Theophrastus *On First Principles*  
(known as his *Metaphysics*)
Philosophia Antiqua

A Series of Studies on Ancient Philosophy

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VOLUME 119

Theophrastus of Eresus

Sources for His Life, Writings, Thought and Influence
Theophrastus *On First Principles*
(known as his *Metaphysics*)

Greek Text and Medieval Arabic Translation, Edited and Translated with Introduction, Commentaries and Glossaries, as Well as the Medieval Latin Translation, and with an Excursus on Graeco-Arabic Editorial Technique

*By*
Dimitri Gutas

BRILL
LEIDEN • BOSTON
2010
ἰδίας μούσως
πρῶτον μὲν βούλομαι γενέσθαι τὰ περὶ τὸ μουσεῖον καὶ τὰς θεὰς συντελεσθῆναι καὶ εἰ τι ἄλλο δύναται περὶ αὐτὰς ἐπικοσμηθῆναι πρὸς τὸ κάλλιον ἔπειτα τὴν Ἀριστοτέλους εἰκόνα τεθῆναι εἰς τὸ ἱερόν Ἐοφράστου διαθήκη (Diog. Laert. V,51)

quid? Theophrastus mediocriterne delectat, cum tractat locos ab Aristotele ante tractatos?
Cicero, De finibus 1.6
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The short essay *On First Principles* by Theophrastus, thought to have been known in the manuscript tradition as his *Metaphysics* because it was transmitted together with the books that came after Aristotle’s *Physics* (τῶν μετὰ τὰ Φυσικά), occupies a distinctive position among ancient Greek philosophical writings in two ways. It survives in a rich and varied manuscript tradition that includes two early Greek manuscripts from the ninth and tenth centuries, a medieval Arabic translation from the ninth, a medieval Latin translation from the thirteenth, and a host of Renaissance manuscripts—including an Aldine edition that has been rightly regarded as a codex optimus—in which generations of hardly negligible Greek scribes and scholars tried their hands at correcting by conjecture the perceived inaccuracies or corruptions in the text. It is also in the enviable position of being arguably one of the most closely studied and scrutinized of all extant ancient Greek philosophical writings: it has enjoyed a number of pre-modern editions, three modern editions by the most respected scholars of Greek and of ancient philosophy—the latest barely fifteen years ago (Usener 1890, Ross and Fobes 1929; Laks & Most 1993)—, two shorter commentaries (Ross and Laks & Most) and two more extensive ones (van Raalte and Henrich), and a fair number of modern translations into most European languages, including Greek. In sheer numbers of pages of study and commentary in proportion to the dozen or so full pages of Greek text, the attention it has commanded is impressive, if not unique.

Under these circumstances the question is reasonably asked why there is need for yet another commented edition. To give a general answer first, I will refer to the recent discussion of the very question by Jacques Brunschwig, “Do We Need New Editions of Ancient Philosophy?” For two of the three major reasons given by Brunschwig, the answer in this case is a resounding yes. The indirect tradition—the medieval Arabic and Latin translations—is rich in evidence of significance for the edition,

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while re-reading the known witnesses in the light of this evidence has yielded some superior ways to understand the text. The Latin translation in particular has been unjustifiably neglected (it gives us, for one, the original title of the work), while the Arabic translation, though already used to good effect by M. Crubellier in the latest edition of Laks & Most, has many more riches to offer when analyzed in detail. Specifically, and briefly put, the Arabic translation, which derives from a different transliteration of an uncial exemplar than does the rest of the tradition, gives us access to a Greek manuscript tradition that is different and older than that of our earliest extant manuscripts, the famous Viennese (J) and Parisian (E) manuscripts of Aristotle. As a result, it gives us over thirty new and superior readings (Part I, Chapter 2.2 below)—a sizeable number given the brevity of the text. In some of these cases, it corroborates suggestions and emendations made by scholars, notably those by Usener. And in view of the fact that it was made by one of the premier translators of Greek philosophical texts, Ishāq ibn-Ḥunayn, it provides a glimpse into the way in which the text was understood by a scholar of the first classical renaissance, that in ‘Abbasid Baghdad, who was close in both time and approach to the last phase of live Greek philosophy in late antiquity.

Re-reading the witnesses already used by my predecessors, in the context of the firmer understanding of the transmission of the text provided by the Arabic and Latin translations, gives us new confidence in the soundness of the paradosis, the text as transmitted in the Greek manuscripts, and enables us better to identify the primitive errors of the archetype (Part I, Chapter 2.5 below) and locate their place with greater precision. As a result, it has been possible to recognize as authentic and retain a number of readings previously considered corrupt and to offer corrections more consistent with the transmitted text. This edition is the most conservative of all previous ones in adhering to the text of the paradosis.

To give a more particular answer to Brunschwig’s question, I should add that a related purpose of this study is to draw the attention of classical scholars to the real value of medieval Arabic translations, whenever extant, for the establishment of the Greek text. It is no exaggeration to say that there has been among scholars of Greek a certain hesitation, beyond the understandable one induced by the requirement of mastering Arabic, to engage with these translations, perhaps because of what is perceived to be “the fog and darkness of the Arabic text,” in the words of Barnes 1997, 26. It is true that Barnes was talking about the text of the
Arabic translation of Ptolemy’s (“al-Gharib”) life and works of Aristotle, and not of all Arabic translations, but the perception has been quite prevalent.\(^2\) Arabic translations, like many a Greek and Latin text, may be clear or foggy and dark, depending on the case, but this has to be properly assessed and not simply stated. In the case of the libraries of both Aristotle and Theophrastus, with whose fate Barnes was concerned in that article, it is particularly inappropriate to call “foggy” Ptolemy’s Arabic text, perhaps the one single document that reports something reliable and concrete about the work of Andronicus, when all the Greek evidence on the matter is darker than anything that Heraclitus himself could have produced.

On the other hand, to be fair, it must also be stated that part of the problem is that the cause of the Arabic translations has been badly served by those who studied them, generating the impression of their “fog and darkness”\(^3\). And this applies also to the present work by Theophrastus, the value of whose Arabic translation was not properly appreciated, which led to some negative assessments.\(^4\) It is actually a reliable translation, or, to put it more accurately, it is a useful translation to mine for the underlying Greek text. Crubellier’s work in the Laks & Most edition has gone some way in establishing that, and I have followed the road to its end in the present study.

\(^2\) The complaint against the disinclination by classical scholars to engage with Arabic was voiced already over half a century ago by Richard Walzer, and indeed in connection with the very Essay by Theophrastus edited in this volume: “Theophrastus’ metaphysical fragment was re-edited, in Oxford, about 25 years ago, by two of the most distinguished workers in this field [Ross and Fobes]. Both of them were unaware of the fact that the Arabic text exists in the Bodleian library and had been treated by the late Laudian professor of Arabic [Margoliouth], in a paper published in 1892” (“On the Legacy of the Classics in the Islamic World,” Festschrift Bruno Snell, München: C.H. Beck, 1956, 189–196, reprinted in his Greek into Arabic, Oxford: Bruno Cassirer, 1962, 35). It would be inaccurate to say that not much has changed since then, but the problem remains: the corner has not been turned yet, and classics departments are not rushing to teach Arabic as the third classical language, at least for students in Greek philosophy and science. Whence the aspirations of the present study.


\(^4\) Like that expressed by van Raalte 113n6, that we should be warned “against putting too much faith in this source.”
The main issue, or task, is that Arabic translations have to be evaluated and properly assessed and mined case by case. To that end, when it was suggested to me that I prepare critical editions of both the Greek and Arabic texts of this work by Theophrastus, I accepted mainly because I saw that the same person working on both texts would offer the opportunity to lay down some ground rules and procedures about the proper method to be followed in Graeco-Arabic editions. These procedures, as they developed in the course of my study, are presented in the Excursus at the end of Part I.

This new edition of *On First Principles* by Theophrastus thus offers, within the covers of a single volume, the Greek text—a more conservative one, with renewed faith in the soundness of the paradosis—as well as all the evidence that can be used for its establishment: a simultaneous critical edition of the medieval Arabic translation and a diplomatic edition of the medieval Latin translation. In this way a sound editorial practice that was initiated over a century ago has now reached its full implementation. My one true predecessor, the pioneer D.S. Margoliouth of Oxford, prepared critical editions of both the Greek text of the *Poetics* and its medieval Arabic translation, but he did it in separate publications and without systematically using the one for the benefit of the other. In all other cases where the Arabic evidence has been used in editions of Greek works, either the Greek and the Arabic texts were edited separately by different scholars or the Greek text has not survived. It is my hope that the benefits of the single-author approach adopted in this study will become sufficiently evident as to recommend it to all editors of Greek works that exist in medieval Arabic translations, most notably those of Aristotle and

---


6 To give a brief review of the most salient publications, A. Gudeman edited again the Greek text of the *Poetics* (Berlin 1934) making full use of J. Tkatsch’s earlier edition of the Arabic translation (Vienna 1928–1932), though due to the disparate approaches and understanding of proper procedures by the two scholars the result was less than satisfactory. L. Minio-Paluello’s 1949 Oxford edition of the *Categories* and *De interpretatione* made use of the Syriac translations edited by Kh. Georr (Beyrouth 1948), but the extent to which the Arabic version has yet to offer new information remains to be seen. R. Walzer edited the Arabic translation of Galen’s *On Medical Experience* (Oxford 1944), but the Greek text has not survived; and the same applies to the magisterial *pentapla* edition by H.J. Drossaart Lulofs and E.L.J. Poortman of Nicolaus Damascenus’s *De plantis* (Amsterdam 1989). Finally, collections of fragments of ancient authors also started using the Arabic evidence—notably A. Smith’s Teubner edition (1993) of Porphyry’s fragments (though D. Wasserstein provided only the English translation but not the Arabic text), and FHS&G—but in these cases again the Greek text has not survived.
Gal. It is also my hope that the methodological ground rules laid down in the Excursus will be followed by future scholars and, most importantly, improved; for the Graeco-Arabist, they provide a test case of editorial procedures that will be of benefit to Arabists and classicists alike.

The Arabic translation, in addition to its value for the establishment of the Greek text, is a wonderful document also because it represents the first extant commentary on the text of Theophrastus. Here we can watch a colleague from the past—and this is particularly meaningful to those of us who have tackled the Greek text either to edit or translate it or both—grapple with the very same problems that we faced, and either admire his perspicacity when we deem him to have been right in his interpretation, especially considering the conditions under which he worked—can any modern scholar imagine working on an edition of any Greek text without LSJ, Kühner-Gerth, or, in Aristotelian studies, without Bonitz (and now, TLG)?—or be humbled by his mistakes in the secret hope that what now appears to us as the obviously right interpretation will not be shown by a future scholar to have been just as erroneous. After spending many (perhaps too many) hours in the company of Isḥāq trying together to solve the numerous problems presented by the text of Theophrastus, I have felt the barriers of time, place, and language that separate us dissolve and leave behind just the sheer enjoyment of shared scholarship, both philological and philosophical.

Acknowledgments

The support and help which I received in the preparation of this study by friends and colleagues in classics and ancient philosophy surpass all bounds of scholarly cooperation and generosity. The Islamic tradition, on the basis of a passage in the Qurʾān in which the Prophet is said not to have been stingy with propagating its message (wa-ma huwa ʿalā l-ğaybi bi-ḍanīn, Q81.24), has always considered sharing liberally one’s knowledge as deserving of paradise. Leaving to Allāh the dispensation of paradise, I can only offer with genuine pleasure my sincere gratitude.

When, after the publication in 1992 of FHS&G, it was decided that the Theophrastus project would continue with an edition of his opuscula, Bill Fortenbaugh, our primus inter pares, suggested that I undertake the task of editing both the Greek text and the medieval Arabic translation of what has been known as Theophrastus’s Metaphysics. Despite my reservations, I eventually agreed for the reason I state in the Preface above.
I am truly grateful to Bill (F), but also to Pamela (H) and Bob (S), for the idea, for this opportunity offered to a single person formally to work on both texts, and for the subsequent unwavering support. They should know that without their help this study could have never been completed.

In the meantime, Michel Crubellier, who had collaborated with André Laks and Glenn Most in the preparation of Laks & Most (1993) by providing information about Ishâq’s Arabic translation, and who had published a related article (1992), was himself preparing an edition of it. Crubellier decided most graciously to withdraw from his project and, with unparalleled generosity, sent me his draft edition, copies of the Arabic manuscripts, and related material. He has saved me both time and effort in this already long-winded project, and I have truly benefited from his preliminary work, to which I refer in my notes (see Part I, Chapter 3.4). There are no words to thank him, and I only hope that the result of my endeavors meets the high standards that he would have set for his own edition.

Other friends and colleagues were equally generous in sending me materials upon request and answering nagging questions. Glenn Most most kindly sent me preliminary copies of manuscripts J and P and answered questions about the apparatus criticus of Laks & Most; MarleinvanRaalte obligingly sent me copies of Usener’s edition of the work and related material; Enrico Berti and Pamela Huby were kind enough to share with me drafts of unpublished papers; Michel Cacouros patiently provided initial help with reading the knottier parts of manuscript P; Rüdiger Arnzen offered keen comments and sound advice on the methodological excursus; my longtime Yale colleague and friend Victor Bers provided speedy and timely responses to many an abstruse query on Greek morphology and syntax; my most recent and welcome Yale colleague Verity Harte shed much needed illumination on Heraclitean bibliography; and my student Matteo Di Giovanni obligingly cast a critical eye on Bartholomew’s Latin translation and benefited me with his comments. In addition, a CNRS grant awarded through the initiative and support of Henri Hugonnard-Roche and Maroun Aouad of that venerable institution of premier research enabled me to spend a sabbatical term in Paris where I could benefit from interaction with these and other colleagues and begin working on the final stages of the project in ideal circumstances. I am deeply indebted to them all.

