, his derivation of its attributes nonetheless shows that his monism is anything but generous.

It will be worth drawing attention to some of the immediately apparent differences between Melissus' treatise and Parmenides' poem. First, the absence of anything like Parmenides' proem in Melissus and his adoption of prose rather than verse as his medium both suggest that Melissus is much less concerned than Parmenides with relating his pronouncements to pre-philosophical traditions. Second, despite some sporadic and readily refutable claims to the contrary, there is no good evidence that Melissus' treatise included a cosmology. 30 On this point the silence of the later tradition seems all but decisive: if Melissus had presented any views on questions in natural philosophy, surely some trace of them would have been preserved somewhere in the extant remains of ancient philosophical historiography and commentary. Absent any direct evidence that Melissus' treatise dealt with such questions, the nearest indication that his treatise had a lost cosmological portion might seem to come in the midst of Simplicius' efforts to explain Aristotle's claim that Melissus and Parmenides' views do not belong to the domain of natural science (Arist. Cael. 3. 1. 298^b17–18) in face of the objection that they called their works $\Pi \epsilon \rho i \phi i \sigma \epsilon \omega s$ or On nature. Simplicius explains that 'they spoke in their books not only about things beyond nature but also about natural things, and for this reason perhaps they did not avoid employing the title, On nature' (Simp. in Cael. 556. 28–30). But one certainly cannot conclude from this that Simplicius knew of any Melissan cosmology. For not only would Melissus fr. 8 be sufficient basis for a claim that Melissus' treatise dealt

²⁹ See above, pp. 102–8, 125–33.

Reinhardt 1916: 71–2, attempted to understand Melissus fr. 8, not as a denial of status to the phenomenal world, but as a justification and systematic account of that world corresponding to the second part of Parmenides' poem. This line of interpretation, however, has met with little sympathy; for criticisms, see Reale 1970: 235–8. More recently, Bicknell 1982 claimed to have found evidence for a Melissan cosmology concealed in the testimonium on Metrodorus of Chios found in an extract by Eusebius from the pseudo-Plutarchean *Stromateis* (Eus. *PE* 1. 8. 11). See Palmer 2001 on why Bicknell's proposal should not be accepted.

with natural things, but Simplicius just prior to these lines is quite clear about Melissus' view of the world of becoming: 'He [sc. Aristotle] handles Melissus and Parmenides first, of whom the former says there altogether is no coming to be, while Parmenides says not with respect to truth but with respect to opinion' (in Cael. 556. 12–14). Further on, Simplicius points out that Melissus' full title, $\Pi\epsilon\rho$ $\dot{\nu}$ $\dot{$

Melissus began with the following declaration and supporting argument: 'Whatever was always was and always will be. For if it came to be, it is necessary that prior to its coming to be there is nothing; if then nothing there was, in no way could anything come to be from nothing' (fr. 1).³¹ The first sentence of fr. 2, which may well have followed without interruption, completes the argument: 'Since then it did not come to be, it is and always was and always will be'. 32 Employing his preferred method of indirect proof, Melissus here in fr. 1 relies on the principle that there is no genesis ex nihilo, which Aristotle correctly identifies as a 'common opinion' of the natural philosophers (*Ph.* 1. 4. 187^a27–9, *Metaph.* 11. 6. 1062^b24–6, cf. *Metaph.* 1. 3. 984^a32-3). Simplicius in fact twice points out Melissus' reliance on this principle in his opening argument (Simp. in Ph. 103. 13-15, 162. 23-4). Even if Melissus can secure via this principle that whatever was must always have been, he requires something more to secure the remainder of his conclusion, that whatever was always will be. Whether or not an argument for this further conclusion once stood between our frs. 1 and 2, the beginning of fr. 2 in any case states the ground for the joint conclusion, namely that it (sc. $\ddot{o} \tau \iota \dot{\eta} \nu$, 'whatever was') was not generated. One may bridge the apparent gap in Melissus' reasoning by crediting him with the assumption that only what is generated is subject to destruction.

One might, moreover, suppose Melissus to be drawing upon Parmenides' arguments against the possible generation of What Is: 'for what birth will you seek of it? | How, whence increased? From not being I shall not allow | you to say or to think: for not to be said and not to be thought | is it that it is not. And indeed what need could have aroused it | later rather than before, beginning from nothing, to grow?' (fr. 8. 6b–10). As we have seen, however, the prohibitions of Parmenides' goddess here

On the legitimacy of Aristotle's ascription, see p. 226 below.

 $^{^{31}}$ ἀεὶ ἦν ὅ τι ἦν καὶ ἀεὶ ἔσται. εἰ γὰρ ἐγένετο, ἀναγκαιόν ἐστι πρὶν γενέσθαι εἶναι μηδέν· εἰ τοίνυν μηδὲν ἦν, οὐδαμὰ ἂν γένοιτο οὐδὲν ἐκ μηδενός. The absence of a connecting particle at the beginning of this fragment suggests that these words stood at the beginning of Melissus' treatise. Some have supposed that the opening of the anonymous paraphrase of Melissus' argument preserved ap. Simp. in Ph. 103. 15–104. 15—'If on the one hand nothing is, what could one say about this as if it were something?'—reflects a prior argument by Melissus that something is. On the error of this supposition, see Palmer 2004: 35–7.

³² Punctuating with a full stop after έσται since what follows introduces a fresh demonstrandum: ὅτε τοίνυν οὐκ ἐγένετο, ἔστι τε καὶ ἀεὶ ἦν καὶ ἀεὶ ἔσται. καὶ ἀρχὴν οὐκ ἔχει οὐδὲ τελευτήν, ἀλλὶ ἄπειρόν ἐστιν.

apply specifically and only to what is and cannot not be. Night is quite correct to remind Parmenides of the illegitimacy of speaking or thinking of what is and cannot not be as ever having not been. What must be cannot have once not been. There is, however, no general prohibition against genesis *ex nihilo* in Parmenides fr. 8. 6b–9a, only the specific prohibition against what must be ever having not been. The stretch of reasoning in fr. 8. 9b–10 comes closer to a general prohibition, given its reliance on a version of the universally applicable principle of sufficient reason. But here too the immediate object of concern is what must be, not whatever else merely happens to be but need not be, so that these verses are no precedent for Melissus' unrestricted declaration in fr. 1 that 'in no way could anything come to be from nothing'.

Already we encounter a critical difference between Parmenides and Melissus. Parmenides is first concerned with whatever enjoys the necessary mode of being specified in fr. 2. 3. The major deduction and revelation comprising the Way of Conviction is devoted to determining just what such an entity must be like, simply in virtue of its mode of being. By contrast, the subject Melissus takes at the outset of his main deduction is 'whatever was' ($\delta' \tau \iota \hat{\eta} \nu$). The universal quantification and the lack of modal restriction makes this a subject quite different from Parmenides'. Furthermore, the generality of the subject phrase, the past tense of the verb, and the fact that his declaration that whatever was 'always was and always will be' came right at the beginning of Melissus' treatise make it most unlikely that the verb 'to be' here is being used in any restricted manner. Melissus' subject, at least initially, is not whatever must be but simply whatever was or happened to be. Once he argues that whatever was always was and will be, then the subject in effect becomes, more simply, whatever is. While Melissus' initial argument does not avail itself of the philosophical use of the verb 'to be' introduced by Parmenides, it does nonetheless involve a move towards restricting application of 'being' to things that are not subject to coming to be: if whatever is always was and always will be, then whatever has not always been and will not always be-that is, whatever is subject to becoming and perishing—cannot be something that 'is'.

Once Melissus has, as he thinks, won this restriction of talk of 'being' to what is always (tantamount on an actualist conception of modality to what necessarily is), he has secured the major basis for the ensuing derivation of his subject's attributes, especially the subsidiary attributes derived in fr. 7. What is always must be temporally unlimited, without beginning or end, as he argues in the remainder of fr. 2. He then argues, in an apparent equivocation, that what is must likewise be spatially unlimited (frs. 3 and 4) and thus one or unique (frs. 5 and 6). He seems then to have argued, via yet another equivocation, that, since what is is one, it must also be homogeneous, 34 thus completing the derivation of the central attributes of what is,

The equivocation is upon 'one ($\ell \nu$)', which first appears to designate the uniqueness of what is but then is used in the sense of 'uniform'. There is no argument for homogeneity in the fragments. The evidence of the summary paraphrase preserved by Simplicius suggests that Melissus may have simply asserted homogeneity as a direct consequence of uniqueness: 'What is one is always similar to itself' (Simp. *in Ph.* 103. 31). On the other hand, the mention of the attribute of homogeneity at the end of fr. 7. 1's retrospective summary suggests that Melissus may have presented some

marked by the interim conclusion: 'So then it is everlasting, unlimited, one, and all alike' (οὕτως οὖν ἀίδιόν ἐστι καὶ ἄπειρον καὶ ἔν καὶ ὅμοιον πᾶν, fr. 7. 1). In the ensuing arguments designed to show that what is must be unchanging in all respects, suffering neither diminution, growth, rearrangement, pain, nor distress (fr. 7. 2–6), Melissus not surprisingly stresses that these varieties of change all involve some form of becoming and/or perishing of what is. Only his striking final argument against motion (to which we shall return) fails to rely on the distinction, articulated at the very outset of his argument, according to which whatever is cannot be subject to becoming, while whatever becomes cannot properly be said to be.

The notion that nothing that changes can properly be said to 'be' plays even more of a central role in fr. 8. This portion of the treatise begins with a characterization of the foregoing deduction as the greatest indication or proof that 'one thing alone is' $(\mathring{\epsilon}\nu \,\mu\acute{o}\nuο\nu\, \mathring{\epsilon}\sigma\tau\iota\nu$, fr. 8. 1). While these words are obviously meant to encapsulate that deduction's result, their precise sense can seem uncertain. Initially, the most tempting way to understand them may be as an assertion of strict monism, as if they signified that there is only one thing or even that one thing alone exists. While this does appear to be an entailment of Melissus' argumentation to this point, what follows here in fr. 8 suggests that we should have reservations about construing the verb here only existentially. Melissus begins a fresh argument for his claim that one thing alone is by saying, 'for if many things were, these would have to be just such as I say the One is' (εἰ γὰρ ἦν πολλά, τοιαῦτα χρὴ αὐτὰ εἶναι οἶόν περ ἐγώ φημι τὸ ἕν $\epsilon \hat{i} \nu \alpha \iota$, fr. 8. 2). It is important to ask why Melissus supposes that this is the case. Whence derives the necessity of things other than the One being such as he has shown the One to be? Melissus provides the material for answering this question in what immediately follows:

For if earth is and water and air and fire and iron and gold, and the living and the dead, and black and white and other things such as people say are real ($\delta \sigma a \phi \alpha \sigma \partial \nu o \delta \alpha \theta \rho \omega \sigma o \delta \delta \nu a \delta \rho \omega o \delta \delta \rho o \delta \delta v a \delta \rho o \delta \rho o \delta \delta \rho o \delta \rho o \delta \delta \rho o \delta \rho \rho$

The list here of things people say are real contains both elemental stuffs (earth, water, air, fire, iron, gold) and pairs of opposites (the living and the dead, black and white, etc.). One might suppose that Melissus is alluding to the elements of the Empedoclean and Anaxagorean physical theories. Let us, however, momentarily disregard the possible origin of Melissus' list of things people say are real and focus

argument on its behalf in the initial sequence, and in fact the MXG attributes to Melissus a set of intermediate premises for inferring the homogeneity of what is from its uniqueness: 'Being one, it is in every way alike; for if it were not alike, being several things it would no longer be one but many' $(974^{a}12-14)$. Since indirect proof is one of Melissus' favoured forms of reasoning, it may well be the case that the MXG in this instance reflects Melissus' own reasoning (cf. Reale 1970: 149–50).

³⁵ See Palmer 2004: 25–34, for a treatment of Melissus' successive arguments for the attributes of what is, compared and contrasted with the attributes of Parmenidean Being and the arguments for them in the Way of Conviction.

on how this passage supports and clarifies the antecedent claim that if many things were, they would have to be such as Melissus has said the One is.

In the first place, the passage shows that in making this claim Melissus does not mean to say that each of them must display the full range of attributes he has shown the One to have (though this may well be entailed by what he means to say), but instead that whatever is must be what it is eternally and immutably. The passage's logic is as follows. People are prone to say that all manner of things 'are', but since this verb properly applies only to things that are (what they are) always and invariably, if we are right to say that the various objects of our experience 'are', then they must perpetually be just as we encounter them, and they cannot be subject to change or alteration. The passage is not concerned with the mere existence of earth, water, air, and the rest, but with the question of whether any of these things can properly be said to 'be', that is, whether any of these things really are, where this is taken by Melissus to amount to their only, or ever and immutably, being (what they are). In short, Melissus denies that entities subject to change can properly or strictly be said to 'be'. This is not immediately equivalent, however, to denying that entities subject to change do not exist. It is only to say what we have already seen that certain Greek philosophers, including Plato, were prone to say in the wake of Parmenides' isolation of a restricted use of the verb 'to be', namely, that things subject to becoming should not, strictly speaking, be said to be.

The way Melissus develops his argument confirms that this is the point he wants to make, in the process suggesting that his listing of the kinds of things 'people say are real' is meant to represent an everyday ontology rather than the elements of any particular Presocratic system. Melissus proceeds to make the point that we do in fact suppose 'that we correctly see, hear, and apprehend things' (fr. 8. 2), and that we have experience of all manner of things becoming different and altering, of what's hot becoming cold, what's hard becoming soft, and what's living dying, and vice versa in each case: 'it seems to us that all these things become different', he says, 'and whatever was and what is now are nothing alike' (fr. 8. 3). The examples of alteration leading to this generalization pick up the second group of fr. 8. 2's instances of things people say are real, namely pairs of opposites. The last of these examples, what's living and what's not living, is in fact the first pair of opposites in the earlier list. The examples that follow in the remainder of fr. 8. 3 then pick up the first group, the elemental stuffs. Iron and gold reappear here, along with stone, as instances of things that appear strong and permanent but that we know from our own experience are gradually worn down, as when an iron ring, in Melissus' own example, is worn down by rubbing against the finger that wears it. Earth and water reappear in the example of the opposite kind of process, whereby the solid and durable earth and stone come to be from water, in an apparent reference to phenomena like silting or the depositing of sediment.

That Melissus appeals to how 'we' speak and how things seem to 'us' for his examples of alteration, together with the fact that the opposites and stuffs mentioned in his two sets of examples quite clearly pick up from the preceding list of the kinds of things 'people' say are real, indicates that Melissus does not mean to single out the fundamental entities of natural philosophers such as Empedocles or Anaxagoras.

In the remainder of fr. 8, Melissus develops the idea, already contained in this interim conclusion, that it is inappropriate to class the mutable objects of our normal experience as things that are (what they are), given that they eventually and inevitably cease to be what they happen to be at the moment we encounter them. Melissus elicits what he takes to be the contradiction between our experience of the mutability of things and what would be entailed by saying that such things 'are': 'while we say that many things "are" (εἶναι) and so eternal and having their own characters and strength, it seems to us that all things become different and change from how they appear on any particular occasion' (fr. 8. 4).36 This is a simple summary of the contradiction elicited by the analysis in fr. 8. 2–3. On the one hand, if the things people speak of as being real are in fact so, then each of them must always be just as it is (\approx fr. 8. 2), and yet experience shows that even those things that seem strong and permanent do not continue being what they once appeared to be (\approx fr. 8. 3). Melissus then responds to this dilemma by rejecting the hypothesis that numerous things 'are', a hypothesis based on the impressions of stability that lead people to speak of various things as 'being' or 'being real'. 'Therefore it is clear', he says, 'that we have not seen correctly and that those many things do not correctly seem to be $(\epsilon \hat{i} \nu a i)$: for they would not change if they were real $(\epsilon \hat{i} \ \hat{a} \lambda \eta \theta \hat{\eta} \ \hat{\eta} \nu)$, but each would be just such as it appeared to be; for nothing is stronger than real being $(\tau \circ \hat{v} \dots \hat{\epsilon} \acute{o} \nu \tau \circ s)$ $\partial \lambda \eta \theta \iota \nu o \hat{v}$)' (fr. 8. 5). Here Melissus' intended equivalence between 'being' and 'being' real' is as clear as one could desire. Equally clear is what it means for him for something to be or be real, namely that it not be subject to change. The sense of the odd-sounding claim that nothing is stronger than 'real being' seems to be that if something (really) is, then there is no possibility of it being overpowered, so to speak, and compelled either to alter or to cease to be. 37

Makin 2005: 282, dubs this the 'Nothing Stronger' principle and recasts it as, 'Nothing can overturn what is true and real'. Thus formulated, it plays a key role in his reconstruction of fr. 8's

 $^{^{36}}$ φαμένοις γὰρ εἶναι πολλὰ καὶ ἀίδια καὶ εἴδη τε καὶ ἰσχὺν ἔχοντα, πάντα ἑτεροιοῦσθαι ἡμῖν δοκεῖ καὶ μεταπίπτειν ἐκ τοῦ ἑκάστοτε ὁρωμένου (fr. 8. 4 ap. Simp. in Cael. 559. 6–8). The omission of the καί preceding ἀίδια in several manuscripts, along with puzzlement as to why Melissus should be claiming that we say that many things not only are but are eternal, has made the sense of the first clause seem problematic. The perceived problems and proposed solutions are succinctly reviewed at Reale 1970: 402; cf. Calogero 1932: 97–8 n. 16. The problems are resolved by taking the initial καί as epexegetic, as in this translation.

While it has often been assumed that Melissus' argument is designed to demonstrate the mendacious and unreliable character of our sensory experience, it actually relies heavily on our experience of things as subject to eventual alteration. Sensation is here said to be unreliable only in so far as it leads people to suppose that its objects may legitimately be said to 'be', when in fact, according to Melissus, only what always is what it is really is. Quite clearly, Melissus in fr. 8 is not simply arguing that the multiple and mutable objects of our everyday experience do not exist. The line of reasoning pursued in this fragment is perfectly compatible with the existence of these things. More than that, the argument actually *relies* on their existence in so far as its leverage against the hypothesis that many things 'are' is gained by endorsing our experience of their mutability. So it is not surprising that the argument's conclusion that it is illegitimate to characterize the many things people normally say 'are' as really being does not mean that these many things do not exist: that it is not the case that *x* always is whatever it happens to be at some time does not entail that *x* never is what it is, much less that it does not exist or is not anything.

Should we conclude from fr. 8, then, that Melissus was a generous monist? Did he hold that there is just one entity that really or only is (what it is), while there are innumerable other things that imperfectly or contingently are (what they are), in that they are subject to various kinds of change? The complex argument we have just been considering certainly appears compatible with such a position. If it were all that had survived of his treatise, we might well have concluded that his monism was in fact generous. As things stand, however, Melissus can be seen to go further than merely urging a reform of natural language that would restrict application of the verb 'is' to things that always and invariably are what they are. For the conception of what is previously developed in what he calls his 'greatest proof' that only one thing is precludes the possibility of any locally and temporally restricted entities existing alongside and/or within it. Since what is, according to Melissus, is spatially

argument, as a principle the opponent Makin conjures for Melissus is himself supposed to accept. Makin presumes Parmenides was a strict monist who denied all plurality and change, and he supposes Melissus sought to defend Parmenides by arguing against an imaginary opponent of Eleatic orthodoxy, for whom he invents an elaborate identity as the 'Bluff Realist' to fit this purported dialectical context (275-81). Although Makin belabours the criterion of dialectical relevance, the dialectical context he envisages for Melissus' treatise is unhistorical. Melissus was not, as Plato suggests Zeno was, a defender of Parmenides against those who found his views ridiculous. It is thus no surprise that Makin's eventual reconstruction of Melissus' argument is so flawed (he repeatedly and wrongly insists, for instance, that the argument appeals to an Eleatic argument against change, and he even misconstrues the force of the claim that 'nothing is stronger than real being'). Melissus' actual strategy conforms to his announcement, at the beginning of fr. 8, that he will offer further indications that εν μόνον ἔστιν by targeting the supposition that many things are, given that if they were $(\epsilon i \gamma \acute{a} \rho \mathring{\eta} \nu \pi o \lambda \lambda \acute{a} \dots, \text{fr. } 8.2)$, they would have to be such as he has shown the One to be, since he claims already to have shown what whatever is must be like. In fr. 8. 5, 'nothing is stronger than real being' serves, rather rhetorically, to justify what is essentially the same point made in this original articulation of the supposition at fr. 8. 2: 'they would not change if they were real $(\epsilon i \ \hat{a} \lambda \eta \theta \hat{\eta} \ \hat{\eta} \nu)$, but each would be just such as it appeared to be now—something that the numerous intervening examples have shown is contradicted by the fact that all the things we say are eventually fail to be what we once perceived them to be. Makin proclaims the superiority of his reconstruction over the one provisionally provided at Palmer 2004: 38-9, but he simply ignores the evidence there that undermines his presumption that Parmenides and Melissus were 'Eleatic allies'.

unlimited, nothing can exist outside of it. Thus if there are, in addition to what is, entities whose existence is merely contingent and restricted, there must be a way for them to exist within and alongside what is. This possibility, however, is ruled out by Melissus' argument that, since there is no void or emptiness, what is is a motionless plenum with no variation in density (fr. 7. 7–10). Thus not only is what is, as Melissus conceives it, the only entity that 'is' what it is eternally and immutably, but its character is such that its presence precludes that of any other entities. There is literally no room in Melissus' world for temporally and spatially limited entities that are subject to change.

So despite fr. 8's apparent compatibility, on its own, with the weaker thesis that the ordinary objects of sensation should not strictly speaking be said to 'be' since they are subject to change, Melissus may have supposed that fr. 8's argument entitles him to the stronger thesis that everyday things do not really exist at all. This is because there is much the same ambiguity in the Greek phrase, $\epsilon \hat{i} \nu \alpha \iota \, d\lambda \eta \theta \hat{\eta}$, which we have been translating as 'to be real', as in this English phrase. Sometimes 'x is real' means merely that x exists or is really there. In other contexts, 'x really is F' means that x is F unqualifiedly or without the deficiencies of other things we may say are F. It is not quite so normal for us to say simply 'x really is' as a way of indicating that x is (what it is) or exists unqualifiedly, for the notion of unqualified being does not feature in our everyday parlance. This is true of both English and Greek. The relevant ambiguity with respect to Melissus is nonetheless between x merely existing and x existing unqualifiedly, it being possible to express either notion by use of the phrase, $\epsilon i \nu a \iota$ $d\lambda\eta\theta\hat{\eta}$. Given how he has traded on equivocation in his 'greatest proof' that only one thing is, it would not be surprising if Melissus tried to argue that the multiple and mutable objects of our experience are not real, that is, do not exist, by arguing that the things people normally say are real are not, in that they are not always such as they at one time appear to be. The ambiguity such an equivocation would trade on already seems present in Melissus' description of earth, water, air, and so on as well as various opposites as the kinds of thing 'people say are real $(\epsilon \hat{i} \nu \alpha \iota \ \hat{a} \lambda \eta \theta \hat{\eta})$ ' (fr. 8. 2). For ordinary people, if they say this, surely do not mean that all such things exist or are what they are unqualifiedly, and yet this is the 'error' of common parlance that Melissus proceeds to 'correct' by arguing that only what is in the manner he has shown the One to be can properly be said to 'be'. Whether or not Melissus' argument in fr. 8 equivocates in this way, ultimately his position remains that there exists just one thing, an everlasting, spatially infinite, and unchanging plenum with no internal differentiation. With this position goes the corollary that none of the familiar objects of our everyday experience exist.

In the end, Melissus' position should be seen as a deformation of Parmenidean ontology. Whereas Parmenides had pursued an inquiry into the nature of what is and cannot not be, contrasting this mode of being with that of the entities people normally focus their attention on, Melissus tries to argue that *whatever is* must be always and invariably, like Parmenides' necessary being. Whereas Parmenides' deduction in the Way of Conviction was an attempt to form a clearer conception of What Is $(\tau o) \epsilon (\delta v)$ by exploring the implications of its modality, thus showing that it must be ungenerated and deathless, whole, uniform, motionless, and perfect,

Melissus' deduction purports to show that whatever there is has more or less analogous features. If, moreover, whatever is must always and invariably be what it is, then it is hardly surprising that there is no place in Melissus' ontology for entities that exist or are what they are only contingently; and it is thus no surprise that Melissus does not include, alongside his account of what really is, a cosmology or general account of things subject to change. Having effectively denied their existence, he makes no attempt to explain them. 38 We have seen how the conventional ascription to Parmenides of the paradoxical metaphysical thesis of strict monism, along with the corollaries that the world of our ordinary experience is a non-existent illusion and that our sensory evidence to the contrary is altogether deceptive, derives from the disastrous mistake of ignoring Parmenides' modal distinctions. A similar disregard lies at the heart of Melissus' own deformation of his metaphysical outlook. Unlike those in modern times whose view of Parmenides has been unduly influenced by Melissus' treatise, Melissus himself could perhaps plead forgiveness on the ground that Parmenides' modal distinctions—and, in particular, his idea that there is something that is and cannot not be, and his frequently restrictive use of the verb 'to be' in designating this entity—were so novel that Melissus proved unable to handle them correctly. While this seems to some extent to have been the case, Melissus' treatise also seems deliberately provocative, even perverse, in its advocacy of strict monism. Melissus, in short, would rightly have been seen by his contemporaries as an eristic. Considering the evidence that some of them did in fact see him this way will help further clarify Melissus' relation to Parmenides.

MELISSUS AS AN ERISTIC

Both Aristotle and Isocrates provide useful guidance on the question of Melissus' purposes by suggesting the contemporary framework within which to situate his wildly paradoxical view that there is only one thing. In the *Physics*, Aristotle dismisses the position that what is is one and unchanging, in the sense in which he there understands it to have been maintained by Melissus and Parmenides, as largely irrelevant to the inquiry into nature:

Examining whether it is one in this sense is like arguing against any other thesis ($\theta \not\in \sigma_{iS}$) propounded for the sake of argument (e.g. the Heraclitean thesis, or if someone should say that what is is a single human being), or like refuting an eristic account ($\lambda \acute{o}yov \ \acute{e}\rho\iota\sigma\tau\iota\kappa\acute{o}v$), which in fact both these arguments are, both that of Melissus and that of Parmenides. For they assume false premises and their reasoning does not follow. Or rather, the argument of Melissus is crude and provides no difficulty, but once a single absurdity is granted, the rest follows. But this is nothing difficult to deal with. (*Ph.* 1. 2. 185°5–12)

Although one might well be uncomfortable with such a characterization of Parmenides' position (as we shall presently see that Aristotle himself soon is), the characterization of Melissus' purpose as essentially one of eristic controversy has the

³⁸ See further Palmer 2001 and 2004: 22–3 with nn. 8 and 9.

ring of truth. Here it is useful to set alongside the *Physics* passage Aristotle's actual definition of a *thesis* in the *Topics*: 'A *thesis* is a conception contrary to general opinion but propounded by someone famous as a philosopher; for example, "Contradiction is impossible", as Antisthenes said, or the opinion of Heraclitus that "All things are changing", or "Being is one", as Melissus says; for to pay any attention when an ordinary person sets forth views which are contrary to received opinions is foolish' (*Top.* 1. 11. 104^b19-22 , after Forster). So Aristotle seems to have seen Melissus as a practitioner of eristic argumentation, a trafficker in deliberate paradox who aimed to confound general opinion. It is highly suggestive to see Aristotle setting the Melissan thesis that what is is one ($\hat{\epsilon}_{\nu} \tau \hat{o} \delta_{\nu}$), with no mention of Parmenides, alongside two of the most notorious sophistic theses, Antisthenes' denial of the possibility of contradiction and the doctrine of radical flux typically associated with the neo-Heraclitean Cratylus.

While, as with Zeno, it would probably be going too far to label Melissus a 'sophist', it is at any rate clear that he belongs to an intellectual milieu quite different from that of Parmenides. He seems to have been roughly contemporary with Socrates and, like him, active during the period of the sophists' rise to prominence in the latter half of the fifth century. Looking back on this period, Isocrates opens his Encomium of Helen by ridiculing those pretentious thinkers who could speak on behalf of some unusual position contrary to normal belief (ὑπόθεσιν ἄτοπον καὶ $\pi a \rho άδο ξον$) (Orat. 10. 1). His ensuing catalogue of paradoxical positions and the thinkers associated with them, at the end of which we come to Melissus, bears comparison with the passages from Aristotle just cited. First mentioned by Isocrates are those who maintain that falsehood and contradiction are impossible. Next he speaks, in an obvious swipe at Socrates, of those who persist in maintaining what Isocrates sees as the no less paradoxical positions that the virtues of courage, wisdom, and justice are identical and that none of them is naturally possessed by humans but all are instead a kind of acquired knowledge. Isocrates' third class of paradoxmongers comprises generally those he characterizes as wasting their time on eristic controversies $(\pi \epsilon \rho i \tau \dot{\alpha} s \ \ddot{\epsilon} \rho \iota \delta \alpha s)$ that, from his point of view, are of no benefit whatsoever. Isocrates would apparently agree with Aristotle that Melissus belongs to this latter class: this deliberate propounding of paradoxical views is no recent invention, he goes on to say, since Protagoras and 'those who became sophists in his time' have left to us prose treatises ($\sigma v \gamma \gamma \rho \acute{a} \mu \mu a \tau a$) with content of this sort and even worse (Orat. 10. 2). Among Protagoras' contemporaries who produced treatises with convoluted defences of paradoxical positions he mentions Gorgias, Zeno, and finally Melissus, whom he describes as having 'attempted to discover demonstrations that the universe is a single entity even though the number of things constituted by nature is limitless' (Orat. 10. 3).

This passage is properly referenced by Philoponus in his commentary on Arist. Ph. 1. 2. 185^a5 (Phlp. in Ph. 29. 12 ff.). Although Merrill 1998: 42, claims Aristotle is simply being facetious in citing Melissus' position as an example of a $\theta\epsilon\sigma\iota$, he could hardly have found a better example of a conception contrary to general opinion than the claim that only one thing exists.

One point connecting these passages from Aristotle and Isocrates is that both authors see Melissus as an eristic advocate of a deliberately paradoxical thesis who belonged to the sophistic milieu. While there are good reasons to reject Isocrates' inclusion of Socrates in this group, as there are for rejecting Aristotle's inclusion of Parmenides, there would seem to be no ready reasons for rejecting their mutual view of Melissus. It in fact makes good sense to place him alongside those figures of the sophistic era who developed certain Presocratic ideas in novel and, at the same time, intensely problematic directions. The 'Heraclitean' thesis of radical flux propounded by Cratylus, to which Aristotle refers in both of the passages above, 40 represents one such development. The same is true of the prevalent sophistic theses regarding the impossibility of falsehood and contradiction, which appear rooted in a selective use of certain statements by Parmenides. 41 Melissus' comparably extreme position that exactly one thing exists should, as we have seen, be understood along similar lines as a radicalizing development of Parmenidean ontology.

There are significant indications, furthermore, that Melissus was a more prominent representative of so-called 'Eleaticism' during this period than Parmenides himself, 12 just as Cratylus seems to have been for a time a more influential representative of Heracliteanism than Heraclitus. The author of the Hippocratic treatise, On the nature of man, plausibly identified by Aristotle as Hippocrates' pupil and son-inlaw Polybus (Arist. HA 3. 3. 512^b12), refers to Melissus by name in charging that the advocates of the various forms of material monism—those who are agreed that the universe is formed from a single underlying element but who differ as to whether this element is air, fire, water, or earth—wind up unknowingly supporting the position of Melissus ([Hp.] Nat. Hom. 6. 1. 9-13, 22-5). Polybus also adapts certain of Melissus' arguments to his attack on medical theories based on the idea that humans are composed of only a single element. With respect to this point, Jacques Jouanna has shown how the treatise's opening diatribe against those who import cosmological speculation into medical theory illuminates the relation between Melissus and Diogenes of Apollonia, who functions for Polybus as the principal representative of this type of theorizing. ⁴³ Jouanna began by demonstrating how the opening chapters of *On the nature of man* reveal its author to have been thoroughly familiar with Diogenes' views and how the attack on the philosophical partisans of monism and their medical counterparts is structured around a critique of particular Diogenean arguments. He then called attention to the evident uses of Melissus in this critique and, finally, to the fact that there are sufficient verbal reminiscences of Melissus in Diogenes' own work to suggest that he was particularly concerned with responding to Melissus' arguments in formulating his own views. 44

⁴⁰ Cf. Arist. *Metaph.* 1. 6. 987^a32-^b1, closely paralleled by 13. 4. 1078^b12-15; on Cratylus' Heracliteanizing, see also Metaph. 4. 5. 1010^a7–15.

⁴¹ See Palmer 1999*a*: 124–34. 42 Cf. Reale 1970: 31–2.

⁴³ Jouanna 1965.

⁴⁴ Ibid. 320–2, following Diller 1941: 361–2.

Melissus' notoriety in the latter part of the fifth century is also apparent from the fact that he, rather than Parmenides, features as the principal Eleatic target in Gorgias' treatise, On nature, or On what is not. This title in fact appears to be a parodic reference to Melissus' own title, On nature, or On what is. 45 We have already seen in Chapter 1 that Gorgias' work mounts an attack on the various attempts by his predecessors to identify some particular entity or group of entities as basic to the being of all other entities and that the doxographical preface to the treatise's first division recorded at MXG 979^a13–18 confirms this view of his purpose. 46 Thus the sense of Gorgias' first thesis, 'nothing is', ⁴⁷ is not that nothing at all exists but that nothing is or exists in the fundamental manner of his predecessors' proto-substances. Although Gorgias' target in this treatise has often been taken to be Eleatic or simply Parmenidean Being, the doxographical preface makes it clear that his target is much broader. He does not merely set about showing that what is fundamentally cannot be one, ungenerated, and unchanging—he also seeks to demolish the theories of those who held it to be many, generated, and changing. Furthermore, even in those portions of the treatise's first division where he is arguing against the possibilities that what is is one and ungenerated, Gorgias' target is evidently not the Parmenidean but the Melissan conception of what is. 48

Thus in the argument against the possibility that what is is ungenerated, Gorgias argues 'via the axioms of Melissus' that if it is ungenerated it must be unlimited and then proceeds to perform a *reductio* on this conception (*MXG* 979^a21–6). In the companion arguments against the possibility that what is generated, Gorgias appears to be adapting some of Melissus' own arguments against generation and alteration:

nor is it generated. Nothing at any rate could come to be either from what is or from what is not. For *if what is were to alter, it would no longer be what is* [cf. Melissus fr. 7. 2], just as if likewise what is not should come to be, it would no longer be what is not. Nor, again, could it come to be from what is not. For *if what is not is not, no thing could come to be from nothing* [cf. Melissus fr. 1]. But on the other hand if what is not is, for the same reasons it could not come to be from what is, it could not come to be from what is not. (*MXG* 979^a26–33)

Things become more complicated when we come to the arguments against the possibility that what is is one since the text of the *MXG* becomes quite corrupt at this point. 49 When the text becomes clear again, one finds Gorgias adapting

⁴⁵ See n. 25 above.

⁴⁶ See pp. 35–6 above.

⁴⁷ [Arist.] MXG 979⁴11: οὐκ εἶναί φησιν οὐδέν. Cf. S.E. M. 7. 65: ἐν γὰρ τῷ ἐπιγραφομένῳ περὶ τοῦ μὴ ὄντος ἢ περὶ φύσεως τρία κατὰ τὸ ἐξῆς κεφάλαια κατασκευάζει, εν μὲν καὶ πρώτον ὅτι οὐδὲν ἔστιν.

⁴⁸ Cf. Reale 1970: 24 n. 97, 31; Merrill 1998: 29.

⁴⁹ The following translation follows Buchheim's attempts at reconstruction: 'Furthermore, if something is, it is, he says, either one or many. But if neither one nor many, nothing would be. And one [it could not be] because [what is truly one] would be incorporeal [in so far as it has no magnitude; this he establishes] via the argument of Zeno. But if there is [not] one, [then there is nothing. For without there being one,] neither [is there] many. But if it is neither [one] nor many, it is nothing' (MXG 979^b36–980^a2). The point that what is truly one would be incorporeal, with its

Melissan argumentation once more, this time against the possibility that what is undergoes change:

Nor, he says, can anything change. For if it were to change, it would no longer be in the same state, but what is would not be being, and what is not would have come to be [cf. Melissus fr. 7. 2]. And further, if it moves and as one is transferred from one place to another, not being continuous, what is is divided and is not at this point. So that if it moves altogether, it is altogether divided. But if this is the case, it altogether is not. For at this point where it is divided, he says, it lacks being, speaking of 'being divided' instead of 'void', just as is written in the so-called *Arguments of Leucippus* [cf. Melissus fr. 7. 7, 7. 10]. (MXG 980^a1–8)

If Gorgias is specifically concerned with Parmenides anywhere in the treatise's first division, it is in what the MXG author refers to as his 'special demonstration' ($i\delta los a\pi \delta \delta \epsilon \iota \xi \iota s$), summarized at $979^a 24-34$. The treatise nevertheless seems, on the whole, to indicate that Melissus, rather than Parmenides, was for Gorgias the main representative of the view that reality is one, ungenerated, and unchanging—or at least that he expected his audience to be more familiar with Melissus' advocacy of this position.

We have thus seen that there are good reasons to suppose that Melissus was a more prominent representative of Eleaticism than Parmenides in certain circles of the philosophical world of the later fifth century. To this same period, it seems, dates the origin of what becomes the doxographical tradition's standard grouping of Melissus and Parmenides under the labels, 'what is is one' ($\hat{\epsilon}\nu \tau \hat{o} \ \mathring{o}\nu$) or, alternatively, 'everything is one' ($\hat{\epsilon}\nu \tau \hat{\sigma} \hat{\pi}\hat{a}\nu$). The ultimate source of this persistent classification would appear to be Gorgias' own doxographical preface to the first division of On nature, or On what is not. For the dichotomies in terms of which it classified the Presocratic proto-substances—ungenerated versus generated, one versus many, and unchanging versus changing—yield a common position for Parmenides and Melis-grouping them together in this way, however, the simple dichotomies of Gorgias' schema gloss over and thus obscure the critical difference between Parmenides' generous monism and the strict monism of Melissus. It is not surprising that Gorgias' influential classification appears to have soon become the source of some confusion regarding Melissus' relation to Parmenides. This is perhaps most evident now in Aristotle's treatment of Melissus and Parmenides. Again, the classificatory schema that frames Aristotle's review of opinions on the number and nature of first principles $(a\rho\chi\alpha')$ in *Physics* 1. 2 appears to be an adaptation of Gorgias' original schema:

reminiscence of Melissus fr. 9, might lead one to conclude that the specifically Melissan conception is being targeted here as well. However, the apparent conflict between fr. 9's indication that Melissus conceived of what is as incorporeal and his claims elsewhere that what is is unlimited in extension (fr. 3), full, and without any admixture of void (fr. 7. 7–10) suggests a need for caution before leaping to such a conclusion. For detailed discussion, see Palmer 2003.

⁵⁰ On this argument, see Palmer 1999a: 69–73.

It is necessary that the *archē* be *either single or plural*, and if single, either *not subject to change*, as Parmenides and Melissus say, or *changing*, just as the natural philosophers say, some declaring the first *archē* to be air, and some, water. But if plural, they must be either limited or unlimited in number, and if limited but more than one, they must be either two or three or four or some other number, and if unlimited, they must be so either as Democritus holds, one in kind but differing in shape, or differing or even opposite in form. (Arist. *Ph.* 1. 2. 184^b15–22)

The Gorgianic dichotomies are here replaced by a more complex, nested schema structured around his first and third dichotomies, the second apparently having been subsumed under the third. Aristotle acknowledges his debt when he goes on to say, 'Those who inquire how many fundamental entities ($\tau \grave{a}$ $\check{o}\nu\tau a$) there are are conducting a similar inquiry [sc. to his own regarding archai]; for, as to what things entities are from primarily, they ask whether these are one or many, and if many, whether limited or unlimited, such that they are inquiring whether the $arch\bar{e}$ and the elements are one or many' (184^b22–5). Although it was once widely assumed that Aristotle must here be referring to the doxographical passage in Plato's Sophist (242 C–D), the roots of Aristotle's classification stretch back to the Gorgianic classification of the conflicting opinions regarding $\tau \grave{a}$ $\check{o}\nu\tau a$ or the fundamental entities of the Presocratic systems.

Despite the influence of Gorgias' classification on the schema that frames Aristotle's inquiry, Aristotle recognized that grouping Melissus with Parmenides under the Gorgianic label, 'what is [is] one and unchanging' (ξν καὶ ἀκίνητον τὸ ὄν, Ph. 1. 2. 184^b26), obscures significant differences between their positions. The greater part of his consideration of Melissus and Parmenides in Physics 1. 2-3 is indeed devoted to distinguishing the different senses in which he understands them to have held that what is [is] one $(\mathring{\epsilon}\nu \ \tau \mathring{o} \ \mathring{o}\nu)$ and that everything [is] one $(\mathring{\epsilon}\nu \ \tau \mathring{o} \ \pi \hat{a}\nu)$, given his crucial recognition that these labels are multiply ambiguous. After explaining why he will discuss these thinkers even though their views do not properly belong within the inquiry concerning nature (Ph. 1. 2. $184^{b}25-185^{a}20$), he begins the substantive portion of his examination by asking, 'What do those who maintain that everything is one mean?' (Ph. 1. 2. 185°22). Aristotle approaches this question by undertaking a twofold classification of the possible senses based upon his distinction among the possibly relevant senses, first, of 'being' (185^a20–^b5) and then of 'one' (185^b5–25) and then upon his understanding of the thesis, 'everything is one', in light of these senses. If the resulting discussion seems artificial, this is largely because at this stage Aristotle is most interested in pointing out the untenability of all the various options without, however, yet giving any decisive indication as to which he thinks best captures Melissus' and Parmenides' actual positions.

The more specific criticisms of Melissus and Parmenides in *Physics* 1. 3, however, make the differences Aristotle sees between their respective varieties of monism clear enough. Aristotle has already in *Physics* 1. 2 corrected his charge that Melissus and Parmenides were essentially eristic controversialists with the qualification, 'Or rather, the argument of Melissus is crude and provides no difficulty, but once one absurdity is granted the rest follows' (*Ph.* 1. 2. 185^a10–12); and he now explains the ways in which he thinks Melissus' reasoning is fallacious (*Ph.* 1. 3. 186^a10–22). After

somewhat vaguely stating that the same type of considerations will apply to Parmenides even though there are certain others peculiar to him, Aristotle zeroes in on his principal charge against Parmenides, namely that he assumes that $\tau \delta$ $\delta \nu$ or 'being' is used in one sense only when it is in fact a $\pi o \lambda \lambda a \chi \hat{\omega}_S \lambda \epsilon \gamma \delta \mu \epsilon \nu o \nu$ or 'something said in many ways' (*Ph.* 1. 3. $186^a 22-5$). It seems a safe assumption that Aristotle means that Parmenides only recognized the use whereby 'being' picks out substance, so that Parmenides' position is here supposed to be that everything that is is substance. Aristotle's subsequent designation of Parmenidean Being as 'what just is' ($\tau \delta$ $\delta \pi \epsilon \rho$ $\delta \nu$) and his characterization of this as not being an attribute of anything else ($186^b 1-2$, 4–5) appear to confirm this point. The ensuing criticism—that even if 'being' had only one sense, this would not mean that there is only one being ($186^a 25-7$, cf. $187^a 6-10$)—implies that Aristotle is further treating Parmenides as maintaining that everything that is is one substance. This peculiarly Aristotelian analysis seems to connect at some level to the genuinely Parmenidean use of $\tau \delta$ $\epsilon \delta \nu$ or 'what is' as his preferred way of designating what is and cannot not be.

When Aristotle suggests that Parmenides assumed $\tau \delta$ $\ddot{o}\nu$ or 'being' is only used to pick out substance, he does not mean thereby to impute to Parmenides the strict monism he ascribes to Melissus. This is clear enough from where Parmenides and Melissus are located within Aristotle's classification of the possible senses of the thesis, 'everything is one', given the different senses of 'one'. The difference in the views Aristotle attributes to them is perhaps clearest in *Metaphysics* 1. 5, where he says that in maintaining that what is is one $(\mathring{\epsilon}_{\nu} \tau \mathring{o} \ \mathring{o}_{\nu})$ Parmenides appears to mean that what is is one 'in account' (κατὰ τὸν λόγον), whereas Melissus appears to mean that what is is one 'materially' ($\kappa \alpha \tau \dot{\alpha} \tau \dot{\eta} \nu \ \ddot{\nu} \lambda \eta \nu$) (Metaph. 1. 5. $986^{6}18-20$). Aristotle then says this explains why Parmenides says what is is limited, while Melissus says it is unlimited (*Metaph.* 1. 5. 986^b20–1, cf. *Ph.* 1. 2. 185^b17–18). The characterization of Parmenides' view here amounts to attributing to him the view distinguished at *Physics* 1. 2. 185^b5–9, namely, that all things are one in virtue of being identical with respect to the account of their essence. (Recall that Aristotle embraces what we have called the 'aspectualist' reading of the relation between the two major phases of the goddess's revelation.) Likewise, the characterization of Melissus' views in Metaphysics 1. 5 involves attributing to him a different view, also isolated in the *Physics* passage, namely, that everything is one qua being continuous or indivisible.

Melissus' monism, in short, amounts for Aristotle to the view that everything is a single, that is, continuous or indivisible, and unlimited quantity (or extension). Aristotle sees Parmenides' monism as something quite different and altogether more serious. Recognizing only a use of 'being' that indicates what something is in respect of its substance or essence, Parmenides, according to Aristotle, supposed that everything that is is substance, and he supposed everything to be one in the sense that the account of the essence of everything is identical. Furthermore, whatever might differentiate what is cannot do so with respect to its essence but only accidentally. But no accident of what just is can belong to its essence, and since Parmenides admits only a use of 'being' indicating what something is in respect of its substance or essence, no differentiating accident of what is can be said to be. Such is the

essential content of Aristotle's reconstruction of Parmenides' reasoning at *Physics* 1. 3. 186°34–°54, and likewise of his summary allusion to this passage at *Metaphysics* 1. 5. 986°528–31. The only point, in fact, where Aristotle's representation of Parmenides in *Metaphysics* 1. 5 appears to differ from the major treatment in *Physics* 1. 2–3 is in following up this summary with the qualification that, being compelled to go with the phenomena, and supposing that what is is one with respect to the account (*sc.* of its essence) but plural with respect to perception, he posited a duality of principles on which to base his account of the phenomena (*Metaphysics* 1. 5. 986°527–34).

In the end, then, the evidence of Plato and Aristotle does not support the sixth tenet of Guthrie's narrative, that Zeno and Melissus were followers of Parmenides each of whom in his own way aimed to defend and advance the Eleatic founder's paradoxical metaphysical position. Plato and Aristotle do not support this story because neither made the mistake, embodied in the narrative's first two tenets, of supposing that Parmenides maintained that only one thing exists and that its existence entails that the world of ordinary experience is an illusion. It should be plain enough, to anyone not blinded by this supposition, that Plato casts Zeno's arguments against the common-sense view that there are many things as an indirect defence of Parmenides against uncomprehending detractors and that he sees Parmenides' monism as something altogether more serious than Melissus'. As for Aristotle, he virtually never mentions Zeno alongside Parmenides, and the implication that he saw no substantive connection between them may in fact be the more historically accurate view. Despite the assimilation of Melissus and Parmenides under the Gorgianic label, 'what is is one and unchanging' ($\hat{\epsilon}\nu \kappa \alpha \hat{\iota} \hat{a}\kappa \hat{\iota}\nu \eta \tau o \nu \tau \hat{o} \tilde{o}\nu$), and despite the confusion potentially engendered by Melissus' prominence for a time as a representative of Eleaticism, Aristotle believed that grouping these two thinkers under this convenient label obscured critical differences between their positions. In this much, at least, Aristotle was certainly right. Parmenides' monism was something altogether different from the strict monism of the aping Melissus.

There were good reasons to be suspicious about the sixth tenet in Guthrie's narrative even before understanding how Parmenides' modal distinctions define his philosophical outlook. Now, however, having understood that there is no good reason to suppose that he intended his account of what must be to preclude the existence of all the manifold entities that are and again are not, we have firmer grounds for rejecting as historically inaccurate not only Guthrie's but any narrative that depicts Zeno and Melissus as the faithful defenders of Parmenides' philosophical legacy. While Zeno's paradoxes most definitely challenged natural philosophers to develop viable models of material structure and composition, they did so by ingeniously applying a mathematical conception of space and extension to physical bodies naïvely conceived so as to make both their composition and movement seem highly problematic. Zeno's paradoxes were not developed to further a Parmenidean challenge to normal assumptions regarding plurality, change, and motion, for the simple reason that there was no such Parmenidean challenge. Parmenides never argued that there is no plurality, change, or motion tout court but, much more narrowly, that what must be must be eternal and unchanging, unique, and homogeneous. Far from propounding some paradoxical and, worse, untenable view, Parmenides was essentially entitled to the conclusions he drew, from the bare specification of its necessary mode of being, regarding what what must be must be like. Melissus, by contrast, developed an argument purporting to show that whatever there is has roughly the attributes Parmenides had shown what must be must have. Melissus argued that whatever was (and now is) must be ungenerated, everlasting, spatially unlimited, unique, homogeneous, unchanging, unmoving, unaffected, and an undivided plenum. If there were such an entity, its existence would indeed leave no room for anything else; but there is not, because Melissus' arguments involve fallacies of equivocation so that his conclusions do not follow. Aristotle and Isocrates seem right to have regarded his arguments as essentially eristic, given their evident confutation of common sense for no apparent good purpose. His perverse deformation of Parmenides' serious metaphysical vision had its moment of ascendancy. He even seems to have influenced the early atomists' positing of void as a necessary condition for motion. Serious philosophers, however, beginning with Plato and Aristotle, realized that Melissus was a basically crude and negligible thinker when compared to the more profound Parmenides.

Anaxagoras and Parmenides

Histories of Presocratic philosophy tend to portray Anaxagoras as one of the 'post-Parmenidean pluralists'. Whether his physical theory is taken as a reaction against some form of Parmenidean challenge to the viability of natural philosophy or as an attempt to abide by Parmenidean conditions upon being a genuine or fundamental entity, Anaxagoras has been depicted as seeking to give the phenomena of the natural world an adequate theoretical basis by positing a multitude of material principles that replicate as far as possible the attributes of Parmenidean Being. Guthrie's narrative and its descendants also all presume that Anaxagoras aimed to abide by a specifically Parmenidean prohibition against non-being in the form of a stricture against generation. Because these accounts depict Anaxagoras either as attempting to rescue cosmology from a challenge Parmenides never in fact issued or as embracing an explanatory agenda he never actually articulated, it may seem redundant to consider here any of the specific failings of depictions of Anaxagoras as a post-Parmenidean pluralist. With the demise of T1 and T2 in Guthrie's narrative, there also falls T7. Nonetheless, long habituation to the commonplace that Parmenides decisively influenced, in one way or another, the development of Anaxagoras' physical system is likely to be a lingering source of resistance to the modal reading of Parmenides as a generous monist. It is therefore necessary to make plain the errors involved in the presumption that Anaxagoras designed his physical principles to replicate the attributes of Parmenidean Being and thereby endeavoured to accommodate some specifically Parmenidean prohibition regarding change. Clearing the obstacle of this erroneous presumption makes possible a better understanding of Anaxagoras' physical system, of the likely importance of Zeno's antinomies for its development, and of the true structural correspondence between Parmenides' and Anaxagoras' broader systems. With this latter recognition, we start to move towards a better understanding of Parmenides' place in the history of Presocratic philosophy.

Before turning specifically to Anaxagoras, it will be worthwhile observing where we now stand with respect to the commonplace that the later Presocratics accept a Parmenidean stricture against generation *ex nihilo*. One important consequence of the modal reading is that it allows us to see that *nihil ex nihilo fit* is not a specifically Parmenidean principle at all. The widespread notion that in the Way of Conviction he rejects all generation and destruction ignores the fact that the arguments in this portion of his poem concern only what is and cannot not be, rather than any entity

whatsoever. Parmenides is perfectly right to argue in fr. 8. 5–21 that what is and cannot not be, that is, what must be, cannot have come to be and cannot cease to be, given that each of these possibilities involves an inadmissible conception of what must be as not being. There is no generalized prohibition against coming to be or perishing, however, for the straightforward reason that Parmenides is not here concerned with all entities generally. By the same token, Parmenides never argues that change in general is impossible, on the ostensible ground that it illicitly involves mention of what is not in positing that what is not subsequently is. The particular stretch of argument too often wrongly regarded as involving a general dismissal of all change, at fr. 8. 26–31, is in fact restricted to demonstrating specifically that what is and cannot not be is unchanging or unmoving $(\hat{a}\kappa i\nu\eta\tau\sigma\nu)$. Again, Parmenides is right to argue that what must be must be what it is whenever it is. Parmenides never argues, however, that anything whatsoever, regardless of its mode of being, must be unchanging.

Aristotle in numerous places speaks of the principle, nihil ex nihilo fit, as one commonly endorsed by all earlier natural philosophers. There is no good reason to doubt the basic accuracy of his judgement on this point. Granted that our evidence for the natural philosophers prior to Parmenides does not present any explicit statement of the principle as such, it is nevertheless plainly assumed in their cosmologies. Certainly there is no hint that the originative principles in the early Presocratic cosmologies—be it Anaximander's apeiron, Anaximenes' aēr, or Heraclitus' fire—themselves came to be. Heraclitus is explicit about this, saying that 'this world order no god nor mortal produced, but it always was and is and will be: an ever-living fire, kindling in measures and being quenched in measures' (fr. 31). Since everything else comes to be, in one way or another, from these originative principles, the principle that nothing comes to be from nothing is implicitly obeyed, even if not explicitly stated, in what we know of these early systems. This is one important respect in which the early Presocratic cosmogonies differ from the traditional theogony recounted in Hesiod, where everything, including the first gods and goddesses, has its birth. Contrast how even Pherecydes of Syros in the sixth century began his cosmotheogony by declaring, 'Zas and Chronos were always and Chthonie ... ' (D.L. 1. 119, cf. Dam. Pr. 124).

² Cf. Kirk et al. 1983: 56: 'Zas and Chronos and Chthonie "always existed": this resolves the difficulty of creation ex nihilo'.

¹ Arist. Ph. 1. 4. 187^a27-9 : τὴν κοινὴν δόξαν τῶν φυσικῶν ὡς οὐ γιγνομένου οὐδενὸς ἐκ τοῦ μὴ ὅντος. 187^a34-5 : τὸ μὲν ἐκ μὴ ὅντων γίγνεσθαι ἀδύνατον (περὶ γὰρ ταύτης ὁμογνωμονοῦσι τῆς δόξης ἄπαντες οἱ περὶ φύσεως). Metaph. 11. 6. 1062^b24-6 : τὸ γὰρ μηδὲν ἐκ μὴ ὅντος γίγνεσθαι, πὰν δ' ἐξ ὅντος, σχεδὸν ἀπάντων ἐστὶ κοινὸν δόγμα τῶν περὶ φύσεως. Mourelatos 1981 somewhat cautiously and indirectly defends, against potential charges of anachronism, the implication of Aristotle's statements that the principle may safely be traced back to thinkers earlier than Parmenides. Mourelatos 1987: 132-3, is rather less circumspect, declaring outright that 'the principles ex nihilo nihil and in nihil nil are not Eleatic in origin', drawing attention to the apparent statement of the first of these principles by Alcaeus (καί κ' οὐδὲν ἐκ δενὸς γένοιτο, Alc. 76), and acknowledging the tacit acceptance of these principles in Anaximander, Anaximenes, Xenophanes, Heraclitus, and Pythagoras.

While Parmenides himself may likewise implicitly accept the principle, in so far as his own cosmology apparently obeys it, he never articulates it explicitly. Although fr. 8. 6-13 is the passage in his poem commonly taken to contain a statement of the principle that no thing comes to be from nothing, we have seen in Chapter 4 that they instead form part of Parmenides' argument for the perfectly sound point that what must be cannot have come to be and cannot ever cease to be. There is in these verses no general argument against generation, only one against the possibility that what must be might have come to be. This particular argument relies, moreover, on the basic idea that what must be cannot be conceived of as not being, rather than on any prohibition against generation from nothing. The consideration deployed in the rhetorical question at fr. 8. 9b-10—'And indeed what need could have aroused it l later rather than before, beginning from nothing, to grow?'—rejects the possibility that What Is could have been generated from nothing, but via an appeal to the principle of sufficient reason and significantly not on the ground that generation ex nihilo is impossible. For all Parmenides' goddess says in the Way of Conviction, the more ordinary entities that are but need not be might very well be generated from nothing, provided there is some reason or cause for this to occur at one time rather than another. There is, of course, no real ground for supposing that Parmenides, any more than any other Presocratic, accepted the possibility of such generation. But his acceptance of what Aristotle rightly identifies as the common principle of Presocratic cosmology is rather to be inferred from the explanatory scheme he adopts in his own cosmology than from anything he says about What Is.

Because they ignore the modal distinctions at the heart of Parmenides' philosophy, Guthrie's narrative and its descendants make the disastrous mistake of attributing to him a general prohibition of non-being, and they fail to recognize that his goddess issues only the more limited and legitimate prohibition against conceiving of what must be as not being (what it is). Since some may suppose that Anaxagoras nevertheless saw a general prohibition in Parmenides, regardless of what he actually argued, the earlier part of this chapter will highlight how the assumption that Anaxagoras aimed to accommodate purportedly Parmenidean strictures against not-being proves untenable on internal grounds. The first section of this chapter will provide a succinct overview of Anaxagoras' physical theory focused on identifying its fundamental postulates and articulating their relationships. Such an overview is necessary here because existing accounts of Anaxagoras' theory generally fail to recognize the fundamental position within it of the postulate that there is no least magnitude. The account of Anaxagoras' system in this section is solely internal and thus presumes no view of his relation to other thinkers. The following section will show how the assumption that Anaxagoras' physical system was designed to obey the purportedly Parmenidean strictures against generation and not-being either requires arbitrary restriction or leads to absurdity. The remainder of the chapter will explore some of the beneficial results of abandoning the notion, rooted in mistaken interpretations of Parmenides, that Parmenides had any decisive impact on the development of Anaxagoras' brilliant theory of the structure of matter and the composition of everyday objects.

ANAXAGORAS AND HIS PHYSICAL THEORY

Anaxagoras of Clazomenae is the first major Greek philosopher to make Athens his intellectual home. Born at the beginning of the fifth century BC in the Ionian city of Clazomenae, he would return to Ionia and die in Lampsacus in 428/7 BC, having spent many years in Athens, where he gained notoriety as an associate of Pericles. Plato famously records the ready availability of Anaxagoras' book in Athens as well as Socrates' early interest in his ideas. Anaxagoras was eventually prosecuted by Pericles' political enemies under the infamous decree of Diopeithes (438/7 BC), which provided for the indictment of those disavowing the divine or teaching about the heavens on charges of $\alpha \sigma \epsilon \beta \epsilon \iota \alpha$ or sacrilege (Plu. *Per.* 32. 1–6, cf. D.S. 12. 39, D.L. 2. 12–14). The specific teaching most commonly cited as having led to his prosecution is Anaxagoras' view that the sun is merely a stone, not a god (e.g. Plu. *Superst.* 169 F, D.L. 2. 12). This was of course not the last time demagogic politicians in Athens would angle for advantage by indicting a practitioner of free and rational inquiry on a fabricated charge of impiety.

The following passage from Diogenes Laertius is the critical source for Anaxagoras' chronology:

(a) He is said to have been twenty years old ($\epsilon \tilde{l} \kappa \sigma \sigma \iota \nu \epsilon \tilde{l} \nu \alpha \iota$) at the time of Xerxes' crossing [480/479 BC] and to have lived to be seventy-two. (b) Apollodorus says in his Chronika [FGrH 244 F 31] that he was born in the 70th Olympiad [500–497 BC] and that he died in the first year of the 88th [428/7 BC]. (c) He began to philosophize at Athens in [the archonship of] Kallias [456/5 BC], being twenty years ($\epsilon \tilde{l} \tau \omega \nu \epsilon \tilde{l} \kappa \sigma \sigma \iota \nu \tilde{\omega} \nu$), as says Demetrius of Phalerum in his Record of Archons [F 150], (d) and there they also say he spent thirty years. (D.L. 2. 7)

While the dates of Anaxagoras' birth and death are largely uncontroversial, such is not the case with the dating of his Athenian sojourn. Diogenes' report at (c) of the information in Demetrius has long been thought confused. The phrase, 'being twenty years' $(\hat{\epsilon}\tau\hat{\omega}\nu\ \epsilon \tilde{\iota}'\kappa \rho \sigma \iota \nu'\ \tilde{\omega}\nu)$, here translated with a literal awkwardness designed to preserve its ambiguity, has been taken to mean that he was twenty years old when he came to Athens, so that the date of his arrival should be $480/479\ BC$ rather than $456/5\ BC$. Reading 'Kalliades' instead of 'Kallias' in the same sentence has seemed to many to solve the problem, since Kalliades was in fact archon in $480/479\ BC$. Jaap Mansfeld has demonstrated, however, that this emendation does not resolve the

³ By demonstrating the reliability of the relative (if not absolute) chronology in the account of Anaxagoras' trial in Plutarch's *Life of Pericles* and taking this together with the evidence from other sources for the attacks on Pericles' associates, Pheidias and Aspasia, as well as Anaxagoras, in the runup to the Peloponnesian war, Mansfeld 1980*a* is able to date Anaxagoras' indictment and departure from Athens to 437/6 BC.

⁴ Mansfeld 1979: 40 n. 4, points out that the now universally accepted correction of the majority manuscript reading, $\epsilon \beta \delta o \mu \eta \kappa o \sigma \tau \hat{\eta} s$ $\delta \gamma \delta \delta \hat{\eta} s$ ('seventy-eighth'), which would have the report from Apollodorus putting Anaxagoras' death forty years before the date that can be inferred from the previous sentence, to $\delta \gamma \delta o \eta \kappa o \sigma \tau \hat{\eta} s$ $\delta \gamma \delta \delta \hat{\eta} s$ ('eighty-eighth'), which yields consistently 428/7, should be attributed not to Scaliger but to Meursius (Johannes van Meurs, 1579–1639), the Dutch classical scholar who likewise proposed emending $Ka\lambda\lambda iov$ to $Ka\lambda\lambda i\delta \delta v$ in the following sentence.

passage's difficulties. For one thing, it is highly improbable that Anaxagoras should have come to Athens in the year Xerxes destroyed the city. Also, it is inconsistent with his trial having occurred in the 430s (when most scholars, including Mansfeld, date it) that he should have stayed in Athens for thirty years beginning in 480/479 BC. 5 Mansfeld thus retains the transmitted 'Kallias' and accepts 456/5 BC as the date of Anaxagoras' arrival in Athens; and he argues that ἐτῶν εἴκοσιν ὤν should not be taken to mean that Anaxagoras was twenty at this time but instead that he was in Athens for twenty years, that is, until 437/6 BC. Mansfeld thus proposes correcting έτων εἴκοσιν ων ad probabilem sententiam to ἐτων εἴκοσιν ⟨ἐκεῖ διατρίβ⟩ων ('working there for twenty years'). 6 The fundamental soundness of this proposal is confirmed by Diogenes' report in (d) of an alternative to Demetrius' view: 'and there they also say he spent thirty years'. If this is an alternative to the view in Demetrius, then the sense of whatever he actually wrote that lies behind the troublesome phrase in Diogenes must have been that he spent twenty years in Athens. Mansfeld has elaborated a strong and detailed case for dating Anaxagoras' arrival in Athens to 456/ 5 BC and his departure to 437/6 BC. Mansfeld's meticulous argumentation provides compelling support for the later dating, and his chronology should be accepted absent detailed rebuttal of his arguments. Mansfeld's chronology is consistent with the dating of Anaxagoras' philosophical prime after Empedocles' already suggested by the most natural reading of Aristotle's remark that Anaxagoras, though earlier in age than Empedocles, was later in his activity.8

Anaxagoras developed an ingenious physical theory, more sophisticated and complex than anything that had come before, on the basis of a remarkable hypothesis concerning material structure. Modern reconstructions have tended to explicate this theory by specifying a set of fundamental postulates and showing how Anaxagoras himself repeatedly returns to them in articulating his views. The same tendency is already evident in Simplicius' exposition of Anaxagoras' views. Thus at the

⁵ See the detailed arguments at Mansfeld 1979: 47–55.

⁶ Ibid. 55–8.

⁸ Arist. Metaph. 1. 3. 984^a11–13: ἀναξαγόρας δὲ ὁ Κλαζομένιος τῆ μὲν ἡλικία πρότερος ὢν τούτου [sc. Ἐμπεδοκλέους] τοῖς δ' ἔργοις ὕστερος ἀπείρους εἶναί φησι τὰς ἀρχάς. Although ὕστερος does sometimes have the sense of 'inferior' that some have claimed for it here, its balancing of πρότερος, the sense of which is manifestly temporal, should have been enough to confirm the temporal sense of the corresponding ὕστερος had interpreters not already been committed to the mistaken early dating of Anaxagoras' Athenian sojourn. If Aristotle had wished to pass judgement on Anaxagoras' merits relative to Empedocles', he would likely have written χείρων instead of ὕστερος. It can no longer be plausibly maintained, as it notably was by O'Brien 1968, that Anaxagoras wrote before Empedocles and in fact influenced him.

beginning of his commentary on Aristotle's criticisms of Anaxagoras in *Physics* 1. 4, after noting that Aristotle appears to respond to virtually all of Anaxagoras' conclusions or axioms, Simplicius identifies what he takes to be the more important postulates of Anaxagoras' physical theory and, fortunately for us, quotes his own words as evidence of his commitment to them:

And in fact that [his material principles] were infinite, he states directly at the beginning: 'Together all things $(\chi \rho \dot{\eta} \mu \alpha \tau a)$ were, limitless in both magnitude and smallness' (Anaxag. fr. 1 ad init.). And that there is neither a least nor a greatest among the principles: 'for neither of the small', he says, 'is there a smallest, but always a smaller (for what is cannot by cutting not be⁹); likewise, there is always a larger than the large; and equal it is to the small in extent. And in itself each is both large and small' (fr. 3). For if everything is in everything, and everything gets separated out from everything, then even from what is thought to be the smallest there will be separated out something smaller than it, and what is thought to be the largest has been separated out from something larger than itself. And he states plainly that 'in every thing there is a portion of every thing except mind, and there are some things in which mind too is' (fr. 11). And again that 'other things contain a portion of every thing, but mind is without limitation and independent and has been mixed with no thing' (fr. 12 ad init.). And elsewhere too he speaks like so: 'And since indeed equal are the portions of the large and the small in multitude, in this way also would every thing be in every thing. And they cannot be separate, but all things share a portion of every thing. Since the smallest cannot be, they could not be separated, and none could come to be on its own; but just as in the beginning, now too all things are together. In all things there are many things, even of those that are extracted, equal in extent in both the larger and smaller' (fr. 6). And this too Anaxagoras posits, that each of the perceptible homoeomeries comes to be and has its character in virtue of its composition from like things. For he says: 'but whatever is most in it, each individual thing most apparently is and was these things' (fr. 12 ad fin.). He appears to say also that mind attempts to separate them but is not able. (Simp. in Ph. 164. 14-165. 5)

Here one finds most of the postulates that have tended to figure in modern reconstructions, with one notable exception. If we take George Kerferd's list of the main Anaxagorean principles that can be extracted from the ancient evidence and that had tended to feature in modern reconstructions down to the time of his writing—a list comprising the canon of No Becoming and the postulates of Infinite Divisibility, Universal Mixture, Predominance, and Homoeomereity¹⁰—we see

⁹ See Sider 2005: 84–5 *ad loc.*, for a defence, with full references to earlier discussions, of $\tau o \mu \hat{\eta} > o \mathring{\upsilon} \kappa \epsilon \mathring{\iota} \nu a \iota$ as an easy correction of $\tau \mathring{\upsilon} \mu \mathring{\eta} > o \mathring{\upsilon} \kappa \epsilon \mathring{\iota} \nu a \iota$ codd. On the difficulties of the transmitted reading, see also Schofield 1980: 156–7 n. 15 (although he ends up following Kranz's proposal to bracket $\tau \acute{o}$ codd.). In what follows, I generally follow the text of the fragments as established in Sider 2005.

<sup>2005.

10</sup> Kerferd 1969: 490–1, where these tags respectively denote the principles that 'Nothing comes into being out of nothing', 'There is no limit to the divisibility of a thing', 'In everything there is always a portion of everything else . . .', 'Things . . . contain a predominance of what they are', and 'Things are made of parts which are like one another and are also like the whole'. Cf. Reeve 1981: 90–1; Teodorsson 1982: 66; Mourelatos 1987: 143–4; Graham 1999: 163–4. Barnes 1982a: 318, sees three fundamental tenets, that in the beginning everything was, and now everything is, mixed together, which counts as two tenets, and the further tenet that there is no smallest portion of anything. Graham 1994 attempts to provide rigorous formulations of the first four of Kerferd's principles to test their consistency.

that all but the first of these figure, in some fashion, in Simplicius' overview. The postulate of Homoeomereity, however, figures only in Simplicius' repetition of Aristotle's identification of Anaxagoras' material principles with the stuffs that Aristotle himself calls 'homoeomerous', meaning that each of their parts has the same character as the whole. It now tends to be recognized that Aristotle's designation is potentially anachronistic and so that reconstructions of Anaxagoras' system should not make it axiomatic that its fundamental stuffs are in fact identical with the things Aristotle calls 'homoeomerous'. We shall therefore refrain from presenting any postulate of homoeomereity as part of Anaxagoras' theory.¹¹

The most important postulates of Anaxagoras' physical theory are the following. First, there is the no least magnitude postulate (hereafter, **NLM**), according to which there is no lower limit on the size of portions of matter. This formulation more accurately reflects Anaxagoras' conception than speaking, as many do, of a principle of infinite divisibility; for Anaxagoras does not envision performing dichotomies on bits of matter so much as taking small portions of things to consider their character and their contribution to constituting the things of which they are portions. ¹² There is also the related no greatest magnitude postulate (NGM), according to which there is no upper limit on the size of portions of stuff; and there is the postulate of small/large isometry (**SLI**), according to which, for any portion of matter, x, there are just as many portions of stuff smaller than x as there are portions larger than x, to wit, infinitely many. NLM and NGM are introduced in tandem in fr. 3. Neither is conceptually prior to the other, although the former postulate does considerably more work. **SLI** follows more or less directly from **NLM** and **NGM**. ¹³ There is also another group of related postulates: the postulate that every thing is in every thing (EE), according to which every portion of matter contains portions of every kind of stuff; the inseparability postulate (I), according to which no stuff can be totally on its own—that is, discrete, separate, and isolated from all other stuffs—once it has been mixed with other stuffs; and the postulate of preponderance (P), according to which

¹¹ The ascription of a principle of homoeomereity to Anaxagoras goes back to Cornford 1930, where it was argued that the principle cannot be held consistently with the principle that there is a portion of everything in everything. The principle has more recently figured centrally in Mann 1980. Against identifying Anaxagorean stuffs with Aristotelian homoeomeries, see, for instance, Mathewson 1958 (*contra* Cornford); Lanza 1963; Guthrie 1965: 325–6; Barnes 1982a: 321; Pepe 1991; Graham 1994: 81–3, 101–7.

¹² Cf. Schofield 1980: 89–90, commenting on Anaxag. fr. 6: 'the expression "infinite divisibility," natural enough in the comparison with Zeno, does not capture the focus of Anaxagoras' thought here (nor, indeed in Fragment 3). Anaxagoras is concerned with *the small*. His main message is not one about the consequences of infinite divisibility but about the irrelevance of size to complexity of composition.' With this point goes a further one that has gained currency since being stressed by Barnes, namely that Anaxagorean matter is not particulate. So Barnes 1982a: 325: 'Anaxagorean stuffs contain portions of all other stuffs; but those portions are not located at one or more points within the parent lump—they are mingled smoothly and regularly throughout its body. Any stuff contains every stuff; but the contained stuffs are not present by virtue of a mechanical juxtaposition of particles; they are present as the items in a chemical union.' Cf. Strang 1963: 102–3; Schofield 1980: 68–79; Teodorsson 1982: 73–6; Mourelatos 1987: 145; Curd 1998: 148–50.

the characteristics of a thing apparent at the phenomenal level are a function of the preponderance within it of stuffs with the relevant characters. ¹⁴ In this group **EE** is the most basic postulate, with **I** and **P** accompanying it as corollaries. More will be said about these principles in due course.

The crucial point to emphasize at the moment is the foundational role of **NLM** within Anaxagoras' system. Every postulate of the theory, with the exception of the related **NGM**, ultimately relies on **NLM**. Only because there is no least magnitude is it possible, for example, for there to be a portion of every thing in every thing: since the portions can be limitlessly small, an unlimited number of them can be present in any given thing. ¹⁵ The famous opening of Anaxagoras' book already suggests that **NLM** is the bedrock postulate of his physical theory: 'Together all things were, *unlimited* both in multitude and *in smallness*; *for the small also was unlimited*. And since all things were together, none was evident *due to their smallness*' (fr. 1 *ad init.*). ¹⁶ While several postulates of Anaxagoras' theory are already present in this opening statement, the no least magnitude postulate is given special emphasis by being stated, restated, and then employed to explain why none of the unlimited multitude of things was apparent in the universe's precosmogonical state.

The foundational role of **NLM** is perhaps most apparent in fr. 6:

(a) And since indeed equal are the portions of the large and the small in multitude, in this way also would every thing be in every thing. (b) And they cannot be separate, but all things contain a portion of every thing. (c) Since the smallest cannot be, they could not be separated, and none could come to be on its own; (d) but just as in the beginning, now too all things are together. (e) In all things there are many things, even of those that are extracted, equal in extent in both the larger and smaller. ¹⁷

¹⁴ Cf. Arist. *Ph.* 1. 4. $187^{\rm b}2$ –4, Simp. *in Ph.* 27. 7–8. Anaxagoras' commitment to **P** is also evident in fr. 1's description of the precosmogonical state as one where, due to the predominance of air and aether, all other characters within the mix are obscured: 'And since all things were together, none was evident due to their smallness; for air and aether dominated ($\kappa \alpha \tau \epsilon \hat{\iota} \chi \epsilon \nu$) all things, both being unlimited.' (On the sense of $\kappa \alpha \tau \epsilon \hat{\iota} \chi \epsilon \nu$, see Sider 2005: 73–5, with refs. to earlier discussions.) The condition of things as here described conforms to **P** as articulated at the end of fr. 12.

 15 Cf. Strang 1963: 108; Schofield 1980: 69. See also Graham 1994: 92–3, for a succinct demonstration that what he refers to as the postulate of Universal Mixture (UM) \approx **EE** entails what he terms Infinite Divisibility (ID) \approx **NLM**, given that assuming UM obtains but not ID leads to

contradiction.

 16 όμοῦ χρήματα πάντα ἦν, ἄπειρα καὶ πλῆθος καὶ σμικρότητα: καὶ γὰρ τὸ σμικρὸν ἄπειρον ἦν. καὶ πάντων ὁμοῦ ἐόντων οὐδὲν ἔνδηλον ἦν ὑπὸ σμικρότητος. Schofield 1980: 36-40, argues that this was indeed how Anaxagoras' book began and that since he gives the primordial mixture thesis pride of place by opening with the words, ὁμοῦ χρήματα πάντα ἦν, the thesis deserves a prominent place in any account of his system. Much the same reasoning suggests that **NLM** should be recognized as at least as fundamental.

17 καὶ ὅτε δὴ ἴσαι μοῖραί εἰσι τοῦ τε μεγάλου καὶ τοῦ σμικροῦ πλῆθος, καὶ οὕτως ἂν εἴη ἐν παντὶ πάντα. οὐδὲ χωρὶς ἔστιν εἶναι, ἀλλὰ πάντα παντὸς μόῖραν μετέχει. ὅτε τοὐλάχιστον μὴ ἔστιν εἶναι, οὐκ ἂν δύναιτο χωρισθῆναι, οὐδὰ ἄν ἐψ΄ ἑαυτοῦ γενέσθαι, ἀλλ᾽ ὅπωσπερ ἀρχὴν εἶναι, καὶ νῦν πάντα ὁμοῦ. ἐν πᾶσι δὲ πολλὰ ἔνεστι καὶ τῶν ἀποκρινομένων ἴσα πλῆθος ἐν τοῖς μείζοσί τε καὶ ἐλάσσοσι. For other discussions of the argument here, see Reesor 1960: 1–3; Barnes 1982a: 337–8; Schofield 1980: 89–94 and 98–9; Graham 1994: 94–101.

Sometimes, as in this passage, the paratactic style of Anaxagoras' prose somewhat obscures the train of his reasoning. Matters are made worse by the fact that this passage appears to begin in medias res, giving the conclusion of one argument in (a), presenting a different line of argument in (b) to (d), and finally bringing the two arguments together in (e). The arguments themselves are developed as a sequence of entailments. The entailment stated in (a) seems to pick up a point made in fr. 3, where NLM and NGM are said to entail SLI: 'For neither of the small is there a smallest, but always a smaller (for what is cannot by cutting not be); likewise, there is always a larger than the large; and equal it is to the small in extent. And in itself each is both large and small' (fr. 3). 18 The thought here seems to be something like the following. If for every portion of stuff, x, there is some other portion of stuff, y, such that y is smaller than x, and if likewise for every portion of stuff, x, there is some other portion of stuff, z, such that z is larger than x, then no matter what portion of stuff x may be, there are just as many portions of stuff smaller than x as there are portions larger than x, namely, infinitely many. Ultimately, every portion of stuff can be seen to be as large as it is small ('in itself each is both large and small'), for every portion is larger than as many portions of stuff as it is smaller than, namely, infinitely many. What Anaxagoras means can seem obscure when he says that the large is equal to the small in multitude and then again, as he puts it in the opening sentence of fr. 6, that the portions of the large and small are equal in multitude, but a central part of his conception must be that (the portions of) the large and the small are both of limitless multitude. Thus the small and the large are equivalent in that any 'large' portion of stuff will contain just as many smaller portions as any 'small' portion of stuff, given that each will contain infinitely many smaller portions. 19 Because of this equivalence, there is room for some portion of every kind of stuff in every portion of stuff, no matter how small or large the portion of stuff in question may be. This is precisely Anaxagoras' point in fr. 6 (a): **SLI** entails **EE**. Comparison with fr. 3 shows that **SLI** rests in turn on the bedrock NLM and the related NGM.

The central argument in fr. 6 travels an alternative route from **NLM** to **EE**, in this instance via **I**. Initially, this postulate of inseparability might seem to be simply that nothing can be totally 'on its own', that is, discrete, separated, and isolated from everything else. If the inseparability postulate is so understood, then in fr. 6 (c) Anaxagoras will appear to be assuming that the existence of a minimum magnitude is a necessary condition of separability and discreteness. This assumption does have some intuitive plausibility. For the pure isolation of a particular character in some portion of stuff might seem to require that the composition of the portion in question be such as to exclude the possible presence of any admixture of other characters within it, and it might seem that this condition would be guaranteed to be satisfied only in the case where the portion of stuff is of minimal magnitude and thus physically incapable of having a smaller portion of any other character lurking within

¹⁸ For more detailed treatment of the argument here, such as it is, see Schofield 1980: 82–9.