An earlier draft of the introduction to the Greek text (Part I, Chapter 2), the text itself with the English translation, and the commentary were read and commented upon with scholarly care and great patience
by Peter Adamson, Bill Fortenbaugh, Pamela Huby, Paul Kalligas, David Reisman, Robert Sharples, Leonardo Tarán, and Marlein van Raalte. In addition, all of them were quick to respond by e-mail to queries on individual passages and problems. I greatly benefited from their learned comments, and, if I thank them collectively here instead of in many a note in the body of the work, it is only to spare the reader from my tedious repetition of gratitude which, though sparsely registered, is indeed profound. For the shortcomings that remain I alone am responsible.

My students in my Graeco-Arabic seminar at Yale, with different generations of whom I read this text by Theophrastus, not only asked penetrating questions that helped me articulate my theses and my methods better, but on occasion also provided suggestions for the proper reading of the Arabic text. Though I will introduce two of them here by name, because they appear in the apparatus—Amos Bertolacci and Alexander Treiger—all of them who participated in the seminars made invaluable contributions, for which I am truly grateful. There is no greater happiness for a teacher than to have students from whom he can learn.

On the technical side, to the libraries at Vienna (Österreichische Nationalbibliothek) and Paris (Bibliothèque Nationale), Oxford (Bodleian) and Tehran (Malik), go my thanks for the use of their invaluable manuscripts upon which this edition of Theophrastus is based. A special word of thanks is also due to the staff and the library system at Yale University, my lifelong resource, which I never took for granted. The editorial team at Brill, with Mmes Van Erp and Van der Wel, and their typesetters at TAT Zetwerk, with Messrs Geradts and Rustenburg, deserve both special thanks for their courtesy, efficiency, and professionalism, and admiration for expertly producing a very complicated text in three alphabets. I am also grateful for the excellent edition of the text in Laks & Most and its producers, a sound foundation upon which I could build, and, last but not least, for the wonder of the Internet age, the TLG (Thesaurus Linguae Graecae), without which classical and Byzantine Greek studies can now hardly be envisaged (and due to which we wonder all the more at our predecessors, who worked without it).

In closing, I wish to express my gratitude ἐκ Ψβαθεων to my wife Ioanna, who has fashioned our life together into a welcoming space for all muses to reside, with a selfless love that surpasses understanding. This book is as much hers as it is mine.

New Haven, February 2010
ABBREVIATIONS AND REFERENCE WORKS

Allan
Notes by D.J. Allan in his copy of Ross & Fobes, as reported by Laks & Most

Blau

Burnikel
Burnikel 1974

CAG
Commentaria in Aristotelem Graeca, consilio et auctoritate Academiae Litterarum Regiae Borussicae, Berlin: Georg Reimer, 1882–1907

Crubellier
M. Crubellier, unedited draft edition of the Essay by Theophrastus

CWA

Denniston

DK
H. Diels and W. Kranz, Die Fragmente der Vorsokratiker, 3 vols, Dublin/Zürich: Weidmann, 196612 (19516)

Dozy

DPhA, -Supplement

EI²

Elr

FHS&G
Theophrastus of Eresus. Sources for His Life. Writings, Thought & Influence, edited and translated by William W. Fortenbaugh, Pamela Huby, Robert W. Sharples (Greek and Latin), and Dimitri Gutas (Arabic), 2 vols, Leiden: Brill, 1992

Fischer

Fobes
In Ross and Fobes 1929, “that part of the Introduction which deals with the MSS” (pp. xxvi–xxxii), “the apparatus criticus,” and “the Indexes”

GAL, GALS

GALex
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Work</th>
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<tbody>
<tr>
<td>Henrich</td>
<td>Henrich 2000</td>
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<tr>
<td>Kley</td>
<td>Kley 1936</td>
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<tr>
<td>Laks &amp; Most</td>
<td>Laks and Most 1993</td>
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<tr>
<td>LSJ</td>
<td><em>A Greek-English Lexicon</em>, compiled by H.G. Liddell and R. Scott, revised and augmented throughout by Sir H.S. Jones with the assistance of R. McKenzie and with the cooperation of many scholars, with a revised supplement 1996; Oxford: Oxford University Press, 1996</td>
</tr>
<tr>
<td>van Raalte</td>
<td>van Raalte 1993</td>
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<tr>
<td>Ross</td>
<td>In Ross and Fobes 1929, the Text, the English translation, the Introduction except for the part dealing with the MSS, and the Commentary</td>
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<tr>
<td>Treiger</td>
<td>Personal communication by Alexander Treiger</td>
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<tr>
<td>Tricot</td>
<td>Tricot 1948</td>
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<tr>
<td>TLG</td>
<td><em>Thesaurus Linguae Graecae</em>, <a href="http://www.tlg.uci.edu">www.tlg.uci.edu</a></td>
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### Abbreviations of Works by Aristotle and Theophrastus

**Aristotle**

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<th>Abbreviation</th>
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<tr>
<td>APo.</td>
<td>Analytica posteriora</td>
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<td>APR.</td>
<td>Analytica priora</td>
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<td>Cat.</td>
<td>Categories</td>
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<td>DA</td>
<td>De anima</td>
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<tr>
<td>DC</td>
<td>De caelo</td>
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<tr>
<td>EE</td>
<td>Eudemian Ethics</td>
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<tr>
<td>GA</td>
<td>De generatione animalium</td>
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<tr>
<td>GC</td>
<td>De generatione et corruptione</td>
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<tr>
<td>HA</td>
<td>Historia animalium</td>
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<td>Int.</td>
<td>De interpretatione</td>
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<tr>
<td>MA</td>
<td>De motu animalium</td>
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<tr>
<td>Met.</td>
<td>Metaphysics</td>
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<td>Mete.</td>
<td>Meteorology</td>
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<td>NE</td>
<td>Nicomachean Ethics</td>
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<tr>
<td>PA</td>
<td>De partibus animalium</td>
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<td>Phys.</td>
<td>Physics</td>
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<td>Poet.</td>
<td>Poetics</td>
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<tr>
<td>Rhet.</td>
<td>Rhetoric</td>
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<tr>
<td>SE</td>
<td>Sophistici elenchi</td>
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<td>Top.</td>
<td>Topics</td>
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**Theophrastus**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Work</th>
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<tbody>
<tr>
<td>CP</td>
<td>De causis plantarum</td>
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<tr>
<td>HP</td>
<td>Historia plantarum</td>
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<tr>
<td>Ign.</td>
<td>De igne</td>
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<tr>
<td>Mete.</td>
<td>Meteorologica</td>
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<td>Vent.</td>
<td>De ventis</td>
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PART I

INTRODUCTION TO THE TEXTS
CHAPTER ONE

INTRODUCTION TO THE ESSAY\(^1\)

1. Date of Composition

His deathbed complaint about the brevity of human life notwithstanding, Theophrastus lived to a ripe old age (372 / 370–288 / 286 BC).\(^2\) In the course of the 85 years of his life, the Greek speaking world in which he grew and was intellectually, socially, and historically formed, saw tremendous changes. Before he was even fifty, the Greek city states which, as city states, constituted the only political formation he knew, lost their independence under Macedonian domination after the battle of Chaironeia (338), while the great empire of the Persian King of Kings that had dominated Greek history for some centuries was destroyed by Alexander, the former student of his teacher and colleague, Aristotle. And he lived for close to another forty years after these events to see the successor states founded by Alexander’s generals take root and change forever the political and cultural scene of the Greek world and the Eastern Mediterranean. In his personal life, he went from his birthplace in the obscure village of Eresos in southwest Lesbos to become, after many turns, the scholarch of the Peripatos, a position he held for a good thirty-five years. But it was the changes in intellectual history that were the most dramatic. In his lifetime, and for the most part through his participation, philosophy developed from the early literary Socratic musings of Plato to a dominant—indeed, domineering—and established discipline of higher thought whose practice was already pursued, with different orientations and methods, in four distinct areas of Athens, the Academy, the Lyceum, the Stoa, and the Garden. As a young man he

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\(^1\) For the sake of brevity I will be referring to the work edited and studied in this book as the Essay.
\(^2\) In anticipation of the commentary volume on the biographical material in FHS&G, see the critical assessment of the sources on the life of Theophrastus by Mejer 1998, complemented by Dorandi 1998. For the deathbed complaints of Theophrastus see fr. 34 FHS&G.
may have heard Plato (we are not certain), but when he went (back?) to Athens with Aristotle in 335, Speusippus had already been succeeded by Xenocrates as head of the Academy, and later, when he was himself head of the Peripatos, his colleagues in the Academy were still Xenocrates and then Polemon. He was, moreover, the older contemporary of Zeno, the founder of Stoicism, and of Epicurus. The crucial period of the foundation of ancient philosophy—of all philosophy—which we read and study, Theophrastus lived through and helped form. Given the rapid evolution of philosophy during this lengthy period, the question of the date on which his Essay on first principles was written is of singular importance for its understanding and evaluation.

In the absence of an independent source dating the Essay, its contents and their relation to current ideas and the works of Theophrastus’s contemporaries have from the very beginning constituted the means to estimate the time of its composition. The fact that in the Essay Theophrastus is prima facie seen as criticizing two of Aristotle’s signature theories, the unmoved mover and teleology, coupled with what I interpret as an inability on the part of most scholars to entertain even the possibility that a disciple could conceivably criticize his master—and indeed the philosophical genius of all time—during the master’s lifetime, led early to the view, which has survived until very recently, that the Essay was written after the death of Aristotle in 322. But already in 1962, in a study of spontaneous generation, Balme suggested that the Essay may be earlier than Aristotle’s De generatione animalium and Historia animalium V–VI, and

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3 For a summary of earlier views see Gaiser 1985, 24–26. Only Diogenes Laertius mentions, twice, that Theophrastus studied with Plato, at III.46 and V.36. In the former passage, in the biography of Plato, he ascribes the report to anonymous sources (ἔνιοι … φώνην), which makes it dubious, although in the latter, in the biography proper of Theophrastus, he is categorical (πρῶτον μὲν ἦκουσιν Ἀλκιππον … εἰς τῇ πατρίδι, ἕτ’ ἀκούσας Πλάτωνος μετέστη πρὸς Ἀριστοτέλην). It is highly unlikely that as-Šahrastānī (d. 1153), the only other author that states that Theophrastus was a student of Plato (fr. 241c FHS&G), had an independent source worthy of credence. Nevertheless, the evidence in Diogenes Laertius cannot be easily waived away, while the question itself is also related to the other question about the presence of Theophrastus in Assos after Plato’s death; see the sensible discussions of the material by Mejer 1998, 17–19 and Dorandi 1998, 33, and cf. note 10 below.

4 See Long 1998.


6 Berti 2002, 339–341 gives a very useful summary of the history of this debate, which I mostly follow. The list of the supporters of a post-Aristotelian date for the Essay include Jaeger 1923, 374; Ross p. xxv; Regenbogen 1940, 1393; Tricot p. viii; Theiler 1958,102/292; Reale 1964, 131; van Raalte 1988, 198; van Raalte 24–25; Romani 1994, 12; Dillon 2002, 176n4.
in 1971 D. Frede was able to show that Theophrastus’s criticism of the unmoved mover is directed at an earlier stage of that theory. Other studies followed along these lines, to the point that today the early date of composition of the Essay has found wide acceptance.

The main argument in support of this revised view has been that Theophrastus is arguing either in favor of or against positions held by Aristotle earlier in his life, or that, had Theophrastus known the mature works by Aristotle at the end of the latter’s career, he could not have written what he did, in fact, write. Briefly to review this evidence, the following arguments and passages in the Essay indicate that the Aristotelian work to which they correspond had not yet been composed and that this work was actually a response to Theophrastus’s aporetic discussion, and thus temporally posterior.

Arguably the most telling characteristic of the Essay in this regard, as Devereux 1988 has shown, is the fact that Theophrastus knows nothing of the central and latest books of Aristotle’s Metaphysics but concentrates all his comments on the older books and especially on book Lambda.7 Reale 1964, 127–133, also studied the close connection between the Essay and Book Lambda but, assuming the Essay to be post-Aristotelian, wanted to argue in favor of a late date for Lambda. However, the early date of Lambda can hardly be disputed on many grounds, including the evidence from the Essay. In addition, the passage on astronomy at 5a22 in the Essay, which can be completed with the help of the Arabic translation, points unmistakably to Lambda 8, making this much discussed chapter of Book Lambda contemporary with the early date of the rest of the Book.8

Following the lead of Balme, Most 1988a analyzed ten biological passages, which are problematic for Aristotelian teleology, discussed at 10b7–20 and 11a10–12 in the Essay. As Most demonstrated, some of the difficulties raised by Theophrastus were subsequently resolved by Aristotle in the De partibus animalium and De generatione animalium, thus establishing the earlier date of the Essay.

In a similar vein, Devereux 1988 pointed to other features in the Essay which reflect discussions of passages in the early books of Aristotle’s

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7 Theophrastus’s use of Lambda was already documented by Zeller 1877, 148.
8 Thus justifying the skepticism of Krämer 1973, 214n44 (”die Spätdatierung von Λ 8 unbewiesen und m.E. unbebweisbar ist”); see further the commentary on the first Aporia in Part III below. Frede 2000, 47–49 summarized the arguments in favor of an early and unified Book Lambda; cf. also Devereux 1988, 173 and note 33.
Metaphysics and of other early works but not the later ones, as in the case of the relation of focal meaning in analyses of knowledge (pp. 183–184). To these may be added the following from my analysis of the Essay. At 5b7–10 Theophrastus raised a problem about the motion initiated by the unmoved mover as the object of desire, a problem directed at Aristotle’s Metaphysics Λ 7, 1072a26. Aristotle responded in the De anima Γ 10, 433b13–28, refining his position (see the commentary following Diaporia 8.1 in Part III below). Again, at 5b10–6a5 Theophrastus asked whether and how the influence of the first cause can penetrate into the sublunar realm and benefit the natural world; Aristotle responded in De generatione et corruptione B 10, 336b25–337a7 (see the commentary following Diaporia 10.1 in Part III below). In all these cases the temporal priority of the Essay is established by the fact that had the works by Aristotle in which these issues are resolved already been written and available to Theophrastus when he was writing the Essay, he could not have raised the objections or difficulties that he did.