¹⁹ This postulate will seem sound only if one supposes that all infinities are equal. There is no indication that Anaxagoras supposed otherwise, whereas one can see how he tries to face up to some of this supposition's odd consequences.

it. The obvious problem with all this is that the purity of mind or $vo\hat{v}s$ looks like an exception to the inseparability postulate and thus to the entailment expressed in fr. 6 (c). Anaxagoras explicitly states towards the beginning of fr. 12 that mind has been mixed with no thing, but alone it is itself on its own ($\mu \epsilon \mu \epsilon \iota \kappa \tau \alpha \iota \ o v \delta \epsilon v \iota \ \chi \rho \eta \mu \alpha \tau \iota$, $\lambda \lambda \lambda \dot{\alpha} \mu \delta v o s \alpha \dot{v} \tau \delta s \dot{\epsilon} \delta \dot{\epsilon} \delta \epsilon \alpha \tau \tau o v \dot{\epsilon} \delta \tau \iota v$); and yet he nowhere implies that it is different from other things in having minimal portions. If mind can exist on its own, why can other things not do so? It will not do to say that mind is an exception, for while it is certainly exceptional in many respects, it is still a physical entity, and as such it should not violate the fundamental postulates of Anaxagorean physics.

Rather than saying that mind is an exception to I or, worse, charging Anaxagoras with inconsistency, we should instead recognize that the simple formulation of the inseparability postulate stands in need of qualification. That is, we need to reformulate the postulate as I have done in first introducing it above: nothing once mixed with other things can ever be totally on its own. Mind can exist separately and on its own because it never has had an admixture of anything else. Anaxagoras takes pains to make the point in fr. 12 that if mind ever should be mixed with anything else, it would be mixed with everything else and would lose its distinctly pure character and consequently its power. Everything else, on the other hand, having been mixed with everything else right from the beginning, cannot possibly be separated totally from them. For the kind of discrimination this would involve would only be possible if there were minimal magnitudes into which things could be separated. This is how Anaxagoras' point in fr. 6 (c) is to be understood. He makes much the same point when he says in fr. 8 that the things in the cosmos 'have not been separated from one another' (οὐ κεχώρισται ἀλλήλων, note the perfect tense) and, in a surprisingly vivid image, that the hot and the cold 'have not been chopped with an axe' from one another.

Now we can properly appreciate the series of entailments in the central argument of fr. 6. In (c) Anaxagoras makes the point that **NLM** entails **I**, that nothing once mixed with other things can ever be totally on its own. Inseparability in turn entails that everything, with the admissible exception of mind, contains a portion of everything else, which is the point drawn in (b) on the basis of the reason given in (c). The present tense of the verb 'contains' ($\mu\epsilon\tau\dot{\epsilon}\chi\epsilon\iota$) is not just a general present, for Anaxagoras' point is that **EE** continues to hold now wherever it has held in the past. Thus he draws the conclusion in (d) that all things are together now just as they were in the beginning prior to the cosmos's formation. In the beginning, as we learn in fr. 1, all things were together and so uniformly blended and intermixed that everything had the appearance of air and aether, the stuffs Anaxagoras supposes predominant in the whole. The cosmos formed when a revolution governed by mind in its cosmic role caused the stuffs in the precosmogonical mixture to be evenly distributed no longer, with various stuffs being separated out or extracted from the uniform mixture and coming together with portions of similar stuffs. As a result of this extraction and aggregation, different regions and portions of the universe took on distinct characters and became recognizable as the earth, sun, moon, stars, and the remainder of the cosmos's population, including organisms and other individual things. One might suppose that the extraction of stuffs that led to the cosmos's

formation proceeds so far that **EE** ceases to apply and that things come to be at the microscopic level just what they appear to be at the phenomenal level. In fr. 6, Anaxagoras is concerned with countering any such supposition, apparently because he recognizes that it would undermine the universality of his postulates and thus the elegance and explanatory power of his system. As the postulate of every thing in every thing applied in the beginning, so it continues to apply now, for **NLM** ensures that no separation, not even all the extraction of stuffs that has occurred in the formation of the cosmos, could ever be enough to isolate completely any stuff that was once mixed with the others. Thus we find Anaxagoras in (e) reinforcing the conclusion in (d) in just the way he does, making the point that in all things there continue to be portions of even those stuffs that are extracted.

To summarize, fr. 6 begins in (a) with the final stage of a general argument showing that **NLM** together with **NGM** entails **EE** via **SLI**. The fragment then moves in (b) to (d) to an argument showing that the entailment of **EE** by **NLM** holds even now. The fact that in this second argument it is assumed, rather than argued, that **EE** held during the cosmos's initial stage might suggest that **EE** is in fact as much of a bedrock postulate for Anaxagoras as **NLM**. However, it remains the case both that **NLM** is a necessary condition for **EE** and that Anaxagoras attempts to show, via **SLI**, that **NLM** entails **EE**. Therefore, it seems fair to conclude that **NLM** is more fundamental within Anaxagorean physics than even **EE**: while **EE** makes it possible for Anaxagoras to explain qualitative change, every thing can be in every thing only if **NLM** holds. The point is worth insisting upon since **EE** has received rather more attention in discussions of Anaxagoras' thought (not surprisingly, since much of his system's explanatory power derives from this postulate, and it also appears to present serious problems of interpretation).

Anaxagoras' articulations of **EE** in fr. 6 sound perfectly general: 'every thing in every thing ($\hat{\epsilon}\nu \pi a \nu \tau \hat{\iota} \pi a \nu \tau a$)' and 'every thing contains a portion of every thing' ($\pi a \nu \tau a \pi a \nu \tau a$)' and 'every thing contains a portion of every thing' ($\pi a \nu \tau a \pi a \nu \tau a$). This postulate can be understood as the result of rigorous adherence to what Aristotle identifies as the shared presumption of all Presocratic cosmologies, that no thing comes to be from nothing. Anaxagoras criticizes normal talk of 'coming to be' and 'perishing' as inappropriate: 'The Greeks are improperly accustomed to speaking of coming to be and perishing; for no thing $(o \nu \delta \hat{\epsilon} \nu \dots \chi \rho \hat{\eta} \mu a)$ comes to be nor yet perishes, but each is formed by combination

Anaxagoras' reliance on a postulate of infinite divisibility (not quite the same thing as **NLM**) has been questioned by Mann 1980: 242–7, and Inwood 1986. Mann's doubts about whether Anaxagoras' commitment to **EE** entails the doctrine of infinite divisibility are rooted in his belief that Anaxagoras' basic entities are homoeomeries, such that their division always yields parts all of which have the same character as the stuff divided. Anaxagorean stuffs are not like this, however, for he does not require that every microscopic or 'non-apparent' portion of an object must have the same properties at its level that the object as a whole does at our level of observation. One in fact expects just the opposite, given that no two portions of stuff will have exactly the same composition. Inwood's doubts rest on an interpretation of $\mu \acute{e}\gamma \epsilon \theta o_s$ or 'largeness' and $\sigma \mu \iota \iota \iota \iota \iota \iota$ or 'smallness' in Anaxagoras as meaning, respectively, 'the characteristic of being separated out and so distinguishable from other stuffs' and 'the characteristic of being mixed and so not distinguishable from other stuffs' (Inwood 1986: 22). For criticisms of this idiosyncratic reading, see Graham 1994: 108 n. 58.

from things that are $(a\pi \hat{\sigma}) \epsilon \delta \nu \tau \omega \nu \chi \rho \eta \mu a \tau \omega \nu$ and dissolved into them. Thus they should properly call coming to be "being formed by combination" and perishing "being dissolved" (fr. 17). There is similar criticism in Empedocles. However, whereas Empedocles' physical theory requires that whatever comes to be does so from something pre-existent, Anaxagoras seems to have supposed that every thing that comes to be must do so from things that, to some extent, are already what it comes to be. That is to say, he commits himself to a more demanding variant of what Aristotle terms the 'common axiom' of Presocratic cosmology: not merely that no thing comes to be from what is not, but that nothing comes to be from what it is not. While he never formulates this axiom as such in any of the extant fragments, his apparent adherence to it comes through when he asks, 'how could hair come to be from not-hair and flesh from not-flesh?' (fr. 10).²¹ The way his physical theory accounts for change by means of the separating out of characters from the mixture also seems to reflect his commitment to the general axiom. One needs to be careful, though, about how one characterizes its operation within Anaxagoras' system, for it is all too easy to take Anaxagoras to be concerned with the kind of analysis of change that is paradigmatic for Aristotle, wherein some thing not previously F becomes F. Anaxagoras' rhetorical question in fr. 10 suggests that he conceives of change more along the lines of F coming to be, rather than along the lines of x coming to be F. For example, he thinks in terms of hair coming to be, not in terms of something becoming hair. Moreover, what really happens, in Anaxagoras' view, in cases where we would be prone to say that F comes to be, is that F becomes apparent at our level of observation— $\tilde{\epsilon}\nu\delta\eta\lambda$ ov $\pi\alpha\rho$ ' $\tilde{\eta}\mu\hat{\iota}\nu$, as he would have said. \tilde{F} becomes apparent in some locality when portions of F beneath the threshold of our observation come together in such a way that their aggregate comprises an observable amount of F. Anaxagoras tells us this in fr. 17, when he says that no thing $(\gamma \rho \hat{\eta} \mu \alpha)$ comes to be but is compounded from things that already are (ἀπὸ ἐόντων χρημάτων).

The range of things to which Anaxagoras meant **EE** to apply has been probably the most difficult and controversial issue in the reconstruction of his physical theory. Some restriction of the postulate appears necessary to forestall absurdity. Anaxagoras can hardly have meant to analyse all characteristics or properties in terms of the preponderance of stuffs in their subjects' constitution. It would clearly be absurd, for instance, to try to account in this way for relational properties such as being to the left of, being larger than, or being the same age as. Thus despite Anaxagoras' special concern with the small and the large, he never lists these among the microscopic things or characters that congregate to become apparent at our level of observation. Smallness and largeness are properties of things, not things within them. It would be even more absurd to understand **EE** in so unrestricted a way that it entails that every

²¹ Although the authenticity of this fragment (preserved *ap.* schol. *in* Greg.Naz. 36. 911 Migne) has sometimes been questioned (e.g. by Schofield 1980: 135–43), that it is genuine seems confirmed by Arist. *GA* 1. 18. 723^a6–11 as well as by Lucretius' report that, according to Anaxagoras, 'bones are born from diminutive, tiny bones' (1. 835–6). See further Sider 2005: 121–2. Schofield 1975 argues that the scholium derives from Eudemus.

individual is in everything else, for example, that Socrates is in Plato.²² Thus it is reasonable to suppose that when Anaxagoras says that every thing is in every thing, he means roughly that every basic stuff is in every thing. The problem is to determine just what he means to include among the basic stuffs.

This problem emerges quite clearly from fr. 4b, where Anaxagoras describes the mixture of all things prior to the cosmogony:

And before being separated out, while all things were together, not even any colour was apparent. For the commingling of all things $(\delta\pi\delta\nu\tau\omega\nu\chi\rho\eta\mu\delta\tau\omega\nu)$ prevented this, both of the moist and the dry, and the hot and the cold, and the bright and the dark, and of much earth present within, and of seeds $(\sigma\pi\epsilon\rho\mu\acute{a}\tau\omega\nu)$ unlimited in multitude not at all like one another. For none even of the others was like the one to the other. And these things being so, one must suppose all things $(\chi \rho \dot{\eta} \mu a \tau a)$ to be present in the whole.

Everyone can agree that among Anaxagoras' basic stuffs are the opposite characters here given pride of place, the moist and the dry, the hot and the cold, and so on (cf. frs. 8 and 12). This is about all that is non-controversial. The difficulties in understanding what else, if anything, Anaxagoras meant to include among his basic stuffs derive from two basic problems in the evidence, both apparent in fr. 4b. First, we find Anaxagoras using two general terms, $\chi \rho \dot{\eta} \mu a \tau a$ or 'things' and $\sigma\pi\epsilon\rho\mu\alpha\tau\alpha$ or 'seeds', whose range and relation are much less clear than they could be. Aristotle makes the situation even more difficult by referring to Anaxagoras' material principles as $\delta\mu\omega\omega\mu\epsilon\rho\hat{\eta}$ or 'homoeomeries', his own term for things whose parts are 'synonymous' with, or called the same thing as, the whole (Arist. GC 1. 1. 314^a24–9, cf. Cael. 3. 3. $302^{a}31^{-b}3$). Second, things other than the traditional opposites appear in Anaxagoras' lists: earth (fr. 4b), air and aether (frs. 1, 2, and 12), hair and flesh (fr. 10), the stars, sun, and moon (fr. 12), and humans and other creatures (fr. 4a). The challenge for the interpreter is to provide a descriptive reconstruction of Anaxagoras' physical theory that clarifies his terminology, accounts somehow for Aristotle's view that the homoeomerous bodies were his elements, and that explains the presence of these other things on Anaxagoras' lists. 23 While meeting this challenge anew is not part of our immediate agenda, dispelling the erroneous assumption that Anaxagoras' physical theory was developed with the intention of replicating in its principles the attributes of Parmenidean Being will nevertheless liberate reconstruction of the theory from certain unnecessary constraints. These have led to extreme and otherwise unmotivated readings, and they have tended to flatten out hierarchical relations crucial to the theory. 24

²² Cf. Barnes 1982a: 320: 'The delicious suggestion that by "all things" Anaxagoras meant literally "all things" is, alas, untenable: "all things are in all things" will then imply that Anaxagoras is in my typewriter and Clazomenae in its keys; and these idiocies were evidently no part of Anaxagorean physics'.

Teodorsson 1982: 23–64, usefully surveys the principal interpretations down to 1980 (though

the line developed in Furley 1976 is notably absent from this survey).

24 So e.g. Teodorsson 1982: 70: 'Anaxagoras took [the] rigorous position [that] everything in the universe must be assumed to have full, Parmenidean, being. . . . Anything that is found to exist in the world must have been there as such in the primordial mixture. Nothing is primary in relation to anything else.'

ANAXAGORAS AND THE PRINCIPLE OF NO BECOMING

While some have doubted whether Anaxagoras in fact set himself the goal of responding to 'the Eleatic challenge', the consensus has tended to be that his criticism of ordinary talk of coming to be and perishing in fr. 17 is an endorsement of a Parmenidean position that such changes are strictly speaking impossible.²⁵ Central to this story is the idea that Anaxagoras' basic entities are meant to be a plurality of Parmenidean entities.²⁶ In these respects, the conventional view has Anaxagoras responding to Parmenides in much the same way as Empedocles is supposed to have done, by positing a plurality of fundamental entities each of which satisfies allegedly Parmenidean conditions upon being a genuine entity. However, the difficulties in understanding the scope of the Anaxagorean postulate that every thing is in every thing (EE) are needlessly exacerbated by pursuit of the misguided presumption that Anaxagoras has to be seen as responding to or else following Parmenides by endowing all his basic stuffs with Parmenidean being so that nothing properly regarded comes to be or perishes. There is no longer reason to suppose that Parmenides denied the reality of change and becoming or that he somehow attempted to specify what any genuine entity would have to be like. Nor is there any good reason to suppose that Anaxagoras understood him as having done so. As we shall see in this section, the standard presumptions to the contrary lead either to absurdity or to arbitrary delimitation of his endorsement of the purportedly Parmenidean principles.

There is, again, some reason to suppose that Anaxagoras went further than his predecessors and supposed, not only that no thing can come to be from nothing, but that no thing can come to be from what *it* is not, that is, from what is not already at some level or to some degree whatever it is going to become. David Furley has astutely pointed out, however, that the conventional account of Anaxagoras'

²⁵ So Raven 1954: 123: 'It is a platitude that in Fr. 17 ... Anaxagoras is accepting, even while twisting to his own ends, a Parmenidean postulate'. Cf. e.g. Kirk and Raven 1957: $368-9 \approx \text{Kirk}$ et al. 1983: 359; Guthrie 1965: 281; Furley 1976: 48 ff.; Mann 1980: 228–9. Note that Schofield 1980: 5, calls the canonical view of Parmenides' influence on Anaxagoras merely 'probable'.

²⁶ So Vlastos 1950: 327, where Anaxagoras' substances' are said to 'all have Parmenidean being'. Cf. Guthrie 1965: 281, where it is said that Anaxagoras' theory of matter was developed to accommodate the radical idea 'that *every* natural substance must be assumed to have existence in the full Parmenidean sense'. (It also used to be commonly held that Anaxagoras endorsed a Parmenidean denial of void, though this feature of Anaxagoras' 'response' has come to be deemphasized somewhat as Melissus has come to be credited with identifying the existence of void as a necessary condition of motion.) For worries about this traditional variant, see Graham 1994: 79; 1999: 165–9; Graham nonetheless continues to hold that Anaxagoras' elements are meant to conform to the canons of Eleatic being, given his commitment to the meta-principle reading of Parmenides as 'telling what something would have to be like in order to qualify as an explanatory principle' (1999: 168). Finkelberg 1997, Curd 1998a: ch. 4, and 2007: 137–42, likewise suggest that the pluralists, including Anaxagoras, should be seen as following Parmenides' lead rather than as reacting against him. Whether he is seen as reacting against Parmenides to save the phenomena, or as pursuing the agenda in natural philosophy Parmenides pioneered, in either case Anaxagoras' elements are understood as entities intended to conform to the canons of Parmenidean being.

response to Parmenides suffers from a major defect: the notion that all Anaxagorean stuffs have Parmenidean being is given 'a highly selective sense, in which blood, bone, leaf, and silver are natural substances, but men, horses, and trees are not'. 27 Accepting the idea that Anaxagoras sought to improve on Empedocles' four-element theory by including such things among his basic stuffs, so that no new thing comes to be when, for example, blood, bone, hair, or flesh come to be or become apparent, Furley notes that this will be merely a limited improvement unless such things as men, horses, and trees are also counted among the basic entities: 'Unless we can find a reason why Anaxagoras should be content to allow organisms to lack "Parmenidean being," while at the same time carefully elevating their tissues to that status, he appears merely to have postponed his problem, not to have solved it.'28 In other words, if Anaxagoras intended to extend the range of basic stuffs or entities with 'Parmenidean being' in order to analyse instances of coming to be and perishing as merely apparent, then he should be presumed to have intended this analysis to extend beyond the qualitative, elemental, and 'homoeomerous' stuffs like hair and flesh to anything normally thought to come to be, including complex organisms and their parts. Accepting the antecedent of this conditional, Furley proposes that the 'seeds' or σπέρματα Anaxagoras mentions in fr. 4b (cf. 4a) are the seeds, in the normal biological sense, of all plants and animals.

That Anaxagoras' 'seeds' are this kind of thing seems at least as plausible a suggestion regarding their identity as any other on offer, ²⁹ and the idea gains support from the testimonia concerning Anaxagoras' biological theories that Furley cites and discusses. However, it does not seem that including seeds of this type in the mixture affords Anaxagoras a successful response to the problem Furley believes he inherited from Parmenides. The problem, again, is supposed to be how to explain the apparent generation of new things without violating the requirement that nothing can come to be from what it is not. The best textual evidence for Anaxagoras' concern with this problem—'for how could hair come to be from not-hair and flesh from not-flesh?' (fr. 10)—suggests that the worry relates to qualitative emergence. How could something with qualities of a certain kind be generated or come to be from things not already possessing those qualities? Including seeds of the various kinds of organisms in the mixture does not help with this problem. For whatever kind of identity one might posit between a seed and the mature organism that develops from it, it will not be qualitative identity, the relevant kind of identity—unless the seeds themselves are conceived of as already possessing the qualitative characteristics of the mature individual.

Considerations of this type have driven one interpreter, Eric Lewis, to embrace just such an extreme 'solution'. Like Furley and so many others, Lewis assumes that Anaxagoras was led to maintain that every thing is in every thing by his embrace of the 'Eleatic' prohibition against coming to be. Lewis, however, pursues the

²⁷ Furley 1976: 51.

²⁸ Ibid

²⁹ See Teodorsson 1982: 80, for a summary overview of opinions on the nature of Anaxagorean σπέρματα.

implications of this supposed commitment in an unrelenting manner.³⁰ He wonders in particular about how to account for the apparent coming to be of individuals: 'To claim that individuals are complexes of homoeomers which can be, and are, present in everything, is simply to ignore the problem, for on such an account the complexes, which simply are the individuals, surely do come to be.'31 Thinking it unwarranted to suppose that Anaxagoras would have denied that individuals exist, Lewis proposes that Anaxagoras 'makes the individual organisms eternal, via his theory of seeds', ³² a claim he expands by positing that Anaxagorean $\sigma\pi\epsilon\rho\mu\alpha\tau\alpha$ are 'seeds of all the individual organisms that will ever exist', that is, 'homunculi of all individual organisms' or tiny instances of all individuals.³³ On this extreme view, the seed of Socrates will be a tiny version of Socrates, which, in so far as it is meant to be a Parmenidean being, has always existed. In fact, we are told, 'Anaxagoras took the bold step of having it that all individual organisms have always existed'. 34 Lewis apparently finds it acceptable, however, for these ungenerated individuals to be subject to destruction.³⁵ Among the many odd features of Lewis's view is how he is at once uncompromising in pursuing what he takes to be the implications of Anaxagoras' adherence to the 'Eleatic' prohibition against coming to be and yet totally neglects the parallel 'Eleatic' prohibition against destruction. In the end, even Lewis's homunculi fail to be genuinely Eleatic entities.³⁶

Furley is right to point out that if Anaxagoras conceived his physical principles as 'Parmenidean beings' with the intention of abiding by Parmenides' strong prohibition against generation, then it would have been arbitrary of him to limit his adherence to Parmenides' strictures to things such as blood, bone, hair, and flesh. Unless he makes organisms Parmenidean beings as well, he fails to abide by Parmenides' prohibition. Furley himself, however, though driven by the belief that Anaxagoras' adherence to the postulate of no becoming must be more thoroughgoing than normally presumed, ends up arbitrarily limiting the degree of his adherence to the postulate. He gives no reason, at any rate, why only kinds but not tokens of organisms should fall within the scope of EE and thus not come to be from what they are not. Perhaps he felt that pushing the postulate any further would lead to

 $^{^{30}}$ The reconstructions of Anaxagoras in Reeve 1981 and Furth 1991 are likewise driven to implausibly unrestricted versions of **EE** by unstinting pursuit of the notion that Anaxagorean physics is designed specifically to obey Parmenidean strictures against non-being.

31 Lewis 2000: 14. This point resembles Furley's complaint that consistency in his adherence to

the Eleatic postulate of no becoming requires that application of EE extend to organisms as well as their tissues.

³² Ibid. 17.

³³ Ibid. 18. Cf. 19 n. 32, where Lewis speculates that Furley's view of the *spermata* 'is compatible with the homunculus theory', though he does not suppose Furley actually means to endorse the theory. Lewis can be seen as developing in a positive manner the point deployed against Furley by Mann 1980: 235-6 (cf. Curd 1998 a: 136 n. 25), that strict adherence to the postulate that nothing come to be from what it is not 'exacts an incredibly high standard on our accounts of generation' such that 'consistency requires that the seeds of men be homunculi'.

³⁴ Ibid. 22. ³⁵ Cf. ibid. 21 n. 36.

³⁶ Cf. Mann 1980: 236.

absurdity. Lewis is unhampered by any such concern. In his case, however, the idea of Anaxagoras' adherence to the Parmenidean postulate of no-becoming so dominates his account that **EE** becomes something of a secondary concern. For while he adopts the view of Anaxagoras' endorsement of the 'Eleatic' prohibition as the motivation behind the idea of every thing in every thing, Lewis's homunculi wind up being exempt from **EE**. Since **EE** applies to kinds rather than tokens, 'individual organisms do not fall under the scope of the E in E postulate to begin with'. 37 It would make the position even more outlandish than it is already if each and every thing had to contain homunculi of all future organisms. In the end, Lewis's homunculi hypothesis, which is driven too exclusively by the 'Eleatic' postulate of no becoming, does not help us better understand the range of EE's application. The ridiculous notion that there are homunculi of all individual organisms hardly deserves much attention as a reasonable representation of Anaxagoras' actual theory. Still, Lewis's interpretation provides a useful indication of how the conventional assumption that Anaxagoras endorses the 'Eleatic' postulate that nothing can come to be from what is not (it) can only lead to absurdity if rigorously pursued and not arbitrarily restricted. If, however, one accepts the conventional assumption without feeling the need to pursue it rigorously, then one will have to answer Furley's objection and explain why Anaxagoras should have allowed some things but not others to come to be from what they are not.

In short, the hypothesis that Anaxagoras conceived his physical principles as 'Parmenidean beings' with the intention of abiding by Parmenides' strong prohibition against generation must either be arbitrarily restricted or lead to absurdity. It will not do to try to allow Anaxagoras some form of 'respectful compromise', which would have it that he accepts coming into being for some things but not others, for this is already to exempt him from adherence to Parmenides' prohibition. The fact that the hypothesis that Anaxagoras' physical system was designed to abide by Parmenides' strong prohibition against generation leads to absurdity unless arbitrarily restricted indicates that there is something problematic about the hypothesis itself. What the problem is should be clear, namely, that there is in fact no Parmenidean prohibition against generation. Although both the strict monist and logical-dialectical readings take him to be arguing in fr. 8. 5–21 that nothing either comes to be or perishes, their failure to take account of the modal distinctions that define Parmenides' inquiry means that they find a general prohibition against generation and destruction where none exists. What Parmenides instead argues in fr. 8. 5-21, and argues correctly, is that what is and cannot not be can neither come to be nor perish. This prohibition clearly does not extend to all entities whatsoever, for not all entities enjoy this necessary mode of being. Thus it is wrong to attribute to Parmenides a universal rejection of generation and destruction, and it is likewise wrong to suppose that later Presocratic cosmologists were endeavouring to respond to his arguments against the reality of such changes. There is, again, every good reason to credit Aristotle's repeated statements that *nihil ex nihilo fit* was a general presupposition of Presocratic cosmology. Anaxagoras, like all the Presocratic cosmologists, including Parmenides, abides by this principle. Anaxagoras is also evidently concerned with accounting for qualitative emergence in natural processes of generation and growth. His postulate that every thing is in every thing (**EE**), which is made feasible by his more fundamental no least magnitude postulate (**NLM**), provides the basis for explaining these processes. There are sufficient challenges in isolating the scope of **EE** without the distorting misconception that with it Anaxagoras hoped to abide by a general principle of no becoming.

Advocates of the meta-principle reading will agree that there is no general principle of no becoming in Parmenides. They see him as denying only that genuine or fundamental entities can undergo generation and destruction, and they will say that Anaxagoras' basic stuffs are designed to replicate the attributes of Parmenidean Being. The simple fact, however, is that the attributes Parmenides argues belong to τὸ ἐόν in the Way of Conviction are no more thoroughly replicated in the principles of Anaxagoras' physical system than they are in the principles of Parmenides' own cosmology.³⁸ The claim that Anaxagoras' stuffs are meant to be a plurality of Parmenidean entities is hard to square with the actuality of his theory. Anaxagorean stuffs have hardly any attributes of 'Parmenidean Being' other than being ungenerated and indestructible: they are neither uniform, indivisible, nor all alike; they are neither motionless nor changeless; and they do not seem to have the kind of perfection described at the end of the Way of Conviction, even if one understands Parmenides' words there as merely metaphorical.³⁹ It is a serious, if generally unacknowledged, problem for the conventional view that one should refrain from characterizing any thing in Anaxagoras' system—with the exception of Nous as being anything as such or as having any definite characteristics, except in a merely phenomenal manner relative to the particular level of observation. With the exception of *Nous*, nothing in Anaxagoras is just what it appears to be. Instead, because every thing is *in* each thing (whatever the exact range of this postulate), each thing at some level and to some degree is each of the things within it. 40 Nothing other than Nous has the kind of discrete and invariable identity that characterizes Parmenidean Being.

³⁸ On the insuperable difficulty posed for the meta-principle reading by the fact that Parmenides' light and night do not satisfy what are supposed to be Parmenides' own conditions upon the principles of a viable cosmology, see pp. 29–31 above.

Among those committed to the view that Anaxagoras' basic entities are meant to be a plurality of Parmenidean entities, there are some who look beyond the attributes of being ungenerated and imperishable and acknowledge that the remaining attributes seem not to belong to Anaxagorean stuffs, though they tend to try to find ways to work around this unwelcome point. Curd 1998a: 152 e.g. suggests that each of the $\chi \rho \eta \mu a \tau a$ 'can be conceived as a separate, independent entity, though none in actuality is like this', and she makes it part of her exposition that *Nous* does in fact know them as such: 'The *chrēmata* themselves, stable and permanent features of the *kosmos*, are entities that meet Parmenidean criteria, each with a fixed and unchanging nature that can be grasped by *Nous*' (ibid. 154, cf. 141–7).

⁴⁰ Cf. Reeve 1981: 93–4, on Anaxagoras' reasons for positing 'the principle of Dissimilarity', namely that '[n]othing, except mind, is (wholly) like anything else' (91).

The already difficult task of reconstructing Anaxagoras' physical theory should therefore no longer be hampered by the artificial constraint imposed by the erroneous presumption that Parmenides was a major influence upon its development—whether via the purported challenge of his strict monism or via his purported articulation of general requirements upon being a genuine or fundamental entity. Removing this obstacle to an accurate understanding of Anaxagoras' place in the Presocratic tradition has a number of beneficial effects. For one, the way is cleared for recognizing that Zeno is more likely than Parmenides to have influenced Anaxagoras' development of his brilliant theory of material structure and composition. More significantly for our purposes, it makes it possible to recognize the true correspondence between the systems of Anaxagoras and Parmenides. Finally, we may suggest reasonable restrictions on the scope of **EE** since it need no longer be distorted by the mistaken belief that Anaxagoras accepted an impossibly rigid version of a principle of no becoming inherited from Parmenides.

ANAXAGORAS AND ZENO

We have seen in Chapter 5 how Zeno effectively challenged natural philosophers to develop a model of material structure and composition that would not have the contradictory consequences he argued are entailed by commonplace views. That Anaxagoras' is notably the first Presocratic theory to involve something more than an everyday conception of material structure, coupled with the foundational role within his system of the No Least Magnitude postulate, already makes prima facie plausible the once widely endorsed idea that he developed his physical theory in part in reaction to Zeno. In this connection, Mansfeld's exhaustive demonstration that Anaxagoras' period of residence and philosophical activity in Athens stretched from 456/5 to 437/6 BC is a result of the first importance. Mansfeld's historical arguments expose as mistaken what some have thought an all but decisive objection to the possibility of Zenonian influence, namely the supposition that Anaxagoras, arriving in Athens in 480 BC, is as likely as not to have written prior to Zeno. 41 If Anaxagoras in fact came to Athens in 456/5 BC, and if, as Plato's Parmenides suggests, Zeno was born around 490 BC and compiled his collection of paradoxes at a young age, then there is no chronological obstacle to supposing that Zeno's arguments influenced the development of Anaxagoras' physical theory. It is even possible that Anaxagoras knew Zeno personally. According to Plutarch, 'Pericles heard Zeno of Elea treating of nature like Parmenides' (Plu. Per. 4. 5). When understood to mean that Pericles was Zeno's pupil, this claim has generally been dismissed as improbable and uncorroborated by other evidence. But Plutarch's report does not necessarily

⁴¹ Furley 1976: 59, is thus mistaken to have asserted that 'there is no good external evidence for thinking that Anaxagoras wrote later than Zeno'; and thus falls his first line of argument against the idea that Anaxagoras' physical theory was influenced by Zeno.

imply that Pericles was Zeno's actual student. Instead, it suggests a scenario much like the one described as the dramatic occasion of Plato's *Parmenides*, one where Zeno visits Athens and reads his treatise to a group of Athenians whose interest in the latest ideas has made them anxious to hear it. That Zeno spent some time in Athens is also suggested by the report in the Platonic *First Alcibiades* that Kallias paid him 100 minae for instruction (*Alc*.1 19 A 3–6). While we are ultimately in no position to know whether Anaxagoras did encounter Zeno in Athens, nothing appears to preclude the possibility, and the evidence of their simultaneous presence in Athens may even make an encounter seem likely.

Commitment to the presumption that Anaxagoras developed his physical theory primarily as a response to Parmenides has often been accompanied by a downplaying or dismissal of the possibility of Zenonian influence. 42 One might have expected that more historians, believing that Anaxagoras' physical theory was a response to Parmenides and that Zeno's arguments aimed to further and support Parmenides' teachings, would have been able to accommodate the idea that Anaxagoras' physical theory also involved a response to Zeno. 43 Mansfeld's study of Anaxagoras' chronology has now removed the only serious obstacle to exploration of Zeno's impact on Anaxagoras. The best argument that there was such influence will come from seeing just how effectively Anaxagorean physics, with its fundamental postulate of no least magnitude, eludes the unwelcome consequences of Zeno's paradoxes of composition. Apparent 'echoes' of Zeno in Anaxagoras are insufficient to establish this influence, for they leave it open for the sceptic to counter that Zeno is echoing Anaxagoras, not Anaxagoras Zeno, and that Zeno's arguments were designed to point up, inter alia, the inadequacies of Anaxagoras' physical theory. The problem with this response, as we shall see, is that Anaxagoras' theory is sufficiently sophisticated that Zeno's antinomies of limited and unlimited and of large and small do not actually undermine it. If Zeno meant to point to problems in Anaxagoras' theory, then he must be judged to have failed. It is therefore altogether more plausible that Anaxagoras' physical theory was developed in reaction to Zeno's challenge to unreflective conceptions of material structure. This hypothesis becomes all the more plausible when it becomes clear what particular Zenonian premises Anaxagoras rejects. The major problem with the scepticism, in studies of two or three decades

⁴² For expressions of scepticism about the possibility that Anaxagoras was responding to Zeno, see Strang 1963: 366–7; Furley 1976: 76–80; Schofield 1980: 80–2; Barnes 1982*a*: 627 n. 33. Note, however, that Schofield subsequently admits that he gives a 'rather Zenonian interpretation' of Anaxagoras' commitment to unlimited smallness (1980: 88) and is willing enough to speak of 'his affinities with Zeno in Fragments 3 and 6' (ibid. 94).

⁴³ There have, though, been certain exceptions. So e.g. Raven 1954: 125 ff., the basis for Kirk and Raven 1957: $370-2 \approx \text{Kirk}$ et al. 1983: 360-2. Raven's account requires a fair amount of correction, not only because of his outmoded notion that Zeno's arguments were directed against 'Pythagorean unit-point-atomism', but also because he is less precise than he should be about where Anaxagoras follows and where he departs from Zeno; it is not quite right to say, for instance, that Anaxagoras applied 'to physical matter the arguments that had earlier been employed by Zeno in connexion with mathematical magnitude' (Raven 1954: 125). Cf. Guthrie 1965: 281 and 289–90; Teodorsson 1982: 70-2.

ago, towards the idea that Anaxagoras was responding to Zeno is that they hardly even consider how Anaxagoras' theory affords him an escape from Zeno's antinomies by providing the resources for rejection of specific premises on which these antinomies rely.

Recall that Zeno argued as follows that if there are many things, they must be both limited and unlimited in number.

If there are many things, it is necessary that they be just so many as they are and neither greater than themselves nor lesser. But if they are just as many as they are, they would be limited $(\pi \epsilon \pi \epsilon \rho a \sigma \mu \epsilon \nu a)$. If there are many things, entities are unlimited; for there are always other entities between entities, and again others between those. And thus entities are unlimited $(\tilde{a}\pi \epsilon \iota \rho a)$. (Zeno fr. 3 ap. Simp. in Ph. 140. 29–33)

The argument here may be reconstructed as follows. Its overall structure is: if (M) there are many things, then (F) there must be finitely many things; and, if (M) there are many things, then (I) there must be infinitely many things. The assumption that there are many things is thus supposed to have been shown to lead to contradiction, namely, that things are both finitely and infinitely many. The particular argument for (F) seems to be simply:

- (F1) If (M) there are many things, then they must be just so many as they are.
- (F2) If the many things are just so many as they are, they must be finitely many.
- :. (F3) If (M) there are many things, then (F) there must be finitely many things.

The somewhat more complex argument for (I) may be reconstructed as follows:

- (I1) If (M) there are many things, they must be distinct or separate from one another.
- (I2) Any two things will be distinct or separate from one another only if there is some other thing between them.
- (I3) Two representative things, x_1 and x_2 , will be distinct only if there is some other thing, x_3 , between them.
- (I4) x_1 and x_3 will in turn be distinct only if there is some other thing, x_4 , between them.
- (I5) Since the postulate in (I2) can be repeatedly applied as in (I3) and (I4) a limitless number of times, between any two distinct things there will be infinitely many other things.
- .: (I6) If (M) there are many things, then (I) there must be infinitely many things.

In one development of his general thesis that the cosmos's present state replicates many aspects of its original condition prior to the cosmogonical differentiation of things by mind, Anaxagoras wrote: 'And even when these things have been thus differentiated, one must understand that all things $(\tau \dot{\alpha} \ \pi \dot{\alpha} \nu \tau a)$ are no less and no more; for it is impossible for there to be more than all, but all things are always equal' (fr. 5). Here Anaxagoras seems to echo the beginning of Zeno fr. 3 and to endorse the postulate in (F1). He is able, though, to avoid Zeno's conclusion in the first arm of the antinomy. For it is also part of Anaxagoras' theory that things are unlimited in

multitude. 44 Anaxagoras correctly recognizes that things can be both as many as they are and infinitely many. 45 Raven thought this suggests that Anaxagoras understood the nature of infinity better than Zeno. A more judicious conclusion would perhaps be that Anaxagoras understood infinity clearly enough for him not to succumb to the prima facie plausibility of (F2). In any case, by avoiding the conclusion of the antinomy's first arm, Anaxagoras is effectively free to accept the conclusion in the other arm, that there are infinitely many things, though notably not for the reasons given by Zeno. Anaxagoras' postulate of Inseparability would have prevented him from accepting (I1). He might nevertheless be thought generally sympathetic to the argument, in so far as it implies something like his own No Least Magnitude postulate. The conclusion, it appears, only makes sense when something like **NLM** is part of the picture, such that there is always room between any two things for another.

There might already seem to be plain evidence of Anaxagoras' relatively sophisticated understanding of infinity, as well as of his desire to develop an effective response to Zeno's arguments, in this very postulate, that nothing is so small that there is not something smaller, and nothing so large that there is not something larger. To quote his own words again: 'For neither of the small is there a smallest, but always a smaller (for what is cannot by cutting not be); likewise, there is always a larger than the large; and equal it is to the small in extent. And in itself each is both large and small' (Anaxag. fr. 3). This fragment has not surprisingly been thought the most reminiscent of Zeno, given its notion of limitlessly small (and large) magnitudes and its apparent acceptance of infinite divisibility. More particularly, it can be seen as part of a response to Zeno's argument purporting to show that, if there are many things, they must be both so small as to have no magnitude and so large as to have unlimited magnitude. The overall structure of the antinomy of large and small is: if (M) there are many things, then (S) they must be so small as to have no magnitude; and, if (M) there are many things, then (L) they must be so large as to have unlimited magnitude. The assumption that there are many things is thus yet again allegedly shown to lead to contradiction. In Zeno's own words, 'if there are many things, they are both large and small: so great as to be unlimited in magnitude, and so small as to have no magnitude' (Zeno fr. 2 ap. Simp. in Ph. 139. $8-9 \approx 141.6-8$). The end of Anaxagoras fr. 3 shows that he, too, in his own

⁴⁵ Furley 1976: 60, thus wrongly claims that Anaxagoras has no argument against Zeno's antinomy of limited and unlimited. The argument may not come in fr. 3, but Anaxagoras has the resources in his broader theory to forestall Zeno's inference from (M) to (F). Furley also claims that the argument of Zeno fr. 3 might well be aimed at Anaxagoras, for the reason that Anaxagoras 'shows no sign of noticing that if things are as many as they are . . . then they are finite'. But it is only natural for Anaxagoras not to 'notice' what he does not in fact believe.

way, accepts the notion that each thing is both large and small, though for him this apparently means that size is essentially a relative matter (a notion encapsulated in **SLI**). With magnitude extending limitlessly in both directions, anything of any specific magnitude is no more large than small. **SLI** preserves the balance between the two dimensions in a way that Zeno's antinomy of large and small does not, for Anaxagoras rejects the idea that things can *ever* be so small as to have no magnitude whatsoever.

Anaxagoras can also be seen putting to work the notion of infinitesimal magnitude that features so prominently in Zeno's paradoxes. Of course, Anaxagoras fr. 3 makes nothing like the point Zeno purports to demonstrate in the antinomy of large and small, namely, that each individual thing must be both limitlessly large and disappearingly small. Nevertheless, Anaxagoras can be seen as incorporating key Zenonian premises into his physical theory while avoiding the absurd conclusions Zeno sought to derive from the hypothesis of plurality. He accomplishes this by effectively endorsing all but of one of Zeno's premises in each arm of the antinomy, while rejecting only the premise he sees as leading to absurdity. Simplicius only alludes to Zeno's argument in the antinomy's first arm, saying that Zeno derived the conclusion that each of the many 'has no magnitude from each of the many being the same as itself and one' (*in Ph.* 139. 18–19 = Zeno fr. 2 *ad fin.*). Although this is not much to go on, the argument may plausibly be reconstructed as follows:

- (S1) Each of the many is the same as itself and one.
- (S2) Whatever has magnitude can be divided into distinguishable parts.
- (S3) Whatever has distinguishable parts is not the same as itself.
- .: (S4) Whatever has magnitude is not genuinely the same as itself.
- (S5) Whatever is not the same as itself is not genuinely one.
- .. (S6) Whatever has magnitude is not genuinely one.
- :. (S7) Each of the many has no magnitude.

To be 'the same as itself' is what it means for something to be 'one' in the strict sense Zeno envisages, whereas any magnitude, which will have distinguishable parts in virtue of being spatially extended, will fail to be strictly one and self-identical. Zeno then transitioned to the other arm via the following lemma (Simp. *in Ph.* 139. 11–15, cf. 141. 1–2): each of the many must have some magnitude, for what has no magnitude would be nothing. Although the evidence in Simplicius (*in Ph.* 140. 34–141. 10) mostly pertains to how Zeno argued that each thing must have infinitely many parts—the premise featuring here as (L2)—the broader argument for (L) may be reconstructed as follows:

- (L1) Each of the many has some magnitude. [From the lemma]
- (L2) Each of the many contains infinitely many parts.
- (L3) Each of the parts of each thing has some magnitude.
- (L4) The magnitude of any object is equal to the sum of the magnitudes of its parts.
- (L5) The sum of infinitely many parts of some magnitude is infinite.
- .. (L6) The magnitude of each of the many is infinite.

The antinomy taken as a whole thus purports to have shown that, if there are many things, each of them must have both no magnitude and infinite magnitude.

Taking the latter arm first, it is clear that Anaxagoras accepts that each of the (infinitely) many entities populating his world has some magnitude. EE and NLM commit him, moreover, to each of these many entities having infinitely many portions, and to each of these portions having some magnitude. While there is no reason for him not to accept (L4), he seems to have had a good enough grasp of infinity to realize that (L5) is false: the sum of infinitely many parts of some magnitude need not in fact be infinite, provided that the parts in question are diminishingly small. This point should be clear enough to anyone who, as fr. 3 suggests Anaxagoras did, thinks about repeatedly dividing a sample object into ever smaller parts. For just as two halves make one whole, a half and two quarters also make a whole, a half and a quarter and two eighths make a whole, and so on. No matter how many parts an object is divided into, these parts will never be such that their magnitudes sum to more than the magnitude of the original whole. A more sophisticated mathematical formulation of the postulate at play here may of course be given. But all that is really required to see that (L5) is false is common sense and enough imagination to envision the kind of repeated division just described. Equipped with NLM, Anaxagoras is prepared to accept (L1) to (L4), but he apparently had enough sense to realize that he could reject (L5) and thereby the absurd conclusion of this arm of Zeno's antinomy.

Even more telling for our purposes is how Anaxagoras might be thought to have reacted to the argument in the antinomy's first arm, to the effect that each of the many has no magnitude. We have already noted, in discussing Zeno's relation to Parmenides, that this argument's initial assumption is reminiscent both of Parmenides' description of light as 'altogether the same as itself' (fr. 8. 57b) and of his description of What Is as 'one' and 'all alike' (fr. 8. 6a, 22b); and we considered whether Zeno's argument here might be as devastating for Parmenidean Being as for everyday pluralism. All this may serve as background to consideration of Anaxagoras' response to Zeno's argument. Since unity and self-similarity are among the attributes of Parmenidean Being, they should also be attributes Anaxagoras aims to give each of the 'elements' of his physical theory—if these were in fact the plurality of Parmenidean beings they are typically said to be. A passage at the end of the lengthy fr. 12, however, shows that nothing in his world other than mind is unified and self-similar. Having said that no thing other than mind is altogether separated or distinguished from other things, thereby reinforcing I as a corollary of EE, Anaxagoras says: 'But mind is all alike, both the greater and the lesser [sc. portions of it]. But nothing else is like anything else, but in whatever there are things dominant, each single thing most apparently is and was these things ($vo\hat{v}_s$ $\delta \hat{\epsilon} \pi \hat{a}_s$ $\delta \mu o\hat{\iota} \delta \hat{\epsilon} \hat{\epsilon} \sigma \tau \iota \kappa \alpha \hat{\iota} \delta \hat{\iota} \kappa \alpha \hat{\iota} \delta \hat{\iota}$ έλάσσων. ἔτερον δὲ οὐδέν ἐστιν ὁμοῖον οὐδενί, ἀλλ' ὅτω πλεῖστα ἔνι, ταῦτα ένδηλότατα εν εκαστόν έστι καὶ ἦν)'. Now, while Anaxagoras does call each of the things other than mind 'single' or 'one' ($\tilde{\epsilon}\nu$) in a superficial way, and while his specific point here that each is like no other implies that each is like itself, nevertheless none of the things other than mind is the same as itself and one in the sense

required to generate the conclusion of Zeno's argument. For Anaxagoras' theory of composition effectively endorses (S2), (S3), and (S5), and it avoids the conclusion that each thing has no magnitude only by denying that each thing is the same as itself and one in the relevant sense.

A little reflection will make this clear. (What follows applies to everything except mind and to the period after the initial, cosmogonical separation.) Take any specimen object. According to the postulate of preponderance (P), it will have the appearance of whatever 'things' $(\chi \rho \dot{\eta} \mu a \tau a)$ predominate within it. Moreover, it will not be (just) like any other object, because the things comprising it will not be the same as the things in any other object, neither in their character nor in their distribution. Now consider the specimen object divided into parts in any way whatsoever. What applies to the whole object in relation to other objects will also apply to its parts in relation to one another (and presumably even in relation to the whole of which they are parts). Each part will have the appearance of whatever things predominate within it, and each part will be (just) like no other object, including the other parts, since each part has its own, unique composition. Thus, with respect to all things other than mind, Anaxagoras commits himself to (S2), that whatever has magnitude can be divided into distinguishable parts, for after the initial cosmogonical separation no portion of the cosmos is identical to any other. He would also appear to be committed to (S3) and (S5), in so far as they are both meant to be analytic. In any case, he is committed to the notion that nothing is (just) the same as any of its parts, because after the initial separation nothing other than mind is homogeneous throughout, and being non-homogeneous is a non-trivial way for something to fail to be the same as itself. By the same token, being non-homogeneous is a non-trivial way of failing to be one.

Zeno's argument requires such non-trivial senses of self-similarity and unity. Furthermore, uniformity and homogeneity are what Parmenides himself had in mind when he described What Is as 'whole and uniform' (ovleta) vertheta vertheta and went on to argue that What Is is without differentiation since it is all alike (fr. 8. 22–5). If Anaxagoras' 'elements' were uniform and homogeneous entities like What Is, then he could endorse (S1) and yet forestall Zeno's conclusion simply by rejecting (S2). There are some things, he could say, that cannot be divided into distinguishable parts because they are homogeneous throughout, so that no possible division would produce parts distinguishable from the others. Anaxagoras in fact takes precisely the opposite tack: he rejects (S1) and endorses all the remaining premises of Zeno's argument. He denies that any entity is the same as itself and one in the relevant ways and instead propounds a theory wherein every thing is phenomenally and compositionally distinct from every other thing, including each of its own parts.

What is particularly important to note here is that it is *precisely because* Anaxagorean stuffs do not have the attributes of 'Parmenidean Being' that his physical theory can avoid succumbing to Zeno's antinomy. By positing that all 'things' $(\chi \rho \dot{\eta} \mu a \tau a)$ were present together in the precosmogonical mixture, Anaxagoras can account for the changes that led from this initial state to the present cosmos, as well as for the

changes that continue to occur, all in terms of the rearrangement and resulting new preponderances of these things. Since each portion of stuff contains every kind of stuff within itself, though to different degrees both than other portions and than in different regions within itself, no Anaxagorean stuff will be 'whole and uniform', that is to say, just what it is wherever it is. Nor, evidently, is any Anaxagorean stuff either unchanging or perfect in the way Parmenides argues What Is is. Since Anaxagorean stuffs do not have these attributes, it hardly makes sense to try to portray them as a plurality of essentially Parmenidean entities. The only attributes Anaxagorean stuffs share with Parmenides' What Is are those of being ungenerated and unperishing. Anaxagoras conceived of his stuffs in this way, not because of any specifically Parmenidean influence, but because he was committed to a more stringent version of the common axiom of Presocratic cosmology according to which, not only does no thing come to be from nothing, but no thing comes to be from what it is not already to some degree. Moreover, if it had been Anaxagoras' agenda to pursue the project of cosmology by positing as basic a plurality of 'Parmenidean' entities, with each having the Parmenidean attributes of wholeness and uniformity, the resulting theory would have foundered on Zeno's antinomy of large and small.

If one seeks an Eleatic pedigree for Anaxagoras' physical theory, Zeno is a much better candidate than Parmenides. In Zeno, Anaxagoras would have found inspiration for his theory's most fundamental postulate, that there is no least magnitude. There is evidence of a deeper engagement in the striking fact that Anaxagoras accepts several key premises of the Zenonian antinomies, even while he understands the nature of infinity well enough to escape Zeno's conclusions. Anaxagoras' own words in fr. 6 actually echo the formulation of the first arm of Zeno's antinomy of limited and unlimited, and they show he accepts Zeno's point that, if there are many things, they must be just so many as they are. Anaxagoras' understanding of infinity, however, was clear enough for him not to succumb to the allure of the fallacious inference that they must accordingly be finitely many. He likewise accepts the idea that each of the many contains infinitely many parts, which functions as a key premise in Zeno's argument that each of the many is infinite in magnitude; yet his conception of the kind of limitless division he envisages in fr. 3 was sufficiently clearsighted for him to reject the superficially plausible notion that infinitely many parts of some magnitude sum to an infinite magnitude. Finally and most tellingly, Anaxagoras accepts, for every portion of stuff other than mind after the initial state of mixture, all the key assumptions of Zeno's argument that each of the many has no magnitude—that whatever has magnitude can be divided into distinguishable parts and, as such, is neither the same as itself nor genuinely one—while disavowing the attributes of self-similarity and unity that give Zeno's argument its purchase against the Parmenidean One.

That Anaxagoras' theory successfully avoids the unpalatable consequences of Zeno's antinomies of composition suggests that his physical theory may have been driven by Zeno's challenge to develop an adequate theory of material composition and structure. The state of our evidence, particularly the scarcity of Zeno's own formulations of his arguments, means that we cannot accurately gauge the depth of Anaxagoras' engagement. We can, however, securely dismiss the notion that Zeno

might have been targeting physical theories like that of Anaxagoras. Since Zeno's arguments rely on premises Anaxagoras quite plainly rejects, the arguments would have no purchase against his theory, and only fundamental misunderstanding could ever have led Zeno to suppose they did. Anaxagoras' theory of material structure, by contrast, constitutes a very effective response to Zeno. For it incorporates several key principles deployed by Zeno and yet rejects just enough of his premises to make possible an apparently viable physical theory. In many ways, Anaxagoras' response is more dialectically effective against Zeno than the subsequent response of the early atomists, who end up rejecting more of his premises, most notably the premise that any magnitude is limitlessly divisible that Anaxagoras actually endorses in the form of the fundamental **NLM**.

ANAXAGORAS AND PARMENIDES: THE TRUE CORRESPONDENCE

Even leaving aside how conventional views of Anaxagoras' relation to Parmenides involve serious misunderstandings of Parmenides' own philosophical achievement, we have seen how implausible it is to cast Anaxagorean stuffs as the pluralized analogues of 'Parmenidean Being', given that they share with it only the attributes of being ungenerated and unperishing. The fundamental difficulty for the commonplace view is that Anaxagorean stuffs are insufficiently discrete to have the stable identity of Parmenidean Being. One might wonder, however, whether the precosmogonical state of affairs as a whole, rather than the portions and stuffs that comprise it and the cosmos into which it transforms, might not better be considered the Anaxagorean analogue of Parmenidean Being. The totality of Anaxagorean stuffs appears always to have existed, and the principle of the conservation of stuffs articulated in fr. 5 indicates that it will remain constant. In this sense, the totality of Anaxagorean stuffs is ungenerated and imperishable. Prior to the initiation of the cosmogonical process, moreover, it is whole and uniform: 'And before being separated out, while all things were together, not even any colour was apparent; for the mixing together of all things (ἡ σύμμιξις πάντων χρημάτων) prevented it' (fr. 4b ad init., cf. fr. 1). It is difficult to tell, however, whether this is supposed to indicate uniformity of character merely at what would be our normal level of observation or perfect uniformity right throughout, so as to be without differentiation of character at any level. Likewise, when one asks to what extent the totality of stuffs at this stage may be regarded as 'still' or unchanging, it is unclear whether to suppose merely that no change or motion was apparent or, more strongly, that there was no transmutation or movement among the stuffs at the microscopic level as well. For the sake of argument, let us suppose that the precosmogonical state is uniform and still throughout. If, finally, the totality of things cannot have the perfection of spherical shape, given that Anaxagoras' commitment to NGM entails that the universe must

be spatially unlimited, it remains the case that the precosmogonical state is what it is wherever it is.

Once the cosmogony is under way, however, the mixture of stuff changes and gradually transforms into the differentiated condition of the present cosmos, with its concentrations of stuffs in different regions. Although Anaxagoras' principle that the total quantity of stuffs remains constant means that no stuff is either generated or perishes during this process, the condition of the totality most definitely alters: our 'cosmos' or ordered world system comes into being out of the primordial chaos, apparently as one among others. ⁴⁷ In short, however uniform and unchanging the totality was supposed to be initially, it ceases to be uniform and unchanging once the cosmogony gets under way, precisely because the cosmogonical process is a process of change, movement, and differentiation. Since the totality of stuffs changes from the initial condition described in frs. 1 and 4b in the ways described in frs. 2, 4a, 9, and 12 to 16, the precosmogonical mixture cannot in fact properly be regarded as the Anaxagorean analogue of Parmenidean Being. ⁴⁸ While it replicates the features of What Is more thoroughly than any Anaxagorean stuffs do, the precosmogonical mixture does so only temporarily.

In Anaxagoras' system, only Nous is ever and always the same as itself and one in the sense of being uniform and homogeneous. Nous is 'all alike ($\pi \hat{a}s \ \delta \mu o \hat{\iota} os$), both the greater and the lesser [sc. portions of it]' (fr. 12). This is because, as Anaxagoras says towards the beginning of the same fragment, 'Nous is without limitation and independent and has been mixed with no thing, but alone it is itself on its own'. Anaxagoras takes a tack with respect to Nous that he might otherwise have taken in response to the first arm of Zeno's antinomy of large and small if it had in fact been his intention to make the many things in his system plural replicates of Parmenidean Being. This fact suggests that Nous is the nearest analogue of Parmenidean Being of anything in his system, certainly a nearer analogue than either the 'things' $(\chi \rho \dot{\eta} \mu \alpha \tau \alpha)$ and 'seeds' $(\sigma \pi \epsilon \rho \mu a \tau a)$ that are also fundamental entities of his ontology or else their totality in the cosmos's initial state. Nous is much more like what Parmenides shows what must be must be like than the other Anaxagorean stuffs. Nous is clearly supposed to be ungenerated and imperishable. It is also, as just noted, uniform and homogeneous throughout, so that it has no distinguishable parts. Furthermore, the obscure mechanism, described in fr. 12, whereby Nous functions as the ultimate cause of the cosmos's order and arrangement—namely, by 'knowing' and ordering all things that were, are, and will be 49—allows *Nous* to remain as far as possible

⁴⁷ See Mansfeld 1980*b*; Schofield 1996.

⁴⁸ Sisko 2003: 100–2, defends the notion that Anaxagoras' Primordial Chaos is Parmenides' One (as he rather injudiciously puts the point, ibid. 114) and then builds upon this identification an account of how Anaxagoras upholds Parmenidean postulates while reacting against him that is almost as implausible in its details as Lewis's homunculi theory. (Although Sisko at 90 n. 4 cites Reeve 1981 and Graham 1999 as scholars who 'accept the view that Anaxagoras' Primordial Chaos is meant to be equivalent to Parmenides' One', it is not in fact clear that they do so.)

⁴⁹ Fr. 12 passîm, especially καὶ γνώμην γε περὶ παντὸς πᾶσαν ἴσχει καὶ ἰσχύει μέγιστον ('and it has all knowledge about all things and has the greatest power'), and later, καὶ τὰ συμμισγόμενα τε καὶ ἀποκρινόμενα καὶ διακρινόμενα πάντα ἔγνω νοῦς. καὶ ὁποῖα ἔμελλεν ἔσεσθαι—καὶ ὁποῖα ἦν

unchanging even as it causes change in all other things. Anaxagoras is clearly concerned that *Nous*'s creative activity and interaction with the rest of the cosmos should in no way diminish its perfection. In ascribing to *Nous* this elevated status as the greatest and most perfect of entities, Anaxagoras endows *Nous* with the final attribute in Parmenides' programme, perfection.

Of course, the perfection of Nous is not the perfection of uniformity at its extremity we find in Parmenides, but this difference simply highlights how we should not, and need not, force the correspondence. Since there is no imperative requiring that Anaxagoras 'respond' to a non-existent challenge from Parmenides in articulating the principles of his own system, there is no requirement that Nous simply replicate the attributes of What Is. The actual nature of Anaxagoras' relation to Parmenides is not at all like that posited within Guthrie's narrative. In Anaxagoras' particular case, the relation may not even be one of influence at all. We shall have more to say about this in Chapter 8. For now, let it merely be recognized that Nous, rather than the quasi-elemental $\chi \rho \dot{\eta} \mu a \tau a$, is the nearest analogue in his system of What Is in Parmenides', without any attempt as yet to specify what might account for this correspondence. Furthermore, we may acknowledge the differences between *Nous* and What Is without diminishing the reality of the correspondence. There is no indication, for instance, that Parmenides conceived of What Is as controlling all things in the way Anaxagoras describes Nous as doing; nor do the extant fragments suggest that Parmenides conceived of What Is as sentient and even omniscient, as Anaxagoras clearly envisions *Nous* to be. Nevertheless, Anaxagoras' depiction of *Nous* is reminiscent of Parmenides' account of What Is in the ways already mentioned and in other ways to be discussed presently; and *Nous* is much more like What Is than the quasi-elemental $\gamma \rho \dot{\eta} \mu a \tau a$ that make up the world it governs. Even if Anaxagoras did not necessarily model his account of Nous on Parmenides' account of What Is, the two entities are nonetheless similar enough for one to see that they occupy analogous positions in the two systems.

While the perfection of *Nous* is not that of spherical shape, the account of *Nous* in the opening of fr. 12 is in other ways suggestive of the Way of Conviction's fourth and culminating stage. Anaxagoras says:

ἄσσα νῦν μὴ ἔστι, καὶ ὁποῖα νῦν ἔστι, καὶ ὁποῖα ἔσται—πάντα διεκόσμησε νοῦς ('and *Nous* knew all things, both things commingled and things separated and discriminated. And whatever was going to be—both whatever was that now is not, and whatever now is, and whatever will be—*Nous* ordered them all'), where *Nous*'s activities of knowing and ordering seem put on a par and perhaps even equated. On *Nous*'s directive role, see in particular Laks 1993, along with the further comments in Defilippo 1993: Lesher 1995; Curd 1998*a*: 141–7; 2007: 192–205.

έφ' έαυτοῦ ἦν, ἀλλά τεῳ ἐμέμεικτο ἄλλῳ, μετεῖχεν ἂν ἁπάντων χρημάτων, εἰ ἐμέμεικτό τεῳ. ἐν παντὶ γὰρ παντὸς μοῖρα ἔνεστιν, ὥσπερ ἐν τοῖς πρόσθεν μοι λέλεκται· καὶ ἂν ἐκώλυεν αὐτὸν τὰ συμμεμειγμένα, ὥστε μηδενὸς χρήματος κρατεῖν ὁμοίως ὡς καὶ μόνον ἐόντα ἐφ' ἑαυτοῦ).

limited' or 'infinite' and as 'self-governing'. The immediate context strongly suggests, however, that both epithets are connected in sense with Nous's being 'mixed with no thing' other than itself and with its being 'alone by itself'. A more appropriate translation of $\alpha \dot{v} \tau \sigma \kappa \rho \alpha \tau \dot{\epsilon}_S$ would thus seem to be 'independent', for the emphasis is not on Nous's governing itself but on how it is neither governed, influenced, nor affected by anything else. Likewise, rendering $\tilde{a}\pi\epsilon\iota\rho\rho\nu$ as 'unlimited' or 'infinite' hits the wrong note, for Anaxagoras' point hardly seems to be that Nous is limitlessly extended. Rather, the point seems to be that Nous's power and control are not limited in any way by anything else, a point developed at the end of the passage in the description of how being mixed with other things would involve a reduction of *Nous*'s ability to control things. Anaxagoras' use of the adjective $\alpha \pi \epsilon \iota \rho o \nu$ here may be compared to its use by the sophist Antiphon, apparently in describing the divine: 'for this reason it lacks nothing and does not expect anything at all, but it is free from limitation ($\alpha\pi\epsilon\iota\rho\sigma$ s) and in need of nothing ($\alpha\delta\epsilon\eta\tau\sigma$ s)' (fr. 10). Here the use of $\overset{\circ}{a}\pi\epsilon\iota\rho\sigma s$ as a near synonym of $\overset{\circ}{a}\delta\epsilon'\eta\tau\sigma s$ suggests the translation 'free from limitation', where limitation implies some kind of lack or failure. It is likewise best to understand $a\pi \epsilon \iota \rho o \nu$ in the opening of Anaxagoras fr. 12 as 'unlimited' in the sense of being free from limitation or unhindered.⁵⁰

 $^{^{50}}$ Cf. Deichgräber 1933: 348–9. Sider 1981: 96, follows Jaeger 1947: 241, in arguing that $\mathring{a}\pi\epsilon\iota\rho\rho\nu$ here must mean 'infinite' on the grounds that the term has this sense everywhere else in Anaxagoras and that 'the desired contrast is sufficiently present in $\mu\epsilon\mu\epsilon\iota\kappa\tau\alpha\iota$ $οὐδ\epsilonν\iota$ $\chi\rho\dot{\eta}\mu\alpha\tau\iota$ '. These considerations are both weak: nothing else in Anaxagoras' system could be unlimited in the way *Nous* is by being mixed with nothing, and Anaxagoras does more in the remainder of the fragment than merely develop the notion that *Nous* 'has been mixed with no thing'. A much stronger point against understanding $\mathring{a}\pi\epsilon\iota\rho\nu$ here as 'infinite' is that it leaves the epithet unconnected to anything that follows and thus unmotivated within the context of this fragment.

significantly, he makes a comparable intuitive leap in supposing that if *Nous* contained a share of anything else, it would have to contain shares of everything.

Recognizing that Anaxagorean *Nous*, not the $\chi\rho\eta\mu\alpha\tau\alpha$ of his physical theory, is the nearest analogue of What Is in Parmenides opens the way to appreciating better the parallels between their respective physical principles. Broadly speaking, both Parmenides and Anaxagoras posit certain things as fundamental to the constitution and generation of other things, Like every other Presocratic cosmologist, they are thus able to avoid the conceptually repugnant notion of generation ex nihilo. Not only is the range of cosmological phenomena they seek to explain much the same, but there are even certain parallels in the details of their accounts, most notably in their shared view that the earth shines by reflecting the light of the sun. 51 When it comes to comparing the principles of their respective cosmologies, Anaxagoras' description of the 'seeds' as 'nothing like one another' (οὐδὲν ἐοικότων ἀλλήλοις) and his claim that none of them 'is the one like to the other' (οὐδὲν ἔοικε τὸ ἔτερον τῶ ἑτέρω, Anaxag. fr. 4b, cf. fr. 12 ad fin.) are both reminiscent of Parmenides' characterization of light as like itself and 'yet not the same as the other' $(\tau \hat{\omega} \ \delta' \ \dot{\epsilon} \tau \dot{\epsilon} \rho \omega \ \mu \dot{\eta} \ \tau \omega \dot{v} \tau \dot{o} v)$ (Parm. fr. 8. 58a). Of course, Parmenides' material principles differ fundamentally from Anaxagoras' in being the minimum plurality of two, while Anaxagoras' are unlimited in multitude. Even so, both presume that qualitatively distinct or even opposed principles are required to account for the variety of characters apparent in the cosmos's population. The Parmenidean light and night even embody some of the opposites found in Anaxagoras' lists. The traditional opposites mentioned in the Anaxagorean fragments are: the moist and the dry, the hot and the cold, the bright and the dark, and, finally, the dense and the rare (Anaxag. frs. 4b, 8, 12, 15). It is striking that just these four pairs of opposites appear, and no others (apart from the large and the small, though they do not function in his system as constituents of things). Parmenides, recall, speaks of light and night as follows. First there is the 'aetherial flame of fire, I being gentle, most light' (Parm. fr. 8. 56b-7a). The other principle he describes as being 'in itself | the opposite, dark night, dense in form and heavy' (Parm. fr. 8. 58b-9), and he also gives it the epithet 'obscure' or 'invisible' (Parm. fr. 9. 3). Clearly, light is dry, hot, bright, and rare. Night is explicitly said to be dark and dense, and if it is the opposite of fiery light, then, presumably, it would also be cold and perhaps even moist.

More significant than this correspondence between light and night's opposed qualities and the Anaxagorean opposites is how Anaxagoras, like Anaximander before him, makes the opposites themselves material principles rather than defining characteristics of the material principles, as they are in Parmenides and Empedocles. It is impossible to say for certain whether Anaxagoras was led to give the opposites this distinct status by critical reflection on the element theories of Parmenides and Empedocles. Nevertheless, reflection on the difference between having the opposites

⁵¹ Parm. frs. 14 and 15; cf. Aët. 2. 26. 2 ([Plu.] *Plac.* 2. 26. 891 c 9 ≈ Stob. *Ecl.* 1. 26. 1b), 2. 28. 5 (Stob. *Ecl.* 1. 26. 2). Anaxag. fr. 18; cf. Pl. *Crat.* 409 A 11−B 1, Aët. 2. 28. 5 (Stob. *Ecl.* 1. 26. 2), Plu. *Nic.* 23. 3, Hippol. *Haer.* 1. 8. 8. See further Wöhrle 1995 and Graham 2002*b* on Parmenides' right to be counted as the first to recognize this fact.

define the characters of a limited plurality of elements and having them be elemental characters in their own right may lead to a better understanding of Anaxagoras' physical theory.

The mistaken belief that Anaxagorean stuffs are meant to be a plurality of Parmenidean beings has had the unfortunate effect of levelling out a system that is in fact capable of sophisticated compositional hierarchy. If every thing has to be a Parmenidean entity so as to avoid absolutely any thing's coming to be from what it is not, then every thing has to be 'in the mix' from the start and has to have as fundamental an ontological status as every other thing, in that each thing in the mix is a 'Parmenidean being'. We have already seen how the presumption that Anaxagorean stuffs must be Parmenidean entities has driven some to try to find ways to extend this fundamental status from the opposites and stuffs like earth and hair to organisms and even homunculi of individual organisms. However, the levelling effect of this conventional presumption can also be seen in reconstructions that are more restrictive about which Anaxagorean stuffs are meant to be Parmenidean entities. Consider how one of the most important and problematic Anaxagorean lists of stuffs has been interpreted. 'And before being separated out', he says, 'while all things were together, not even any colour was apparent; for the mixing together of all things $(\pi \acute{a}\nu \tau \omega \nu \chi \rho \eta \mu \acute{a}\tau \omega \nu)$ prevented it, of both the moist and the dry and the hot and the cold and the bright and the dark, and with much earth present within and seeds limitless in multitude nothing like one another' (fr. 4b). One very common way of understanding this list of stuffs is to say that the precosmogonical mixture contains, all on an equal footing, (i) the opposites, (ii) portions of earth and by extension the remaining three 'Empedoclean' elements, water, air, and fire, and finally (iii) the 'seeds', although just what these are supposed to be has been variously understood. The levelling effect is apparent here in the assumption that this fragment presents three classes of stuff, all equally fundamental.⁵²

A different, more hierarchical view emerges if one reflects on how the characters of the Parmenidean and Empedoclean elements are determined by the qualities each possesses that distinguish it from the other(s). There is good evidence that Anaxagoras thought of earth as similarly constituted. For he describes the earth as having originally come to be where the dense, moist, cold, and dark came together (fr. 15). This description poses a serious problem for the view that earth is a stuff in the original mixture with the same fundamental status as all the other 'things' $(\chi \rho \dot{\eta} \mu a \tau a)$. For if this were the case, one would expect Anaxagoras to have explained the formation of the earth as a result of the separating out and aggregation of portions of earth. That he actually explains it in terms of the coming together of the opposites suggests that the kind of stuffs that for Parmenides and Empedocles are elements are likewise understood in Anaxagoras' system as congeries of 'substantial' opposites analogous to those that constitute the earth itself. Wherever the dense, the

 $^{^{52}}$ Some of the blame for the levelling effect may also be assigned to Aristotle, in so far as he seems to make no distinction between opposites and the 'homoeomerous' stuffs when e.g. he says that on Anaxagoras' theory 'there is nothing purely and completely white or black or sweet or flesh or bone' (Ph. 1. 4. $187^{6}4-6$).

moist, the cold, and the dark preponderate to the right degree, there one will have some earth—or something with the phenomenal appearance associated with earth, namely a certain degree of density, moisture, coolness, and darkness.

It is necessary to make reference to the right degree of preponderance, for it also seems to be part of Anaxagoras' theory that none of the 'substantial' opposites exists in isolation. Hot and cold, dry and moist, bright and dark, and rare and dense are qualitative continua. Something's being hot or being cold, for instance, is always a relative matter, a question of the degree to which one of these opposite qualities preponderates. Anaxagoras' EE postulate, the idea that every thing has a share of every thing $(\pi \acute{a} \nu \tau \alpha \pi a \nu \tau \acute{o}_{S} \mu o \hat{\rho} a \nu \mu \epsilon \tau \acute{e}_{X} \epsilon_{I}$, fr. 6), nicely encapsulates this sensible notion: since hot and cold, as well as the other opposites, are relative characteristics, there is nothing that is purely or only hot, which is to say, nothing hot that does not also have a certain degree of coldness, or that does not have its share of coldness, however minimal that may be. Furthermore, the idea that every thing has a share of every thing will not apply just along the individual qualitative continua, for it is also the case that no object lacks some relative degree of moisture, brightness, and density. In this way, not only will every thing in which one of the opposites predominates (to whatever degree) also have some share of its companion opposite, it will also be the case that every physical object will share in each of the kinds of qualities that characterize physical objects generally. That is, every physical object will be to some degree—that is, have some portion of—hot and cold, dry and moist, bright and dark, rare and dense. Conceivably, other qualitative continua could be added to this list. However, the fact that they would also have to be features like temperature and density that every physical object must have to some degree suggests that Anaxagoras may have purposefully limited his substantial opposites to just the four one finds on his lists 53

Even these four qualitative continua, however, provide sufficient parameters within which to generate a limitless variety of stuffs. There are already infinitely many degrees to which the pairs of opposites along each qualitative continuum may be present or predominate, and every definite degree along each continuum has infinitely many ways of combining with different degrees of preponderance along the other qualitative continua. For example, the preponderance of the opposites in earth might be represented as shown in Figure 6.1.

A similar specification could be given for each of the endlessly many other kinds of stuff. All this has interesting implications for how to understand the list of 'things'

⁵³ Aristotle mentions sweet as well as black and white at Ph 1. 4. $187^{b}4-6$. Anaxagoras himself speaks of 'seeds of all things having manifold shapes and colours and ήδονάς' (fr. 4a), ήδονάς here being typically translated as 'savours' or 'flavours' (cf. Sider 1982: 68, where the uses of the term ap. Heraclit. fr. 67 and Diog.Ap. fr. 5 are cited as parallels). These passages might suggest that sweet and bitter should be included among the opposites. However, Anaxagoras never lists them alongside the other pairs he consistently mentions; and if one argues for the inclusion of sweet and bitter among the opposites on the basis of fr. 4a, then one will be forced to accept opposite shapes or forms $(\iota \delta \acute{e} \alpha_S)$ as well. It thus seems better to think of the manifold shapes, colours, and savours the seeds are here said to have as qualities they have in virtue of the presence and relative preponderance of the fundamental qualities within them.

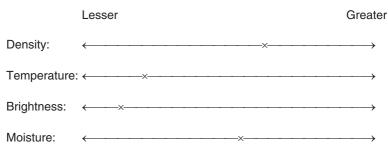


Figure 6.1

(χρήματα) in fr. 4b. First, the pairs of opposites are seen to be more fundamental than the 'much earth' mentioned subsequently in the fragment, for whatever earth is present in the mixture of all things will be due to the preponderance to the right degree of the opposites, dense, cold, bright, and moist. Second, if portions of earth are present in the mixture in this way, there is no reason why all manner of other kinds of stuff should not similarly be present, a fact which explains the additional mention of the 'seeds limitless in multitude nothing like one another'. It makes good sense to think of these seeds as portions of the limitless variety of other kinds of stuff that will be present wherever the preponderance of the opposites is different from the one productive of earth. More properly speaking, earth is one of the limitless variety of seeds, and among the seeds one may also class the other kinds of stuffs specifically mentioned elsewhere by Anaxagoras—air, aether, hair, and flesh—plus stuffs of limitlessly many other kinds. 54

This reconstruction has a number of satisfying results. One is that it involves an ontological hierarchy between the opposites and the seeds or particular kinds of stuff while at the same time allowing them all not only to be classed under the general rubric of $\chi\rho\eta\mu\alpha\tau a$ but also to be governed by the postulate that every thing is in every thing (EE). It accounts for the evidence of the fragments suggesting that the opposites have a more fundamental position in Anaxagoras' system than other things without, however, denying such stuffs as earth, aether, hair, and flesh their rightful place among the $\chi\rho\eta\mu\alpha\tau a$. Another advantage is that it allows one to demarcate, on the one hand, the $\chi\rho\eta\mu\alpha\tau a$ defined by the degree of preponderance of the opposites and, on the other, more complex entities compounded from them, including both individual entities like the sun and moon as well as human beings and other creatures. There is no pressure to say that any of these things are in the original mixture, and yet at the same time all their qualitative features are accounted for by the qualitative features of the stuffs from which they are compounded. Finally,

⁵⁴ Cf. how Aristotle speaks of 'the homoeomeries... and all the other seeds' (*Cael.* 3. 3. 302^a31^{-b}2). He seems mistaken, however, when in this same passage he implies that the 'Empedoclean' elements have a distinct status in Anaxagoras' theory by describing air and fire as mixtures of these. See Barnes 1982*a*: 326–7.

whether Anaxagoras' theory arose from reflection on what he took to be the inadequacies of the element theories of Parmenides and Empedocles, in hindsight their respective positing of two and four elemental postulates looks rather arbitrary. Why should the pair light and night, or just the four Empedoclean elements, be thought any more basic than other inorganic stuffs like gold, iron, and salt, ⁵⁵ or even organic stuffs like flesh, bone, and hair? The question is particularly acute when each of the limited plurality of elemental stuffs is specified in terms of the qualitative characteristics that distinguish it from the other(s). If the very same qualities in other combinations and in different degrees will define other stuffs, what reason will there be not to give these other stuffs the same status as those singled out as elemental? Moreover, if the qualities define the nature of the elemental stuffs, however many one takes them to be, does this not suggest that the qualities are themselves somehow more basic than the elements whose characters they define?

If Anaxagoras knew Parmenides' poem, his physical theory is much more likely to have been influenced by considerations such as these than by any desire that his material principles should each individually replicate the attributes of Parmenidean Being. If Anaxagoras knew and was influenced by Parmenides' poem, his physical, cosmological, and biological theories will have been influenced by Parmenides' physical, cosmological, and biological theories; and his conception of *Nous* will have been influenced to some degree by Parmenides' account of What Is. Such is the proper structural correspondence between their systems. *Nous* is the nearest analogue of What Is, as the substantial opposites—the moist and the dry, the hot and the cold, the bright and the dark, and the dense and the rare—are the nearest analogues of Parmenides' light and night.

⁵⁵ From this perspective, the way Simplicius lists gold alongside fire and water as examples of Anaxagorean material principles (Simp. *in Ph.* 27. 5) is suggestive, even though its presence in Simplicius' summary of Anaxagoras' doctrine may well be due to Theophrastus or Aristotle having mentioned it in their own explication as an example of a homoeomerous stuff.

Empedocles' Element Theory and Parmenides

Histories of Presocratic philosophy have grouped Empedocles with Anaxagoras as one of the 'post-Parmenidean pluralists'. Empedocles, too, has been portrayed as attempting to furnish an adequate theoretical foundation for natural phenomena by positing a multitude of material principles—the four elements or 'roots': earth, air, fire, and water. Each of these elements is allegedly intended to reproduce as far as possible the attributes of Parmenidean Being, thus enabling Empedocles to abide by a specifically Parmenidean prohibition against generation. Since the interpretations of Parmenides on which the various versions of this story depend all fail to take proper account of the modal distinctions at the core of Parmenides' thought, it may seem superfluous to describe in further detail where accounts of Parmenides' influence on Empedocles go wrong. However, since the understanding of Empedocles as a 'post-Parmenidean pluralist' is so firmly entrenched in Presocratic scholarship, its very familiarity will likely seem to some to justify scepticism about a modal interpretation of Parmenides. It will therefore be worthwhile showing just how weak the evidence for typical views of the Empedoclean 'response' to Parmenides actually is. More than that, we shall see that freeing reconstruction of Empedocles' element theory from the artificial constraint of the requirement that his elements be 'Parmenidean beings' makes possible a more accurate understanding of the foundation of his physical theory. This result will in turn pave the way for the concluding chapter's discussion of the true correspondence between the Parmenidean and Empedoclean systems. Here we shall begin with a preliminary orientation to Empedocles' physical system and discussion of its purported response to Parmenides. We shall then consider in some detail the problems with the presumption that the Empedoclean elements must replicate the attributes of Parmenidean Being as well as the prospects for a more accurate understanding of their character and interaction.

EMPEDOCLES' COSMOLOGY

Empedocles of Acragas is a remarkable figure who resists easy characterization. The bravura of the persona we encounter in his verses and, especially, their blending of eschatological and cosmological features can make his viewpoint seem difficult to

comprehend. We hear something of how Empedocles saw himself in the following verses, where he describes the progression of purified souls to higher forms of human life: 'And at last seers and poets and healers | and leaders among earth-dwelling men they become, whence they sprout anew as gods, greatest in honours' (fr. 146). Empedocles embodied all these types, even to some extent the divine. In a vivid description of his celebrated and elevated status, he describes how he walks among vast throngs of people, honoured as a 'deathless god, no longer mortal', and how in each city he visits he is revered by the populace and asked for advice, prophecy, and healing (fr. 112). The Empedocles who emerges from such verses is an itinerant sage, mystic, and healer who proclaimed a more than human understanding of the world's workings. Central to this deeper understanding was his development of the Pythagorean doctrine of metempsychosis, according to which the soul is successively reincarnated in new bodily forms depending on how it conducted itself in previous lives. This teaching furnishes the basis, for instance, for Empedocles' proscriptions against the sacrifice and consumption of animals. He vividly describes how those who fail to recognize that the dead are reincarnated in new forms may end up unwittingly engaging in the worst form of cannibalism by sacrificing and consuming members of their own family (fr. 137, cf. fr. 136).