All of the evidence listed above indicates that the Essay was written before Metaphysics ΓΖΗΘ, De generatione et corruptione, De anima, De partibus animalium, De generatione animalium, and Historia animalium V–VI. This means, essentially, that it was written before the major literary activity of Aristotle after his return to Athens in 335 BC. Specifically, it has been argued by P. Louis that De partibus animalium was written around 330, and by Ross that De anima was written after 334.9 Accordingly the date of composition of the Essay, since it was written before both De partibus animalium and De anima, must be around 334. These dates are not precise to the year, naturally, but the bulk of the evidence makes it indisputable that the Essay must have been written at the latest at the very beginning of Aristotle’s second and final stay in Athens (between 335 and 323).

This dating is fixed on the basis of the relation established by some scholars between the Essay and the works of Aristotle. Others have arrived at a similar assessment when considering the relations of Theophrastus with the Academy. Krämer 1973 in particular (as also, earlier, Krämer 1971, 12n41) documented the constant presence of “the Pythagorean-clad Platonism of the Academy” in the background—and not only—throughout the Essay, and especially the prominent place

according to the ideas of Speusippus, so that he could suggest (p. 214) that the Essay chronologically should be located in a period when the philosophy of Speusippus (d. 339) was still very much alive. Indeed Krämer asked a very important question (p. 213), whether the proximity to Platonic positions that are seen in the Essay (for example, the favorable presentation by Theophrastus of the unwritten Platonic doctrine of the one and indefinite dyad at 11b1 ff.; see the commentary in Part III below) is a return to Platonism or indicative of an earlier stage in Theophrastus’s development, corresponding to that of the early Aristotle. Given the conclusion arrived at in the preceding paragraph about the latest date on which the Essay could have been written (ca. 334), the first alternative in Krämer’s question can be safely excluded. Similar conclusions were reached by Berti (2002, preprint) when discussing the positions exhibited in the Essay about the movement of the heavens and the knowledge of the first principles. In addition to these studies, that Theophrastus in the Essay was philosophically close to Platonic positions is also shown by the fact that he seems to use the word παράδειγμα (at 7b2), meaning “paradigmatic” cause in the Platonic sense, much as it was used by Aristotle only in his esoteric works and once only in the earliest part of the Physics (194b26), which date from Aristotle’s first residence in Athens (see the commentary on 7b2 below in Part III). All this then raises the next question, whether it is possible to date the Essay even earlier than 334 BC.

In his landmark study on the development of the natural philosophy of Theophrastus and Aristotle, Gaiser 1985, 86, dated Aristotle’s De generatione et corruptione and Meteorology I–III, or at least their preliminary versions, to the period of Aristotle’s residence in Assos (347–345), right after the death of Plato. Following the majority opinion (summarized on pp. 24–26), Gaiser maintained that Theophrastus also was present in Assos at the time, a thesis which his study was expressly intended further to corroborate (p. 27). Assuming that this is so,10 and if, as mentioned

10 There is no independent evidence for Theophrastus’s sojourn in Assos other than two mutilated papyri texts, in one of which the name of Theophrastus may appear in association with Assos (Didymus, In Demosthenem commenta, col. 5,54 Pearson-Stephens) and in the other it may be implied (Philodemus, PHerc. 1021, col. V,1), both assessed positively by Gaiser 1985, 9–17 (and repeated by K. Gaiser, Philodemus Academica, Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1988, 161 and 380), but reviewed negatively by A.M. Battegazzore, “Il Theophrast in Assos di Konrad Gaiser,” Elenchos 10 (1989) 217–230, at 217–220. Nevertheless, Gaiser’s overall thesis can hardly
above, Aristotle’s *De generatione et corruptione* responds to the Essay by Theophrastus, then there is a very real possibility that the latter was also written during the same period in Assos. Furthermore, if, as I suggest in the commentary, the word ἀτακτῷ ἐν τέρα at 444 in the Essay refers to or is an echo of Aristotle’s ἀτακτῷ ἐν τέρα in *Meteorology* 338b20, and *Meteorology* I–III was also composed in Assos, then so was Theophrastus’s Essay.

These considerations make it certainly possible, and very much probable, that the Essay may have been written in Assos, giving us 347 as the earliest date of composition. Accordingly, it can be maintained with as much certainty as is possible in such cases that Theophrastus’s *On First Principles* was written in the period between 347 and 334. Beyond this we have no hard and fast evidence that will allow us to be more precise, but only personal—and considered, I might add—views. Mine is that it was written in Assos. Among considerations based on evaluation of the nature and purpose of the Essay (for a full discussion see section 3 below in this chapter), the following are of relevance.

The fourteen-year span between 347 and 334 covers a turbulent period in the lives of Aristotle and Theophrastus. After the first two or three years in Assos, which were possibly the most settled ones, they spent another two or three in Mytilene, and then the rest in Macedonia, where Aristotle was tutoring Alexander, before their eventual return to Athens in 335. The years in Assos have been seen as a continuation of the philosophical climate and milieu of the Academy: Jaeger 1948, 115, called the gathering of philosophers there “a colony of the Athenian Academy, … the foundation of the school of Aristotle,” and Gaiser 1985, 89, agreed. During this period Speusippus was head of the Academy in Athens, while Xenocrates was most probably with Aristotle and Theophrastus in Assos. And these are precisely the *dramatis personae* in the Essay: Plato and the Pythagoreans who provide the framework—with the Pythagoreans Archytas and Eurytus actually mentioned by name—Speusippus and

be discounted both on its own merits and on the basis of other circumstantial evidence, adumbrated by Dorandi 1998, 31–33. There is, finally, the added consideration that it would seem improbable that Theophrastus could have had as good an inside knowledge of, or especially a personal stake in, the discussions in the Academy, as indicated in this very Essay and as just described in the preceding paragraph, had he met Aristotle for the first time only when the latter came to Mytilene after Assos in 345, and had actually been present in an Academic environment for the first time in his life only when Aristotle returned to Athens in 335.
Xenocrates, and Aristotle, of course, and his new theories about the unmoved mover and teleology; that the pre-Socratics are but marginal at best, as Krümer 1973, 208 observed, is further indication that the Essay is not so much a systematic run-through of all opinions on the subject of first principles but a presentation of the views held by the people actually participating in the discussion, either in person or by proxy, because they set the stage for its very terms.

It is difficult to see the same kind of environment that would be conducive to the production of a work like the Essay being also present in either Mytilene or Macedonia. In particular, would the sense of proximity to Academic positions we witness in the Essay have persisted during those long years of Theophrastus’s close association with only Aristotle, and after the death of Speusippus (339) and away from Xenocrates? As for the first year after the return of the two philosophers to Athens in 335, by that time they had been working together for over fourteen years, if not more, and the kind of critical discussion of Aristotle’s earlier metaphysical theories that one finds in the Essay would have already taken place between them; besides, by that time Aristotle would have developed some of the later metaphysical ideas, and Theophrastus would have known about them. For in the opening of the Essay Theophrastus, very much like Aristotle in the early book Alpha of the Metaphysics, is still grappling with the very name of the discipline in which he is engaged, which he simply calls ἡ τῶν πρώτων ΨτΡέτα twoεωρία, showing no awareness that Aristotle had tried calling it, in the later books of the Metaphysics, in a variety of ways (see the commentary on 443 below in Part III). For all these considerations, as an aporetic essay historically situated at the beginning of Aristotle’s new thinking about metaphysical subjects, whose function as a dialectical exercise is intended precisely to promote and abet that thinking, the Essay finds its intellectual and historical context better in Assos in 347–345 than in Athens after 335.

2. Title and Transmission

Two problems relating to the title of the Essay have dogged scholarship from the very beginning. One is its very name, given the glaring historical anachronism of the transmitted title, μετὰ τὰ ψυχικά (if this transmitted title is taken to refer to Theophrastus’s work, as it almost universally has been), since this particular title was given to Aristotle’s
work by that name only in the first century BC when his extant corpus was published. The second is the unusual—and to some, inexplicable—syntax of the transmitted title itself, Θεοφράστου τῶν μετὰ τὰ φυσικά, in which something has been thought to be missing. Furthermore, and ironically, a very helpful and learned Scholium added by some person (or persons) at the end of the Essay in some manuscripts, something which normally would have helped resolve the issue, has actually compounded the problem, due to difficulties in its interpretation. Much ink has been spilt on all these issues, but inevitably they must be revisited, for none of the proposed solutions has found universal acceptance or is, in my estimation, satisfactory.

First, it is necessary to provide what may be taken at this stage of scholarship to be the ascertained evidence on the basis of which a solution can be sought. There is, to begin with, the text and translation of the Scholium, separated into its three components (the capitalization of the Greek text is mine):

[a] Θεοφράστου τῶν μετὰ τὰ Φυσικά.
[b] Τούτο τὸ βιβλίον Ἀνδρόνικος μὲν καὶ Ἐρμίππος ἀγνοοῦσιν, οὐδὲ γάρ μνείαν αὐτοῦ ὀλίγα πεποίησαν ἐν τῇ ἀναγραφῇ τῶν Θεοφράστου βιβλίων· Νικόλαος δὲ ἐν τῇ θεωρίᾳ τῶν Ἀριστοτέλεων μετὰ τὰ Φυσικά μνημονεύει αὐτοῦ λέγων εἶναι Θεοφράστου.
[c] Εἰσὶ δὲ ἐν αὐτῷ οἴον προδιαποροῖ τινὲς ὀλίγας τῆς πραγματείας.


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11 According to the most plausible assessment of the evidence. The occurrence of the title μεταφυσικά in the anonymous “Hesychius” catalogue of Aristotle’s writings (no. 111) can be thought to be earlier than the first century BC Roman edition only if the text is emended to read, μετὰ (τὰ) φυσικά. The form μεταφυσικά as such is much later and thus can be seen in the “Hesychius” list only as an interpolation, perhaps by Hesychius himself. See the discussion of the evidence by M. Narcy in DPhA Supplement 226.

12 The Paris. Gr. 1853 (P) omits τὰ in the title by haplography, but has it in the Scholium at the end.

13 The Scholium has been studied repeatedly, and in detail, not only with reference to this Essay by Theophrastus but also in a number of other contexts; see, among the most relevant discussions for Theophrastus, Usener 1861, 259–260; Rose 1863, 183–185; Ross pp. ix–x; Jaeger 1932, 289–292; Kley 14–15; Jaeger, ed. Metaphysics, pp. vi–vii; Regenbogen 1940, 1366–1367, 1389; Theiler 1958, 102/292; Drossaart Lulofs 1969, 27–30; Burnikel 123–130; Berti 1982, 13–14; Vuillemin-Diém 1982, 173–198; Vuillemin-Diém 1995, 308–325; Hecquet-Devienne 2004, 171–183.
Andronicus and Hermippus do not know this book, for they make no mention of it at all in the list of Theophrastus’s books; Nicolaus, though, does mention it in his study of Aristotle’s books that come after the *Physics*, saying that it is by Theophrastus.

It contains some few “pre-diaporiae,” so to speak, relating to the entire treatise.

(a) The manuscript transmission of the Essay as Aristotelian together with the books of Aristotle’s *Metaphysics*

The Scholium itself, however it is understood, clearly puts Theophrastus’s Essay in close proximity to Aristotle’s *Metaphysics*, as is also obvious from the environment in which the work was transmitted in the manuscripts. In both of our oldest and most reliable independent Greek manuscripts, the Parisinus gr. 1853 (P) and the Vindobonensis phil. gr. 100 (J), the Essay is found together with the major physical, ethical, and metaphysical Aristotelian treatises. The contents of P are, in order, Aristotle’s *Physics*, *De caelo*, *De generatione et corruptione*, *Meteorology*, *De anima*, *De sensu et sensibilibus*, *De memoria et reminiscentia*, *De somno et vigilia*, *De divinatione per somnium*, *De motu animalium*, *Metaphysics*, Theophrastus’s Essay, the pseudo-Aristotelian *De coloribus*, Aristotle’s *De partibus animalium*, *De generatione animalium*, *De incessu animalium*, *Ethica Nicomachea*, *Magna moralia*. In J the order is, *Physics*, *De caelo*, *De generatione et corruptione*, *Meteorology*, Theophrastus’s Essay, Aristotle’s *Metaphysics*. In P the Essay follows that of Aristotle, in J it precedes it. On the basis of her lengthy research on P and especially on the text of the *Metaphysics* in it, Hecquet-Devienne 2004 concluded in a convincing fashion that the order of these treatises in P is old and that it reflects the “state of the Lyceum library, which bears witness to ongoing research,” before the death of Aristotle. Her conclusions corroborate those of Most 1988a and

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14 A “pre-diaporia”, rendering the Greek προδιάποροια, is a preliminary run-through of an aporia. I have kept the Greek form because it is a technical term and, in the Greek, apparently a neologism. See the discussion on the Scholium in the commentary in Part III below. As for aporia (and its cognates, the verb ἀπορέω and the adjective ἀπορος), I keep the word, which is accepted in English. The cluster of concepts surrounding the word are crucial in the philosophies of both Aristotle and Theophrastus, and no single English word expresses them adequately. I follow Arthur Madigan, *Alexander of Aphrodisias. On Aristotle’s Metaphysics 2 & 3*, Ithaca, N.Y.: Cornell University Press, 1992, 87n3, who examines the concept and refers to the discussion by J. Owens, *The Doctrine of Being in the Aristotelian Metaphysics*, Toronto: Pontifical Institute of Medieval Studies, 1963, 211–219. For its importance in this Essay see below in this chapter, section 3.
mine mentioned in the preceding section: Theophrastus’s Essay “constitutes Theophrastus’s contribution to a ‘first’ *Metaphysics* by Aristotle,” a contribution which helped Aristotle take into account the issues raised by Theophrastus and partly respond to them. The Essay was accordingly not integrated into the works of Theophrastus and the lists of his works because it formed part of ongoing research in the Lyceum (p. 186). As Hecquet-Devienne puts it, the Paris manuscript “may be indeed the descendant of a copy of Aristotelian writings that corroborates a state of the research in the Lyceum before Aristotle achieved the revision of his works on (the) basis of contributions by other philosophers of the school” (p. 189). This revision seems to be clearly reflected in the programmatic opening paragraph of Aristotle’s *Meteorology* (338a-339a9) where he mentions *Physics*, *De caelo*, and *De generatione et corruptione* as having been completed, *Meteorology* as the work at hand, and the animal and plant treatises as still to be written. This order corresponds quite closely to the order of the treatises in the Paris manuscript.