Metempsychosis is one important manifestation of the cyclical and reciprocal changes Empedocles saw operating at both the microcosmic and macrocosmic levels. He held that nothing ever perishes absolutely, that everything is instead continuously reborn in new forms, and that everything that comes to be has some form of pre-existence. These ideas function in Empedocles' system as fundamental principles of explanation for all manner of phenomena, from the lives of plants and animals right up to the life of the cosmos itself. He emphatically returns to these basic ideas in verses such as the following:

And another thing I shall tell you: there is birth $(\phi \dot{\nu} \sigma \iota s)$ of none of all mortal things, nor any end in baneful death, but only mixture and interchange of what is mixed are there, though humans call these things 'birth' $(\phi \dot{\nu} \sigma \iota s)$; (fr. 8) Fools—for their thoughts are not far-reaching, they who expect what before is not to come to be or for anything to die away and to perish altogether. (fr. 11)

The connection between the general principles and the doctrine of metempsychosis is especially evident in the following verses:

No man wise in his thoughts would divine such things as these, that, so long as they live what indeed they call 'life', for so long then they are, and for them are there good and bad things, but prior to being formed and once dissolved as mortals, then they are nothing; (fr. 15) But when things intermingled come into the air as a man, or as the stock of wild beasts, or as of plants,

¹ For the text of the fragments, I follow Wright 1981 except where indicated, while preserving their standard numbering as in Diels and Kranz.

or as of birds, then people say it 'is born', and when they are separated, they again call this 'miserable death': they do not name them as is right,² but I also yield to custom. (fr. 9)

At this microcosmic level, the so-called 'birth' of each individual living thing, be it human, animal, or plant, is in fact the coming together and intermingling of pre-existing entities, including the elemental constituents of all things.³ The same principles also apply at the macrocosmic level. Empedocles appears to have thought that the cosmos as a whole goes through a cycle of periodic changes, and that these changes constitute the cosmos's own 'birth', 'life', and 'death'. Although this is not the place to enter fully into the controversies regarding the details of this picture, it will nevertheless be useful for the argument to outline what appear to have been the main stages of Empedocles' cosmology.

These stages are primarily distinguished with respect to how the four constitutive elements—earth, air or aether, fire, and water—are arranged and by how the two primary forces, Love and Strife, are operating. Empedocles highlights the cosmos's large-scale changes when, for example, he announces: 'A twofold tale I shall tell: for once they grew to be one only | from many, and once they grew apart again to be many from one, | fire and water and earth and the vast height of air, ⁴ | and baneful Strife apart from these, equal in every direction, | and Love among them, equal in length and breadth' (fr. 17. 16–20). Here one glimpses how the changes in the relations of the elements and in the localization of the principles Love and Strife define different stages in the history of the cosmos. That history ultimately divides into two major phases, with Love's power increasing in one phase and Strife's in the

² Reading $\hat{\eta}$ θέμις οὐ καλέουσι in fr. 9. 5a. Cf. Hes. *Op.* 137: $\hat{\eta}$ θέμις ἀνθρώποις κατὰ ἤθεα.

³ Plus, apparently, some persisting principle of life and cognition required for the continuing identity presumed by the doctrine of metempsychosis. Cf. Solmsen 1975: 125; Kirk *et al.* 1983: 321.

⁴ Elsewhere Empedocles refers to these four elements as 'roots' and casts them in the guise of divinities: 'For hear first the four roots of all things: | bright Zeus and life-bearing Hera, and Aidoneus and Nestis, who wets with her tears mortal springs' (fr. 6). While it is clear that Nestis corresponds to the element water, which elements Zeus, Hera, and Aidoneus (i.e. Hades) represent has been a matter of continued controversy since antiquity. The modern consensus has tended to be that Zeus = fire, Hera = air, and Aidoneus = earth (cf. Wright 1981: 22 ff.). In antiquity, however, while some held this view, others maintained that Zeus = fire, Hera = earth, and Aidoneus = air. A modern minority position has been that Zeus = air, Hera = earth, and Hades = fire. Defence of this latter view has been a cornerstone of Peter Kingsley's provocative interpretation of Empedocles (see Kingsley 1994; 1995: chs. 1–4: 2002: 381–2). Identification of Zeus with air or, less anachronistically, aether is appealing given the traditional, widespread association of Zeus and the aether with the region of the heavens. Moreover, Empedocles is known to have called the element air 'cloud-gatherer' (νεφεληγερέτης, fr. 149), an epithet typically reserved in Homer for Zeus. Likewise, the epithet given Hera in Emp. fr. 6—'life-bearing' $(\phi \epsilon \rho \epsilon \sigma \beta \iota o s)$ —is used of the earth and its fruitfulness by both Homer and Hesiod. This leaves Aidoneus or Hades to be identified with the element fire; and Kingsley suggests that the equation of Hades, the god of the regions below the earth, with fire would have been quite natural for an inhabitant of the volcanic island of Sicily (so, previously, Burnet 1930: 229 n. 3). Empedocles himself speaks of how 'there are many fires burning beneath the surface of the earth' (fr. 52). For critiques of Kingsley's reconstruction, see Mansfeld 1995a; Picot 2000.

other. Each of these two forces achieves a period of maximal influence, after which the other begins to reassert itself. Aristotle speaks of this alternation when he attributes to Empedocles the view that Love and Strife rule and are the causes of change in turn, while there is a condition of rest between their respective periods of activity (*Ph.* 8. 1. 252^a7–10).⁵ Simplicius' commentary on Aristotle's remarks on Empedocles here in the *Physics* reproduces portions of their explication by Eudemus, and it also preserves several critical Empedoclean fragments that give a picture of Love and Strife's activity in the cycle's successive phases (Simp. *in Ph.* 1183. 28–1184. 16):

Eudemus supposes the motionlessness occurs at the point of Love's predominance during the Sphere, when everything is combined; 'there neither are the swift limbs of the sun distinguished' (fr. 27. 1), but, as he says, 'in this way it is held fast in the dense cover of harmony [i.e. Love], | a rounded sphere delighting in its joyous solitude $(\mu ovi\eta)^{\circ}$ (fr. 27. 3–4). Once Strife has again begun to predominate, then motion again occurs in the Sphere: 'for all the limbs of the god began to tremble, one after another' (fr. 31). But how does saying that it happens so out of necessity differ from saying that it happens by nature when one does not introduce the cause? Empedocles seems to say this in this verse: 'And they dominate in turn as time revolves' (fr. 17. 29), and when he appeals to necessity as the cause of what occurs: 'There is an oracle of necessity, an ancient decree of the gods, | eternal, sealed fast by broad oaths' (fr. 115. 1–2). For he says that because of necessity and these oaths, each predominates in turn. Empedocles says these things as well about the predominance of Strife: 'But when Strife had grown great in its limbs | and arose to its prerogatives once the time was completed | which had been established for them both in turn by a broad oath...' (fr. 30)

The indication in fr. 27. 3–4 and fr. 31 that Empedocles conceived of the cosmos as spherical, animate, and divine is confirmed by other fragments and testimonia.⁸

⁵ O'Brien 1969: 55–103, argues at length that the period of rest during Love's total ascendancy comprises a primary alternation with the balancing cosmogonical period of movement and plurality, and that within this other period there is a subordinate or secondary alternation between a period of increasing Strife and one of increasing Love.

⁶ That Eudemus apparently cited these verses in commenting on ἦρεμεῖν δὲ τὸν μεταξὺ χρόνον at Arist. Ph. 8. 1. 252^a9-10 (cf. 250^b26-251^a5, 252^a19-21) has suggested to some that he understood Empedocles' μονίη as referencing the divine Sphere's (temporary) rest from the disturbance of change and alteration. See O'Brien 1969: 22-5, and Wright 1981: 188 ad loc., for discussion and references (to which add Solmsen 1975: 137-8) as well as for arguments that the available evidence and comparanda support the sense of 'rest' (O'Brien) or 'stillness', i.e. 'absence of change or movement' (Wright). The case for the alternative sense of 'solitude' has since been given new weight by Slings 1991, where it is pointed out that the rules of Greek word formation preclude derivation of $\mu o \nu i \eta$ from $\mu \acute{e} \nu \omega$, that arguments for $\mu o \nu i \eta$ as 'steadfastness' from purported parallels in Homer and Tyrtaeus carry no weight, that ἐστήρικται in fr. 27. 3 is sufficient to explain Eudemus' quotation, and that $\mu o \nu i \eta$ is derived from $\mu \delta \nu o \varsigma$ like $\sigma o \phi i a$ from $\sigma \delta \phi o \varsigma$. The broader question of which stages of Empedocles' cosmology were characterized by rest and which by movement is exhaustively treated by O'Brien 1969: 4-45, with the conclusions that there was one time of rest, during the stage of the unified Sphere under Love, that this is in fact the view of Aristotle, Eudemus, and (in part) Plutarch, and that Emp. fr. 27. 3-4 and fr. 31 (quoted by Eudemus) as well as fr. 35 offer good support.

Cf. Arist. *Metaph.* 3. 4. 1000⁶12–17, where these same three verses are cited in conjunction with Aristotle's complaint that Empedocles fails to identify the cause of the transformation.

⁸ See Emp. fr. 29 ap. Hippol. Haer. 7. 29. 13–14, Emp. fr. 31, Arist. Metaph. 3. 4. 1000^b3, Simp. in Ph. 1124. 1, in de An. 70. 17.

This is an important point to which we shall return. For now, it is significant in that it indicates that the cosmos is itself in some sense alive and has its own life cycle, thus maintaining the parallelism between macrocosm and microcosm.

The theory of Love and Strife's alternating ascendance reflected in this passage from Simplicius can be supplemented and developed by additional evidence. The resurgence of Strife after the period of the perfect harmony of all things under the rule of Love appears to have involved an initial separation of the four elements or 'roots' out of the Sphere. Since the extant fragments preserve only hints of what happened at this point (see especially the end of fr. 22), we must rely on testimonia for the details. According to the doxographer Aëtius, 'Empedocles says that aether was separated off first, and fire second, after which came earth, from which, as it was squeezed about by the force of the rotation, water gushed out' (Aët. 2. 6. 3 ([Plu.] Plac. 2. 6. 807 B 1-6)). The mention of 'the force of the rotation' seems to be a reference to the whirl or vortex described by Empedocles in fr. 35. Apparently, the renewed activity of Strife produced this vortex, which led to the gradual separation of the roots out of the Sphere described by Aëtius. Ultimately, it seems, Strife's progressive disruption of the maximal unity previously achieved by the activity of Love produces a state of maximal disunity or separation of the roots. Plutarch describes this state of the cosmos under the final ascendancy of Strife as follows:

Earth had no part in heat, water no part in air; there was not anything heavy above or anything light below; but the principles of all things were unmixed and unloving and solitary, not accepting combination or association one with another, but avoiding and shunning one another.... So they were until desire came over nature providentially. (Plu. *De fac. orb. lun.* 926 E–F, cf. Arist. *Metaph.* 1. 4. 985°23–7)

It seems we are to imagine nested spheres of—progressing from inner- to outer-most—earth, water, aether, and fire, with each element pure and free of any admixture with its neighbours. After this point of Strife's ascendancy has been reached, Love begins to reassert itself. Fr. 35 describes how Love begins to advance from the centre of the vortex and Strife begins to retreat towards the cosmos's outermost boundary, with the result that the elemental roots of all things begin to mingle with one another once again and to enter into all manner of combinations. And as they mixed together, Empedocles says, 'there poured forth myriad tribes of mortal creatures | fitted together with all manner of forms, a wonder to behold' (fr. 35. 16–17). The ultimate result of the elemental roots' renewed association will be the reconstitution of the unity of the harmonious Sphere previously broken apart by Strife. Once restored, it will be destroyed yet again by Strife, and the alternation between the ascendancy of Love and Strife in turn is apparently meant to go on forever, in an endlessly repeated cycle of changes.

Empedocles' cosmology, then, divides into two major phases: a period during which Love's influence gradually increases until it becomes total, balanced by a period in which the influence of Strife does the same. Most scholars properly agree

⁹ So, for instance, O'Brien 1969: 146–55. Osborne 1987*a*: 38–40 (cf. Osborne 2000: 339–41), however, questions whether there need have been such a stage.

about this much. A small minority, however, have rejected the notion of an Empedoclean cosmic cycle altogether, arguing that those passages where Empedocles seems to speak of cosmic cycles all in fact refer merely to the generation and destruction of plants, animals, and humans at the microcosmic level. 10 According to this type of interpretation, the cosmos develops linearly from an initial state of perfect unity in the Sphere, through its disruption by Strife, the separation of the roots, and the subsequent formation of the physical cosmos, to the reappearance of Love, after which zoogony begins and the world eventually attains its present condition. This linear or non-cyclical interpretation, however, requires dismissing far too much ancient testimony. While the reports of some ancient authors admittedly betray an improper assimilation of Empedocles' theory to the Stoic theory of the cosmos's periodic conflagration (e.g. Hippol. Haer. 1. 3. 1–2), obviously there is no Stoic influence operative in the reference to Empedocles in Plato's Sophist, 11 in his adaptation of Empedocles in the great myth of the Statesman, 12 or in Aristotle's plain assertion that Empedocles' separation of the elements from an initial mixture occurs cyclically, in contrast with its unique occurrence in Anaxagoras (Arist. Ph. 1. 4. 187^a20-6, cf. Metaph. 1. 4. 985^a21-9, Ph. 8. 1. 250^b23-251^a5, Cael. 1. 10. 279^a14–17, 3. 2. 301^a14–20). Simplicius' testimony is even clearer:

Others maintain that the same cosmos comes to be and perishes alternately, and again arises and perishes, and that this succession goes on for ever. Thus Empedocles says that Love and Strife gain the ascendancy in turn: Love brings all things together into one, destroys the cosmos created by Strife, and makes of it the Sphere, whereas Strife separates the elements again and creates a world like this. (Simp. *in Cael.* 293. 18–23, followed by quotation of Emp. fr. 17. 7–8, 10–13)

All these ancient philosophers could, of course, have gotten Empedocles wrong on this point, but there is no compelling evidence from the fragments that they did.

A non-cyclical interpretation of Empedocles' cosmology is tempting because so many of the passages apparently describing the cosmic cycle employ the same terminology elsewhere found in Empedocles' descriptions of the elemental roots' combinations in forming organic compounds and creatures as well as the subsequent 'death' or dissolution of these things. This thematic ambiguity is so pervasive in Empedocles' language that it seems to have misled the minority of interpreters who advocate the non-cyclical interpretation into arguing that, whenever he speaks of

Thus Hölscher 1965; Van der Ben 1975, 1984 (cf. Brown 1984). The earlier work of Van der Ben is exhaustively criticized by O'Brien 1981, chs. 5 and 6 of which dismantle Van der Ben's particular arguments for a non-cyclical interpretation of Empedocles' cosmology. O'Brien 2000 likewise attempts to deprive Hölscher's reconstruction of a crucial piece of evidence.

¹¹ Pl. Sph. 242 D 7–243 A 1: 'Later certain Ionian and Sicilian muses [sc. Heraclitus and Empedocles] recognized that the surest course was to weave together both [sc. previous views] and to say that reality or what is $(\tau \hat{o} \ \mathring{o} \nu)$ is both many and one, and that it is held together by enmity and affection....[The latter] say that alternately $(\hat{e}\nu \ \mu \hat{e}\rho \epsilon \nu)$ the universe is at one time one and friendly under Aphrodite, while at another time it is many and hostile to itself because of strife'.

¹² Pl. Plt. 268 D-274 E, where the cycle of the universe's reversing rotation is particularly reminiscent of Empedocles. See the detailed comparison between Plato's myth and Empedocles at Bollack 1965: 133–6. See also O'Brien 1969: 94–7.

things coming together and then separating, he is always referring to the cycles of birth, death, and rebirth through which plants and animals pass. Instead of trying to eliminate the ambiguity, however, it is best to acknowledge it as an essential feature of Empedocles' development of his message, driven by systematic concerns. Empedocles studiously describes the coming together of the elements to form mortal compounds and their eventual dissolution in the same terms he uses to describe the eventual uniting of the elements in the Sphere and the subsequent dissolution by Strife that produces the individual elements anew. The parallel Empedocles intuits between macrocosm and microcosm makes it critical that the cosmos as a whole should undergo the same kind of cyclical changes as do the individuals that live within and populate it.

While most interpreters agree that Empedocles viewed the cosmos's development as cyclical, there continues to be fundamental disagreement about the sequence of events within each cycle. The fragments and testimonia make it clear that Empedocles gave some account of the formation of the cosmos's major physical structures—the heaven of the fixed stars, the sun, moon, earth and sea, and so on. He also expounded a novel, 'evolutionary' zoogony, the stages of which are nicely summarized by Aëtius:

Empedocles held that the first births of animals and plants were by no means whole, but disjointed, with parts that were not growing together. ¹³ The second, when the parts did grow together, were like dream images. The third were of whole-natured things. The fourth were no longer from similar things such as earth and water, but already through each other—some when the nutriment is condensed, others when the shapeliness of the females effects a stimulation of the spermatic movement. (Aët. 5. 19. 5 ([Plu.] *Plac.* 5. 19. 908 d 15–E 8))

The principal question regarding Empedocles' cosmic cycle, one that continues to divide commentators, is whether it is reversing or non-reversing, that is, whether what occurs in the phase of Love's waxing influence should be thought to have occurred in reverse order in the phase progressively dominated by Strife.¹⁴

¹³ Cf. Arist. *GA* 1. 18. 722^b17–21, where Aristotle's quotation of Emp. fr. 57. 1 ('as numerous neckless heads sprang forth') assigns it to a stage in the generation of living creatures under Love ($\hat{\epsilon}\pi\hat{\iota}$ $\tau\hat{\eta}$ s $\Phi\iota\lambda\delta\tau\eta\tau\sigma$ s) when the parts of animals were formed in isolation prior to a subsequent stage when they grew together to form whole creatures.

The traditional view, originating in the 19th cent. and ensconced in the histories of Zeller, Burnet, Kirk and Raven, and Guthrie, that the cosmic cycle reverses itself (cf. Bignone 1916: 545–98; Minar 1963: 140–5, with diagram) was starkly challenged by Hölscher 1965, advocating no cycle, though more influentially by Solmsen 1965 and Bollack 1966 (with Bollack 1969*a*, 1969*b*; cf. Bollack 1968), each of whom advocated a non-reversing cycle (cf. Hershbell 1971: 174–8), with a zoogony *only* in the period of Love's increasing influence after the period of Strife's disruption. (Precursors of this latter view are to be found in Tannery 1887: 313–47; von Arnim 1902.) At around the same time, O'Brien 1969, expanding the interpretive line explored in O'Brien 1967, mounted a detailed exposition of the older view. The resulting controversy is usefully surveyed and the arguments and evidence analysed by Long 1974. Long himself advocates the non-reversing interpretation, as have Kirk *et al.* 1983: 297–9, and Furley 1987: 98–102 (cf. Mansfeld 1985*b*: 187–8). Compare the more radical view of Osborne 1987*a*: 38–49. For defences of the reversing cycle interpretation in light of the earlier controversy, see Wright 1981: 40–56; Barnes 1982*a*: 308–10; Inwood 1992: 41–6, and the reprisal in O'Brien 1995: 403–29.

A particularly odd feature of the reversing cycle interpretation is that it posits a reverse zoogony, in which the stages of the development of living creatures described by Aëtius are supposed to proceed in reverse order in the Strife-dominated phase. This is a bizarre idea for which there appears to be no direct evidence. Not all advocates of a double zoogony have embraced this conception, however; Guthrie, for instance, assigns the first of Aëtius' two stages to the period of Love's growing influence and the latter two to that of Strife's. If It seems most natural, though, to think of all four stages as belonging to a single, quasi-evolutionary process that began when the elemental roots had combined into stuffs such as flesh and bone from which non-homoeomerous parts could be generated and that continued until creatures appeared that were capable of generating themselves. If Love is understood as a force promoting the combination and interaction of disparate entities to form new entities, then her influence would be apparent in all these stages.

The debate over the character of the cosmic cycle, along with numerous other issues in Empedoclean interpretation, has been given new impetus by the most welcome discovery of fresh textual evidence. The papyrologist Alain Martin identified some scraps of papyrus languishing in the Bibliothèque Nationale et Universitaire de Strasbourg as the remains of an ancient copy of a poem by Empedocles. After publishing an initial report of his discovery in 1995, Martin collaborated with Oliver Primavesi to produce an exemplary critical edition of the new papyrus fragments accompanied by extensive commentary. On the basis of the hand, which resembles that of literary papyri from the Roman period, Martin dates

¹⁵ Defenders of the traditional view typically find evidence for the 'double zoogony' in fr. 17. 3–5 (see O'Brien 1969: 164–8), even though the sense of these cryptic verses is far from clear. They certainly do not contain any description of specific zoogonic processes as they are supposed to have occurred during the phase of Strife's waxing influence, and they can be read with equal or greater plausibility in a manner that implies no such process. See Long 1974: 404–12; Kirk *et al.* 1983: 288–9 n. 1; as well as the somewhat less plausible interpretation in Mansfeld 1972. Graham 1988 defends the traditional view against Long via a close reading of fr. 17. 1–13 (see also Martin and Primavesi 1998: 75–82; Trépanier 2003*a*: 22–31); Graham 2005 defends the traditional view by focusing on Empedocles' description of the location and actions of Love and Strife, while remaining non-committal on the issue of a double zoogony.

¹⁶ Guthrie 1965: 200–11. Cf. Bignone 1916: 570–85.

¹⁷ On the problem of the number of zoogonies in light of the new papyrus evidence, see in particular Sedley 2005 (on which Sedley 2007: ch. 2, is largely based). Among other things, Sedley proposes that the framing verse π]ρῶτον μὲν ξύνοδόν τε διάπτυξίν τ[ε γενέθλης at ensemble a(ii) 24 and 30 should be seen as 'encapsulating the double-zoogony theme that was introduced in the enigmatic [ft. 17. 3–5]' in a way that confirms that the earlier verses are actually referring to the double birth under Love and Strife of living organic beings (334–5); he then ingeniously proceeds to argue that while all four zoogonical stages described by Aëtius manifest Love's influence, the third and fourth stages also reflect the description, in fr. 62 and now also in ensemble \mathbf{d} , of a separate anthropogony by Strife directly from the earth (335–43), such that Love and Strife's zoogonies occur simultaneously in our world. See also Gemelli Marciano 2005, which casts new light on the problem by teasing out connections between Empedocles' zoogony and embryology.

Martin 1995; Martin and Primavesi 1998. Kingsley 2002: 333, has justifiably described their edn. as 'an academic masterpiece of clear documentation, scrupulous editing, careful translation work and detailed commentary'. He also fairly remarks that their reconstructions of many of the verses poorly preserved in the papyrus sometimes give the impression that '[w]hat we are being presented with is not so much Empedocles as Empedocles carefully imitating Empedocles' (334).

the papyrus roll to the end of the first or the beginning of the second century AD. His painstaking reassembly of the surviving pieces of the papyrus has yielded eleven groupings or 'ensembles', designated a to k. Nothing significant can be made of seven of these (e-k): they contain as little as part of a single letter to at most portions of a few lines that even when reconstructed amount to no more than a few words. Of the four more substantial ensembles, a has added parts of thirty-four verses to fr. 17, 19 so that it now surpasses Parmenides fr. 8 as the longest surviving fragment of Presocratic philosophy, with the new material elaborating on the major theme of the generation and regeneration of the world's population. ²⁰ Ensemble $\hat{\mathbf{b}}$ connects with the three verses of fr. 76 already known from their quotation at Plutarch, *Quaestiones* conviviales 618 B, reveals the disorder of that quotation, and adds a bit of detail to Empedocles' exercise in comparative anatomy illustrating how 'earthy' parts can reside outside as well as inside a creature. Ensemble **c** connects with fr. 20 but adds little new information. 21 Ensemble d, finally, adds portions of sixteen new verses to fr. 139 and presents perhaps the greatest interpretive challenges. Martin and Primavesi argue that ensemble d must follow Emp. fr. 62, which Simplicius quotes as coming from the second book of the *Physics* (Simp. in Ph. 381. 29–30). ²² Richard Janko has more recently developed a reconstruction according to which all the pieces of the papyrus come from five successive columns.²³ It was already evident from ensemble a that the papyrus's columns were thirty lines long and, from the stichometric mark Γ at the end of this ensemble, that $\mathbf{a}(\mathbf{ii})$ was the tenth column. On Janko's reconstruction, ensemble c begins the eleventh column and thus follows without interruption upon ensemble a(ii); ensemble d then begins, and ensemble

¹⁹ The quotation from Empedocles at Arist. *Metaph.* 3. 4. 1000^a29–32 comes from the new material—a(i) 8 to a(ii) 2—rather than from Emp. fr. 21. 9–12 as previously thought. See further Primavesi 1998*b*.

²⁰ In Martin and Primavesi 1999: 88–90 and *passim*, Primavesi claimed that the fresh evidence of ensemble **a** tends to support the hypothesis of a double zoogony, a view previously articulated at Primavesi 1998*a*: 265–85. Against this claim, see Laks 1999; Santaniello 2004. For a defence of the traditional view of Empedocles' cosmology in light of the new evidence, see Trépanier 2003*a*. Trépanier 2003*b* (cf. 2003*a*: 34–5) seems right in arguing, *contra* Primavesi's proposal that **a(ii)** 3–17 represent an account of the reign of Strife, that the general presentation begun in fr. 17 continues down to **a(ii)** 21.

²¹ There is a potentially important difference in] ερχομεθε[at \mathbf{c} $\mathbf{3}$, in so far as these letters suggest reading the first person plural συνερχομεθ' in fr. 20. 2, rather than the neuter plural participle συνερχομεθ' as otherwise attested in the manuscripts of Simplicius. Martin and Primavesi 1998: 91, emphatically endorse the papyrus's new reading, taking it to be both confirmed by and in turn to legitimize [συνερχο]μεθ' εἰς ενα κοσμον at $\mathbf{a}(\mathbf{i})$ $\mathbf{6}$, which closely parallels fr. 26. 5, and [εἰση]ρχόμεθ' εἰν μ[ονον εἶναι] at $\mathbf{a}(\mathbf{i}\mathbf{i})$ 17. (Martin and Primavesi produce a fourth instance by supplementing]ουμε[at \mathbf{d} \mathbf{d} \mathbf{a} si [εἰξικ]νούμε[θα.) At \mathbf{c} $\mathbf{3}$, however, the copyist's θ has been corrected to ν by another hand, and there is a trace of such a correction at $\mathbf{a}(\mathbf{i})$ $\mathbf{6}$. These corrections and the fact that the indirect tradition transmits no variant of this type for συνερχόμεν' at fr. 17. 7 and 26. 5 or for συνιστάμεν' at fr. 35. 6 indicate that the new variants should be accorded little authority. For further discussion, see Van der Ben 1999: 533–7; Osborne 2000: 344–9; Algra and Mansfeld 2001; Inwood 2001: 76–7; Kingsley 2002: 337–8 and n. 6; Laks 2002; Trépanier 2003a: 1–4, and 2003b: 388–90; Janko 2004: 7 n. 34.

²² Martin and Primavesi 1998: 110-11 (cf. 284, 307-8).

²³ Janko 2004 (cf. Janko 2005). Osborne 2000: 334–9, had already questioned Martin and Primavesi's rationale for assigning ensemble **d** to the second book.

b concludes, the twelfth column; ensemble **f** straddles the eleventh and twelfth columns; and ensemble **e** begins the thirteenth. If correct, Janko's reconstruction would yield a fairly continuous stretch of one hundred and thirty-one verses from book 1 of Empedocles' *On nature*. 24

While initial claims regarding the importance of this new textual evidence have ranged from the extravagant to the deflationary, how and to what extent it will actually impact understanding of Empedocles is still being determined. The difficulty of assessing the evidence of the Strasbourg papyrus has been compounded by its having surfaced at a time when some scholars were already advocating revisionary approaches to Empedocles, forcing us to reconsider fundamental questions that once seemed settled. Thus, for example, while the Empedoclean fragments were long thought to derive from two major poems, Catherine Osborne has argued that all the fragments in fact derive from a single poem. ²⁵ Although the viability of her single-poem hypothesis was soon called into question by David Sedley, ²⁶ her provocative

²⁴ Janko 2004: 5, acknowledges that the join between ensembles **a** and **c** lacks papyrological confirmation and 'must depend on the internal evidence of the sense'. The sense, however, of the juxtaposed **a(ii) 30—c 1** (ὄψει γὰρ ξύνοδόν τε διάπτυξίν τε γενέθλη[c || Νείκεος εἴνεκεν ἔργα δι]άκτορα μη[τιόωσας) is jarring, even on Janko's reconstruction of the second verse. Janko also acknowledges that '[t]he placing of fr. **d** in the column after fr. **c** is also unverifiable on the basis

of the papyrus, because the distance between the fragments is too great'.

Osborne 1987a: 24-32. (Long 1974: 425, now seems prescient in having declared: 'The cosmic cycle...has tended unfortunately to overshadow other issues. The major outstanding question, with which future studies of Empedocles must come to grips, is the relation of the physical to the religious poem.') For succinct statements of the standard view Osborne reacts against, see Wright 1981: 17-21, and Kirk et al. 1983: 282-3. Osborne tries to show that the variously attested ways of referring to Empedocles' work—(i) Καθαρμοί or Purifications, (ii) Φυσικά or *Physics*, and (iii) the less well-attested $(\tau \dot{\alpha}) \pi \epsilon \rho \dot{\nu} \phi \dot{\nu} \sigma \epsilon \omega s$, which is ambiguous between '(writings) on nature' and 'writings, On nature'—are in fact just alternative ways of referring to the same work; that the evidence for the length and number of Empedocles' books is unreliable; that Plutarch's introduction of fr. 115, which concerns the pollution and exile of the daimones, as having come 'at the beginning of his philosophy' (Plu. De exil. 607 C) implies a single poem; and that the various forms of address in the fragments need not imply multiple poems if we assume that Empedocles opened with an address to the people of his native Acragas and then directed his main teaching to Pausanias, his disciple and chief addressee (24–32). Her single-poem hypothesis, together with her plea in Osborne 1987b for interpreting the Presocratic fragments integrally with the context of their quotations, would become the twin pillars of Inwood's 1992 edn. of Empedocles. The single-poem hypothesis is also endorsed, though more qualifiedly, by Waterfield 2000: 133 ff.

 study has nevertheless forced scholars to rethink their criteria for assigning fragments to the two poems and has contributed substantially to the development of a more integrated picture of Empedocles' thought.²⁷ She has shown that it is wrong to assign fragments of questionable provenance to the *Purifications* simply because they seem to have some 'religious' content. The very fact that the single-poem hypothesis can be proposed and seriously considered is itself a sign of how far Empedoclean scholarship has come since the era when scholars tried to segregate Empedocles' physical doctrines from the religious and mystical aspects of his thought. Diels even founded his 1901 edition of the Empedoclean fragments (the basis for the Empedocles section in Die Fragmente der Vorsokratiker) on an argument that the 'theological' fragments have no place in Empedocles' physical system and thus should be assigned to the Purifications, conjoined with the speculative developmental thesis that this poem was composed well after the physical poem, On nature, and reflects a movement in Empedocles' thought from rationalism to mysticism. 28 While Empedocles' rescue from such diagnoses of schizophrenia has been a gradual process, ²⁹ there is now broad recognition that the religious and mystical strands and the philosophical and scientific strands of his thought were thoroughly intertwined. 30 Regardless of what position they take on whether he wrote one major poem or two, almost all scholars today reject a division of the fragments such as one finds in Diels and Kranz's edition. The extension of fr. 139 in the Strasbourg papyrus's ensemble **d**—with its description of Strife's destructive power and Empedocles' expression of anguish over his own and others' terrible fate—now shows definitively that Empedocles' ideas regarding the life of the cosmos and the fate of the soul were intimately intertwined.³¹

'the fuller form—an induction into the mysteries at the heart not only of Empedocles' own teaching but of existence as a whole' (349).

²⁷ See Trépanier 2004: ch. 1, for a review of issues bearing on the single-poem hypothesis that takes account of the Strasbourg papyrus's fresh evidence. While inclined to favour the hypothesis, Trépanier sensibly emphasizes the need for a unified understanding of Empedocles' wide-ranging concerns regardless of the number of his writings. Cf. Martin and Primavesi 1998: 114–19.

²⁸ Diels 1898. Cf. the similar thesis of Wilamowitz-Möllendorff 1929 that the presumed opposition between the physical theories of *On nature* and the religious doctrines of the *Purifications* is to be explained by positing the intervening influence of the Pythagoreans. Cf. Zeller 1892: 806, where it is claimed that Empedocles' religious teachings have no apparent connection with his scientific principles but are merely 'Glaubensartikel' grafted onto his philosophical system.

²⁹ Kahn 1960*b* is often cited as a major turning point. See Giannantoni 1997: 242–5, for a useful survey of views regarding the relation of the religious and scientific or philosophical currents in Empedocles' thought. For a more recent approach to the question, based on a distinction between Empedocles' 'esoteric' and 'exoteric' instruction, see Curd 2005.

³⁰ There is also now, in Kingsley 1995, 2002, and 2003: part II, a more purely religious and mystical Empedocles. Kingsley disdains treating Empedocles as a philosopher, on the ground that doing so is bound to be anachronistic, and yet he is more than willing to embrace all manner of other anachronisms, as is evident, for example, in his pronouncement that 'correspondences and overlaps between alchemical, Gnostic, and Empedoclean teaching can only be explained in one way: as a result of underlying similarities of outlook and world-view' (1995: 67; cf. 2002: 341–4).

³¹ Cf. e.g. Martin and Primavesi 1999: 119; Osborne 2000: 337 and 355–6; Kingsley 2002: 339–41; Trépanier 2003*a*: 14–19.

PARMENIDES' PURPORTED INFLUENCE

The progress of the past two decades towards a better understanding of Empedocles makes this a propitious moment to reconsider his relation to Parmenides. Catherine Osborne, whose groundbreaking work pointed the way to an integrated understanding of Empedocles now finding confirmation in the scraps of the Strasbourg papyrus, has complained of how, during the era of the compartmentalized or schizophrenic Empedocles, 'there could be no point to Empedocles' message unless it settled the details of an elaborate pluralist response to Parmenides'. 32 Although we approach Empedocles from different directions and with different agendas, I evidently share Osborne's deep scepticism about views casting Empedocles in the role of post-Parmenidean pluralist. Here we shall identify the essential features of conventional accounts of Empedocles' response to Parmenides before discussing some of the distortions they involve. Empedocles' four element theory is normally portrayed as rescuing cosmology from the challenge of Parmenidean monism while simultaneously adhering to fundamental principles he is supposed to have articulated. The first such 'Parmenidean' principle is that no thing can come to be from nothing: nihil ex nihilo fit. Empedocles is often thought to endorse a specifically Parmenidean injunction against absolute generation and destruction when he says, 'for it is impossible for it to come to be from what is not, | and that what is should be destroyed is unachievable and incomprehensible' (Emp. fr. 12. 1–2). 33 These words are typically said to echo what has been thought to be a general Parmenidean prohibition against generation ex nihilo in fr. 8. 6b–9a: 'for what birth will you seek of it? | How, whence increased? From not being I shall not allow | you to say or to think; for not to be said and not to be thought | is it that it is not.' Likewise, Empedocles' criticisms of ordinary talk of birth and death in such texts as frs. 8, 9, and 11 have been seen as nods to these verses and to Parmenides' conclusion that 'birth is extinguished and death unheard of (Parm. fr. 8. 21). Those who have questioned Parmenides' monism or who have wanted to see Empedocles' physical theory, not so much reacting against Parmenides, but as carrying out an agenda set by him still make

³² Osborne 2000: 337.

³³ Inwood 2001: 26, is representative when he says that Empedocles in this fragment 'accepts Parmenides' denial of genesis and perishing'. Compare e.g. Kirk and Raven 1957: 324; Guthrie 1965: 139, of frs. 11 and 12: 'the language of Parmenides is recalled to show how far Empedocles is prepared to go with him. He accepts the statements that nothing can come out of nothing and that what exists cannot perish'; Long 1966: 259: 'He follows Parmenides in denying that what is not can come into being or that what is can be destroyed'; Longrigg 1976: 421: 'Empedocles reveals himself persuaded by Parmenides when he accepts the assertion that what exists must persist unchanged and adopts his denial of the existence of $\tau \dot{o} \mu \dot{\eta} \, \ddot{o} v$. He also accepts the first deduction from this premise and agrees that coming to be and passing away are impossible since they entail nonexistence: [quotation of fr. 12]. The whole tone of these lines is clearly Parmenidean.' Likewise, McKirahan 2005: 167, proposes that fr. 12 'shows not only that Empedocles accepted and presented arguments for some familiar Eleatic theses, but that he apparently made original contributions to the kind of argument associated with the Eleatic philosophers'. Contrast the more circumspect attitude of Mourelatos 1981: 658.

Empedocles' acceptance of Parmenides' rejection of coming to be and passing away central to their stories.³⁴

Each of the Empedoclean elements or 'roots', moreover, is supposed to satisfy conditions articulated in the course of Parmenides fr. 8. Most importantly, each of these roots is supposed to be eternally invariable in itself, such that it preserves its essential nature even when variously compounded with the other elements. By positing a plurality of such entities, Empedocles thought he could account for the phenomenal multiplicity and change Parmenides had allegedly felt compelled to deny. Thus on conventional views of Empedocles' response to Parmenides, Empedocles accepts his stricture against absolute genesis and destruction but accounts for the cosmos of change and plurality by transferring the attributes of Parmenidean Being to his own four elements or roots. Since these elements preserve the attributes of Parmenidean Being, there is no absolute coming to be or perishing. Combining in myriad ways to produce the world's population, these elements themselves are supposed to be properly Parmenidean entities, in that they undergo no change in themselves but persist essentially unaltered within the various compounds into which they enter via 'mixture' and from which they re-emerge via 'separation' when the things temporarily constituted from them perish. The elements are supposed to persist as the essentially unchanging substrates of change both in the localized compounds of the microcosmic level and in the macrocosmic compound that is the Sphere under the absolute rule of Love.

Empedocles is supposed to have explicitly signalled his reaction against Parmenides when, in speaking, as Guthrie says, of the ultimate plurality which will make a physical world possible,³⁵ he directs his audience: 'Hear you the undeceiving order of my discourse' ($\sigma \dot{v}$ δ' ἄκουε λόγου στόλον οὖκ ἀπατηλόν, Emp. fr. 17. 26). This verse is typically understood as intentionally echoing and contradicting the goddess's announcement to Parmenides that he is to learn mortal notions by 'listening to the deceptive order of my verses' ($\kappa \dot{o} \sigma \mu o \nu \dot{\epsilon} \mu \dot{\omega} \nu \dot{\epsilon} \pi \dot{\epsilon} \omega \nu \dot{a} \pi \alpha \tau \eta \lambda \dot{o} \nu \dot{a} \kappa o \dot{\omega} \omega \nu$, Parm. fr. 8. 52). While Parmenides' cosmology is, so the story goes, marked as deceptive because it is an account of a world of change and plurality he has shown to be altogether illusory, Empedocles emphatically declares that his cosmology is not deceptive because he has managed to place the enterprise of cosmology on new and secure foundations. ³⁶ By positing as the basic elements of change a set of material entities each of which (almost) meets the requirements of 'Parmenidean being', and by

³⁴ See Barnes 1982*a*: 436–7; Curd 1998*a*: 155; Graham 1999: 167. Compare McKirahan 2005: 177–81.

³⁵ Guthrie 1965: 138.

³⁶ Wright 1981: 170, is representative in describing Emp. fr. 17. 26 as a 'direct challenge to Parmenides' deprecation of his *Doxa'*. Curd 1998*a*: 156, also sees a significant intertextual relation between Emp. fr. 17. 27–9 and Parm. fr. 8. 51–2, describing the former as an inversion of the latter meant to stress the trustworthiness of Empedocles' account. Cf. Longrigg 1976: 422: Empedocles 'deliberately echoes Parmenides' words when he claims in contradiction that his own description of the physical world is *not* deceitful (οὐκ ἀπατηλόν). Here Empedocles claims a positive value for his description of the sensible world just where Parmenides had denied it.' For an exception to the general presumption of a specific polemic against Parmenides here, see Bollack 1969*b*: 71–2. See also Nünlist 2005, which attempts to offer a new perspective on Empedocles' alleged criticism of

explaining generation and destruction in terms of these elements' rearrangement, Empedocles is said to have found a way to save the phenomena from Parmenides' devastating critique.³⁷ Because he is, along with Anaxagoras, credited with reviving the enterprise of cosmology after the Eleatic disruption, some even go so far as to label Empedocles a 'neo-Ionian'.³⁸ It has been thought an important feature of this revival that Empedocles validates the utility of sensory evidence in our efforts to understand the cosmos and the origins and workings of its population, and this validation is said to be a reaction against Parmenides' (supposed) complete degradation and dismissal of the evidence of the senses.

In short, depictions of Empedocles' physical theory as a species of 'post-Parmenidean pluralism' presume (i) that Empedocles at fr. 17. 26 explicitly signals his critical stance towards Parmenides, (ii) that he accepts a specifically Parmenidean stricture against generation *ex nihilo*, and (iii) that he posits as the substantial basis of change four elements, each of which he styles a Parmenidean entity. We shall consider each of these presumptions in turn, showing where they are mistaken and laying bare some of the distortions of the evidence they have involved. While the first two presumptions may be dealt with relatively quickly, the third will require a lengthier treatment, given the complexity of the evidence. Patience here will be rewarded by a better understanding of Empedocles' element theory. Once we have dispensed with the historically inaccurate view that Parmenides' argument in the Way of Conviction had any significant influence on Empedocles' element theory, we will be well positioned to consider in the next chapter the true structural correspondence between their broader systems.

To begin with the first point, then, the commonplace that Empedocles fr. 17. 26 deliberately echoes Parmenides fr. 8. 52 to signal Empedocles' saving of the phenomena from Parmenides' destructive logic simply ignores the actual context of Empedocles' words. The account to which he refers when he enjoins his audience, 'hear you the undeceiving order of my account' (Emp. fr. 17. 26b), is not the cosmological account as a whole but the specific claim he has just been insisting upon, namely, that Love operates in the larger cosmos as a principle of harmony and unification, just as we experience her doing in our own selves:

... and Love among them, equal in breadth and depth. Her behold you with your thought, and sit not with eyes bedazzled: she who is recognized as innate in mortal joints,

Parmenides by teasing out the implications of the poetological metaphors, $\kappa \delta \sigma \mu o s \ \epsilon \pi \epsilon \omega v$ and $\delta \delta \gamma o v \sigma \tau \delta \delta o s$.

³⁸ So Barnes 1982*a*: 305 (followed by Graham 1999: 159): Empedocles ... pursues the old Ionian ideal of *historia* despite the pressure of the Eleatic *logos*.' Mourelatos 1987: 128 (and *passim*) likewise speaks of Empedocles together with Anaxagoras and the early atomists as 'Neo-Ionian

cosmologists'.

³⁷ So e.g. Longrigg 1976: 422: Empedocles' 'solution' to Parmenidean dilemma is 'to deny that there ever was an original unity and to postulate instead four eternally distinct substances, each of which possesses the characteristics of the Eleatic One-Being. . . . There is no absolute becoming of things in the world but only mingling ($\mu i \xi_{15}$) and separation ($\delta \iota \dot{\alpha} \lambda \lambda \alpha \xi_{15}$) of these four fundamental principles. . . . by this relative genesis the strict Parmenidean canon of *ex nihilo nihil fit* is evaded [sic] and unalterable being persists through every instance of change'.

and by her they think friendly thoughts and perform peaceable deeds, calling her by the name 'Joy' and 'Aphrodite'.

Not any mortal man is aware of her whirling among them [sc. the elements]: but hear you the undeceiving order of my account. (fr. 17. 20–6)

The prospect of deception Empedocles tries to stave off is mortals' failure to recognize Love's operation outside their own limbs. Empedocles is here claiming that his account of Love's function is not deceptive. In other words, it is no mistake to believe, even if it is not immediately evident, that Love functions at the macrocosmic level as a harmonizing and unifying force in all compounds in much the same way as she functions at the microcosmic level to produce harmonious relations among human beings. Empedocles must emphasize that his words are not deceptive precisely because it is not apparent to mortals that Love has the broader role, despite the fact that they are directly aware of her effects in their own bodies. The account that is not deceptive is that Love has this cosmological role.

On this point, Empedocles seems roughly to agree with Parmenides. For the isolated Parmenides fr. 13—'she devised Eros the very first of all the gods'—indicates that Eros likewise had an important role to play in his cosmology. Aristotle quotes this verse towards the beginning of his discussion of the final cause in *Metaphysics* 1 as evidence that Parmenides might be thought one of the first to have seen, as Aristotle thinks Anaxagoras clearly did, that mind functions generally in nature, just as it does in living creatures, as the cause of the cosmos and all its order (Metaph. 1. 3-4. 984b15-31). Aristotle thus feels that Parmenides may have had the same intuition that is evident here in Empedocles, namely, that Love generally causes things in the natural world to join harmoniously in much the same way as we are aware of love doing in our own selves and other living creatures. We have already seen in Chapter 4, furthermore, that Parmenides marks his account of mortal notions as deceptive, not because the things described in the cosmology it comprises do not exist, but because these things are subject to change and thus unable to afford the unwandering thought or genuine conviction that comes with apprehension of what must be. ³⁹ Thus the idea that Empedocles fr. 17. 26 signals his 'response' to a Parmenidean 'challenge' rests on misunderstandings of both Empedocles and Parmenides. In this instance, those who have seen in Empedocles fr. 17. 26 a correction of Parmenides' deprecation of his cosmology have seized upon a superficial verbal connection—the use of the adjective 'deceptive' in characterizing an 'account'—to support a preconceived picture of the two thinkers' relation while ignoring the actual context of the Empedoclean verse. Empedocles is not saying that his cosmology, in contrast with Parmenides', is not deceptive, but that one is not deceived in thinking that Love operates to harmonize and unify, not only at the microcosmic level in our own bodies, but at the macrocosmic level as well.

If there is a genuine intertextual relation here, as seems not unlikely, it is more extensive and thematic than the purported 'correction' of Parmenides fr. 8. 52 in Empedocles fr. 17. 26. There are numerous reminiscences of Parmenides' disparagement of exclusive reliance on the senses in Empedocles' 'hymn to Love', as others have rightly recognized. 40 Empedocles' criticism of ordinary mortals for their lack of awareness, particularly in fr. 17. 21—'Her behold you with your thought, and sit not with eyes bedazzled' $(\tau \dot{\eta} \nu \ \sigma \dot{\nu} \ \nu \dot{\phi} \omega \ \delta \dot{\epsilon} \rho \kappa \dot{\epsilon} \nu, \ \mu \eta \delta' \ \ddot{\sigma} \mu \mu \alpha \sigma \iota \nu \ \dot{\eta} \sigma \sigma \ \tau \dot{\epsilon} \theta \eta \pi \dot{\omega} s)$ —recalls the similar disparagement of mortal incomprehension by Parmenides' goddess. She, too, uses the adjective 'bedazzled' ($\tau \epsilon \theta \eta \pi \acute{o} \tau \epsilon_S$, Parm. fr. 6. 7) in describing mortals' condition and directs Parmenides to rely, not on the senses, but on reason $(\lambda \acute{o} \gamma \omega)$ Parm. fr. 7. 5b $\approx \nu \delta \omega$, Emp. fr. 17. 21), if he is to apprehend the content of her revelation. Empedocles' instruction to behold Love in her cosmic role with thought or the mind $(\tau \dot{\eta} \nu \ \sigma \dot{\nu} \ \nu \dot{\phi} \omega \ \delta \dot{\epsilon} \rho \kappa \dot{\epsilon} \nu)$ also bears comparison with the goddess's instruction to Parmenides to 'behold things that, while absent, are steadfastly present to thought $(\nu \delta \omega)$ ' (fr. 4. 1). Calling 'absent' what is apprehensible only by thought appears to be Parmenides' way of speaking of what will come to be referred to as nides, not to mention other Presocratics, the recognition that there are important things not evident via the senses that we can only come to know through thought and reason. Of course, one does not want to downplay the fact that Empedocles is more prone than Parmenides to ground his claims in empirical evidence. The present passage provides a good example. Empedocles' claim that Love acts as a principle of harmony and union in the cosmos generally is meant to have an empirical basis in mortals' awareness of Love's operation in their own limbs. There is an inference to be made from feeling the operation of love at the microcosmic level in one's own self to recognizing it as a force operating at the macrocosmic level in the body of the cosmos. 41 Mortals are typically unable to make the inference, however, for it requires a kind of thought and reason to which they are unaccustomed.

Thus while both Parmenides and Empedocles criticize ordinary mortals for their lack of understanding and their dazed reliance on the senses that prevents them from apprehending what is available only to thought, Empedocles' conception of the path to genuine understanding is decidedly more empirical than Parmenides'. Empedocles is clear that the evidence of each of the senses, when properly employed, furnishes a passage for understanding $(\pi \delta \rho o s \dots \nu o \hat{\eta} \sigma a \iota)$, Emp. fr. 3. 12). Parmenides' conception of the way to achieve understanding that does not wander involves

⁴⁰ e.g. Bollack 1969*b*: 68, and Wright 1981: 170, both *ad* Emp. fr. 17. 21.

⁴¹ Emp. fr. 17. 20–6 thus conforms to Emp. fr. 2's comments on the epistemic predicament of ordinary mortals: compare the description of humans as 'persuaded only of that which each has encountered' in their brief lifespans (fr. 2. 5) with the claim that mortals are only aware of Love's operation in their own limbs (fr. 17. 22); the rhetorical question, 'but who boasts of discovering the whole' (fr. 2. 6b, accepting Fränkel's τ (s α) after α (s), with the point that no one is aware of Love's macrocosmic operation; 'these things are not to be seen (α) with 'the point that no one is aware [α) with '[n] or any mortal man is aware [α) with '[n] among them [α]. The elements]' (fr. 17. 25–6a); and the promise that 'you then . . . will learn . . . '(fr. 2. 8b–9a), with the directive, 'hear you the undeceiving order of my account' (fr. 17. 26b).

freeing oneself altogether from the reliance on the senses that leads mortals to focus their thought on things subject to change. Whether his cosmology furnished any precedent for Empedocles' appeal to empirical evidence in support of his own theories is impossible to know given the scant remains of this part of Parmenides' poem. In any case, there are both thematic and philosophical connections, as well as significant differences, between Empedocles' and Parmenides' epistemological stances. The nuanced character of the intertextual relation here, and the fact that it is specifically his account of Love's cosmological role that Empedocles describes as 'undeceiving', belies any notion that Empedocles simply stakes his claim against Parmenides when he enjoins his audience to hear 'the undeceiving order of my discourse'.

As for the second mainstay of the conventional depiction of Empedocles' response to Parmenides, that Empedocles accepts a Parmenidean stricture against generation ex nihilo, we have already seen that while Parmenides appears to obey the principle, nihil ex nihilo fit, which Aristotle correctly identifies as a common commitment of all the early natural philosophers, Parmenides never articulates the principle explicitly. 42 The Way of Conviction certainly does not contain any general arguments against generation, destruction, or change; where it has been thought to do so, Parmenides is in fact arguing, correctly, that what must be (what it is) cannot either have come to be or ever cease to be (what it is). It is therefore misguided to cast Empedocles' revisionary attitude towards everyday talk of generation and destruction as part of a 'response' to Parmenides. Empedocles' attitude in fact seems less motivated by anything in Parmenides, or even by the common axiom of Presocratic cosmology that no thing comes to be from nothing, than by his development of the Pythagorean doctrine of metempsychosis. 43 We have already noted how this doctrine permeates his entire cosmological, eschatological, and ethical vision. His criticisms of ordinary mortals' misconception of birth and death generally centre upon their failure to recognize this one essential truth.

For Empedocles, Pythagoras is the paragon of wisdom, 'a man exceptionally knowing, | who indeed possessed the greatest wealth of understanding' (fr. 129. 1–2), because of his purported ability to reach out with his understanding so that 'easily could he see each of all the things there are, | even unto ten and twenty human lifespans' (fr. 129. 5–6). Empedocles himself professes the same ability when he declares that heretofore he has been a youth and a maiden, a bush, a bird, and a fish (fr. 117). His self-professed superior understanding, like that of Pythagoras, is based

⁴² See above, pp. 225–7.

⁴³ Cf. Mourelatos 1981: 663–4.

⁴⁴ While Diogenes Laertius notes that some thought Parmenides the subject of these lines, that Empedocles is in fact speaking of Pythagoras is all but certain. Thus Porph. *VP* 30, where fr. 129 is quoted in full; cf. Iamb. *VP* 67. Trépanier 2004: 124–5, takes the fragment as evidence of Empedocles' avowed allegiance to Pythagoreanism, *contra* the case made by Riedweg 1995 for viewing his background as exclusively Orphic. It should be noted, however, that the Muse invoked by Empedocles in frs. 3, 4, and 133, and thus numbered by Trépanier among Empedocles' avowed allegiances, is named in the last of these fragments as Kalliopeia, the Muse most often identified as the mother of Orpheus (cf. Kern 1922: T22–4).

to a significant degree on this ability to transcend the limited perspective of a single lifetime (cf. fr. 2. 3–8a) and thus to see what ordinary humans cannot, that they existed before being 'born' and will continue to exist after they 'die'. This fundamental teaching of the continuing existence of all living things, rather than any specific concern with Parmenides, likely lies behind the generalized principle governing change at the macrocosmic as well as the microcosmic level. Nothing ever really dies or perishes or is really born or generated. Instead, these apparently absolute changes are merely the transformations of one thing into another and of old things into new forms.

It is worth dwelling for a moment on how Empedocles might have arrived at the general principle that nothing ever undergoes absolute generation or destruction via the same kind of reasoning that led him to see Love operating everywhere as a principle of unification and harmony, namely, via a generalization from the microcosmic level of personal experience to the macrocosmic level. Note how he criticizes mortals in fr. 11: 'Fools: for far-reaching thoughts are not in those | who suppose that what previously is not comes to be $(\gamma i \gamma \nu \epsilon \sigma \theta a \iota)$ or that something dies $(\kappa \alpha \tau \alpha \theta \nu \dot{\eta} \sigma \kappa \epsilon \iota \nu)$ and is altogether destroyed $(\dot{\epsilon} \dot{\epsilon} \dot{\delta} \lambda \lambda \nu \sigma \theta \sigma \iota)$. When Empedocles says that ordinary humans have no 'far-reaching thoughts' $(\delta o \lambda \iota \chi \acute{o} \phi \rho o \nu \epsilon s \dots \mu \acute{e} \rho \iota \mu \nu \alpha \iota)$, he appears to be repeating fr. 2's point that their understanding is circumscribed by their individual lifespans, beyond which they are unable to see. Since Empedocles himself, like Pythagoras, claims the ability to see beyond this present lifespan to recall his past lives and the transformations he has undergone, his personal experience gives him a basis for inferring that in the cosmos generally there is no true birth or death but only continuous transformation. Thus most of his denials that there is any absolute generation or destruction have strong zoogonical overtones. He says that no wise man would suppose that mortals exist only while living what they call 'life' and not also before coming to have their present form or after its dissolution (fr. 15). That is, the wise man understands that we existed before being 'born' and that we shall exist after 'death', which is the core of the Pythagorean doctrine of metempsychosis. Again, Empedocles says, when the roots or elements combine and emerge in the form of a human being, beast, plant, or bird, people mistakenly say it 'comes to be', and when its elements separate, they mistakenly call it 'death' (fr. 9). Here there is the same criticism of mortals for failing to recognize the truth of the Pythagorean doctrine, though now with the rudiments of a physical explanation of the transformations involved in 'birth' and 'death'. Likewise, when Empedocles says that there is no birth $(\phi \dot{v} \sigma \iota s)$ or end in death for any mortal thing, but that what mortals call 'birth' is merely the mixture and interchange of what is mixed (fr. 8), the focus continues to be on the transformations of living creatures. Even as he extends these explanatory principles from the zoogonical to the cosmogonical context, the Pythagorean doctrine of metempsychosis remains fundamental to Empedocles' conception of how-at both the microcosmic and macrocosmic levels, and both in the biological realm and the natural world more generally—nothing is ever truly born but always pre-existed in some form and, likewise, nothing perishes absolutely but will be reborn repeatedly in new forms. There is no need to look beyond Empedocles' commitment to the Pythagorean doctrine of metempsychosis and his intuition of a correspondence between microcosm and macrocosm to account for his pronouncements in frs. 8, 9, 11, and 15 regarding generation or birth and death or destruction.

The closest Empedocles ever actually comes to a perfectly general statement of the principle, *nihil ex nihilo fit*, is in fr. 12, 45 which we noted above has often been taken as endorsing a Parmenidean prohibition against absolute generation and destruction. Unfortunately, neither of the sources preserving these verses provides the kind of information about their original context that would allow us to determine whether their scope was as general as their isolation from any context now makes it seem. The text of the fragment is also uncertain at critical points and seems to have suffered under pressure, both in antiquity and in modern times, to make it serve as a general statement that nothing can come to be from, or perish into, what is not. The apparent use of $\dot{\epsilon} \dot{\delta} \nu$ or 'being' in the second verse as a subject is without parallel in the fragments of Empedocles, so that any opinion as to what he might have so designated must be purely speculative. The participle might be better understood as functioning circumstantially, so that the sense of the first two verses would be that it is impossible for 'it'—whatever Empedocles was originally talking about here—to come to be from a condition of not being and that it is likewise impossible for it, once it is $(\partial \hat{\phi})$, to be utterly destroyed. Depending on what his subject actually was, Empedocles' point might not have been so very different from the one we can more clearly see him making in fr. 15, that no creature 'is' only for so long as it lives what mortals normally call 'life' and is nothing once it 'dies'. Even if fr. 12 was a more universal statement to the effect that there is no absolute generation or absolute perishing, Empedocles even so would not have taken this from Parmenides—for the straightforward reason that Parmenides never makes any such general prohibition.

Ph. Aet. 2 quotes the first two verses of this fragment, without attribution, as follows: $\ddot{\epsilon}\kappa \tau o \hat{v}$ γὰρ οὐδάμἢ ἐόντος ἀμήχανόν ἐστι γενέσθαι | καί τ' ἐόν ἐξαπολέσθαι ἀνήνυστον καὶ ἄπυστον. Their attribution to Empedocles is secured by [Arist.] MXG 975 a 36- b 6, a passage criticizing Melissus' view that whatever is must be eternal: 'Furthermore, even if it is altogether impossible either for what is not to come to be or for what is to perish, nevertheless what prevents some of these being generated and others eternal, as Empedocles also says? For while agreeing to all these things [in saying] that ἐκ τοῦ μὴ ὄντος ἀμήχανον ἐστι γενέσθαι, τό τε ὂν ἐξόλλυσθαι ἀνήνυστον καὶ ἄπρηκτον, ἀεὶ γὰρ $\theta \dot{\eta} \sigma \epsilon \sigma \dot{\theta} a \iota \ddot{\delta} \pi \eta \kappa \dot{\epsilon} \tau \iota s a \dot{\epsilon} \dot{\nu} \dot{\epsilon} \rho \epsilon \dot{\epsilon} \delta \eta$, he nevertheless says that some entities are eternal, fire and water and earth and air, and that others come to be and have come to be from these.' While this passage supplements Philo's quotation with a rather obscure rationale in the additional verse (cf. Inwood 2001: 27), it looks to be a mishmash of quotation and (mostly) paraphrase. The versions of fr. 12. 1a in both sources are, moreover, unmetrical. Diels drew on both and introduced a minor emendation to produce the text he printed as 31B12. 1: ἔκ τε γὰρ οὐδάμ' ἐόντος ἀμήχανόν ἐστι γενέσθαι. Bollack 1969 b: 82, plausibly pointed out that $\epsilon \acute{o}\nu \tau os$ seems to require the definite article found in Philo's version and therefore adopted $\epsilon \kappa \tau \sigma \hat{v} \gamma \hat{a} \rho \mu \hat{\gamma} \epsilon \hat{o} \nu \tau \sigma s$ at the beginning of the verse. Wright 1981: 98 (cf. 173), altered this to the slightly less preferable ἔκ γὰρ τοῦ μἢ ἐόντος, accepted by Inwood 1992: 212 (cf. 265). Opinions vary on how to correct the MXG's garbled version of v. 3, though the obvious correction of $\alpha \epsilon i$ to $\alpha \epsilon i$ and Panzerbeiter's emendation of $\theta \eta \sigma \epsilon \sigma \theta \alpha \iota$ to $\tau \eta \gamma'$ $\dot{\epsilon}\sigma\tau\alpha\iota$ have been the most generally accepted solutions.

EMPEDOCLES' ROOTS AS A 'PLURALITY OF PARMENIDEAN BEINGS'

Prima Facie Problems and the Particles Postulate

The central tenet in accounts of Empedocles' 'response' to Parmenides is that the four Empedoclean elements or 'roots'-fire, aether, water, and earth-individually replicate the attributes of Parmenidean Being. Their satisfaction of the Parmenidean requirements upon being a proper, or properly fundamental, entity supposedly enables Empedocles to save the phenomena and set the project of cosmology on a new and secure footing. So critical has the notion that the Empedoclean elements are ungenerated and imperishable been to this story that it may now seem beyond question. Witness Guthrie's confident assertion: 'The remains of Empedocles himself, as well as Aristotle's comments, leave no doubt that he conceived of the elements as immutable and indestructible. This was one of the cornerstones of his answer to Parmenides.'46 Aristotle does indeed say, in the examination of the antecedents of his own four causes that so influenced Guthrie's narrative, that Empedocles' four material principles 'always remain and do not come to be (ἀεὶ διαμένειν καὶ οὐ $\gamma i \gamma \nu \epsilon \sigma \theta \alpha i$), except in respect of being many and few, when they are combined and discriminated, into one thing and out of one thing respectively' (Metaph. 1. 3. 984^a9-11). Aristotle does not, however, present this conception as central to any Empedoclean response to Parmenides. More significantly, Aristotle's fuller discussions of Empedocles' element theory elsewhere, particularly in On generation and destruction, show that he was not consistently committed to the view that the roots always persist ungenerated. If we attend to Empedocles' actual words without the prejudices born of Guthrie's ahistorical narrative and do not neglect the Aristotelian evidence that contradicts it, an altogether different picture emerges, one according to which the Empedoclean roots have their own life cycles and undergo their own transformations like virtually everything else in his system.⁴⁷

The fragments contain numerous and important prima facie indications that the Empedoclean roots are not the ungenerated and imperishable substances they have been made out to be. Empedocles himself says that the roots 'are of like age *in their birth*' ($\eta \lambda \iota \kappa \alpha \ \underline{\gamma \epsilon \nu v \alpha \nu} \ \dot{\epsilon} \alpha \sigma \iota$, fr. 17. 27b), which quite clearly implies that they had a birth or came to be at some time. He says that the roots 'perish into each other and grow [out of each other] in decreed turns' (fr. 26. 2). He strongly implies, moreover, that the roots do not persist in the unified Sphere during the phase of Love's peak ascendancy when he says that 'there neither are the swift limbs of the sun distinguished ($\delta\iota\epsilon(\delta\epsilon\tau a\iota)\ldots$ ' (fr. 27. 1). If 'the swift limbs of the sun' can be taken as representing fire (cf. fr. 21. 3), and if what applies to fire applies to the other roots,

⁴⁶ Guthrie 1965: 146.

⁴⁷ A view comparable to the one to be developed here is adumbrated in Osborne 1987*a*: 41–2, where she shows in her own way how '[t]he idea that Love's effect is to mix but not to change is . . . untenable on a close reading of the physical fragments' (33).

then the most obvious sense of these words would seem to be that the roots do not maintain their distinct characters during this period of maximal unity in the cosmos's history. ⁴⁸ The plainest indication, finally, that Empedocles' roots are not immutable comes in fr. 26. 3–12:

For these themselves [sc. the roots] are, but running through one another they come to be humans and the tribes of other creatures, at one time combining by Love into one order,
and at another time each borne apart again by the enmity of Strife,
until such time as growing together as one they become altogether submerged.

Thus in so far as they have learned to grow one from many and when the one again grows apart they come forth as many, in this respect they both come to be and not for them is there continual life; but in so far as these never cease constantly interchanging, to this extent they are ever unchanged with respect to their cycle.

There is a weaker reading, to be discussed in due course, according to which fire and the other elements somehow persist in the Sphere under Love but are somehow not 'discerned' as doing so. ⁴⁹ Their importance is emphasized by their being repeated almost verbatim from fr. 17. 9–13. Likewise, fr. 26. 1 = fr. 17. 29, fr. 26. 3–4a \approx fr. 17. 34–5a \approx fr. 21. 13–14a, fr. 26. 5–6 \approx fr. 17. 7–8. Here in fr. 26, however, it is somewhat clearer that Empedocles is referring to the life cycle of the cosmos. Solmsen 1975: 127–9, has claimed that the corresponding verses of fr. 17. 9–13 have nothing to do with cosmology; this claim rests, however, on an identification of $\theta\nu\eta\tau\sigma$ as the subject in fr. 17. 11 and 13, and he cannot really explain how living things (rather than the roots) are $\frac{\partial \kappa}{\partial \nu}\eta\tau\sigma$ $\kappa\alpha\tau$ $\frac{\partial \kappa}{\partial \nu}\kappa\lambda\sigma$ (fr. 17. 13b). Solmsen in any case acknowledges that the corresponding verses in fr. 26 pertain to the roots (1975: 132). He likewise has to acknowledge that the roots are the subject of fr. 17. 16 ff.; but while this stretch of text begins by repeating vv. 1–2 in vv. 16–17, Solmsen persists in his claim that $\theta\nu\eta\tau\dot{\alpha}$ (sic) is the subject in vv. 11 and 13 (1975: 133).

Mourelatos 1987: 163, is therefore wrong in stating, 'True to his principles [sc. that the elements are eternal and unchanging in their character], Empedocles does not ever use $\gamma i \gamma \nu \epsilon \sigma \theta a \iota$, "to come to be," in an absolute construction (which would yield the sense "to be born") with the elements or forces as subject.' In the accompanying n. 45, Mourelatos appeals to Solmsen to suggest that the subject of $\gamma i \gamma \nu \sigma \tau a \iota$ here in v. 10a is to be found in $\delta \nu \theta \rho \omega \pi o \iota$ and $\theta \eta \rho \epsilon s$ in v. 4, even though Solmsen himself (see n. 49) resisted just such a move. Mourelatos's ad hoc suggestion is unsustainable, given that $\delta \nu \theta \rho \omega \tau a \iota$ and $\delta \nu \theta \rho \omega \tau a \iota$ in the predicative position in v. 4 after $\gamma i \nu \sigma \tau a \iota$, with the roots clearly functioning as the verb's subject, as likewise of the verbs, $\kappa \rho \alpha \tau \epsilon \sigma \sigma a \iota$ (v. 1), $\delta \nu \epsilon \iota$ in the predicative position in v. 4, $\delta \nu \epsilon \iota$ is $\delta \nu \epsilon \iota$ in the predicative position in v. 4 after $\delta \nu \epsilon \iota$ in the predicative position in v. 4 after $\delta \nu \epsilon \iota$ in the predicative position in v. 4 after $\delta \nu \epsilon \iota$ in the predicative position in v. 4 after $\delta \nu \epsilon \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative position in v. 4 after $\delta \iota \iota$ in the predicative

Contrast Parm. fr. 8. 30a: ἔμπεδον αὖθι μένει. Giannantoni 1997: 250, following Bignone 1916: 404, goes too far in claiming there is 'certamente' a reference to Parm. fr. 30 in Empedocles' use of the same phrase at fr. 17. 11b. What is certain is that Empedocles' express denial that the roots have an ἔμπεδος αἰών contrasts starkly with Parmenides' description of the steadfast existence of what must be.

condition under Love (fr. 26. 7).⁵² Empedocles is explicit about the kind of permanence the roots enjoy when he ascribes it to them solely and specifically as a function of their continuous interchange (fr. 26. 11 ≈ fr. 17. 12). Although the changes they undergo at the macrocosmic level culminate eventually and periodically in the loss of their individual identities when they grow together as one in the Sphere, the roots are subsequently reborn when the Sphere is again broken apart at the advent of Strife. Thus their cycle of generation and destruction is unchanged and repeats itself endlessly.⁵³ The roots themselves, though, are born or generated from the Sphere and eventually perish back into it, so that their life is not continuous. The clear and cumulative impression of these various statements is that the roots are not eternal but subject to generation and destruction. His characterization of them in these verses is to be contrasted, note, with the persistence Empedocles attributes to the forces of Love and Strife, of which he says: 'They are as they were before and shall be, and never, I think, will endless time be emptied of these two' (fr. 16). Nowhere in the fragments does Empedocles come close to ascribing eternity in so plain a fashion to fire, aether, water, and earth.⁵⁴

All these statements run counter to the common opinion that Empedocles' elements must be eternal if they are to realize their role in his cosmology as 'Parmenidean beings'. There have accordingly been efforts to circumvent the evident import of Empedocles' characterizations. Not all the evidence just surveyed can be explained away, of course. Much of it must simply be ignored to maintain that the roots are ungenerated and imperishable. Nonetheless, some of Empedocles' language is ambiguous enough to appear compatible with a scenario where the roots persist in some way within the harmonized Sphere under Love, with the result that it would fall short of being a true unity. Thus it is often said that Empedocles' statement that in the Sphere under Love 'neither are the swift limbs of the sun distinguished' (fr. 27. 1) need not necessarily mean that the elements do not persist and retain their identities. For example, Friedrich Solmsen wrote that 'the elements could not lose their identity completely when they were merged in the Sphairos. They disappear only for the eye: $0\vec{v}$ $\delta\iota\epsilon\dot{\iota}\delta\epsilon\tau\alpha\iota$ [not discerned] is the most that Empedocles can afford to say....We know that Love has done her absolute best and being unhampered by Strife has carried *mixis* and *sygkrisis* to their extreme. But the result is still

⁵² Cf. fr. 17. 1b–2: 'for at one time it grew to be *one alone* ($\varepsilon \nu \dots \mu \delta \nu \sigma \nu$) | from many [sc. the roots], and then again it grew apart to be many from one'.

⁵³ Cf. O'Brien 1969: 8, re. fr. 26. 12, ἀκίνητοι κατὰ κύκλον: 'By this he means—the preceding lines make it clear—that the movement of the elements is constantly repeated.' Against the common claim that Aristotle misunderstood this point, see O'Brien 1969: 252–61.

⁵⁴ At fr. 21. 4 he refers to the aetherial moon and stars as ιμβροτα ('immortals', 'divinities') despite their having come to be. He refers to the roots themselves in a decidedly ambiguous manner as ιμβροτα ('immortal') at fr. 35. 14, where he describes them as having *learnt* to be immortal and as then growing mortal. There is also the lexicographer Hesychius' entry ιμβμρα ειτριαμβμρα ειτρ

not a true $\epsilon v^{.55}$ This he says despite Empedocles' various unqualified assertions that the elements under Love grow together to be 'one' (e.g. fr. 26. 7–9) or 'one only' ($\epsilon \nu \mu \delta \nu \sigma \nu$, fr. 35. 5, cf. fr. 17. 1) and despite the description of the Sphere as 'altogether unlimited' ($\pi \delta \mu \pi \sigma \nu$ $\delta \pi \epsilon i \rho \omega \nu$, fr. 28. 1b). This last description apparently has to mean that it is without internal division, something Solmsen has trouble comprehending given his commitment to the elements' persistence within the Sphere. Though Solmsen's study contains many valuable insights, some of which we shall return to, it is nevertheless vitiated by taking as its leading question, 'How did Empedocles react to Parmenides' repudiation of $\gamma \epsilon \nu \epsilon \sigma \iota s$ [generation] and $\phi \theta \sigma \rho \delta \epsilon \nu \epsilon \sigma \iota s$ [generation]?

Solmsen finds the answer to his question in Empedocles' statement regarding the roots, $\dot{a}\lambda\lambda'$ $\dot{a}\dot{v}\tau'$ $\ddot{\epsilon}\sigma\tau\nu$ $\tau a\hat{v}\tau a$ (fr. 17. $34\approx a\dot{v}\tau\dot{a}$ $\gamma\dot{a}\rho$ $\ddot{\epsilon}\sigma\tau\nu$ $\tau a\hat{v}\tau a$, fr. 26. 3), which he takes to mean that 'elements alone are truly real'. 58 Nothing in the immediate context or elsewhere in Empedocles licenses an understanding of $\ell \sigma \tau w$ here in this strong sense. It depends instead on the erroneous preconception that the elements must be 'Parmenidean beings'. Empedocles' actual point here, as we shall see more clearly in due course, is that the four roots comprise the fixed and total quantity of stuff in the cosmos and that everything else is somehow made of them. This point need not entail, however, either that the roots are themselves ungenerated and imperishable, as such, or that they always retain their characteristic identities even when they combine in the unified Sphere under Love (or even in other temporary compounds). Such a strong view follows, not from Empedocles' own words, but from the presumption that he posits a plurality of 'Parmenidean beings' in reaction to Parmenides' purported prohibition against generation and destruction. But Parmenides issued no such general prohibition. The relevant metaphysical principle is, instead, the general one that no thing can come to be from nothing, or, as Empedocles formulates it, that there is no absolute birth or death but only transformation. That the elements lose their distinctive identities in the unified Sphere under Love and re-emerge as themselves at the next advent of Strife is in accordance with this principle, in both its general Presocratic and its specifically Empedoclean form: the elemental roots are neither generated from nor destroyed into nothingness, and their lives, like those of virtually everything else in his cosmology, are ones of transformation.

Such, briefly stated, is the understanding of Empedocles' roots that begins to emerge once one abandons the artificial strictures imposed on interpretation by the

⁵⁵ Solmsen 1975: 136. Cf. Mourelatos 1987: 185–7, where the four elements in the Sphere under Love are allowed to 'unite readily and pervasively', though in a 'through-and-through reciprocal interpermeation', so that the Sphere under Love is not a true unity but 'the locus of a *coincidentia oppositorum*'.

⁵⁶ See Solmsen 1975: 135–6. There may likewise be an imputation of unity in fr. 27. 4's description of it as 'a rounded sphere delighting in its joyous solitude $(\mu o \nu i \eta)$ ', if $\mu o \nu i \eta < \mu \acute{o} v o s$ (see n. 6 above) implies that it is unified as well as alone.

⁵⁷ Solmsen 1975: 123.

⁵⁸ Ibid. 133. Cf. Wright 1981: 167 and 181, where both phrases are translated as 'these are the only real things'.

erroneous assumption that Empedocles' physical theory is driven by Parmenides' arguments in the Way of Conviction. To explore this result in more detail, it will be useful to attend to a view that a number of interpreters have attributed to him by way of defending the presumption that the elements are eternal and so persist even when united in the Sphere under Love, namely, the view that Empedocles' elements have a particulate structure. The idea has been that fire, aether, water, and earth can retain their identities by persisting in the form of microscopic particles.⁵⁹ While the uniform mixture of these particles is supposed to produce a macroscopic state where none of the distinguishing characteristics of the elements are apparent, at the microscopic level each particle of each element is supposed to retain the specific qualities that define its kind. Thus the supposition that Empedocles conceived of matter as having a particle structure, a supposition for which there is little if any plausible evidence in the fragments, has provided one way of explaining away the unwelcome implications of his statements that the elements are no longer distinguished when merged in the Sphere under Love. While there is some indirect evidence in Aëtius and Galen supporting attribution of such a theory to Empedocles. their reports likely derive from a passage where Aristotle says that Empedocles must suppose that the elements combine to form objects like bricks and stones combine to form a wall, with the elements set side by side in small particles. ⁶⁰ Certainly not all, probably not even a majority, of those who have wanted to understand Empedocles' roots as 'Parmenidean beings' have taken this further step of positing that they have a particulate structure. 61 Still, there has been a long-running debate on this point, 62 and considering this particular way of defending the claim regarding the eternity and persistence of the Empedoclean roots will be useful in prompting reconsideration of the evidence in Aristotle that Guthrie claimed as reliably supporting his narrative's seventh tenet, that Empedocles' element theory, like the physical theories of Anaxagoras and the early atomists, was driven by concerns inherited from Parmenides.

⁵⁹ Cf. Wright 1981: 187: 'the minute particles of roots are so mingled that it is impossible to pick out any one and distinguish it from another'.

⁶⁰ Arist. *GC* 2. 7. 334°26–31; cf. Aët. 1. 13. 1 ([Plu.] 1. 13. 883 в 5–7 ≈ Stob. *Ecl.* 1. 14. 1k), 1. 17. 3 ([Plu.] 1. 17. 883 в 4–6 ≈ Stob. *Ecl.* 1. 17. 1), and Gal. *in Hp. Nat.Hom.* 15. 49 (*CMG* 5. 9. 1, 27. 22–7). All these passages are collected at 31A43 DK. ⁶¹ Stokes 1971: 324 p. 42 page relations.

⁶¹ Stokes 1971: 324 n. 42, not only rejects the view but strikes the right chord when he says it 'is doubtful whether Empedocles had any theory of matter at all'. Stokes endorses as substantially correct the arguments against the notion of Empedoclean atomism at Reinhardt 1950: 178–9, as does Barnes 1982*a* in the note accompanying his declaration that we need not 'pay any heed to the doxographical assertion that the roots had an atomic or corpuscular substructure' (309, cf. 623 n. 11).

Kranz 1912 proposed that Empedocles had developed a form of atomism prior to Leucippus and Democritus. While we shall focus on the role ascription of a particle theory to Empedocles plays in the account in Guthrie 1965 of his 'response' to Parmenides, the ascription is also to be found e.g. in Longrigg 1967 and 1976: 437–8; Wright 1981: 34–40 and passim; Pierris 2005æ: 190–1. Reinhardt 1950: 178–9, argued against Kranz's presentation of his proposal in Kranz 1949: 45. More recently, Gemelli Marciano 1991 has argued at length against attributing a particle theory to Empedocles by reviewing the ancient testimonia that might seem ground for the attribution—including a good deal of later material not discussed here—and showing how much of this evidence is compromised by various conflations of Empedoclean with Anaxagorean, atomistic, and even Platonic doctrine.

Appreciating that the Aristotelian evidence actually suggests a rather different view will in the end lead to a better understanding of Empedocles' conception of the elements and their interaction in compounds.

Guthrie relied on attribution of a particle theory to Empedocles in explaining away fr. 26. 2's talk of the elements perishing into one another. 63 He adapted Verdenius' argument⁶⁴ that the verbs in this verse— $\kappa \alpha i \phi \theta i \nu \epsilon i \epsilon i s \alpha \lambda \lambda \eta \lambda a \kappa \alpha i$ αὔξεται ἐν μέρει αἴσης—are not to be translated as 'perish' and 'come into being' since they mean instead, respectively, 'grow smaller' and 'grow larger'. This proposal is purportedly licensed by the notion that Empedocles had a particle theory of material structure, in that having Empedocles talk of the elements growing larger and smaller implies that he had some definite quantitative conception of their structure. Obviously, however, to claim that $\phi\theta$ i $\nu\epsilon\iota$ is mistranslated as 'perish' is untenable and entirely *ad hoc*. The verb $\phi\theta$ *ivew* normally means 'to decay', 'to wane', 'to pass away', 'to waste', or 'to perish', that is, to be involved in the kind of change that leads to death or some other type of extinction. It is to be perishing, and even if the elements do not perish altogether when they combine and interact with one another, Empedocles' use of the verb $\phi\theta$ ($\nu\epsilon\iota$ implies some loss of their character or identity, some gradual failing or lapse of what they are. Likewise, αὐξάνεσθαι normally means 'to grow', 'to wax', or 'to increase' in some respect. Here it is more easily understood as describing the resurgence of the elements' character or identity as they grow dominant in turn.

Most fundamentally, this verse confronts the interpreter with a choice: do Empedocles' roots interact with and affect one another when they combine, or do their combinations leave them essentially unaffected? A good deal of ingenuity has been employed in modern times to maintain the latter answer. Among the ancient commentators, however, one finds a greater willingness to countenance the first option, that the Empedoclean elements genuinely interact and are changed when they combine with one another. Thus Simplicius, for example, prefaces his quotation of fr. 26. 1–2 by remarking that these lines make it clear that the elements transform simply following Aristotle's lead. Modern commentators wanting to ascribe a particle theory to Empedocles have also appealed to Aristotle. For example, Guthrie, in support of his (misleading) claim that a particle theory was attributed to Empedocles in antiquity from Aristotle onwards, quotes the passage from On generation and corruption mentioned above as lying behind Aëtius and Galen's attributions. Aristotle is posing the question of how, on a theory such as Empedocles', one is to envision the generation of stuffs such as flesh from the elements: 'What will be the way, for those who speak like Empedocles? It must be composition ($\sigma \acute{\nu} \nu \theta \epsilon \sigma \iota s$), just like when a wall is made from bricks and stones; and this mixture will be of persisting elements, put together in small parts ($\kappa \alpha \tau \dot{\alpha} \mu \iota \kappa \rho \dot{\alpha}$) next to each other. Likewise with flesh and each of the others' (GC2. 7. 334°26–32). Mourelatos likewise appeals

⁶³ In the additional note appended at Guthrie 1965: 146–7, to his account of the Empedoclean elements.
⁶⁴ Verdenius 1948: 12–13.

to this passage as 'explicit corroboration' of his thesis 'that all mixtures in Empedocles, including ostensibly homogeneous ones, are, fundamentally, mechanical aggregations'. 65

One must be careful, however, not to isolate this passage from its dialectical context, as one is unfortunately encouraged to do by its excerpting as a testimonium in Diels and Kranz. The passage can be adequately understood only when considered in relation to Aristotle's remarks on the Empedoclean elements earlier in the treatise, particularly at the end of On generation and corruption 1. 1, where one finds Aristotle's most thoughtful and reliable discussion. Aristotle's remarks on Empedocles' physical theory at various points in the remainder of the treatise, particularly in On generation and corruption 1. 8 and 2. 6-7, hearken back to this earlier discussion and need to be interpreted consistently with it. Unfortunately, the crucial comments on Empedocles at the end of On generation and corruption 1. 1 have received less attention than they deserve, probably because no part of this passage features among the Diels and Kranz testimonia. Before coming to this passage, however, we must first consider Aristotle's far more influential remarks on Empedocles earlier in the same chapter. There we shall be able to isolate an essential point on which Aristotle has misled subsequent commentators, both ancient and modern. We shall also see how care must be taken to distinguish between, on the one hand, passages where Aristotle engages in speculative reconstruction of what he supposes Empedocles, or anyone who holds a theory like his, would have to say to remain consistent and, on the other hand, passages where Aristotle comes closer to providing something like genuine testimony informed by his own reading of identifiable fragments against which his remarks can be readily checked.

Elemental Transformation

GC 1. 1 on mixis and diallaxis in Empedocles fr. 8

In the opening chapter of *On generation and corruption*, Aristotle divides earlier theories on the treatise's subject into two types, depending on whether their proponents posit one or a plurality of material principles. Those positing only one such principle, he says, must suppose that other entities are generated from it via its alteration; conversely, those positing more than one material principle must, he says, conceive of generation as something other than alteration (*GC* 1. 1. 314°6–13). The neatness of this division might well cause concern over its potential for historical distortion. Such concern seems well placed when Aristotle proceeds to declare that Anaxagoras misunderstood his own position, since what he actually says is that generation and destruction are the same as alteration even though he posits a plurality of elements (314°13–16). Aristotle can see that the way Anaxagoras actually speaks of things contradicts his own classification of his position, but he feels confident that he has seen, better than Anaxagoras himself was able to, what Anaxagoras should have said. This apparently cavalier treatment of Anaxagoras

⁶⁵ Mourelatos 1987: 177.

stems from Aristotle's desire that his own theory appear to emerge dialectically from earlier positions. It is meant to count as some confirmation of his theory that it both preserves the valuable features of earlier views while overcoming their inherent problems.

In this instance, Aristotle's theory is supposed to strike a middle course between the two alternatives he finds represented among his predecessors: Aristotle will argue that it is best to posit a plurality of material principles—more specifically, a limited plurality of such principles, a point on which he is willing to commend Empedocles—and also that other things are generated from the elements via a kind of alteration rather than via some form of rearrangement of elements retaining their qualitative identities in compounds. His idea that the four elements share an underlying nature, and are thus in some sense the same stuff qualitatively modified in different ways, is effectively an adaptation of those earlier theories according to which, as he understands them, there is a single material substrate from which all other things are generated by various types of alteration. With respect to the classification of earlier theories that opens the treatise, then, his own theory takes from one side the view that generation is essentially alteration and combines it with the other side's view that there is more than one material principle.

Aristotle's desire that his own position be seen to emerge dialectically from earlier views, and in such a way that it appears confirmed by its ability to cope with problems he argues they could not, may seem to have blinded him somewhat to his susceptibility to misrepresenting those earlier views to make them function as he wants. His claim here in On generation and corruption 1. 1 that Anaxagoras misunderstood his own view when he identified generation and destruction with alteration would seem a clear instance of this failing. Aristotle's claim seems outrageous precisely because of his apparent willingness to discount Anaxagoras' own statements if they do not conform to his classification. Aristotle also seems to want his own theory not to appear too nearly anticipated by any earlier theory, which it would be were Anaxagoras allowed to have held both that there is a plurality of elements and that things are generated from them (not to mention their being generated from something more fundamental) via a kind of alteration. We shall see that Empedocles' element theory even more nearly anticipates Aristotle's own theory and that Aristotle is therefore prone to distorting it in a similar fashion to fulfil his broader purposes in the treatise. Showing that Empedocles' theory more nearly anticipates Aristotle's than he is willing to admit is not an end in itself. Nonetheless, to understand Aristotle's treatment of that theory with a view to the insight it provides into Empedocles' own conception requires that we maintain sight of Aristotle's agenda. 66

⁶⁶ Aristotle is certainly not the last philosopher who has sometimes preferred to deal with positions he believes his predecessors should have held rather than the ones they actually did. While this approach may be anathema to the historian, it can seem more defensible from the perspective of the philosopher concerned more with positions than persons, and Aristotle's philosophical inquiries are often first interested in the range of possible positions on a problem and secondarily with who may have actually occupied them. One should also remember that the

Aristotle's assumption, dictated by his initial classification, that those positing a plurality of material principles must consider generation and destruction something other than alteration informs his view that Empedocles, Anaxagoras, and the atomists all explained these processes in terms of composition and decomposition. In Empedocles' case, this view is reflected in Aristotle's influential representation of the important fr. 8 as describing generation and destruction in terms of mixture and separation. Aristotle here reproduces only a portion of the four-verse fragment preserved more fully by Plutarch: ἄλλο δέ τοι ἐρέω φύσις οὐδενὸς ἔστιν ἁπάντων Ι θνητῶν, οὐδέ τις οὐλομένου θανάτοιο τελευτή, Ι ἀλλὰ μόνον μίξις τε διάλλαξίς τε μιγέντων Ι έστι, φύσις δ' έπὶ τοῖς ὀνομάζεται ἀνθρώποισιν ('Another thing I shall tell you: there is phusis of none of all | mortal things, and not any end in destructive death, | but only mixture and diallaxis of what is mixed | there is, and "phusis" is the name given these by humans'). Aristotle quotes, without interruption, the words here underlined in the Greek quotation (GC 1. 1. 314^b7–8, cf. 2. 6. 333^b14–15). 67 The translation for now simply transliterates two key terms on which interpretation of these verses critically depends. Aristotle's understanding of διάλλαξις as indicating separation is particularly problematic. It is clearly driven by the presumption, articulated just prior to his partial quotation of fr. 8, that those who have posited multiple material principles must theorize generation and destruction in terms of their combination and dissolution; he in fact gives every sign of taking Empedocles' $\delta\iota\dot{a}\lambda\lambda\alpha\xi\iota_{s}$ as if it were a synonym of $\delta\iota\dot{a}\lambda\nu\sigma\iota_{s}$. The term itself, like a fair proportion of Empedocles' vocabulary, is uncommon. ⁶⁹ The verb from which it is formed,

views he would have found among many of his Presocratic predecessors on problems such as that of material structure and composition would properly have seemed inadequately developed or even, at some level, incoherent. Thus if he sometimes introduces into discussion what he thinks one of these earlier thinkers was trying to say in spite of his stumbling expression, or perhaps what one of them should have said to be consistent, and if he does this to get a tenable position on the table, then this approach is understandable and even pardonable. In short, while the historian of early Greek philosophy may well find it frustrating that Aristotle often recasts or shapes the views of the Presocratics for his own purposes, it is natural enough for him to do so. Thus criticizing Aristotle for 'misrepresenting' the Presocratics somewhat misses the mark. Aristotle should be neither defended nor censured as a historian of philosophy, for he is never engaged in a purely historical project when discussing his predecessors' views.

⁶⁷ Aristotle here in GC1. 1 clearly understands Empedocles' φύσις as generation. Oddly enough, however, at Metaph. 5. 4. $1015^{a}1a$ -2a, he quotes verses 1b, 3, and 4 of fr. 8 without interruption to illustrate the sense of φύσις as the substance of things that exist by nature, i.e. their 'nature'. But this is certainly an anachronism (for discussion of which, see Nilles 1989). Cf. Cherniss 1935: 109 n. 446 and 243–5 n. 114. In Empedocles, as we have already noted, φύσις means primarily 'birth'— 'generation' in the most basic sense. Again, the limiting genitive phrase 'of all mortal things' and v. 2's pairing of φύσις with death, notably not preserved in Aristotle's quotations, are sufficient to make it clear that this is the term's proper sense here.

68 Arist. GC 1. 1. 314^b4-8: τοις δε τὰ γένη πλείω ποιοῦσι διαφέρειν τὴν ἀλλοίωσιν τῆς γενέσεως· συνιόντων γὰρ καὶ διαλυομένων ἡ γένεσις συμβαίνει καὶ ἡ φθορά. Διὸ λέγει τοῦτον τὸν τρόπον καὶ Ἐμπεδοκλῆς, ὅτι "φύσις οὐδενός ἐστιν, ἀλλὰ μόνον μίξις τε διάλλαξίς τε μιγέντων."

⁶⁹ It occurs in the plural at Pl. *Ep.* 7. 350 D 6: οὐ πειθόμενοι ταῖς ὑπ' ἐμοῦ διαλλάξεσιν ('failing to heed my attempts at reconciliation', tr. Morrow). It also occurs at Hp. *Salubr.* 1. 10; Iamb. *Theol. Arith.* p. 5, 9; and schol. in Nic. *Ther.* 7 A 1.

διαλλάσσω, has the sense of 'give and take in exchange' or simply 'exchange', 'interchange', or even, in some contexts, 'change from enmity to friendship' or 'reconcile with one another'. It never has the sense of 'separate'. The more common substantive, $\delta\iota a\lambda\lambda a\gamma\dot{\eta}$, has the senses of 'interchange' or 'reconciliation' one would expect from its cognate verb. It never means 'separation', and it is hard to see why the less common $\delta\iota\dot{a}\lambda\lambda a\dot{\xi}\iota s$ should have such a sense. Empedocles himself, most significantly, twice uses the verb $\delta\iota a\lambda\lambda\dot{a}\sigma\sigma\omega$ in contexts where he is normally understood as describing the *interchange* of the elements: $\delta\iota a\lambda\lambda\dot{a}\sigma\sigma\sigma\nu\tau a$ $\delta\iota a\mu\pi\epsilon\rho\dot{\epsilon}s$ $\sigma\dot{\delta}\delta\mu\dot{a}\lambda\dot{a}\gamma\epsilon\iota$ (fr. 17. 12, cf. 17. 6), which Inwood renders 'they never cease from constantly *interchanging*' (emphasis mine); and $\zeta\hat{\omega}\rho a$ $\tau\epsilon$ $\tau\dot{a}$ $\pi\rho\dot{\nu}$ $\sigma\dot{\kappa}\kappa\rho\eta\tau a$, $\sigma\dot{\kappa}\kappa\lambda\dot{a}\dot{\epsilon}\kappa\nu\tau a$ $\kappa\epsilon\lambda\dot{\epsilon}\dot{\nu}\theta\sigma\nu s$ (fr. 35. 15), which Inwood renders 'and things previously unblended were mixed, *interchanging* their paths' (emphasis mine).

The understanding of fr. 8. 3-4a all this suggests—'but only mixture and interchange among the things mixed | there is'—works better in the full context of the fragment, omitted in Aristotle's casual quotation. In particular, it allows one to make better sense of the ensuing statement that 'phusis is the name given these by humans' (fr. 8. 4b). There can be no doubt that the plural pronoun $\tau o \hat{i} s$ in verse 4 refers to the processes of both $\mu i \xi \iota s$ and $\delta \iota \dot{\alpha} \lambda \lambda \alpha \xi \iota s$. Empedocles' point can hardly be, however, that humans normally speak of what he himself identifies as the elements' separation as 'birth' or 'generation'. Only when $\mu i \xi \iota s$ and $\delta \iota \dot{a} \lambda \lambda a \xi \iota s$ are understood as referring, respectively, to the mixture of and interchange among what is mixed does it make sense for Empedocles to say that these are what people normally speak of as *phusis*. Thus, while the subsequent tradition of commentary, both ancient⁷¹ and modern, has tended to follow Aristotle's lead in misunderstanding μίξις and διάλλαξις here as mixture and separation,⁷² Empedocles himself appears actually to have meant to identify the mixture and interchange of what is mixed as the underlying processes involved in what people normally speak of as birth or generation.⁷³ Correctly understanding μίξις and διάλλαξις in fr. 8 as mixture and

e.g. Plu. Col. 1112 A glosses διάλλαξις as διαλύσις; Aët. 1. 30. 1 ([Plu.] Plac. 1. 30. 885 D 4–9), as διάστασις; Simp. in Ph. 161. 18 and in Cael. 306. 4, as φθορά; and Simp. in Ph. 180. 28 as διάκρισις.

⁷³ Osborne 1987*a*: 41, correctly translates διάλλαξις as 'interchange'. However, the accompanying n. 73, despite correctly stating that '[n]o reference is made here to separation into

 $^{^{70}}$ Inwood 2001: 225, 245. Cf. μεταλλάσσον[τ' ('exchanging' or simply 'changing') in the Strasbourg papyrus at ensemble \mathbf{a} (ii) 12. 71 e.g. Plu. Col. 1112 A glosses διάλλαξις as διαλύσις; Aët. 1. 30. 1 ([Plu.] Plac. 1. 30. 885 d 4–9),

The suggestion brings Aristotle's understanding much closer to what Empedocles in fact seems to have meant, it is motivated by Brunschwig's on recognition of the problems with understanding $\delta\iota\delta\lambda\lambda\delta\xi\iota s$ as suggestion brings Aristotle's understanding much closer to what Empedocles in fact seems to have meant, it is motivated by Brunschwig's own recognition of the problems with understanding $\delta\iota\delta\lambda\lambda\delta\xi\iota s$ as separation (53–4). The conclusion that Aristotle himself was aware of these problems is difficult, however, given that he quotes the portion of Emp. fr. 8 he does as support for the claim that those positing a plurality of elements must conceive of generation and destruction as something other than alteration 'since generation and destruction occur when things come together and are dissolved' (Arist. GC 1. 1. 314^b4–6). See above, n. 68.

interchange suggests that Empedocles conceived of elemental mixture as producing a reciprocal interaction, wherein the roots as they mix are qualitatively affected by one another in an interactive interchange that produces compounds with new qualities of their own. As we test the possibility that Empedocles' theory involved such a conception of the roots' transformation, we shall find his own words indicating that when the roots combine to form something new, their interaction involves some loss of their distinctive characters. Instead of being four eternally and perpetually distinct elemental substances, Empedocles' roots perpetually oscillate between qualitative distinctness and indistinctness as they are made qualitatively distinct by Strife and harmonized by Love in ways that lessen their differences and produce qualitatively new things from their unions.

Perishing and regeneration of the Empedoclean roots

The widespread presumption that the Empedoclean roots are eternal, immutable, and persist unchanged in the mixture achieved by Love has already been challenged in a seminal article by Catherine Osborne. 74 She drew attention to how Aristotle, in his discussion of the Empedoclean elements at the end of On generation and corruption 1. 1, quite plainly states that they lose their properties when united in the Sphere and that they are thus genuinely born or generated from it when the cosmogonical process begins again. She also quotes Philoponus' even plainer statement, in his commentary on this passage, that Empedocles 'says when Love dominates, all things become one and produce the Sphere, which exists without quality $(\mathring{a}\pi o \iota o \nu)$, since no longer is either the particular character $(\imath \delta \iota \acute{o} \tau \eta \tau a)$ of fire or of any of the others preserved in it, given that each of the elements has cast off its peculiar form $(\tau \dot{o} \ o i \kappa \epsilon \hat{i} o v \epsilon \hat{i} \delta o s)$ ' (Phlp. in GC 19. 6–9). Philoponus continues: 'so it is clear that he posits that the differences that give the elements their forms $(\tau \dot{\alpha}s \epsilon i \delta o \pi o \iota o \dot{v}s)$ $\delta \iota \alpha \phi o \rho \acute{a}_{S}$) can be removed' (19. 9–10). Philoponus proceeds consistently to describe the Sphere under Love as a uniform and undifferentiated body (19, 14, 19, 29, 20. 1). He also recounts how the elements come to be when qualitative differences arise again at various places within the Sphere, these being the qualities by which the elements generated from it are once again distinguished from each other (19. 10-18). Commenting on Aristotle's emphatic statement that fire, earth, and water did not still exist when the universe was one (Arist. GC 1. 1. 315^a18–19), Philoponus says: 'When, he says, the universe was one, that is, the Sphere, neither fire was in it nor any of the others in its own state, since it would have no longer been one; but it is clear that each of the elements gave up being what it was, and they all produced the single substance of the Sphere' (Phlp. in GC 20. 6-9). Philoponus quite plainly supposes that the Empedoclean elements do not retain their distinctive

elements', betrays the lingering influence of Aristotle's misconstrual in its gloss on the 'interchange of mixed things' $(\delta\iota\acute{a}\lambda\lambda\alpha\xi\iota_{S}$ $\tau\epsilon$ $\mu\nu\gamma\acute{e}\nu\tau\omega\nu$) as indicating the 'remixing' of elements to form other products that occurs when a mortal thing dies. Barnes 1982a: 439, likewise translates $\delta\iota\acute{a}\lambda\lambda\alpha\xi\iota_{S}$ in fr. 8. 3 as 'interchange' but then says, 'Empedocles is offering us comminglings and separations in place of generations and destructions'.

⁷⁴ Osborne 1987*a*: 42–4.

characters when they merge in the period of Love's total influence to form the unified Sphere. He understands Empedocles' Sphere under Love, not as a mixture, but as an absolute unity or fusion, in which all differentiation has disappeared. Consequently, he understands the roots or elements as born or generated from the Sphere as the next cosmogonical phase begins.

Since Philoponus' exegesis follows Aristotle quite closely, one might suppose it possible to discount the view presented in his commentary by showing where Aristotle's own picture is mistaken. It soon becomes evident, however, that the passage on which Philoponus is commenting is, despite the relative neglect it has suffered, based on what is for Aristotle an unusually attentive reading of Empedocles' own words. Since it contains Aristotle's most perceptive analysis of Empedocles' physical theory, and since Diels and Kranz disastrously failed to include any portion of this passage in their testimonia on Empedocles, it is well worth quoting *in extenso*. Aristotle is arguing that Empedocles falls into self-contradiction by not allowing that the elements come to be from one another:

Empedocles, then, seems to say things that contradict both the phenomena and himself. For he denies that any of the elements comes to be from any other, while all other things come to be from these, but at the same time he says, when he has collected all nature except Strife into one, that each [element] again comes to be from the One. Thus it is clear that from a One, when things were made distinct by certain differences and qualities (διαφοραῖς τισὶ χωριζομένων καὶ πάθεσιν), there came to be water and fire, in accordance with the way he says that the sun is bright and hot, and the earth is heavy and solid. Therefore if these differences are removed (for they can be removed since they came to be), it is clear that earth must come to be from water and water from earth, and likewise for each of the others, not only at that time but even now, as they change their qualities. From what he has said, their qualities are capable of being attached and separated again, especially since Strife and Love are still struggling with each other. For just this reason they were generated from a One at that time too: for at any rate, of course, everything was not one while fire and earth and water still existed. (GC 1. 1. 315°3–19)

We shall see as we proceed that virtually every idea Aristotle ascribes to Empedocles in this passage finds confirmation in the fragments, particularly in fr. 21, which is evidently the source of much of Aristotle's reflection. Another sign of the passage's value is the charge of inconsistency Aristotle here levels against Empedocles. For it indicates that Aristotle is not here engaged in the imaginative reconstruction of what he supposes Empedocles should have said in order to be consistent or of what Aristotle supposes to be entailed by a theory of the type propounded by Empedocles. While this is certainly characteristic of his treatment of Empedocles elsewhere (as we shall see in the next section), the tenor of the present passage is altogether different. There are good reasons, then, to take seriously and explore its plain suggestions that the Empedoclean roots lose their qualities, not only in the Sphere under Love, but also to some extent whenever they combine to form specific compounds during the cosmological phase. Aristotle clearly thinks that the qualities that distinguish the Empedoclean roots from one another are not permanent but acquired features that can also be lost and, consequently, that the elements are subject not only to generation but to continuous mutation or transformation as well.

The discussion of Empedocles' theory in this passage should perhaps be seen as involving a correction, based on closer reading and further reflection, of *Metaphysics* 1. 3. 984^a8–11, where Aristotle had said that Empedocles' four elements 'always remain and do not come to be'. 75 There, in discussing the antecedents of his material principle, Aristotle had not distinguished theories of change as he does in On generation and corruption 1. Here, as noted, he opens his investigation by saying that those who posit one material principle must conceive of generation in terms of its alteration, whereas those, including Empedocles, who posit more than one principle must conceive of generation in some other way. In Metaphysics 1. 3, by contrast, Aristotle apparently envisions only a theory of the first type and attributes it to all the figures he mentions, regardless of whether they posit one or more material principles. He at any rate frames the discussion by saying that the majority of the first philosophers supposed that the material principle is the constitutive and generative source of all things in that its substance persists while it alters with respect to its attributes (της μεν οὐσίας ὑπομενούσης τοῖς δε πάθεσι μεταβαλλούσης, Metaph. 1. 3. 983^b9–10). The qualifying exception that accompanies Aristotle's subsequent statement that the Empedoclean elements always remain and do not come to be— 'except in respect of being many and few, when they are combined and discriminated, into one thing and out of one thing respectively' (Metaph. 1. 3. 984a10-11) is perhaps meant to explain what this change of attribute amounts to in the case of Empedocles' four elements. Alternatively, it may be adding just the qualification our passage from the end of On generation and corruption 1 suggests, namely, that while the roots are elemental, in that everything comes to be from them while they do not come to be from any other element, they are nonetheless to be regarded as perishing when they are combined into one thing and as coming to be when they are made distinct again as they emerge from one thing. Regardless of what Aristotle actually meant by the obscure qualification to his statement in Metaphysics 1. 3 that Empedocles' elements always remain and do not come to be, and whether or not the qualification makes his characterization there consistent with the ampler discussion at the end of On generation and corruption 1, we may justifiably regard this latter passage as better representing Aristotle's considered view.

One reason for doing so is that, throughout this passage, Aristotle seems to be merely explicating and elaborating what he could read for himself in fr. 21:⁷⁶

The Aristotle's remark that Empedocles 'says that the sun is bright and hot ($\lambda \epsilon \nu \kappa \delta \nu \kappa \alpha \lambda \theta \epsilon \rho \mu \delta \nu$), and the earth is heavy and solid ($\beta a \rho \nu \kappa \alpha \lambda \theta \kappa \delta \nu$) points us to fr. 21, for here Empedocles likewise speaks of the sun as $\lambda \epsilon \nu \kappa \delta \nu$ and $\theta \epsilon \rho \mu \delta \nu$ and of things 'dense-packed' ($\theta \epsilon \lambda \nu \mu \nu \delta \nu$) and 'solid'

The same perhaps applies to the claim at Metaph. 3. 4. $1000^{\rm b}19-20$ that Empedocles 'makes all things perishable except the elements $(\pi\lambda\dot{\eta}\nu\,\tau\dot{\omega}\nu\,\sigma\tauo\iota\chi\epsilon(\omega\nu)$ ', though the context suggests that he may be referring to Love and Strife rather than to the roots; compare the curious claim at Metaph. 3. 1. 996°a8 that Empedocles made Love the substance or substratum of things. Elsewhere Aristotle lumps together the Empedoclean Sphere under Love and Anaxagoras' precosmogonical mixture, with the result that he ends up attributing to Empedocles a view according to which the elements are either already contained in the Sphere as contraries and separated out of it $(Ph. 1. 4. 187^*20-6)$ or are present in the Sphere potentially but not actually (Metaph. 12. 2. $1069^{\rm b}20-4$, cf. 12. 6. $1072^{\rm a}4-6$). None of these other passages suggests the sustained engagement and reflection evident in the discussion of Empedocles' element theory at the end of GC1.1.

Come now, observe the witness to my previous discourse, in case anything earlier was unsupported in its frame: sun bright to look upon and hot in every way, and the immortal beings [moon and stars] that are bathed in heat and shining light, and rain in everything dark and cold; 5 and from the earth there flow forth things dense-packed and solid. And in rancour they are endowed with various forms and all separate, while in Love they come together and are desired by each other. From these all things that were, that are, and that will be hereafter have sprung-trees, and men and women, 10 and beasts, and birds, and water-fed fish, and even long-living gods supreme in their honours. For these things themselves are, but running through each other they become altered in their aspect: for mixture changes them.

We are thus in the fortunate position of being able to readily judge the accuracy of Aristotle's representation.

Note first how Empedocles in fr. 21 describes the effect of Strife and Love: 'And in rancour they are endowed with various forms (διάμορφα) and all separate, | while in Love they come together and are desired by each other' (fr. 21. 7-8). The effect of Strife is twofold: (i) to distinguish the roots from one another with respect to their form or appearance, and (ii) to separate them from one another locally. Aristotle focuses on the first effect when he speaks of water and earth being generated from the One (that is, the Sphere) via a process of qualitative differentiation. If the operation of Strife is responsible for fire, aether, water, and earth being $\delta\iota\acute{a}\mu\rho\rho\phi\alpha$, or distinguished from one another in virtue of possessing the attributes fr. 21. 3-6 describes as defining them, then Love should so act on the roots to cause them to lose their qualitative distinctness. The description in fr. 21. 8 of Love's corresponding and twofold effect of combination and inspiring their mutual desire may already seem to imply as much, for it is tempting to understand the description of the roots' desire for one another in terms of an impulse to become like one another, whether by actually taking on each other's qualities or by coming to share with one another in other qualities. Aristotle, at any rate, plainly speaks of the elements as changing their qualities, not only when they are generated from the One or the Sphere, but also whenever they combine to form compounds and, in so doing, undergo the

(στερεωπά) as flowing from the earth. (Reasons for preferring the correction θ ελυμνά—which was adopted from Sturz in Diels 1901: 266, but abandoned by Kranz for θ ελεμνά ap. Hsch. Θ 216 in revising Diels's Fragmente der Vorsokratiker—may be found in O'Brien 1969: 266–7; Janko 1986. Cf. LSJ s.v. προθέλυμνος II for the sense 'dense-packed', which allows one to make good sense of Aristotle's paraphrase.) These epithets are part of a metonymic description of the four elemental stuffs in vv. 3–6. While it may not be immediately apparent that these are in fact the four roots, comparison with Empedocles' modes of referring to the elements in other fragments (for which, see the useful table at Wright 1981: 23) suggests that Simplicius, who preserves this fragment, was correct in making this identification (cf. Simp. $in\ Ph$. 159. 11–13).

mutual interchange that Aristotle takes to imply that the elements come to be from one another. 77

The end of fr. 21 echoes the distinction between mixture and interchange among what is mixed already seen in fr. 8. After declaring that everything that was, is, and will be comes from the four roots, and after then briefly cataloguing the kinds of mortal creatures he has in mind (fr. 21. 9-12), Empedocles declares, 'For these things themselves are, but running through each other | they become altered in their aspect, for mixture changes them $(\gamma'_i\gamma_{i}\epsilon_{\tau}\alpha_i \stackrel{.}{\alpha}\lambda\lambda_{0i}\omega_{\pi}\alpha_i \stackrel{.}{\tau}\alpha_i \stackrel{.}{\gamma}\alpha_{\rho}\delta_{i}\alpha_i \stackrel{.}{\alpha}\mu_{\epsilon}(\beta_{\epsilon i})'$ (fr. 21. 13-14). The text of the latter half of verse 14 has suffered corruption. While άμείβει is certain, Diels's edition of Simplicius' Physics commentary reports the following readings for what precedes: τόγον διάκρισις D: τογον διάκρασις E: τὰ γὰρ διάκρυψις a : lac. F. Diels's own conjectured correction, τόσον διὰ κρᾶσις, 78 which yields the sense, 'so much does mixture change them', entered Die Fragmente der Vorsokratiker as τόσον διὰ κρῆσις and has since been accepted by numerous editors and commentators. This conjecture provides welcome support for the common view that mixture alters the elements only in a limited and superficial manner, that is, with respect to their 'countenance' or surface appearance, in keeping with what $d\lambda \lambda o \iota \omega \pi \dot{a}$ might already seem to imply. It is, however, a shaky basis indeed for attributing to Empedocles the requisite supposition that there are two levels of qualities, the elemental and the phenomenal, a view for which it is hard to find any other evidence. Wright in her edition correctly points out, moreover, that Empedocles nowhere else uses $\tau \delta \sigma \sigma s$ without a corresponding relative and that good sense may be had by accepting the Aldine edition's $\tau \hat{\alpha} \gamma \hat{\alpha} \rho$, rather than Diels's attempted correction of $\tau \acute{o} \gamma o \nu$ to $\tau \acute{o} \sigma o \nu$.

Here the textual question mirrors the philosophical and interpretive question of how to understand qualitative emergence in Empedoclean mixtures. Is Empedocles' conception such that fire, aether, water, and earth are thought to retain their distinctive qualities when they combine to produce things with qualities that differ yet again from those of their components? 80 Or did Empedocles think the roots interact with one another and so to some extent lose their distinctive qualities when

⁷⁷ Contrast *Metaph.* 1. 8. 989^a19–31, where Aristotle had criticized Empedocles for refusing to allow that the elements can be generated from one another, on the ground that he denies that there is some single nature that comes to be fire and water.

78 Diels 1880: 163, citing Parm. 8. 41 as a parallel for the tmesis.

⁷⁹ See Wright 1981: 101 *app.crit.* and 179 *ad loc.*, for her resulting conjecture, which I have accepted here, despite her marking a crux in the text by giving the reading of D in crosses.

⁸⁰ Something like this is involved in the 'illusionist reading of Empedocles' advanced in Mourelatos 1987: 178-87, which posits 'a discrepancy between underlying reality and surface appearance' and that the existence of qualities other than those of the four elements is just an 'illusion'. Something like this claim would appear to be required, even though it has no genuine textual support, in order to maintain that Empedocles' roots are eternal and qualitatively immutable. Aristotle's assertion at *Cael.* 3. 7. 305^b1–3 that those like Empedocles and Democritus unwittingly produce only an apparent, not a real, generation of the elements from one another hardly supports the 'illusionist' reading. Apart from the problem of the vague grouping of Empedocles with Democritus, this is an instance of Aristotle's attributing to thinkers a view that he thinks they failed to recognize as their own. That is, not even Aristotle supposes this is what Empedocles meant to say.

they combine under Love's influence? Each interpretation has ramifications for Empedocles' view of material structure. Considering some Empedoclean cases will in fact make it clear that the two-level interpretation requires attributing to Empedocles a particle theory, whereas a theory that allows the elements to lose something of their distinctive qualities as they interact to form new stuffs involves nothing more than an everyday or common-sense conception of the parts of things.

Consider Empedocles' account of the formation of blood and flesh. He characterizes them as compounded from each of the four roots in roughly equal proportion: 'And earth encountered81 these most equally, | Hephaistos and rain and all-gleaming aether, | anchored in the perfect harbours of Kupris, | whether a little more or less among the more: | from these came blood and forms of other flesh' (fr. 98). 82 There is, in fact, some sense in thinking that the qualities of blood represent an amalgam of the qualities of the four elements, for instance, the heat of fire, the vitality of aether, the fluidity of water, and earth's thickness. Focus for a moment on what happens to fire's quality of heat and water's cool quality when these two elements combine with each other (and the other elements) in the formation of blood. Given that the compound, blood, is cooler than fire and warmer than water, are we to imagine that blood's intermediate degree of warmth is the average of its components' temperatures, while at the same time their own temperatures remain unaltered in the mixture and unaffected by their interactions with the other elements? Attributing a particle theory to Empedocles allows one to imagine such a scenario. Even those who have done so, however, should find this kind of interactionless aggregation unwelcome, for it is too implausible that hot and cool things placed in proximity should fail to affect one another so as to equalize their initially different temperatures. Admittedly, a particle theory might distinguish between essential qualities of its element-particles, such as their mass or shape, that they are supposed to retain when they combine with other particles, and accidental properties, such as their speed and temperature, that are subject to alteration due to their interaction with other particles. A particle theory might conceivably also make room for emergent properties that are thought to be neither essential nor accidental properties of the particles themselves but only of particle aggregates. Colour might be an example of such an emergent property. There is, however, no basis for attributing any such elaborate distinction between kinds of properties to Empedocles. (Note again how in fr. 21. 3 he appears reasonably to make heat a distinguishing property of elemental fire.) Without such a distinction among properties, it is natural to suppose the roots are actually affected by one another when they combine and interact, so that they lose

°Cf. Aët. 5. 22. 1 ([Plu.] *Plac.* 5. 22. 909 c 1–7), where Empedocles' 'recipe' for flesh is reported along with one for sinews $(\tau \hat{\alpha} \nu \epsilon \hat{\nu} \rho a)$ not attested in the fragments plus the one for bone found in Emp. fr. 96. Thphr. *Sens.* 12 likewise suggests 'recipes' for numerous compounded stuffs.

Mourelatos 1987: 176, claims that συνέκυρσεν here 'serves to emphasize that even in that most thorough mixing that results in the production of blood, the four elements do not achieve a fusion', but doing so requires that he wrongly reject the obvious point, already implicit in the fragment's final verse, that this encounter was merely the *beginning* of the process that led to the generation of blood and other organic stuffs. The use of συνέκυρσεν here is comparable to the use of τύχε in fr. 85: 'and gently shining flame met (τύχε) a little earth'.

82 Cf. Aët. 5. 22. 1 ([Plu.] *Plac.* 5. 22. 909 c 1–7), where Empedocles' 'recipe' for flesh is

to some extent the qualitative identities they came to have when distinguished and separated from one another by Strife. All of which is to say that the effect of Love on the elements is to counteract or reverse the effect of Strife by causing them to unite in such a way that they are genuinely affected by, and come to be like, one another. Empedocles expresses this idea in a perfectly straightforward manner when he declares here at the end of fr. 21, 'running through one another | they come to be of altered aspect; for *mixture changes them*'.

Empedocles nonetheless appears to ascribe a kind of permanence to the elements in saying, 'For these things themselves are' $(\alpha \hat{v} \tau \hat{a} \gamma \hat{a} \rho \tilde{\epsilon} \sigma \tau v \tau \alpha \hat{v} \tau a, \text{ fr. 21. 13a})$; yet in the very next verse he says that they 'come to be of altered aspect' $(\gamma i \gamma v \epsilon \tau a \hat{u} \lambda \lambda o \iota \omega \pi \hat{a}, \text{ fr. 21. 14a})$. Aristotle may have been picking up on the apparent difficulty here when he complains that Empedocles contradicts himself by denying that the elements can come to be from one another while also allowing that their defining qualitative characteristics are impermanent. Be that as it may, while it may be tempting to try to resolve the apparent contradiction between the elements' permanence and mutability implicit in these verses by maintaining that the elements remain qualitatively unchanged when they enter into compounds, comparison with the verses' near repetition in fr. 17 suggests a more plausible resolution. After the brief 'hymn to Love', Empedocles there returns to describing the roots on which Love acts (fr. 17. 27–35):

For these [sc. the roots] are all equal and of like age in their birth, and each keeps its prerogative, each has its own character, and they rule in turn with the revolution of time.

Besides these no thing then comes to be afterward, and there is no ceasing to be:

For if they were to perish continuously, they would no longer be;

And what could increase this whole? And whence could it come?

And how could it be destroyed, since nothing is bereft of these?

But these things themselves are, and running through one another they come to be different at different times and are continuously ever the same.

Ensemble **a** of the Strasbourg papyrus preserves the last four verses and then continues initially with verses closely resembling fr. 21. 7–12. ⁸³ While fr. 17. 34 replicates fr. 21. 13, fr. 17. 35 differs from fr. 21. 14 in a way that only strengthens the sense of contradiction already felt there. In this context, however, it should be clear enough how the elements can come to be different while constantly remaining the same. For Empedocles has just been arguing that the four roots, taken together, comprise the fixed and total quantity of stuff in the cosmos available for compounding. The description of the elements as 'of like age in their birth' ($\eta \lambda u \kappa a \gamma \epsilon v v a v$, fr. 17. 27b) alludes to their (re)birth out of the Sphere when Strife's intrusion causes them to assume once again their distinguishing characteristics. When Empedocles

⁸³ ...]μεν' εἰς ἔνα κόσμον | ...]ον' ἐξ ένὸς εἶναι at **a(i) 6–7** appear to have involved a statement of Love's unifying and Strife's distinguishing powers. As such, they would have been comparable to the more specific fr. 21. 7–8. The following four verses, **a(i) 8-a(ii) 2**, though likewise only partially preserved, are plausibly supplemented by Martin and Primavesi as virtually identical to fr. 21. 9–12.

then indicates that nothing comes to be *in addition to* these primal stuffs (fr. 17. 30), this claim has to be understood in a quantitative rather than a qualitative sense. ⁸⁴ For it is a fundamental tenet of his cosmological scheme that all manner of other things *do* come to be, or are generated, via the elements' interaction. No more stuff is available to Love for compounding than she finds when she begins to reassert her influence, but from it she is able to generate all the vast range of things and plants and creatures.

The arguments in the next three verses simply underscore what amounts to an Empedoclean principle of the conservation of matter. The argument at verse 31, that if the roots were to perish continuously, then at some point they would be all gone, presumes that the total quantity of stuffs is limited and, apparently, that if this total quantity could decrease at all there would be nothing to prevent it decreasing altogether to the point of nothingness. If Empedocles is allowed the presumption of a limited totality of stuffs, this is not a bad piece of reasoning. The arguments that follow in verses 32-3, cast in the form of a series of rhetorical questions, have been thought reminiscent of the rhetorical questions scattered throughout Parmenides' demonstration of why What Is must be ungenerated and undestroyed. The rigour evident in Parmenides' reasoning there, however, seems lacking in Empedocles'. The implication of the questions in verse 32 that nothing could increase the whole $(\tau \dot{\delta})$ $\pi \hat{a} v$) seems based on the simple idea that the whole, as the totality of stuffs, is already all there is. Even odder is the apparently question-begging bit of reasoning in verse 33, to the effect that the whole could not be destroyed 'since nothing is bereft presuming, on the basis of verse 31, that the elements cannot diminish. Whatever we might think of the quality of Empedocles' argumentation here, what he is arguing for should be clear, namely, that the roots together comprise the fixed and total quantity of stuffs in the cosmos. 86 In short, they are quantitatively invariable. This 'conservation of matter' is what Empedocles is referring to when he says that 'these things themselves are $(\alpha \vec{v} \tau' \vec{\epsilon} \sigma \tau v \tau \alpha \hat{v} \tau a, \text{ fr. } 17.34a \approx \text{ fr. } 21.13a)$ and then again that the roots are 'continuously ever the same' (ηνεκές αιèν ὁμοῖα, fr. 17. 35b) even as he says that they run through each other to become different at different times. Since their invariance is a quantitative one, 87 it is compatible with the roots' qualitative mutability.

⁸⁴ Mourelatos 1987: 165, is thus wrong to take fr. 17. 30 as an Empedoclean denial of qualitative emergence.

emergence.

85 This assertion is more reminiscent of Parmenides' point that 'all is full of light and invisible night together, | of both alike, since nothing is with neither' (Parm. fr. 9. 3–4) than of anything in the Way of Conviction.

⁸⁶ McKirahan 2005: 167–8, finds the same claim implied in the rhetorical question, πόθεν οὖν τί κ' ἐπέλθοι; ('from where, then, could anything come in addition?'), recorded at [Arist.] MXG 976^b23. See also 168–70 for McKirahan's own analysis of the argumentation in fr. 17. 30–3, which he takes to be giving 'Eleatic-style arguments for Eleatic-style theses . . . not found in Parmenides and Melissus'.

While Mourelatos 1987: 166–7, is right to see $a\vartheta\tau$ " $\epsilon\sigma\tau\nu$ $\tau a\vartheta\tau a$ (fr. 17. 34a \approx fr. 21. 13a) as the equivalent of fr. 17. 30, he is wrong to take this as an anti-emergentist assertion that only these things exist and to characterize the phrase, as he later does, as the 'recurring formula of the exclusive reality of the four elements' (179).

What may well seem worrisome about the emerging picture is that the qualitative mutability of fire, aether, earth, and water—a mutability Empedocles' language confirms Aristotle was right to recognize—tends to undermine the stability of their identity and thus their status as elements. This kind of worry is in fact reflected in Aristotle's concluding comments on Empedocles in *On generation and corruption* 1. 1, where he frets about another possible contradiction:

It is unclear whether the One or the many should be posited as their source $(\partial \rho \chi \dot{\eta} v)$ —I am referring to fire and earth and the things of their rank [sc. air and water]. For the One is an element $(\sigma \tau o \iota \chi \epsilon \hat{\iota} o v)$ in so far as it underlies them as matter $(\dot{\omega}_S \ \ddot{v} \lambda \eta \ \dot{v} \pi \dot{o} \kappa \epsilon \iota \tau a \iota)$, from which earth and fire come to be, undergoing change due to the motion. But in so far as this [sc. the One] comes to be by composition when those things unite, while they come to be from its dissolution, they are more elemental and naturally prior. (GC 1. 1. 315^a19–25)⁸⁸

Aristotle thinks Empedocles has to allow the elements to come to be from one another. 89 He is uncertain, however, about whether the elements should be considered each other's ultimate source or whether the unified Sphere under Love should have this role. The problem obviously stems from Empedocles' cyclical conception of the large-scale cosmogonical processes, wherein fire, aether, earth, and water are generated from the Sphere when Strife reasserts itself, and then, ultimately, the Sphere is regenerated when Strife's retreat before Love's advance has caused the four roots once again to lose their qualitative distinctions and unite in perfect harmony. The chicken-and-egg quandary—which came first, the elements or the Sphere?—makes it unclear just what, on Empedocles' theory, is the elemental level. Aristotle is right to note this tension, for he is right to have recognized that the four roots do not persist when they unite in the Sphere. Even without the cyclical theory, it might seem to undermine the status of roots as elements that, while everything else is generated from them, they are themselves generated from the unified Sphere. Potentially more worrisome is how Empedocles' 'elements' are continuously even now losing their identities, when they mix and interact to form more local unities such as blood, flesh, bone, and the rest of the world's population of complex stuffs and individuals. Actually, however, that the roots undergo changes that involve the loss of their qualitative distinctions when they merge to form compounds should only seem problematic if one is committed to the outmoded notion that Parmenides' 'Truth' was taken by Empedocles as somehow articulating conditions that the

⁸⁸ Cf. GC 1. 8. $325^{\rm b}19-24$: 'In Empedocles' case, it is clear that other things down to the elements have their generation and destruction, but how the cumulative bulk of these elements themselves comes to be and perishes is not clear, nor is it possible for him to say unless he says that there is an element $(\sigma \tau o \iota \chi \epsilon \hat{\iota} o \nu)$ of fire too, and likewise of all the others.' Like the end of GC 1. 1, this passage implies that, in Aristotle's eyes, the elements themselves are generated and perish, and that, for this to be the case, there must be some common and elemental nature underlying them.

⁸⁹ Aristotle himself, of course, thinks the four simple bodies come to be from one another. The opening of *GC* 2. 4 refers to his arguments in *Cael.* 3. 6, where he secures this point by first establishing that the elements are themselves subject to generation and destruction and by then ruling out the alternatives that they are generated from something incorporeal or from a body distinct from themselves. Aristotle develops his own account of how the simple bodies are generated from one another in *Cael.* 3. 7 and *GC* 2. 4–5.

material principles of his own physical system had to satisfy, or if one is otherwise operating with an anachronistic conception of an element to which Empedocles' roots supposedly must conform.

Even if the roots are subject to periodic losses of their qualitative identities, there remain good reasons for identifying these four stuffs as basic or 'elemental'. First, they are more amply represented in the world than virtually anything else one could identify. They are also well suited to explaining the things Empedocles was apparently most intent on explaining, namely the origins of the stuffs like blood, flesh, and bone from which living things are formed, because the qualities of the four roots provide a plausible basis for deriving the qualities of these other stuffs. The warmth and viscosity of blood, for example, can be explained by reference to the qualities and relative amounts of its elemental components. It is not surprising that the four-element theory that originated with Empedocles should have survived as long as it did, for it anticipates key features of more advanced chemical theories in positing that there are a limited number of stuffs from which all other things are compounded, that the qualities of non-elemental stuffs are produced by the interaction between the elemental stuffs, and that the proportion among the elements in a compound is a critical determinant of its own qualities. The major difference between modern and Empedoclean chemistry is that modern chemistry, with its molecular conception of material structure, is grounded in the more fundamental science of physics. Empedocles' element theory, by contrast, involved no more than a rudimentary conception of the physical structure of matter, as we shall see in the next section. This would seem to be because the problem of material structure did not present itself in any serious way prior to the conceptual spur provided by the Zenonian paradoxes of infinite divisibility, and, in contrast to the evidence for Anaxagoras and the early atomists, there is nothing to indicate that Empedocles was at all concerned with responding to Zeno.

The Question of Material Structure

Empedocles' rudimentary conception

Certain of Aristotle's comments on Empedocles in later chapters of *On generation and corruption* might seem to suggest that he had a developed theory of material structure. In approaching these passages, two principles should be kept in mind. First, these subsequent remarks should, ideally, be understood consistently with the discussion of Empedocles in the treatise's opening chapter. Second, care must be taken to distinguish between the places where Aristotle is reconstructing what he supposes Empedocles *should* say, or extrapolating in some other way, and those places where he is attributing ideas to Empedocles that can be tested and confirmed against the evidence of the fragments. By failing to adhere to this second principle, the subsequent traditions of doxography and commentary often canonized as historical 'fact' what for Aristotle was merely speculative reconstruction.

In On generation and corruption 1. 8, Aristotle introduces and criticizes what he understands as Empedocles' appeal to the existence of tiny 'pores' or passages $(\pi \delta \rho o \iota)$ to explain how things affect and are affected by one another. Aristotle indicates that some, such as Empedocles, appealed to these tiny passages not only in their account

of perception, which posited passages in the sense organs receptive of effluences from objects, ⁹⁰ but also in explaining mixture in general: 'they claim that things mix that have passages commensurate with each other' (324^b34–5). This point raises two questions of immediate interest. First, what does the idea that all things, apparently, have these tiny passages imply regarding Empedocles' conception of the fundamental structure of matter? Second, what does the mechanism of mixture suggested by the role attributed to these passages imply about the qualitative interaction between things that are mixed and combined?

One preliminary point to note is that, if Empedocles did in fact explain why certain things combine by appealing to their containing imperceptible passages or $\pi \delta \rho o \iota$, he may have meant nothing more definite than that a necessary condition for their combination is satisfied, namely that they have room to interpenetrate. When he speaks at numerous points of things running through one another when they combine (frs. 17. 34 = a(i) + 4, 21. 13, 26. 3, and probably a(ii) + 15), this hardly implies anything very precise about the underlying physical structure of the things that so combine. (Pour water into wine, and it will be as evident to you as it was to Empedocles that the liquids run through one another as they combine.) When Theophrastus in *On the senses* echoes Aristotle's claim in *On generation and corruption* 1. 8 that Empedocles thought mixture generally occurs between stuffs with commensurate pores, ⁹² he comments that Empedocles appealed to the commensurability

In explanations of specific biological processes, of course, the conception of the passages involved is likely to have been more precise. See in particular Empedocles' references to the 'pipes' $(\sigma i\rho \nu \gamma \gamma \epsilon s)$, 'furrows' $(\ddot{\alpha} \lambda o \xi \nu)$, and 'passageways' $(\delta i \delta \delta o \iota \sigma \iota)$ in fr. 100's account of respiration.

⁹⁰ The role of these πόροι in Empedocles' theory of perception is well attested (Pl. *Meno* 76 C–E, Arist. Sens. 2. 438^a4–5 with Alex.Aphr. in Sens. 24. 3–9, Thphr. Sens. 7–24), and they or something similar also played a role in his theories of respiration (fr. 100), nourishment (Plu. Quaest.conv. 649 C-D), and even magnetism (Alex.Aphr. Quaest. 2. 23). Like Plato at Meno 76 C, Theophrastus reports that colour perception, on Empedocles' theory, involved the conveyance to vision of certain 'effluences' (Thphr. Sens. 7, cf. 91; see also Arist. Sens. 2. 438^a4–5) and also that he thought these involved in smell (Sens. 9, cf. Emp. fr. 101), though not, apparently, in hearing, touch, and taste (cf. Sens. 9, 20). Gemelli Marciano 1991: 13, properly notes that Theophrastus' references here to the role of effluences in Empedocles' accounts of sight and smell make no mention of particles. (Minar 1963: 139, inserts an ascription of 'elemental particles' into Thphr. Sens. 11 by translating $\mu\eta\delta$ ' $\alpha\hat{v}$ μικρὰ μηδ' ὑπερβάλλοντα τῷ μεγέθει as 'nor in particles too small or too large' and ὧν δὲ πυκνὰ καὶ κατὰ μικρὰ τεθραυσμένα as '[t]hose in whom the elemental particles are close-fitting and broken down into small bits' and then claims that the testimonium indicates that mixtures under Love's influence are far from homogeneous.) Empedocles' own declaration that 'there are effluences (ἀπορροαί) from all things' (fr. 89 ap Plu. Quaest.nat. 916 D) is quoted by Plutarch in a context that could mistakenly be taken as indicating that these effluences came in the form of minute particles; contra this inference, see Gemelli Marciano 1991: 9-10. On Empedocles' theory of perception more generally, see Long 1966: 259-66.

 $^{^{92}}$ Compare Thphr. Sens. 12, ὅλως γὰρ ποιεῖ τὴν μίξιν τῆ συμμετρία τῶν πόρων, and Arist. GC 1. 8. $324^{\rm b}34-5$, καὶ μίγννσθαί φασιν ὅσων οἱ πόροι σύμμετροι πρὸς ἀλλήλους εἰσίν. Theophrastus' comment comes amidst his first criticism of Empedocles' theory of perception, that since the commensurability of their pores is a condition for the mixture of even inanimate stuffs, then everything will be perceptive. This comes after he has surveyed Empedocles' views regarding sensation and thought and has described numerous applications of the basic principle that perception is the result of effluences from objects fitting into 'pores' with which they are commensurate.

of pores to explain why oil and water, unlike other fluids, do not mix. This remark points to what may well have been the source of Aristotle's supposition that Empedocles accounted for the mechanism of mixture generally by referring to tiny passages or 'pores'. For Alexander and Michael of Ephesus have fortunately both preserved a small portion of the passage to which Theophrastus must have been referring. There Empedocles declares that water is 'more in accord (ἐνάρθμιον⁹³) with wine, but with oil | it is not willing [sc. to mingle]' (Emp. fr. 91 ap. Alex.Aphr. Quaest. 2. 23 and [Phlp.]/Mich. in GA 123. 16-21). The adjective $\alpha \rho \theta \mu \iota os$, on which $\epsilon \nu \alpha \rho \theta \mu \iota \sigma \nu$ is formed, means 'joined' or 'united', particularly in bonds of friendship or alliance (as e.g. at Hom. Od. 16, 427, Hdt. 7, 101). Empedocles employs the simple adjective to describe how Love's activity is apparent in human activity: 'she who is recognized as innate in mortal joints ($\ddot{a}\rho\theta\rho\sigma\iota s$), | and by her they think friendly thoughts and perform peaceable deeds ($\alpha\rho\theta\mu\alpha$ $\theta\rho\alpha$)' (fr. 17. 22–3). The figura etymologica highlights the root sense of $\tilde{a}_{\rho}\theta\mu\nuos$ as 'joined'. Empedocles' other use of the adjective occurs in the following lines: 'for all these are in accord $(\ddot{a}\rho\theta\mu\iota a)$ with the portions of themselves, | the beaming sun and earth and the heaven and the sea, | [parts] such as have strayed from them to be born in mortal things' (fr. 22. 1–3). The point of these verses seems to be that there continues to be a particular affinity between the cosmic representatives of the four elements and the portions of the elemental masses that have entered into the formation of living creatures. 94 Here especially the description of the sun, earth, heaven, and sea as 'in accord' ($\alpha \rho \theta \mu \mu \alpha$) with the 'portions' or 'parts' ($\mu \acute{e} \rho \epsilon \sigma \sigma \iota \nu$) of themselves in other things suggests that Empedocles' uses of $\epsilon \nu \alpha \rho \theta \mu \iota \nu \nu$ and $\alpha \rho \theta \mu \iota \alpha$, with their root sense of 'joining' or 'fitting together' ($\sqrt{d\rho}$, reduplicated in $d\rho\alpha\rho i\sigma\kappa\omega$, 'join', 'fit together'), prompted Aristotle and Theophrastus' discussions of his theory in terms of συμμετρία or commensurability.

 $^{^{93}}$ While Karsten's conjectured ἐνάρθμιον would occur only here, it is the obvious correction for the unmetrical manuscript reading, ἐναρίθμιον.

⁹⁴ So Wright 1981: 195, where one may find refs. to more convoluted readings.
95 Kingsley 2002: 393 and n. 147, expands upon Bollack 1969*b*: 233–4, to argue on etymological grounds that κρῆσιν ἐπαρκέα here in fr. 26. 4 can only mean 'resistant to mixture'.

most easily understood as referring to the qualitative characters each element has acquired by being made distinct from the others by Strife. Certainly there is nothing here that would add to the impression one might (wrongly) have taken from fr. 22. 1 that the elements have some kind of physical articulation that makes them commensurate with other portions of themselves. Thus if Aristotle and Theophrastus based the idea of commensurability on Empedocles' use of $\partial \ell \nu d\rho \mu \mu \nu \nu$ and $\partial \ell \rho \mu \nu \nu$, as seems likely, then they succumbed to overinterpretation of a less determinate conception. In so doing, they prepared the way for modern efforts to give Empedocles a more precise conception than he in fact had of material structure and the mechanism of elemental interaction.

⁹⁶ [Phlp.]/Mich. in GA 123. 13–16 provides a suggestive parallel in its attempt to identify just what Empedocles said that may have led Aristotle to suppose that all things have passages or πόροι: Empedocles said that in all the sublunary bodies, such as waters, oils, and others, there are, as he [sc. Aristotle] has said in On generation and corruption, πόροι and solid parts mixed together, and he [sc. Empedocles] called the pores "hollows" (κοίλα) and the solid parts "dense" (πυκνά)."

 97 In addition to those already cited, see Williams 1982: 125 *ad* Arist. *GC* 1. 8. 324^b25, together with the approving comments of Mourelatos 1987: 168–9, plus his extended speculations at 171–7 regarding how a developed theory of $\pi\delta\rho\rho\iota$ would enable Empedocles to explain the

mechanism of mixture in detail.

98 Here I follow the text of fr. 96 established by Sider 1984: ή δὲ χθων ἐπίηρος ἐν εὐτύκτοις χοάνοισι | τὰς δύο τῶν ὀκτῶ μοιράων λάχε Νήστιδος αἴγλης, | τέσσαρα δ' Ἡφαίστοιο τὰ δ' ὀστέα

λευκά γένοντο Ι Άρμονίης κόλλησιν άρηρότα θεσπεσίησιν.

⁹⁹ Guthrie 1965: 151 n. 1. Wright 1981: 208–9, translates χοάνοισι as 'hollows', glossing this as 'holes in the earth', and consequently rejects εὐτύκτοις for εὐστέρνοις. Inwood 2001: 245, translates χοάνοισι as 'channels'. Mourelatos 1987: 175, states that ἐν εὐστέρνοις χοάνοισι 'has strong sexual coloring', translates as 'broad-bosomed funnels', and claims that Empedocles 'is playing off the transparent sexual imagery against a no less transparent allusion to his mechanical theory of poroi'.

Sider 1984: 20, argues that, because Empedocles is 'almost certainly' taking Hom. Il. 18. 470 and Hes. Th. 862–3 as models, his $\chi \delta \alpha \nu o \iota$ cannot be just crucibles but must be tall and cylindrical smelting ovens with holes for bellows. This bit of overinterpretation enables Sider to obtain a reference (otherwise absent) to the earth's 'pores', motivated by uncritical acceptance of Aristotle and Theophrastus' reports of the role of $\pi \delta \rho o \iota$ in Empedocles' theory of elemental mixture (Sider 1984: 24 n. 38)

¹⁰¹ Kingsley 1995: 74–8, suggests that Empedocles introduces fire as Hephaistos when he wishes to emphasize its creative capacity, in contrast with its destructive function suggested in frs. 6 and 109, and draws connections to the cult of Hephaistos in Sicily. Cf. Guthrie 1965: 188–90; Wright

1981: 24-5.

bone. Appreciating the operative analogy helps make sense of the otherwise odd-seeming notion that bone contains two parts earth, two parts water, and four parts fire. No simple set of ingredients for bone, this list implies a procedure whereby the earth is transformed into mud by the addition of water, and then the resulting compound is hardened by being fired. Understanding the analogy helps make it clear that $\kappa \delta \lambda \lambda \eta \sigma \iota \nu$ is improperly translated as 'glues' by those wishing to portray the combination of Empedoclean elements as interactionless aggregation. Within the framework of the analogy, the appropriate sense for Empedocles' $\kappa \delta \lambda \lambda \alpha$ is the one of 'welding' or 'fusing' that the more common $\kappa \delta \lambda \lambda \eta \sigma \iota s$ has in comparable metallurgical contexts (such as Hdt. 1. 25, Thphr. *Lap.* 26, Plu. *Sept.sap.conv.* 156 B). It may well be the case that this passage was taken by some ancient interpreters as indicating what some modern interpreters have wanted it to, namely that Empedocles imagined the elements to be permeated by microscopic pores or channels. Obviously, however, like the other primary evidence we have considered, it implies nothing near so definite regarding the fundamental structure of matter.

There is in fact no good evidence in the fragments that Empedocles had anything more than rudimentary or everyday ideas regarding the structure of matter. At no point does he go beyond his identification and qualitative discrimination of four basic stuffs to speculate further about their fundamental physical structure or the underlying mechanism of their interactions. His characteristic expressions and terminology indicate how he conceives of the roots' interactions solely in terms of the qualitative changes they undergo in uniting. He talks of the 'mixture and interchange of what is mixed' (fr. 8. 3), of the roots 'running through one another [to] come to be different at different times' (fr. 17. 34b–5a), of how 'they become altered in their aspect, for mixture changes them' (fr. 21. 14), of how 'they perish into each other and grow [out of each other] in decreed turns' (fr. 26. 1), of how 'in Love they come together and are desired by each other', while 'in rancour they are endowed with various forms and all separate' (fr. 21. 7–8, cf. fr. 26. 5–6).

Furthermore, in some of the most prominent descriptions of how the roots under Love's influence 'think friendly thoughts and perform peaceable deeds' (fr. 17. 23), Empedocles seems to have enjoyed finding ingenious ways to describe Love's miraculous craftsmanship, as he does in employing a metallurgical analogy to describe the forging of bone. He finds such an analogy useful because it encourages his audience to think of the generation of bone from the roots in terms of a familiar example of change where different things, when combined in a specific manner, produce a new thing with its own distinct qualities. The analogy is in line with Empedocles' penchant for appealing to familiar facts of experience to support his claims regarding the non-apparent operations of nature at large. Another good

¹⁰² Compare Emp. fr. 62's description of fire's agency in bringing up 'shoots' (ὅρπηκας) of men and women and 'rough forms' (οὐλοφυεῖς . . . τύποι) out of the earth with their share of both water and heat. It seems reasonable to connect this description with fr. 73: 'as at that time Kypris when she moistened earth with rain | busied herself making shapes and gave them to swift fire to harden'; for Simplicius quotes this fragment as following soon after fr. 95. Here, too, the analogy is with the firing of ceramic.

example of this kind of confirmation comes in Plutarch's quotation, amidst his discussion of the bonds of friendship, of Empedocles' comparison between Love's effect on her patients and the effect of the sap of fig trees in curdling milk to produce yogurt: 'Friendship draws together, unites, and holds together, consolidating (καταπυκνοῦσα) through association and friendly feeling, "as when fig-tree sap curdled and set white milk," as Empedocles says, for friendship tends to produce this kind of oneness and compounding' (Emp. fr. 33 ap. Plu. Amic.mult. 95 A, cf. Hom. Il. 5. 902). The juice's curdling of the milk is an everyday instance of how different stuffs, here two liquids, noticeably interact when combined to produce another stuff, in this case a viscous solid, with new qualities of its own. Although Plutarch's quotation unfortunately does not allow us to know just how Empedocles employed the comparison, it nonetheless appears an apt one for Love's dual effect of bringing her patients together and promoting their interaction so as to form qualitatively new compounds.

None of these analogies seems meant to imply any precise conception either of the fundamental structure of matter (be it particulate, continuous, or otherwise) or of whatever unobserved physical mechanism may underlie elemental interaction. The appeal to these familiar cases for confirmation of his theory of elemental interaction points to the fact that he conceives of this interaction in fundamentally qualitative terms. The change the elements undergo when they combine under Love's direction involves the loss of their own distinctive qualities, as they combine and assimilate to form new things with their own distinctive qualities. Under the direction and influence of Strife, they re-emerge and regain their distinct identities by coming once again to possess the qualities that define them as fire, aether, earth, and water. These elements may be regarded as persisting when combined only in the limited sense, which, as we have seen, Empedocles is careful to specify, that the quantity of stuff remains constant. They do not, however, persist as such, that is, as fire, aether, earth, and water, given that their mixture and interchange involves a mutual affecting and being affected that leads to qualitative assimilation and loss of their defining characteristics. Empedocles' theory of elemental interaction in the formation of new stuffs under Love's guidance need not rest upon any further theory regarding the fundamental structure of matter and the physical mechanics of elemental interaction. Nor does the potter, when he combines water with earth to make clay and then fires this to make ceramic pottery, with qualities of hardness and colour possessed by none of its components, need to have any very precise theory of material structure and the underlying mechanics of the interactions he produces.

The fact that Empedocles constantly appeals to such familiar examples of the crafting of new things by the skilful combination of materials for confirmation of his own general theory of Love's generation of new natural things from various combinations of the four elements is itself a strong indication that he has no more than an everyday conception of the structure of matter. What is important for Empedocles is

 $^{^{103}}$ The few words of fr. 34, 'gluing barley-meal with water', seem likely to have been part of a similar everyday comparandum for interactive combination, namely the formation of dough prior to baking barley cakes.

a point he repeatedly stresses, as if aware of the incredulity it would arouse, namely, that all the world's vast and varied population derives ultimately from the combinations and interactions of basic stuffs of just four kinds. This is the point of the famous painter simile in fr. 23, in which he describes skilled decorative craftsmen 'who, when they take pigments of various colour in their hands, | mixing in harmony more of some and less of others, | from them produce forms resembling all things' (fr. 23. 3-5). The list that follows of the kinds of things they depict is identical to Empedocles' lists elsewhere of things produced from the mingling of the roots (fr. 23. 6–8 \approx fr. 21. 10–12 \approx a(i) 9–a(ii) 2). He then makes the point of his simile clear by urging that no one be deceived into supposing that the world's population, innumerable as it is, has any other source than the four roots (fr. 23. 9–11). 104 What might make people dubious of his theory is just what Empedocles seems to find so exciting and wonderful, namely, its radical economy of explanation. Empedocles himself appears to be commenting on just this feature of the theory in fr. 71, even though Simplicius' quotation unfortunately breaks off before the thought is completed: 'But if your conviction is at all flimsy regarding these things, | how from water and earth and aether and sun | mixing there could come to be so many forms and colours of mortal things | as now have come to be fitted together by Aphrodite . . . ' (fr. 71, cf. fr. 107. 1). Here we see again Empedocles' characteristic appeal to a familiar example of artistic production for confirmation of his own theory of elemental interaction. Once again, these analogies function to confirm his basic point that certain basic stuffs when artfully combined in specific ways are capable of generating new stuffs with their own distinctive qualities; and Empedocles' appeals to these familiar examples of artistic production tend to suggest that he had no more than an everyday conception of material structure and the mechanics of elemental interaction.

Aristotle's speculative reconstruction

This is not to say, of course, that later interpreters would not press a more sophisticated theory upon Empedocles. We have already seen, for instance, how his vague talk of water's being more 'in accord' ($\epsilon v \acute{a} \rho \theta \mu \iota o v$) with wine than with oil apparently led Aristotle and Theophrastus to ascribe to him the view that mixture generally occurs between stuffs with commensurate pores. Since the internal evidence of the fragments indicates that Empedocles' element theory is essentially a qualitative theory with no more than a rudimentary conception of material structure, we need to be all the more wary of uncritically accepting the Aristotelian evidence suggesting that Empedocles thought of matter as particulate and that he in this way anticipated the atomism of Leucippus and Democritus. Where Aristotle's discussion of the Empedoclean elements implies this proto-atomism, he is indicating, not anything

¹⁰⁴ Longrigg 1976: 430, gets the point of the painter simile just right: 'To show how a great variety of compounds could be formed from so small a number of basic constituents, he cites the technique of a painter who by using only a few colours is able to produce likenesses of all things.' See, further, ibid. 431–3, on the possible connection with the development of tetrachrome painting in Greece.

he actually found in reading Empedocles, but what he imagines an Empedoclean theory of material structure would have to look like. There are in fact clear signs in all the relevant passages that Aristotle is engaged in this kind of speculative reconstruction or extrapolation.

For instance, in On the heavens 3. 6, in the course of his own argument that the elements are not eternal, he advances the consideration that the analysis of the elements into smaller parts must either stop at some point or continue without limit; if the analysis stops somewhere, it must either stop at atomic bodies or at divisible bodies that are not actually divided. Aristotle says that this latter option is what Empedocles seems to have intended. 105 The qualified manner of Aristotle's ascription indicates clearly enough that the view is no more than a hypothetical reconstruction: Empedocles enters the picture as the originator of the four-element theory; Aristotle wonders what he might have thought about the problem of matter's ultimate degree of divisibility; and he can only come up with this bit of speculation, since there was nothing more in Empedocles' poem than the quite vague talk of elemental 'portions' to suggest he had any view on the problem at all. If Aristotle could have found evidence in Empedocles' poem for the view he cautiously attributes to him here, then he presumably would have mentioned him in On generation and corruption 1. 2, where he identifies the question of whether there are indivisible magnitudes as the starting point for discussion of a range of questions pertaining to generation and destruction. There, however, he makes no reference to Empedocles, only to Leucippus and Democritus among the Presocratics.

Among the ancient commentators, Aristotle's speculations are transformed into Aristotelian dogma. A good example of this process is provided by Simplicius' commentary on the present passage. Here Simplicius simply restates Aristotle's remark in an unqualified manner and expands on it by bringing in an equally unhistorical comment by Aristotle in the treatise's next chapter:

For if [the analysis] stops, either this is something atomic at which it stops, or something divisible though never to be divided, that is, never to be destroyed, just as Empedocles says. For he says the elements are divisible. He does not posit principles that are atomic, as Democritus and his followers do; but he supposes that the four elements are not transformed into one another and are imperishable, because he does not allow that they have any common material, but he says that their generation from one another by being separated out is merely apparent, for everything is actually present in everything. (Simp. *in Cael.* 628. 6–13)

Towards the beginning of *On the heavens 3*. 7, where Aristotle considers how the elements are generated from each other, he says that Empedocles, Democritus, and their followers—even without realizing it themselves—held that the generation of the elements from one another is only apparent, not real, generation, for they make this generation a process whereby something is separated out from a body that was already present in it all along (*Cael. 3*. 7. 305^b1–5). This bit of Aristotelian

 $^{^{105}}$ Εἰ δὲ στήσεταί που ἡ διάλυσις, ἥτοι ἄτομον ἔσται τὸ σῶμα ἐν ῷ ἴσταται, ἢ διαιρετὸν μὲν οὐ μέντοι διαιρεθησόμενον οὐδέποτε, καθάπερ ἔοικεν Ἐμπεδοκλῆς βούλεσθαι λέγειν (Arist. Cael. 3. 6. $305^{\rm a}1-4$). See Gemelli Marciano 1991: 19.

reconstruction is contradicted by the more careful and attentive treatment of Empedocles at the end of *On generation and corruption* 1. 1, perhaps not surprisingly since here in *On the heavens* Aristotle is willing to attribute to Empedocles and the rest a view that they would not have recognized as their own. Nevertheless, it becomes a central feature of Simplicius' commentary, leading him to attribute to Empedocles the Anaxagorean-sounding idea that everything is actually present in everything (cf. Simp. *in Cael.* 632. 11–13). It is not hard to see that Simplicius' elaboration on Aristotle's circumspect comment is a pure fantasy of reconstruction, one in which Simplicius is more concerned with being faithful to Aristotle than to anything Empedocles himself might have said. Simplicius notably makes no attempt to do what he was thankfully prone to do elsewhere in his commentaries, introduce the evidence of Empedocles' own words as confirmation of Aristotle's remarks.

The same kind of qualified ascription seen in *On the heavens 3*. 6 prefaces Aristotle's attempt in *On generation and corruption* 1. 8 at imagining the structure of Empedoclean matter:

It is virtually necessary for Empedocles to say just what Leucippus says. For he says there are certain solids, undivided ($\mathring{a}\delta\iota a(\rho\epsilon\tau a)$, unless there are pores everywhere continuously. But this is impossible; for then there will be nothing else solid alongside the pores, but everything will be void. Therefore it is necessary for the things that are in contact to be indivisible, and the things between them, which he calls 'pores', to be empty. But this is what Leucippus says about affecting and being affected. (*GC* 1. 8. $325^{\rm b}5-11$)

In this rather difficult passage, ¹⁰⁶ Aristotle presses to extremes the idea that everything is permeated by imperceptible passageways or 'pores', treating them as functionally equivalent to the atomist void. This is all evidently just speculation on Aristotle's part—what he thinks Empedocles would have to say about the structure of matter, once he is credited with the idea that the elements are permeated by imperceptible passageways and these are then understood to be empty. Aristotle first concludes that Empedoclean matter cannot be divisible everywhere since there cannot be pores everywhere in it. Some such bit of reasoning may explain why in *On the heavens* 3. 6 he is inclined to attribute to Empedocles the view that the elements are not atomic but *divisible*, though not limitlessly so in any actual way. Here, however, this line of thought gives way before the idea that Empedocles has to posit *indivisible* solid bodies. The passage is based on an assumption that would give rise to

¹⁰⁶ See the discussion at Gemelli Marciano 1991: 14–21. She usefully contrasts Aristotle's supposition here that Empedoclean 'pores' must be empty with the implication of Thphr. Sens. 13–14 that there was no discernible view in Empedocles on the question whether the pores should be considered full or empty. She also discusses the probable Platonic-Academic influence on Aristotle's treatment of Empedocles, suggested by Aristotle's own reference to Pl. Ti. 53 A ff. as the source of the problem for Empedocles' theory raised at GC 1. 8. 325^b19–25 and apparently confirmed by echoes of the Timaeus both here and in Cael. 3. 6. 305^a1–9. On how the remodelling of other Empedoclean theories in Plato's Timaeus affected Aristotle's (and Theophrastus') treatment of Empedocles, see O'Brien 1970. For how Aristotle's treatment of the pore theory in GC 1. 8 is designed to show that there is no viable option for explaining how bodies interact in action and passion other than the atomist theory and his own theory positing that bodies are everywhere divisible, see Hussey 2004: 243–8.

a common charge of inconsistency against Empedocles in antiquity, namely that he cannot simultaneously suppose the pores or passages permeating bodies are empty and yet also deny the existence of void, as he was taken to do in declaring, 'nor is any of the whole empty ($\kappa\epsilon\nu\epsilon\delta\nu$) or in excess' (fr. 13). Already Theophrastus complained of the problem this creates for the role pores were meant to play in his theory of perception: 'There is the further question of whether the pores are empty or full. If they are empty, it follows that he contradicts himself, for he says generally that there is no void. But if they are full, living creatures would always be perceiving: for it is clear that what is like fits into them, just as he says' (Sens. 13). A response to the problem subsequently invented for Empedocles is reflected in Philoponus' commentary (Phlp. in GC 160. 3–7). The whole 'problem', however, again reflects the later tradition's common canonization of a fundamentally speculative discussion by Aristotle.

Finally, there is the passage in *On generation and corruption* 2. 7 Guthrie quoted as evidence of Aristotle's attribution of a particle theory to Empedocles. This passage should not be read shorn of its context, as its excerpting in Diels and Kranz can tempt one to do. In *On generation and corruption* 2. 6, Aristotle has already presented a series of criticisms of Empedocles' physical theory, especially for maintaining that his elements could not be transformed into one another. The first of these criticisms begins with Aristotle remarking that one might wonder how those who, like Empedocles, posit multiple elements, and thus that the elements do not change into one another $(\mu \dot{\eta}) \mu \epsilon \tau a \beta \dot{a} \lambda \lambda \epsilon \iota \nu \epsilon \dot{\iota} s \ddot{a} \lambda \lambda \eta \lambda a$, can suppose that the elements are nonetheless 'comparable' $(\sigma \nu \mu \beta \lambda \eta \tau \acute{a})$, which Aristotle takes to be the sense of his calling them 'equal' ($i\sigma a$, fr. 17. 27a) (GC 2. 6. 333 a 16–20). A few lines further on, Aristotle characterizes the Empedoclean elements simply as 'intransmutable' (ἀμετάβλητα, 333°33). Likewise, Aristotle had towards the end of On generation and corruption 2. 1 contrasted his own theory, which allows elements such as earth, fire, and water to change into one another, with Empedocles' theory, which Aristotle says does not make such an allowance and therefore does not have the option of explaining the generation of things from the elements as a kind of άλλοίωσις or alteration (GC 2. 1. 329^a24-b2). Given his previous discussion of Empedocles at the end of On generation and corruption 1. 1, this repeated insistence now by Aristotle that Empedocles' elements are intransmutable certainly seems odd. Although Aristotle there began by attributing such a view to Empedocles, he had proceeded to argue that Empedocles' view that the elements are capable of losing their distinguishing qualities when they combine in the united Sphere, and are subject to such change even now when they interact with one another under Love's influence, entails that Empedocles' elements are capable of being generated from one another.

One might be inclined to question the correctness of Aristotle's supposition, in this earlier context, that the qualitative mutability he has detected in the Empedoclean elements entails that they can be generated from one another. All that strictly follows is that earth, for example, can come to be from the same stuff that was once qualified as water, not that earth can be generated directly from water. Philoponus' commentary on *On generation and corruption* 1. 1. 315^a3–19 in fact recognizes this

distinction and explains that only in this restricted sense can the elements be said to come to be from one another—in the sense that portions of the undifferentiated and homogeneous Sphere that were formerly qualified by attributes that distinguish fire may, when the elements are generated anew from the Sphere, be qualified by the attributes that distinguish water (Phlp. in GC 19. 18-20. 4). It can seem a rather quibbling objection on Aristotle's part to say that Empedocles contradicts himself, if he denies that the elements can be generated from one another, on the ground that his broader theory must allow that one element can come to be from what was once another element. What is particularly significant, though, is the apparent vacillation in Aristotle's view on the transmutability of the Empedoclean elements. Is he simply inconsistent on this point, unaware of how he appears to contradict himself? A somewhat more charitable view is that Aristotle recognizes the need to maintain, as his so to speak official stance, that Empedocles' elements are intransmutable, for indulging the alternative threatens to undermine the distance he wishes to maintain between his position and all earlier theories. Empedocles' homogeneous Sphere would otherwise anticipate his own material substrate of qualification, and Empedocles' elements will be transmutable in much the same way Aristotle's are, namely, capable of being generated from a portion of substrate that has come to be differently qualified.

Against this background, the way Empedocles figures in On generation and corruption 2. 7 is all the more intriguing. The chapter focuses on problems pertaining to the formation of compounds from elements. The discussion operates at a high level of generality: from the outset Aristotle is clearly more concerned with examining the commitments of broadly conceived positions rather than the views of individual thinkers. He begins by distinguishing two types of theory, according to whether they allow that the elements can be generated from one another; those allowing that they are so generable must also allow that they have some common nature underlying their qualitative differences (334^a17-18), while those theories not making this allowance, he says, will have difficulty explaining how flesh, bone, and other such stuffs can be produced from the elements (334^a18-21). Given the previous chapter's characterization of Empedocles' position, one expects him to be included among this second class of theorists. However, it soon becomes apparent that Aristotle in fact places Empedocles (or more accurately, anyone who holds a theory such as his) in the first class, that is, among those allowing that the elements can be generated from one another and who are thus committed to their having some common substrate. For Aristotle now returns to theorists of the first type to suggest that they, too, will have difficulty explaining how anything apart from the elements comes to be from them (334^a21-3). This brings us back to the passage excerpted by Diels and Kranz as 31A43 and quoted by Guthrie as evidence that Empedocles' physical theory must have assumed the particulate structure of matter. Part of Guthrie's mistake is to have reproduced only the portion of the passage excerpted by Diels and Kranz (334°26–31), which makes it impossible to see why Aristotle says that, on a theory like Empedocles', flesh, bone, and other stuffs must be produced from the elements in the way a wall is produced from bricks and stones.

The testimonium in its fuller context is as follows:

This involves a problem also for those who produce [the elements] from one another, namely in what manner something else besides them comes to be from them. I mean, for example, that water can come to be from fire, and fire from it; for there is something common underlying. However, flesh and marrow come to be from these [the elements]. How do they come to be? What will be the way, for those who speak like Empedocles? It must be composition $(\partial u \dot{\alpha} \gamma \kappa \eta \gamma \dot{\alpha} \rho \ \sigma \dot{\nu} \nu \theta \epsilon \sigma \iota \nu \ \epsilon \bar{\iota} \nu \alpha \iota)$, just like when a wall is made from bricks and stones; and this mixture will be of persisting elements, having been put together in small parts next to one another. Likewise with flesh and each of the others. ($GC 2. 7. 334^a 21-31$)

To understand this passage properly, one must be able to see just why Aristotle thinks a theory involving mutual generation of the elements via qualitative modification of a common substrate must hold that bone and other compound stuffs are produced from the relevant elements by means of $\sigma \dot{\nu} \nu \theta \epsilon \sigma \iota s$ or composition. At first it seems odd for Aristotle to suppose that a theory where the elements are not everlasting but are generated from one another nonetheless must suppose that these elements persist essentially unaltered when they combine with one another to produce other stuffs. Aristotle makes this inference because, in the first place, the mutual generation of the elements conforms to his standard analysis of change: when water is produced from fire, a material substrate once qualified as fire comes to be qualified as water (s comes to be F from being not-F). However, the generation of compounds from the elements resists this kind of analysis, Aristotle reasons, because there is no reason to think any one rather than another element functions as the substratum for the compound. Thus the compound, unlike its individual elements, cannot be conceived of as generated via qualitative alteration of something underlying it. Therefore, the compound must be a product of the collocation of elements that undergo no real change themselves. All this hearkens back to Aristotle's fundamental classification of theories in On generation and corruption 1. 1, repeated at the beginning of *On generation and corruption* 2. 1, according to which theories positing a single material principle must conceive of the generation of other stuffs and entities as alteration, while theories positing multiple material principles must conceive of it as something other than alteration.