The presence of Theophrastus’s Essay in both these manuscripts (P and J) as the only non-Aristotelian work would indicate that it was included among the writings of Aristotle and under his name from the very beginning, and almost certainly in the Roman edition of Aristotle’s works in the first century BC.15 This explains why the lists of Theophrastus’s writings drawn by both Hermippus, the disciple of Callimachus the great librarian, and Andronicus (as Porphyry informs us, fr. 39 FHS&G) make no mention of the Essay, as stated in the Scholium. Both of these scholars may well have known it, but if so they knew it as Aristotelian.16 In this regard it has been pointed out that the lists of Theophrastus’s writings in Diogenes Laertius (and of Aristotle’s, for that matter), which almost certainly go back to Hermippus, were thought by their author to be a complete list of all his works, based, in all probability, on autopsy of the holdings in the Alexandrian library.17 It is thus difficult to assume that

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15 Hecquet-Devienne 2004, 189. Barnes 1997 raised enough aporiae about Andronicus of Rhodes as the author of the edition to warrant greater caution in assigning this role to him. Barnes actually gave structured argument for a position that had been implied, suggested, and stated by others before; see Lord 1986, 158, with references to Düring 1957, 415. Be that as it may, the existence of a Roman edition in that century seems beyond dispute, for Nicolaus of Damascus, about whom more later, actually used it around the turn of the eras. The actual identity of its editor is of no consequence to my argument here.

16 For a similar assessment see Burnikel 125.

17 Blum 1991, 60. The provenance of the lists from a library seems to be proven beyond serious doubt by the presence of the complete number of lines given by Diogenes
had the Essay been identified as Theophrastean Hermippus or Andronicus would have overlooked it.

Furthermore, with regard to the ability of these two scholars to assess the authenticity of the ascription of the Essay to Aristotle, it is important to note that modern scholarship may have criteria for such matters that are not exactly the same as those of the ancients. In the case of Hermippus, Ross, p. x, believes that “it seems unlikely that Hermippus would have failed to notice the obviously unaristotelian character of the work.” It is not clear why this work should have seemed so “obviously unaristotelian” to Hermippus who, if he knew anything at all about Aristotle, would have known about the aporetic character of *Metaphysics* B and N. Besides, as Moraux 1951, 221–222, depicts him, Hermippus was much more interested in a good gossipy story than in philosophical hair-splitting, while Pfeiffer says that Hermippus's biographical work was “written in a more novelistic vein ... with ... anecdotes.” As for Andronicus, we have his precise reasoning for declaring *De interpretatione* spurious and *De anima* authentic (as transmitted by Philoponus, *In De an.* 27.21 = Düring 1957, 418 no. 75 o), a state of affairs that should raise severe doubts, if not about his competence, then at least about his criteria. This is not to cast aspersion on Andronicus's intelligence, erudition, or service to Aristotelian studies, but merely to point out that critical judgments of this sort are always culturally determined (as are ours) and should be evaluated in that context.

All this evidence thus indicates beyond any serious doubt that the Essay was from the very beginning transmitted together with the books which were later to form Aristotle's *Metaphysics* and as part of or appendix to it, as a result of which it went unnoticed by the great Hellenistic bibliographers as one of the works of Theophrastus. And almost certainly, as already noted, it was also included as an Aristotelian work in the

Laertius for all the books by both Aristotle and Theophrastus (445270 and 232808 lines respectively). For this very reason it is difficult to prefer as the ultimate author of the lists Arison of Keos over Hermippus, as argued by Moraux 1951, 221 ff. Blum's section on the libraries of Aristotle and Theophrastus, pp. 52–64, should be consulted together with the chapter by Moraux 1973, 3–31, and the recent summary of the state of affairs by Primavesi 2007, 58–59.

18 See the discussion of this very issue, with regard to Aristotelian commentators, in Moraux 1974.

Roman edition of the Aristotelian corpus; indeed, if our most ancient Aristotelian manuscripts, P and J, ultimately derive from that edition, it is difficult to see how the Essay could not have been part of it.

(b) The identification of Theophrastus as the author of the Essay by Nicolaus of Damascus and the date and authorship of the Scholium

Next, we have reasonably certain evidence about Nicolaus of Damascus (born 64 BC, died after 15 AD?). The author of the Scholium credits him for restoring the work to Theophrastus in a study of Aristotle’s *Metaphysics*. Drossaart Lulofs 1969, who collected most of the extant testimonia and fragments of this work by Nicolaus, very plausibly suggested (p. 23) that the reference in the Scholium must be not to an independent work by Nicolaus but to a section dealing with the *Metaphysics* in his *On the Philosophy of Aristotle*.20 We are also relatively well informed about what Nicolaus did in that section.21 From Averroes, who had access to an Arabic compendium of Nicolaus’s work (T7.4–6 Drossaart Lulofs), we know that Nicolaus also discussed the arrangement of the subjects in Aristotle’s *Metaphysics* and on occasion disagreed with it. It is reasonable to suppose that it was in the course of precisely such a discussion of the contents and the arrangement of the books of the *Metaphysics* that Nicolaus made mention of (μνημονεύει) Theophrastus’s Essay, and said that it was not by Aristotle but Theophrastus (λέγων εἶναι Θεοφράστου). This implies—with little, if any, doubt—that Nicolaus found the Essay in the edition of Aristotle’s works he was using and that it

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20 The Greek title of this work is Περὶ τῆς Ἀριστοτέλους φιλοσοφίας, according to Simplicius, *In De caelo* 398.36 = Test. 5.1 Drossaart Lulofs 1969. It is preserved in a highly abbreviated Syriac translation in a Cambridge University manuscript, on which Drossaart Lulofs based his edition, but also, in indirect transmission, on the citations and paraphrastic versions of this translation extant in the Syriac work of Bar-Hebraeus (1226–1286), most of which remains unedited. See Zonta 2001, who translated several passages from Bar-Hebraeus which probably derive from Nicolaus’s work, and Takahashi 2005, for more details on the contents of the Syriac manuscript and the recovery of further fragments from the work.

21 The section on Aristotle’s *Metaphysics* to which the author of our Scholium refers as θεωρία τῶν Ἀριστοτέλους μετὰ τὰ Φυσικά is taken by Drossaart Lulofs 1969 (p. 11, T7) to be its very title. This, however, can hardly be right. The Greek phrase is descriptive and not literal, meaning simply “Nicolaus’s study of Aristotle’s books after the *Physics*.” Titles descriptive of the study of something did not themselves contain as a rule the expression θεωρία τοῦ/τῆς/τῶν; very simply if the work was a study of something it was called Περὶ followed by a genitive.
was attributed there to Aristotle; for why should Nicolaus have mentioned the Essay at all in that connection unless it had been physically present in his manuscript of Aristotle’s *Metaphysics* as one of the books following the *Physics*? Thus the Scholium provides further documentary support to the evidence established in the preceding section, from the study of the manuscript tradition, that Theophrastus’s Essay was transmitted together with Aristotle’s *Metaphysics* and as part of it.

What edition of Aristotle’s works was Nicolaus using for his study? The order in which he treats Aristotle’s works in it (T6 Drossaart Lulofs, and pp. 23–24) is roughly that in the Roman edition, the slight deviations from it being easily attributable to Nicolaus’s quarrel with Aristotle about the arrangement of subjects in the *Metaphysics*, as mentioned above. Thus, it is most probable that it was in this edition that Nicolaus found the Essay and restored it to Theophrastus. However, what is more problematic than the actual edition used by Nicolaus is the *title* under which he found the Essay transmitted in the name of Aristotle. This is a problem to which I will come back at the end of this discussion.

Nicolaus made the correct identification of the author of the Essay in the course of the discussion, in his work Περὶ τῆς Ἀριστοτέλους φύλοσοφίας and not in a separate treatise, of the arrangements of subjects and topics in the edition of Aristotle’s *Metaphysics* that he was using. The question now is, how did the scholarly world come to know about this identification, and when did this happen? The way in which the Scholium refers to the issue (μνημονεύει αὐτῷ λέγων εἶναι Θεοφράστου) suggests that one could find out about Nicolaus’s identification by reading the pertinent passage(s) in his work on Aristotle—i.e., the identification was not otherwise announced or noted in a special way. If this is so, then the question becomes, who read Nicolaus’s work on Aristotle and when? The earliest references that we have to its having been read and noticed are two: one is by the scholiast, of course, who in part (b) of the Scholium refers directly to Nicolaus’s restoration of the Essay to Theophrastus, and the other is by Simplicius, who also gives us the title of the work, mentioned above. Now the dates of Simplicius are known (first half of the 6th century); the question is to date the scholiast. Theoretically, it could be anybody between the first decade of the Christian era (at which time approximately Nicolaus wrote his work on Aristotle), and the time of Simplicius. But if part (c) of the Scholium, in which the work of Theophrastus is characterized as a προδιαπόρια to Aristotle’s *Metaphysics*, was written by the same person who wrote part
(b), in which Nicolaus’s work is mentioned, then this scholiast lived in late antiquity in the circle of the Neoplatonic philosophers: his technical use of the term προδιαπορία, a use which was developed only in late antiquity, attests to this (see the discussion in Part III in the commentary on 12b4).

The question whether parts (b) and (c) of the Scholium were written by the same person is contested. Hecquet-Devienne 2004, 182, basing herself on the research of Vuillemin-Diem on the Latin translation of Aristotle’s *Metaphysics* by William of Moerbeke,22 claims that they were not, principally because part (c) of the Scholium was not translated into Latin: William’s “Greek model,” Hecquet-Devienne concludes, “did not yet contain it.” This does not really follow. The absence of that sentence in William’s translation need not necessarily mean that his Greek model did not have it; William himself may have decided, for whatever reason, not to translate it.23 However, even if William’s Greek exemplar did not have it, this need not necessarily mean that part (c) of the Scholium had not yet been written by the same person who wrote part (b): William’s Greek manuscript may itself have omitted it, as was the entire Scholium omitted in numerous Greek manuscripts, or it may have been omitted at some point in the Greek transmission. In any case, arguments from omissions in MSS are hardly reliable and the evidence from William of Moerbeke’s Latin translation is accordingly inconclusive.

It appears much more probable that the authors of parts (b) and (c) of the Scholium were, in fact, the same person. Nicolaus’s work on Aristotle—on all of Aristotle, as the Syriac and Arabic translations studied by Drossaart Lulofs indicate—was an important work, written at a time when Aristotelian scholarship began to be mainstream in Greek philosophical literature. And yet we hear nothing about this work until Simplicius. How is this to be interpreted? It was probably not by chance,

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22 G. Vuillemin-Diem discussed the scholium and its Latin translations extensively in her book-length article, 1982, 173–208. She later incorporated it, with slight modifications, in her book on the same subject, 1995, 308–325. In what follows I will be referring to her later, 1995, publication only.

23 Vuillemin-Diem 1995, 317, maintains that “Wilhelm hat den übrigen Text [of the Scholium, part (b)] so sorgfältig wiedergegeben, dass er diesen aufschlussreichen Satz [part (c)] sicher nicht von sich aus weggelassen hätte.” But William knew this Scholium as referring to Book A of Aristotle’s *Metaphysics*, and he could hardly have agreed with the assessment in part (c) of the Scholium that Book A was merely a προδιαπορία of the entire treatise. So he may have decided to censure it.
insofar as the preponderance of evidence, though indirect, suggests otherwise. The elements of this indirect evidence are the following. Nicolaus was an outsider to the school philosophical tradition and as such had no institutional context that would preserve and transmit his works. He was known because of his sheer industriousness and intelligence, and, if we can interject a contemporary cultural value into his time and immediate posterity, because he had rubbed shoulders with celebrity: Antony and Cleopatra, Herod, Augustus. He was accordingly known in a general way, and his most popular work, if one is to judge by the frequency with which it is quoted in later literature, was his multi-volume history. But in philosophy he was ignored—or if he was known to some extent, then he must have been cited by authors in works which themselves have been ignored and not survived. Thus if Nicolaus’s philosophical works were not noticed in philosophical circles in his lifetime and immediately after his death, did they enter the mainstream of philosophical discussion before we first come across them in Simplicius’s works? This question is crucial. By “mainstream philosophical discussion” I mean being read and studied by people who, in addition to having a philosophical education so as to appreciate Nicolaus’s identification of the Essay as having been written by Theophrastus, also had access to and were themselves responsible for manuscript production and the further copying of philosophical texts. For it would be inane to argue that Nicolaus’s works were not read by anybody between their production and Simplicius: they were available in manuscript and anybody could have read them, and there is no way we can know who. But what is important for our purposes is to know that the person who read them was someone who would be in a position to take action, commission or sponsor a new manuscript copy of the works of Aristotle, and have inserted it in the Scholium that we find in the Paris manuscript. It is in this sense that we would like to know who, if anybody, read them before Simplicius.

Drossaart Lulofs (1969, pp. 42, 131) insists that Porphyry knew the works of Nicolaus and his Περὶ τῆς Ἀριστοτέλους φιλοσοφίας, and even suggests (p. 4317) that Simplicius might have derived his information about Nicolaus from Porphyry, but he offers no evidence whatsoever. The fact is, Simplicius is the first author who both cites the title of Nicolaus’s work and offers a quotation from it (In De caelo 399.2 = fr. 29

Drossaart Lulofs), while we have absolutely no evidence that Porphyry did anything of the sort. These citations by Simplicius indicate that the work of Nicolaus began to be read and appreciated by the Neoplatonic philosophers in late antiquity, and that this is the first time that it demonstrably entered the philosophical mainstream, as further indicated by its translation (among other works by Nicolaus) into both Syriac and Arabic. The philosophical tastes and predilections of authors writing in Syriac and Arabic were very much shaped by and followed the orientation of the philosophical schools in late antiquity. The fact that it is Simplicius who cites Nicolaus is also significant: given his travels in the Near East, if the manuscripts of Nicolaus of Damascus were preserved in his native city or greater Syria, it stands to reason that Simplicius may have come across them there.

Finally, two further considerations are relevant. The one is based on the fact of the complete absence of Theophrastus’s Essay itself from all extant ancient philosophical literature. It is certain that it was not known until the time of Nicolaus because it was thought to be by Aristotle, as discussed above. Once Nicolaus restored it to him, however, it should have attracted some attention if Nicolaus’s identification had become widely known—i.e., if Nicolaus’s Περὶ τῆς Ἀριστοτέλους φιλοσοφίας was read in philosophical circles before the time of Simplicius. But it had not and it was not. The only comment that we have about Theophrastus’s Essay is part (c) of the Scholium, which calls it a προδιαποφία on Aristotle’s *Metaphysics*, a comment made by someone among, or closely affiliated with, the Neoplatonic philosophers in late antiquity (see the commentary on the Scholium in Part III below).

The second consideration relates to another scholium in the Paris manuscript (f. 231v, in the margin) in which the one we are studying occurs; it concerns a comment on the word ἐκτιστοφερως in the text of Aristotle’s *Metaphysics* A 8, 989b30. This other scholium, as Vuillemin-Diem discovered (and reported by Hecquet-Devienne 2000, 147), is derived wholly from Asclepius’s commentary on the *Metaphysics* (64,2–7 and 65,32–35 Hayduck). This scholiast was manifestly a Neoplatonic scholar contemporary with or younger than Asclepius (first half of 6th century). Yet a third scholium in the same manuscript remarks on the authenticity of Book A of the *Metaphysics*. These three scholia—two on Aristotle’s *Metaphysics* and the one on Theophrastus’s Essay—point to erudition and judiciousness in their author(s). They were all to be found in the ultimate archetype from which these sections of manuscript P were copied (by scribe E II, as termed by the specialists; see Hecquet-Devienne
If the authors of the three scholia were all the same person, and the indications are that they were, then he was the contemporary of or slightly younger than Asclepius.25

Taken together, what all this suggests is that although Theophrastus’s Essay was restored to him in the work Περὶ τῆς Ἀριστοτέλους φιλοσοφίας by Nicolaus of Damascus at the turn of the Christian era, this identification was first noticed and acted upon some five centuries later by someone in the circle of the Neoplatonic philosophers who was in a position to affect manuscript production and change the ascription to the rightful author by writing or dictating the Scholium. This conclusion may be based on evidence that is, for the most part, circumstantial and from silence, but it presents the most probable course of events at this stage of our knowledge.26 If that is the case, then parts (b) and (c) of the Scholium were either written by the same person or at any rate were roughly contemporary; they both stem from the philosophers of late antiquity.

(c) Analysis of the syntax of the Scholiast’s title, Ὁθεοφράστων τῶν μετὰ τὰ φυσικά

This conclusion in turn affects the question about the title of Theophrastus’s Essay because it implies that this work continued to be transmitted in the manuscripts of Aristotle’s works as part of or related to the latter’s Metaphysics, carrying whatever title, or none, as the case might be.

25 Hecquet-Devienne 2000, 147, who suggests as much, nevertheless does not clearly discriminate between the author of these scholia and the scribe of E II, for she seems to attribute the two scholia on Aristotle’s Metaphysics to the scribe of manuscript P, E II. However, if that part of the manuscript was copied around the middle of the tenth century (see Hecquet-Devienne 2000, 114–115 for the documentation), it appears difficult to believe that a scholiast as learned in philosophy and its literature could have arisen at that time. The scholia are all indicative of active involvement in philosophical research and must be thought to go back to our late antique scholiast. The problem which may have disoriented Hecquet-Devienne 2000 is that the two scholia on Aristotle are written in the margin of manuscript P, while the one on Theophrastus is in the main body of the page, right after the end of the Essay. But it appears that the scribe (E II) decided to copy the Theophrastus Scholium inside the page and not in the margin as he did with the previous two because the Essay ends almost at the end of the page and he had a little writing space left which, one the one hand, was not large enough to begin copying the next treatise, De coloribus, and, on the other, he did not wish to leave blank. This is also indicated by the fact that at the end of the Theophrastus Scholium he still had a couple of lines space left, which he filled with an adespoton remark on the soul.

26 It is true that “silence rarely proves much,” as Barnes 1997, 18, aptly observed; “but this particular silence”—five centuries of complete lack of awareness of the existence of Theophrastus’s Essay—“is sustained and surprising.”
Philosophers until late antiquity continued to read it as Aristotle’s work. Once Nicolaus’s intervention was noticed by a reader who was also in a position to act on it, the manuscript of Aristotle that was next commissioned and which contained Theophrastus’s Essay and the Scholium, that is, parts (b) and (c), must also have carried a title for it. What we have in the extant manuscripts is the notorious Θεοφράστου τῶν μετὰ τὰ φυσικά, which is part (a) of the Scholium. How does this relate to the rest of the Scholium and to whatever title was or was not there to begin with?

The unaffiliated genitive (τῶν) in the transmitted title has been variously interpreted. The alternatives that have been proposed are the following:

(a) Partitive genitive, indicating that the Essay is a part of a larger (actual or planned) book by Theophrastus with that title (Ross p. x; Laks & Most p. x and translation, p. 2, “Tiré de la Métaphysique de Théophraste”).

(b) Genitive of origin, with the preposition ἐκ being understood, indicating that the Essay is extracted from a larger actual book by Theophrastus with that title; i.e., Θεοφράστου τῶν ἐκ τῶν μετὰ τὰ φυσικά, “From Theophrastus’s Metaphysics” (Laks & Most p. x, note 6).

(c) Partitive genitive, indicating that the Essay is the part written by Theophrastus of Aristotle’s Metaphysics; i.e., Θεοφράστου τῶν Ἀριστotelεύς μετὰ τὰ φυσικά, “Diaporie by Theophrastus on Aristotle’s Metaphysics” (Burnikel 126: “Theophrasts Anteil an der Metaphysik des Aristoteles”).

(d) Genitive of belonging, with a presumed noun, like προδιαπορία, to which the genitive is attached, not expressed; i.e., Θεοφράστου τῶν Ἀριστotelεύς μετὰ τὰ φυσικά, “Theophrast’s metaphysische Diaporien,” Burnikel 127n45).

(e) Partitive genitive, with a number following the title (assuming it was lost in transmission), indicating the number of the book from the Metaphysics which this is; i.e., Θεοφράστου τῶν μετὰ τὰ φυσικά α’ (i.e., Βιβλίου πρώτον), “The first book of Theophrastus’s Metaphysics” (Laks & Most p. x note 6).

(f) Genitive of belonging, with a number following the title (assuming it was lost in transmission), indicating the number of books of which the work consists, even in the case of books having one book (see Moraux 1951, 198); e.g., Θεοφράστου τῶν μετὰ τὰ φυσικά α’ (i.e., Βιβλίου ἑν), “Theophrastus’s Metaphysics, one book.”
(g) A title normally recorded in the nominative appears in the genitive in catalogues of titles (see Moraux 1951, 198); i.e., a presumed Θεοφράστου τὰ μετὰ τὰ φυσικά would become, Θεοφράστου τῶν μετὰ τὰ φυσικά.

Given the transmission of the work established so far, the impossible alternatives can be relatively easily eliminated. (a) and (b) rest on the assumption that whoever is responsible for the transmitted title thought that, first, the work is a fragment or part of a whole, and second that Theophrastus himself had written, or was planning to write, a work, entitled μετὰ τὰ φυσικά, from which this work was an extract. The second assumption is manifestly invalid. There is no indication anywhere that anyone until late antiquity thought that Theophrastus had written or was planning to write such a work, and in any case, even if there had been, its title could not have been μετὰ τὰ φυσικά. As Burnikel 126 duly remarks, this phrase did not express the subject upon which a treatise could be written but merely the place occupied by Aristotle’s Metaphysics in the edition of his works, or even, if the designation μετὰ τὰ φυσικά is older than the Roman edition, in the arrangement of Aristotle’s works in groups. Whether the transmitted title goes back to Nicolaus or the Neoplatonic scholiast or anybody in between, μετὰ τὰ φυσικά could have meant to him only Aristotle’s work so located in the edition or arrangement; Theophrastus could not have been the author of a book named μετὰ τὰ φυσικά. Accordingly, the Essay could not be a part of or extract from it.

The last three alternatives (e,f,g) have two problems. The first is what has just been mentioned, that they make μετὰ τὰ φυσικά to be a title for a book by Theophrastus, an impossibility. The second is that they represent titles as entered in a list or catalogue of books, which would imply that the person responsible for the transmitted title copied it verbatim from such a catalogue. But the problem is precisely, as the Scholium says, that there was no such title in any catalogue of Theophrastus’s books (and this catalogue would have had to be one of Theophrastus’s books because his name is mentioned in the title).

This leaves the two alternatives (c) and (d) suggested by Burnikel, which point to the right direction. The analysis of the transmitted title can again begin with what I take to be certain in the Scholium, the fact that its part (c) was written by a philosopher or scholar active in the

27 See above, note 11.
philosophical schools in late antiquity (fifth or sixth century), as discussed above. Now first, in this part of the Scholium, the words τῆς Ὀλής πραγματείας refer, without any doubt, to Aristotle’s *Metaphysics*; and second, in part (b) of the Scholium, the work is attributed to Theophrastus. If that is so, then as Burnikel astutely observed, the transmitted title, Ὑστεροφάστων τῶν μετὰ τὰ φυσικά, expresses exactly the same thing as parts (b) and (c) of the Scholium. But it is important to establish a temporal priority here: the title must be posterior to parts (b) and (c) because it depends on them in the sense that this title could never have been given to the Essay if the Scholium were not there. On the basis of parts (b) and (c), then, the scholiast, most likely, or some scribe after him, (re–?) named the Essay, or actually described it, as “Theophrastus’s ⟨part⟩ of what comes after (Aristotle’s) Physics,” with the emphasis on Ὑστεροφάστων. The insertion of the title at the end of the work in part (a) of the Scholium thus corroborates the analysis just given: the title is based on parts (b) and (c) and is posterior to them, semantically if not necessarily temporally, but it is necessary to add it in close proximity to the evidence that justifies it, i.e., the contents of parts (b) and (c).

It appears that the difficulty we have understanding this laconic title is that we are accustomed to reading the phrase μετὰ τὰ φυσικά as the title of the work we call *Metaphysics*; instead we should read it as a prepositional phrase, indicating a location after the Φυσικά in the edition, and see Φυσικά only as the title of Aristotle’s work. The Neoplatonists in late antiquity, from whom this title arises, consistently understood the phrase in this fashion. Philoponus explicitly states that this is the case: Ὑστερολογικὰ μὲν ἐστὶ τὰ μετὰ τὴν φυσικὴν πραγματείαν αὐτῶ τεταγμένα,

28 The term πραγματεία, by the way, is also the one regularly used by the Neoplatonists to refer to Aristotle’s *Metaphysics*: Asclepius, *In Met*. 1.6, 8, Hayduck; Syrianus, *In Met*. 1.2. The Arabic translator (Išḥāq) also understood the reference in the Scholium, some version of which he read in his Greek manuscript (Ψ), to be to Aristotle’s *Metaphysics*; see next below.

29 Burnikel 126: “Diese Worte [sc. προδιαποδία τῆς Ὀλῆς πραγματείας] sagen aber … nichts anderes aus als der Titel selbst.”

30 In subsequent copies of the Scholium the insertion of the title at the end of the work may have served another purpose, to avoid having the Scholium understood as referring to the next work copied in manuscript P, *De coloribus*. Although τοῦ τῶν in line 1244 of the Scholium would normally refer to what preceded (as noted by Berti 1982, 12, and Hecquet-Devienne 2000, 148n142), the presence of the title itself in the Scholium would preclude any confusion.

ἁπέρ Ψo;Υkρονὕτω μετὰ τὰ Φυσικά πρΨo;ΥkρονσηγΨo;Υkρονacuteρευσε

In Cat.  , Busse; thus capitalized),32 and this understanding also appears in the titles of the commentaries on Metaphysics: “the book (that comes) after the Physics of Aristotle” = ΣΨkΡΨΥkρονλία εἰς τὸ μείζον Α τῆς μετὰ τὰ ΨΥkρονά ΨΥkρονaccurευσερ΄ (Asclepius In Met. 1 Hayduck), or Περὶ τῶν ἐν τῷ Β τῆς μετὰ τὰ ΨΥkρονά ΨΥkρονaccurέυσερ΄ (Syrianus, In Met. 1, Kroll).

Thus, just as the Greek that is understood naturally from the mere title τὰ μετὰ τὰ ΨΥkρονά is, τὰ μετὰ τὰ ΨΥkρονά ΨΥkρονaccurέυσερ΄ (“of the ⟨books that are rearranged or come⟩ after ⟨Aristotle’s⟩ Physics ⟨i.e., in the edition⟩, the one by Theophrastus.”

In a sense, even Burnikel himself appears not to have fully grasped his own explanation of the title, for he translated it as (p. 126), “Theophrast’s Anteil an der Metaphysik des Aristoteles,” taking “Metaphysik” as the title, instead of a prepositional phrase. He thus made another suggestion, which he liked better, namely alternative (d), according to which it is assumed that some word to which the genitive τῶν would belong has dropped out. The word that he suggested is πρΨo;ΥkρονδιαπΨo;Υkρονρίαι, from part (c) of the Scholium. It is quite possible to understand the title in this fashion, especially since it appears relatively certain that the title was derived from parts (b) and (c) of the Scholium, as discussed above. The difficulty, though, is to account for the loss of the word in a title—and a crucial word for that matter—in a carefully edited manuscript from which both Ρ and Ι derive.