When it comes to determining what, if anything, this passage tells us about Empedocles' physical theory, it is essential to recognize its speculative character. Rather than reporting directly on Empedocles, Aristotle is articulating what he sees as the necessary commitments of a certain type of physical theory. Empedocles' element theory is supposed to be representative of this type, in so far as it can to be seen to allow that the elements are transmutable and that they have a common underlying nature, in accordance with the discussion of his views at the end of *On generation and corruption* 1. 1. In contrast with that discussion, however, Aristotle's further comments here in *On generation and corruption* 2. 7 are contradicted by the evidence of the fragments. As we have seen, Empedocles' account in fr. 96 of how bone is produced, which Aristotle seems to have in mind, strongly suggests the forging of something new from the elements' fusion. The fragment's metallurgical imagery

belies any notion that parts of earth, water, and fire combine to make bone merely by being placed next to each other like bricks and stones in a wall. Empedocles actually seems to have conceived of the process as analogous to the production of hardened ceramic from the firing of clay. This is an altogether more plausible conception of how bone is produced from earth, water, and fire than Aristotle's model of setting parts of each of these stuffs alongside one another. Furthermore, Aristotle's inference that the combination of elements on a theory such as Empedocles' can be no more than simple collocation is predicated on his own supposition that qualitative alteration requires a single substrate. Again, this assumption explains why Aristotle is prepared to allow that Empedocles' elements are generated via alteration from the Sphere, which he thinks must function as their common substrate, and why he is nonetheless unwilling to allow that compounds are generated by a process that would involve alteration of the elements. This assumption, however, plays no role in Empedocles' physical theory. He has no general model of change as a process wherein s comes to be F from being not-F. His model is instead rooted in the conception of Love as the force whereby things are combined and assimilated, and of Strife as the force whereby things are distinguished and separated. It is thus only natural for him to think, as we have seen he does, that when the elements unite under the influence of Love, they to some extent lose their distinct qualitative identities to form something genuinely new.

Thus Aristotle's treatment of Empedocles' physical theory in On generation and corruption does not, as Guthrie claimed, support the mistaken idea that Empedocles' elemental roots have a particulate structure. The Aristotelian evidence likewise fails to support the view of Guthrie's narrative and its descendants that Empedocles intended the roots to be a plurality of 'Parmenidean beings' and that, as such, they are the primary locus of his response to Parmenides. Since Aristotle did not view Parmenides either as presenting a radical challenge to cosmology or, more generally, to everyday presumptions regarding the existence of change and plurality or, as others have supposed, as articulating fundamental conditions of adequacy for the principles of future cosmological theories, it is no surprise that the Aristotelian evidence fails to support any of the representations of Parmenides' impact on Empedocles based on such views. Our more careful consideration of Aristotle's treatment of Empedocles' element theory has shown that Aristotle's view that the roots lose their distinctive qualities, not only when they unite in the Sphere under Love, but whenever they merge to form compounds has a solid grounding in Empedocles' own words. Unfortunately, the unwelcome implications of Empedocles' plain statements that mixture changes the roots, that they come to be, and that their life is not continuous have tended to be neglected, diminished, or explained away so as to make the evidence fit the dialectic of challenge and response that modern historians have wished to impose on the period. It has been critical for this presumed dialectic that the Empedoclean roots be considered ungenerated and imperishable, especially since the roots fail to be 'Parmenidean beings' in other important respects. Since they are obviously, for instance, capable of motion and internal division, his purported transfer to them of the attributes of 'Parmenidean

Being' has been described as 'incomplete' or 'selective', ¹⁰⁷ a point about which we shall have more to say momentarily. The presupposition that Empedocles' response to Parmenides requires his elemental roots to be at least ungenerated and imperishable has tended to obscure, not only the value of Aristotle's most accurate reflections on Empedocles' physical theory in the latter part of *On generation and corruption* 1. 1, but also the evidence of Empedocles' own words suggesting an explanatorily powerful theory of elemental combination and transformation that is truer to the facts of experience than the theory with which he has been saddled.

Empedocles' theory of elemental interaction, furthermore, conforms comfortably to Empedocles' broader vision, wherein nothing is ever really born or ever truly dies since these changes involve instead the transformation of things into new forms. Cyclical processes of transmigration and transmutation extend throughout his system, at both the microcosmic and macrocosmic levels, and the roots too have their own life cycles of transformation and reconstitution. They are subject to the kind of qualitative change that involves the loss of their characteristic identity, both when they merge in the perfect unity of the Sphere under Love and also when they combine and interact to form various complex stuffs and eventually plants and animals. The roots' intermixture, from which 'there poured forth myriad tribes of mortal creatures' (fr. 35. 7), begins at the point in the cosmic cycle when Love reappears in the midst of the cosmic vortex via which Strife has totally differentiated and separated the four roots (fr. 35. 3-13, cf. a(ii) 16-20). Empedocles describes this new beginning as follows: 'And forthwith things that once learned to be immortal grew mortal, | and things once unmixed grew to be pure stuffs 108 as they interchanged their paths: | and as they mixed together, there poured forth myriad tribes of mortal creatures | fitted together with all manner of forms, a wonder to behold' (fr. 35, 14-17). The roots are themselves the things here described in a striking oxymoron as having 'learned to be immortal', in a reference to their birth out

¹⁰⁷ So, for instance, Inwood 2001: 26, who adds that 'Empedocles does not make it clear . . . what arguments he would have used to defend his selective acceptance of Parmenidean conclusions'. Cf. Solmsen 1975: 134, and Wright 1981: 29–30, on how Empedocles' element theory supposedly adopted or modified certain conclusions Parmenides had reached in the 'Truth' and at the same time reasoned independently of him.

108 Here in fr. 35. 15a the majority of editors and critics accept Diels and Kranz's ζωρά τ ε τ ὰ

¹⁰⁸ Here in fr. 35. 15a the majority of editors and critics accept Diels and Kranz's ζωρά $\tau \epsilon \tau \dot{\alpha}$ $\pi \rho i \nu \ddot{\alpha} \kappa \rho \eta \tau a$ (the text preserved by Thphr. ap. Ath. Deipnos. 10. 22. 424 a and Plu. Quaest.conv. 677 D); this provides the simplest correction for Simplicius' unmetrical ζωρά $\tau \epsilon \tau \dot{\alpha} \pi \rho i \nu \ddot{\alpha} \kappa \rho \iota \tau a$ (in Ph. 32. 25, in Cael. 529. 15). Nonetheless, the apparent difficulty in getting ζωρά and $\ddot{\alpha} \kappa \rho \eta \tau a$ to yield a contrast comparable to that between $\theta \nu \dot{\eta} \tau (a)$ and $\dot{\alpha} \theta \dot{\alpha} \nu a \tau (a)$ in the previous verse led Wright 1962 (where one will find earlier proposals amply recorded) to conjecture ζωρά $\tau \epsilon \pi \rho i \nu \kappa \dot{\epsilon} \kappa \rho \iota \tau o$, which is supposed to mean 'and formerly unmixed things were in a mixed state' and to be supported by the lax quotation of the phrase as ζωα $\tau \epsilon \pi \rho i \nu \kappa \dot{\epsilon} \kappa \rho \iota \tau o$ at Arist. Po. 25. 1461°25. Although her conjecture provoked a series of attempted rebuttals, in O'Brien 1965, West 1966, and Solmsen 1967, she is not without justification in pronouncing their objections 'unconvincing' (Wright 1981: 208). With its sense as 'pure', notably of wine unmixed with water, ζωρά seems virtually synonymous with $\alpha \kappa \rho \eta \tau a$. The translation adopted here is meant to reflect a tentative suggestion that what Empedocles refers to as ζωρά are mixtures of the roots that yield 'pure stuffs' such as blood, flesh, and bone, the formation of which other evidence shows he was particularly interested in, and which in turn combine variously to form living creatures. If this is correct, ζωρά would be an appropriate term to emphasize that the elements' mingling produces true fusions.

of the Sphere under Love as the entities Empedocles sometimes gives the names of traditional divinities. The roots 'grew mortal', however, when they began to interact with one another to fuse into compounds and then the vast array of mortal creatures. Empedocles obviously means for us to understand that the generation of mortal creatures from the elements' mingling and interaction involves their own 'mortality', that is, the loss of their qualitative identities as they are transformed into new things with qualitative identities of their own.

Here we have yet another mention of the twin processes of elemental mixture and interaction we have seen Empedocles elsewhere refer to in various ways: 'mixture and interchange among what is mixed' (fr. 8. 3), 'running through one other | they come to be different at different times' (fr. 17. 34b–5a, cf. fr. 26. 3b–4), 'in Love they come together and are desired by each other; for mixture changes them' (fr. 21. 8, cf. fr. 22. 4–5, fr. 23. 4a). The roots' mortality, of course, is limited, for while they 'perish into each other' they also 'grow [out of each other] in decreed turns' (fr. 26.2), that is, they 'die' only to be reborn and transformed into new forms, like everything else in Empedocles' cosmology except Love and Strife. The roots have their own life cycles of 'birth', 'death', and new 'birth'. The kind of changes they undergo at the macrocosmic level in being generated from and ultimately perishing back into the Sphere under Love they also undergo when they interact under Love's influence to form things at the microcosmic level: 'Thus in so far as they [sc. the roots] have learned to grow one from many | and when the one again grows apart they come forth as many, | in this respect they both come to be and not for them is there continual life; | but in so far as these never cease constantly interchanging, | to this extent they are ever unchanged with respect to their cycle' (fr. 26. $8-12 \approx$ fr. 17. 9-13). There is no internal motivation to make the roots exceptions to the metaphysical principles of cyclical transformation that lie at the heart of Empedocles' philosophy.

EMPEDOCLES' COSMOLOGY AND PARMENIDES' COSMOLOGY

In an influential study, Friedrich Solmsen wrote as if Empedocles saw the task of responding to what Solmsen, like so many others, falsely presumed to be Parmenides' repudiation of generation and destruction as one to be accomplished by finding a place somewhere in his own system for the various attributes of Parmenidean Being. Thus noting how the six principles of Empedocles' physical system—the four roots plus Love and Strife—fall short of the Parmenidean ideal, Solmsen said, 'To transfer all predicates of the monolithic $\epsilon \acute{o} \nu$ to six principles was impossible. Empedocles has transferred as many as he could and in some instances has found a kind of equivalent or substitute.' After listing what he took to be the roots' Parmenidean attributes, Solmsen wrote, 'Having realized that some predicates of Parmenides' $\epsilon \acute{o} \nu$ cannot attach themselves to the elements we may wonder whether

they reappear elsewhere in Empedocles' physics or cosmology. The Sphairos is the obvious new home for several. He then proceeded to consider at much greater length the less commonly commented correspondences between Parmenides' (τὸ) ¿όν and the Empedoclean Sphere under Love. Solmsen thus aimed to improve on conventional accounts of Empedocles' response to Parmenides focused more exclusively on the supposedly Parmenidean character of the roots. In so doing, he tried to take account of some rather evident similarities for which these accounts had no natural place, and so tended to dismiss or explain away, such as the obvious similarity between Empedocles' 'rounded Sphere' ($\Sigma \phi \alpha \hat{\imath} \rho o s \kappa \nu \kappa \lambda o \tau \epsilon \rho \eta s$, frs. 27. 4, 28. 1) and Parmenides' description of What Is as like the bulk 'of a well-rounded sphere' (εὐκύκλου σφαίρης, fr. 8. 43). Solmsen's odd parcelling out of attributes 111 nevertheless makes his picture of Empedocles' 'response' to Parmenides seem mechanical and essentially arbitrary. Instead of the more conventional picture of Empedocles' roots as the primary locus of his response to Parmenides, on Solmsen's account the roots, Love and Strife, and the unified Sphere all, in different ways and to limited degrees, replicate certain features of Parmenidean Being.

Neither Empedocles' four roots nor Love and Strife were ever meant to be 'Parmenidean beings'. Their proper analogues are instead to be found in the principles of Parmenides' cosmology. It is important to note that numerous features of Empedocles' physical system that Guthrie's narrative and its descendants cast as central to his alleged 'response' to Parmenides are already present in Parmenides' own cosmology. Like Empedocles, Parmenides posits a plurality of material principles as the unified basis for accounting for the phenomena of generation and change in the cosmos. Furthermore, Parmenides' own light and night replicate roughly as many attributes of What Is as Empedocles' roots do, so that light and night would appear to have as much right as the roots to be called 'Parmenidean beings'. Nothing suggests, moreover, that Parmenides' cosmology violated the principle of no generation *ex nihilo*: it is precisely by positing light and night as the ultimate material and qualitative sources of the cosmos's population that he avoids violating this common principle of Presocratic cosmology.

One can see how conventional narratives have confused the correspondence between the two systems in their treatment of Empedocles' apparent view that the cosmos is a *plenum*. His assertion, in the midst of his argument that the four roots comprise the fixed quantity of stuffs, that 'nothing is empty of these' (Emp. fr. 17. 33) has been viewed as tantamount to a denial of void and thus to an echo and endorsement of Parmenides' conclusion that 'it is all replete with What Is' (Parm. fr. 8. 24b). 112 In actual fact, however, Empedocles' assertion is properly regarded as analogous to a point, not in the Way of Conviction, but in Parmenides' own

¹¹⁰ Ibid, 134-5.

¹¹¹ Cf. the conclusion ibid. 145: 'the perfection of the Sphairos is due to predicates of Being that originated in Parmenides' legislation. These predicates have been divided, one part of the heritage going to the Sphairos, the other to the elements, and the latter have generously admitted "mortal" compounds to a share of the bounty.'

112 See, for instance, Guthrie 1965: 139.

cosmology: 'nothing is empty of these' $(\tau \hat{\omega} \nu \delta' \circ o' \delta \hat{\epsilon} \nu \ \ddot{\epsilon} \rho \eta \mu o \nu$, Emp. fr. 17. 33) should be compared with Parmenides' assertion in the cosmological portion of his poem that 'all is full of light and invisible night together, | of both alike, since nothing is with neither $(\epsilon \pi \epsilon)$ $\delta \delta \epsilon \tau \epsilon \rho \omega \mu \epsilon \tau \alpha \mu \eta \delta \epsilon \nu$ (Parm. fr. 9. 3–4). By contrast, Empedocles' statement, 'and not any of the whole is empty or too much' $(o\dot{v}\delta\dot{\epsilon} \tau\iota \tau o\hat{v})$ παντὸς κενεὸν πέλει οὐδὲ περισσόν, Emp. fr. 13 ap. Aët. 1. 18. 2 sub titulo Περὶ κενοῦ, cf. [Arist.] MXG 976^b26–7), does appear directly reminiscent of the central portion of Parmenides' argument that What Is is both whole and uniform: 'and it is not any more there, which would keep it from holding together, | nor any worse, but it is all replete with What Is' $(o \mathring{v} \delta \acute{\epsilon} \tau \iota \tau \mathring{\eta} \mu \mathring{a} \lambda \lambda o \nu, \tau \acute{o} \kappa \epsilon \nu \epsilon \mathring{\iota}_{o} \nu o \iota \mu \iota \nu \sigma \upsilon \nu \acute{\epsilon} \gamma \epsilon \sigma \theta a \iota, | o \mathring{v} \delta \acute{\epsilon}$ τι χειρότερον, παν δ' $\ddot{\epsilon}$ μπλεόν $\dot{\epsilon}$ στιν $\dot{\epsilon}$ όντος, Parm. fr. 8. 23–4). The context of the paraphrase of Empedocles fr. 13 in the MXG, however, indicates that he is here describing the period 'when all things combine into one form so as to be one' (MXG) 976^b25–6), that is, to the unified Sphere under the rule of Love. Thus the similarity between Empedocles' 'denial of void' in fr. 13 and the line of thought of Parmenides fr. 8. 23-4 suggests that the unified Sphere is the proper Empedoclean analogue of What Is in Parmenides. In devising their cosmologies, moreover, both seem to have been concerned that their elements preserve or replicate the fullness of, respectively, the Sphere under Love and What Is.

In a similar way, the characteristics of Empedocles' four roots typically thought reminiscent of the attributes of 'Parmenidean Being' for the most part have their proper analogues among the attributes of Parmenides' own material principles (excluding, naturally, characteristics that have been improperly forced upon Empedocles' roots to make them conform more closely to the 'canons of Parmenidean being'). These similarities between the roots and light and night are not surprising, given their functionally analogous positions in the two systems. The mistaken assumption that Empedocles' roots roughly replicate the attributes of 'Parmenidean Being' was, moreover, to some extent a natural one to make, for a number of these attributes recur in Parmenides' descriptions of light and night. It is therefore all the more imperative that one not confuse the true structural correspondence between their systems.

We may first, then, take note of the points of resemblance in Empedocles' and Parmenides' respective descriptions of the roots and of light and night. The similarity between Parmenides fr. 9. 3–4 and Empedocles fr. 17. 33 has already been noted. The balance between light and night implied when Parmenides says all is full 'of both alike' ($\[Towv\]$ $\[Towv\]$

¹¹³ So Wright 1981: 29: 'the equality and independence attributed to fire and night in the $Doxa\dots$ are found in Empedocles' description of the roots'. Solmsen 1975: 134, however, fails to recognize this correspondence and supposes Emp. fr. 17. 27a is instead an echo of Parm. fr. 8. 49, $o\hat{i}$ $\gamma \dot{\alpha} \rho \, \pi \dot{\alpha} \nu \tau c \theta \epsilon \nu \, \hat{i} \sigma c \nu$. ' $\hat{i} \sigma c \nu$, in [Parmenides'] original conception a warrant of intrinsic unity, now obtains in the mutual relation of the elements where it safeguards the balance and thus helps toward stability'. The safeguard of balance and stability Solmsen finds in Emp. fr. 17. 27a is more evidently present, though, in Parm. fr. 9. 4a.

Empedocles describes the distinguishing characteristics of the elements in a passage such as fr. 21. 3-6 bears comparison with Parmenides' account of the distinct characters of light and night in fr. 8. 55-9. 114 Moreover, although Empedocles distinguishes four elements and Parmenides only two, Aristotle noted that Parmenides winds up with four elements and, at the same time, that Empedocles' actual deployment of the elements indicates a binary opposition wherein fire is ranged against the other three: 'Those who make the elements two, as Parmenides makes fire and earth, produce the intermediate mixtures from these, such as air and water Some say straightway that there are four elements, such as Empedocles. But even he reduces them to two elements; for he ranges all the others against fire' (Arist. GC2. 3. 330^b13–21). Likewise, in *Metaphysics* 1, Aristotle says that although Empedocles was the first to posit four material elements, study of his verses shows that he effectively treats them as two, opposing fire to all the rest (Arist. Metaph. 1. 4. 985^a31-^b3). We have in fact seen how, in Empedocles' account of the formation of bone, the element fire is best understood as acting upon the proper ingredients earth and water to 'fire' or fuse them together in a way that transforms them into a new stuff with its own distinct qualities. There are other instances where fire likewise acts on the other elements, variously baking, hardening, fusing, and concocting them. 115 In the end, the difference between the number of material principles posited by Parmenides and Empedocles may be essentially superficial. What is important is that both sought to explain the formation of the world's diverse population in terms of the combinations of a limited plurality of material principles conceived of in fundamentally qualitative terms. Of Parmenides' cosmology, Plutarch writes: 'blending as elements the bright and dark, he produces out of these and through these all the phenomena' (Col. 1114 B). Substitute fire, aether, earth, and water for light and night, and this would be as apt a description of Empedocles' approach.

Just as the principles of Empedocles' cosmology are reminiscent of Parmenides' in these various respects, 117 so there are numerous similarities to be found in their explanations of particular natural phenomena. Given how little has survived of the

¹¹⁴ Cf. Bollack 1969 b: 73, ad Emp. fr. 17. 28, $\tau \iota \mu \hat{\eta} \hat{s} \dots \hat{\epsilon} \kappa \acute{a} \sigma \tau \phi$. There might also seem to be a parallel between Parmenides' description of light as 'every way the same as itself' ($\hat{\epsilon} \omega \nu \tau \hat{\phi} \frac{1}{\pi} \hat{a} \nu \tau \sigma \sigma \epsilon \tau \omega \hat{\nu} \tau \acute{o} \nu$, Parm. fr. 8. 57b) and Empedocles' general description of the roots as 'continuously ever the same' ($\hat{\eta} \nu \epsilon \kappa \hat{\epsilon} \hat{s} \hat{a} \hat{\epsilon} \hat{\nu} \hat{o} \mu o \hat{i} \hat{a}$, Emp. fr. 17. 35b). We have seen, however, that Empedocles' phrase imputes quantitative invariance to the roots, whereas Parmenides means that light is qualitatively self-identical. It seems reasonable to suppose, however, that Empedocles' roots are as such likewise qualitatively identical to themselves, even if they are subject to losing their identities in compounds, and, conversely, that Parmenides' light and night are supposed to comprise the fixed totality of stuffs from which other things are produced.

¹¹⁵ See Longrigg 1976: 430 ff.; Wright 1981: 24–5.

Likewise, the impression given by Parmenides' reference to the early appearance of Eros in his cosmology—'she devised Eros as the very first of all the gods (fr. 13)—that Empedocles posited twice as many motive principles when he introduced Strife as a force of enmity and opposition to counter the harmonizing influence of Love is at least called into question by Cicero's report that Parmenides spoke of War and Discord as well Cupid (Eros) as divinities (Cic. N.D. 1. 28). Cf. Finkelberg 1997: 2–4.

¹¹⁷ For a rather different view of the connections between Parmenides' and Empedocles' element theories, see Schwabl 1957.

cosmological portion of Parmenides' poem, we have to rely here largely on doxographical reports, the reliability of which we are often no longer in a position to confirm. Even so, it is intriguing to hear, for example, from the third-century Roman grammarian Censorinus, that Empedocles' theory of the initial generation of living creatures from the coming together of individual limbs produced directly from the earth (cf. Emp. frs. 62, 67) is to be found in all its essential details in Parmenides (Cens. Die nat. 4. 7. 8). 118 The ancient doxographers also note similarities between Parmenides' and Empedocles' views on the moon's reflected light (Aët. 2. 28. 5 (Stob. Ecl. 1. 26. 2)), ¹19 on the identity of nous and psuchē (Aët. 4. 5. 12 (Stob. Ecl. 1. 48. 7)), on sense perception and the role in it of 'commensurate passages' (Thphr. Sens. 1, Aët. 4. 9. 6 (Stob. Ecl. 1. 50. 22)), on appetite (Aët. 4. 9. 14 (Stob. Ecl. 1. 50. 25)), and on how the position of the embryo in the womb determines the sex of offspring (Aët. 5. 7. 1–2, 4 ([Plu.] *Plac.* 5. 7. 905 D 6–E 2, E 5–8)), even if Aristotle reports that their views differed regarding the relative warmth of males and females (PA 2. 2. 648^a25). A similarity has also been noted between Parmenides fr. 16 on the physiology of thought and Empedocles' view that the quality of thought depends upon the mixture of the elements. ¹²⁰ That there should have been similarities in their account of specific cosmological, psychological, and biological phenomena should be hardly surprising, now that we can straightforwardly accept the cosmology of Parmenides' poem as Parmenides' own cosmology, for this enables us also to see that he and Empedocles were engaged in broadly similar explanatory projects. There of course remain fundamental differences between their cosmological schemes. There is no serious indication in the Parmenidean evidence of anything like Empedocles' extension of the principles informing the Pythagorean theory of metempsychosis to the life of the cosmos itself. 121 Nor does it appear that the

This connection is fully confirmed by the close echoes of Parm. fr. 14 in Emp. fr. 45 and the

equivalence of thought in Parm. fr. 15 and Emp. fr. 47.

¹¹⁸ See further Bollack 1969*b*: 429–30.

See Long 1966: 267–8. For a cautionary note, see Laks 1990: 14–17, on how $\phi\theta\epsilon\hat{i}\rho\epsilon\sigma\theta\alpha\hat{i}$ in Theophrastus' account of Parmenides' cognitive theory may reflect assimilation of Parmenides' view to Empedocles' rather than genuine similarity. See also Sedley 1992 on how Theophrastus' reconstruction of Empedocles' perceptual theory is undermined by the doxographical schema that causes him to be grouped with Parmenides.

Finkelberg 1997: 4–7, argues that Parmenides' cosmology, like Empedocles', involved a 'conception of the cyclical nature of cosmic evolution' involving 'the recurrent emergence and destruction of the differentiated world' (7), but his case involves overinterpretation of Parm. fr. 19 in conjunction with the comment at Hippol. Haer. 1. 11. 1 that Parmenides 'said the cosmos perishes ($\phi\theta\epsilon i\rho\epsilon\sigma\theta\alpha\iota$), but in what way he does not say'. Finkelberg claims that fr. 19 'states that the world has a beginning and will have an end', but it is hardly as clear as he supposes that $\tau \dot{\alpha} \delta \epsilon$ in v. 1 'means the totality of things constituting the world of the $\delta\delta\xi a$ ' (4). Its scope may well be more limited; or, as v. 3 suggests, $\tau \acute{a} \delta \epsilon$ may refer, not to the cosmos as a totality, but collectively to all its mutable members, so that the goddess is claiming that each of these things will some day perish. Such a claim would be consistent with their modality as things that are but need not be. It need not imply any single cataclysmic event and certainly not the destruction of the entire cosmos as a totality. Of the testimonium in Hippolytus, Finkelberg implausibly claims that the 'present tense of $\phi\theta\epsilon i\rho\epsilon\sigma\theta\alpha\iota$ suggests that world destruction is a recurrent event rather than a unique occurrence in a remote future'; this is as much evidence as he has for the hypothesis that 'Parmenides postulated the recurrent generation and destruction of the world' (5). Since, however, Hippolytus' statement seems

dualistic principles of Parmenides' cosmology were generated from some initially undifferentiated state. In contrast to the crucial relation between the roots and the Sphere under Love repeatedly referred to by Empedocles, it is not clear that Parmenides envisioned any relation, other than co-presence, between what must be and all the things, formed from light and night, that are but need not be.

ultimately based on Parm. fr. 19. 2 (cf. Tarán 1965: 266 n. 100), as this would account for both the view attributed to Parmenides as well as the comment that he did not indicate how the cosmos perishes, nothing further about Parmenides' view can legitimately be inferred from this testimonium.

Parmenides' Place in Presocratic Philosophy

The preceding chapters have endeavoured to expound and defend an historically accurate understanding of Parmenides' philosophy. The argument has necessarily ranged beyond issues internal to his didactic poem because the tendency of modern historians to cast Parmenides as Presocratic philosophy's pivotal figure has reinforced the status of mistaken readings by making them fundamental to narratives of the period's historical development. Thus the impulse to find targets for Parmenides among his major Presocratic predecessors has affected how the Milesians, Heraclitus, and even Pythagoras have been interpreted. The representation of later Presocratic thought has been affected even more profoundly by the notion that Empedocles, Anaxagoras, and the early atomists all designed the physical principles of their cosmologies so as to make them conform as far as possible to the canons of Parmenidean being. Mistaken assumptions regarding Parmenides' relation to these thinkers have had their effect in turn on how Parmenides himself has been understood. For some historians have presumed that his poem must be interpreted in a way that bears out the notion that he was aiming to expose the inadequacies of earlier Ionian thinking or that he in one way or another set the agenda for the physical theorizing of the later Presocratic. The presumption that Zeno and Melissus were advocates of a position more or less identical to Parmenides' has likewise had a pernicious influence on representations of his own thought.

It has therefore seemed necessary, to ensure that the modal interpretation of Parmenides developed in Chapters 2 to 4 might receive a fair hearing, to isolate some of the major problems and distortions involved in currently influential accounts of his relation to the other Presocratic philosophers. If these accounts had remained unchallenged, it would have been easy enough to persist, for example, in mistakenly presuming that Empedocles and Anaxagoras meant their elements to be pluralities of Parmenidean beings, or that Zeno's arguments against change and plurality and Melissus' arguments for strict monism were direct extensions of Parmenides' position. As a result, it would have been too easy to suppose that the modal reading of Parmenides must be on the wrong track, given that it does not accord with these presumptions. Thus, after demonstrating in Chapters 2 to 4 how the interpretation developed there enables one to make better sense of Parmenides' principal claims and arguments than on other readings, Chapters 5 to 7 have endeavoured to show why Zeno and Melissus should not be regarded as orthodox

Parmenideans and why neither Anaxagoras' nor Empedocles' element theory should be regarded as driven by any problem or agenda inherited from Parmenides. The focus here has been on the most persistent tenets of Guthrie's narrative, and the main goal has been to defuse potential objections to the modal interpretation of Parmenides rooted in familiar views of his impact on later thinkers.

Fortunately, for this purpose, it has been less necessary to discuss in such detail the problems with the view of Parmenides' relation to the other Presocratics posited by Guthrie's narrative, for other historians of the period have, over the past four decades or so, already drawn attention to its inadequacies. Thus, for instance, it has come to be recognized that the origins of the atomist hypothesis were altogether more likely to have been influenced by the challenging arguments of Zeno and Melissus than by any specific engagement with Parmenides. Likewise, proponents of the logicaldialectical interpretation of Parmenides have recognized that the attempts to find for him specific targets among the earlier Presocratics have been largely unconvincing. One also encounters sporadic expressions of dissatisfaction with the Popperian model of conjecture, challenge, and response that making Parmenides, in one way or another, the period's pivotal figure imposes on Presocratic philosophy. Unfortunately, recognition of the various tensions and inaccuracies in Guthrie's narrative has for the most part led only to its being adjusted, patched, and modified here and there. What is needed instead is the outright abandonment of this artificial construction, for Guthrie's narrative, and its various descendants as well, have confused and thus collapsed the genuine structural correspondence between Parmenides' system and those of the other major Presocratic metaphysicians and cosmologists. While it would be too presumptive to try to present a new narrative for the history of early Greek philosophy, nonetheless an important result of the development and defence of the modal interpretation of Parmenides here is that it enables us to see that there is more basic continuity in Greek philosophy's early development than heretofore recognized. This final chapter, therefore, begins with a retrospective of the view of Parmenides that has emerged in Chapters 2 to 4. It then proceeds to consider his relation to Xenophanes and Empedocles, the figures with whom he perhaps has the most in common, to his Milesian predecessors, and to Heraclitus. The purpose here is to identify the proper structural relation between Parmenides' system and those of the other major Presocratics. The concluding section will then say something about the accident of history largely responsible for the common misperception that Presocratic philosophy is just natural philosophy and about its relevance to the proper understanding of Parmenides.

PARMENIDES IN RETROSPECT

It is scarcely credible that ancient philosophers from Plato onwards should have known nothing of Presocratic philosophy's fundamental arc of development. Of course, it is an important tenet of Guthrie's narrative that the evidence of Plato and Aristotle broadly and reliably supports his picture of that development. However, due consideration of the Platonic and Aristotelian evidence shows this not to be the case, primarily because it shows that Plato and Aristotle both understood Parmenides as a generous monist. It is particularly important, moreover, to have an accurate understanding of the Aristotelian passage that, when casually misread, has seemed to provide the otherwise missing ancient support for Guthrie's narrative. This is, of course, the beginning of *Physics* 1. 8, where Aristotle claims that a problem to which earlier thinkers succumbed requires for its resolution his own analysis regarding the principles of change. Aristotle says that the first philosophers interested in reality and the nature of things went astray and ended up saying that none of the things that are $(\tau \hat{\omega} \nu \ \mathring{o} \nu \tau \omega \nu \ o \mathring{o} \delta \acute{\epsilon} \nu)$ comes to be or perishes and, what is worse, wound up denying that many things are and holding that only what is itself [is] (οὐδ' εἶναι πολλά φασιν $\vec{a}\lambda\lambda\hat{a}$ μόνον $\vec{a}\vec{v}\tau\hat{o}$ το $\vec{o}v$) (Ph. 1. 8. $191^{a}23-33$). It is tempting to suppose that Aristotle is here referring specifically to the Eleatics (even though he does not mention them here by name) and thus that this passage lends Aristotle's authority to the widespread supposition of modern times that Parmenides brought the proper analysis of change to the forefront of the philosophical and scientific agenda by denying that anything whatsoever changes.

In Chapter 3, however, we have seen that Aristotle's description of the thinkers in question as 'the first philosophers to inquire into reality and the nature of the things that are' would appear to encompass all those early thinkers whose views he has been things that are' here, he is not referring to all entities without restriction, or simply to whatever exists. Instead, $\tau \dot{a}$ $\ddot{o}\nu\tau a$ in this context are the various fundamental entities of the Presocratic systems. This philosophical use of $\tau \dot{\alpha}$ $\ddot{o}\nu\tau\alpha$ (or $\tau\dot{o}$ $\ddot{o}\nu$), as picking out what really is, is common enough in Aristotle, particularly in his discussions of earlier thinkers. When Aristotle says, then, in Physics 1. 8 that the first philosophers were driven to the conclusion that 'none of the things that are $(\tau \hat{\omega} \nu \ \mathring{o} \nu \tau \omega \nu \ o \mathring{o} \delta \acute{\epsilon} \nu)$ either comes to be or passes away', the untenable position into which he is claiming most of the Presocratics unfortunately lapsed is that no fundamental entity—no 'substance', he would otherwise say—comes to be or perishes. This claim is in fact consistent with Aristotle's treatment of the Presocratics elsewhere. From Aristotle's perspective, the conceptual poverty of the Presocratic theories led to denial of one of the phenomena he thinks most needs explaining: the generation of substances. This, essentially, is his complaint at the beginning of *Physics* 1. 8. Only when the passage's more important uses of $\tau \dot{a}$ $\ddot{o}\nu\tau a$ are misconstrued as 'what exists', and when the difficulty Aristotle attributes indiscriminately to the early philosophers is consequently mistaken for a specifically Parmenidean or Eleatic difficulty, will Aristotle's remarks here seem to support Guthrie's narrative.

Aristotle's admittedly complex and often perplexing treatment of Parmenides in *Physics* 1. 2–3 has suffered from comparable misunderstanding. This unfortunate state of affairs has only been aggravated by insufficient attention to how Aristotle there distinguishes Parmenides' monism from the cruder, material monism of Melissus. Parmenides, according to Aristotle, recognized only a use of 'being' that indicates what something is in respect of its substance or essence. Consequently,

Aristotle supposes, Parmenides concluded both that everything that is is substance and that everything is one, in the sense that the account of the essence of everything is identical. Since, furthermore, whatever might differentiate What Is cannot do so with respect to its essence but only accidentally, given that no accident of what just is can belong to its essence, and since Parmenides admits only a use of 'being' indicating what something is in respect of its substance or essence, no differentiating accident of what is can be said to 'be'. This train of thought is reflected in Aristotle's reconstruction of Parmenides' reasoning at *Physics* 1. 3. 186^a34–^b4 and likewise in the summary allusion to this passage at Metaphysics 1. 5. 986^b28-31. Aristotle's representation of Parmenides in *Metaphysics* 1. 5 adds the qualification that, being compelled to follow the phenomena, and supposing that what is is one with respect to the account (sc. of its essence) but plural with respect to perception, he posited a duality of principles as the basis of his account of the phenomena (986^b27–34). Aristotle, in short, like Plato before him, makes Parmenides out to be a generous monist; and he likewise follows Plato in adopting an 'aspectual' view of the relation between the two major stages of the goddess's revelation. Recognizing these facts requires more than the superficial attention to isolated passages on which claims regarding Plato and Aristotle's understandings of Parmenides have too often been based: it requires attention to the full range of their representations and uses of Parmenides throughout their works and an effort to reconcile representations and uses across and even within works so that a synoptic understanding emerges.

The philosophical uses of 'to be' by both Plato and Aristotle in certain contexts to indicate what really, fundamentally, or only is-often, though not only, in the participial phrases $\tau \delta$ $\delta \nu$ and $\tau \delta$ $\delta \nu \tau a$ —reflect a use of the verb inaugurated by Parmenides himself. One sees it most crucially in the way he refers, throughout the Way of Conviction, to what is and cannot not be simply as τὸ ἐόν or 'What Is'. Parmenides' goddess so designates what enjoys the mode of being specified in the first way of inquiry for understanding—'that [it] is and that [it] is not not to be' (fr. 2. 3)—just as she refers to what enjoys the mode specified in the second way—'that [it] is not and that [it] must not be' (fr. 2. 5)—as $\tau \delta \mu \dot{\eta} \epsilon \delta \nu$ or 'what is not' (fr. 2. 7a). These verses wherein the goddess specifies the first two ways of inquiry are the most important in Parmenides' poem, in that how one understands them largely determines how one will understand Parmenides' philosophy as a whole. It is thus a major failure of interpretation that the modal clauses in the latter halves of these two verses have been simply neglected or otherwise de-emphasized. Proper attention to Parmenides' modal distinctions makes it possible to understand why Night marks these first two paths as distinct from a third path, subsequently introduced as that along which mortals wander, and thus the relation between the two major accounts that follow—'the trustworthy account and thought | about true reality' (fr. 8. 50b-1a) and her account of 'mortal notions' (fr. 8. 51b) in the poem's cosmology.

Parmenides had sufficient insight to appreciate that there are modes of being fundamentally different from that enjoyed by the mutable entities of our everyday experience. There are in addition the modes we would today call those of necessary being and necessary non-being or impossibility. Correctly recognizing, however, that there can be no apprehension of what necessarily is not, Parmenides focuses his

attention on what necessarily, or only and at all times, is (what it is). Whatever apprehension he might come to have of whatever is in this way, moreover, he could expect to be permanent and reliable. For whatever is in this way is permanently and reliably what it is. His apprehension of what must be would therefore differ significantly from his apprehension of the mutable objects of his previous experience. Prior to receiving the goddess's revelation, Parmenides, like other mortals, had merely 'wandering understanding' (fr. 6. 6), which is to say that his apprehension of things 'wandered', changed, and varied just as the objects of his perceptually based apprehension themselves changed and varied. Night reveals to Parmenides how he might transcend the epistemic haplessness of ordinary mortals by focusing his understanding on what is and cannot not be, or, more simply, what must be, and by thus seeking to attain some apprehension of what it must be like merely in virtue of its mode of being. Once he has come to understand what what must be must be like, his understanding will never change, fail, or be disappointed, and so he may be said to have attained the true or genuine conviction of thought that does not wander.

Parmenides' progress along the Way of Conviction thus involves considering what the mere mode of being of what must be implies regarding its nature or character. The goddess repeatedly reminds him not to lapse into thinking of what must be as somehow not being, for this lapse would amount to straying from the path he must follow in his search for understanding that does not wander. Recognizing the modal distinctions that define Parmenides' three ways of inquiry and, more specifically, taking full account of the specification of what Night describes as the path of conviction that attends upon true reality—namely 'that [it] is and that [it] is not not to be' (fr. 2. 3)—is fundamental to understanding the arguments of the major deduction in fr. 8. If one fails to appreciate that Parmenides is here developing a conception of what what must be must be like, then as one proceeds through the arguments designed to demonstrate 'that What Is is ungenerated and deathless, whole and uniform, and still and perfect' (fr. 8. 3-4), one will find it increasingly difficult to understand how Parmenides could literally mean what he says, and so one will be driven to interpret these attributes metaphorically. This is a principal failing of both the logical-dialectical and meta-principle interpretations. The modal interpretation, by contrast, allows one to understand Parmenides as meaning just

This interpretation also allows one to appreciate the basic validity of Parmenides' main deduction. What must be can certainly neither have come to be nor cease to be. Likewise, what must be cannot change in any respect, for this would involve its not being what it is, when in fact what must be must not only be but must also be what it is at all times. These are the temporal attributes of What Is: eternity and changelessness. Since Parmenides assumes that what must be has not only a temporal but also a spatial existence, he infers, first, that it must be what it is wherever it is and that it must be free from any internal variation. Such variation would involve its being something or having a certain character in some place(s) while being something else or having another character in others, and this possibility is incompatible with the necessity of its being what it is. It must also be free from variation at its extremity. Since the only solid that is uniform at its extremity is a sphere, what must be must be

spherical. These are the spatial attributes of What Is: wholeness, uniformity, and perfection.

It is difficult to see what more Parmenides could have inferred regarding the character of What Is merely from the specification of its modality as a necessary entity. One virtue of the modal interpretation is that it shows the main programme to have a systematic character that suggests Parmenides actually meant it to exhaust the logical possibilities: What Is must both be and be what it is both temporally and spatially. For What Is to be (or exist) across times is for it to be 'ungenerated and deathless'. For it to be what it is across times is for it to be 'still' or unchanging. For What Is to be (or exist) everywhere is for it to be 'whole'. For it to be what it is at every place internally is for it to be 'uniform'; and to be so everywhere at its extremity is for it to be 'perfect' or 'complete'. Taken together, these attributes amount to a set of perfections: everlasting existence, immutability, the internal invariances of wholeness and uniformity, and the invariance at its extremity of being optimally shaped.

Parmenides employs the term $\partial \lambda \eta \theta \epsilon i \eta$ or 'reality' as a designation for What Is because its mode of being makes it superior to other entities and endows it with various perfections they do not possess. However, the fact that other entities are what they are only for a time or only contingently quite plainly does not mean that they are illusory or 'merely' apparent phenomena. They are certainly 'real', if by this it is merely meant that they exist. But they are not what they are in the same way the entity Parmenides calls 'reality' is what it is. Parmenides' is a generous monism. That is to say, while his ontology has room for only one entity that must be (what it is), it also comprises the vast population of entities that are (what they are) only contingently in so far as they are all subject to change. The goddess's criticism of mortal haplessness focuses on their presumption that genuine conviction and understanding that does not wander can be had from directing one's attention to these essentially mutable entities. Mortals' reliance on sensation causes them erroneously to suppose that the cosmos's population is exhausted by such entities and, accordingly, that these things should rightly be the focus of their cognitive attention. The goddess reveals to Parmenides the error of these suppositions by indicating, first, that there are other modes of being and then by leading him through a meditation on what what must be must be like. While understanding the nature of what must be is of primary importance for Parmenides, he recognizes that it is also desirable to understand the nature, origin, and operation of the cosmos's more familiar mutable entities. Because these have their own underlying principles, and because they are governed, it seems, by their own kind of necessity, it is possible to have some understanding of these things as well. As the divine counsellor who advised Zeus on his creation, Night is well-placed to provide Parmenides an account of the cosmos's origins and operations superior to all others.

If we ask what relation Parmenides envisages between what must be and all the things that are but need not be, the answer seems to be that What Is is omnipresent throughout the cosmos while yet maintaining its own identity distinct from the cosmos's mutable population. This should not seem such an odd conception. That What Is is (what it is) at all times, such that it is eternal and unchanging, certainly does not preclude the simultaneous existence of other entities that are (what they are)

only mutably and for only a limited time; nor does What Is being what it is everywhere at its extremity, that is, spherical, as Parmenides also envisages the cosmos as being. Only its attributes of wholeness and uniformity can appear to preclude the existence of other things, but Parmenides' argument for these attributes shows that they amount to ascriptions of qualitative self-identity, indistinguishability, or homogeneity to What Is. A ready analogue for Parmenides' conception is to be found in Anaxagoras, who appears to have envisioned the relation between Mind and the rest of the world in much the same manner. For Mind, he says, 'is now where also all the others are $(\nu \hat{\nu} \nu \vec{\epsilon} \sigma \tau \iota \nu \vec{\nu} \alpha \kappa \alpha \hat{\iota} \tau \hat{\alpha} \vec{\alpha} \lambda \lambda \alpha \pi \vec{\alpha} \nu \tau \alpha)$, in that which surrounds many things and in those which have accreted and in those which have separated out' (fr. 14). Since, as we have seen, Anaxagoras' Mind is a nearer analogue of Parmenides' What Is, and since What Is, as a necessary entity, has the various perfections of everlasting existence, immutability, homogeneity or uniformity, and optimal shape, it is only natural to wonder whether What Is is supposed to be divine. It will be useful to address this question by considering an important feature of Empedocles' relation to Parmenides only touched upon in the previous chapter and by considering the one tenet of Guthrie's narrative that still deserves credence, that Parmenides' monism was influenced by the monotheistic vision of Xenophanes.

XENOPHANES, PARMENIDES, EMPEDOCLES

¹ Most of the major points of correspondence are noted by Solmsen 1975: 135–8. See the odd efforts to explain the connection in Bollack 1965: 169–73, and O'Brien 1969: 242–4, both of which are roundly abused by Barnes 1982a: 313–14; his own commitment to a revised version of Guthrie's narrative leads him to reject the evident connection outright: 'The Sphairos is irrelevant to the Neo-Ionian answer to Parmenides'. Although Kirk *et al.* 1983: 295–6, acknowledge that the Sphere 'is indisputably modeled on Parmenides' verses in [fr. 8. 42–4]', they have little to say about the implications of this connection. La Croce 1980/1 is exceptional in insisting that Empedocles' Sphere under Love, not the roots, is the analogue in his system of Parmenides' Being. Despite this study's various idiosyncrasies, including a tendency towards review of testimonia rather than the direct evidence of the fragments, La Croce's view of the relation between Empedocles and Parmenides' systems is basically correct.

Ecl. 1. 15. 2). These descriptions directly recall the opening of Parmenides' culminating description of the perfection of What Is: 'But since there is a furthest limit, it is perfected | from every side, like the bulk of a well-rounded globe, | from the middle equal every way' (αὐτὰρ ἐπεὶ πεῖρας πύματον, τετελεσμένον ἐστί | πάντοθεν, εὐκύκλου σφαίρης ἐναλίγκιον ὄγκω, | μεσσόθεν ἰσοπαλèς πάντη, Parm. fr. 8. 42– 4a). Parmenides proceeds to argue that What Is is invariant everywhere at its extremity, that is, that it has the perfect shape of a sphere, since it is 'equal to itself from every side' (oî ... $\pi \acute{a} \nu \tau o \theta \epsilon \nu$ îoov, Parm. fr. 8. 49a); and this phrase is closely echoed by Empedocles' 'equal to himself from every side' $(\pi \acute{a} \nu \tau o \theta \epsilon \nu \ \acute{t} \sigma o \varsigma < \acute{\epsilon} o \acute{\iota} >$, Emp. fr. 28. 1a). While one might have thought these parallels so plain as to be indisputable and indicative of a deep connection between What Is and the Sphere under Love, they have tended to be downplayed because they are difficult to accommodate within the confines of conventional narratives. The modal interpretation of Parmenides, however, by making it possible to appreciate the proper structural correspondence between the Empedoclean and Parmenidean systems, makes it possible to acknowledge without excuse or embarrassment Empedocles' deliberate modelling of his vision of the perfectly unified cosmos under Love after Parmenides' climactic description of the perfection of What Is.

We need not suppose, moreover, that the Empedoclean Sphere must replicate as many of the attributes of Parmenidean Being as possible, as adherents to variants of Guthrie's narrative have had to presume the four roots must do if they are to function as the primary locus of some Empedoclean response to Parmenides. For the dynamic of the relation that results from recognition of the proper correspondence is no longer such that Empedocles 'succeeds' only if the Sphere replicates as many attributes as possible of its analogue. Empedocles can borrow as much or as little from Parmenides' account as suits his own purposes. The Sphere under Love certainly appears to have various features that Parmenidean Being does not. It is, for example, an animate entity, capable of taking delight in its solitude, whereas there is no evidence in the fragments that Parmenides thought What Is either conscious or animate, for he would appear to have rightly recognized that these attributes cannot be ascribed to it simply in virtue of its necessary mode of being. (Some have tried to extract such a conclusion from fr. 3, but we have already seen how this involves an unnatural reading of the fragment.) Although What Is is the proper object of unerring understanding, Parmenides does not describe it as itself a thinking entity. Another apparent difference between Parmenides' What Is and the Empedoclean Sphere is that the latter is periodically destroyed and regenerated, whereas What Is is pre-eminently shown to be ungenerated and deathless. Along with this difference goes another. While Parmenides describes What Is as 'motionless' or 'still' $(a\tau\rho\epsilon\mu\dot{\epsilon}_S)$ Parm. fr. 8. 4), Empedocles depicts the Sphere as beginning to shake when Strife begins once again to assert itself: 'for all the limbs of the god [sc. the Sphere] trembled in turn' (Emp. fr. 31). This fragment points to still another difference, namely that Empedocles is prepared to speak of the Sphere as a god or divinity, not surprisingly since it is a living and conscious entity, while Parmenides nowhere calls his necessary being $\theta \epsilon \delta s$ or a 'god'.

Despite these differences, the remaining attributes enumerated in the Way of Conviction's programme—that it is whole $(o\tilde{v}\lambda ov)$, uniform $(\mu o v v o \gamma \epsilon v \epsilon' s)$, and perfect (τελεστόν)—all recur as features of the Empedoclean Sphere. What Parmenides proves to mean by 'perfect' is that What Is is uniformly balanced and bounded like a sphere (Parm. fr. 8. 32-3, 42-9), and Empedocles evidently means the Sphere under Love to have the same kind of perfection. We have already seen, moreover, how Empedocles' reference to the Sphere's condition as without void or excess (Emp. fr. 13) reflects the central portion of Parmenides' argument that What Is is 'whole and uniform' (Parm. fr. 8. 23-4). Empedocles likewise indicates the unified Sphere's lack of internal differentiation when he describes it as 'altogether without limit' (πάμπαν ἀπείρων, Emp. fr. 28. 1b). This phrase proves difficult if one is committed to the roots' continued persistence within the Sphere even at the period of Love's peak influence, for one will then be driven to suppose that it indicates that the Sphere is without an external limit or boundary, which seems absurd given that its spherical shape entails that it is spatially limited. Solmsen is nonetheless willing to saddle Empedocles with this absurdity: 'A globe lacking boundaries is inconceivable for us. Empedocles must have felt differently', though he confesses, after some fishing for an explanation, that $\dot{a}\pi\epsilon i\rho\omega\nu$ has implications and connotations that escape us'.² The sense of $d\pi \epsilon i \rho \omega \nu$ Solmsen's erroneous presumption that the roots must persist in the Sphere in order to be 'Parmenidean beings' prevented him from acknowledging is precisely that of the absence of internal boundary or differentiation found in Parmenides' claims that What Is is not divisible, since it is all alike, and that it is all continuous (Parm. fr. 8. 22, 25). We may freely acknowledge the similarity here, since we are not driven to explain away Empedocles' own indications that the roots merge and fuse completely in the Sphere at the peak of Love's influence to form a genuine unity.

Although we have observed that the Sphairos ultimately fails to be 'unshaken' $(a\tau\rho\epsilon\mu\epsilon's)$, it at least remains stable and unchanging for the duration of the period between its reconstitution and the fresh incursion of Strife (Emp. frs. 27. 4, 28. 2, cf. fr. 27a). Parmenides' description of how What Is 'remaining the same and in the same lies on its own' (Parm. fr. 8. 30) would apply equally well to the Sphere under Love. With all the other major attributes of What Is finding their place in Empedocles' vision of the Sphere, it seems a jarring discrepancy that this divine and perfect entity should be subject to perishing, even if it is eventually reborn. One might well imagine Empedocles' asking whether the unity and perfection the cosmos achieves during Love's peak influence might somehow be preserved during the ensuing cosmogonical phase. One might imagine him, in other words, asking the question the Zeus of the Orphic *Rhapsodies* asks of Night prior to his new creation, 'How will all things be for me one and each apart?' Empedocles does in fact appear to have a

² Solmsen 1975: 135–6.

³ Wright 1981: 190, approaches such a view when she speaks of 'the implication that there are no internal frontiers dividing one element off from another', although how she can say this while simultaneously maintaining the elements' eternity is unclear.

solution to this problem regarding the persistence of the Sphere's divine perfection. We have already observed how in fr. 31 Empedocles refers to the Sphere as a god. Aristotle likewise reports that for Empedocles the Sphere was 'the most blessed god' $(\epsilon \dot{v} \delta a \iota \mu o v \epsilon \sigma \tau a \tau o v \theta \epsilon \delta v, Metaph. 3. 4. 1000^b 3; cf. Simp. in Ph. 1124. 1)$.

Consider now Empedocles' description of the unified Sphere under Love in fr. 29. 1–2 in the context of Hippolytus' quotation:

Regarding what sort of form the cosmos has when ordered by Love, he speaks in this way—'for no twin limbs sprout from its back, | no feet, no swift knees, no reproductive genitals'—but 'a sphere it was', and it is equal to itself.⁴ Some such thing, the most beautiful form of the cosmos, Love produces as one from many. (Emp. fr. 29. 1–2 *ap.* Hippol. *Haer.* 7. 29. 13–14)

Then compare this description of the Sphere under Love with Empedocles' account of a certain 'divine mind', in verses quoted by the great Alexandrian Neoplatonist, Ammonius:

The Acragantine sage rebuked the stories told by the poets about the gods as being of human form, . . . declaring with respect to the divine totality $(\pi\epsilon\rho\hat{\iota}\ \tau o\hat{\iota}\ \theta\epsilon\hat{\iota}ov\ \pi a\nu\tau\delta s)$ generally: 'for it is not adorned in its limbs by a human head, | no twin limbs sprout from its back, | no feet, no swift knees, no shaggy genitals, | but a mind divine $(\phi\rho\hat{\eta}\nu\ \hat{\iota}\epsilon\rho\hat{\eta})$ and beyond the power of description it alone is, | darting throughout the entire cosmos with swift thoughts'. (Emp. fr. 134 ap Ammon. in Int. 249. 1–10)

This divine mind clearly belongs to the cosmogonical period, given the description of it as darting *throughout the cosmos* with its swift thoughts, and yet it is described in terms virtually identical to those in the description of the divine Sphere under Love (fr. 134. 2–3 \approx fr. 29. 1–2). The implication of this repetition seems clear: the 'divine mind' Empedocles describes in fr. 134 is the form in which the divine Sphere under Love persists during the cosmogonical phase. Although Diels sought to segregate fr. 134 from the 'physical poem' because of its overtly 'religious' content, the Byzantine author Joannes Tzetzes quoted the fragment's last two verses as having come 'in the third book of the *Physics*' (*H.* 7. 517–18). Scholars have been more prone to side with Tzetzes than Diels, and they have been ever more prepared to recognize that the connection between the Sphere under Love and the divine mind

⁴ Diels and Kranz print Hippolytus' ἀλλὰ 'σφαῖρος ἔην' καὶ ἶσος ἐστιν αὐτῷ, with 'emendation' of the latter clause, as if it continues the quotation. Wright 1981: 189 (cf. Inwood 1992: 80 n. 7), calls these words 'an unmetrical summary', prompting Barnes 1982b: 194, to defend them in reply as 'evidently a corrupt line of E., not a piece of Hippolytan prose'. Surely Hippolytus is paraphrasing something he found in Empedocles, though not necessarily in a single verse, so that it seems unwise to treat these words as a corrupt quotation. That σφαῖρος ἔην is genuinely Empedoclean nonetheless appears confirmed by Simp. in Ph. 1124. 2.

So Wright 1981: 254: 'The $\phi\rho\eta\nu$ ίερή would be that which now remains of the sphere-god after the shattering of its unity and rest by Strife.' This persistence may explain Aristotle's otherwise puzzling statement that the cosmos is in a similar state (όμοιως ἔχευν) now, under the rule of Strife, as it was previously under the rule of Love (Arist. GC2. 6. 334^45-7). Cf. Solmsen 1965: 132, to the effect that Aristotle's όμοιως ἔχευν 'may rest on the presence of identical lines in the description of the *Sphairos* and of the Cosmos created by Strife', though Solmsen seems not to have been thinking specifically of frs. 29 and 134.

whose thoughts permeate the cosmos must have played an important role in Empedocles' thought.⁶

In so far as the Sphere persists as this divine mind throughout the cosmogonical period, it does not in fact perish due to Strife's incursion but enjoys its own form of eternal existence. It thus resembles Parmenides' What Is in the additional respects of being ungenerated and deathless. This point merely adds confirmation to what is already evident, namely, that the Sphere or divine mind is the Empedoclean analogue of What Is in Parmenides. A similar sentiment, finally, seems to underlie both Empedocles' declaration regarding the divine that 'it is not accessible for us to approach with our eyes | or to grasp with hands, by which the broadest | road of persuasion for humans leads to the mind' (fr. 133 ap. Clem.Al. Strom. 5. 81. 2, where it is said that Empedocles is speaking of $\tau \delta \theta \epsilon \hat{i} o \nu$) and the goddess's injunction to Parmenides in fr. 4. 1 to 'behold things that, while absent, are steadfastly present to thought', which the verses that follow suggest pertained to τὸ ἐόν or What Is. There is also an echo here in Empedocles of the important Parmenidean motif of the ways of inquiry and of his view of mortals as driven to follow the path they do by their exclusive reliance on their senses. If Empedocles is in fact saying that the divine mind is imperceptible to us even as it is 'darting throughout the entire cosmos with swift thoughts', then we have yet another model, in addition to the one found in Anaxagoras fr. 14, for understanding the co-presence of What Is and the differentiated and mutable cosmos in Parmenides.

Empedocles' description of the Sphere or divine mind is also reminiscent of Xenophanes' anti-anthropomorphic vision of the greatest god. Compare Empedocles fr. 134. 1–3 and fr. 29. 1–2, just quoted above, with Xenophanes' criticisms of anthropomorphic conceptions of the divine in frs. 14, 15, and 16 (cf. fr. 1. 21–4, frs. 11 and 12) and, likewise, with his assertion that the greatest god is 'not at all like mortals in its form $(\delta \epsilon \mu as)$ or in its mind $(\nu \delta \eta \mu a)$ ' (fr. 23. 2). Regarding this latter aspect, Xenophanes says more positively that this god 'shakes all things by the thought of its mind $(\nu \delta o \nu \phi \rho \epsilon \nu \ell)$ ' (fr. 25) and that it 'sees as a whole, thinks $(\nu o \epsilon \hat{\iota})$ as a whole, and hears as a whole' (fr. 24). One may compare Empedocles' description of what Ammonius referred to as 'the divine totality' as 'a mind divine $(\phi \rho \dot{\eta} \nu \ \ell \epsilon \rho \dot{\eta})$... darting throughout the entire cosmos with swift thoughts $(\phi \rho o \nu \tau \ell \sigma \iota)$ ' (fr. 134. 4–5). The similarity suggests that Xenophanes may likewise have supposed his greatest god to be present throughout the cosmos as it shakes all things. Be that as it may, Empedocles certainly appears to have been influenced by both Xenophanes' anti-anthropomorphism and his positive conception of divinity.⁷

⁷ Cf. Rathmann 1933: 113 and n. 4; Calogero 1950: 37–8; Darcus 1977: 176–7. Finkelberg 1997: 9–16, argues that Xenophanes also provided a model for the theory of elemental mixture that plays a central role in both Parmenides' and Empedocles' cosmologies.

⁶ See e.g. Kahn 1960*b*: 6 n. 8; Long 1966: 258 n. 1; Zuntz 1971: 216–18; Wright 1981: 254–5. Cf. Bignone 1916: 631–49, *contra* Diels 1898: 399 ff. Kirk *et al.* 1983: 311, comment: 'Empedocles may have concluded *On Nature* with a description of the "holy mind" of a god who has some of the physical properties of the Sphere, yet whose existence is apparently contemporaneous with the cosmos.' Kingsley 1996: 111, pronounces 'doubtless correct' Ammonius' comment (*in Int.* 249. 3–4) that Emp. fr. 134 is a description of Apollo.

There are also striking parallels between the attributes Parmenides ascribes to What Is and those Xenophanes ascribes to the greatest god. With Parmenides' claim that What Is is 'ungenerated and deathless' (fr. 8. 3b) compare how Xenophanes criticizes mortals for believing the gods are born (fr. 14. 1) and is reported by Aristotle to have considered those who say the gods are born just as impious as those who say they die (Arist. Rh. 2. 23. $1399^{b}5-9$). Likewise, Parmenides' conception of What Is as 'whole $(o\delta \lambda ov)$ and uniform' (fr. 8. 4a) is paralleled in the imputation of uniformity in Xenophanes' declaration that 'whole $(o\delta \lambda os)$ it [sc. god] sees, whole it thinks, and whole it hears' (fr. 24). Parmenides' characterization of What Is at the point when, in his argument for its being 'still' or unchanging, he says that 'remaining the same, in the same place, and on its own it rests, | and thus steadfast right there it remains' (fr. 8. 29–30a) closely parallels Xenophanes' statement, regarding his greatest god, that 'always in the same place it remains moving not at all' (fr. 26. 1).

Any impulse these parallels may bring about towards viewing What Is in Parmenides as divine must be tempered by the fact that there are other, equally striking differences between What Is and Xenophanes' greatest god. One of the most significant differences is the absence of any overt suggestion that What Is in any way thinks or perceives, as Xenophanes' god clearly is supposed to do. Parmenides, again, conceives of What Is as having just those attributes, specified in the Way of Conviction's main programme, that be ascribed to it simply in virtue of its necessary mode of being. Furthermore, Parmenides significantly assigns the traditional governing and directive capacity, which Xenophanes ascribes to his god in saying that it shakes all things with its thought (fr. 25), not to What Is but to the divinity of fr. 12 that Aëtius suggests is to be identified as the Necessity we see operative elsewhere in fr. 8. 30b-1 and fr. 10. 5-7. Parmenides even employs one of the standard Greek formulae for describing the omnipotence of the divine when he says that she 'governs all things' $(\pi \acute{a} \nu \tau \alpha \kappa \nu \beta \epsilon \rho \nu \hat{a})$, fr. 12. 3b), making it at least plausible to suppose that this same divinity is the one said in fr. 13 to have 'devised ($\mu\eta\tau i\sigma\alpha\tau o$) Eros the very first of all the gods'. What Is itself has the power neither to direct nor to be aware of all things that Xenophanes attributes to his greatest god. Nothing indicates that What Is is even animate or conscious. There consequently appears to be little point in thinking an entity to be a god that so totally lacks these traditional features of the divine.

What, then, are we to make of the fact that the attributes of What Is are so reminiscent of Xenophanes' greatest god? On the one hand, given the apparent echo

⁸ That Parmenides' monism was influenced by the monotheistic vision of Xenophanes was, recall, T5 in Guthrie's narrative. Although endorsement of this tenet was already on the wane when Guthrie was writing, at one time the persistent association of Parmenides and Xenophanes in antiquity (beginning with Pl. *Sph.* 242 D 4–7 and Arist. *Metaph.* 1. 5. 986^b21–2) was commonly accepted as an accurate reflection of Xenophanes' historical impact on Parmenides. Reflecting the common view of his time, Zeller had held that Xenophanes was the greatest influence upon Parmenides' world view. Subsequently, however, Karl Reinhardt would hypothesize that Xenophanes' period of intellectual activity post-dated Parmenides', on the grounds that the depiction of Xenophanes in the pseudo-Aristotelian *On Melissus, Xenophanes, and Gorgias* should

of Xenophanes fr. 26. 1 in Parmenides fr. 8. 29-30a and the other parallels noted above, it would seem perverse not to admit that Xenophanes influenced Parmenides in some way. On the other hand, however, Parmenides' vision of What Is seems to be of an altogether different order than Xenophanes' conception of the greatest god, primarily because Xenophanes' conception maintains identifiable connections to the religious tradition's representations of the heavenly ruler that Parmenides' conception does not. While Xenophanes is sharply critical of the anthropomorphism of the Homeric and Hesiodic gods, significant features of his god nevertheless continue to have their counterparts in Homer and Hesiod. The way Xenophanes' god effortlessly shakes all things (fr. 25) recalls not only Hesiod's description of Zeus' effortless action from his heavenly abode (Op. 5–8) but also Homer's description of how Zeus makes Olympus tremble simply by nodding his head (Il. 1. 528-30). In the end, Xenophanes seems to have arrived at his conception of the greatest god by refining traditional representations of the heavenly ruler in accordance with certain principles regarding what befits the greatest god. 'It is good always to have regard for the gods', he says to justify his dismissal of tales of battles fought by the gods as the fictions of earlier generations (fr. 1. 21–4). This principle of true piety may likewise be seen as grounding his criticism of Homer and Hesiod for their imputation to the gods of acts humans normally consider wrong (frs. 11, 12). Xenophanes likewise bases his claim that god is unmoving on a consideration regarding what befits god, saying that 'it is not befitting' $(o\dot{v}\delta\dot{\epsilon}\dots\dot{\epsilon}\pi\iota\pi\rho\dot{\epsilon}\pi\epsilon\iota)$ for him to go to different places (fr. 26).

The most momentous application of his rationalizing piety occurs in Xenophanes' claim, reported by Aristotle, that those who say the gods were born are just as impious as those who say they die (Arist. Rh. 2. 23. 1399^b5-9, cf. fr. 14. 1). For the criticism of the internal contradiction in the Homeric and Hesiodic conception of the gods as suffering birth but not death points the way to the modality of necessary being that becomes the central focus of Parmenides' meditation. Indeed, this background may explain why Parmenides devotes most of the Way of Conviction's first stage to arguing that what must be must be ungenerated and does so little by way of arguing that it is deathless. Whatever inspiration Parmenides may have derived from Xenophanes, the method by which he developed his conception is altogether different and new. Whereas Xenophanes takes traditional religious representations of the gods of the heavens as material to be rationally refined and transformed in accordance with principles of true piety, a method which allows those features of traditional conceptions to persist that do not contradict these principles, Parmenides' inquiry is altogether more abstract and more rigorously deductive. As we have seen, he focuses his attention on what is and cannot not be

be accepted as historically accurate. While Reinhardt's chronological hypothesis was rightly rejected, the conclusion he drew from it, that Parmenides was the true founder of the 'Eleatic school' of Presocratic philosophy, would survive. For more details on this curious turn of events in the history of Presocratic scholarship, see Palmer 1999a: 186–9. Although the dismissal of the idea of Xenophanean influence on Parmenides has become fairly standard, it is not universal. Malcolm Schofield, for instance, allows that there are more than merely verbal echoes of Xenophanes' theology and epistemology in Parmenides (Kirk et al. 1983: 240–1, revising Raven's dismissal in Kirk and Raven 1957: 265).

and proceeds to consider what can be inferred regarding the character of such an entity simply from its mode of being. He develops an exhaustive conception of what what must be must be like by systematically pursuing the fundamental idea that what must be both must be (or exist), and must be what it is, both temporally and spatially. Whatever other attributes it might have that cannot be understood to belong to it in one of these ways do not enter into Parmenides' conception of What Is. Thus it has none of the features of the religious tradition's heavenly gods that persist as attributes of Xenophanes' greatest god, despite resembling it in other respects. If Xenophanes can be seen as a founder of rational theology, then Parmenides' distinction among the principal modes of being, and his derivation of the attributes that must belong to what must be simply as such, qualify him to be seen as the founder of metaphysics or ontology as a domain of inquiry distinct from theology.

If What Is is not a god, however, neither does it have anything to do with the material principles of the Presocratic cosmologies. The presumption that it does has involved, among other errors, failing to recognize the true correspondence between the systems of Parmenides and the other Presocratics and thus disastrously misunderstanding Parmenides' place in Presocratic philosophy. Although Parmenides is more purely metaphysician than theologian, one cannot ignore the fact that What Is, in his system, is the analogue of the greatest god, the Sphere under Love/the divine mind, and Mind in the systems, respectively, of Xenophanes, Empedocles, and Anaxagoras. Likewise, light and night, the physical principles of Parmenides' cosmology, have their proper analogues in Xenophanes' earth and water, Empedocles' four elemental roots, and Anaxagoras' substantial opposites.

Unfortunately, the interpretation of Parmenides as a strict monist at the heart of Guthrie's narrative, the logical-dialectical reading of Owen and his pupils, and the meta-principle reading of Mourelatos and his followers all fail to attend properly to the modal distinctions that are the cornerstone of Parmenides' ontology. This fundamental failure effectively reduces Parmenides' trifold distinction between what is and cannot not be, what is but need not be, and what is not and must not be to some form of a simple distinction between what is and what is not. As a consequence, both the basic and modified forms of Guthrie's narrative collapse the proper structural correspondence between the Parmenidean and other major Presocratic systems. All these interpretations regard the first part of Parmenides' poem as somehow critical to the development of Greek physical theory, whether as a specific reductio of Milesian monism, as a more general reductio of ordinary belief in change and plurality, or as a programmatic account of what the fundamental entities of an adequate physical theory would have to be like. This involves taking What Is in Parmenides as either a material principle manqué or a meta-principle, while all but disregarding altogether the nearer replication of its attributes in Xenophanes' greatest god, Empedocles' Sphere under Love, and Anaxagoras' Mind.

It is worth noting that while modern historians have tended to portray Empedocles as reacting against Parmenides, the ancient historiographical tradition tended to represent him as Parmenides' devotee or disciple. This is a significant point, for while we can expect the ancient doxographers and commentators to get many things

wrong, it strains credulity to suppose that they all failed to notice the crucial 'fact' that Empedocles' cosmology was developed in reaction against, or response to, a Parmenidean challenge. Instead we find, to begin with, that Theophrastus is reported to have described Empedocles as Parmenides' 'admirer' $(\zeta \eta \lambda \omega \tau \dot{\eta} \nu)$, 'imitator' (μιμητήν), and 'associate' (πλησιαστής) (Thphr. ap. D.L. 8. 55 and Simp. in Ph. 25. 19-21). Diogenes also records the opinion that Empedocles' description of a man of outstanding knowledge in fr. 129 refers, not to Pythagoras as most suppose, but to Parmenides (D.L. 8. 54). Diogenes' record of this competing view is important for its indication that some in antiquity (Diogenes does not say who) thought Empedocles indebted enough to Parmenides to praise him in this exalted manner. Other testimonia identify Empedocles as Parmenides' actual pupil or successor, a role for which he competes with Zeno in the later tradition. Thus we find both Empedocles and Zeno described as Parmenides' 'favourite' (παιδικά): in Zeno's case, the description goes back to Plato, Parmenides 127 B 5-6, and thus not surprisingly becomes a commonplace in the later tradition (Ath. 11. 113. 505 F, D.L. 9. 25, Proc. in Prm. 1. 684. 20 and 1. 700. 21). That Porphyry's History of Philosophy should have described Empedocles with this term is more unexpected (Porph. fr. 208). The Suda eventually comes to identify both Empedocles and Zeno as Parmenides' διάδοχοι or 'successors' (Suda s.v. 'Parmenides'). Diogenes Laertius also reports that there was some conflict between Theophrastus and the Peripatetic biographer, Hermippus of Smyrna, as to whether Empedocles was an admirer of Parmenides or Xenophanes (D.L. 8. 55–6).

None of the ancients, however, suggests that Empedocles was a rebellious pupil who rejected and sought to overcome the teachings of Parmenides. We have already seen the fundamental error in the appeals of modern historians to the opening of Aristotle's *Physics* 1. 8 as support for the narrative framework wherein he has been cast in this role. Now we may say something about the other bit of early evidence that might be taken to indicate an Empedoclean reaction against Parmenides, the ontological 'doxography' in Plato's Sophist. There the Eleatic Visitor presents a schematic overview of earlier efforts to specify the number and nature of the is' might likewise be a good translation of $\tau \dot{a}$ $\ddot{o}\nu\tau a$ here, provided it is not taken to imply the non-existence of anything else. There follows a division of views into three types: (i) that there are many such entities, or more precisely, according to the representative(s) of this view, three such entities; (ii) that there is just one such entity, this being the view of the Eleatic 'tribe', which obviously includes Parmenides even though Xenophanes is the only named representative; and (iii) that 'what really is is both many and one' (τὸ ον πολλά τε καὶ εν ἐστιν, Sph. 242 E 1-2). The Visitor describes this third position as a combination of the first two types and ascribes it to 'certain Ionian and Sicilian Muses' (242 D 6-7), that is—as becomes evident in the ensuing elaboration of their specific versions of this position—Heraclitus and Empedocles.

The Visitor describes the Empedoclean view of what really is as follows: 'at one time everything $(\tau \hat{o} \pi \hat{a} \nu)$ is one and loving under Aphrodite, and at another time

everything is many and hostile to itself because of a certain Strife' (242 E 5–243 A 2).9 The Visitor in this way represents Empedocles' unified cosmos under the rule of Love as paralleling the Eleatic tribe's view that 'what is called "all things" [sc. the cosmos] is only one thing' (242 D 5-6). Where Empedocles is represented as departing from Parmenides and the Eleatics is in allowing that what is a single entity when ruled by Love is many things when Strife is present. All this is very different from the conventional modern story's representation of the Empedoclean elements as a plurality of would-be Parmenidean beings. It is common practice not to take this Platonic passage very seriously and to dismiss it as a bit of tongue-in-cheek good fun. It is understandable that it should be dismissed in this way by those who are baffled by its contents, as anyone will be who supposes that Parmenides was an otherwise than generous monist and that Empedocles was one of a group of 'post-Parmenidean pluralists' who responded to this monism by positing as basic a plurality of quasi-Parmenidean elements. For what sense can then be made of the association of Parmenides with the monotheistic position of Xenophanes? Or of the view that the Empedoclean Sphere under Love is the true analogue of Eleatic Being? The lines of affiliation drawn in this brief Platonic passage are in fact, however, more historically accurate than anything in the conventional narrative's representation of the relations between Xenophanes, Parmenides, and Empedocles. Plato understood enough to underscore Parmenides' connection with Xenophanes, given that both Parmenides' necessary and perfect being and Xenophanes' greatest god are each in its own way principles of unity in the cosmos, and he was perceptive enough to appreciate that Empedocles' unified cosmos under the rule of Love is the analogue of both these entities.

⁹ O'Brien 1969: 93–4, briefly mentions some of the ways in which this passage has been misunderstood before correctly noting that 'Plato is thinking of Empedocles' cycle from the most general point of view. He therefore naturally reproduces the *major* alternation between being one and being many.'

For the sense of this phrase, see Palmer 1999a: 186.

What follows briefly reprises points previously made ibid. 193–7.

furthest limit, it is perfected | from every side, like the bulk of a well-rounded globe, | from the middle equal every way.' Since certain features of Xenophanes' greatest god and Empedocles' Sphere under Love have their analogue in the attributes of Parmenides' Being, a number of these attributes of the intelligible living creature and of the visible cosmos modelled upon it have Xenophanean and Empedoclean resonances as well.

There are, however, crucial attributes of Plato's animate cosmos that recall Xenophanes and Empedocles but that have no analogue in Parmenides. For example, Timaeus argues that the demiurge created the cosmic living creature, first, with neither eyes nor hearing, for there was nothing visible or audible outside it; second, with no organs of respiration or digestion, for there was no air or nourishment outside it; and, third, with neither hands nor feet, for the rotating motion proper to its spherical shape and to the activity of its intellect $(vo\hat{v}_s)$ did not require them (Pl. Ti. 33 B 7–34 A 7). This third point evidently recalls Empedocles fr. 29. 1–2: 'for no twin limbs sprout from its back, | no feet, no swift knees, no reproductive genitals'. Plato would also have recognized how Empedocles had drawn upon Parmenides himself for the image of the sphere as well as upon Xenophanes' criticisms of anthropomorphic views of the divine. Timaeus' first and second points are more clearly Xenophanean. In Diogenes Laertius' report that Xenophanes' God 'sees as a whole, hears as a whole, and does not breathe' (D.L. 9. 19), the first two phrases clearly reflect Xenophanes' description of the greatest god in fr. 24: 'whole it sees, whole it thinks, and whole it hears'. Timaeus' denial that the cosmic living creature has specific organs of perception also seems to be an adaptation of this fragment. The most important Xenophanean aspect of the cosmic living creature is its animate and intelligent nature: Timaeus begins his account of the cosmos by declaring that it must be considered a living creature provided with both soul and intelligence (Pl. Ti. 30 B 7–8).

It is also true, of course, that Plato's descriptions of the Forms sometimes contain striking echoes of Parmenides' description of What Is, most notably in Diotima's account of the Form of Beauty at *Symposium* 210 E–211 B and in Socrates' description of the Equal itself at *Phaedo* 78 D. ¹² For advocates of the meta-principle reading of Parmenides, these echoes will likely appear to indicate that Plato understood Parmenides as having specified in a general manner what it is to be *F* in some strong sense or what it is to be a genuine entity. However, the fact that Plato's Forms resemble Parmenides' What Is in being eternal, unchanging, and, in a way, homogeneous and uniform, needs to be considered within the fuller context of Plato's engagement with Parmenides. The unmistakable echoes of Parmenides in the arguments with the sight-lovers towards the end of *Republic* 5—where Plato seeks not only to establish the fundamental ontological distinction between what completely or absolutely is, what both is and is not, and what is not in any way, but also to associate knowledge, *doxa*, and complete non-apprehension, respectively, with each of these modes of being—suggest that Plato saw Parmenides as the first to have

¹² For details of this comparison, ibid. 4–5.

distinguished, in a sufficiently general way, the fundamental modes of being and to have distinguished epistemic states accordingly. The Forms as such, however, do not figure in these arguments. Plato is taking a further step in assigning Forms to the rank of what completely is. The Forms prove, moreover, not to be the closest Platonic analogue to What Is in Parmenides. While they are ungenerated, imperishable, and unchanging, since they are abstract or immaterial entities, they cannot be whole and uniform in anything but a metaphorical way. In Parmenides, however, wholeness and uniformity are properly spatial attributes of What Is and are, as such, to be understood literally rather than metaphorically.

In the end, the spherical cosmos of the *Timaeus* modelled upon the intelligible living creature, and not the Forms, is the nearest analogue in Plato of What Is in Parmenides. This correspondence is perhaps most manifest in the echoes of Parmenides' culminating description of What Is in the midst of Timaeus' argument that the cosmos would be best considered spherical since it is appropriate for it to have the shape that encompasses all others. The demiurge, Timaeus says, 'fashioned it rounded and spherical, extending equally from the middle in every direction to the extremities, of all shapes the most perfect and the most similar to itself' (Pl. Ti. 33 B 4-6). Plato would seem here to be again adapting Parmenides' description of What Is in fr. 8. 42b-4a: 'it is perfected | from every side, like the bulk of a well-rounded globe, from the middle equal every way'. Proclus in fact quoted Parmenides fr. 8. 43-4 in his commentary on this stretch of the Timaeus (Procl. in Ti. 1. 33 B 4-6, i. 69. 20-3), where he also noted the similarity to Empedocles' Sphere under Love. Diels, moving in the other direction, quoted the Platonic passage as providing the best clarification of Parmenides' image of the sphere, and he likewise suggested Plato's simultaneous borrowing from Xenophanes and Empedocles. 13

What accounts, then, for the similarities between Xenophanes' greatest god, Parmenides' necessary and perfect being, and Empedocles' Sphere under Love/ divine mind? Given the three thinkers' periods of activity and geographic proximity, the obvious answer is that Parmenides' conception was actually influenced by Xenophanes' and Empedocles', in turn, by Parmenides'. While there is no good reason to doubt that this was the case, it is again important to recognize that the broad similarities between their conceptions, and their equally important differences, almost certainly reflect individual innovation within a shared tradition. Such a hypothesis perhaps best enables one to explain the similarities between Parmenides' account of What Is and Anaxagoras' conception of Mind in its cosmic manifestation. Here the correspondences are less likely, though still possibly, to be understood as the result of Parmenides' direct influence on Anaxagoras.

Whatever specific relationships of actual influence we are prepared to countenance, the first important thing is to recognize the true structural alignment between Parmenides' system and those of the other Presocratics. Parmenides did not interrupt, divide, or spark any sort of paradigm shift in the early Greek metaphysical and

¹³ Diels 1897: 88 ad Parm. fr. 8. 43; cf. 80 ad fr. 8. 22.

cosmological speculation. He instead belongs fairly solidly within that tradition. While he was certainly an innovative and visionary thinker, his innovations need to be understood as operating within a tradition that maintains a good deal more continuity than the Popperian model of conjectures and refutations would have one believe. For just as Parmenides' metaphysical deduction has nothing to do with the physical principles of either his predecessors' or successors' systems, neither were early Greek philosophers so exclusively concerned with natural philosophy. By now, this should be abundantly clear in the cases of Empedocles and Anaxagoras, not to mention Xenophanes. But what I have spoken of as the true structural alignment between their systems and Parmenides' can be extended to other early Greek philosophers, particularly the Milesians and Heraclitus.

PARMENIDES AND THE MILESIANS

In the course of Chapter 1's reconsideration of the outmoded representations of the Milesians as material monists, we have already seen that Anaximenes is likely to have conceived of aer as the original generative principle rather than as the persisting substrate of all change. We also noted in passing that if Thales said water is the archē of all things, or something to that effect, he is much more likely to have meant that things have their source or origin in water than that water somehow persists in things as their underlying nature or substance. Aristotle's statement, in discussing the antecedents of his material principle, that 'Thales, the originator of this kind of philosophy, says it is water, and therefore he declared that the earth is on water' (Metaph. 1. 3. 983b20-1, cf. Cael. 2. 13. 294a28-b1) becomes the source of the official view among the ancient doxographers, 14 and not a few modern historians, that Thales identified water as the archē of all things. However, Aristotle's ensuing speculations about what may have led Thales to his view—perhaps because he observed that things are nurtured by moisture, that warmth and life come from moisture, or that the seeds of all things are naturally moist (983^b22–7)—suggest that Aristotle thinks he meant by this only that water is the source of things, not their persisting substrate such that all the things that have come from water still, in some sense, are water. That the reasons here are Aristotle's reasons, not Thales', furnishes the crucial insight into how Aristotle himself construed the claim, likely encountered in his source, that Thales thought water the archē of all things. Every element in Aristotle's reconstruction of the basis of Thales' view suggests a simple conception of water as merely the source of things.

Likewise, in Anaximander's system, $\tau \delta \, \ddot{\alpha} \pi \epsilon \iota \rho o \nu$ or 'the Boundless' is more likely to have functioned merely as the source or origin of fundamental 'opposites' that thenceforward function as the primary constituents of things. Just as one finds the later tradition repeating the simple dictum that Thales made water the material principle or element, one also finds it said that Anaximander, Thales' 'pupil', made

 $^{^{14}}$ Cf. D.L. 1. 27, Aët. *Plac.* 1. 3. 1 ([Plu.] *Plac.* 1. 3. 875 d 9−F 3 ≈ Stob. *Ecl.* 1. 10. 12).

it, instead, $\tau \delta$ $a\pi \epsilon \iota \rho o\nu$ or 'the Boundless'. Thus Simplicius, following Theophrastus in commenting on Aristotle, *Physics* 1. 2. 184^b15–25, locates Anaximander in Aristotle's schema as follows:

Of those holding that it [sc. the archē] is single and changing and unlimited, Anaximander of Miletus, son of Praxiades, the successor and pupil of Thales, said that the principle and element of things is the Boundless ($\partial_{\rho}\chi\dot{\eta}\nu$ $\tau\epsilon$ $\kappa\alpha\dot{\nu}$ $\sigma\tauo\iota\chi\epsilon\hat{\nu}o\nu$ $\epsilon\dot{\nu}\rho\eta\kappa\epsilon$ $\tau\hat{\nu}\nu$ $\delta\dot{\nu}\tau\omega\nu$ $\tau\hat{\nu}$ $\delta\dot{\nu}\tau\omega\nu$ $\delta\dot{\nu}\tau$

Although Simplicius (or Theophrastus) here aims to find a place for Anaximander in the classificatory schema that structures Aristotle's inquiry in *Physics* 1 regarding earlier views on the principles of natural entities, Aristotle himself makes no place for Anaximander among those who held the principle to be single and changing, as he restricts the options to its being air or water (Arist. *Ph.* 1. 2. 184^b16–18). Even the latter part of this passage from Simplicius, moreover, suggests that the Boundless functioned in Anaximander's system merely as the source or origin of the things that thenceforward function as the primary constituents of things. Note especially how its last sentence, which preserves the lone verbatim fragment of Anaximander's prose treatise, refers to a *plurality* of entities, not to the Boundless itself, as that from which things are generated and into which they are destroyed via processes that Anaximander himself describes in terms of these entities making recompense to one another.

Other sources allow us to identify this plurality of things as the fundamental 'opposites' generated from the Boundless, even though exactly how this was supposed to occur remains obscure. ¹⁷ Particularly important for our purposes is the

¹⁵ On the question of what Anaximander meant by τὸ ἄπειρον, see Kahn 1960*a*: 231–9; Gottschalk 1965: 51–2; Dancy 1989: 163–72; Graham 2006: 29–31.

¹⁶ Cf. Cic. Acad. 2. 118: is enim infinitatem naturae dixit esse, e qua omnia gignerentur. Aët. 1. 3. 3

¹⁶ Cf. Cic. Acad. 2. 118: is enim infinitatem naturae dixit esse, e qua omnia gignerentur. Aët. 1. 3. 3 ([Plu.] Plac. 1. 3. 875 $\,$ $\,$ $\,$ $\,$ $\,$ Fcb. Ecl. 1. 10. 12): Ἀναξίμανδρος . . . φηαι τῶν ὄνταν τὴν ἀρχὴν εἶναι τὸ ἄπειρον· ἐκ γὰρ τούτου πάντα γίνεσθαι καὶ εἶς τοῦτο πάντα φθείρεσθαι. D.L. 2. 1: Ἀναξίμανδρος . . . ἔφασκεν ἀρχὴν καὶ στοιχεῖον τὸ ἄπειρον, οὐ διορίζων ἀέρα ἢ ὕδωρ ἢ ἄλλο τι. Hippol. Haer. 1. 6. 1–2: Ἀναξίμανδρος . . . ἀρχὴν ἔφη τῶν ὄντων φύσιν τινὰ τοῦ ἀπείρου, ἐξ ἦς γίνεσθαι τοὺς οὐρανοὺς καὶ τὸν ἐν αὐτοῖς κόσμον. . . . οὖτος μὲν ἀρχὴν καὶ στοιχεῖον εἴρηκε τῶν ὄντων τὸ ἄπειρον, πρῶτος τοὕνομα καλέσας τῆς ἀρχῆς.

The beginning of a testimonium at [Plu.] Strom. 2 provides the best evidence for what was involved: 'He [sc. Anaximander] says that something from the eternal productive of both hot and cold (τι ἐκ τοῦ ἀίδιου γόνιμον θερμοῦ τε καὶ ψυχροῦ) was separated out at the generation of this cosmos, and that from this a sphere of flame grew around the air around the earth, like bark around a tree, etc.' This obscure passage suggests that the 'opposites' were not immediately generated from the Boundless but instead from some kind of intermediate generative principle or seed. See further West 1971: 83–5 and 95–6; Kirk et al. 1983: 129–33. Gottschalk 1965: 47, emphasizes how this passage suggests that Anaximander understood cosmogony as an essentially organic process, like the growth of a plant or embryo, and the Boundless itself as capable of producing something resembling seed.

following passage from *Physics* 1. 4, where Aristotle begins to discuss the views of the natural philosophers:

The natural philosophers (oi $\phi v \sigma u \kappa oi$) speak of things in two ways. Some, on the one hand, having made the underlying body one, whether one of the three or something else that is more dense than fire yet lighter than air, ¹⁸ generate other things via condensation and rarefaction and thereby produce a plurality.... Some, on the other hand, hold that from the One oppositions present within it are separated out, just as Anaximander says, and those who say that it is one and many, like Empedocles and Anaxagoras; for they also separate out the other things from the mixture. (*Ph.* 1. 4. $187^a 12-16$, 20-3)¹⁹

Unlike Simplicius (or Theophrastus), Aristotle does not classify Anaximander as a 'material monist', that is, as one who held that some single material stuff is the persisting substrate of all other things. Since the later tradition disagrees with Aristotle on this point, one should treat with due suspicion testimonia such as that a few lines later in Simplicius to the effect that Anaximander and Anaximenes both held that the underlying nature of things $(\tau \dot{\eta} \nu \ \dot{\nu} \pi o \kappa \epsilon \iota \mu \dot{\epsilon} \nu \eta \nu \ \dot{\phi} \sigma \iota \nu)$ is single and unlimited (Simp. in Ph. 24. 26–7). As already noted, the classification of views at the beginning of Physics 1. 2 has no place for Anaximander's Boundless, even though Simplicius (or Theophrastus) tried to create one. The passage just quoted confirms that Aristotle no more viewed Anaximander as a 'material monist' than he did Empedocles or Anaxagoras. Moreover, that what Aristotle here refers to as 'oppositions' separated out from 'the One' (sc. the Boundless) functioned in Anaximander's

¹⁸ This is one of the numerous places Aristotle mentions an unattributed theory identifying the material principle as something intermediate between fire and air, the others being *Metaph.* 1. 7. 988°30–1, *GC* 2. 1. 328°53–5, and 2. 5. 332°20–2. The last of these passages mentions the theory alongside another, likewise unattributed theory, according to which the material principle is an intermediate of air and water, a view Aristotle also mentions at *Ph.* 3. 4. 203°18, 3. 5. 205°27, *Cael.* 3. 5. 303°11–12, and *Metaph.* 1. 7. 989°14–15. Although since antiquity (cf. Simp. *in Ph.* 149. 9 ff.) there has been an ongoing dispute as to whether these passages are referring to Anaximander's Boundless, that this cannot be the case is shown by Aristotle's explicitly setting Anaximander's theory in opposition to the first type of theory in *Physics* 1. 4 and also by the simple fact that an intermediate of air and fire, or water and air, would have a specific character, whereas Aristotle explicitly and repeatedly characterizes the Boundless as having no specific character of its own. Modern attempts such as that by Whitby 1982: 227 (echoing Kahn 1960*a*: 44 ff.), to identify these passages as references to Anaximander repeat the error of some of the ancient commentators in trying to insert Anaximander into Aristotle's classifications.

The apparent contrast between this passage's grouping and that at Arist. GC 1. 1. 314*11 ff., where Anaximander does not figure in Aristotle's division of the ancients into monist and pluralist camps, might suggest that Aristotle came to regard Anaximander as ultimately more of a 'monist' than Empedocles and Anaxagoras. A more reasonable conclusion would be that Aristotle continued to appreciate the difficulties in simply classifying Anaximander as either a monist or pluralist. Note that while Aristotle says in GC 1. 1 that those maintaining that the 'monists' who hold that everything is generated from some single thing must conceive of generation as essentially alteration, Theophrastus appears to have made a point of noting that this is not in fact the case with Anaximander: 'He does not produce generation through alteration of the element but through the opposites being separated out by means of the external motion' (Thophr. 40 Simp. in Ph. 24, 23, 5)

means of the eternal motion' (Thphr. *ap*. Simp. *in Ph*. 24. 23–5).

²⁰ Aristotle likewise associates Anaximander's 'One' (*sc.* the Boundless) with the primeval mixtures of Empedocles and Anaxagoras at *Metaph.* 12. 2. 1069^b20–4 to illustrate his point that all things come to be or change from being potentially to being actually. Cherniss 1935: 366, claimed that Aristotle here identifies Anaximander's Boundless with his own prime matter, but

system as the primary constituents of the developed cosmos's population seems confirmed by Simplicius' (or Theophrastus') quotation of Anaximander's own words in the previous passage.²¹ It is now, in fact, widely and rightly accepted that Anaximander theorized the generation and destruction of natural things in terms of the interaction of some sort of 'opposites', even if these were, as Uvo Hölscher proposed, stuffs such as flame and mist rather than 'the hot', 'the cold', and so on as such.²² Thus Anaximander's Boundless should not be thought of as the persisting material substrate of other things. It seems far more likely to have been, like Thales' water, their original source or that from which they ultimately descend.²³ There is no reliable evidence that Anaximander thought the cosmos's present population is made up of the Boundless, and his apparent view of the generation of 'opposites' or basic stuffs out of the Boundless as a kind of 'birth' tells against any such conception.²⁴

Anaximander's Boundless, moreover, was no inert source of things but, it appears, an active divinity capable somehow of governing the cosmos's generation and subsequent operation. Aristotle, again, implies as much in a key passage from *Physics* 3. 4 that not only confirms that he understood Anaximander's Boundless to be the source, though not the substrate, of all other things but also emphasizes in unmistakable terms its essential divinity:

... of this [sc. τ ò ἄπειρον] there is no origin (ἀρχή), but it is thought to be the origin of other things and to embrace all things and to govern all things (καὶ περιέχειν ἄπαντα καὶ πάντα κυβερναν), as those say who do not posit other [moving] causes besides τ ò ἄπειρον, such as Mind or Love. This, indeed, is the divine; for it is deathless and unperishing (ἀθάνατον ... καὶ ἀνώλεθρον), just as Anaximander says and the majority of the natural philosophers. (Ph. 3. 4. 203 $^{\rm h}$ 10–15, cf. 3. 6. 207 $^{\rm a}$ 18–20, 3. 7. 208 $^{\rm a}$ 2–4)

Gottschalk 1965: 37–8, correctly notes that nothing so strong follows from Aristotle's tentative conclusions regarding the implications of Anaximander's view here.

²¹ Cf. Simplicius' ensuing comment that Anaximander 'does not produce generation via alteration of the element but via the opposites separated out through the motion of the eternal' (in Ph. 24. 23–5). See also Arist. Ph. 3. 5. 204^{4} 24–9, where, though not explicitly named, Anaximander is in view as holding that $\tau \hat{o}$ $\mathring{a}\pi\epsilon\iota\rho\rho\nu$ is something other than the opposites and is that from which these are produced.

²² Hölscher 1953: 292–3. For the more general opinion, see e.g. Heidel 1912: 233–4; Zeller 1919: 291–3; Vlastos 1947: 168–73; Kirk 1955: 33–5; Kahn 1960*a*: ch. 3 *passim*; Lloyd 1964: 95–100; Kirk *et al.* 1983: 119–20. Freudenthal 1986: 198–9, pronounces 'uncontroversial' the thesis that the 'basic constituents of Anaximander's world are equal opposite powers balanced against one another in dynamic equilibrium'. Asmis 1981 and Engmann 1991 both attempt to argue against this prevalent view.

²³ Thus Gottschalk 1965: 50, concludes that, in its role as that from which all things have sprung, Anaximander's Boundless functioned analogously to the parents of the universe in the mythological cosmogonies such as Hesiod's. Cf. Solmsen 1950 and the detailed discussion in Stokes 1963

²⁴ Classen 1977: 94 (cf. 97–8), plausibly concludes that 'Anaximander conceived of the infinite [το ἄπειρον]... as capable of producing out of itself flame, earth and air (and water) without either implying that they were in any form *present* in the infinite or explaining its creative activity; and ... he felt free to speak of the coming-to-be and growth of the cosmos as parallel to birth and growth in nature.'

The paratactic style and formulaic character of the phrases Aristotle employs in describing the divine nature and governing function of the Boundless likely echo or even reproduce Anaximander's own words.²⁵

Modern accounts, then, such as Guthrie's, of the Boundless as the world's unique substance and the permanent base of things and of water, earth, fire, and other stuffs as secondary manifestations or modifications of the Boundless are not well supported by the ancient evidence, particularly not by the evidence of Aristotle, our most important source. It is hard not to feel that the outmoded view of Thales, Anaximander, and Anaximenes as 'material monists' was driven to some extent by a presumption that their physical theories must have been suitable targets for Parmenides' alleged critique of earlier physical theories. Be that as it may, the way Aristotle associates Anaximander's physical theory with those of Empedocles and Anaxagoras is especially awkward for Guthrie's narrative. That Anaximander had already sought to explain the cosmogonical process and other cosmological phenomena in terms of the interactions of a plurality of basic stuffs, which, though generated from an initially undifferentiated state of things, properly function as the elements (in a loose sense) of all other entities sounds uncomfortably like the kind of theory the so-called 'post-Parmenidean pluralists' are supposed to have developed in critical reaction against Parmenides. There appears to be more continuity between the physical theories of Anaximander, Empedocles, and Anaxagoras than Guthrie's narrative is prepared to allow.

Anaximenes' $a\bar{e}r$, moreover, like the Boundless in Anaximander, was no inert elemental stuff but an all-embracing divine force governing the cosmos. Aëtius attributes to Anaximenes a striking analogy between microcosm and macrocosm: 'As our soul, being $a\bar{e}r$, holds us together, so pneuma and $a\bar{e}r$ embrace the whole cosmos' (οἶον ἡ ψυχή, φησίν, ἡ ἡμετέρα ἀὴρ οὖσα συγκρατεῖ ἡμᾶς, καὶ ὅλον τὸν κόσμον πνεῦμα καὶ ἀὴρ περιέχει, Aët. 1. 3. 4 ([Plu.] Plac. 1. 3. 876 A 9–B 1 \approx Stob. Ecl. 1. 10. 12)). While some have doubted the reliability of this testimonium, ²⁶ both Aëtius elsewhere and Cicero record the opinion that, for Anaximenes, $a\bar{e}r$ was a god (Aët. 1. 7. 13 (Stob. Ecl. 1. 1. 29b), Cic. N.D. 1. 26, cf. Augustin. C.D. 8. 2). Our evidence, therefore, indicates that both Anaximander's Boundless and Anaximenes' $a\bar{e}r$, far from being inert material stuffs out of which other things are made, were in fact conceived of by them as divine entities, from which other things have been

²⁶ Kirk *et al.* 1983: 159, explain why the text should be regarded as paraphrase rather than direct quotation. For a more sceptical view, see Alt 1973.

²⁵ Cf. Hippol. Haer. 1. 6. 1: ταύτην δ' ἀίδιον εἶναι καὶ ἀγήρω, ἣν καὶ πάντας περιέχειν τοὺς κόσμους. Diels and Kranz take Hippolytus as here preserving a genuinely Anaximandrean term in ἀγήρω, printing it as 12B2; likewise, they print ἀθάνατον . . . καὶ ἀνώλεθρον ap. Arist. Ph. 3. 4. 203 had 13-14 as 12B3. Cf. Kahn 1960a: 43; Kirk et al. 1983: 115. Gottschalk 1965: 39, points out that Hippolytus' statement that Anaximander said the Boundless 'surrounds' (περιέχειν) the universe, and the conjunction of this verb with κυβερνᾶν in the passage from Aristotle, suggests that Anaximander used this latter verb to describe the activity of the Boundless. Freudenthal 1986: 208-10, interestingly speculates that the Boundless's governing power must have involved its ensuring that the ascendancy of each of the various 'opposites' in the periodic changes associated with the natural order is only temporary and that reparation through reversal of these changes follows the opposites' encroachment upon one another.

generated, and which embrace all things and govern to some extent the changes they undergo. Those historical narratives that cast the theories of the Milesians as the targets of Parmenidean criticism and that tend to view early Greek philosophy as primarily natural philosophy have found this evidence hard to assimilate. By contrast, the modal interpretation of Parmenides allows us to appreciate the true structural alignment between his system and those of Anaximander and Anaximenes. On the one hand, there is something regarded as the greatest or most perfect entity: Anaximander's Boundless, Anaximenes' aer, and What Is in Parmenides. Then there are the material principles from which the visible cosmos and its population are generated: in Anaximander, the 'opposites' or basic stuffs generated out of the Boundless; in Anaximenes, wind, cloud, water, earth, and stone generated from aēr, and light and night in Parmenides. Certainly, Parmenides' specific conceptions of the most perfect entity, of the material principles, and of the relation between the two are all quite different than the conceptions of Anaximander and Anaximenes. Nonetheless, these different conceptions should be regarded as ones that were elaborated within a broader framework of speculation regarding the nature of the divine, the nature of the world, and the nature of their relation. Parmenides' views on the first and last of these questions may be the most radical of any early Greek philosopher, given his strict commitment to saving no more about What Is than what can be inferred about it from its mode of being. Although he is as a result more a metaphysician than theologian, there evidently remains a basic structural correspondence and thus an underlying continuity between his system and those of Anaximander, Anaximenes, as well as Xenophanes, before him, and those of Empedocles and Anaxagoras afterwards.

PARMENIDES AND HERACLITUS

The goddess who addresses Parmenides represents herself as imparting to him an understanding that transcends the unstable and confused thoughts of 'mortals'. While these 'mortals' are never given a name, many have wanted to see in the following description of them a reference to Heraclitus: 'They are borne along | deaf and blind at once, bedazzled, undiscriminating hordes, | who have supposed that it is and is not the same | and not the same; but the path of all these turns back on itself $(\pi \acute{a}\nu\tau\omega\nu\ \delta\grave{\epsilon}\ \pi a\lambda\acute{\iota}\nu\tau\rho\sigma\pi\acute{o}s\ \grave{\epsilon}\sigma\iota\ \kappa\acute{\epsilon}\lambda\epsilon\upsilon\theta os)$ ' (Parm. fr. 6. 6b–9). The adjective $\pi a\lambda\acute{\iota}\nu\tau\rho\sigma\pi os$, which designates the path 'mortals' follow as one that turns back on itself, has been thought an allusion to one of Heraclitus' own pointed criticisms of ordinary people's lack of understanding: 'they do not understand how it is in concord with itself while in discord—a backward-turning $(\pi a\lambda\acute{\iota}\nu\tau\rho\sigma\sigma\sigma s^{27})$ harmony, like a bow's and a lyre's' (Heraclit, fr. 51). The obscure clause at

²⁷ παλίντροπος is given in the citations at Hippol. *Haer.* 9. 9. 2, Plu. *Tr. an.* 473 F, and *An. procr.* 1026 B; παλίντονος ('backward-stretched'), at Plu. *Is. et Osir.* 369 A, *Tr. an.* 473 F ms. D, and Porph. *Antr.* 29. There is division over which reading is to be adopted, and it is hard not to feel that arguments on this point are clouded by preconceptions as to whether Parm. fr. 6 is alluding to

Parmenides fr. 6. 8–9a, preceding the 'echo' of Heraclitus, has also been understood as alluding to the Heraclitean doctrine of the unity of opposites. While some have wanted to see in this alleged intertextual relation a cornerstone of the period's philosophical development, others have dismissed as mistaken overinterpretation the idea that Parmenides is here alluding to Heraclitus at all.²⁸

There are in fact numerous problems with treating Parmenides fr. 6 as a criticism of Heraclitus. We cannot safely assume, for instance, that Parmenides would have known anything about Heraclitus. It is even more of a stretch to suppose that Parmenides could have expected his audience to be familiar enough with Heraclitus' writings to recognize the verses of fr. 6, 8-9 as a critical allusion. Consider for comparison how little Plato, two generations later, seems to have known of Pythagoreanism before travelling personally to southern Italy (or more relevantly how patchy, as we shall see, Plato's information about Heraclitus himself seems to have been). How confident can one be that Parmenides would have known more of Heraclitus than Plato? Certainly, immigrants such as Pythagoras and Xenophanes were important links between the Ionia and Magna Graecia, and it seems safe to suppose that Parmenides had contact with the members of the Pythagorean sect, if not the founder himself, as well as with Xenophanes or his writings. Since Heraclitus criticizes both Pythagoras and Xenophanes by name, he certainly knew of them; but what knowledge of their younger critic can they be expected to have carried with them to southern Italy? How else would Parmenides have known of Heraclitus except from someone who had heard him read from his 'book'?²⁹

Heraclitus, with those who think it does tending to argue for $\pi \alpha \lambda \ell \nu \tau \rho o \pi o s$ in Heracl. fr. 51 and those who think there is no allusion tending to argue for $\pi \alpha \lambda \ell \nu \tau o \nu o s$.

²⁸ Opinion regarding the proposal that Parmenides in fr. 6 means specifically to criticize Heraclitus has been divided ever since it was advanced in Bernays 1850: 62–3 n. 1. For a succinct history of reaction to Bernays's proposal, see Graham 2002*a*: 27. Mansfeld 1964: ch. 1, examines at length the grounds for assuming Parm. fr. 6 refers to Heraclitus, concluding that, while it cannot positively be ruled out, no such assumption is necessary and that fr. 6 certainly does not refer only or even primarily to Heraclitus. Conche 1996: 104–6, cites a number of those who have endorsed it, before voicing his own doubts: 'En 6. 8–9, l'unité des opposés est l'unité des contradictoires. Ce n'est pas celle qu'a théorisée Héraclite. Ce passage du fragment 6 ne peut donc atteindre ni concerner Héraclite.'

²⁹ Graham 2002*a* attempts to show that the parallels of vocabulary and phrasing between Heraclitus and Parmenides are so extensive that Parmenides must actually have composed his poem with Heraclitus' book to hand. However, too many of the purported parallels he lists are either too superficial to be understood as allusions (so with Heraclit. fr. 30, ἀποσβεντύμενον, and Parm. fr. 8. 21, ἀπέσβεσται; Heraclit. fr. 103, ξυνὸν ἀρχή, and Parm. fr. 5. 1–2a, ξυνὸν ὁ ϵ μοί ἐστιν, Ι ὁππόθεν ἄρξωμαι; Heraclit. fr. 71, ὁδός, and Parm. fr. 6. 3, όδοῦ, etc.) or are better understood as reflecting the inheritance of a common tradition (a possibility Graham discounts at the outset). To the latter class evidently belongs the parallel play upon words in Heraclit. fr. 34, φάτις αὐτοῖσι μαρτυρεῖ· παρεόντας ἀπεῖναι, and Parm. fr. 4. 1, λεῦσσε δ' ὅμως ἀπεόντα νόῳ παρεόντα βεβαίως, given how Heraclitus' own words point to a familiar aphorism employing this figure. A more significant parallel of this type is that between Parm. fr. 12. 3b, δαίμων ἡ πάντα κυβερνῆ, and Heraclit. fr. 64, τὰ δὲ πάντα οἰακίζει κεραυνός, and fr. 41, ἐν τὸ σοφόν, ἐπίστασθαι γνώμην †οτεη† κυβερνῆσαι πάντα διά πάντων, for these passages all employ a common type of archaic formula for describing divine power.

Furthermore, the 'mortals' criticized by Parmenides' goddess for their lack of understanding are more naturally identified in a manner consistent with the poem's indications of its generic affiliations and immediate cultural context. They are likewise the ones most obviously picked out by this plural and indefinite description, namely, the general run of humanity, from whose ignorance the goddess's revelation enables Parmenides to extract himself. This motif of the transcendence of the condition of mere mortals appears to have been a common feature of the initiation literature that informs Parmenides' poem. It has been recognized for some time now that there are numerous elements in Parmenides fr. 1 (the 'proem') indicative of such affiliation: the description of himself as 'a knowing man $(\epsilon l \delta \delta \tau a \phi \hat{\omega} \tau a)$ ' (fr. 1. 3), the metaphor of the initiate's path to understanding, the encounter with a goddess, the promise that the initiate will transcend the ordinary mortal condition, and so on. Even apart from this context, the criticism of mortals Parmenides places in the mouth of his goddess functions against the background of the traditional archaic contrast between human frailty and divine power. ³⁰

The most serious problem with the old idea that Parmenides targets Heraclitus for criticism is that what once made it attractive—the way it ranges the philosopher who denied the reality of all change against the philosopher of universal flux—rests on reductive misrepresentation of both Parmenides' and Heraclitus' thought. The idea of Parmenides and Heraclitus' opposition can be traced back to Plato, *Theaetetus* 152 E 1-9, where Socrates famously ranges all the advocates of the Heraclitean 'secret doctrine' that 'nothing ever is, but everything is coming to be' $(e\sigma\tau \iota \mu \epsilon \nu \dots \delta \nu)$ οὐδέν, ἀεὶ δὲ γίγνεται) against Parmenides, who is represented later in the dialogue as maintaining, with Melissus, that all things are one and unchanging (180 E 2-4, cf. 183 E 3-4). Over the years, however, it has come to be appreciated that Plato's representation of Heraclitus was deeply influenced both by Hippias' anthology and by the sophistic Heracliteanism of Cratylus.³² This sophistic use of Heraclitus evidently continued to influence the young Aristotle of the Topics and Physics 1, where Heraclitus figures as a trader in deliberate paradox. The Heraclitean view that everything changes is cited in the Topics as an example of a thesis or 'a conception contrary to general opinion but propounded by someone famous as a philosopher' (Top. 1. 11. 104^b19–22). The Theaetetus' discussion of the implications of the 'Heraclitean' doctrine of constant change provides the basis for the other thesis Aristotle attributed to Heraclitus in the Topics and again in the Physics, namely that the same thing can be both F and not-F (Arist. Top. 8. 5. $159^{b}30-5$, Ph. 1. 2. 185^a5-7, b19-25, cf. Pl. Tht. 152 D 4-E 1). Such is the background of Aristotle's notorious characterization of Heraclitus as one who denied the law of noncontradiction (*Metaph.* 4. 3. 1005^b23–5, cf. 4. 7. 1012^a24–6). The effect upon

³⁰ Mansfeld 1964: ch. 1, explores this background at length in the course of examining the assumption that fr. 6 alludes to Heraclitus.

³¹ Although the modern construction of a Parmenidean critique of Heraclitus is ultimately rooted in Plato's representation of Heracliteanism as a radical flux theorist, at *Sph.* 242 C–243 A Plato represents Heraclitus as responding to Parmenides, rather than vice versa.

32 See further Palmer 2008: 531–2 and 547–8.

Aristotle of the sophistic representations of Heraclitus can be seen in his nearly complete absence from *Physics* 1 and *Metaphysics* 1. Heraclitus figures in these treatises' reviews of reputable opinions just once, at *Metaphysics* 1. 3. 984^a7–8, where he is mentioned along with Hippasos of Metapontum as having identified fire as the material cause.

While other texts show Aristotle had something more than the passing acquaintance with Heraclitus suggested by this relative neglect, 33 there is no real indication that Aristotle, or Plato before him, ever recognized the central role Heraclitus accorded to the divine logos. Although, as we have seen, both Plato and Aristotle seem to have recognized that the schematic representation of Parmenides as the proponent of a single unchanging reality and of Heraclitus as the proponent of universal flux offered too restrictive and reductive a view of Parmenides, they never seem to have made a similar leap with Heraclitus. They never acknowledge that Heraclitus, too, accords a central place in his system to an unchanging entity, the presence and activity of which must be apprehended by reason rather than the senses.³⁴ While Heraclitus certainly stresses, in memorable ways, how everything in the world of our ordinary experience is subject to change, he also heralds the idea that its changes are nonetheless regulated and governed by something permanent and unchanging, namely, the *logos*, in accordance with which, he says, everything comes to be or happens (fr. 1). Fire appears a manifestation or even vehicle of this eternal logos, especially in its purest form as aether. For Heraclitus ascribes a directive capacity to fire itself, both in the cosmos generally, as when he says fire will come suddenly upon all things to judge and convict them (fr. 66, cf. fr. 64), and in human beings, whose souls he associates with fire (fr. 118, cf. frs. 36, 115). Heraclitus nevertheless also speaks of fire in ways suggesting that the world is composed of it: 'This cosmos, the same for all', he says, 'no god nor human made, but it was always and is and will be, ever-living fire, kindled in measures and quenched in measures' (fr. 30, cf. fr. 67). The 'kindling' and 'quenching' of fire would appear to be connected with what he elsewhere describes as its 'turnings' or transformations: 'fire's turnings—first sea, and of sea the one half earth, the other half burner' (fr. 31a, cf. fr. 76). More generally, 'all things are an exchange for fire and fire for all things, just as goods for gold and gold for goods' (fr. 90).

Taking into account the dual aspect of Heraclitean fire, one can see that the eternal and unchanging *logos* occupies a place in his system corresponding to that

³³ See further Palmer 2008: 548–9. On Aristotle's representations of Heraclitus, and their relation to Plato's, see Viano 1989.

³⁴ Nehamas 2002: 46, emphasizes this commonality in suggesting that both Parmenides and Heraclitus accept something like Xenophanes' contrast between human and divine understanding and yet, unlike Xenophanes, ally their own messages with the divine perspective. Nehamas goes on to argue that the distinction between reality and appearance is fundamental to both their systems, so that they share an ontological as well as an epistemological outlook, and he invites us to entertain the possibility that Parmenides does not denounce Heraclitus but shares with him in a common enterprise. Since Mourelatos 1987: 127, notes early on that 'Heraclitus is not purely a philosopher of flux; he gives equal emphasis to the constancy and stability found in flux, to the unity found in diversity', it is fitting that Nehamas's study should appear in a collection of essays in his honour.

occupied by What Is in Parmenides', and likewise that Parmenides' material principles, light and night, have their analogues in Heraclitus' elemental fire. Once one recognizes these correspondences, one can abandon for good the inaccurate and outmoded cliché of the opposition between the philosopher of flux and the philosopher of changelessness. One could then begin properly to explore the genuine similarities and differences in how Parmenides and Heraclitus draw the distinction between reality and appearance and between true understanding and mere belief or opinion. One might want to say that Heraclitus thinks of things in a broadly similar manner, though there are important differences of detail. Heraclitus, too, thinks that while all the objects of immediate experience are subject to ceaseless change, differentiation, and opposition, there is nonetheless something permanent and unchanging that, though initially non-apparent, it is imperative to try to apprehend. Like Parmenides, Heraclitus draws a contrast between reality and appearance by distinguishing between what is permanent and unchanging and what is subject to change. Heraclitus likewise supposes genuine understanding requires apprehension of what is permanent and unchanging, whereas the lesser epistemic condition characteristic of ordinary mortals focuses on the ever-changing objects of sensation. This broad correspondence is reflected in the numerous similarities between Heraclitus' and Parmenides' criticisms of mortal incomprehension, similarities which extend from the descriptions of mortals' benighted stupor to the more specific criticism of mortals for having focused on the world's differentiated and changing aspect while failing to apprehend what is one and unchanging. There remain, of course, critical differences between Heraclitus and Parmenides, perhaps most importantly that the Heraclitean logos/fire is an immanent principle intimately connected with the world and its operation, rather than an entity, as on Parmenides' conception, coterminous but apparently otherwise unrelated to the rest of the cosmos's population. Heraclitus' declaration, 'from all things one and from one all things ($\frac{\partial \kappa}{\partial t} \pi \dot{\alpha} \nu \tau \omega \nu \dot{\epsilon} \nu \kappa \alpha \dot{\epsilon} \dot{\epsilon} \dot{\epsilon} \dot{\nu} \dot{\delta} s$ $\pi \acute{a} \nu \tau a$)' (fr. 10 ad fin.), is quite different from Parmenides' view of the relation between the one perfect being and everything else.

CONCLUSION

The modal interpretation of Parmenides makes it easier to recognize and accept the facts, first, that the material principles of his cosmology have their analogues in the material principles of the other major Presocratic cosmologies and, second, that What Is has its analogue in the most important divine principles of the early Greek philosophers, that is to say, in Anaximander's Boundless, in Anaximenes' aër, in Xenophanes' greatest god, in Heraclitus' logos, in Empedocles' Sphere under Love that persists as a divine mind in the differentiated cosmos, and in Anaxagoras' Mind. Merely to identify the proper structural correspondence between the Parmenidean and other Presocratic systems is obviously not to propose any new narrative for histories of early Greek philosophy. It is merely to identify something fundamental any historically accurate account of the period's philosophical development needs to

take into account and respect. This identification nonetheless suggests that historians should be more cautious than they often have been about conceiving of this development in terms of Popperian problem-solving or Kuhnian paradigm shifts. For in looking to these models of the dynamics of scientific development, one risks losing sight of the fundamental commonalities and continuities, not only among the systems of the early Greek philosophers, but among theirs and the systems of the philosophers who succeeded them. Application of the Popperian and Kuhnian models, not surprisingly, tends to obscure the fact that there is more to early Greek philosophy than natural philosophy.

This fact, unfortunately, also tends to be obscured by the nature of our evidence, particularly by how Aristotle is directly or indirectly responsible for the survival and transmission of most of what we now know about early Greek philosophy. A decade ago, A. A. Long properly reminded us that even more distorting than the doxographical tradition's interpretation of early Greek philosophy within the terms of anachronistic conceptions such as the identification of the material cause, the postulation of principles and elements, and monism versus pluralism (all of which we have seen can be traced back to Aristotle's Gorgianic schema at the beginning of Physics 1. 2) is a point he thinks modern scholarship has generally overlooked: that the Peripatetics with whom this tradition originated showed little interest in the early Greek philosophers' views of the divine. 35 Coupled with two other presumptions, that the early thinkers assimilated thinking/mind to perception and that they took themselves to be observing and describing a physical world external to themselves, Long supposes this fundamental oversight is responsible not only for Aristotle but also many modern historians having approached early Greek philosophy in a way he describes as follows:

They frequently present these thinkers as fumbling empiricists or proto-scientists, whose main objective was to account for the origins of the observable world, from a position of epistemic detachment. Indeed, our very concept of 'Presocratic' is largely derived from the belief that a 'philosophie engagée', a philosophy that placed human concerns at the centre, was Socrates' special creation. It is striking that this approach to early Greek philosophy, to the extent that it applies at all, works best with those thinkers who are first, the earliest, and second, the ones whom we know only via the doxographical tradition—the Milesians. The approach signally fails with Pythagoras; it hardly works for Xenophanes; it does not fit more than a fraction of Empedocles, and still less of Heraclitus or Parmenides. ³⁶

In a similar vein, Catherine Osborne has argued that the evidence for Presocratic thought found in Hippolytus is especially valuable since his concern with religious ideas stands in stark contrast with the bulk of the extant tradition's preoccupation with Presocratic views on natural philosophical questions; exploring Hippolytus' understanding of the Presocratics, she suggests, is one way of offsetting the effect of the Aristotelian preoccupation with natural philosophy.³⁷

³⁵ Long 1996: 128. ³⁶ Ibid. 129.

³⁷ Osborne 1987*b*: 14–15.

Historians certainly need to take account of the profound impact Aristotle's interests have had on the survival and transmission of early Greek philosophy. This important point has been emphasized from the outset of this study. It is not quite correct, however, to say that Aristotle and the Peripatetics had little interest in the early Greek philosophers' views of the divine. For one thing, Aristotelian natural philosophy hardly excludes explanations of natural phenomena in terms of divine principles. In this respect, it is in line with the natural philosophy of most of the major Presocratics, from the Milesians to Anaxagoras, and with that of Plato and the Stoics. One needs to keep in mind that ancient natural philosophy and modern science differ in this way. More importantly, it seems clear that Aristotle and the Peripatetics actually did inquire into early views in the domain of theology or first philosophy, even though the work they did has largely been lost.

When Aristotle says at *Metaphysics* 1. 5. $986^{b}15-16$ that Xenophanes, Parmenides, and Melissus speak of everything as one 'in a different way' than the natural philosophers do, he means that they speak in a way appropriate to another field of inquiry. Thus in *On the heavens* 3. 1 Aristotle says that in denying change Parmenides did not speak in the manner of natural philosophy ($\phi \nu \sigma \iota \kappa \hat{\omega} s$) but nevertheless well ($\kappa \alpha \lambda \hat{\omega} s$), 'for the existence of certain ungenerated and generally unchanging entities belongs rather to another inquiry prior to natural science' (*Cael.* 3. 1. $298^{b}18-21$). Given his division of theoretical understanding in *Metaphysics* 6. 1 into mathematics, natural philosophy, and theology or first philosophy, which he calls the highest of the theoretical sciences ($1026^{a}18-23$), it is clear that the inquiry prior to natural philosophy to which Aristotle indicates consideration of Parmenides' conception of What Is properly belongs is theology or first philosophy.

Aristotle's division of the theoretical sciences appears to have been fundamental to the philosophico-historical inquiries of the early Peripatos. Peripatetic historical inquiries in mathematics are represented for us primarily by the remains of Eudemus' History of geometry, History of mathematics, and History of astronomy. Obviously the most important historical inquiries in natural science are Aristotle's Physics 1, with the proper qualifications, and Theophrastus' Tenets in natural philosophy and its epitome. As for historical inquiries in theology or first philosophy, Eudemus appears to have also composed a historical survey of the field that traced its origins back to the pre-philosophical tradition not only of the Greeks, but of the Babylonians, Persians, Phoenicians, and Egyptians as well. Diogenes Laertius also lists among Theophrastus' works a History of theology ($T\hat{\omega}v$ $\pi\epsilon\rho\hat{v}$ $\tau\hat{o}$ $\theta\epsilon\hat{v}$ $to\tau\rho\rho(a)$ in six books

 $^{^{38}}$ Γεωμετρικὴ ἱστορία = Eudem. frs. 133–41. ἸΑριθμητικὴ ἱστορία = Eudem. fr. 142. ἸΑστρολογικὴ ἱστορία = Eudem. frs. 143–9. The first and third titles are as given in Simplicius (in Ph. 60. 31, in Cael. 488. 19), rather than Γεωμετρικαὶ ἱστορίαι as ap. Procl. in Eucl. El. 352. 15 and ἸΑστρολογικαὶ ἱστορίαι as ap. Clem.Alex. Strom. 1. 65. 1. Diogenes Laertius' catalogue of the works of Theophrastus mentions four books of Ἱστορίαι γεωμετρικαὶ (D.L. 5. 48), an Ἰαστρολογικὴ ἱστορία in six books, and Ἰαρθμητικαὶ ἱστορίαι (D.L. 5. 50); there is some doubt whether these titles represent genuine works of Theophrastus or a confused interpolation of those by Eudemus.

³⁹ Eudem. fr. 150. In addition to the commentary on this tantalizing text in Wehrli 1969, see Casadio 1999 and Betegh 2002.

(D.L. 5. 48), of which, unfortunately, nothing survives. If Theophrastus did in fact write such a work, it is reasonable to expect that it would have dealt with many of the same figures he treated in the *Tenets in natural philosophy*. One might expect it to have contained more discussion of the kind one finds in Aristotle at *Metaphysics* 12. 10. 1075^b1–11, where, taking up the question of the existence of the good in the cosmos, Aristotle interprets both Empedocles and Anaxagoras as having had relevant views on the question. Empedocles is said to have identified the good with Love, Anaxagoras with the kinetic activity of Mind. Although Aristotle criticizes these positions for not adequately conceiving of the good in the cosmos as a final cause, he still takes them to be views relevant to inquiry in the domain of first philosophy. ⁴⁰

If Eudemus and Theophrastus' historical inquiries pertaining to the theoretical science of theology or first philosophy had survived, or even if these particular works had had more of an impact on the later doxographical tradition, our evidence for early Greek philosophy might have been very different indeed. The same can be said of a work by Aristotle himself, the lost On philosophy. 41 The third book of On philosophy seems to have contained Aristotle's presentation of his own views in the area of philosophy conceived of as cosmotheology, while the first two books appear to have contained a critical-historical overview of philosophy as cosmotheology in the Greek and non-Greek pre-philosophical traditions, then among the early Greek philosophers, and finally in Plato. Something of the tenor of this work can still be gleaned from a testimonium explicitly attributed to its first book: 'Aristotle in the first book of the On philosophy says that they [sc. the Magi] are more ancient than the Egyptians, that according to them there are two principles, a good daimon and an evil daimon, and that the name for one is Zeus and Oromasdes, for the other, Hades and Areimanios' (D.L. 1. 8 = Arist. fr. 23). This is not so very different from what Aristotle says of Empedocles and Anaxagoras in *Metaphysics* 12, 10. Both passages are indicative of the types of question, not to mention the broad scope and inclusiveness, one might expect from an Aristotelian history of theology or first philosophy.

Were the first book of *On philosophy* preserved, there would almost certainly be less temptation to accept the questions, classifications, and lines of demarcation appropriate to natural philosophy as defining early Greek philosophy. As a result, the errors of treating What Is in Parmenides as having anything to do with the material principle and of consequently collapsing the proper structural correspondence between his system and those of the other major Presocratics might have been more easily avoided. For we would have had more explicit testimonia and probably

⁴⁰ See Palmer 2000 for discussion of Aristotle's treatment of those early thinkers he typically refers to as $\theta\epsilon \delta \lambda \delta \gamma \sigma \iota$.

⁴¹ Caution is certainly required when it comes to this work, given the scholarly excesses since the Jaeger's reconstruction led him to identify it as a fundamental turning point in Aristotle's development away from his Platonist roots (see Jaeger 1948: 128–64). An egregious example of overindulgent reconstruction of the work is Untersteiner 1963, a separate edn. of the 'fragments' of the $\Pi \epsilon \rho i \ \phi \iota \lambda o \sigma o \phi (\alpha s)$, with translation and commentary, extending to more than 300 pp. and comprising a compendium of previous scholarly excesses. For a judicious review of this 'edition', see Tarán 1966. Fortunately, research upon Aristotle's lost works was given a firmer basis by Olof Gigon's 1987 publication of the fragments of Aristotle's lost works in a new edn.

more direct evidence concerning the divine or otherwise supreme or most perfect entities in these systems. Fortunately, with some care these errors can still be avoided. If one does not lose sight of the modal distinctions essential to a proper understanding of Parmenides' philosophy, one may recognize the presumption that the Way of Conviction was intended to issue a challenge to, or otherwise set the agenda for, cosmological theorizing for what it always was, an entirely modern invention rooted in misinterpretations of Parmenides. If there was no Parmenidean challenge, then there was no response to that challenge by the 'post-Parmenidean pluralists'. Thus we have seen that Aristotle seems right to have represented the early atomists as engaged especially with the paradoxical arguments of Zeno and Melissus, that Anaxagoras' physical theory is best understood as the first attempt to articulate a viable account of the structure of matter in the wake of the Zenonian arguments that had put the problem of material structure on the scientific and philosophical agenda, and that Empedocles' element theory—like Parmenides' own—is an essentially qualitative theory of material interaction without any very precise picture of the physical structure of things. As for Parmenides himself, he deserves finally to be recognized for his genuine contribution to philosophy. He was the first to have distinguished with due rigour and abstraction between what must be, what cannot be, and what is but need not be. He was the first to have associated with each mode of being a distinct mode of cognition. He was also the first rigorously to have explored what what must be must be like simply given its mode of being. His demonstration in the Way of Conviction that what must be must be ungenerated and imperishable, unchanging, whole, uniform, and perfect is thus the first, if distant, forerunner of arguments such as that found in Anselm's Monologion to the effect that God must be simple, eternal, omnipresent, and immutable. Parmenides himself, though, at once belongs firmly to the Presocratic tradition of speculation on the divine and its relation to the rest of the cosmos, even as the rigorous meditation he undertakes in this portion of his poem sets him apart as more of a pure metaphysician.

APPENDIX

The Fragments of Parmenides' Poem

INTRODUCTION

Diogenes Laertius identifies Parmenides as a philosopher who wrote only a single treatise (D.L. 1. 16, cf. Simp. in Ph. 144. 25). This work was a poem composed in epic hexameter somewhere around the beginning of the fifth century BC and originally extending to perhaps 800 lines. Roughly 160 lines of the poem have survived, in the form of excerpts or 'fragments' that vary in length from a single word (fr. 15a) to sixty-one lines (fr. 8). These fragments survive only because later ancient authors felt the need to quote some portion of Parmenides' poem in their own writings. Thus, for example, portions of fr. 7 are quoted in Plato's Sophist and book 14 of Aristotle's Metaphysics (fourth century BC), in book 7 of Sextus Empiricus's Adversus Mathematicos (second century AD), in Diogenes Laertius' brief biography of Parmenides in book 9 of his Lives of the Eminent Philosophers (probably third century AD), in Simplicius's Commentary on Aristotle's Physics (sixth century AD), as well as in the commentary on Aristotle's Metaphysics attributed to Alexander of Aphrodisias. Later authors such as these would have transcribed either from a copy of the poem to which they had access, from an anthology of some type in which certain verses appeared already excerpted, or simply from memory (as Plato and, much later, Proclus often seem to do). It is hardly surprising, therefore, that already in antiquity quotations of Parmenides' poem in different authors and sources should have contained different reports of a word or two here and there. Furthermore, each of the ancient works containing these excerpts has come down to us in multiple medieval manuscripts. Centuries of copying and recopying inevitably produced even more discrepant readings, especially in places where the copyists may have had difficulty understanding the sense of Parmenides' archaic phraseology or were unfamiliar with his epic morphology. The historical vagaries of the poem's partial preservation via an entirely indirect, lengthy, and often conflicting tradition have presented modern editors with the task of trying to determine as best they can what words Parmenides himself actually wrote.1

Despite real difficulties here and there, happily this task is in most places reasonably straightforward. The kind of reasoning editors and textual critics employ is

¹ See further Cordero 1987 on the history of the poem's survival, including an appendix listing the ancient authors who are our sources for Parmenides' text. Cordero also provides a very useful survey of the modern era's efforts at reconstructing Parmenides' poem, beginning with Henri Estienne's *Poesis Philosophica* (Geneva, 1573) and concluding with the successive edns. of the text of the fragments in Diels 1897, 1901, and the 1st-6th edns. of *Die Fragmente der Vorsokratiker* (with a useful appendix summarizing the different readings in Diels's edns.).

nicely exemplified by how it has come to be generally agreed that in fr. 7. 1 Parmenides wrote \vec{ov} $\gamma \hat{a} \rho \mu \hat{\eta} \pi \sigma \tau \epsilon \tau \hat{ov} \tau \hat{ov} \delta a \mu \hat{\eta}$, $\vec{\epsilon i} \nu \alpha i \mu \hat{\eta} \vec{\epsilon ov} \tau a$. The manuscripts variously give the last word here as either $\frac{\partial}{\partial \nu} \tau \alpha$ or $\frac{\partial}{\partial \nu} \tau \alpha$. Metrical considerations aside, Parmenides can be relied on to have employed the epic/Ionic form of the substantive participle here just as he does elsewhere in the fragments. In this instance, it is easy enough to understand how Parmenides' original $\dot{\epsilon}\acute{o}\nu\tau\alpha$ came to be written as $olimits_{0}$ in some manuscripts: the Attic $olimits_{0}$ must represent some later copyist's normalization of the dialect form. There are far more transmitted variants of the phrase $\tau \circ \hat{v} \tau \circ \delta \alpha \mu \hat{\eta}$. Although the now generally accepted reading is also the most widely attested, some manuscripts record $\tau o \hat{v} \hat{\tau}' o \hat{v} \delta a \mu \hat{\eta}$, $\tau o \hat{v} \tau o v o \hat{v} \delta a \mu \hat{\eta}$, or even $\tau o \hat{\nu} \tau o \mu \eta \delta a \mu \hat{\eta}$ in this portion of the verse. The first of these variants is transmitted in the principal manuscript families of Plato's Sophist, where the line is quoted at 237 A 8 and again at 258 D 2. However, since $\tau o \hat{v} \tau' o \hat{v} \delta \alpha \mu \hat{\eta}$ is unmetrical, it cannot be what Parmenides himself wrote. It is not even likely to have been what Plato read or remembered, for it is more plausible that $\tau \circ \hat{v} \tau \circ \delta \alpha \mu \hat{\eta}$ had already been corrupted to $\tau \circ \hat{v} \tau \circ \hat{v} \delta \alpha \mu \hat{\eta}$ in the archetype of our manuscripts of the *Sophist*.³ Both this reading and the remaining variants would seem to be the result of copyists' incomprehension of the difficult $\tau \circ \hat{v} \tau \circ \delta \alpha \mu \hat{\eta}$. Thus, despite the transmission of a number of variant readings in the textual tradition, editors now agree that there is only one serious contender here for what Parmenides himself wrote. The sense of the words $\tau o \hat{v} \tau o$ $\delta \alpha \mu \hat{\eta}$ may be difficult, but the text seems secure.

While editors now nearly all agree on the text of fr. 7. 1, there are other places where the best attested reading is certainly corrupt or where the manuscripts contain multiple or even no viable readings, so that conjecture and emendation are required to recover Parmenides' original words. In certain cases where there are such problems, editors remain at odds over the true reading. Fortunately, the extent of this difference is not terribly great, affecting only a word or phrase in roughly one out of ten lines. In the principal editions of the fragments since 1965, 5 there is a significant

² See pp. 354–5 below for further details.

³ So suggests Coxon 1986: 190–1. Cf. Tarán 1965: 74; Duke et al. 1995: 417 (app.crit. ad Sph. 237 A 8) and 455 (app.crit. ad Sph. 258 D 2).

There has not always been such editorial unanimity. Jackson 1892 records the emendations $\tau ο \hat{v} \sigma \delta \alpha \hat{\eta} s$, $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta} s$, $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta} s$, $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta} s$, $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta} s$, $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta} s$, and $\tau o \hat{v} \tau \sigma \delta \alpha \nu \hat{\eta}$ proposed, respectively, by Heindorf, Steinhart, Wagner, and Überweg and Campbell. Considering these proposals to stray too far from the basic agreement of the transmitted readings, and yet rejecting the defence of $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta}$ by Stein 1867: 785, Jackson himself proposed to divide $\delta \alpha \mu \hat{\eta}$ as $\delta \alpha \mu \hat{\eta}$ and, in order to make sense of this, to divide $\mu \hat{\eta} \pi \sigma \tau \epsilon$ earlier in the line as $\mu \hat{\eta} \pi \sigma \tau \epsilon$ and to take the resulting $\mu \hat{\eta}$ with both $\pi \sigma \tau \epsilon$ and $\delta \alpha \mu \hat{\iota}$. This strained proposal was rightly rejected by Diels 1897: 74, who endorsed Stein's line of reasoning. Since the restatement of the case for Stein's acceptance of the majority MS reading by Tarán 1965: 73–5, editors have been agreed in accepting $\tau o \hat{v} \tau \sigma \delta \alpha \mu \hat{\eta}$ (though Coxon 1986: 59, alone among recent editors, prefers $\mu \hat{\eta} \pi \sigma \tau \epsilon$ to $\mu \hat{\eta} \pi \sigma \tau \epsilon$).

⁵ Tarán 1965; Hölscher 1969; Heitsch 1974; Kirk et al. 1983; Cordero 1984; Gallop 1984; Coxon 1986; O'Brien 1987a; Conche 1996; Cassin 1998. It is to the presentations of the text in these volumes that I am referring in speaking of 'recent editors' or 'recent editions'. Beginning this list with Tarán's edn. is not simply arbitrary, for it both marked a major advance in the establishment of the text and includes full discussion of previous scholarship. Not included in this list are the presentations of the text in Casertano 1978; Reale and Ruggiu 1991; Cerri 1999. Casertano departs from the Diels and Kranz text only in preferring the MS reading to Kranz's

variance of opinion among the editors at fr. 1. 3 and 29, fr. 2. 4, fr. 6. 1 and 3, fr. 8. 4, 12, 19, 33, 38, and 61, fr. 12. 1 and 4, and fr. 16. 1 and 2. Not included in this count are differences in accentuation (particularly of the verb $\dot{\epsilon}\sigma\tau\iota\nu$), in capitalization, in the restoration of epic/Ionic forms, or instances of evident idiosyncrasy on the part of a single editor. With this degree of relative unanimity, I had hoped it would be unnecessary to include a presentation of the text of the fragments in this book. As it turned out, however, I continued to have reservations about referring the reader to the text as it appears in any of the recent editions. I have therefore decided to indicate what the main body of this book takes Parmenides' words to have been and to indicate, in the places where there is any serious question about the text, why I have adopted the readings I have. I do not pretend to be providing a new critical edition of the text, for my knowledge of it is based entirely on published editions and studies rather than on fresh inspection of manuscript sources. This appendix aims merely to provide the reader a ready reference to accompany the discussion of the fragments in the preceding chapters. With this purpose in mind, I have tended towards minimizing the information presented, especially when it would only replicate information readily available elsewhere.⁶

Ebert's Restoration of the Transposed fr. 8. 34-41

The most important advance in Parmenidean textual criticism in recent years is Theodor Ebert's recognition that a block of text in fr. 8 at some point suffered transposition from its original location. Ebert has convincingly argued that vv. 34–41

emendation at fr. 1. 3 and in giving $\pi \acute{a}\nu τ$ $\acute{o}\nu \acute{o}\mu a\sigma \tau a\iota$ instead of $\pi \acute{a}\nu τ$ $\acute{o}\nu o\mu(a)$ $\acute{e}\sigma \tau a\iota$ at fr. 8. 38. Reale likewise reproduces for the most part the Diels and Kranz text, except that he preserves the MS reading at fr. 1. 3, prints the ill-considered $\pi \epsilon \rho$ $\acute{o}\nu \tau a$ for $\pi \epsilon \rho \acute{o}\nu \tau a$ at fr. 1. 32, and adopts Tarán's proposal of $\acute{e}\kappa$ $\tau o \acute{e}\acute{o}\nu \tau o s$ for $\acute{e}\kappa$ $\mu \dot{\gamma}$ $\acute{e}\acute{o}\nu \tau o s$ at fr. 8. 12. None of the departures in Cerri's edn. from the superior edns. of Cordero, Coxon, and O'Brien (fr. 1. 3, $\pi \acute{a}\nu \theta'$ \ddot{a} $\dot{\tau}'$ $\ddot{\epsilon}\eta$; fr. 1. 32, $\pi \epsilon \rho$ $\ddot{o}\nu \tau a$; fr. 6. 5, $\pi \lambda \acute{a}\sigma \sigma o \nu \tau a \iota$) merit serious consideration.

⁶ For instance, in listing the sources for each fragment I have not included those where the citation simply replicates an identifiable citation by an earlier author. Thus e.g. I have not provided refs. for the replications of Aristotle's quotations of Parmenides in Alexander's and Asclepius' commentaries on the Metaphysics. Ampler reporting of the quoting sources, something typically more useful for pursuing the ancient reception than for establishing the text, can be found in some of the recent edns. For full bibliographic details of the modern edns. of the various ancient authors in whose works the fragments are transmitted, see O'Brien 1987 a: 81-91 (cf. Conche 1996: 273-6; Cassin 1998: 295-8); O'Brien also gives details of the MSS in which these authors' works are transmitted. A selective critical apparatus is included in Tarán 1965; Heitsch 1974; Coxon 1986; O'Brien 1987a; Conche 1996; Cassin 1998. Cordero 1984 aims at providing a more exhaustive apparatus but in so doing introduces a surfeit of trivial and inconsequential information. An excellent index verborum is furnished by O'Brien 1987a: 119-34 (cf. Conche 1996: 277-82). Homeric and Hesiodic comparanda accompany the presentation of the fragments in Heitsch 1974 and Coxon 1986. Hölscher 1969 integrates key testimonia (reports, as opposed to quotations, of Parmenides' views by ancient authors) into his presentation of the fragments of Parmenides' cosmology, as do Kirk et al. 1983. Gallop 1984: 95-123, provides an English translation of the Diels-Kranz B-fragment contexts and of the testimonia as assembled in Diels-Kranz (their 'A fragments'). Coxon 1986: 95-155, provides an extensive collection of ancient testimonia (untranslated) that goes well beyond what is collected in Diels-Kranz.

originally followed v. 53 and should henceforth be restored to this location. He properly acknowledges having been anticipated in this argument by Guido Calogero in 1936, though he notes that Calogero's original proposal went virtually unnoticed. Ebert begins making his more vigorous case by rightly rejecting attempts to maintain that vv. 34–41 advance the argument projected in fr. 8's main programme or, failing that, that these verses function as an interim summary or recapitulation of the Way of Conviction; for it must be admitted that precious little in these lines could realistically be seen as fulfilling either function. An even more problematic feature of the lines in their traditional position is that the critique of certain ideas attributed to mortals at vv. 38b–41 seems very much out of place prior to the goddess's explicit transition to her treatment of their views. Since the goddess is quite deliberate in marking that transition at vv. 50–2, telling Parmenides there that she is ending her account concerning true reality and that she will recount mortal opinions in what follows, the critique of mortals at vv. 38b–41 looks strangely premature.

Ebert also worries that the argument on behalf of completeness or perfection, the last attribute announced in the programme, is on the transmitted ordering of the text interrupted by vv. 34–41 only to be resumed and completed in vv. 42–9. Ebert here follows the common view that v. 32 begins the argument for perfection. In actual fact, however, vv. 32-3 continue the argument for the programme's penultimate attribute, ἀτρεμές or 'still', which had begun at v. 26. (See the discussion in Chapter 4 above, at pp. 153–5.) Note that $\alpha \tilde{v} \tau \acute{a} \rho$ at the beginning of v. 42 (cf. 26) already suggests that a new phase of the argument is under way with this line, for this prepositive particle 'is an adversative conjunction commonly used to introduce a strong or surprising contrast...; sometimes to introduce a slight contrast..., but one stronger than that marked by $\delta \epsilon'$. While this point marginally diminishes the force of Ebert's insistence on the lack of any intelligible transition between vv. 33 and 34 and vv. 41 and 42, it makes it easier to see why—if Ebert's main thesis that vv. 34-41 suffered transposition is correct—this block of text wound up where it did, just after the arguments for the attributes $o\tilde{v}\lambda o\nu$ and $\tilde{a}\kappa i\nu\eta\tau o\nu$, which happen to be mentioned at v. 38, and just prior to the arguments for the final attribute of completeness, which is not similarly mentioned in vv. 34-41. Even with this minor correction to his argument, Ebert is still right to insist that vv. 34-38a and 38b-41 are inexplicably awkward and out of place in their transmitted location.

Ebert's positive suggestion that relocation of vv. 34–41 just after v. 52 restores the original order of Parmenides' text is attractive for a number of reasons. First, it allows

⁷ Ebert 1989: 122–3 and nn. 4–7, pointing to Calogero 1936: 177 n. 2. Barnes 1982a: 180, recognizing that vv. 34–41 hardly seem to correspond to anything in fr. 8's main programme, records his 'sympathy with the proposal to place them after line 49, and to read them as a sort of summary of the Way of Truth'. One cannot say, however, whether Barnes's sympathy extends to actual endorsement: see Barnes 1982a: 207.

⁸ Detailed discussion at Ebert 1989: 125–31. Ebert is particularly critical of the efforts of Tarán 1965: 139–44, and Heitsch 1974: 173, to find in these lines an argument for uniqueness, on the assumption that this is what is meant by μουνογενές at fr. 8. 4a.

⁹ Ebert 1989: 132.

¹⁰ Smyth 1920: §2801.

the tight sequence of arguments executing the plan initially articulated at fr. 8. 3-4 to proceed uninterrupted. It does much the same for the goddess's account of what lies along the way mortals typically follow, since there is no longer the misplaced introduction of mortal opinions prior to the goddess's transition from the Way of Conviction. More particularly, it satisfactorily resolves certain problems in the transition from v. 52 to v. 53. The transmitted text leaves the verb $\kappa \alpha \tau \epsilon \theta \epsilon \nu \tau \sigma$ at v. 53 without any apparent subject. On Ebert's proposed relocation of the transposed text, however, the subject is provided by $\beta \rho o \tau o i$ in v. 39, where it is in fact the subject of the very same verb. Moreover, $\pi \epsilon \pi \lambda \alpha \nu \eta \mu \epsilon \nu \omega i$ in v. 54 will now be in agreement with $\beta \rho o \tau o i$ in v. 39; and $\beta \rho o \tau o i$ can likewise function as the subject of $\epsilon \kappa \rho i \nu a \nu \tau o$ and $\epsilon'\theta$ εντο in v. 55. It was always obvious that the subject of the verbs $\kappa \alpha \tau \epsilon' \theta$ εντο, $\epsilon \kappa \rho i \nu \alpha \nu \tau o$, and $\epsilon \theta \epsilon \nu \tau o$ must be $\beta \rho o \tau o i$. Ebert's relocation results in this subject no longer having to be merely understood. Another problem with the transition from v. 52 to v. 53 in the text as transmitted was that the $\gamma \acute{a}\rho$ in v. 53 was apparently without any proper function: vv. 53-4 do not seem to provide a ground or explanation for what the goddess has said in vv. 51-2. On the proposed relocation, however, the goddess's statements at vv. 53 ff. naturally support what she says at vv. 38b-41.

In the end, the proposal that the verses in question have been displaced from their original position is so inherently attractive, and the detailed case Ebert develops for the proposal is so strong, that it should be adopted in all future editions. Long familiarity with the transmitted version may make one feel it unlikely that Simplicius' otherwise excellent text should be subject to such a defect. We know, however, from the end of Sextus Empiricus' long quotation of the opening of Parmenides' poem (S.E. M. 7. 111) that in later antiquity the text of Parmenides was capable of falling into serious disorder. 12 It is crucially telling, moreover, that in none of the many quotations from Parmenides fr. 8 by other ancient authors does v. 34 follow v. 33, v. 42 follow v. 41, or v. 53 follow 52. 13 Ebert's effort to make scholars recognize that vv. 34-41 have suffered transposition within fr. 8 should not be allowed to pass into oblivion like Calogero's original proposal. Unfortunately, editions appearing since the publication of Ebert's study have inexcusably failed to take account of it. ¹⁴ Ignoring his proposal is not an option. I hope the summary of his argument given here may help Ebert's proposal gain the acceptance it deserves. One reason I have chosen to present the text of the fragments in this appendix is that it is enormously helpful to see the result of the restoration of the transposed block of text printed on the page. (I have retained the traditional line numbers to facilitate cross-reference with older studies.) The discussion of fr. 8 in Chapter 4 also shows that the restored text makes interpretation of Parmenides' reasoning more straightforward in numerous ways not mentioned here.

¹¹ See Ebert 1989: 132–4.

For a succinct account of how the pastiche at the end of Sextus's quotation of the proem came about, see Mansfeld 1995*b*: 228–9, which relies on results established by Rocca-Serra 1987.

Cf. Ebert 1989: 122–3, 136.

¹⁴ Although published in a reputable journal, Ebert's article is included in the bibliographies of neither Cassin 1998 nor Cerri 1999. Conche 1996 at least includes the article in its bibliography, though there is no consideration of its case elsewhere in this edn.

Discrepancies in Reported Manuscript Readings

One feature of the presentation of the text of the fragments here that requires some explanation is the regrettably necessary decision to refrain from accompanying the text with an *apparatus criticus*. I would certainly have preferred to do so, but even a synthetic apparatus based on existing editions has proved unfeasible due to the worrisome degree of uncertainty regarding the actual manuscript readings introduced by their reporting in the editions of Nestor-Luis Cordero (1984) and A. H. Coxon (1986). Both based their editions on fresh inspection of some of the major manuscripts, ¹⁵ and yet there are numerous places where Cordero's and Coxon's reports diverge. Staying with our example of fr. 7. 1, first compare their reports of the transmitted variants in the line. Coxon's apparatus reads:

τοῦτο δαμŷ Ar. EJ, Simpl. DE 143, E 135, E 244: τοῦτ' οἰδαμŷ Plat. BTW 237^a, BTW 258^d, Ar. A^b, Syr., Simpl. F 244, τούτου οἰδαμŷ F 143, τοῦτο μηδαμŷ D 135, D 244, Ps.-Alex., τοῦτο δαŷs Ar. recc., τοῦτο . . . ἐόντα om. in lac. Simpl. F 135 ἐόντα Plat. W 258^d, Ar., Ps.-Alex., Syr.: ὄντα Plat. BTW 237^a, BT 258^d, Simpl.

Contrast this with Cordero's apparatus for the same line:

μὴ ποτε Pl. | τοῦ δαμῆ Simpl. 135 Ε: τοῦτο δαμῆ Simpl. 143 D,Ε, 244 Ε, Ar. Ε: τοῦτο δαμῆ Ar. J: τοῦτο οὐδαμῆ Simpl. 143 F: τοῦτο οὐδαμῆ Pl. 237a Y, Ar. Ab,Gb,Ib, Simpl. 244F: τοῦτ οὐδαμῆ Pl. B,T,Y, 258d W: τοῦτ οὐ δαμῆ Pl. 237a W: τοῦτο μηδαμῆ Simpl. 135D, Ps. Alex. | δυνάμει Ar. T | ὄντα Pl. B,T,Y, 237a W, Simpl. D,Ε: ἐῶντα Ar. Ab

Since the differences between $\delta a\mu\hat{\eta}$ and $\delta a\mu\hat{\eta}$ and between $o\imath\delta a\mu\hat{\eta}$ and $o\imath\delta a\mu\hat{\eta}$ are insignificant (the iota subscript with a, η , and ω ceasing to be written after about 100 BC), Coxon and Cordero's different reporting of these words should not be taken as indicating a difference in their reading of the manuscripts. Contrast how Coxon gives $\tau o\imath v o \delta a\mu\hat{\eta}$, while Cordero prints $\tau o\imath v \delta a\mu\hat{\eta}$, as the reading at Simp. in Ph. 135. 21, E (codex Venetus Marcianus graecus 229, thirteenth century). Both of these reported readings differ (though Coxon's insignificantly) from the reading $\tau o\imath v o \delta a\mu\hat{\eta}$ recorded by Diels in his 1882 edition of Simplicius's commentary and later printed in Die Fragmente der Vorsokratiker. Again, while Coxon (as Diels) gives $\tau o\imath v \tau o v o\imath \delta a\mu\hat{\eta}$ as the reading at Simp. in Ph. 143. 31, F (codex Venetus Marcianus graecus 227, thirteenth century), Cordero records the reading of this manuscript as $\tau o\imath v \tau o v o\imath \delta a\mu\hat{\eta}$. Finally, Coxon gives $\tau o\imath v \tau o v \delta a\mu\hat{\eta}$ as the reading at Plato, Sophist 237 A 8, W (codex Vindobonensis suppl. gr. 7, eleventh century), while Cordero gives its reading as $\tau o\imath v \tau o v \delta a\mu\hat{\eta}$.

¹⁵ Coxon 1986: p. v, identifies the MSS consulted in the preparation of his edn., including the most important MSS of Simp. *in Ph.*, S.E. *M.* 7, and Procl. *in Prm.* Cordero does not indicate what MSS were consulted in preparation of his edn., merely noting that the text he presents 'provient en grande partie de sources manuscrites' (Cordero 1984: 20). Nevertheless, his extensive work on the history of the text of Parmenides indicates that he has consulted more MSS than Coxon.

¹⁶ Duke *et al.* 1995: 417, apparently rely on Coxon in reporting $\tau o \hat{v} \tau o \delta a \mu \hat{\eta}$ as the reading at Arist. *Metaph.* EJ and Simp. *in Ph.* 135 E, 143 DE, and 244 E. While they print this reading in their text in both locations in the *Sophist* where fr. 7. 1–2 is quoted, their apparatus reports $\tau o \hat{v} \tau o \hat{v} \delta a \mu \hat{\eta}$ as the reading of MSS β TW at both 237 A 8 (noting however 'nisi fort. $\tau o \hat{v} \tau o \hat{v} \delta a \mu \hat{\eta}$ hic voluit W') and 258 D 2 (noting 'nisi fort. $\tau o \hat{v} \tau o \hat{v} \delta a \mu \hat{\eta}$ hic voluit T').

Whose reports should one trust, absent the ability to consult the manuscripts oneself? A basis for comparing Coxon and Cordero's skills as collators is provided by the photo-reproduction in Coxon's edition of folios 124 and 125 of codex Florentinus Laurentianus 85, 19 (the manuscript of S.E. M. 7 designated 'N' by modern editors), which contains fr. 1. 1–30, fr. 7. 2–7, and fr. 8. 1. Table 9. 1 summarizes the discrepancies between Cordero's and Coxon's reports of N. As a basis for assessing their varying reports, it also gives the results of my own inspection of the photo-reproduction in each case. Starred (*) are those readings printed in the text of the two editions with no indication in the apparatus that the reading of N differs. For example, Coxon prints $\pi \acute{\epsilon} \mu \pi o \nu$ in fr. 1. 2, and his apparatus records no variant reading in N, which would appear to indicate that he read $\pi \acute{\epsilon} \mu \pi o \nu$ in N.

Now, anyone without experience of the problems of palaeography who views the scrawl across these two folios will easily see why total unanimity in reporting manuscript readings is unlikely. Only in a few cases, however, might difficulty in the copyist's hand be thought to explain the differences in Cordero and Coxon's reports. What more likely explains most of the differences is an apparent decision by one or the other not to report a variant deemed insignificant. This would be the charitable way of accounting for the different reports at fr. 1. 2, 8, 16, 17, 25, fr. 7. 2, and fr. 8. 1. In the remaining cases, Coxon's collation tends on the whole to be the more accurate. In the end, however, the results of this comparison do not generalize in a way that allows one, in lieu of direct inspection of the manuscripts, to determine whose report is to be trusted in other places where they diverge. Consider now, in light of the information in Table 9.1, the discrepancy between Cordero's report of $\tau o \hat{v}$ $\delta a \mu \hat{\eta}$ and Coxon's report of $\tau o \hat{v} \tau o \delta a \mu \hat{\eta}$ as the reading in fr. 7. 1 at Simp. in Ph. 135. 21, E. One cannot prefer one report to the other on the ground that Coxon's readings, say, are generally the more reliable. What is worse, one cannot even say with confidence that Coxon's report of $\tau o \hat{v} \tau o \delta a \mu \hat{\eta}$ accurately reflects what he saw when or if he consulted this manuscript in this place, for he may well have read $\tau o \hat{v} \delta a \mu \hat{\eta}$, like Cordero, and yet judged it too insignificant a variant to be reported. Even though Cordero's apparatus is deliberately less 'selective', the information in Table 9.1

Table 9.1 Discrepancies between Cordero's and Coxon's reports of cod. Fl. Laur. 85, 19, fos. 124 and 125

	Cordero 1984	Coxon 1986	Autopsy
fr. 1. 2	πέμπτον	πέμπον*	πέμπτον
fr. 1. 3	$\pi \stackrel{\cdot}{lpha} u au au au au$	πάντ' ἄτη	πάντ' ἄτη
fr. 1. 8	κύκλοισιν	κύκλοις*	κύκλοισιν
fr. 1. 13	$a\hat{v}$ $ au a \iota$	$aec{v} au lpha cupa cupa$	$aec{v} au a\iota$
	πλήν θ' αι'	$\pi\lambda\dot{\eta}\nu$ θ a î	$\pi\lambda\dot{\eta}\nu$ θ ° a î
fr. 1. 16	ως σφιν*	ως φιν	ως φιν
fr. 1. 17	ἀπερέως	$a\pi au \epsilon ho \epsilon \omega s^*$	ἀπερέως
fr. 1. 25	$\tau a i^*$	heta' a i'	θ α i
fr. 1. 29	ἀτερκές	$\dot{a} au\epsilon ho\kappa\grave{\epsilon}s$	άτερκ è ς
fr. 7. 2	διζήσεος	διζήσιος	διζήσεος
fr. 7. 4	ἀκοήν	ἀκουὴν*	incertum
fr. 8. 1	δ' ἔτι*	$\delta \epsilon ilde{ au}$	$\delta \epsilon ilde{\epsilon} au \iota$

indicates that he does not report reliably and consistently what is contained in the manuscripts. One can only conclude, with some dismay, that neither Cordero nor Coxon can be relied on as an accurate reporter of the manuscript readings.

One must also acknowledge the troubling errors in Coxon's reporting of the manuscripts as detailed by Denis O'Brien in a complementary note to his own 1987 edition. ¹⁷ He notes, for example, that whereas Diels's edition of Simplicius' commentary on Aristotle's *Physics* gives πάντη ὄνομα (om. εἶναι), παντὶ ὄνομα εἶναι, and πάντη ὄνομα εἶναι as variants of the end of fr. 8. 38, transmitted respectively in manuscripts D (Florentinus Laurentianus 85, 2), E (Venetus Marcianus graecus 229), and F (Venetus Marcianus graecus 229), Coxon's apparatus gives παντὶ ὄνομ' εἶναι as the reading in Simplicius with no indication of any variation in the manuscripts, all of which Coxon claims to have consulted. O'Brien also notes numerous instances where Coxon has not consulted the relevant manuscripts afresh and yet either fails to report manuscript readings published in previous editions of the quoting authors or, worse, inexplicably diverges from their reports. These are just some examples of the types of problem with Coxon's reporting noted by O'Brien. With some justification, then, O'Brien feels driven to renounce all systematic use of Coxon's apparatus. He is unnecessarily insulting, however, when he speaks of Coxon as merely 'pretending' to have consulted manuscripts of Simplicius' commentary on Aristotle's Physics and Proclus's commentary on Plato's Parmenides. It would be more fair and accurate to say that Coxon appears sporadically to have consulted some of the key manuscripts rather than to have collated them systematically.

However trivial the kind of discrepancies I have been noting may appear, they are nonetheless sufficient to frustrate efforts to produce today even a modest apparatus for the fragments on the basis of published scholarship rather than on the basis of fresh inspection and collation of the manuscripts. The difficulties engendered by the editions of Coxon and Cordero are apparent in what serves as an apparatus in O'Brien's own edition. He is often in the position of having to record different reports of the same manuscript or to opt for one report against another on sometimes deficient grounds. While O'Brien has been harshly criticized by Leonardo Tarán for failing to include a synthetic critical apparatus, ¹⁸ he has coped as well as can now be expected given the uncertainties introduced by the editions of Cordero and Coxon. Therefore, rather than providing an apparatus based on others' unreliable and flawed reportage, I instead, with the necessary caveats, refer readers requiring further details of the manuscript readings to the editions of Cordero, Coxon, and O'Brien.

If Tarán's own long-projected new edition of Simplicius' commentary on Aristotle's *Physics* had appeared, we might have expected now to have scrupulously reliable information regarding the readings in the manuscripts of the most crucial source for Parmenides' fragments. At a 1985 conference Tarán argued the need for a

O'Brien 1987a: 106–18. Anyone who would pronounce Coxon's the best edn. of the fragments (as several reviewers writing in English did when it first appeared) on the grounds that it is based on new collations of the most important MSS will find reading these pages a salutary experience. See also the telling criticisms at Tarán 1987: 260–1, of Coxon 1968b's misguided effort to argue for the superiority of MS F of Simp. *in Ph.* over MSS D and E.
Tarán 1993: 153.

new edition of Simplicius' commentary by detailing the serious shortcomings of Diels's edition, including his reliance on collations by others that were themselves often inaccurate or incomplete, his inaccurate or otherwise misleading reports of the manuscript readings, his misjudged elimination of several manuscripts he should have taken into account, and the existence of important manuscripts of which he was simply unaware. 19 Tarán concluded by describing the procedures he would follow in producing a new and truly critical edition of Simplicius' commentary. The scale of the work there projected, however, was enormous, given the number and the dispersal of the manuscripts he proposed to consult and the sheer size of Simplicius' commentary. Fortunately for our purposes, however, most of the examples of Diels's inaccuracy Tarán cited are in places where Simplicius quotes Parmenides. This useful information is incorporated in the presentation of the text that follows. Until the work Tarán envisaged is completed, however, an accurate and reliable apparatus criticus to accompany the fragments seems unattainable. While the present situation is certainly unfortunate, it is some kind of progress that we should no longer suppose reliable the information on which previous scholars blissfully relied. I might add that the frustrations of trying to cope with Cordero and Coxon's imperfect reporting of the manuscripts and of waiting so long for Tarán's new edition only strengthens me in the opinion that it is coming past time for the libraries whose special collections house the medieval manuscripts to foster greater access by using modern technology to produce hi-res images of these works and to make these readily available via the internet to the international scholarly community. With current technology it should no longer be necessary, as it was in the nineteenth and twentieth centuries, to travel to the great European libraries to consult these works. The manuscripts should instead now come to us. With this kind of open access, it would then in most cases be comparatively much more straightforward to resolve the uncertainties regarding the textual tradition fomented by the editions of Cordero and Coxon.