The evidence from the Arabic translation indicates that Isḥāq may have had some of the difficulties discussed here. The colophon of the Arabic translation—it is a colophon and not a scholium—reads as follows:

“The treatise by Theophrastus, the advocate of Aristotle’s arguments in metaphysics, ⟨in⟩ the translation by Isḥāq, is finished.”

The phrase describing Theophrastus, “the advocate of Aristotle’s arguments in metaphysics,” al-qayyim bi-huˇgaˇgA r i s.t¯o.t¯alis f¯ı-m¯ab a #.t-.tab¯ı a , must be based on the Greek Scholium; the identification of

32 Also more briefly in Simplicius, In Cat. 4, Kalbfleisch, and Olympiodorus In Cat. 7, Busse (where both Kalbfleisch and Busse erroneously print Ἡ Μετὰ τὰ Ψυσικά, with a capital Μ instead of a capital Φ).
Aristotle’s *Metaphysics* as the work to which Theophrastus’s Essay relates reflects τῆς ὀλίγης προαγματειας in part (c) of the Scholium. The difficulty is how to understand the description of Theophrastus as the advocate, defender, custodian, curator (al-qayyim bi-) of Aristotle’s arguments, or perhaps even one who provides and sets up arguments; theoretically, if the translator, Ishāq, had our Scholium in front of him, this word should have reflected προδιαποφία. Perhaps it does, but it is difficult to argue for it. Given that the Greek word is a *hapax legomenon*, we cannot expect to find other instances of it translated into Arabic. On the other hand, as mentioned at the outset, the meaning of the Greek word is not difficult to gauge from its etymology, and the Baghdad translators of Aristotle were very good at etymological translations. Now the word ἀποφία and its derivatives in this treatise, where they occur a number of times, are normally, and properly, rendered by šakk and ḥayra and their derivatives, not by the verb qāma bi- and its derivatives (see the Glossary). Conversely, qayyim bi- in the Graeco-Arabic translation literature renders words that mean custodian and keeper, like προοιμία (WGAUS s.v.), ἐπιτραπέζιον (WGAŬ s.v.), and οἰκουμήνη (GA 744b16), not derivatives of ἀποφία. Either, therefore, Ishāq had a Greek scholium or colophon different from the one in our Greek manuscript P, or he translated according to what he thought the sense of our Scholium to be. I tend to think the latter. Ishāq knew that Theophrastus was the faithful student of Aristotle, and he could hardly envisage that προδιαποφία would actually mean that Theophrastus raised serious doubts about Aristotle’s work. For šakk (doubt) in Arabic, the word for ἀποφία used in the translation, has a much stronger negative sense than (δι-)ἀποφία does in Greek, and Ishāq accordingly used a friendly term, qayyim bi-, which, in this instance, would be closer in meaning to advocacy by setting up arguments. If, therefore, προδιαποφία in the Scholium means a preliminary working through of aporiae for an eventual fully articulate proof (as discussed in the following section of this chapter), then qayyim bi-

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34 And, according to the mistaken information in some Arabic sources, including a history of medicine by Ishāq b. Ḥunayn himself, Aristotle’s nephew; see fr. 3A FHS&G.

35 And this is the reason why the translator of Book B of Aristotle’s *Metaphysics* does not use it, which leads the unerring Commentator Averroes to appreciate it properly as an exercise in Aristotelian dialectical method.
as someone who sets up arguments for the subjects in Aristotle’s *Metaphysics* is a good enough approximation. It looks highly probable that the Greek manuscript used by Ishāq, Ψ, also contained our Scholium, except that the translator omitted the other information about Hermippus and Andronicus and Nicolaus as irrelevant for the purposes of his readers.

(d) *The Essay had an original title which could have been Περὶ ἀφχον*  

If then it can be taken as established that the Essay was transmitted in the manuscript tradition, and eventually edited, along with the books that were later to form the *Metaphysics* of Aristotle and under his name, not of Theophrastus (a), and that the working title that was given to it, Θεοφράστου τῶν μετὰ τὰ φυσικά, was accordingly not a real title but a description by a Neoplatonic scholiast of the place of the Essay in this transmission (b and c), the question is next raised whether it had an original title and if it did what it was. A number of scholars have scoured the ancient lists of Theophrastus’s works in order to find a title that might fit the contents of the Essay,36 but this exercise is fruitless if, as just discussed, it was transmitted in antiquity—at the time, that is, when those lists were drawn—as a work by Aristotle; hence it is in the lists of Aristotle’s works that it should be looked for. But this is tantamount to, and just as difficult as, asking what the original titles of the individual books that eventually comprised Aristotle’s *Metaphysics* were, since for all practical purposes the Essay functioned and was transmitted as one of them.

To begin with, all evidence indicates that the Essay must have had a title originally, even if it was what we would today call a working title. This is indicated in general by the established practice, by the time of Theophrastus, of adopting as standard titles the statements in the introductory sentence(s) of a given work (White 2002, 19–20). But more specifically in the case of the Lyceum, it is also clear from the fact that Aristotle himself used such titles to give cross-references to the books of what later became his *Metaphysics* (and, of course, to his other

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36 For example, the title of Theophrastus’s work Περὶ τῶν ἀπλῶν διαπορημάτων, as listed in Diogenes Laertius V,46, has found a number of supporters, for obvious reasons. It would appear that Krische was the first to make the suggestion in 1840, 343, and he was followed by Tricot (p. vii), and then by Reale 1964, 23, and Dillon 2002, 175n1; the later scholars do not necessarily credit Krische, while Dillon credits Reale. For her part, van Raalte (12n1) suggests Περὶ αἰτιῶν, Diogenes Laertius V,49.
works); thus, the title ἐν τοῖς περὶ τοῦ ποιοχῶς (Met. I 1, 1052a15) refers to Metaphysics Δ, ἐν τοῖς (δι-)ἀπορήσασιν (Met. M 2, 1076a39, b39) refers to Metaphysics B, ἐν τοῖς περὶ οὐσίας καὶ περὶ τοῦ ὀντός (Met. I 2, 1053b17) refers to Metaphysics Z and H, etc. We do not have a complete list of these working titles for all the books that were eventually included in the Metaphysics, but that hardly seems relevant; if some books demonstrably had titles, then they must all have, including the Essay by Theophrastus, if only for the practical purpose of referring to them during composition and discussion.\textsuperscript{37} In any case, the practice at the time was to give titles to one’s writings, and there is no good reason why Theophrastus would not have done so in this particular instance.

Secondly, it is to be noted that at least one of these working titles, the first one listed above referring to book Delta, also appears in the Hellenistic catalogue of Aristotle’s writings as preserved by Diogenes Laertius and “Hesychius”: Περὶ τῶν ποιοχῶς λεγόμενων ἢ κατὰ πρόοθεσιν (numbers 36 and 37 respectively). Other titles of individual books by Aristotle that were eventually incorporated in the larger works, titles that were accordingly dropped from Andronicus’s list as redundant and superseded, also appear in this Hellenistic catalogue.\textsuperscript{38} It thus stands to reason that the title of Theophrastus’s Essay, transmitted as it was with the books of Aristotle’s Metaphysics, may also appear in this catalogue. On this assumption, the most likely title for the Essay would be Περὶ ἀρρωστῶν (“Hesychius” 21), even without any other corroborating evidence which I will next discuss: it is manifestly the most fitting title for the contents, and it is not incontrovertibly attached to any work by Aristotle. That it is fitting may well be indisputable,\textsuperscript{39} but that it has not been assigned to any work by Aristotle requires some discussion, for it has been thought to refer to the Physics.

The relevant entries in the Hellenistic catalogue of Aristotle’s works, most probably drawn by Hermippus (if not by Ariston of Keos, according to Moraux 1951), as preserved in Diogenes Laertius and “Hesychius,” are the following:

\textsuperscript{37} A complete list of Aristotle’s cross-references in the Metaphysics to his works is provided by R. Goulet in DPhA Supplement 235–236.

\textsuperscript{38} See the very useful comparative chart of the two catalogues by Diogenes Laertius and “Hesychius” in DPhA I,424–431 (R. Goulet), with indications of the larger works into which the books with the working titles were later incorporated.

\textsuperscript{39} Laks & Most, who do not think that this is the title of the Essay, nevertheless rightly conclude, “si l’on devait le [sc. the Essay] rebapiser, il faudrait sans doute l’intituler περὶ ἀρρωστῶν,” p. xviii, with references to earlier scholars.
Diogenes Laertius “Hesychius”
41. Περὶ ἀρχῆς α’
90. Περὶ φύσεως γ’
91. Φυσικῶν α’

Diogenes 90–91 and “Hesychius” 81–82 are clearly the same titles, despite the slight variations, and it has been usually taken that no. 90 / 81 refers to books ΒΓΔ of the Physics, but no. 91 / 82 remains problematic. If no. 91 / 82 is Physics A, then Diogenes 41, Περὶ ἀρχῆς, cannot be, which would leave the latter unassigned; but also conversely, if Diogenes 41, Περὶ ἀρχῆς, is Physics A, then the title in no. 91 / 82, (Περὶ) φυσικῶν/-ῶν α’, obviously referring to a physical book or books, would be unassigned.

What is of greater relevance to our discussion, though, are the entries Diogenes 41 and “Hesychius” 21, which for the most part have been taken, first, to be identical, and second, to refer both to the same book, Physics A. But neither of these assumptions is probable, let alone certain. In the first place, the “Hesychius” 21 entry is itself problematic: it is two titles rather than a double title, for in the latter case the disjunction consists either of a proper name plus a descriptive title, or two variants of the same descriptive title, whereas Περὶ ἀρχῆς ἢ φύσεως is two titles. In addition, the (Περὶ) φύσεως part of this title is the doublet of “Hesychius” 81 which, according to Ross 1936 and others, refers to Physics B. But if, by this reckoning, Περὶ ἀρχῆς ἢ φύσεως refers to Physics A, we cannot have the Περὶ φύσεως part of the same title Περὶ ἀρχῆς ἢ φύσεως also refer to Physics B. As for the Diogenes 41 title, Περὶ ἀρχῆς, which is also taken to refer to Physics A, Moraux 1951, 83, presented arguments by which it could equally well refer to a book or parts of a book from the Metaphysics.

It is clear that nothing definite can be elicited from this material, and there is no point in prolonging the discussion; Ross himself was quick to admit (1936, 5) that “almost everything in the interpretation of these lists, especially those of Diogenes and Hesychius, is highly conjectural.” The point I would like to make is that, given the transmission of Theophrastus’s Essay among the books of Aristotle’s Metaphysics, and the way in which the Hellenistic catalogue was compiled, the title Περὶ ἀρχῆς in

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40 Moraux 1951, 105; Ross 1936, 5–6.
41 I.e., the title is either like Diogenes Laertius 17, Ἀλέξανδρος ἢ ὑπέρ ἀπόκινων, or, Diogenes Laertius 25, Περὶ τοῦ πάσχειν ἢ πεπονθέναι.
“Hesychius” is as much likely to refer to this Essay as to any book in Aristotle’s Physics or Metaphysics. In other words, there is no evidence whatsoever that would contradict the assumption that the title Περὶ ἀρψκΡΥῶν in “Hesychius” actually refers to Theophrastus’s Essay.

The next point concerns what I have just mentioned about the way in which the Hellenistic catalogue was compiled. Thanks to recent research, most significantly by Primavesi 2007, we are in a better position to evaluate the conflicting and problematic reports about the fate of the libraries of Aristotle and Theophrastus and the transmission of their works. It now seems quite certain that there were two distinct means of transmission, one through the library bequeathed to Neleus, reportedly out of circulation for some time and eventually found again, and the other through copies extant independently in the Peripatos and acquired by the Library in Alexandria, with some works being transmitted in the one, others in the other, and the majority in both ways;42 the disparity between the Hellenistic list of Hermippus and the post-Andronicus list of Ptolemy al-Gharib are sufficient evidence for this. In this context, the Hellenistic catalogue of Hermippus, based on actual copies extant in the Lyceum and acquired by the Library of Alexandria, would be precisely the source to include the title of Theophrastus’s Essay under the name of Aristotle, given its transmission, while the library of Theophrastus himself, bequeathed to Neleus, if it included a copy of the same Essay, would be expected to have it properly attributed to the owner of that library, Theophrastus. Accordingly, the edition of the Essay among the books constituting Aristotle’s Metaphysics—the Roman edition, that is, that formed the basis of Nicolaus’s study of that work—must have used as source a copy that came ultimately from the Lyceum but not from the library bequeathed to Neleus, and the editor, after incorporating the Essay in his edition, would have dropped its original title, just as he had dropped the original titles of the other books of Aristotle’s Metaphysics, as mentioned just above.

The question then needs to be asked, how did Nicolaus of Damascus judge that the author of the Essay was Theophrastus? For if it is taken as established that the copy of the edition in his hands attributed it to Aristotle, but without a title, he could have studied the contents and possibly come to the negative conclusion that it was not by Aristotle,

42 For a brief list of Aristotelian works demonstrably available to philosophers in Hellenistic times outside Neleus’s library see Barnes 1997, 12–16, and his references there.
but what made him assert \textit{positively} that it was by Theophrastus? Theophrastus wrote nothing on metaphysics apart from this Essay, and there was accordingly no body of doctrine by him in comparison with which one could conclude similarity of content and approach. It is therefore very unlikely that it was internal evidence that could have led Nicolaus to identify the real author, and there remains the possibility of external evidence in the form of another copy attributing the Essay to Theophrastus. If, then, Nicolaus had access to an independent manuscript by Theophrastus,\footnote{As suggested by Drossart Lulofs 1969, 28; cf. also Mejer 1998, 23 and note 71.} in all likelihood it descended from the copy in the library bequeathed to Neleus.