This explanation of why the following presentation of the Parmenidean fragments is not accompanied by an apparatus criticus should not make one think that our knowledge of the fragments themselves is generally insecure. This is hardly the case. As already indicated, only with respect to a word or phrase in roughly one line out of ten do recent editors tend to disagree about what Parmenides originally wrote (disregarding, again, differences of accentuation, capitalization, and restoration of epic/Ionic forms). There may be uncertainty at present about whether $\tau o \hat{v} \delta \alpha \mu \hat{\eta}$ or $\tau \circ \hat{v} \tau \circ \delta \alpha \mu \hat{\eta}$ is to be found at Simp. *in Ph.* 135. 21 in codex E but there now seems hardly any reason to doubt that the latter is what Parmenides wrote in fr. 7. 1. Furthermore, while it is certainly to be hoped that more careful combing of the manuscripts and accurate recording of the information they contain will improve our knowledge of the fragments, only marginal enhancement can reasonably be expected. The renewed investigation of the textual tradition by Cordero and Tarán in particular has already vielded valuable results in a few places, each of which is noted below. However, the most significant advances over the past few decades in our understanding of what Parmenides wrote have come, not from this type of

¹⁹ See Tarán 1987.

investigation, but from Ebert's attention to a major problem in the transmitted order of certain verses in fr. 8 and from closer attention to Parmenides' poetic dialect. The former advance has been discussed in the previous section, and the next will begin by touching upon the latter.

Standardization of Dialect, Capitalization, and Numbering

One of the many merits of Coxon's edition is his demonstration of how deeply Parmenides' language is steeped in the epic tradition. In his discussion of Parmenides' poetic dialect, Coxon argues that the evidence of the manuscripts, which 'offer hardly any Attic forms of which the more plausible epic and Ionic form is not attested for Parmenides in either the same or another place', taken together with Parmenides' evident dependence on Homer, 'amply justifies the restoration of epic and Ionic for tragic and Attic forms in the few places where the manuscripts present only the latter'. 20 While none of the corrections Coxon accordingly makes changes the sense of a verse, all have the advantage of crediting Parmenides with consistency in his dialect. Why, for example, should he be thought to have employed the Ionic $\tau\omega\dot{v}\tau\dot{o}v$ in some lines (fr. 8. 57, 58) and the Attic $\tau\alpha\dot{v}\tau\dot{o}v$ in others (fr. 6. 8, 9, fr. 8. 29, 34)? Just a year before the publication of Coxon's edition, David Sider had quite sensibly requested 'that Parmenides be edited according to the same standards we apply to his literary models, Homer and Hesiod';²¹ and he argued persuasively for restoration of some of the same forms Coxon would introduce. Sider and Coxon's pleas were not unprecedented, of course. Already in the nineteenth century textual critics would on occasion propose either restoring epic forms or preferring minority manuscript readings that reflect epic morphology. 22 But Sider and especially Coxon have been staunch advocates of more rigorous application of these editorial principles throughout the fragments.²³ This results in the following improvements on

²⁰ Coxon 1986: 7 and 8.

²¹ Sider 1985: 362. On Parmenides' epic inheritance, see Pfeiffer 1975; Pieri 1977; Arrighetti 1983; Wright 1998. A note of caution: that Parmenides' poetic dialect is that of epic does not entail that Parmenides' thought must be understood against a specifically Homeric background. The approach adopted in Mourelatos 1970 assumes this must be the case, but this approach is rightly criticized by Tarán 1977: 652–60. Although Tarán's tone is often too harsh, his conclusions that Parmenides' adoption of epic as his means of expression 'does not imply... that Parmenides' doctrine is in essentials connected with the motifs and themes of Homer, nor that the latter holds the key to the understanding of the former' (655) and that '[m]otifs are not necessarily transmitted together with language and meter' (658) are sound, as is his judgement that Mourelatos's nearly exclusive focus on Homeric material is altogether arbitrary. Similar criticisms could be made of Coxon 1986. In point of fact, the connections with Hesiod run deeper in Parmenides than with Homer, as Pellikaan-Engel 1974 amply demonstrates.

 $^{^{22}}$ So e.g. Brandis's proposal of i δθανάτησι συνήορος at fr. 1. 24, Karsten's advocacy of i i for i ταις at fr. 1. 30, and Stein's suggestion of i τωὐτόν for i ταιντον codd. at fr. 6. 8 and 9 (similarly Karsten at fr. 8. 29 and 34). Likewise, at fr. 1. 20 i αὐτέων N, even though the minority reading, has long been recognized as superior to i αὐτών LEs.

²³ Coxon's edn. was duly praised for this improvement by reviewers. Thus Schofield 1987: 350–1: 'Perhaps the most interesting and important general conclusion Coxon draws from his study of the manuscript tradition of Parmenides is the proposition (*contra* Diels) that Parmenides' diction is uniformly epic and Ionic....Scarcely a dramatic advance in understanding, but how secure is

Diels and Kranz: ἐς for εἰς codd. at fr. 1. 10 (cf. ἐς codd. at fr. 1. 2), ἀθανάτησι συνήορος for ἀθανάτοισι συνάορος codd. at fr. 1. 24, τῆς for ταῖς codd. at fr. 1. 30 (where NB τῆς ap. D.L. 9. 22) and fr. 12. 2, δοκεῦντα for δοκοῦντα codd. at fr. 1. 31, αὖτις for αὖθις codd. at fr. 5. 2, πλάζονται (Aldine) for πλάττονται (DEF) at fr. 6. 5 (so Diels and Coxon's reports of the readings at Simp. in Ph. 117. 9; Cordero records no variants), as well as πλαγκτόν for πλακτόν and φορεῦνται for φοροῦνται at fr. 6. 6, 24 τωὖτόν for ταὖτόν codd. at fr. 6. 8 and 9, fr. 8. 29 and 34, μοῦνος for μόνος at fr. 8. 1 (where both are attested), ἐάσω for ἐάσσω codd. at fr. 8. 25 ἐπλάχθησαν for ἐπλάχθησαν at fr. 8. 28 (where both are attested; cf. πολυπλάγκτων codd. at fr. 16. 1), τωὖτῷ for ταὖτῷ codd. at fr. 8. 29, αἰθερίην for αἰθερίαν codd. at fr. 10. 1, and καθαρῆς for καθαρᾶς codd. at fr. 10. 2.

It only remains to discuss a few minor matters before presenting the text and translation of the fragments, followed by notes on individual textual problems. While it should be normal editorial practice for proper names to be capitalized, there are instances in the poem where it is difficult to determine whether a noun Parmenides employs in fact functions as such. This is because he was writing in an era when many of the forces and heavenly bodies once conceived of as personified divinities were being naturalized and demythologized. This transition did not occur all at once, however, and one still encounters gods and goddesses in Parmenides' poem. There are consequently numerous places where one must decide whether a noun is functioning simply to designate a particular heavenly body, element, or power or whether the noun is supposed to be the proper name of some divinity personifying the entity in question. These decisions cannot be sidestepped by avoiding capitalization altogether. There are places where Parmenides is plainly employing the proper name of a divinity, as for instance in fr. 13, where it would seem strange to print $\ddot{\epsilon}\rho\omega\tau\alpha$ (as Coxon does) in preference to " $E\rho\omega\tau a$, or in fr. 1. 9, where it would be equally strange to print $\dot{\eta}\lambda i\dot{a}\delta\epsilon_{S}$ (as Coxon and Cordero do) rather than $H\lambda\iota\acute{a}\delta\epsilon_{S}$.

Greater difficulties occur in the case of nouns denoting heavenly bodies, powers or forces, and elements. In fr. 11, for instance, Parmenides mentions a series of heavenly bodies, many of which featured as divinities in earlier mythical cosmogonies. However, the fact that earth, sun, and moon are listed here alongside 'the common aether' and 'the heavenly Milky Way' suggests that they are conceived of by Parmenides as

one's grip on an author if one does not attend to the question of whether his language is Ionic and epic or whether he slips in and out of different dialects at will?' Compare Wright 1988: 275: 'there is now a consistent orthography of epic and Ionic where previously there had been a sprinkling of Attic, tragic, and what were supposed to be Italian dialect forms'. Renehan 1992: 398–9, counts the printing of more consistently epic and Ionic forms among Coxon's chief contributions to the text, allowing that he 'makes on the whole a good case (against Hermann Diels) for removing some Attic endings and restoring Homeric and Ionic forms'.

²⁵ Coxon 1986: 198 *ad loc*: 'The form $\epsilon \acute{a}\sigma \omega$ is that which occurs in our mss. of Homer and is much better attested for P. by the mss. of Simplicius than the variant $\epsilon \acute{a}\sigma \sigma \omega$ '.

²⁴ Both forms appear attested in each case, though the MS readings at Simp. *in Ph.* 117. 10 are diversely reported by Diels, Cordero, and Coxon. In his 1882 edn. of Simp. *in Ph.* 1–4, Diels prints πλαγκτόν and gives πλακτόν in his apparatus as the reading at DF¹. The apparatus for Parm. fr. 6. 6 at Cordero 1984: 24, reads: 'πλαγκτόν Simpl. E,F,H',H",X, Cod. Taur. B,II,2 | νόον] νόμον Simpl. E'. At Coxon 1986, 55: 'πλαγκτόν F (e πλακτὸν factum): πλακτὸν DE φορεῦνται E: φοροῦνται DF'. There is no apparatus for the line in O'Brien 1987 a.

natural bodies rather than as personified divinities. Thus $\gamma\alpha\hat{i}\alpha$, $\tilde{\eta}\lambda \iota\sigma$, and $\sigma\epsilon\lambda\tilde{\eta}\nu\eta$ are not capitalized in the text below. Even $\delta\lambda\nu\mu\pi\sigma s$ at fr. 11. 2 appears to designate not Mt Olympus but the outermost rim of the heavens and, as such, should no more be capitalized than $\sigma\hat{i}\rho\alpha\nu\delta\nu$ at fr. 10. 5. The situation is slightly more complicated when we come to the nouns designating such forces or powers as justice, necessity, and fate. These are often portrayed as performing some activity, which suggests they are still conceived of as personified to some extent. For example, justice is described as holding the keys to the great doors through which Parmenides passes as he comes to the goddess's abode, making it natural to print $\Delta i\kappa\eta$ at fr. 1. 14. The same rationale suggests capitalization of $\Delta i\kappa\eta$ again at fr. 1. 28 and fr. 8. 14, of $\Theta\epsilon\mu s$ at fr. 1. 28, of $Moi\rho(a)$ at fr. 8. 37 (contrast $\mu\sigmai\rho a$ at fr. 1. 26, where the term clearly denotes a fate rather than Fate herself), and of $A\nu\alpha\gamma\kappa\eta$ at fr. 8. 30 and fr. 10. 6. It would be odd, moreover, if these four closely related forces were not all treated alike.

The decision is even more difficult with another pair of closely connected nouns, $\pi \epsilon \iota \theta \omega$ and $\partial \lambda \eta \theta \epsilon i \eta$, which I have decided not to capitalize. Although $\Pi \epsilon \iota \theta \omega$ ('Persuasion') appears as a personified deity in Hesiod and continues to do so during Parmenides' time (see Hes. Op. 73, Th. 349; cf. Pi. P. 9. 39, fr. 123. 10, Aesch. Supp. 1040, Hdt. 8. 111), there are also instances where $\pi \epsilon \iota \theta \omega$ ('persuasiveness') functions simply as an appellative noun (e.g. Aesch. Ag. 385, Pr. 173). Parmenides does not cast persuasion in the same kind of active role as he does the forces just discussed ($\kappa \epsilon \lambda \epsilon \nu \theta \sigma_s$, not $\Pi \epsilon \iota \theta \omega$, is the understood subject of $\delta \pi \eta \delta \epsilon \hat{i}$ at fr. 2. 4); and his use of cognate forms elsewhere in the poem suggests that this force is sufficiently naturalized as no longer to be conceived as a divinity. Recent editors (including Kirk et al., Cordero, Coxon, O'Brien, and Cassin) also agree in not capitalizing $\pi \epsilon \iota \theta o \hat{v}_S$ at fr. 2. 4. While recent editors are less unanimous about the capitalization of $d\lambda\eta\theta\epsilon i\eta$, the number of instances in early Greek literature of its being personified as a deity are negligible. Parmenides might well have been innovative here and treated it as such, and $\partial h \theta \epsilon i \eta$ does often appear to serve as a name for the entity whose nature is described in the Way of Conviction. In this use the term does not seem personified, however, and I have thus decided against capitalization of $\partial h \theta \in \mathcal{U}$. Finally, there is an equally difficult decision to be made regarding 'night' and 'day' in fr. 1. 9 and 11. While $N \dot{v} \xi$ is employed in certain important contexts as the proper name for the goddess, Night (Hom. Il. 14. 259, Hes. Op. 17, Th. 123, 211, 224), there does not appear to have been a parallel use of ${}^{3}H\mu\alpha\rho$. At fr. 1. 11, therefore, where the nouns are readily understood as referring simply to the successive periods of night and day, they are not capitalized. At the end of fr. 1. 9, however, the context suggests that the divinity Night is being referred to and thus that $N\nu\kappa\tau\delta\varsigma$ should be capitalized.

The numbering of the fragments in Diels and Kranz's edition is here preserved since it has long since become standard. While for ease of reference the fragments are also presented in the order of this numbering, this choice represents no more than a qualified endorsement of Diels's judgements regarding their relative position in Parmenides' original poem. Alternative orderings have been proposed, especially for fr. 4, fr. 5, and fragments from the cosmology; and a more radical and substantive reordering of frs. 2, 3, and 6 has been argued for at length in Wiesner 1996. None of the reorderings constitutes a clear improvement on Diels's ordering, while some are almost certainly worse, so that it will do no harm to reproduce, with appropriate caution, both Diels's ordering and his numbering of the fragments.

TEXT OF THE FRAGMENTS

Fragment 1

(vv. 1-30; S.E. M. 7. 111; vv. 28b-32; Simp. in Cael. 557. 25-558. 2; vv. 28b-30; D.L. 9. 22)

ἵπποι ταί με φέρουσιν ὅσον τ' ἐπὶ θυμὸς ἱκάνοι πέμπον, ἐπεί μ' ἐς δδὸν βῆσαν πολύφημον ἄγουσαι δαίμονος, ή κατὰ †πάντ' ἄτη† φέρει εἰδότα φῶτα. τῆ φερόμην, τῆ γάρ με πολύφραστοι φέρον ἵπποι άρμα τιταίνουσαι, κοῦραι δ' όδὸν ἡγεμόνευον. 5 άξων δ' εν χνοίησιν ί<ει> σύριγγος ἀυτὴν αἰθόμενος, δοιοῖς γὰρ ἐπείγετο δινωτοῖσιν κύκλοις ἀμφοτέρωθεν, ὅτε σπερχοίατο πέμπειν Ήλιάδες κοῦραι, προλιποῦσαι δώματα Νυκτὸς ές φάος, ωσάμεναι κράτων ἄπο χερσὶ καλύπτρας. 10 *ἔνθα πύλαι νυκτός τε καὶ ἤματός εἰσι κελεύθων*, καί σφας ὑπέρθυρον ἀμφὶς ἔχει καὶ λάινος οὐδός. αὐταὶ δ' αἰθέριαι πληνται μεγάλοισι θυρέτροις. των δὲ Δίκη πολύποινος ἔχει κληίδας ἀμοιβούς. τὴν δὴ παρφάμεναι κοῦραι μαλακοῖσι λόγοισιν 15 πείσαν ἐπιφραδέως, ώς σφιν βαλανωτὸν ὀχῆα ἀπτερέως ὤσειε πυλέων ἄπο· ταὶ δὲ θυρέτρων γάσμ' άγανες ποίησαν άναπτάμεναι πολυγάλκους άξονας εν σύριγξιν αμοιβαδον είλίξασαι γόμφοις καὶ περόνησιν ἀρηρότε· τῆ ρα δι' αὐτέων 20 ίθὺς ἔχον κοῦραι κατ' ἀμαξιτὸν ἄρμα καὶ ἵππους. καί με θεὰ πρόφρων ὑπεδέξατο, χείρα δὲ χειρὶ δεξιτερήν έλεν, ὧδε δ' ἔπος φάτο καί με προσηύδα. ὧ κοῦρ' ἀθανάτησι συνήορος ἡνιόχοισιν ιπποις θ' αι σε φέρουσιν ικάνων ημέτερον δώ, 25 χαιρ', ἐπεὶ οὔτι σε μοιρα κακὴ προὔπεμπε νέεσθαι τήνδ' όδόν (ή γαρ ἀπ' ἀνθρώπων ἐκτὸς πάτου ἐστίν), άλλὰ Θέμις τε Δίκη τε. χρεὼ δέ σε πάντα πυθέσθαι, ημέν άληθείης εὐκυκλέος άτρεμές ήτορ ηδέ βροτών δόξας, της οὐκ ἔνι πίστις ἀληθής. 30 άλλ' ἔμπης καὶ ταῦτα μαθήσεαι, ώς τὰ δοκεῦντα χρην δοκίμως είναι διὰ παντὸς πάντα περώντα.

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TRANSLATION AND CONTEXT OF THE FRAGMENTS

Fragment 1

Sextus introduces his extensive quotation from Parmenides' proem as follows: 'Xenophanes' associate Parmenides condemned doxastic reason, by which I mean that which has weak conceptions, and posited as the criterion reason capable of knowledge, i.e. unerring reason, having renounced conviction in the senses. Thus commencing his *On nature*, he writes in this way: "The mares who carry me...".' In commenting on the important passage at Arist. *Cael. 3.* 1. 298^b14-24 , Simplicius quotes vv. 28b-32 as evidence that Parmenides posited two kinds of reality, 'that of what genuinely is $(\tau \hat{o} \ \tilde{o} \nu \tau \omega s \ \tilde{o} \nu)$, the intelligible, and that of what comes to be, the perceptible, which he did not deem it right to call "being" without qualification but "apparent being" $(\delta o \kappa o \hat{v} \nu \ \tilde{o} \nu)$; therefore he says truth is about what is, while doxa is about what comes to be. Parmenides at any rate says: "You must learn all things...".'

The mares who carry me as far as the soul could reach were leading the way, once they stepped guiding me upon the far-fabled path of the divinity, which carries over †all cities† the knowing man. On it was I borne, for on it were the headstrong mares carrying me, drawing the chariot along, and maidens were leading the way. And the axle in its naves was making the sockets screech as it was burning, for it was being driven by two whirling wheels on either side, when hastening to lead the way were the maiden daughters of Helios, having once left the halls of Night for the light, having pushed with their hands the veils from their heads. There are the gates of the paths of night and day, and a lintel and a stone threshold hold them on both sides. And they themselves high in the air are filled with great doors; and hard-punishing Justice holds their alternating bolts. Appeasing her with gentle words, the maidens shrewdly persuaded her to push the pin-fastened bolt for them swiftly back from the gates. And in the doorframe these made a yawning chasm as they swung open, while the bronze-clad door posts they were rotating one after the other in their sockets fitted with dowels and rivets. There and then through them the maidens held the chariot and mares straight along the broad road. And the goddess received me kindly, and in her hand she took my right hand, and she spoke and addressed me thus: 'O young man, accompanied by immortal charioteers and mares who bear you as you arrive at our abode, welcome, since a fate by no means ill sent you ahead to travel this way (for surely it is far from the track of humans), but Right and Justice. You must needs learn all things, both the unshaken heart of well-rounded reality and the notions of mortals, in which there is no genuine trustworthiness. Nonetheless these things too will you learn, how what they resolved had actually to be, all through all pervading.

(vv. 1–8: Procl. *in Ti*. 2. 105 B, i. 345. 18–24, 26–7; vv. 3–8: Simp. *in Ph.* 116. 28–117. 1; vv. 5b–6: Procl. *in Prm.* 6. 1078. 4–5)

εί δ' ἄγ' ἐγὼν ἐρέω, κόμισαι δὲ σὺ μῦθον ἀκούσας, αἴπερ ὁδοὶ μοῦναι διζήσιός εἰσι νοῆσαι· ἡ μὲν ὅπως ἔστιν τε καὶ ὡς οὐκ ἔστι μὴ εἶναι, πειθοῦς ἐστι κέλευθος, ἀληθείη γὰρ ὀπηδεῖ, ἡ δ' ὡς οὐκ ἔστιν τε καὶ ὡς χρεών ἐστι μὴ εἶναι, τὴν δή τοι φράζω παναπευθέα ἔμμεν ἀταρπόν· οὔτε γὰρ ἂν γνοίης τό γε μὴ ἐόν, οὐ γὰρ ἀνυστόν, οὔτε φράσαις.

Fragment 3

(Plot. Enn. 5. 1. 8, 5. 9. 5; Clem.Al. Strom. 6. 23. 3)

... τὸ γὰρ αὐτὸ νοεῖν ἐστίν τε καὶ εἶναι

Fragment 4

(Clem.Al. Strom. 5. 15. 5)

λεῦσσε δ' ὅμως ἀπεόντα νόῳ παρεόντα βεβαίως·
οὐ γὰρ ἀποτμήξει τὸ ἐὸν τοῦ ἐόντος ἔχεσθαι
οὔτε σκιδνάμενον πάντη πάντως κατὰ κόσμον
οὔτε συνιστάμενον.

Fragment 5

(Procl. in Prm. 1. 708. 10-11)

ξυνὸν δέ μοί ἐστιν ὁππόθεν ἄρξωμαι· τόθι γὰρ πάλιν ἵξομαι αὖτις.

Come now, I shall tell—and convey home the tale once you have heard—just which ways of inquiry alone there are for understanding: the one, that [it] is and that [it] is not not to be, is the path of conviction, for it attends upon true reality, but the other, that [it] is not and that [it] must not be, this, I tell you, is a path wholly without report: for neither could you apprehend what is not, for it is not to be accomplished, nor could you indicate it.

Fragment 3

Defending his claim that the three primary hypostases, the One or the Good, *Nous*, and Soul, are all represented by Plato as relating to one another just as they do in his own system, Plotinus says that 'indeed even earlier Parmenides grasped a doctrine of this kind, in so far as he identified being and *nous*, and he did not locate being among the perceptibles, saying: "for the same thing..."

... for the same thing is (there) for understanding and for being

Fragment 4

Clement writes, prior to quoting these lines, 'Speaking in riddles about hope, Parmenides in his poem says such things as...' He then comments: 'For one who hopes, just like one who has faith, sees with the intellect its objects and things to come.'

but behold things that, while absent, are steadfastly present to thought: for you will not cut off What Is from holding fast to What Is, neither dispersing everywhere every way in a world order nor drawing together

Fragment 5

Proclus rather inexplicably quotes these words together with fr. 8. 25 and 43 as evidence that Parmenides presumed a plurality of intelligible objects.

It is a common point for me from which I shall begin: for there I shall come back again.

(vv. 1–2a: Simp. in Ph. 86. 27–8; vv. 1b–9: Simp. in Ph. 117. 4–13; vv. 8–9a: Simp. in Ph. 78. 3–4)

χρὴ τὸ λέγειν τὸ νοεῖν τ' ἐὸν ἔμμεναι· ἔστι γὰρ εἶναι, μηδὲν δ' οὐκ ἔστιν· τά σ' ἐγὼ φράζεσθαι ἄνωγα. πρώτης γάρ σ' ἀφ' ὁδοῦ ταύτης διζήσιος <ἄρξω>, αὐτὰρ ἔπειτ' ἀπὸ τῆς, ἣν δὴ βροτοὶ εἰδότες οὐδὲν πλάζονται, δίκρανοι· ἀμηχανίη γὰρ ἐν αὐτῶν στήθεσιν ἰθύνει πλαγκτὸν νόον· οἱ δὲ φορεῦνται, κωφοὶ ὁμῶς τυφλοί τε, τεθηπότες, ἄκριτα φῦλα, οἶς τὸ πέλειν τε καὶ οὐκ εἶναι τωὐτὸν νενόμισται κοῦ τωὐτόν· πάντων δὲ παλίντροπός ἐστι κέλευθος.

Fragment 7

(vv. 1–2: Pl. *Sph.* 237 A 8–9, 258 D 2–3, Simp. *in Ph.* 143. 31–144. 1; v. 1: Arist. *Metaph.* 14. 2. 1089^a4; vv. 2–7: S.E. *M.* 7. 111; v. 2: Simp. *in Ph.* 78. 6, 650. 13; vv. 3–5: D.L. 9. 22)

οὐ γὰρ μήποτε τοῦτο δαμῆ, εἶναι μὴ ἐόντα. ἀλλὰ σὰ τῆσδ' ἀφ' ὁδοῦ διζήσιος εἶργε νόημα μηδέ σ' ἔθος πολύπειρον ὁδὸν κατὰ τήνδε βιάσθω, νωμᾶν ἄσκοπον ὅμμα καὶ ἠχήεσσαν ἀκουὴν καὶ γλῶσσαν, κρῦναι δὲ λόγῳ πολύδηριν ἔλεγχον ἐξ ἐμέθεν ῥηθέντα.

Fragment 8

(vv. 1–52: Simp. in Ph. 145. 1–146. 25; vv. 1–14: Simp. in Ph. 78. 8–23; vv. 50–61: Simp. in Ph. 38. 30–39. 9; vv. 50–2: Simp. in Cael. 558. 5–7)

μοῦνος δ' ἔτι μῦθος όδοῖο λείπεται, ὡς ἔστιν· ταύτη δ' ἐπὶ σήματ' ἔασι 5

Simplicius quotes vv. 1–2a as evidence that Parmenides held 'that there is one and the same account of all things, that of What Is'; he comments that 'if What Is is just what one may either speak or think about, there will be one account of all things, that of What Is' and then quotes fr. 8. 36b–8. He later quotes vv. 1b–9, 'in which he censures those who identify opposed propositions', as evidence that Parmenides held that contradictories cannot be true simultaneously.

It is necessary to say and to think that What Is is; for it is to be, but nothing it is not. These things I bid you ponder.

For <I shall begin > for you from this first way of inquiry, then yet again from that along which mortals who know nothing wander two-headed: for haplessness in their breasts directs wandering understanding. They are borne along deaf and blind at once, bedazzled, undiscriminating hordes, who have supposed that it is and is not the same and not the same; but the path of all these turns back on itself.

Fragment 7

In Plato's *Sophist*, the Eleatic Visitor introduces vv. 1–2 while recalling how Parmenides forbade any assumption that what is not somehow is: 'when we were young', he says, 'the great Parmenides used to maintain this firmly from beginning to end, so saying on each occasion both in plain speech and in verse', at which point he quotes these verses with some minor variations (on which, see Palmer 1999a: 78 n. 38). Aristotle's quotation of v. 1 is a nod to this context. Diogenes Laertius quotes vv. 3–5 as evidence that Parmenides identified reason as the criterion and held the senses to be imprecise.

... for this may never be made manageable, that things that are not are. But you from this way of inquiry restrain your understanding, and do not let habit born of much experience force you along this way, to employ aimless sight and echoing hearing and tongue. But judge by reason the strife-filled critique I have delivered.

Fragment 8

As yet a single tale of a way remains, that it is; and along this path markers are there

5

πολλὰ μάλ', ώς ἀγένητον ἐὸν καὶ ἀνώλεθρόν ἐστιν	
οὖλον μουνογενές τε καὶ ἀτρεμὲς ἠδὲ τελεστόν·	
οὐδέ ποτ' ἦν οὐδ' ἔσται, ἐπεὶ νῦν ἐστιν ὁμοῦ πᾶν,	4
έν, συνεχές· τίνα γὰρ γένναν διζήσεαι αὐτοῦ;	
πῆ πόθεν αὐξηθέν; οὕτ' ἐκ μὴ ἐόντος ἐάσω	
φάσθαι σ' οὐδὲ νοεῖν· οὐ γὰρ φατὸν οὐδὲ νοητὸν	
ἔστιν ὅπως οὐκ ἔστι. τί δ΄ ἄν μιν καὶ χρέος ὧρσεν	
υστερον η πρόσθεν, τοῦ μηδενὸς ἀρξάμενον, φῦν;	10
οὕτως ἢ πάμπαν πελέναι χρεών ἐστιν ἢ οὐχί.	
οὐδέ ποτ' ἐκ μὴ ἐόντος ἐφήσει πίστιος ἰσχὺς	
γίγνεσθαί τι παρ' αὐτό· τοῦ εἵνεκεν οὔτε γενέσθαι	
οὕτ' ὅλλυσθαι ἀνῆκε Δίκη χαλάσασα πέδησιν,	
άλλ' ἔχει· ἡ δὲ κρίσις περὶ τούτων ἐν τῷδ' ἐστιν·	15
$\ddot{\epsilon}$ στιν $\ddot{\eta}$ οὐκ $\ddot{\epsilon}$ στιν· κέκριται δ ' οὖν, $\ddot{\omega}$ σπερ $\dot{\omega}$ νάγκη,	1,
την μεν εαν ανόητον ανώνυμον (οὐ γαρ αληθής	
την μεν εαν ανοιγιον ανανομον (ου γαρ αλησης ἔστιν όδός), τὴν δ' ὥστε πέλειν καὶ ἐτήτυμον εἶναι.	
πῶς δ' ἂν ἔπειτα πέλοι τὸ ἐόν; πῶς δ' ἄν κε γένοιτο;	20
εὶ γὰρ ἔγεντ', οὐκ ἔστ', οὐδ' εἴ ποτε μέλλει ἔσεσθαι·	20
τὼς γένεσις μὲν ἀπέσβεσται καὶ ἄπυστος ὅλεθρος.	
οὐδὲ διαιρετόν ἐστιν, ἐπεὶ πᾶν ἐστιν ὁμοῖον·	
οὐδέ τι τῆ μᾶλλον, τό κεν εἴργοι μιν συνέχεσθαι,	
οὐδέ τι χειρότερον, πᾶν δ' ἔμπλεόν ἐστιν ἐόντος.	
τῷ ξυνεχὲς πᾶν ἐστιν· ἐον γὰρ ἐόντι πελάζει.	25
αὐτὰρ ἀκίνητον μεγάλων ἐν πείρασι δεσμῶν	
ἔστιν ἄναρχον ἄπαυστον, ἐπεὶ γένεσις καὶ ὄλεθρος	
τῆλε μάλ' ἐπλάγχθησαν, ἀπῶσε δὲ πίστις ἀληθής.	
τωὐτόν τ' ἐν τωὐτῷ τε μένον καθ' ἑαυτό τε κεῖται	
χοὔτως ἔμπεδον αὖθι μένει· κρατερὴ γὰρ ἀνάγκη	30
πείρατος ἐν δεσμοῖσιν ἔχει, τό μιν ἀμφὶς ἐέργει,	
οὕνεκεν οὐκ ἀτελεύτητον τὸ ἐὸν θέμις εἶναι·	
ἔστι γὰρ οὖκ ἐπιδευές· ἐὸν δ' ἂν παντὸς ἐδεῖτο.	33
αὐτὰρ ἐπεὶ πεῖρας πύματον, τετελεσμένον ἐστὶ	42
πάντοθεν, εὐκύκλου σφαίρης ἐναλίγκιον ὄγκῳ,	
μεσσόθεν ἰσοπαλὲς πάντη· τὸ γὰρ οὔτε τι μεῖζον	
οὔτε τι βαιότερον πελέναι χρεών ἐστι τῆ ἢ τῆ·	45
οὔτε γὰρ οὖκ ἐὸν ἔστι, τό κεν παύοι μιν ἱκνεῖσθαι	
εἰς ὁμόν, οὕτ' ἐὸν ἔστιν ὅπως εἴη κεν ἐόντος	
τῆ μᾶλλον τῆ δ' ἦσσον. ἐπεὶ πᾶν ἐστιν ἄσυλον,	
οἷ γὰρ πάντοθεν ἶσον, ὁμῶς ἐν πείρασι κύρει.	
έν τῷ σοι παύω πιστὸν λόγον ἦδὲ νόημα	5(
ἀμφὶς ἀληθείης· δόξας δ' ἀπὸ τοῦδε βροτείας	-
μάνθανε, κόσμον ἐμῶν ἐπέων ἀπατηλὸν ἀκούων.	52
τωὐτὸν δ' ἐστὶ νοείν τε καὶ οὕνεκεν ἔστι νόημα.	34
οὐ γὰρ ἄνευ τοῦ ἐόντος, ἐν ῷ πεφατισμένον ἐστίν,	35
or jup and to corros, or a negationer contr,	5.

very many, that What Is is ungenerated and deathless,	
whole and uniform, and still and perfect;	
but not ever was it, nor yet will it be, since it is now together entire,	5
single, continuous; for what birth will you seek of it?	
How, whence increased? From not being I shall not allow	
you to say or to think: for not to be said and not to be thought	
is it that it is not. And indeed what need could have aroused it	
later rather than before, beginning from nothing, to grow?	10
Thus it must either be altogether or not at all.	
Nor ever from not being will the force of conviction allow	
something to come to be beyond it: on account of this neither to be born	
nor to die has Justice allowed it, having loosed its bonds,	
but she holds it fast. And the decision about these matters lies in this:	15
it is or it is not; but it has in fact been decided, just as is necessary,	1)
to leave the one unthought and nameless (for no true	
way is it), and that the one that it is indeed is genuine.	
And how could What Is be hereafter? And how might it have been?	
For if it was, it is not, nor if ever it is going to be:	20
thus generation is extinguished and destruction unheard of.	20
Nor is it divided, since it is all alike;	
and it is not any more there, which would keep it from holding together,	
nor any worse, but it is all replete with What Is. Therefore it is all continuous: for What Is draws to What Is.	25
	25
And unmoved within the limits of great bonds	
it is unbeginning unending, since generation and destruction	
have wandered quite far away, and genuine conviction has expelled them.	
And remaining the same, in the same place, and on its own it rests,	20
and thus steadfast right there it remains; for powerful Necessity	30
holds it in the bonds of a limit, which encloses it all around,	
wherefore it is right that What Is be not unfulfilled;	
for it is not lacking: if it were, it would lack everything.	33
But since there is a furthest limit, it is perfected	42
from every side, like the bulk of a well-rounded globe,	
from the middle equal every way: for that it be neither any greater	
nor any smaller in this place or in that is necessary;	45
for neither is there non-being, which would stop it reaching	
to its like, nor is What Is such that it might be more than What Is	
here and less there. Since it is all inviolate,	
for it is equal to itself from every side, it extends uniformly in limits.	
At this point I cease for you the trustworthy account and meditation	50
regarding true reality; from this point on mortal notions	
learn, listening to the deceptive order of my verses.	52
The same thing is both for understanding and that because of which there is	
understanding.	34
For not without What Is, depending on which it has been expressed,	35

εύρήσεις τὸ νοεῖν∙ οὐδὲν γὰρ <ἣ> ἔστιν ἢ ἔσται	
άλλο πάρεξ τοῦ ἐόντος, ἐπεὶ τό γε Μοῖρ' ἐπέδησεν	
οὖλον ἀκίνητόν τ' ἔμεναι· τῷ πάντ' ὀνόμασται	
όσσα βροτοὶ κατέθεντο πεποιθότες εἶναι ἀληθῆ,	
γίγνεσθαί τε καὶ ὄλλυσθαι, εἶναί τε καὶ οὐχί,	40
καὶ τόπον ἀλλάσσειν διά τε χρόα φανὸν ἀμείβειν.	41
μορφας γαρ κατέθεντο δύο γνώμας ονομάζειν,	53
τῶν μίαν οὐ χρεών ἐστιν, ἐν ῷ πεπλανημένοι εἰσίν	
αντία δ' εκρίναντο δέμας καὶ σήματ' εθεντο	55
χωρὶς ἀπ' ἀλλήλων, τῆ μὲν φλογὸς αἰθέριον πῦρ,	
ηπιον ὄν, μέγ' <i>ἐλαφρόν, ἐωυτῷ πάντοσε τωὐτόν</i> ,	
τῷ δ' ἐτέρῳ μὴ τωὐτόν· ἀτὰρ κἀκεῖνο κατ' αὐτὸ	
τἀντία, νύκτ' ἀδαῆ, πυκινὸν δέμας ἐμβριθές τε.	
τόν σοι ἐγὼ διάκοσμον ἐοικότα πάντα φατίζω,	60
ώς οὺ μή ποτέ τίς σε βροτών γνώμη παρελάσση.	

(Simp. in Ph. 180. 9-12)

αὐτὰρ ἐπειδὴ πάντα φάος καὶ νὺξ ὀνόμασται καὶ τὰ κατὰ σφετέρας δυνάμεις ἐπὶ τοῖσί τε καὶ τοῖς, πᾶν πλέον ἐστὶν ὁμοῦ φάεος καὶ νυκτὸς ἀφάντου ἴσων ἀμφοτέρων, ἐπεὶ οὐδετέρω μέτα μηδέν.

Fragment 10

(Clem.Al. Strom. 5. 138. 1)

εἴση δ' αἰθερίην τε φύσιν τά τ' ἐν αἰθέρι πάντα σήματα καὶ καθαρῆς εὐαγέος ἠελίοιο λαμπάδος ἔργ' ἀίδηλα καὶ ὁππόθεν ἐξεγένοντο, ἔργα τε κύκλωπος πεύση περίφοιτα σελήνης καὶ φύσιν, εἰδήσεις δὲ καὶ οὐρανὸν ἀμφὶς ἔχοντα, ἔνθεν ἔφυ τε καὶ ὥς μιν ἄγουσ' ἐπέδησεν Ἀνάγκη πείρατ' ἔχειν ἄστρων.

Fragment 11

(Simp. in Cael. 559. 22-5)

πῶς γαῖα καὶ ἥλιος ἦδὲ σελήνη αἰθήρ τε ξυνὸς γάλα τ' οὐράνιον καὶ ὅλυμπος ἔσχατος ἦδ' ἄστρων θερμὸν μένος ὡρμήθησαν γίγνεσθαι.

will you find understanding: for nothing else either is or will be	
except What Is, since Fate bound it	
to be whole and unmoved; to it all things have been given as names,	
all that mortals have established in their conviction that they are genuine,	
both coming to be and perishing, both being and not,	40
and altering place and exchanging brilliant colour.	41
For they fixed their minds on naming two forms,	53
one of which it is not right to name, wherein they have wandered astray:	
but they distinguished things opposite in form and assigned them marks	55
distinct from one another, for the one the etherial flame of fire,	
being gentle, most light, every way the same as itself,	
yet not the same as the other; but that one is in itself	
the opposite, dark night, dense in form and heavy.	
To you I relate this ordering of things, fitting and entire,	60
so that no understanding of mortals may ever surpass you.	

Simplicius indicates that these verses followed shortly after fr. 8. 59.

But since all things have been named light and night and things in virtue of their powers have been given as names to these and to those, all is full of light and invisible night together, of both alike, since nothing is with neither.

Fragment 10

Clement's introduction to his quotation of these verses does little more than identify them as Parmenides'.

You will know the aether's nature, and in the aether all the signs, and the unseen works of the pure torch of the brilliant sun, and from whence they came to be, and you will learn the wandering works of the round-eyed moon and its nature, and you will know too the surrounding heaven, both whence it grew and how Necessity directing it bound it to furnish the limits of the stars.

Fragment 11

> ... how the earth and sun and moon and the shared aether and the heavenly milk and Olympos outermost and the hot might of the stars began to come to be.

(vv. 1-3: Simp. in Ph. 39. 14-16; vv. 2-6: Simp. in Ph. 31. 13-17)

αί γὰρ στεινότεραι πληνται πυρὸς ἀκρήτοιο, αἱ δ' ἐπὶ τῆς νυκτός, μετὰ δὲ φλογὸς ἵεται αἶσα· ἐν δὲ μέσω τούτων δαίμων ἡ πάντα κυβερνῷ· πάντη γὰρ στυγεροῖο τόκου καὶ μίξιος ἄρχει πέμπουσ' ἄρσενι θηλυ μιγῆν τό τ' ἐναντίον αὖτις ἄρσεν θηλυτέρω.

Fragment 13

(Pl. Smp. 178 в 11, Arist. Metaph. 1. 4. 984 $^{\rm b}$ 26, Simp. in Ph. 39. 18) $\pi\rho\dot{\omega}\tau\iota\sigma\tau\sigma\nu\;\mu\dot{\epsilon}\nu\;{}''\!E\rho\omega\tau\alpha\;\theta\epsilon\hat{\omega}\nu\;\mu\eta\tau\iota\sigma\alpha\tau\sigma\;\pi\dot{\alpha}\nu\tau\omega\nu$

Fragment 14

(Plu. Col. 1116 A)

νυκτιφαές περὶ γαῖαν ἀλώμενον ἀλλότριον φῶς

Fragment 15

(Plu. De fac. orb. lun. 929 B)

αἰεὶ παπταίνουσα πρὸς αὐγὰς ἠελίοιο

Fragment 15a

(schol. Basilii 25, 201. 2 Pasquali)

ύδατόριζο*ν*

In citing vv. 1–3, Simplicius indicates that these lines came a little after Parmenides' discussion of the two elements and that in them he identifies the active principle. He prefaces his quotation of vv. 2–6 by saying, 'Parmenides clearly has provided an active principle not only of bodies which are subject to generation but also of incorporeals which complete the generation when he says, "and those by them..."

For the narrower [sc. rings] are filled with fire undiluted, and those by them with night, though a share of flame is admitted; and in the midst of these the divinity who governs all things: for everywhere she rules over hateful birth and mingling, directing female to mingle with male and the opposite in turn, male with female.

Fragment 13

Plato and Aristotle quote this verse alongside Hesiod's reference to the birth of Eros after that of Chaos and Gaia (*Th.* 116–20), Aristotle's purpose being to show that Parmenides had some idea of the moving cause. Simplicius quotes this verse after quoting fr. 12. 1–3 in a manner that suggests that the divinity of fr. 12. 3 is the subject of $\mu\eta\tau$ i σ a τ o, transitioning between the passages with the remark, 'and he says she is the cause of the gods when he says: "she devised Eros..."

she devised Eros the very first of all the gods

Fragment 14

Plutarch's comments indicate that this verse refers to the moon.

shining at night its foreign light, wandering around the earth

Fragment 15

Plutarch's comments indicate that this partial verse refers to the moon.

always looking towards the rays of the sun

Fragment 15a

The scholiast writes, 'Parmenides in his versification called the earth "water-rooted".'

water-rooted

(Arist. Metaph. 4. 5. 1009b22-5, Thphr. Sens. 3)

ώς γὰρ ἑκάστοτ' ἔχει κρῆσιν μελέων πολυπλάγκτων, τὼς νόος ἀνθρώποισι παρέστηκεν· τὸ γὰρ αὐτὸ ἔστιν ὅπερ φρονέει μελέων φύσις ἀνθρώποισιν καὶ πᾶσιν καὶ παντί· τὸ γὰρ πλέον ἐστὶ νόημα.

Fragment 17

(Gal. in Hp. Epid. vi, 2. 46)

δεξιτεροίσιν μέν κούρους, λαιοίσι δέ κούρας

Fragment 18

(Cael.Aurel. Morb. chron. 4. 9. 134)

femina virque simul Veneris cum germina miscent venis informans diverso ex sanguine virtus temperiem servans bene condita corpora fingit. nam si virtutes permixto semine pugnent nec faciant unam permixto in corpore, dirae nascentem gemino vexabunt semine sexum.

Fragment 19

(Simp. in Cael. 558. 9-11)

οὕτω τοι κατὰ δόξαν ἔφυ τάδε καί νυν ἔασι καὶ μετέπειτ' ἀπὸ τοῦδε τελευτήσουσι τραφέντα· τοῖς δ' ὄνομ' ἄνθρωποι κατέθεντ' ἐπίσημον ἑκάστῳ.

Aristotle quotes these lines to support his claim that Parmenides did not distinguish between thought and perception. Theophrastus introduces his own quotation by saying, 'Parmenides, generally speaking, said nothing definite about perception, but only that, there being two elements, understanding is due to their preponderance. For should the hot or the cold dominate, the understanding becomes different, that due to the hot being better and purer; nonetheless even this requires some proportionality: "For as on each occasion..."

For as on each occasion is the temperament of the much-wandering limbs, so is thought present to humans: for the same thing is that which thinks, the nature of the limbs, in humans in both each and every one: for the greater is thought.

Fragment 17

Galen cites this verse as proof that some of the oldest thinkers supposed that males are conceived in the right of the womb.

on the right sides boys, and on the left girls

Fragment 18

As evidence for his claim that Parmenides held that men are sometimes born soft or passive as a result of conception, Caelius Aurelianus produces his Latin translation of otherwise unknown verses from Parmenides.

When a woman and man mingle the seeds of Venus, the force from the different blood in the veins, giving shape and preserving the right measure, fashions well-formed bodies. For if the forces should fight when the seed is mixed and should not unite in a thoroughly combined body, cruelly will they vex the sex being born from twin seed.

Fragment 19

Just after quoting the transitional fr. 8. 50–2, Simplicius quotes these verses, prefacing them by saying, 'Once he has described the orderly arrangement of perceptibles, he adds again: "Thus just as expected...its mark to each." How then did Parmenides suppose there are only perceptibles when he produced such speculations about the intelligible, which are too much to transcribe here? How did he transfer things appropriate to the intelligibles to the perceptibles, when he quite clearly provides separate instruction regarding the unity of the intelligible and genuinely being and then about the orderly arrangement of perceptibles, and when he does not think it right to call what is perceptible by the name "being"?'

Thus just as expected these things grew and now are and hereafter from this point will end once developed: and upon them humans placed a name giving its mark to each.

TEXTUAL NOTES

The notes that follow discuss those places in the fragments where any real uncertainty remains about what Parmenides wrote. Since their aim is merely to explain why the readings printed above have been adopted (in places where this has not already been made clear in the appendix's introduction), I have tried to keep these notes as brief as possible. For the most part, readings reflecting the emergence of scholarly consensus have been printed without comment. Since, for reasons already indicated, it has not been possible to furnish an apparatus criticus, manuscript variants are recorded here when necessary and as reported in recent editions. Instances where the manuscripts preserve viable alternatives, or even readings genuinely useful for determining what Parmenides himself wrote, are less numerous than one might suppose. Many of the transmitted variants, like those in fr. 7. 1 (discussed above), are unmetrical, nonsensical, and easily recognized as deformations of the correct reading. In many cases, too, of course, the manuscripts transmit readings that no modern editor accepts. For example, in fr. 1. 1 the manuscript of Sextus Empiricus' Adversus mathematicos traditionally labelled N (codex Florentinus Laurentianus 85, 19) gives θ ai and $\phi \epsilon \rho o \nu \sigma a \iota$ for the elsewhere universally attested $\tau a \iota$ and $\phi \epsilon \rho o \nu \sigma \iota \nu$ accepted by all recent editors. In this case, I simply print the widely attested and endorsed readings without noting the variants; and I have followed a like policy in comparable cases.

Fragment 1

1. 3: δαίμονος.

Kranz followed Wilamowitz in accepting Stein's conjecture $\delta a i \mu o \nu \epsilon_S$ (references and discussion at Tarán 1965: 10–11 *ad loc.*) in lieu of the universally attested manuscript reading, $\delta a i \mu o \nu o s$, which is accepted by all recent editors. For parallels, see Burkert 1969: 4 and n. 9.

1. 3: †πάντ' ἄτη†.

Many attempts have been made to resolve the crux in the middle of this verse. Coxon 1968 α pointed out that the theretofore commonly accepted $\pi\acute{a}\nu \tau$ ${}^{\alpha}\acute{a}\sigma\tau\eta$ has no manuscript authority but is due to a false reading of N by Mutschmann during preparation of his edition of Sextus Empiricus. The true reading in N is $\pi\acute{a}\nu\tau$ ${}^{\alpha}\acute{a}\tau\eta$. Other manuscript readings are $\pi\acute{a}\nu\tau \acute{a}\tau\eta$ L, $\pi\acute{a}\nu\tau a$ $\tau\eta$ E, $\pi\acute{a}\nu\tau a$ $\tau\eta$ codices deteriores (s), including B, V, and R, though $\pi\acute{a}\nu\tau a$ $\tau\eta$ A. Cordero 1984: 20, reports $\pi\acute{a}\nu\tau \acute{a}\tau\eta$ as the reading of both N and L. However, inspection of the photographic reproduction of folios 124 and 125 of N usefully included in Coxon's 1986 edition (after p. 40) confirms $\pi\acute{a}\nu\tau$ ${}^{\alpha}\acute{a}\tau\eta$ as the reading in N. It is thus with some hesitation that I here record Cordero's reports of his readings of E and A as distinct from the reading $\pi\acute{a}\nu\tau a$ $\tau\mathring{\eta}$ reported for these manuscripts by Mutschmann (on whom Coxon continues to rely since he personally consulted only L, N, and V). Each of the genuine manuscript readings is the nonsensical result of corruption. Coxon's revelation that $\pi\acute{a}\nu\tau$ ${}^{\alpha}\acute{a}\sigma\tau\eta$ is a falsa lectio has led to reinvigorated discussion of what Parmenides may actually have written.

Tarrant 1976 argued that $\kappa \alpha \tau \hat{\alpha} \pi \hat{\alpha} \nu \tau' \tilde{\alpha} \tau \eta$ (or $A\tau \eta$, $\tilde{\alpha} \tau \eta$, or $A\tau \eta$), newly revealed as the true reading in N, is in fact preferable to any previously conjectured alternative;

but he had to resort to tortuous reasoning to explain how the $\epsilon i \delta \delta \tau \alpha \phi \hat{\omega} \tau \alpha$ or 'man of knowledge' is conveyed along a path of blind deception, and subsequent editors have properly ignored this proposal. Cordero 1982 proposed $\pi \hat{a} \nu \tau \alpha < \vec{v} > \tau \eta$ and translated the resulting phrase as 'à l'égard de tout . . . là'. This proposal, adopted by Couloubaritsis 1986 and Conche 1996, at least has the virtue of being innocuous, and it should be added to the lengthy list of conjectures that have accumulated over the years: κατὰ πάντ' ἀσινῆ, καὶ πάντ' αὐτὴ, κατὰ πάντ' αὐτὴ, κατὰ πᾶν αὐτὴ, κτλ. (see Untersteiner 1958: p. LII n. 4 for full details and attributions of these conjectures, to which add $\pi \acute{a} \nu \theta' \ \ddot{a} \ \tau' \ \ddot{\epsilon} \eta$, as proposed in Cerri 1997). The first of these conjectures is adopted by Gallop 1984 alone among recent editors, citing Mourelatos 1970: 22 nn. 31–2, as if in support. Mourelatos in fact there endorsed $\pi \acute{a}\nu \tau$ ' $\ddot{a}\sigma\tau\eta$ while acknowledging that Coxon has shown the text to be corrupt: 'if $\pi \acute{a}\nu \tau$ ' $\mathring{a}\sigma \tau \eta$ should now count as no more than an emendation, it is still closer to the text than the only other meaningful emendation that has been proposed, Meineke's $d\sigma u v \hat{\eta}$, supported by Jaeger 1947, 112. I therefore keep the traditional reading.' Coxon 1986 revived Heyne's conjecture $\pi \acute{a} \nu \tau$ ' $\ddot{a} < \nu > \tau \eta < \nu >$, translating the result as 'through every stage straight onwards', but his argument, on the basis of Hom. Il. 8. 399–400, that $\alpha\nu\tau\eta\nu$ can have the sense this requires has been decisively refuted by Renehan 1992: 401 (cf. Lesher 1994*b*: 2–3).

Renehan 1992 and Lesher 1994b mount renewed defences of $\pi \acute{a}\nu \tau$ ' $\ddot{a} < \sigma > \tau \eta$ as a straightforward supplement to the reading in N. Lesher (pp. 4-6) rightly questions the legitimacy of Renehan's presumption of a general parallel between Parmenides and Odysseus and of a specific intertextual relation between Parm. fr. 1 and Hom. Od. 15. 82. Lesher himself attempts to situate the opening details of Parmenides' proem against the broader background of Greek lyric poetry, in an effort to show that Parmenides meant 'to explain to his audience the nature of the processes of creative thinking that led him to his discovery' and that fr. 1. 3's description of the path he travelled as one 'which carries a knowing or skilled man down to every town' reflects 'a common way of referring to the poet's exercise of his craft in order to assert that the powers that had inspired him were the same ones that enable poets everywhere to create and perform their works' (16). However, his attempt to address the often noted problem with reading $\pi \acute{a} \nu \tau$ $\acute{a} \sigma \tau \eta$ —namely that it appears to be contradicted by the goddess's subsequent description of the path Parmenides has travelled as one that 'is far from the track of men' $(\partial \pi' \partial \nu \theta \rho \omega \pi \omega \nu \partial \tau \dot{\nu})$, fr. 1. 27)—by saying that this latter reference is to the particular path Parmenides represents himself as having travelled to reach the goddess, whereas that in fr. 1. 2-3 is to the divine pathway of song that all inspired poets follow, involves an unsustainable distinction. The repeated relative $\tau \hat{\eta}$ in v. 4 picks up $\delta \delta \delta \nu$ from v. 2 in a way that makes it plain that the path he initially describes himself as travelling is the path that leads him to the goddess's abode. This is also clear from the fact he refers to the same mares as conveying him in vv. 1, 4, and 21.

written κατὰ πάντ' ἄστη, I have translated accordingly. Nevertheless, since we cannot be certain that this is what he did in fact write, here I print the reading of the generally superior N with daggers to mark the corruption. (O'Brien 1987a likewise acknowledges the corruption and yet improperly indicates a lacuna by printing $\kappa \alpha \tau \dot{\alpha} < \ldots > \phi \dot{\epsilon} \rho \epsilon \iota$, an editorial choice rightly criticized by Tarán 1993: 154, and yet repeated in Cassin 1998.) The suspicion that the middle of this line may be irremediably corrupt is strengthened by the suggestion of Pellicia 1988: 511, that the letters $\tau \alpha \tau \eta$, which occur, variously divided, in all the manuscripts of fr. 1. 3 between $\pi \hat{a} \nu$ and $\phi \epsilon \rho \epsilon \iota$, entered the text as the result of scribal error under the influence of $\phi \hat{\omega} \tau \alpha \cdot \tau \hat{\eta} \phi \epsilon \rho \delta \mu \eta \nu$ (fr. 1. 3b-4a). Renehan 1992: 402, responds that this kind of corruption would have been easier if what originally came between $\pi \hat{a} \nu$ and $\phi \epsilon \rho \epsilon \iota$ looked something like $\tau \eta a \tau$, though this is only moderately reassuring. In the end, proper caution demands that we not pretend to be able to know more here than we really do. Fortunately, not much depends on these lost words: while the crux presents a challenge for textual criticism, its remaining a crux hardly presents an obstacle to proper understanding of Parmenides' philosophy.

1. 6: χνοίησιν ἵ<ει>.

The correction of $\chi \nu o \hat{\imath} \eta \sigma \iota \nu \iota$ N adopted by Diels 1897, with the supplement properly marked.

1. 15: λόγοισιν.

Although Cordero 1984 and Coxon 1986 both slavishly follow the manuscripts in printing $\lambda \delta \gamma o \iota \sigma \iota$, it seems an unnecessary affectation not to adhere to the convention of adding the movable ν in this case, as with $\delta \iota \nu \omega \tau o \hat{\iota} \sigma \iota \nu$ at fr. 1. 7, $\dot{\eta} \nu \iota \delta \chi o \iota \sigma \iota \nu$ at fr. 1. 25, $\kappa \tau \lambda$.

1. 20: ἀρηρότε Bergk : ἀρηρότα codd.

Cordero 1984, alone among recent editors, accepts the plural form of the participle found in the manuscripts against Bergk's restoration of the dual form. Cordero is likewise alone in preferring the majority manuscript reading $a\vec{v}\tau\hat{\omega}\nu$ at the end of the line rather than the epic/Ionic $a\vec{v}\tau\acute{\epsilon}\omega\nu$ preserved in N.

1. 25: $\tau a i LE : \theta^{\circ} a i^{\circ} N : \tau \epsilon \varsigma$.

These same variant readings also occur in fr. 1. 1. Coxon 1986 seems the only editor to have appreciated that the postpositive connective is required here, as it is not in the opening line.

1. 29: εὐκυκλέος.

Several ancient authors preserve portions of the end of fr. 1. In addition to Simplicius' quotation of vv. 28b–32 in his commentary on Aristotle's *De caelo*, vv. 28b–30 are quoted at Diogenes Laertius 9. 22, and vv. 29–30 are quoted by Plutarch (*Col.* 1114 D–E), Clement of Alexandria (*Strom.* 5. 59. 6), Proclus (*in Ti.* 2. 105 B, i. 345. 15–16), and again by Sextus in his discussion of the proem (*M.* 7. 114). Diogenes,

Plutarch, Clement, and Proclus all employ vv. 29-30 (vv. 28b-30 in Diogenes' case) as an encapsulation of the content of Parmenides' poem, which makes one suspect that they may have been relying on excerpts in some kind of doxographical anthology rather than on a complete manuscript of the poem. (Note how Diogenes introduces his quotation: 'And he said his philosophy was twofold, the one part according to truth, the other part according to opinion. Thus he even says somewhere [διὸ καί ϕ ησί που]: χρεώ δέ σε...') Here in v. 29, Proclus alone gives εὐφεγγέος ('brilliant'), which can be disregarded since other readings uniquely preserved by him are uniformly unreliable. Diogenes, Plutarch, and Clement, as well as Sextus, all give εὐπειθέος ('persuasive'); Simplicius alone gives εὐκυκλέος ('well-rounded'). Modern editors and commentators are roughly divided on which of these latter two readings should be adopted. Advocates of $\epsilon \vec{v} \pi \epsilon \iota \theta \acute{e} o s$ include Jameson 1958: 21 ff.; Deichgräber 1958: 22; Fränkel 1962: 402 n. 11; Mourelatos 1970: 154-7; Heitsch 1974; Gallop 1984; Coxon 1986; O'Brien 1987a and 1987b: 315-18; Conche 1996; Cassin 1998. Advocates of εὐκυκλέος include Diels 1897: 54–7; Diels and Kranz 1951; Untersteiner 1958; Guthrie 1965; 9; Tarán 1965; Hölscher 1969; Kirk et al. 1983; Cordero 1984; Mansfeld 1995b: 232. Despite this unsurprising division of opinion, there are stronger reasons for preferring εὐκυκλέος. First, it remains the lectio difficilior, whereas the occurrence of $\epsilon \vec{v} \pi \epsilon \iota \theta \acute{\epsilon} os$ is easily explained as an intrusive 'correction' of the perplexing $\epsilon \tilde{v}\kappa v\kappa \lambda \tilde{\epsilon} o_s$, influenced by the next line's denigration of mortal beliefs as devoid of $\pi i \sigma \tau i s$ $\partial \lambda \eta \theta \dot{\eta} s$. So Mansfeld 1995 b: 232, where it is argued that εὖκυκλέος is an instance of the kind of intentional unclarity characteristic of Presocratic proems: 'The meaning of [εὐκυκλέος] is obscure and needs to be explained, whereas $\epsilon \vec{v} \pi \epsilon \iota \theta \dot{\epsilon} o_S$ and $\epsilon \vec{v} \phi \dot{\epsilon} \gamma \gamma \dot{\epsilon} o_S$ are sufficiently clear. But in retrospect this obscurity disappears as one goes on studying the poem and reaches the description of the perfect Sphere of Being (fr. B8. 42-9), to which the adjective "wellrounded" alludes in an entirely appropriate way and where the more regular formation εὐκύκλου is actually found. The other qualifying term found at fr. B1. 29, $a\tau\rho\epsilon\mu\dot{\epsilon}s$ ("unshakable"), also occurs in fr. B8, viz. at line 4, and a further explanation of what it means is provided at fr. B8. 26-30a.'

Simplicius, moreover, possessed a good manuscript of Parmenides and is the only author whose quotation uniformly preserves the best readings in the remainder of vv. 29–30. By contrast, Plutarch gives $\mathring{\eta}$ $\mu\grave{e}\nu$ and Proclus $\tau\grave{\omega}$ $\mu\grave{e}\nu$ or $\tau\grave{\delta}$ $\mu\grave{e}\nu$ instead of the correct $\mathring{\eta}\mu\grave{e}\nu$ in v. 29; Plutarch, Diogenes, and Sextus 111 give $\mathring{a}\tau\rho\epsilon\kappa\grave{\epsilon}s$ instead of $\mathring{a}\tau\rho\epsilon\mu\grave{\epsilon}s$ in v. 29 ($\mathring{a}\tau\epsilon\rho\kappa\grave{\epsilon}s$ S.E. 111 N); Plutarch and Proclus C give $\mathring{\eta}$ $\delta\grave{\epsilon}$ for $\mathring{\eta}\delta\grave{\epsilon}$ in v. 30; Sextus 111 Lw and Proclus C give $\delta\acute{\epsilon}s\iota$, and Clement and Proclus NP $\delta\acute{\epsilon}s\iota s\iota$, instead of $\delta\acute{\epsilon}s\iota s\iota$ in v. 30; and Diogenes gives $o\mathring{v}\kappa\acute{\epsilon}\tau\iota$ for $o\mathring{v}\kappa$ $\mathring{\epsilon}\nu\iota$ in v. 30. The only instance of another author preserving a better reading than Simplicius in these lines is Diogenes' $\tau\mathring{\eta}s\iota$ for the restored $\tau\mathring{\eta}s\iota$ in v. 30. Once the more frequent occurrence of $\epsilon\mathring{v}\pi\epsilon\iota\theta\acute{\epsilon}os$ is seen to be no sure sign of its accuracy, advocates of this reading must try to argue that it makes better sense in the broader context of Parmenides' thought. Not surprisingly, interpreters wishing to take the goddess's claim that What Is is 'like the bulk of a well-rounded sphere' ($\epsilon\mathring{v}\kappa\acute{v}\kappa\lambda ov\ \sigma\phia\acute{\iota}\rho\etas\ \grave{\epsilon}va\lambda\acute{\iota}\gamma\kappa\iota ov\ \check{\sigma}\gamma\kappa\omega$, fr. 8. 43) as merely metaphorical have tended to favour $\epsilon\mathring{v}\pi\epsilon\iota\theta\acute{\epsilon}os$. In doing so, they might seem to have allowed their interpretive bias to influence their judgement regarding the

textual issue. There are, however, more telling interpretive arguments against $\epsilon \tilde{v}\pi\epsilon\iota\theta\acute{e}os$. Not only does taking $\epsilon \tilde{v}\pi\epsilon\iota\theta\acute{\eta}s$ to mean 'persuasive' involve departing from its normal sense of 'obedient' or 'compliant', but describing $\tilde{a}\lambda\eta\theta\epsilon\acute{\iota}\eta$ as persuasive gets the relation between conviction and reality in Parmenides wrong. Genuine conviction is to be found by following the path that attends upon $\tilde{a}\lambda\eta\theta\epsilon\acute{\iota}\eta$ (fr. 2. 4) or in an account or meditation that is about $\tilde{a}\lambda\eta\theta\epsilon\acute{\iota}\eta$ (fr. 8. 50–1a). Nowhere does Parmenides speak of $\tilde{a}\lambda\eta\theta\epsilon\acute{\iota}\eta$ itself as convincing or trustworthy.

1. 32: περώντα.

Although a few interpreters, most notably Owen 1960: 86 and 88–9, and Mourelatos 1970: 212 ff., have defended the reading $\pi\epsilon\rho$ οντα ('though being') found in Simp. in Cael. DEF, here I follow the consensus view of more recent editors in accepting $\pi\epsilon\rho\hat{\omega}\nu\tau\alpha$ ('pervading' $<\pi\epsilon\rho\hat{\omega}\omega$) found in Simp. in Cael. A, the only recent editions adopting $\pi\epsilon\rho$ οντα being Reale and Ruggiu 1991 and Cerri 1999.

Fragment 2

2. 1: ἄγ' ἐγὼν.

Coxon 1986, 173 ad loc., defends $\mathring{a}\gamma\epsilon \ \tau \hat{\omega}\nu$ codd. (punctuating with a comma after $\mathring{a}\gamma\epsilon$) against Karsten's emendation, $\mathring{a}\gamma'$ $\mathring{\epsilon}\gamma \hat{\omega}\nu$, accepted by Diels-Kranz and all other subsequent editors, on the grounds that the genitive with verbs of speaking is normal epic usage. Karsten's proposal nonetheless continues to produce a more elegant line. See Renehan 1992: 406, for reasons to reject Coxon's defence of the manuscript reading. Note that the idiom here is also favoured by Empedocles: $\epsilon i \ \delta' \ \mathring{a}\gamma\epsilon \ \tau o\iota \ \lambda \epsilon \xi \omega$ (fr. 38. 1); $\nu \hat{v}\nu \ \delta' \ \mathring{a}\gamma' \dots \tau \hat{\omega}\nu \delta\epsilon \ \kappa \lambda \acute{v}$ (fr. 62. 1–3); $\mathring{a}\lambda\lambda' \ \mathring{a}\gamma\epsilon \ \mu \acute{v}\theta\omega\nu \ \kappa \lambda \hat{v}\theta\iota$ (fr. 17. 14, cf. fr. 3. 9 and fr. 21. 1).

2. 4: ἀλη θ είη.

Sider 1985: 363, defends ${}^{\prime}A\lambda\eta\theta\epsilon i\eta$ codd. against Bywater's ${}^{\prime}a\lambda\eta\theta\epsilon i\eta$ (which should not be considered an emendation), citing instances where ${}^{\prime}a\eta\delta\epsilon \hat{\iota}\nu$ and ${}^{\prime}a\eta\delta\delta \hat{\iota}s$ are 'used of a deity who manifests his approval (by standing near) of either a lesser divinity or a mortal'. In Sider's own examples, however, ${}^{\prime}\delta\eta\delta\epsilon \hat{\iota}\nu$ and ${}^{\prime}\delta\eta\delta\delta \hat{\iota}s$ are always used with an expressed dative object. Here the dative object would have to be vaguely understood on the transmitted reading Sider defends, but it is easily supplied by ${}^{\prime}a\lambda\eta\theta\epsilon i\eta$ on Bywater's simple and attractive suggestion.

Fragment 4

4. 1: ὅμως.

The first line of this fragment is quoted from Clement at Thdrt. *Gr.aff.cur.* 1. 72.; there a minority of manuscripts (B and L) read $\delta\mu\hat{\omega}_S$. Hölscher 1968: 122, defends $\delta\mu\hat{\omega}_S$ (adv., 'likewise') against the far better attested $\delta\mu\omega_S$ (conj., 'nonetheless'); Hölscher 1969 and Heitsch 1974 alone among recent editions retain $\delta\mu\hat{\omega}_S$. See further Coxon 1986: 188 *ad loc*.

6. 1: $\tau 6^2$ codd. : $\tau \epsilon$ Karsten.

Leonardo Tarán's research on the textual tradition of Simplicius' commentary on Aristotle's *Physics* showed $\tau \delta \nu o \epsilon \hat{u} \nu$ to be the unanimous manuscript reading. Diels 1897 had printed Karsten's 1835 conjecture τε νοεῦν with no notice in the apparatus of the manuscript reading and did so again in the 1903 first edition of Die Fragmente der Vorsokratiker. He possibly intended to print the unanimous manuscript reading and was misled by the mistaken report in his 1882 edition of Simplicius' Physics commentary, for there the apparatus to in Ph. 86. 27 reports, $\dot{\tau} \epsilon \nu o \epsilon \hat{\nu} libri: \tau \dot{o} \nu o \epsilon \hat{\nu}$ Karsten'. In any case, the result was that for a long time editors and commentators uncritically adopted what was in fact the emendation by Karsten while thinking it the manuscript reading. Tarán's rediscovery of the true manuscript reading was first reported by Nestor-Luis Cordero. See Cordero 1979: 1 and 24 n. 1; 1984: 110 n. 1; 1987: 19-20; and Tarán 1987: 253-4, where Tarán concludes: 'There is no reason at all to emend the text here, and consequently the reading of this first part of 28 B 6, 1 should be $\chi\rho\dot{\eta}$ $\tau\dot{\delta}$ $\lambda\dot{\epsilon}\gamma\epsilon\iota\nu$ $\tau\dot{\delta}$ $\nu o\epsilon\hat{\iota}\nu$ τ' . This being the case, several interpretations of these words, including Diels' own that $\tau \delta$ here is the epic pronoun, are rendered impossible or extremely unlikely merely on textual grounds.' The manuscript reading has since been adopted by O'Brien 1987a and Cassin 1998. Coxon 1986 notes it in his apparatus but accepts Karsten's emendation without comment. Likewise, Kahn 1988: 261, asserts without further consideration that the manuscript reading is 'surely an error of dittography' and that 'the correction $\tau \epsilon$ must be right'. Wiesner 1996: 7, following Schmitz 1988: 94-7, endorses the conjecture on the ground that fr. 6. 1a is meant to function as the antithesis of fr. 2. 7-8 and then proposes that $\tau \delta$ here functions as a demonstrative in the sense of $\tau o \hat{v} \tau o$; but this is to make the text fit a contentious interpretation on the basis of a questionable construal. Since Parmenides does sometimes employ the single $\tau \epsilon$ (frs. 6. 7, 8. 38, 8. 59), and since good sense can be made of $\tau \hat{o} \nu o \epsilon \hat{i} \nu$ (see above, pp. 110–14), I have preserved the manuscript reading here.

6. 3: σ' DEF: τ' BC: om. $G < \tilde{\alpha} \rho \xi \omega > Nehamas : < \epsilon \tilde{\iota} \rho \gamma \omega > Diels : < \tilde{\alpha} \rho \xi \epsilon \iota > Cordero$. The readings in the first part of the line are as reported by Cordero 1979 (see esp. n. 81). On the conjectured supplement of the lacuna adopted here, see above, pp. 65–8.

Fragment 7

Sextus quotes vv. 2–6a as following without interruption upon fr. 1. 30. That they did not do so originally, however, is evident from the way the end of fr. 1 continues in the quotation at Simp. *in Cael.* 557. 25–558. 2. Sextus' jumbled quotation points to his reliance on some anthology or treatise that presented a distillation of the Parmenidean original (perhaps as material for allegorical or sceptical exegesis); for this degree of corruption is unlikely in an actual manuscript, and Sextus himself seems unaware that these lines did not originally follow one another. See further

Deichgräber 1958: 646–7; O'Brien 1987*a*: 238 ff.; Rocca-Serra 1987; Mansfeld 1995*b*: 228–9; Cassin 1998: 16–17. Sextus's text continues after v. 6a with the words, μόνος δ' ἔτι μῦθος ὁδοῖο | λείπεται. This continuation, even though in an evidently corrupted text, has led some to conclude that fr. 8 followed fr. 7 without interruption and to print them as doing so in their editions (so Diels and Kranz 1951; Hölscher 1969; Heitsch 1974; Cerri 1999). Coxon 1986, by contrast, accepts the clause in Sextus as a genuine continuation of fr. 7, even though his own principle of restoring epic forms should have led him to conclude that the Attic μόνος could not have been written by Parmenides. What is more, as Sider 1985: 365–6, has rightly emphasized, the epic form continues to be preserved in roughly half of the manuscripts of Simplicius in the three places where he quotes fr. 8. 1 (*in Ph.* 78. 8 DEW and 145. 1 DEW give μοῦνος, while 78. 8 F, 142. 34, and 145. 1 F give μόνος). One might add that the epic form is securely attested at fr. 2. 2 (cf. μουνογενές, fr. 8. 4). If μοῦνος is accepted at fr. 8. 1, as it should be, then this half line cannot have completed fr. 7. 6a, the result being unmetrical.

Fragment 8

8. 4.

This is the most quoted and consequently the most corrupted Parmenidean verse. The version with the broadest representation in the ancient sources is: οδλον μο(υ)νογενές τε καὶ ἀτρεμὲς ἢδ' ἀγένητον (Simp. in Ph. 120. 23, in Cael. 557. 18,Clem.Al. Strom. 5. 112. 2, Phlp. in Ph. 65. 7, as well as Thdrt. Gr.aff.cur. 4. 7, though this last source cannot be regarded as independent). $o\tilde{v}\lambda o\nu \mu o(v)\nu o\gamma \epsilon\nu \epsilon' s$ is likewise given in the first half of the line in Simplicius's transcription (in Ph. 145. 4) and at in Ph. 30. 2, 78, 13, and 87. 21. This is thus both the most widely represented reading and the one attested in our most reliable source for fr. 8. Diels rightly endorsed it, as do most modern editors. Unfortunately, Kranz's re-edition of Die Fragmente der Vorsokratiker replaced this with ἔστι γὰρ οὐλομελές, found at Plu. Col. 1114 c, not recognizing that $\epsilon \sigma \tau \iota \gamma \dot{\alpha} \rho$ are Plutarch's words, not Parmenides'. The reading $o\dot{i}\lambda o\mu \epsilon \lambda \dot{\epsilon}s$ can also be found in Proclus (in Prm. 6. 1077. 25, 6.1084. 29– 30), although when he gives the complete line as οὖλον μουνομελές τε καὶ ἀτρεμὲς ηρος αγένητον (in Prm. 6. 1152. 25 Σ), his version is easily understood as a deformation of the majority reading. Likewise with μοῦνον μουνογενές at [Plu.] Strom. 5 (as well as Theod. Gr.aff.cur. 2. 108, Eus. PE 1. 8. 5, and 13. 13. 39, though these cannot be regarded as independent). Cobbling together μοῦνον τ' οὐλομελές from Plutarch and ps.-Plutarch, as does Westman 1955: 236-9, followed by O'Brien 1987 a: 47, and 1987 b: 318–33, or οὖλον μουνομελές from Plutarch and Simplicius et al., as does Wilson 1970, is to engage in speculative reconstruction based on clearly inferior sources. For a detailed case on behalf of the majority reading, see Tarán 1965: 88–93, along with the comments above at p. 140 n. 7.

The difficulties are far greater in the line's latter half. All sources apart from Simplicius give $\kappa \alpha \hat{i}$ $\hat{a}\tau\rho\epsilon\mu\hat{e}_S$ $\hat{\eta}\delta$ ' $\hat{a}\gamma\epsilon\nu\eta\tau\sigma\nu$, and he only gives the variant $\hat{\eta}\delta$ ' $\hat{a}\tau\epsilon\lambda\epsilon\sigma\tau\sigma\nu$ in three places (in Ph. 30. 2 (though not in D, which is damaged at this point; see Tarán 1987: 252), 78. 13, and 145. 4 (though in E the reading is a

correction; see Tarán 1987: 253)). The majority reading ηδ' ἀγένητον, however, cannot be correct, for it reduplicates the programme's first attribute from the previous line. The preservation of the alternative reading in Simplicius' transcription is a sign of its superiority. Nevertheless, it too must be corrupt (and likewise the variants ἢ δ' ἀτέλεστον 30 E^a, ἢ ἀτέλεστον 30 F, ἤδ' ἀτέλεστον 78 F, ἢ δι' ἀτέλεστον 78 E), for its sense is flatly counter to what is demonstrated in the final portion of the ensuing argument anticipated here at the end of the programme, namely that What Is is où κ ἀτελεύτητον (fr. 8. 32) and τετελεσμένον . . . πάντοθεν (fr. 8. 42–3). If Simplicius indeed found $\dot{\eta}\delta$ ' $\dot{\alpha}\tau\dot{\epsilon}\lambda\dot{\epsilon}\sigma\tau\sigma\nu$ in the text he transcribed, the simplest correction would seem to be Karsten's ήδε τελεστόν, later endorsed by Covotti, RFIC 36 (1908), 425-7, and accepted by Tarán 1965; Wilson 1970: 32; Cordero 1984. Owen 1960: 77, usefully points out that the corruption may well be due to the influence of the Homeric clausula $\eta \delta' \hat{a} \tau \epsilon \lambda \epsilon \sigma \tau o \nu$ (Il. 4. 26) on some zealous copyist (so, more emphatically, Coxon 1986: 196: 'There is no doubt that the Homeric clausula (Δ 26) has displaced the true text'). Karsten's proposal is rejected, however, by Owen since the adjective $\tau \epsilon \lambda \epsilon \sigma \tau \acute{o} \nu$ is—so he assumed and reported—not securely attested in Greek. Owen thus proposed the emendation, $\vec{\eta} \delta \hat{\epsilon} \ \tau \hat{\epsilon} \lambda \epsilon \iota o \nu$, subsequently endorsed by Mourelatos 1970, Kirk et al. 1983, and somewhat tentatively by Coxon 1986 (while printing $\eta \delta$) † $\dot{\alpha}\tau \dot{\epsilon}\lambda\epsilon\sigma\tau o\nu$ at p. 61, Coxon in his commentary at p. 196 calls $\mathring{\eta}\delta\grave{\epsilon}$ $\tau\acute{\epsilon}\lambda\epsilon\iota ο\nu$ 'the best emendation' and 'perhaps what P. wrote'). Hölscher 1969 and Cassin 1998 print οὐδ' ἀτέλεστον (first proposed by Brandis, Commentationum Eleaticarum, i (Altonae, 1813), 109-10 and 138-40). Hölscher nevertheless calls Tarán's ἢδὲ τελεστόν 'viell[eicht] richtig'.

Owen supposed the adjective $\tau \epsilon \lambda \epsilon \sigma \tau \delta \nu$ not securely attested because the sole occurrence of $\tau \epsilon \lambda \epsilon \sigma \tau \delta s$, $-\acute{\eta}$, $-\acute{v}\nu$ recorded by LSJ ($IG~2^2$. 4548) is marked by the lexicographers as dubious. However, LSJ fails to take account of a secure attestation of the adjective in a scholium on Oppian, Halieutica~2. 4 (ed. Bussemaker, 1899), where the adjective $d\nu \nu \sigma \tau \delta \nu$ is glossed as: $\tau \epsilon \lambda \epsilon \sigma \tau \delta \nu$, $\pi \epsilon \pi \rho \alpha \gamma \mu \epsilon \nu \nu \nu$, $\tau \epsilon \tau \epsilon \lambda \epsilon \iota \omega \mu \epsilon \nu \nu \nu$, $\delta \nu \nu \alpha \tau \delta \nu$ $\delta \nu \nu \delta \sigma \alpha \iota$ $\epsilon \alpha \lambda \nu \nu \delta \sigma \alpha \iota$. This attestation would appear to remove the only serious outstanding objection to reading $\dot{\eta} \delta \dot{\epsilon} \tau \epsilon \lambda \epsilon \sigma \tau \delta \nu$ here at the end of fr. 8. 4. The sense of this phrase is as natural and appropriate in this context as the corruption is easy to explain.

8. 12: ἐκ μὴ ἐόντος : ἐκ τοῦ ἐόντος Karsten.

A sizeable minority of scholars have supposed that the argument here requires emendation of the type proposed by Karsten. So Reinhardt 1916: 39 ff., who also emends $o\vec{v}\delta\epsilon$ to $o\vec{v}\tau\epsilon$ at the start of the line. Likewise Tarán 1965: 101–2, Reale and Ruggiu 1991, 291–2, and Conche 1996, 143–6, all of whom provide further references. O'Brien 1987 a: 36 and 51, likewise adopts Karsten's proposal, printing it as $\vec{\epsilon}\kappa$ $<\tau o\hat{v}$ $\vec{\epsilon} > \acute{o} v \tau o s$. Hölsher 1969: 20, proposed $\vec{\epsilon}\kappa$ $\delta \hat{\eta}$ $\vec{\epsilon} \acute{o} v \tau o s$ as a simpler emendation that gives the same sense. None of these proposals has any manuscript authority. The manuscript readings at both Simp. in Ph. 78. 21 and 145. 12 are $\vec{\epsilon}\kappa$ $\mu \hat{\eta}$ $\vec{o} v \tau o s$ DE, $\vec{\epsilon}\kappa$ $\gamma \epsilon$ $\mu \hat{\eta}$ $\vec{o} v \tau o s$ Fa. Diels made the minor correction to $\vec{\epsilon}\kappa$ $\mu \hat{\eta}$ $\vec{\epsilon} \acute{o} v \tau o s$. Since the manuscripts give no support for Karsten's proposal, and since good sense can be made of the section's argumentation without it (see above, pp. 146–7),

I follow the majority of recent editors in retaining the manuscript reading as corrected by Diels (cf. Mauerhofer 1997: 195–6).

8. 19-20.

Coxon 1986 reports $\pi \epsilon \lambda o \iota \tau o$ as the unanimous manuscript reading in v. 19. Cordero 1984 reports it merely as the reading of F at Simp. in Ph. 145 and thus prints the generally accepted $\pi \epsilon \lambda o \iota \tau \delta$. Renehan 1992: 405, rightly points out that the use of scriptio continua means that whichever version does appear in the manuscripts is largely irrelevant and that the choice between the two versions is a matter of indifference since they are both stylistically acceptable and may yield the same sense. The more drastic emendation, ἔπειτ' ἀπόλοιτο ἐόν—proposed by Karsten 1835: 94, rejected in Diels 1897: 37, and in the earlier editions of Die Fragmente der Vorsokratiker, but installed by Kranz in the 1951 6th edition—stems from failure to understand Parmenides' argument. Rejected by all recent editors (apart from Heitsch 1974, who marks a crux by printing $\ell \pi \epsilon \iota \tau$ † $\alpha \pi \epsilon \lambda o \iota \tau o \dagger \epsilon \acute{o} \nu$), Karsten's proposal has unfortunately been revived by Mauerhofer 1997, where the error is compounded by a proposal to emend $\epsilon i \gamma \dot{\alpha} \rho \, \ddot{\epsilon} \gamma \epsilon \nu \tau'$ in the ensuing v. 20 to $\epsilon i \gamma' \, \dot{\alpha} \pi \dot{\epsilon} \gamma \epsilon \nu \tau'$. As for $\ddot{\epsilon} \gamma \epsilon \nu \tau'$ in v. 20, Tarán 1987: 257, notes that although this reading is represented in none of the manuscripts collated for Diels's edition of Simplicius' Physics commentary (where Diels describes it as a conjecture by Bergk), it is in fact the reading of the fifteenth-century manuscript, Marcianus Graecus, Cl. IV, 15.

8. 33: $\epsilon \pi \iota \delta \epsilon \upsilon \epsilon \varsigma \cdot \epsilon \delta \upsilon$.

The manuscripts of Simp. *in Ph.* variously transmit the middle of this line as (i) $\frac{\partial \pi \iota \delta \epsilon \nu \epsilon' s}{\partial \nu} \frac{\partial \gamma}{\partial \nu}$ at 30. 10, 40. 6 E^aF, (ii) $\frac{\partial \pi \iota \delta \epsilon \epsilon' s}{\partial \nu} \frac{\partial \gamma}{\partial \nu}$ at 30. 10, 40. 6 DE, (iii) $\frac{\partial \pi \iota \delta \epsilon \nu \epsilon' s}{\partial \nu} \frac{\partial \gamma}{\partial \nu}$ at 146. 6 EF, and (iv) $\frac{\partial \pi \iota \delta \epsilon \epsilon' s}{\partial \nu} \frac{\partial \gamma}{\partial \nu}$ at 146. 6 D (see Tarán 1987: 253, for the true reading of 40 F). Of these, (i) comes closest to what Parmenides must actually have written: $\frac{\partial \nu}{\partial \nu}$ is a typical Atticization of the epic/Ionic form Parmenides employs throughout, thus ruling out (iii) and (iv), and $\frac{\partial \pi \iota \delta \epsilon \epsilon' s}{\partial \nu}$ looks like a similar standardization of $\frac{\partial \pi \iota \delta \epsilon \nu \epsilon' s}{\partial \nu}$, the exclusive form of the adjective in Homer and Hesiod, ruling out (ii). Since (i) is unmetrical, most editors, beginning with Diels 1897: 84, have followed Bergk's excision of $\frac{\partial \nu}{\partial \nu}$, a simple and obvious solution that yields a metrical line without the synizesis and synalephe to which others resort in defending it (see Karsten 1835: 101; Fränkel 1930: 192 (followed by Hölscher 1969); Untersteiner 1958: 149; Coxon 1968 b: 72–3, and 1986: 208). For a plausible suggestion as to how $\frac{\nu}{\partial \nu}$ entered the text, see Tarán 1965: 115.

8. 45: χρεών Pl. Sph. 244 ε 5 W, Procl. in Prm. 1. 665. 19, Simp. in Ph. 146. 18 DF: χρεόν Pl. Sph. 244 ε 5 BT, Simp. in Ph. 146. 18 E: χρέον Pl. Sph. 244 ε 5 D. The Ionic χρεόν, otherwise occurring only in Herodotus, has been adopted here by the majority of modern editors, with the exception of Heitsch 1974 and Coxon 1986. In frs. 2. 5, 8. 11, and 8. 54 χρεών is the unanimous manuscript reading. It seems inconceivable, moreover, that Parmenides should have employed χρεών at frs. 2. 5 and 8. 11 and χρεόν in the identical metrical position here in fr. 8. 45.

8. 49.

For the punctuation of vv. 48–9, see above, pp. 157–8.

8. 35: ἐν ῷ Simp. : ἐφ' ῷ Procl. See above, p. 164 n. 40.

8. 36: οὐδὲν γὰρ <ἢ > Preller : οὐδὲν γὰρ Simp. in Ph. 86. 31 : οὐδ' εἰ χρόνος Simp. in Ph. 146. 9.

Coxon 1986: 210-11, persists in defending the latter reading, which he first argued for in his 1934: 138 n. 7; and he has been followed by Conche 1996: 166–7. See, however, the criticisms of Coxon on this point at Renehan 1992: 399–400. For a thorough survey of the problem and a defence of Preller's easy supplement, see Tarán 1965: 128–9.

8. 38.

This line appears at Pl. Tht. 180 E 1, as ofor $d\kappa'(v\eta\tau ov \tau \epsilon \lambda \epsilon' \theta \epsilon \iota \tau \hat{\phi} \pi \alpha v \tau \iota' \delta'vo \mu' \epsilon \iota'va \iota'$ (whence Anon. in Tht. col. 70. 41, Eus. PE 14. 4. 6, Thdrt. Gr.aff.cur. 2. 15, Simp. in Ph. 29. 18, and 143. 10). Since Plato was likely quoting from memory, Simplicius' independent quotations of the line at in Ph. 146. 11 and 87. 1 provide better evidence for what Parmenides actually wrote. While the correct readings in the first half of the line can be securely established on the basis of the readings Simplicius gives, there is more confusion in the latter half, with the result that modern editors and scholars have been divided roughly equally in their support for πάντ' ὀνόμασται (e.g. Woodbury 1958: 148-9; Long 1963: 97; Hölscher 1969; Mourelatos 1970: 180-5; Furley 1973: 7 n. 22; Bollack and Wismann 1974: 204; Casertano 1978; Burnyeat 1982: 19 n. 32; Kirk et al. 1983; Gallop 1984) and πάντ' ὄνομ' ἔσται (Diels and Kranz 1951; Tarán 1965: 129 ff.; Heitsch 1974; Cordero 1984; Coxon 1986; O'Brien 1987a; Conche 1996; Cassin 1998). More recent inspection of the manuscripts by Sider (1985: 366) and Coxon indicates, however, that the former reading is better attested than the collation of Simplicius on which Diels relied had suggested. At Simp. *in Ph.* 146, Diels reports ἀνόμασται as the reading of DEF, whereas Coxon now reports ονόμασται in DE, and Sider reports ονόμασται in W (neither reports the Simp. in Ph. 180. 9, where the correct reading ονόμασται in Fa has become ωνόμασται in DEFpc, shows that ωνόμασται here may likewise be regarded as a corruption of ὀνόμασται. At Simp. in Ph. 87, Sider and Coxon confirm Diels's report of the reading in E as πάντ' ὀνόμασται, and they both give ὄνομ' ἔσται rather than ὄνομα ἔσται as the reading of F. Sider here again reports ὀνόμασται in W. There is the greatest discrepancy in the reports of D, where Diels read πάντ' οὔνομα ἔσται but Sider now reads $\pi \acute{a}\nu \acute{\tau}$, $\acute{o}\nu \circ \mu$, $\acute{e}\sigma \tau \alpha \iota$ and Coxon, $\pi \acute{a}\nu \tau \circ \emph{o}\rlap{v}\nu \circ \mu$, $\acute{e}\sigma \tau \alpha \iota$. Again, neither reports the Aldine edition, in which Diels here read $\pi \acute{a}\nu \tau$ $\acute{o}\nu o\mu$ $\acute{e}\sigma \tau a\iota$.

8. 53: $\gamma v \dot{\omega} \mu as$ Simp. in Ph. 39. 1 $DEE^a F$, 180. 1 Fa: $\gamma v \dot{\omega} \mu as$ in Ph. 30. 23 DEF, 39. 1 a, 180 1. DEF^{pc} .

See Tarán 1965: 216 n. 37. Gallop 1984 follows Furley 1973: 5, in opting for $\gamma\nu\omega\mu\alpha$ s. Against this adoption, see Woodbury 1986: 2.

8. 55: ἀντία.

Cordero 1984, Coxon 1986, and O'Brien 1987*a* accept $\partial \nu \tau ia$ codd. and provide stronger punctuation at the end of the previous line, rather than 'correcting' to $\tau \partial \nu \tau ia$, on the basis of fr. 8. 59, and punctuating with a comma. Cf. Long 1963: 93–4; Heitsch 1974; Gallop 1984; Conche 1996; Cassin 1998.

8. 61: γνώμη.

Coxon 1986 and O'Brien 1987 a follow Stein in printing γνώμη rather than γνώμη. I agree with most editors in judging this unnecessary.

Fragment 12

12. 1: πληνται. παηντο E^a : πάηντο D: πύηντο $D^{pc}E$: lacuna F: ποίηντο a.

Bergk 1842: 1008, conjectured $\pi\lambda\hat{\eta}\nu\tau o$ (aor.²), subsequently adopted by Diels 1882 and in *Die Fragmente der Vorsokratiker*. Later, however, Bergk 1864: 4, conjectured $\pi\lambda\hat{\eta}\nu\tau\alpha\iota$ (perf.), as at fr. 1. 13, on metrical grounds. The opinion of recent editors is divided, with Tarán 1965, Kirk *et al.* 1983, and O'Brien 1987*a* favouring $\pi\lambda\hat{\eta}\nu\tau\alpha\iota$, though it is slightly more difficult palaeographically. The remaining recent editors have preferred $\pi\lambda\hat{\eta}\nu\tau o$, though this requires lengthening the final short syllable. The difficulties are roughly equal, but nothing much hangs on which conjecture is preferred.

12. 4: παντη Mullach : πάντα DEF : πάντων W.

Sider 1979: 67–9, first called attention to the reading of W (Moscow State Historical Museum 3649). This manuscript, which was unknown to Diels, agrees in several places with the fragmentary Ea, which uniquely preserves several correct readings (see Coxon 1968*b*). Kirk *et al.* 1983, Gallop 1984, Conche 1996, and Cassin 1998 have accepted the reading of W. Sider's ready acceptance of his newly discovered reading is tellingly criticized by Tarán 1987: 262–3. Thus I have retained Mullach's conjecture, as does O'Brien 1987*a* and, apparently, Coxon 1986. Cf. Tarán 1965; Hölscher 1969. (Coxon 1986: 87, prints $\pi \acute{a}\nu \tau \eta$, though this is apparently a misprint, since in his commentary on the passage (242) he speaks approvingly of Mullach's $\pi \acute{a}\nu \tau \eta$, while admitting that the text remains uncertain.)

Fragment 16

16. 1: ἐκάστοτ' Arist. EJ, Thphr. : ἔκαστος Arist. E^{pc} : ἐκάστω Arist. A^b .

Theophrastus' quotation of this fragment looks to be more accurate than Aristotle's; thus editors accept $\pi o \lambda v \pi \lambda \acute{a} \gamma \kappa \tau \omega v$ at v. 1 and $\pi a \rho \acute{e} \sigma \tau \eta \kappa \epsilon(v)$ in v. 2 (as *ap.* Thphr.)

rather than $\pi ολυκάμπτων$ and $\pi αρίσταται$ (as ap. Arist.). Although Diels-Kranz prints $\tilde{\epsilon}καστος$ $\tilde{\epsilon}χει$ κρασιν, the more amply attested *lectio difficilior* $\tilde{\epsilon}κάστοτ$, also found in Theophrastus and certain manuscripts of Aristotle, should be accepted. Stephanus thought emendation of κρασιν codd. to κρασις was required so as to provide a subject for $\tilde{\epsilon}χει$, and this suggestion has been endorsed by numerous editors and scholars since (cf. Tarán 1965: 169, and Conche 1996: 244, for references). It is more likely, however, that the subject could originally be inferred from the context. Thus Diels 1897, Diels and Kranz 1951, Hölscher 1969, Heitsch 1974, and Cassin 1998 retain κρασιν. Coxon 1986 restores the Ionic form κρησιν, following a suggestion by Diels (cf. Emp. fr. 21. 14).

Bibliography

- Algra, K., and Mansfeld, J. (2001) 'Three Thetas in the "Empédocle de Strasbourg"', Mnemosyne, 54: 78–84.
- Allen, R. E., and Furley, D. J. (eds.) (1975) *Studies in Presocratic Philosophy*, ii. *The Eleatics and Pluralists* (London: Routledge & Kegan Paul).
- Alt, K. (1973) 'Zum Satz des Anaximenes über die Seele: Untersuchung von Aetios $\Pi\epsilon\rho$ ì $\mathring{a}\rho\chi\hat{\omega}\nu$ ', Hermes, 101: 129–64.
- Arnim, H. von (1902) 'Die Weltperioden bei Empedokles', in Festschrift Theodor Gomperz (Vienna: Hölder), 16–27.
- Arrighetti, G. (1983) 'L'eredità dell'epica in Parmenide', in P. von Haendel and W. Meid (eds.), Festschrift für Robert Muth (Innsbruck: Institut für Sprachwissenschaft), 9–16.
- Asmis, E. (1981) 'What is Anaximander's apeiron?', Journal of the History of Philosophy, 19: 279–97.
- Austin S. (1987) Études sur Parménide, ii. Problèmes d'interprétation (Paris: J. Vrin).
- Austin, S. (1983) 'Genesis and Motion in Parmenides: B 8. 12–13', *Harvard Studies in Classical Philology*, 87: 151–68.
- Barnes, J. (1979) 'Parmenides and the Eleatic One', Archiv für Geschichte der Philosophie, 61: 1–21.
- —— (1982a) The Presocratic Philosophers (2nd edn. London: Routledge & Kegan Paul).
- —— (1982b) Review of Wright 1981, Classical Review, 32: 191–6.
- Bäumker, C. (1886) 'Die Einheit des parmenideischen Seienden', *Jahrbucher für klassische Philologie*, 133: 541–61.
- Becker, O. (1964) 'Drei Abhandlungen zum Lehrgedicht des Parmenides', *Kant-Studien*, 55: 255–9.
- Bergk, T. (1842) Review of S. Karsten, Empedoclis Agrigentini Carminum Reliquiae (Amsterdam, 1838), Zeitschrift für die Alterthumswissenschaft, 9: 1001–11. Repr. in R. Peppmüller (ed.), Kleine philologische Schriften von Theodor Bergk, ii (Halle: Waisenhaus, 1886), 45–59.
- (1864) 'Parmenidea', in *Universitatis Fridericianae utriusque Halis consociatae rector et senatus Latinam orationem...habendam indicunt* (Halle: Hendelii), 3–8. Repr. in R. Peppmüller (ed.), *Kleine philologische Schriften von Theodor Bergk*, ii (Halle: Waisenhaus, 1886), 66–82.
- Bernabé, A. (2002) 'La Théogonie orphique du papyrus de Derveni', Kernos, 15: 91-129.
- (2004) Poetae Epici Graeci Testimonia et Fragmenta, ii/1. Orphicorum et Orphicis similium testimonia et fragmenta (Munich and Leipzig: K. G. Saur).
- Bernays, J. (1850) 'Heraklitische Studien', *Rheinisches Museum*, 7: 90–116. Repr. in H. Usener (ed.), *Gesammelte Abhandlungen von Jacob Bernays*, i (Berlin: Wilhelm Hertz, 1885), 37–63.
- Berti, E. (1988) 'Zenone di Elea inventore della dialectica?', La Parola del Passato, 43: 19–41.
 Betegh, G. (2002) 'On Eudemus fr. 150 (Wehrli)', in I. Bodnár and W. Fortenbaugh (eds.), Eudemus of Rhodes (New Brunswick, NJ: Transaction Publishers), 321–41.
- (2004) The Derveni Papyrus: Cosmology, Theology, and Interpretation (Cambridge: Cambridge University Press).
- Bicknell, P. (1967) 'Parmenides' Refutation of Motion and an Implication', *Phronesis*, 12: 1–5.

- Bicknell, P. (1982) 'Melissus' Way of Seeming?', Phronesis, 27: 194-201.
- Bignone, E. (1916) Empedocle: Studio critico, traduzione e commento delle testimonianze e dei frammenti (Turin: Bocca; repr. Rome: L'Erma di Bretschneider, 1963).
- Bodnár, I. (1985) 'Contrasting Images: Notes on Parmenides B5', Apeiron, 19: 57-63.
- Bollack, J. (1965) Empédocle, i: Introduction à l'ancienne physique (Paris: Éditions de Minuit).
- (1968) 'Les Zones de la cosmogonie d'Empédocle', Hermes, 96: 239–40.
- (1969a) Empédocle, ii. Les Origines, édition et traduction des fragments et des témoignages (Paris: Éditions de Minuit).
- (1969 b) Empédocle, iii/1-2. Les Origines, commentaire (Paris: Éditions de Minuit).
- (1990) 'La Cosmologie parménidéenne de Parménide', in R. Brague and J.-F. Courtine (eds.), *Herméneutique et Ontologie: Mélanges en hommage à Pierre Aubenque* (Paris: Presses Universitaires de France), 17–53.
- and Wismann, H. (1974) 'Le Moment théorique (Parménide, fr. 8. 42–9)', Revue des Sciences Humaines, 39: 203–12.
- Booth, N. B. (1957a) 'Zeno's Paradoxes', Journal of Hellenic Studies, 77: 187–201.
- —— (1957*b*) 'Were Zeno's Arguments a Reply to Attacks upon Parmenides?', *Phronesis*, 2: 1–9.
- (1957c) 'Were Zeno's Arguments Directed Against the Pythagoreans?', *Phronesis*, 2: 90–103.
- Bormann, K. (1979) 'The Interpretation of Parmenides by the Neoplatonist Simplicius', *The Monist*, 62: 30–42.
- Bowra, C. M. (1937) 'The Proem of Parmenides', Classical Philology, 32: 97-112.
- Brown, G. (1984) 'The Cosmological Theory of Empedocles', Apeiron, 18: 97–101.
- Brown, L. (1994) 'The Verb "to be" in Greek Philosophy: Some Remarks', in S. Everson (ed.), *Language* (Companions to Ancient Thought, 3; Cambridge: Cambridge University Press), 212–36.
- Brunschwig, J. (2004) 'On Generation and Corruption I. 1: A False Start?', in de Haas and Mansfeld 2004: 25–63.
- Buchheim, T. (1989) Gorgias von Leontini: Reden, Fragmente und Testimonien (Hamburg: Felix Meiner).
- Burkert, W. (1963) 'Iranisches bei Anaximandros', Rheinisches Museum, 106: 97-134.
- —— (1969) 'Das Proömium des Parmenides und die Katabasis des Pythagoras', *Phronesis*, 14: 1–30.
- (1992) The Orientalizing Revolution: Near Eastern Influence on Greek Culture in the Archaic Age, tr. M. E. Pinder and W. Burkert (Cambridge, Mass.: Harvard University Press).
- (1994) 'Orientalische und griechische Weltmodelle von Assur bis Anaximandros', Wiener Studien, 107: 179–86.
- —— (2004) Babylon, Memphis, Persepolis: Eastern Contexts of Greek Culture (Cambridge, Mass., and London: Harvard University Press).
- —— (2008) 'Prehistory of Presocratic Philosophy in an Orientalizing Context', in Curd and Graham 2008: 55–85.
- Burnet, J. (1930) Early Greek Philosophy (4th edn. London: Black).
- Burnyeat, M. F. (1982) 'Idealism and Greek Philosophy: What Descartes Saw and Berkeley Missed', *Philosophical Review*, 91: 3–40.
- Calogero, G. (1932) Studi sull' Eleatismo (Rome: Tipografia del Senato).
- —— (1936) 'Parmenide e la genesi della logica classica', Annali della Scuola Normale Superiore di Pisa, Classe di lettere e filosofia, ser. 2/5: 143–85.

- Calogero, G. (1950) 'Senofane, Eschilo, e la prima definizione dell'onnipotenza di Dio', in V. E. Alfieri and M. Untersteiner (eds.), *Studi di Filosofia Greca* (Bari: Laterza), 31–55.
- Capizzi, A. (1988) 'Quattro ipotesi Eleatiche', La Parola del Passato, 43: 42-60.
- Casadio, G. (1999) 'Eudemo di Rodi: Un pioniere della storia delle religioni tra oriente e occidente', Wiener Studien, 112: 39–54.
- Casertano, G. (1978) Parmenide: Il metodo, la scienza, l'esperienza (Naples: Guida Editori).
- Cassin, B. (1998) Parménide: Sur la nature ou sur l'étant. La langue de l'être (Paris: Éditions de Seuil).
- Caston, V., and Graham, D. W. (eds) (2002) Presocratic Philosophy: Essays in Honour of Alexander Mourelatos (Aldershot and Burlington, Vt.: Ashgate).
- Caveing, M. (1982) Zénon d'Elée: Prolégomènes aux doctrines du continu. Étude historique et critique des fragments et témoignages (Paris: J. Vrin).
- Cerri, G. (1997) 'Il v. 1, 3 di Parmenide: La ricognizione dell'esperienza', in P. D'Alessandro (ed.), MOUSA: Scritti in onore di Giuseppe Morelli (Bologna: Pàtron), 57–63.
- —— (1999) Parmenide di Elea: Poema sulla natura (Milan: Biblioteca Universale Rizzoli).
- Chalmers, W. R. (1960) 'Parmenides and the Beliefs of Mortals', *Phronesis*, 5: 5-22.
- Cherniss, H. (1935) *Aristotle's Criticism of Presocratic Philosophy* (Baltimore: Johns Hopkins Press).
- —— (1951) 'The Characteristics and Effects of Presocratic Philosophy', *Journal of the History of Ideas*, 12: 319–45.
- Cherubin, R. (2005) 'Light, Night, and the Opinions of Mortals: Parmenides B8. 51–61 and B9', *Ancient Philosophy*, 25: 1–23.
- Clark, R. J. (1969) 'Parmenides and Sense-Perception', Revue des études grecques, 82: 14–32.
 Classen, C. J. (1977) 'Anaximander and Anaximenes: The Earliest Greek Theories of Change?', Phronesis, 22: 89–102.
- Cole, T. (1983) 'Archaic Truth', Quaderni Urbinati di Cultura Classica, 42: 7-28.
- Conche, M. (1996) Parménide: Le Poème. Fragments (Paris: Presses Universitaires de France).
 Cordero, N.-L. (1979) 'Les Deux Chemins de Parménide dans les fragments 6 et 7', Phronesis, 24: 1–32.
- (1982) 'Le Vers I, 3 de Parménide: La Déesse conduit à l'égard de tout', Revue Philosophique, 107: 159–79.
- (1984) Les Deux Chemins de Parménide: Édition critique, traduction, études et bibliografie (Paris: J. Vrin; Brussels: Éditions Ousia).
- (1987) 'L'Histoire du texte de Parménide', in Aubenque 1987: 3–24.
- (1988) 'Zénon d'Élée, moniste ou nihiliste?', La Parola del Passato, 43: 100-26.
- (1991) 'L'Invention de l'école éléatique: Platon, *Soph.* 242d', in P. Aubenque (gen. ed.) and M. Narcy (ed.), *Études sur le Sophiste de Platon* (Elenchos, 21; Naples: Bibliopolis), 91–124.
- —— (1999) 'Una tragedia filosófica: del "se es" de Parménides al ser-uno de Meliso', Revista Latinoamericana de Filosofia, 25: 283–93.
- Cornford, F. M. (1930) 'Anaxagoras' Theory of Matter', Classical Quarterly, 24: 14–30, 83–95. Repr. in Allen and Furley 1975: 275–322.
- —— (1933) 'Parmenides' Two Ways', Classical Quarterly, 27: 97-111.
- ---- (1939) Plato and Parmenides (London: Routledge & Kegan Paul).
- Cosgrove, M. R. (1974) 'The κούρος motif in Parmenides: B1. 24', Phronesis, 19: 81–94.
- Couloubaritsis, L. (1986) Mythe et Philosophie chez Parménide (Brussels: Éditions Ousia).
- (1987) 'Les Multiples Chemins de Parménide', in Aubenque 1987: 25–43.
- Coxon, A. H. (1934) 'The Philosophy of Parmenides', Classical Quarterly, 28: 134-44.
- —— (1968a) 'The Text of Parmenides fr. 1. 3', Classical Quarterly, 18: 69.

- —— (1968 b) 'The Manuscript Tradition of Simplicius's Commentary on Aristotle's *Physics* I–IV', *Classical Quarterly*, 18: 70–5.
- (1986) The Fragments of Parmenides: A Critical Text with Introduction, Translation, the Ancient Testimonia and a Commentary (Phronesis suppl. 3; Assen and Maastricht: Van Gorcum).
- —— (2003) 'Parmenides on Thinking and Being', Mnemosyne, 56: 210–12.
- Crystal, I. (1996) 'Parmenidean Allusions in Republic V', Ancient Philosophy, 16: 351-63.
- —— (2002a) 'The Scope of Thought in Parmenides', Classical Quarterly, 52: 207-19.
- (2002b) Self-Intellection and its Epistemological Origins in Ancient Greek Thought (Aldershot and Burlington, VT: Ashgate).
- Curd, P. K. (1991) 'Parmenidean Monism', Phronesis, 36: 241-64.
- —— (1992) 'Deception and Belief in Parmenides' Doxa', Apeiron, 25: 109-33.
- —— (1993) 'Eleatic Monism in Zeno and Melissus', Ancient Philosophy, 13: 1-22.
- —— (1998a) The Legacy of Parmenides: Eleatic Monism and Later Presocratic Thought (Princeton: Princeton University Press).
- —— (1998b) 'Eleatic Arguments', in J. Gentzler (ed.), *Method in Ancient Philosophy* (Oxford: Clarendon Press), 1–28.
- —— (2005) 'On the Question of Religion and Natural Philosophy in Empedocles', in Pierris 2005: 137–62.
- —— (2006) 'Parmenides and After: Unity and Plurality', in M. L. Gill and P. Pellegrin (eds.), A Companion to Ancient Philosophy (Malden, Mass., and Oxford: Blackwell Publishing), 34–55.
- —— (2007) Anaxagoras of Clazomenae: Fragments and Testimonia (Toronto: University of Toronto Press).
- Curd, P., and Graham, D. W. (eds.) (2008) *The Oxford Handbook of Presocratic Philosophy* (New York: Oxford University Press).
- Dalfen, J. (1994) 'Parmenides, der Vorsokratiker oder: Nicht der Philosoph schafft die Probleme, sondern seine Interpreten', Philologus, 138: 194–214.
- Dancy, R. M. (1989) 'Thales, Anaximander, and Infinity', Apeiron, 22: 149-90.
- Darcus, S. M. (1977) 'Daimon Parallels the Holy *Phren* in Empedocles', *Phronesis*, 22: 175–90.
- Defilippo, J. G. (1993) 'Reply to André Laks on Anaxagoras' Nous', Southern Journal of Philosophy, 31 suppl.: 39–48.
- Deichgräber, K. (1933) 'Hymnische Elemente in der philosophischen Prosa der Vorsokratiker', *Philologus*, 42: 347–61.
- (1958) Parmenides' Auffahrt zur Göttin des Rechts: Untersuchungen zum Prooimion seines Lehrgedichts (Wiesbaden: Akademie der Wissenschaften und der Literatur im Mainz).
- Diels, H. (1876) 'Chronologische Untersuchungen über Apollodors Chronik', Rheinisches Museum, 31: 1–54.
- —— (1879) Doxographi Graeci (Berlin: G. Reimer).
- —— (1880) 'Studia Empedoclea', Hermes, 15: 161-79.
- —— (1897) Parmenides: Lehrgedicht (Berlin: Georg Reimer).
- (1898) 'Über die Gedichte des Empedokles', Sitzungsberichte der Preussische Akademie der Wissenschaften, 63: 396–415.
- —— (1901) Poetarum Philosophorum Fragmenta (Berlin: Weidmann).
- and Kranz, W. (1951–2) *Die Fragmente der Vorsokratiker* (6th edn. Berlin: Weidmann).
- Diggle, J. (1970) Euripides, Phaethon: Edited with Prolegomena and Commentary (Cambridge: Cambridge University Press).

- Diggle, J. (ed.) (1998) Tragicorum Graecorum Fragmenta Selecta (Oxford: Clarendon Press).
 Diller, H. (1941) 'Die philosophiegeschichtliche Stellung des Diogenes von Apollonia',
 Hermes, 76: 359–81.
- Dolin, E. F., Jr. (1962) 'Parmenides and Hesiod', *Harvard Studies in Classical Philology*, 66: 93–8.
- Duke, E. A., Hicken, W. F., Nicoll, W. S. M, Robinson, D. B., and Strachan, J. C. G. (eds.) (1995) *Platonis Opera*, i. *Tetralogias i–ii continens* (Oxford: Clarendon Press).
- Ebert, T. (1989) 'Wo beginnt der Weg der Doxa? Eine Textumstellung im Fragment 8 des Parmenides', *Phronesis*, 34: 121–38.
- Edmonds, R. G. (2004) Myths of the Underworld Journey: Plato, Aristophanes, and the 'Orphic' Gold Tablets (Cambridge: Cambridge University Press).
- Edwards, M. J. (1991) 'Being and Seeming: Empedocles' Reply', Hermes, 119: 283-93.
- Engmann, J. (1991) 'Cosmic Justice in Anaximander', Phronesis, 36: 1-25.
- Evans, J. D. G. (1977) Aristotle's Concept of Dialectic (Cambridge: Cambridge University Press).
- Ferguson, J. (1965) 'On the Date of Democritus', Symbolae Osloenses, 40: 17-26.
- Feyerabend, B. (1984) 'Zur Wegmetaphorik beim Goldblättchen aus Hipponion und dem Proömium des Parmenides', *Rheinisches Museum*, 127: 1–22.
- Finkelberg, A. (1986) "Like by Like" and Two Reflections of Reality in Parmenides', *Hermes*, 114: 405–12.
- (1988) 'Parmenides: Between Material and Logical Monism', Archiv für Geschichte der Philosophie, 70, 1–14.
- —— (1997) 'Xenophanes' Physics, Parmenides' Doxa and Empedocles' Theory of Cosmogonical Mixture', *Hermes*, 125: 1–16.
- —— (1999) 'Being, Truth and Opinion in Parmenides', Archiv für Geschichte der Philosophie, 81: 233–48.
- Fränkel, H. (1930) 'Parmenidesstudien', Nachrichtem der Akademie der Gesellschaft der Wissenschaften in Göttingen, philologische-historische Klasse, 2: 153–92. Rev. repr. in Fränkel, Wege und Formen frühgriechischen Denkens (Munich: Beck, 1955), tr. in Allen and Furley 1975: 1–47.
- —— (1942) 'Zeno of Elea's Attacks on Plurality', American Journal of Philology, 63: 1–25.
- —— (1946) Critical notice of Verdenius 1942, Classical Philology, 41: 168–71.
- —— (1962) Dichtung und Philosophie des frühen Griechentums (2nd edn. Munich: Beck).
- Frede, M. (1988) 'Being and Becoming in Plato'. Oxford Studies in Ancient Philosophy, suppl. vol.: 37–52.
- Frère, J. (1987) 'Parménide et l'ordre du monde: fr. VIII, 50-61', in Aubenque 1987: 192-212.
- Freudenthal, G. (1986) 'The Theory of the Opposites and an Ordered Universe: Physics and Metaphysics in Anaximander', *Phronesis*, 31: 197–228.
- Fritz, K. von (1943) 'Nóos and voeîv in the Homeric Poems', Classical Philology, 38: 79–93.

 —— (1945/6) 'Nous, Noein, and their Derivatives in Pre-Socratic Philosophy', Classical Philology, 40: 223–42, and 41: 12–34. Repr. in Mourelatos 1974: 23–85.
- (1974) 'Zeno of Elea in Plato's *Parmenides*', in J. L. Heller and J. K. Newman (eds.), Serta Turyniana: Studies in Greek Literature and Palaeography in Honour of A. Turyn (Urbana, Ill.: University of Illinois Press), 329–41.
- Furley, D. J. (1967) Two Studies in the Greek Atomists (Princeton: Princeton University Press).
 —— (1973) 'Notes on Parmenides', in E. N. Lee, A. P. D. Mourelatos, and R. M. Rorty (eds.), Exegesis and Argument: Studies in Greek Philosophy Presented to Gregory Vlastos (Phronesis suppl. 1; Assen: Van Gorcum), 1–15.

- (1976) 'Anaxagoras in Response to Parmenides', in R. A. Shiner and J. King-Farlow (eds.), *New Essays on Plato and the Presocratics, Canadian Journal of Philosophy*, suppl. vol., ii. 61–85. Repr. in Furley, *Cosmic Problems: Essays on Greek and Roman Philosophy of Nature* (Cambridge: Cambridge University Press, 1989), 47–65.
- —— (1987) The Greek Cosmologists, i. The Formation of the Atomic Theory and its Earliest Critics (Cambridge: Cambridge University Press).
- and Allen, R. E. (eds.) (1970) Studies in Presocratic Philosophy, i. The Beginnings of Philosophy (London: Routledge & Kegan Paul).
- Furth, M. (1968) 'Elements of Eleatic Ontology', *Journal of the History of Philosophy*, 6: 111–32.
- —— (1991) 'A "Philosophical Hero"? Anaxagoras and the Eleatics', Oxford Studies in Ancient Philosophy, 9: 95–129.
- Gallop, D. (1984) Parmenides of Elea: Fragments (Toronto: University of Toronto Press).
- Gemelli Marciano, M. L. (1991) 'L'"atomismo" e il corpuscolarismo Empedocleo: Frammenti di interpretazioni nel mondo antico', *Elenchos*, 12: 5–37.
- —— (2005) 'Empedocles' Zoogony and Embryology', in Pierris 2005: 373–404.
- Germani, G. (1988) 'AAHOEIH in Parmenide', La Parola del Passato, 43: 177-206.
- Gerson, L. P. (ed.) (1983) Graceful Reason: Essays in Ancient and Medieval Philosophy Presented to Joseph Owens (Toronto: Pontifical Institute of Medieval Studies).
- Giannantoni, G. (1997) 'L'originalità del pluralismo Empedocleo', Elenchos, 18: 235-55.
- Gigon, O. (1936) 'Zu Anaxagoras', Philologus, 91: 1-41.
- —— (1968) Der Ursprung der griechischen Philosophie: Von Hesiod bis Parmenides (2nd edn. Basel and Stuttgart: Schwabe).
- (ed.) (1987) Aristotelis Opera, iii. Librorum Deperditorum Fragmenta (Berlin: de Gruyter).
- Gilbert, O. (1907) 'Die Daimon des Parmenides', Archiv für Geschichte der Philosophie, 20: 25–45.
- —— (1909) 'Ionier und Eleaten', Rheinisches Museum, 64: 185–201.
- Goldin, O. (1993) 'Parmenides on Possibility and Thought', Apeiron, 26: 19-35.
- Gómez-Lobo, A. (1981) 'Retractación sobre el proemio de Parmenides', Revista Latinoamericana de Filosofia, 7: 253–60.
- Gomperz, H. (1924) 'Psychologische Beobachtungen an griechischen Philosophen', *Imago*, 10: 2–34.
- Gottschalk, H. B. (1965) 'Anaximander's Apeiron', *Phronesis*, 10: 37-53.
- Graeser, A. (1972) The Argument of Melissus (Athens: Meletai kai Ereunai, 22).
- Graham, D. W. (1994) 'Symmetry in the Empedoclean Cycle', *Classical Quarterly*, 38: 297–312.
- —— (1994) 'The Postulates of Anaxagoras', Apeiron, 27: 77–121.
- —— (1999) 'Empedocles and Anaxagoras: Responses to Parmenides', in Long 1999: 159–80.
- —— (2002a) 'Heraclitus and Parmenides', in Caston and Graham 2002: 27–44.
- (2002*b*) 'La lumière de la lune dans la pensée archaïque', in A. Laks and C. Louguet (eds.), *Qu'est-ce que la Philosophie Présocratique* (Villeneuve d'Ascq: Presses Universitaires du Septentrion), 350–80.
- —— (2003a) 'A New Look at Anaximenes', History of Philosophy Quarterly, 20: 1–20.
- —— (2003 b) 'A Testimony of Anaximenes in Plato', Classical Quarterly, 53: 327–37.
- —— (2005) 'The Topology and Dynamics of Empedocles' Cycle', in Pierris 2005: 225–44.

- Graham, D. W. (2006) Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy (Princeton: Princeton University Press).
- —— (2008) 'Leucippus's Atomism', in Curd and Graham 2008: 333–52.
- Groarke, L. (1985) 'Parmenides' Timeless Universe', Dialogue, 24: 535-41.
- —— (1987) 'Parmenides' Timeless Universe, Again', Dialogue, 26: 549-52.
- Guérard, C. (1987) 'Parménide d'Élée chez les Néoplatoniciens', in Aubenque 1987: 294–313.
- Guthrie, W. K. C. (1957) 'Aristotle as a Historian of Philosophy: Some Preliminaries', *Journal of Hellenic Studies*, 77: 35–41.
- —— (1962) A History of Greek Philosophy, i. The Earlier Presocratics and the Pythagoreans (Cambridge: Cambridge University Press).
- —— (1965) A History of Greek Philosophy, ii. The Presocratic Tradition from Parmenides to Democritus (Cambridge: Cambridge University Press).
- Haas, F. de, and Mansfeld, J. (eds.) (2004) *Aristotle*: On Generation and Corruption, *Book I* (Oxford: Clarendon Press).
- Heidel, W. A. (1912) 'On Anaximander', Classical Philology, 7: 212-34.
- —— (1913) 'On Certain Fragments of the Pre-Socratics: Critical Notes and Elucidations', Proceedings of the American Academy of Arts and Sciences, 48: 679–734.
- Heimpel, W. (1986) 'The Sun at Night and the Doors of Heaven in Babylonian Texts', *Journal of Cuneiform Studies*, 38: 127–51.
- Heitsch, E. (1974) Parmenides: Die Anfänge der Ontologie, Logik und Naturwissenschaft (Munich: Heimeran Verlag).
- Hershbell, J. P. (1971) 'Plutarch as a Source for Empedocles Re-examined', *American Journal of Philology*, 92: 156–84.
- Hintikka, J. (1980) 'Parmenides' Cogito Argument', Ancient Philosophy, 1: 5-16.
- Hölscher, U. (1953) 'Anaximander and the Beginnings of Greek Philosophy', *Hermes*, 81: 255–77 and 385–417. Repr. in Furley and Allen 1970: 281–322.
- (1965) 'Weltzeiten und Lebenszyklus', Hermes, 93: 7-33.
- (1968) Anfängliches Fragen: Studien der frühen griechischen Philosophie (Göttingen: Vandenhoeck & Ruprecht).
- —— (1969) Parmenides: Vom Wesen des Seienden (Frankfurt am Main: Suhrkamp).
- Huby, P. (1973) Review of Schmalzriedt 1970, Classical Review, 23: 206-8.
- Hussey, E. (1972) The Presocratics (London: Duckworth).
- —— (1990) 'The Beginnings of Epistemology: From Homer to Philolaus', in S. Everson (ed.), Epistemology (Companions to Ancient Thought, 1; Cambridge: Cambridge University Press), 11–38.
- —— (2004) 'On Generation and Corruption I. 8', in de Haas and Mansfeld 2004: 243-65.
- Inwood, B. (1986) 'Anaxagoras and Infinite Divisibility', Illinois Classical Studies, 11: 17-33.
- —— (1992) The Poem of Empedocles (Toronto: University of Toronto Press).
- —— (2001) The Poem of Empedocles (rev. edn. Toronto: University of Toronto Press).
- Jackson, H. (1892) 'On Parmenides 52 (60)', Journal of Philology, 21: 73-4.
- Jaeger, W. (1947) The Theology of the Early Greek Philosophers (Oxford: Clarendon Press).
- —— (1948) Aristotle: Fundamentals of the History of his Development, tr. R. Robinson (Oxford: Clarendon Press).
- Jameson, G. (1958) 'Well-Rounded Truth and Circular Thought in Parmenides', *Phronesis*, 3: 15–30.
- Janko, R. (1986) 'Hesychius Θ 216 and Empedocles fragment 21. 6', Classical Philology, 81: 308–9.

- Janko, R. (2004) 'Empedocles, On Nature I 233–364: A New Reconstruction of P. Strasb. Gr. Inv. 1665–6'. Zeitschrift für Papyrologie und Epigraphik, 150: 1–26.
- —— (2005) 'Empedocles' *Physica* Book I: A New Reconstruction', in Pierris 2005: 93–135.
- Jouanna, J. (1965) 'Rapports entre Mélissos de Samos et Diogène d'Apollonie, à la lumière du traité hippocratique *De Natura Hominis'*, *Revue des Études Anciennes*, 67: 306–23.
- Jucker, H. (1968) 'Archäologische Berichte: Zur Bildnisherme des Parmenides', Museum Helveticum, 25: 181–5.
- Kahn, C. H. (1960a) Anaximander and the Origins of Greek Cosmology (New York: Columbia University Press).
- (1960b) 'Religion and Natural Philosophy in Empedocles' Doctrine of the Soul', *Archiv für Geschichte der Philosophie*, 42: 3–35. Repr. with retractions in Mourelatos 1974: 426–56.
- —— (1966) 'The Greek Verb "to be" and the Concept of Being', *Foundations of Language*, 2: 245–65.
- —— (1968) Review of Tarán 1965, Gnomon, 40: 122-33.
- —— (1969) 'The Thesis of Parmenides', Review of Metaphysics, 23: 700–24.
- —— (1970) Review of Mansfeld 1964, Gnomon, 42: 113-19.
- —— (1973) The Verb 'Be' in Ancient Greek (Dordrecht: Reidel; repr. Indianapolis: Hackett, 2003).
- —— (1988) 'Being in Parmenides and Plato', La Parola del Passato, 43: 237-61.
- Karsten, S. (1835) Parmenidis Eleatae Carminis Reliquiae (Philosophorum Graecorum Veterum, i/1; Amsterdam: Muller).
- Kerferd, G. B. (1969) 'Anaxagoras and the Concept of Matter before Aristotle', *Bulletin of the John Rylands Library*, 52: 129–43. Repr. in Mourelatos 1974: 489–503.
- —— (1981) The Sophistic Movement (Cambridge: Cambridge University Press).
- —— (1991) 'Aristotle's Treatment of the Doctrine of Parmenides', Oxford Studies in Ancient Philosophy, suppl. vol.: 1–7.
- Kern, O. (1922) Orphicorum Fragmenta (Berlin: Weidmann).
- Ketchum, R. J. (1990) 'Parmenides on What there is', Canadian Journal of Philosophy, 20: 167–90.
- Kingsley, P. (1994) 'Empedocles and his Interpreters: The Four-Element Doxography', *Phronesis*, 39: 235–54.
- —— (1995) Ancient Philosophy, Mystery, and Magic: Empedocles and the Pythagorean Tradition (Oxford: Clarendon Press).
- —— (1996) 'Empedocles' Two Poems', Hermes, 124: 108–11.
- —— (1999) In the Dark Places of Wisdom (Inverness, Calif.: Golden Sufi Center).
- —— (2002) 'Empedocles for the New Millennium', Ancient Philosophy, 22: 333-413.
- —— (2003) Reality (Inverness, Calif.: Golden Sufi Center).
- Kirk, G. S. (1955) 'Some Problems in Anaximander', Classical Quarterly, 5: 21-38.
- —— and Raven, J. E. (1957) *The Presocratic Philosophers* (Cambridge: Cambridge University Press).
- and Stokes, M. C. (1960) 'Parmenides' Refutation of Motion', *Phronesis*, 5: 1–4.
- —— Raven, J. E., and Schofield, M. (1983) *The Presocratic Philosophers* (2nd edn. Cambridge: Cambridge University Press).
- Klowski, J. (1971) 'Antwortete Leukipp Melissos oder Melissos Leukipp?', Museum Helveticum, 28: 65–71.

- Kouremenos, T., Parássoglou, G. M., and Tsantsanoglou, K. (2006) The Derveni Papyrus, ed. with introduction and commentary (Studi e Testi per il Corpus dei Papiri Filosofici Greci e Latini, 13; Florence: Leo S. Olschki).
- Kranz, W. (1912) 'Empedokles und die Atomistik', Hermes, 47: 18-42.
- (1949) Empedokles: Antike Gestalt und romantische Neuschöpfung (Zurich: Artemis Verlag).
- La Croce, E. (1980/1) 'Empedocles' Sphairos and Parmenidean Legacy', Platon, 32/33: 114-22.
- Laks, A. (1988) 'Parménide dans Théophraste, De sensibus 3-4', La Parola del Passato, 43: 262-80.
- (1990) "The More" and "the Full": On the Reconstruction of Parmenides' Theory of Sensation in Theophrastus, De sensibus, 3-4', Oxford Studies in Ancient Philosophy, 8: 1-18.
- —— (1993) 'Mind's Crisis: On Anaxagoras' Nous', Southern Journal of Philosophy, 31 suppl.: 19-38.
- (1999) 'A propos du nouvel Empédocle: Les Vers 267–290 du poème physique étayentils l'hypothèse d'une double zoogonie?', Hyperboreus, 5: 15-21.
- —— (2002) 'Reading the Readings: On the First Person Plurals in the Strasburg Empedocles', in Caston and Graham 2002: 127-37.
- (2006) Introduction à la 'philosophie présocratique' (Paris: Presses Universitaires de France).
- Lanza, D. (1963) 'Le omeomerie nella tradizione dossografica anassagorea', La Parola del Passato, 18: 256-93.
- Lear, J. (1981) 'A Note on Zeno's Arrow', Phronesis, 26: 91-104.
- Lee, H. D. P. (1936) Zeno of Elea (Cambridge: Cambridge University Press).
- Lesher, J. H. (1981) 'Perceiving and Knowing in the *Iliad* and *Odyssey*', *Phronesis*, 26: 2–24.
- —— (1984) 'Parmenides' Critique of Thinking: The *Poludēris Elenchos* of Fragment 7', Oxford Studies in Ancient Philosophy, 2: 1–30.
- (1994a) 'The Emergence of Philosophical Interest in Cognition', Oxford Studies in Ancient Philosophy, 12: 1-34.
- —— (1994b) 'The Significance of $\kappa \alpha \tau \dot{\alpha} \pi \dot{\alpha} \nu \tau' \ddot{\alpha} < \sigma > \tau \eta$ in Parmenides fr. 1. 3', Ancient *Philosophy*, 14: 1–20.
- (1995) 'Mind's Knowledge and Powers of Control in Anaxagoras DK B12', Phronesis, 40: 125–42.
- —— (1999) 'Early Interest in Knowledge', in Long 1999: 225–49.
- Leszl, W. (1983) 'L'argomento contro i molti in DK 29B1 e il procedimento di Zenone', in Gerson 1983: 1–27.
- Lewis, E. (2000) 'Anaxagoras and the Seeds of a Physical Theory', Apeiron, 33: 1–23.
- Lloyd, G. E. R. (1964) 'Hot and Cold, Dry and Wet in Early Greek Thought', Journal of Hellenic Studies, 84: 92-106.
- Loenen, J. H. M. M. van (1959) Parmenides, Melissus, Gorgias: A Reinterpretation of Eleatic Philosophy (Assen: Van Gorcum).
- Long, A. A. (1963) 'The Principles of Parmenides' Cosmogony', Phronesis, 8: 90-107.
- —— (1966) 'Thinking and Sense-Perception in Empedocles: Mysticism or Materialism?', Classical Quarterly, 16: 256-76.
- —— (1974) 'Empedocles' Cosmic Cycle in the 'Sixties', in Mourelatos 1974: 397–425.
 —— (1996) 'Parmenides on Thinking Being', *Proceedings of the Boston Area Colloquium in* Ancient Philosophy, 12: 125–51.
- (ed.) (1999) The Cambridge Companion to Early Greek Philosophy (Cambridge: Cambridge University Press).

- Longrigg, J. (1967) 'Roots', Classical Review, 17: 1-4.
- —— (1976) 'The "Roots of All Things"', Isis, 67: 420–38.
- McDiarmid, J. B. (1953) 'Theophrastus on the Presocratic Causes', Harvard Studies in Classical Philology, 61: 85–156. Repr. in Furley and Allen 1970: 178–238.
- MacKenzie, M. M. (1982) 'Parmenides' Dilemma', Phronesis, 27: 1-12.
- McKirahan, R. D., Jr. (1999) 'Zeno', in Long 1999: 134-58.
- —— (2005) 'Assertion and Argument in Empedocles' Cosmology or, What did Empedocles Learn from Parmenides?', in Pierris 2005: 163–88.
- Makin, S. (1982) 'Zeno on Plurality', Phronesis, 27: 223-38.
- —— (1998) 'Zeno of Elea', in E. Craig (ed.), *Routledge Encyclopedia of Philosophy*, ix (London and New York: Routledge), 843–53.
- —— (2005) 'Melissus and his Opponents: The Argument of DK 30 B 8', *Phronesis*, 50: 263–88.
- Mann, W. E. (1980) 'Anaxagoras and the Homoiomere?', Phronesis, 35: 228-49.
- Mansfeld, J. (1964) Die Offenbarung des Parmenides und die Menschliche Welt (Assen: Van Gorcum).
- —— (1972) 'Ambiguity in Empedocles B17, 3–5: A Suggestion', *Phronesis*, 17: 17–39.
- —— (1979) 'The Chronology of Anaxagoras' Athenian Period and the Date of his Trial: Part I. The Length and Dating of the Athenian Period', *Mnemosyne*, 32: 39–60. Repr. in Mansfeld 1990: 264–306.
- —— (1980*a*) 'The Chronology of Anaxagoras' Athenian Period and the Date of his Trial: Part II. The Plot Against Pericles and his Associates', *Mnemosyne*, 33: 17–95.
- —— (1980b) 'Anaxagoras' Other World', Phronesis, 25: 1–4.
- —— (1983) 'Cratylus 402a–c: Plato or Hippias?', in L. Rosetti (ed.), Atti Symposium Heracliteum 1981, i (Rome: Ateneo), 43–55. Repr. in Mansfeld 1990: 84–96.
- (1985a) 'Historical and Philosophical Aspects of Gorgias' "On What Is Not"', in L. Montoneri and F. Romano (eds.), *Gorgia e la Sofistica, Siculorum Gymnasium*, 38: 243–71. Repr. in Mansfeld 1990: 97–125.
- —— (1985b) Review of O'Brien 1981, Mnemosyne, 38: 183–8.
- (1986) 'Aristotle, Plato, and the Preplatonic Doxography and Chronography', in G. Cambiano (ed.), Storiografia e dossografia nella filosofia antica (Turin: Tirrenia Stampatori), 1–59. Repr. in Mansfeld 1990: 22–83.
- (1990) Studies in the Historiography of Greek Philosophy (Assen and Maastricht: Van Gorcum).
- —— (1995a) 'Critical Note: Empedocles and his Interpreters', *Phronesis*, 40: 109–15.
- —— (1995b) 'Insight by Hindsight: Intentional Unclarity in Presocratic Proems', Bulletin of the Institute of Classical Studies, 40: 225–32.
- —— (1999a) 'Sources', in Long 1999: 22–44.
- (1999b) 'Parménide et Héraclite avaient-ils une théorie de la perception?', *Phronesis*, 44: 326–46.
- Martin, A. (1995) 'Un papyrus inédit d'Empédocle dans la collection de Strasbourg', *Gnomon*, 67: 734–5.
- and Primavesi, O. (1998) L'Empédocle de Strasbourg (P. Strasb. gr. Inv. 1665–1666): Introduction, édition et commentaire (Berlin and New York: de Gruyter).
- Mathewson, R. (1958) 'Aristotle and Anaxagoras: An Examination of F. M. Cornford's Interpretation', Classical Quarterly, 8: 67–81.
- Matson, W. I. (1980) 'Parmenides Unbound', Philosophical Inquiry, 2: 345-60.
- —— (1984) 'Eleatic Motions', Philosophical Inquiry, 6: 184–201.
- Matthen, M. (1986) 'A Note on Parmenides' Denial of Past and Future', Dialogue, 25: 553-7.

- Mauerhofer, K. (1997) 'Parmenides DK 28 B 8, 19–20', *Museum Helveticum*, 54: 193–203. Merrill, B. L. (1998) 'Melissus of Samos: A Commentary on the Sources and Fragments', Ph.D. thesis, University of Texas at Austin.
- Mette, H. J. (1963) Der Verlorene Aischylos (Berlin: Akademie-Verlag).
- Miller, M. (2006) 'Ambiguity and Transport: Reflections on the Proem to Parmenides' Poem', Oxford Studies in Ancient Philosophy, 30: 1–47.
- Minar, E. L., Jr. (1949) 'Parmenides and the World of Seeming', American Journal of Philology, 70: 41–55.
- —— (1963) 'Cosmic Periods in the Philosophy of Empedocles', *Phronesis*, 8: 127–45.
- Moraux, P. (1968) 'La Joute dialectique d'après le huitième livre des *Topiques*', in G. E. L. Owen (ed.), *Aristotle on Dialectic: The Topics* (Oxford: Clarendon Press), 277–311.
- Morrison, J. S. (1955) 'Parmenides and Er', Journal of Hellenic Studies, 75: 59-68.
- —— (1964) 'Four Notes on Plato's Symposium', Classical Quarterly, 14: 42-55.
- Mourelatos, A. P. D. (1965) ' $\phi\rho\acute{a}\zeta\omega$ and its Derivatives in Parmenides', *Classical Philology*, 60: 261–2.
- —— (1969) 'Comments on "The Thesis of Parmenides", Review of Metaphysics, 32: 735–44.
- —— (1970) The Route of Parmenides: A Study of Word, Image, and Argument in the Fragments (New Haven, Conn., and London: Yale University Press).
- —— (ed.) (1974) The Pre-Socratics: A Collection of Critical Essays (Garden City, NY: Anchor Press; repr. with editor's supplement and bibliographical addenda, Princeton: Princeton University Press, 1993).
- —— (1979) 'Some Alternatives in Interpreting Parmenides', *The Monist*, 62: 3–14.
- —— (1981) 'Pre-Socratic Origins of the Principle that there are No Origins from Nothing', *Journal of Philosophy*, 78: 649–65.
- —— (1987) 'Quality, Structure, and Emergence in Later Presocratic Philosophy', *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 2: 127–94.
- Nehamas, A. (1981) 'On Parmenides' Three Ways of Inquiry', Deucalion, 33/4: 97-111.
- —— (2002) 'Parmenidean Being/Heraclitean Fire', in Caston and Graham 2002: 45-64.
- Nilles, J. C. (1989) 'Le Fragment 8 d'Empédocle selon la perspective de Plutarque et d'Aristote', *Mnemosyne*, 42: 365–79.
- Nünlist, R. (2005) 'Poetological Imagery in Empedocles', in Pierris 2005: 73-92.
- Obbink, D. (1993) 'The Addressees of Empedocles', *Materiali e Discussioni per l'Analisi dei Testi Classici*, 31: 51–98.
- O'Brien, D. (1965) 'Empedocles fr. 35. 14-15', Classical Review, 15: 1-4.
- —— (1967) 'Empedocles' Cosmic Cycle', Classical Quarterly, 17: 29–40.
- —— (1968) 'The Relation of Anaxagoras and Empedocles', Journal of Hellenic Studies, 88: 93–113.
- —— (1969) Empedocles' Cosmic Cycle: A Reconstruction from the Fragments and Secondary Sources (Cambridge: Cambridge University Press).
- —— (1970) 'The Effect of a Simile: Empedocles' Theories of Seeing and Breathing', *Journal of Hellenic Studies*, 90: 140–79.
- (1980) 'Temps et intemporalité chez Parménide', Les Études Philosophiques, 257-72.
- (1981) *Pour interpréter Empédocle* (Philosophia Antiqua, 38; Paris: Les Belles Lettres; Leiden: Brill).
- (with J. Frère) (1987a) P. Aubenque (gen. ed.), Études sur Parménide, i. Le Poème de Parménide: Texte, traduction, essai critique (Paris: J. Vrin).
- (1987b) 'Problèmes d'établissement du texte', in Aubenque 1987: 314-50.
- —— (1987*c*) 'L'Être et l'eternité', in Aubenque 1987: 135–62.

- —— (1995) 'Empedocles Revisited', Ancient Philosophy, 15: 403–70.
- (2000) 'Hermann Diels on the Presocratics: Empedocles' Double Destruction of the Cosmos (Aetius ii 4. 8)', *Phronesis*, 40: 1–18.
- Osborne, C. (1987a) 'Empedocles Recycled', Classical Quarterly, 37: 24-50.
- —— (1987b) Rethinking Early Greek Philosophy: Hippolytus of Rome and the Presocratics (London: Duckworth).
- (2000) 'Rummaging in the Recycling Bins of Upper Egypt: A Discussion of A. Martin and O. Primavesi, L'Empédocle de Strasbourg', Oxford Studies in Ancient Philosophy, 18: 329–56.
- Owen, G. E. L. (1958) 'Zeno and the Mathematicians', *Proceedings of the Aristotelian Society*, 58: 199–22.
- —— (1960) 'Eleatic Questions', *Classical Quarterly*, 10: 84–102. Repr. with additions in Allen and Furley 1975: 48–81.
- —— (1966) 'Plato and Parmenides on the Timeless Present', *The Monist*, 50: 317–40.
- Owens, J. (1974) 'The Physical World of Parmenides', in J. R. O'Donnell (ed.), Essays in Honour of Anton Charles Pegis (Toronto: Pontifical Institute of Mediaeval Studies), 378–95.
- Palmer, J. A. (1998) 'Xenophanes' Ouranian God in the Fourth Century', Oxford Studies in Ancient Philosophy, 16: 1–34.
- —— (1999a) Plato's Reception of Parmenides (Oxford: Clarendon Press).
- —— (1999 b) Review of Curd 1998, European Journal of Philosophy, 7: 51–5.
- —— (2000) 'Aristotle on the Ancient Theologians', Apeiron, 33: 181–205.
- —— (2001) 'A New *Testimonium* on Diogenes of Apollonia, with Remarks on Melissus' Cosmology', *Classical Quarterly*, 51: 7–17.
- (2003) 'On the Alleged Incorporeality of What is in Melissus', *Ancient Philosophy*, 23: 1–10.
- —— (2004) 'Melissus and Parmenides', Oxford Studies in Ancient Philosophy, 26: 19–54.
- (2008a) 'Zeno of Elea', Stanford Encyclopedia of Philosophy http://plato.stanford.edu/entries/zeno-elea.
- —— (2008*b*) 'Classical Representations and Uses of the Presocratics', in Curd and Graham 2008: 530–54.
- Pelletier, F. J. (1990) *Parmenides, Plato, and the Semantics of Not-Being* (Chicago and London: University of Chicago Press).
- Pellicia, H. (1988) 'The Text of Parmenides B1. 3 (D-K.)', American Journal of Philology, 109: 513–22.
- Pellikaan-Engel, M. E. (1974) Hesiod and Parmenides: A New View on their Cosmologies and on Parmenides' Proem (Amsterdam: Hakkert).
- Pepe, L. (1991) 'L'infinito e la mescolanza: Un aspetto della critica di Aristotele ad Anassagora', Discorsi, 11: 325–39.
- Peterson, S. (1978) 'Zeno's Second Argument Against Plurality', *Journal of the History of Philosophy*, 16: 261–70.
- Pfeiffer, H. (1975) Die Stellung des parmenideischen Lehrgedichts in der epischen Tradition (Bonn: Habelt).
- Picot, J.-C. (2000) 'L'Empédocle magique de P. Kingsley', Revue de Philosophie Ancienne, 18: 25–86.
- Pieri, A. (1977) 'Parmenide e la lingua della tradizione epica greca', *Studi Italiani di Filologia Classica*, 49: 68–103.
- Pierris, A. L. (2005) 'OMOION OMOIΩI and ΔINH: Nature and Function of Love and Strife in the Empedoclean System', in Pierris 2005: 189–224.

- Pierris, A. L. (2005b) *The Empedoclean Kόσμος: Structure, Process and the Question of Cyclicity* (Patras: Institute for Philosophical Research).
- Popper, K. (1958/9) 'Back to the Presocratics', *Proceedings of the Aristotelian Society*, 59: 1–24. Rev. repr. in his *Conjectures and Refutations* (London: Routledge & Kegan Paul, 1963), 136–65.
- —— (1992) 'How the Moon Might Throw Some of her Light upon the Two Ways of Parmenides', *Classical Quarterly*, 42: 12–19.
- Primavesi, O. (1998a) 'Empedocle: Il problema del ciclo cosmico e il papiro di Strasburgo', *Elenchos*, 19: 241–88.
- (1998b) 'Neues zur Aristotelischen Vorsokratiker-Doxographie', in K. Döring, B. Herzhoff, and G. Wöhrle (eds.), *Antike Naturwissenschaft und ihre Rezeption*, viii (Trier: Wissenschaftlicher Verlag), 25–41.
- Prior, W. J. (1978) 'Zeno's First Argument Concerning Plurality', Archiv für Geschichte der Philosophie, 60: 247–56.
- Pugliese Caratelli, G. (1988) 'La θεά di Parmenide', La Parola del Passato, 43: 337–46.
- Radt, S. (ed.) (1985) Tragicorum Graecorum Fragmenta, iii. Aeschylus (Göttingen: Vandenhoeck & Ruprecht).
- Rathmann, G. (1933) Quaestiones Pythagoreae Orphicae Empedocleae (Halle: Saxonum).
- Raven, J. E. (1948) Pythagoreans and Eleatics (Cambridge: Cambridge University Press).
- —— (1954) 'The Basis of Anaxagoras's Cosmogony', Classical Quarterly, 4: 123–37.
- Reale, G. (1970) Melisso: Testimonianze e frammenti (Florence: La Nuova Italia).
- and Ruggiu, L. (1991) Parmenide: Poema sulla natura. I frammenti e le testimonianze indirette (Milan: Rusconi).
- Reesor, M. E. (1960) 'The Meaning of Anaxagoras', Classical Philology, 55: 1-8.
- Reeve, C. D. C. (1981) 'Anaxagorean Panspermism', Ancient Philosophy, 1: 89-108.
- Reinhardt, K. (1916) Parmenides und die Geschichte der griechischen Philosophie (Bonn: Cohen).
- —— (1950) 'Empedocles, Orphiker und Physiker', Classical Philology, 45: 170–9.
- Renehan, R. (1992) Review of Coxon 1986, Ancient Philosophy, 12: 395-409.
- Riedweg, C. (1995) 'Orphisches bei Empedokles', Antike und Abendland, 41: 34-59.
- (1998) 'Initiation—Tod—Unterwelt: Beobachtungen zur Kommunikationssituation und narrativen Technik der orphisch-bakchischen Goldblättchen', in F. Graf (ed.), Ansichten griechischer Rituale: Geburtstag-Symposium für Walter Burkert (Stuttgart and Leipzig: Teubner), 359–99.
- Riezler, K. (1934) Parmenides: Text, Übersetzung und Interpretation (Frankfurt: Klostermann).
- Rijk, L. M. de (1983) 'Did Parmenides Reject the Sensible World?', in Gerson 1983: 29–53.
- Robinson, T. M. (1979) 'Parmenides on the Real in its Totality', The Monist, 62: 54-60.
- Rocca-Serra, G. (1987) 'Parménide chez Diogène Laërce', in Aubenque 1987: 254-73.
- Runia, D. T. (2008) 'The Sources for Presocratic Philosophy', in Curd and Graham 2008: 27–54.
- Russell, B. (1903) *The Principles of Mathematics* (Cambridge: Cambridge University Press). —— (1945) *A History of Western Philosophy* (New York: Simon & Schuster).
- Sainsbury, R. M. (1988) Paradoxes (Cambridge: Cambridge University Press).
- Santaniello, C. (2004) 'Empedocle: Uno o due cosmi, una o due zoogonie?', in L. Rossetti and Santaniello (eds.), *Studi sul pensiero e sulla linga di Empedocle* (Bari: Levante), 23–81.
- Santillana, G. de (1967) 'Prologue to Parmenides', in *Lectures in Honour of Louise Taft Semple:* First Series, 1961–65 (Princeton: Princeton University Press for the University of Cincinnati), 43–93.

- Sassi, M. M. (1988) 'Parmenide al bivio: Per un'interpretazione del proemio', *La Parola del Passato*, 43: 383–96.
- Schmalzriedt, E. (1970) Περὶ φύσεως: Zur Frühgeschichte der Buchtitel (Munich: Wilhelm Fink).
- Schmitz, H. (1988) Der Ursprung des Gegenstandes von Parmenides bis Demokrit (Bonn: Bouvier).
- Schofield, M. (1970) 'Did Parmenides Discover Eternity?', Archiv für Geschichte der Philosophie, 52: 113–35.
- —— (1975) 'Doxographica Anaxagorea', Hermes, 103: 1-24.
- —— (1976) An Essay on Anaxagoras (Cambridge Classical Studies; Cambridge University Press).
- (1987) 'Coxon's Parmenides', critical notice of Coxon 1986, *Phronesis*, 32: 349–59.
- (1996) 'Anaxagoras' Other World Revisited', in K. A. Algra, P. W. Van der Horst, and D. T. Runia (eds.), *Polyhistor: Studies in the History and Historiography of Ancient Philosophy Presented to Jaap Mansfeld on his sixtieth birthday* (Leiden: Brill), 3–20.
- —— (1998) 'Anaxagoras', in E. Craig (ed.), *The Routledge Encyclopedia of Philosophy*, i (London and New York: Routledge), 248–54.
- —— (2005) Review of A. Kenny, A New History of Western Philosophy, i: Ancient Philosophy (Oxford, 2004), London Review of Books (17 Feb.), 31–2.
- Schwabl, H. (1953) 'Sein und Doxa bei Parmenides', Wiener Studien, 66: 50-75.
- (1957) 'Zur "Theogonie" bei Parmenides und Empedokles', Wiener Studien, 70: 278–89.
- (1963) 'Hesiod und Parmenides: Zur Formung des parmenideischen Prooimions (28B1)', *Rheinisches Museum*, 106: 134–42.
- Sedley, D. (1989) 'The Proems of Empedocles and Lucretius', *Greek, Roman, and Byzantine Studies*, 30: 269–96.
- (1992) 'Empedocles' Theory of Vision and Theophrastus' De sensibus', in W. W. Fortenbaugh and D. Gutas (eds.), Theophrastus: His Psychological, Doxographical, and Scientific Writings (New Brunswick, NJ, and London: Transaction Publishers), 20–31.
- —— (1999) 'Parmenides and Melissus', in Long 1999: 113–33.
- —— (2005) 'Empedocles' Life Cycles', in Pierris 2005: 331–71.
- —— (2007) Creationism and its Critics in Antiquity (Berkeley and Los Angeles: University of California Press).
- —— (2008) 'Atomism's Eleatic Roots', in Curd and Graham 2008: 305–32.
- Sider, D. (1979) 'Confirmation of Two "Conjectures" in the Presocratics: Parmenides B 12 and Anaxagoras B 15', *Phoenix*, 33: 67–9.
- —— (1981) *The Fragments of Anaxagoras* (Beiträge zur klassischen Philologie, 118; Meisenheim am Glan: Hain).
- (1984) 'Empedocles B 96 (462 Bollack) and the Poetry of Adhesion', *Mnemosyne*, 37: 14–24.
- —— (1985) 'Textual Notes on Parmenides' Poem', Hermes, 113: 362-6.
- —— (2005) The Fragments of Anaxagoras (2nd edn. Sankt Augustin: Academia Verlag).
- Sisko, J. E. (2003) 'Anaxagoras' Parmenidean Cosmology: Worlds within Worlds within the One', *Apeiron*, 36: 87–114.
- Slings, S. R. (1991) 'Movίη in Empedocles and a Rule of Greek Word Formation', Mnemosyne, 44: 413–15.
- Smyth, H. W. (1920) Greek Grammar (Cambridge, Mass.: Harvard University Press).
- Solmsen, F. (1950) 'Chaos and Apeiron', Studi Italiani di Filologia Classica, 21: 235-48.
- —— (1965) 'Love and Strife in Empedocles' Cosmology', *Phronesis*, 10: 109–48.

- Solmsen, F. (1967) ' $Z\omega\rho\delta$'s in Empedocles'. Classical Review, 17: 245–6.
- —— (1971) 'The Tradition about Zeno of Elea Re-examined', *Phronesis*, 16: 116–41.
- (1975) 'Eternal and Temporary Beings in Empedocles' Physical Poem', *Archiv für Geschichte der Philosophie*, 57: 123–45.
- Sorabji, R. K. K. (1983) Time, Creation, and the Continuum: Theories in Antiquity and the Early Middle Ages (Ithaca, NY: Cornell University Press).
- Sorensen, R. (2003) A Brief History of the Paradox: Philosophy and the Labyrinths of the Mind (New York: Oxford University Press).
- Sprague, R. K. (1955) 'Parmenides: A Suggested Rearrangement of the Fragments in the Way of Truth', *Classical Philology*, 50: 124–6.
- Steele, L. D. (2002) 'Mesopotamian Elements in the Proem of Parmenides? Correspondences between the Sun-Gods Helios and Shamash', *Classical Quarterly*, 52: 583–8.
- Stein, H. (1867) 'Die fragmente des Parmenides περὶ φύσεωs', Symbola Philologorum Bonnensium in Honorem Friderici Ritschelii Collecta, fasc. post. (Leipzig: Teubner), 763–806.
- Stevens, A. (1990) *Postérité de l'Etre: Simplicius interprète de Parménide* (Brussels: Editions Ousia).
- Stokes, M. C. (1963) 'Hesiodic and Milesian Cosmogonies-II', Phronesis, 8: 1-34.
- —— (1971) One and Many in Presocratic Philosophy (Washington, DC: Center for Hellenic Studies).
- Strang, C. (1963) 'The Physical Theory of Anaxagoras', Archiv für Geschichte der Philosophie, 45: 101–18.
- Swindler, J. K. (1980) 'Parmenides' Paradox', Review of Metaphysics, 33: 727-44.
- Tannery, P. (1887) Pour l'histoire de la science hellène: De Thalès à Empédocle (Paris: Alcan).
- Tarán, L. (1959) 'El significado de νοεῖν en Parménides', Annales de Filología Clásica, 7: 122–39.
- —— (1965) Parmenides: A Text with Translation, Commentary, and Critical Essays (Princeton: Princeton University Press).
- —— (1966) Review of Untersteiner 1963, American Journal of Philology, 87: 464–72.
- —— (1977) Review of Mourelatos 1970, Gnomon, 49: 651-66.
- —— (1979) 'Perpetual Duration and Atemporal Eternity in Parmenides and Plato', *The Monist*, 62: 43–53.
- —— (1987) 'The Text of Simplicius's Commentary on Aristotle's *Physics*', in I. Hadot (ed.), *Simplicius: Sa vie, son oeuvre, sa survie* (Peripatoi, 15; Berlin: de Gruyter), 246–66.
- —— (1993) Review of P. Aubenque (ed.), *Études sur Parménide*, i and ii (Paris: J. Vrin, 1987), Ancient Philosophy, 13: 152–6.
- Tarrant, H. (1976) 'Parmenides B1. 3: Text, Context, and Interpretation', *Antichthon*, 10: 1–7.
- Teodorsson, S.-T. (1982) *Anaxagoras' Theory of Matter* (Studia Graeca et Latina Gothoburgensia, 43; Göteborg: Acta Universitatis Gothoburgensis).
- Trépanier, S. (2003a) 'Empedocles on the Ultimate Symmetry of the World', Oxford Studies in Ancient Philosophy, 24: 1–57.
- —— (2003b) "We" and Empedocles' Cosmic Lottery: *P. Strasb. gr.* Inv. 1665–1666, *Ensemble* A', *Mnemosyne*, 56: 385–419.
- —— (2004) Empedocles: An Interpretation (New York and London: Routledge).
- Tulli, M. (2000) 'Esiodo nella memoria di Parmenide', in G. Arrighetti and M. Tulli (eds.), Letteratura e Riflessione sulla Letteratura nella Cultura Classica (Pisa: Giardini), 65–81.
- Untersteiner, M. (1955) 'L'essere di Parmenide è οδλον non εν', Rivista Critica di Storia della Filosofia, 10: 5–23.
- —— (1956) Senofane: Testimonianze e frammenti (Florence: La Nuova Italia).

- —— (1958) Parmenide: Testimonianze e frammenti (Florence: La Nuova Italia).
- (1963) Aristotele: Della Filosofia (Rome: Edizioni di Storia e Letteratura).
- Van der Ben, N. (1975) The Proem of Empedocles' 'Peri Physios': Towards a New Edition of All the Fragments (Amsterdam: Grüner).
- —— (1984) 'Empedocles' Cycle and Fragment 17, 3–5 DK', Hermes, 112: 281–96.
- —— (1999) 'The Strasbourg Papyrus of Empedocles: Some Preliminary Remarks', Mnemosyne, 52: 525-44.
- Verdenius, W. J. (1942) Parmenides: Some Comments on his Poem, tr. A. Fontein (Groningen: Wolters).
- (1948) 'Notes on the Presocratics', Mnemosyne, 1: 8-14.
- Viano, C. (1989) 'Héraclite dans la doxographie d'Aristote', Les Études Classiques, 57: 193-207.
- Vlastos, G. (1946) 'Parmenides' Theory of Knowledge', Transactions and Proceedings of the American Philological Association, 77: 66–77.
- (1947) 'Equality and Justice in Early Greek Cosmologies', Classical Philology, 42: 156-78.
- —— (1950) 'The Physical Theory of Anaxagoras', Philosophical Review, 59: 31–57. Rev. repr. in Furley and Allen 1975: 323-53.
- (1953) Review of J. Zafiropoulo, L'École Éléate (Paris, 1950), Gnomon, 25: 166–9.
- —— (1955) 'On Heraclitus', American Journal of Philology, 76: 337-68.
- —— (1966a) 'Zeno's Race Course: With an Appendix on the Achilles', Journal of the History of Philosophy, 4: 95-108.
- (1966b) 'A Note on Zeno's Arrow', *Phronesis*, 11: 3–18. (1967) 'Zeno of Elea', in P. Edwards (ed.), *The Encyclopedia of Philosophy*, viii (New York and London: Macmillan), 369-79. Repr. in his Studies in Greek Philosophy, i. The Presocratics, ed. D. W. Graham (Princeton: Princeton University Press, 1993), 241-63.
- (1971) 'A Zenonian Argument Against Plurality', in J. P. Anton and G. L. Kustas (eds.), Essays in Ancient Greek Philosophy (Albany, NY: SUNY Press), 119-44.
- (1975) 'Plato's Testimony Concerning Zeno of Elea', Journal of Hellenic Studies, 95: 136-63.
- Waterfield, R. (tr.) (1996) Aristotle: Physics (Oxford: Oxford University Press).
- (2000) The First Philosophers: The Presocratics and Sophists (Oxford: Oxford University
- Waterlow, S. (1983) 'Instants of Motion in Aristotle's Physics VI', Archiv für Geschichte der Philosophie, 65: 128-46.
- Wehrli, F. (1969) Die Schule des Aristoteles, Texte und Kommentar, viii. Eudemos von Rhodos (2nd edn. Basel and Stuttgart: Schwabe & Co.).
- West, M. L. (1966) ' $Z\omega\rho\delta$'s in Empedocles', Classical Review, 16: 135–6.
- —— (1971) Early Greek Philosophy and the Orient (Oxford: Clarendon Press).
- —— (1983) The Orphic Poems (Oxford: Clarendon Press).
- —— (1994) 'Ab Ovo: Orpheus, Sanchuniathon and the Origins of the Ionian World Model', Classical Quarterly, 44: 289-307.
- Westman, R. (1955) Plutarch gegen Kolotes, seine Schrift 'Adversus Colotem' als philosophiegeschichtliche Quelle (Acta Philosophica Fennica, 7; Helsingfors: Societas Philosophica).
- Whitby, M. (1982) 'Quasi-Elements in Aristotle', Mnemosyne, 35: 225-47.
- White, M. J. (1982) 'Zeno's Arrow, Divisible Infinitesimals, and Chrysippus', *Phronesis*, 27: 239–54.
- Wiesner, J. (1996) Parmenides: Der Beginn der Aletheia. Untersuchungen zu B2-B3-B6 (Berlin and New York: de Gruyter).

- Wilamowitz-Möllendorff, U. von (1899) 'Lesefrüchte', Hermes, 34: 203-6.
- —— (1929) 'Die Καθαρμοί des Empedokles', Sitzungsberichte der preussischen Akademie der Wissenschaften, 94: 626–61. Repr. in his Kleine Schriften, i (Berlin: Weidmann, 1935), 473–521.
- Williams, B. (1981) 'Philosophy', in M. I. Finley (ed.), *The Legacy of Greece: A New Appraisal* (Oxford: Clarendon Press), 202–55.
- Williams, C. J. F. (1982) Aristotle's De Generatione et Corruptione (Oxford: Clarendon Press).
- Wilpert, P. (1956/7) 'Aristoteles und die Dialektik', Kant-Studien, 48: 247-57.
- Wilson, J. R. (1970) 'Parmenides, B 8. 4', Classical Quarterly, 20: 32-4.
- Wöhrle, G. (1993) Anaximenes aus Milet: Die Fragmente zu seiner Lehre (Stuttgart: Franz Steiner).
- (1995) 'Wer entdeckte die Quelle des Mondlichts?', Hermes, 123: 244-7.
- Woodbury, L. (1958) 'Parmenides on Names', Harvard Studies in Classical Philology, 63: 145–60.
- —— (1981) 'Anaxagoras and Athens', *Phoenix*, 35: 295–315.
- —— (1986) 'Parmenides on Naming by Mortal Men: fr. B8. 53–56', Ancient Philosophy, 6: 1–11.
- Wright, M. R. (as M. R. Arundel) (1962) 'Empedocles, fr. 35. 12–15', Classical Review, 12: 109–11.
- —— (1981) Empedocles: The Extant Fragments (New Haven, Conn.: Yale University Press).
- (1986) 'Études Parménidiennes', critical notice of Gallop 1984 and Cordero 1984, Classical Review, 36: 63–5.
- (1988) 'Eleatica', critical notice of Coxon 1986 and Couloubaritsis 1986, *Classical Review*, 38: 274–7.
- —— (1998) 'Philosopher Poets: Parmenides and Empedocles', in C. Atherton (ed.), Form and Content in Didactic Poetry (Bari: Levante), 1–22.
- Zeller, E. (1892) Die Philosophie der Griechen in ihrer geschichtlichen Entwicklung, i. Vorsokratische Philosophie, Zweite Hälfte (5th edn. Leipzig: O. R. Reisland).
- (1919) Die Philosophie der Griechen in ihrer geschichtlichen Entwicklung, i. Allgemeine Enleitung; Vorsokratische Philosophie, Esrste Hälfte (6th edn., ed. W. Nestle. Leipzig: O. R. Reisland).
- Zuntz, G. (1971) Persephone: Three Essays on Religion and Thought in Magna Graecia (Oxford: Clarendon Press).

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