(e) \textit{Positive evidence that the original title was Περὶ ἀρΨκΡΥῶν}

The scenario I have sketched in the preceding section (d) is only likely—it cannot be proven; on the other hand, it cannot be disproved either, and this is sufficient to render conclusive the positive evidence suggesting that the original title of the Essay was indeed Περὶ ἀρΨκΡΥῶν. This evidence was first used by V. Rose in 1863 in his \textit{Aristoteles Pseudepigraphus}, p. 183, who came to this conclusion on the basis of the title of the Essay in the Latin translation by Bartholomew of Messina (see below, Chapter 2.4, and Part II.3) and a stray quotation apparently in the Greek gnomological tradition which seems to be based on it. Rose also observed that the title is attested in both Diogenes Laertius and “Hesychius” as one of the works of Aristotle. Rose did not have then the detailed knowledge about the transmission of the metaphysical books of Aristotle, but now that we do, as described above, his conclusion fits the newer findings even better.

Rose’s suggestion did not find favor among classical scholars and historians of ancient philosophy.\footnote{Most students of the Essay paid scant or no attention to it. Jaeger 1932, in his review of Ross and Fobes 1929, expressed doubts about Rose’s suggestion (“das bleibt unsicher, wenn es auch prinzipiell durchaus möglich ist,” p. 290), though he also pointed out the significance of Bartholomew’s Latin translation in this connection (p. 294) and was instrumental in having his student, Kley, edit it. For his part, Kley 1936, 14–15, argued that the scholiast could not have said that Andronicus did not know the Essay if it was included in Andronicus’s edition of the works of Aristotle. But this, first, disregards the fact that the Scholium talks about Andronicus’s list, ἀναγραΨπΡΥς, of \textit{Theophrastus’s} books and not his edition (“Ausgabe”) in which the Essay would have appeared under Aristotle’s name, and second, assumes that the Roman edition of Aristotle’s works was, in fact, by Andronicus, something upon which serious doubt was cast by Barnes} The major objections were two. The
first was stated by Ross in his introduction (p. x) who claimed that the title Περὶ ἀρΨκΡΥῶν, which he ascribed to Hermippus as the probable source of Diogenes Laertius, refers to the first books of Aristotle’s *Physics* and not to Theophrastus. But the invalid nature of this argument by Ross has been discussed above. The second objection, implied by Laks & Most in their edition, is that the evidence in Bartholomew’s Latin translation cannot be taken as coming from an independent source because, Most claimed, Bartholomew used as exemplar the Vienna manuscript of Aristotle (J) which makes no reference to Περὶ ἀρΨκΡΥῶν; the title in the Latin translation, therefore, could not be but the result of a mistake. Far from using the Vienna manuscript, however, Bartholomew based his translation on a manuscript that constitutes a recension (the Messinan) distinct from that (the Constantinopolitan) of all the extant Greek manuscripts (discussed in detail below, Chapter 2.4). The independent transmission of the manuscript used by Bartholomew, therefore, makes it very likely that that manuscript (Λ) did, in fact contain a reference to the title as Ἀριστοτέλους Περὶ ἀρΨκΡΥῶν.

Once the independent nature of the evidence indicating the title of the Essay as Περὶ ἀρΨκΡΥῶν is realized, other, corroborating evidence becomes easily noticed. What appears to have been overlooked in this connection are the references that Theophrastus himself made in the Essay to his title. There is, first of all, the rather conclusive fact that in all of his extant works, and following accepted practice, as mentioned above, he referred to the title in some form in the opening sentence or paragraph; White 2002, 20–22, who documented this, even suggested the obvious (p. 22n40): “either Περὶ ἀρΨκΡΥῶν or Περὶ ἀρΨχῆς would be a reasonable title” for the Essay. But even more telling is the statement by Theophrastus at 6b21 where he said, “here, the investigation is of the first principles” (ἐνθα μέν γάρ τῶν ἀρΨχῶν … ἡ ζήτησις). By the word ἐνθα Theophrastus meant “this here science or discipline we are engaged in,” the discipline that studies the first principles *themselves* (what was later

1997. Kley’s remaining objections are a confused jumble of elements of the transmission discussed above. Reale 1964, 26, dismissed Rose’s thesis in one sentence on the grounds that no scholar has accepted it, thinking that what is stake is not the title but the authorship of the Essay; on the basis of style, he said, the Essay is, “non aristotelico.” Laks & Most disregarded Bartholomew’s translation for the reasons given next in this paragraph, van Raalte did not mention Rose at all, while Henrich 13 mistook Rose for Ross and attributed to Ross the suggestion that the title might be Περὶ ἀρΨχῶν!
to be called metaphysics).⁴⁵ and contrasted it (in the preceding ἐκεῖνας and the following λοιπὰς) with the other disciplines, such as physics, in which the investigation proceeds from the first principles; by so doing he also identified his subject and by extension his title, Περὶ ἀριθμῶν. Further down, at 7b9, he identified the first principles as the subject with which his Essay began (ἐν δὲ τις ἄρχαίς, ὁμοίως δὴ καὶ ὁ πρῶτος λόγος), and thus also referred to his title.

Furthermore, if one keeps the date of composition of the Essay in mind, and that it was written at the time when Aristotle himself was grappling with the problems discussed in it and had composed book Lambda, definitely, and possibly also Alpha Meizon and Beta on the very subject, it becomes apparent how naturally Theophrastus’s Essay fits in their context and continues the discussion initiated in them. The connection of the Essay with Lambda and the references to it are beyond dispute, as already discussed in section 1 of this chapter. But also in Book Alpha Meizon, 1–2, Aristotle struggled with identifying the “nature and purpose” (φύσις and σκοπός, 983a21–23) of the science that studies “the first causes and principles” (981b28–29) and with determining its name (a problem that he would revisit numerous times in the books that eventually constituted the Metaphysics): “the name we are looking for,” he said, “refers to one and the same science,” which, he continued, “must investigate the first principles and causes” (δεῖ γὰρ αὐτὴν [sc. τὴν ἐπιστήμην] τῶν πρῶτων ἄρχων καὶ αἰτίων εἶναι θεωρητικὴν, 982b8–9). The title of Theophrastus’s Essay may easily both derive from or be reflected, if not in this very sentence, then in these and similar considerations by Aristotle. And in the very opening paragraph of the Essay, Theophrastus made reference to the question of the contents of the science sought by Aristotle in A 1–2 and how it relates to the study of nature (see further on the subject the commentary on the first Aporia, below, in Part III). Aristotle continued his search for the sought after science (ἐπιζητομένην ἐπιστήμην, 995a24) in Book Beta and started off his first aporia on a subject which is very close to that treated by Theophrastus. Just as Aristotle asked whether the first causes are to be studied by one or more disciplines (ἐστι δ’ ἀποφίλα πρώτη ... πότερον μιᾶς ἢ πολλῶν ἐπιστημῶν ἰσχύοντα τὰς αἰτίας, 995b4–6), so also Theophrastus set the tone of his entire Essay in his opening sentence by asking what sort of objects are those which can be used to mark the boundaries of this discipline, as

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⁴⁵ All translations without exception render the word as “here,” “ici,” etc., with the same understanding; cf. van Raalte’s comment on the passage.
opposed to physics. Apart from the subject of this aporia, Theophrastus's Essay is by its very style very close to Beta, as I shall next discuss.

On the basis of all the evidence discussed in this section, it appears beyond a reasonable doubt that the title of the Essay was indeed Περὶ ἀρΨκΡΥῶν, and it should be restored to it, while paying homage to the perspicacity of Rose who noticed it a century and a half ago.

3. Nature and Significance of the Work

Long thought of as a fragment of a larger composition, Theophrastus's Essay has eventually been recognized by recent scholarship as an integral and independent work. On the basis of the preceding discussion and the analysis in the commentary, it can be described as a dialectical essay of an aporetic, or rather, diaporetic nature on first principles (περὶ ἀρΨκΡΥῶν). Its explicit purpose, stated in the opening question, is to identify and mark off the subjects which a study of first principles and of the nature of their connection to the rest of the universe must address in order to proceed to a successful resolution (εὐπΨο;Υκρονρεῖν). As such it assumes and operates fully within Aristotelian (and, to the extent that Theophrastus himself contributed to their development, Theophrastean) methods of investigation. The principles of this method are well known and can be summarized in some of Aristotle's familiar statements:

46 Hermann Usener, who first began the systematic study of the Essay in his pioneering article of 1861 entitled, “Zu Theophrasts metaphysischem Bruchstück,” held the text to be fragmentary, dislocated, and lacunose. These views persisted until Ross (1929), in his Introduction, called the former charge into question (p. x) and thoroughly disproved the other two (pp. xix–xxiv). More recently Laks & Most (pp. x–xvii and 89n3) gave a sustained defense of the unity of the Essay.

47 To avoid misunderstanding, the terms “dialectical,” “aporia,” and “diaporia” are to be understood in their strict Aristotelian sense as described in what immediately follows. See also above, note 14.

48 See the collection of articles in S. Mansion 1961, and the very useful and synthetic overview of the methods of Aristotle by Berti 1989. The concept of aporia has been also much discussed; fundamental remains the article by Aubenque in Mansion 1961, while the study by Cleary 1993 provides a detailed analysis of how Aristotle actually proceeded in a diaporia, or worked through an aporia. There is a recent and exhaustive analysis of its use in Greek philosophy up to and including Aristotle in Motte and Rutten 2001.

49 By this I do not mean to imply that these particular texts of Aristotle had necessarily been already composed at the time when Theophrastus was writing, and that he was following their letter, but that Theophrastus was operating on the basis of this
In the *Topics* Aristotle establishes the usefulness of dialectic for the study of the philosophical sciences:

[Dialectic] is useful for the study of the philosophical sciences because if we have the ability to work initially through aporiae (διαπορήσαοι) on either side we shall more easily discern the true as well as the false in each class [of things investigated]. It has a further use in connection with the first things (πρῶτα) relating to each individual science. For, it being impossible to make any statement about them at all on the basis of the first principles proper to the particular science in hand—since these principles are prior to all things—it is by means of what is acceptable to the many or the wise (ἐνδοξά) about each that it is necessary to discuss them.50

Aristotle here establishes the basics of his methodology. Philosophical analyses proceeds from and on the basis of primary axiomatic truths (τὰ πρῶτα) or first principles (ἀρχαι). In the investigation of the first principles themselves, however, since there is nothing prior to them with which to investigate them, recourse must be had to the views held by the many or the wise (ἐνδοξά). The way in which these ἐνδοξά are investigated then consists of a preliminary working through the aporiae they raise, a process which Aristotle consistently calls διαπορεῖν.51 This sifting, so to speak, of the aporiae results in separating the obviously false from the seemingly true, upon which then proper analysis can proceed. Aristotle discusses the process of διαπορεῖν and provides a number of examples in Book B of the *Metaphysics*:

We must, with a view to the science which we are seeking, first recount the things about which we should first raise aporiae (ἀπορηθῶμεν). These include both the other opinions that some have held about them, and any points besides these that happen to have been overlooked. For those who wish to have a successful resolution of their aporiae (ἐυπορηθῶμεν),

understanding he and Aristotle had about method. The statements quoted here, which may or may not have been written at the time Theophrastus was writing the Essay, reflect best this understanding.

50 *Topics* 1013.4–b2; translation adapted from that by Smith 1997, 2–3. The last sentence is structured around μέν … δέ, and its two parts are integrally connected. The contrast that Aristotle is drawing through this sentence structure, and which reflects a contrast in methods, is between two prepositions, ἐκ μέν … διὰ δέ … : If, on the one hand, the method of analysis that starts from (ἐκ) the first principles in each particular science is inoperative, as in this case (because we are investigating the first principles themselves and there is nothing prior to them with which to investigate them), then on the other hand we have to have recourse to working by means of (διὰ) views accepted by the many or the wise. This structure is overlooked in the available English translations.

51 See the discussion of this and related terms in the commentary on 12b4 in Part III.
it is advantageous first to work through them (διαπορησαι) well; for the subsequent successful resolution of aporiae (ευπορία) implies the solution of those that were previously raised (Ἀπορουμένων). ... Therefore one should have surveyed all the difficulties beforehand, both for the reasons we have stated and because people who inquire without first working through the aporiae (διαπορησαι) are like those who do not know where they have to go—besides, such a man does not know whether he has found what he was looking for or not, for to him the end is not clear, while it is clear to him who did raise aporiae at the beginning (τῷ προηπορικότατοι).52

The same approach is re-stated more forcefully and succinctly by Aristotle in a later work, De anima (403b20–24):

In our enquiry concerning soul, at the same time as we proceed by working in a preliminary way through aporiae (διαπορησαιτας) that need to be brought to a successful resolution (ευπορεῖν), it is necessary also to include the views of as many predecessors as expressed themselves on the subject, in order that we may adopt (απολαβείτων) what was stated well and, in case something was not, guard against it.

Aristotle here expands on his understanding of διαπορεῖν. It involves raising the aporiae that can be detected in an examination of what others and one's predecessors have said on a given subject and working through them in a preliminary way, and performing the same task on all other sorts of questions that may be raised. Only this ensures a successful resolution of the aporiae, what Aristotle calls εὐπορία.

The starting points of διαπορεῖν are thus what is acceptable to the many and the wise (ἕνδοξα), or what others or what predecessors have said on a subject, or any other view that may have been overlooked—in short, everything that Aristotle called the phenomena, or “appearances” (τὰ φαινόμενα).53 In the Nicomachean Ethics he makes the following statement on method before entering on a discussion of incontinence:

We must, as in all other cases, set down the phenomena (τιθέντας τὰ φαινόμενα) and, after first working out the aporiae (διαπορήσατας), go on to prove, if possible, the truth of all that is acceptable to the many or the wise about these affections or, failing this, of the greater number and the most authoritative.54

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52 Met. B 1, 995a24−29, a33−b2; translation adapted from that of Ross, CWA 1574−1575.
53 As analyzed in a fundamental article by Owen 1961 and further discussed in detail by Cleary 1994.
54 NE VII 1, 1145b2−6; adapted from the translation by Ross/Urmson, CWA 1809.
The phenomena is a broad category in Aristotle and the things to which it refers depend on the science for which they are relevant and which is under investigation. For the biological sciences and astronomy the reference is to empirical observations:

It falls to experience to deliver the principles of any subject. In astronomy, for instance, it was astronomical experience that delivered the principles of astronomical science, for it was only when the phenomena (φαινόμενα) were adequately apprehended (ληφθέντων) that the astronomical demonstrations were discovered. And the same is true of any art or science whatever.

The methodology encapsulated in these few citations is thus the following. For the philosophical investigation of any subject, and especially for the investigation of the principles of any subject, one starts from what Aristotle broadly calls the phenomena. Depending on the nature of the subject matter treated, these vary all the way from empirical observations to views held by the many or the wise, to the opinions of philosophers of preceding generations, and in short to any other view that commands respect. The task at hand is to identify and apprehend these phenomena (πράγματα καὶ λαμβάνειν τὰ φαινόμενα). Before proceeding with the actual philosophical analysis of any of the subjects for which the phenomena have been collected, and in order to define the goal which one wishes to reach and winnow the true views and opinions from the false, one has to identify and raise the specific problems that are associated with the particular phenomena in each case—the aporiae—and then work through the aporiae in a preliminary way (διαπορέειν). This lends clarity to the subject to be investigated and ensures the eventual successful resolution of the aporiae and the original problem (εὐπορία).

Theophrastus’s Essay is an application, indeed a performance, of these principles or methodological guidelines. His subject being the first things (τὰ πρῶτα), it is clear that there can be no other prior principles from which to start the discussion, so recourse has to be had to the phenomena, as expressly stated by him in his Physics (fr. 143 FHS&G) and indicated in Diaporia 20c1 in the Essay. In this case, these consist of, first, observation of nature and the constitution of the universe (11b26), and second, the existing views and theories by the many and the wise—hence

55 See Cleary’s 1994 analysis of the concept of phenomena in Aristotle’s methodology; cf. 90113, “the meaning of ‘phenomena’ is always relative to the subject matter; e.g., physical vs. moral phenomena.”

56 APr. I 30, 46a17–22; translation adapted from that of Owen 1961, 84.
Theophrastus’s constant reference to earlier and contemporary thinkers. These references do not constitute doxography (except accidentally) but serve the purposes of dialectic investigation. The first step is to be clear about what the knowledge that is sought will consist of, or, as Theophrastus says, state precisely what the boundaries of knowing are (9α25–26). This is done by identifying and then taking hold of, or apprehending, the objective boundaries which define each thing and discriminating it from the rest; as Aristotle spoke about the necessity of apprehending the phenomena, so Theophrastus here talks of apprehending the boundaries (λαμψάνειν ὁροὺς) of the things investigated (9β20, 11α2, 11β25). This helps setting up the aporiae which one will then work through (διαπορέων) as a prelude to the full investigation. Theophrastus’s Essay is precisely the working through of the aporiae which he brings up, one after the other, regarding the first things. The Neoplatonist scholiast accurately perceived this nature of the Essay and called it, appropriately, προ-διαφορία, as discussed above.

57 Much work has been done recently on doxographies, mainly by J. Mansfeld and H. Baltussen, which has shed precious light on their nature and function. In the case of Theophrastus, a pivotal author in the development of the genre, Baltussen points on the one hand to the significance of Aristotle’s Topics as the starting point for Theophrastus’s collection of doxai (Baltussen 2002, 56), and on the other to the crucial aspect of Theophrastus’s philosophical production of “creating overviews on many topics (which) were exploited as useful reference books in later times” (Baltussen 2003, 61).

58 These are the only three passages in the Essay in which the term ὁροὺς occurs. See the discussion of λαμψάνειν ὁροὺς used in this context by Repici 1990, 187–196. As Repici rightly points out, these boundaries are not subjective criteria to be posited by individuals, but the objective facts on the ground, the way in which reality breaks itself into well defined areas and hence enables humans to define their extent. On this understanding, it appears counterintuitive to translate the term ὁροὺς as “standard,” as Lennox 2001, 227, does (followed by Johnson 2005, 36), and then explain that “standards” in this case is to be understood as “principles objectively based in the way the world is,” because all standards—of weight, measurement, orthography, ethical behavior, literary excellence, etc.—are man-made and imply subjective epistemological categories. Theophrastus rather points to objective ontological categories in all being, very much along the lines, it seems, intended by Aristotle’s use of the term ὁροὺς in PA 639α13, to which Lennox and Johnson refer. In that passage Aristotle is not talking about “standards” (Lennox, Johnson), or “canons” (Ogle in CWA), or “règles” (Louis), posited by humans which one adopts in the study of nature, but about different sets of objective boundaries which break reality into different categories and to which we refer in our study, as his immediately following examples make clear: boundaries established by objective or natural sets like substances (οὐσίαι, 639α16), genera (γένη a20), affections (πάθη, a22), and conditions (διαθέσεις, a22). Talking about these subjects indiscriminately, Aristotle goes on to say, is unclear (ἀδύνατον) and fails to respect the proper distinctions among these sets of boundaries (ἀδιάφορον, with the term ὁροῖ included in the word, a22).

59 Some scholars have tended to see this characterization as based on what the scho-
This evaluation of the nature and purpose of the Essay thus has ancient authority as well as contemporary support, and I believe also corresponds most closely to its contents and structure; it also has implications for its date of composition, as discussed in section 1 above. On the other hand, given its aporetic, and hence for the most part doctrinally inconclusive impact, it has also given rise to varied interpretations, which remind one of the Indian story of the blind men and the elephant, each of whom described the animal according to the body part he felt. Thus, to give but a few examples, Reale 1964, 11, believed that the Essay expresses a crisis in the earliest Peripatos that resulted in the “liquidation of Aristotle’s first philosophy”; Battegazzore 1989 felt that it promoted an empiricist approach (cf. Ross, p. xxv, “Theophrastus is first and foremost a man of science”) that induced Aristotle to distance himself from Plato; Krämer 1971, 12, also with reference to the work of Weische, saw skeptical elements in it; van Raalte 1988, 189, argued that it testifies to Theophrastus’s “organicistic” view of “the cosmos as an organic whole”; and Festugière 365–366 even claimed to have discerned in it the outlines of a Christian theology! These views are all welcome, and even though I do not believe that they constitute the main purpose of the Essay, they all point to yet further aspects of it. In a way, they attest to its richness and evocative nature, an indication of how much Theophrastus actually succeeded with his aporiae in making us think seriously about the questions he raises.

Seen from this wider perspective, Theophrastus’s Essay is a window to classical Greek philosophy, offering us a rare view of it in the making. It reflects the very lively discussions in the early Academy which provide the very matrix from which it draws, and it looks forward to—and indeed liast must have inferred from the last paragraph of the Essay (Theiler 1958, 102 / 292; Burnikel 126; Laks & Most p. xvi; van Raalte 7–8; Hecquet-Devienne 2004, 179n26). But given the accuracy of the characterization and the sophisticated understanding of Aristotelian dialectic method it betrays, together with the opposite use of the technical term (προ)διάπορος, as just described, these views can hardly be maintained.

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60 Gaiser 1985, 56, described the Essay as “ein Diskussionsbeitrag zu den ungelösten Schwierigkeiten der Prinzipienlehre des Aristoteles. Theophrast hat wohl auch hier nicht so sehr die aristotelischen Theorien nachträglich in Zweifel gezogen, sondern eher versucht, kritische Anregungen während der Ausarbeitung der aristotelischen Konzeptionen zu geben.” Cf. also Laks & Most, p. xxiii, “la plus grande partie des questions posées par Théophraste ont beaucoup plus à voir avec la gestation d’un programme et d’une méthodologie de recherche qu’avec la critique d’une doctrine constituée.”

61 In addition to these, overall assessments of the Essay can be read in Usener 1861, Zeller, Theiler 1958, Krämer 1973, Botter 1999, Rudolph 2000, Dillon 2002, Berti 2002; for more details see the opening paragraphs of the Commentary in Part III.
in a real way influences—developments both in Aristotle's own later philosophy and the emerging Stoic and Epicurean thought. It is explicitly concerned with the question of first principles, thus touching upon possibly the most significant question addressed by ancient philosophy, but it is also programmatically committed to asking that question from the perspective of the contact (συναψη) and influence which these principles have with regard to the rest of the universe, especially sensible reality, thus situating itself at the very crossroads of the most basic issues raised by ancient—indeed all—philosophy: matter and form, idealism and materialism, monism and dualism. Methodologically, it is concerned not only with theoretical questions of epistemology and with brazenly asking the most fundamental question, “what is knowledge?” (9a23 ff.), but it also constantly uses in the discussion of each problem analytical and epistemological procedures and methods established in the early Academy and later in the Lyceum, procedures such as knowledge by analogy, similarity, and the like. Its non-dogmatic treatment of the issues truly brings out the crux of the matter in each instance and invites serious and sustained study, let alone commentary. Accordingly a volume could be written for virtually every paragraph, and indeed it has been extensively used in the scholarly literature in all sorts of publications.

4. Style, Structure, and Contents of the Text

Very much like Aristotle's Metaphysics Beta, as almost all modern scholars have noted since Brandis 1860, 340, Theophrastus's Essay On First Principles poses a number of aporiae and then works through them in a series of diaporie, as discussed in the previous section. The aporiae themselves are related, as one follows the other in a thematic sequence with few fresh starts—essentially, the two last segmentsof the Essay on epistemology and teleology. The writing is continuous, with almost no natural breaks, something to be expected in so short a piece. The style, given the nature of the work just discussed and the internal audience of the philosophers (in Assos?) to which it was addressed, is elliptical, exploiting to the fullest the capacities of classical Greek for compression of meaning in elaborate periods.

The problem is accordingly how to break the text into meaningful segments for editing and presentation. Usener, who prepared the critical edition that has been normative to this day, thought that the work is a fragment, that it contains a number of lacunae, and that it is disjointed;
as a result, he divided the text into “sections” and “chapters” which not only do not fit adequately the contents but disregard the syntax of the Greek as well. He both ran-in paragraphs that should be kept separate (at 5a13, 7b9, 8b9, 11b23). All subsequent editors and translators of the Essay followed suit (at least in the second offense if not always in the first), which may have created some of the problems of interpretation. Laks & Most discarded Usener’s division into nine “chapters” and introduced their own into five, based on their scrupulous analysis of the text (along “Wittgensteinian” lines, as aptly remarked by Huby 1995), but they kept Usener’s division into 34 “sections.” Manifestly Usener’s numbering, which is arbitrary and unhelpful, cannot be maintained as the actual division of the text into paragraphs, though it has to be provided in the margins, along with his page, column, and line numbers, because all secondary literature since the first publication of his edition refers to these.

In keeping with the dialectical character of his Essay, Theophrastus is careful to identify explicitly the aporiae, and this gives the best possible clue to the building blocks of the work as well as to the natural breaks into paragraphs. He poses twenty-five aporiae in all. These he introduces in one of three ways: either he expressly identifies them as an aporia by calling it such or using a related word that clearly indicates that this is a problem that needs to be studied, or he poses the aporia by asking a direct question, or finally he poses the aporia in an indirect question. Frequently he uses two ways simultaneously to introduce or identify the same aporia.

Following Theophrastus’s lead, I have adopted as paragraphs his own breaks of the text into the several aporiae, reunited sentences that were split into two by Usener, and disregarded accordingly any artificial division into “chapters,” insofar as the discussion is continuous. I assigned an integer number to each separate aporia, but in one particularly complicated case (Apologia 20), where Theophrastus re-formulates the aporia in

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62 § 13 ἀξιόω ἄποδιδόναι; §§ 11, 12, 14, 16 ἄποροienda; §§ 8, 201, 23 ἄπορον; § 15, 20b, 22 ἄφορομόνος; §§ 9, 10, 21, 22, 23 (ἐπι)ζητέω; §§ 6, 7, 15, 17 ζητεῖ (κτλ.) λόγον, σκέψιν; § 24 ληπτέον ὅροις, διστασιμός.

63 § 1 ποίος; § 3 ἐν ποίος; § 17 πότερον ... ἦ; §§ 1, 17, 19 πῶς, §§ 3, 5, 22, 1 τίς; § 22 (passim) τίνος ἐνεκα etc.

64 §§ 9, 15 διὰ τί; § 15, 2011 μέχρι πόσου; § 6, 14 ποίος; § 20α πόσιν, ποσακάς; §§ 2, 4, 9, 10, 11, 14 πότερον ... ἦ; §§ 8, 10, 14, 25 πῶς; §§ 6, 18, 20b, 2011 τίς, τίνως; § 20c2, 25 ἐν τίνι.
three successive stages, I have marked them with the letters a, b, c. Most of
the aporiae are followed by a brief discussion (diaporia), which needed
no special numbering; in some cases, though, the discussion extended
into two or three diaporiae requiring their own paragraphs, and these
have been marked with a decimal number after that of the main apo-
ria. The “chapter” and “section” numbers of Usener are given in the right
margin, the page and line numbers in the proximate left margin. My own
numbering of the aporiae is inserted in bold into the text.

The aporetic character of the work has long been recognized. Ross
(p. xix) called it “aporematic throughout,” and Reale 1964 in particular
paid special attention to this characteristic of the work (cf. Ellis 1988).
He defended vigorously the originality and philosophical significance of
the aporetic method, rightly insisting that raising the aporiae without
resolving them is not “a mere game of hypotheses” (“un mero gioco di
ipotesi,” p. 17). And in his analysis of the text, he even gave a list of all the
aporiae, twenty in all by his reckoning (pp. 88–90). In the main our lists
coincide to a large degree, and where they differ it is primarily because
Reale did not follow closely Theophrastus’s separation of the aporiae.
But more significantly, first, Reale did not see the aporiae as forming the
structure of the Essay, at least insofar as he did not shape his translation
accordingly, but followed Usener’s arbitrary divisions, and second, he
did not make the formulation of the aporiae specific enough to express
the variations in Theophrastus’s questions.65 Laks & Most (p. xxiv n. 24)
criticized Reale’s listing of the aporiae not for the shortcomings I just
mentioned but rather for reducing, as they colorfully put it, “l’opuscolo
à une série rhapsodique d’apories.” For their part, though, they went to
the other extreme by introducing their own five divisions which are not
indicated by Theophrastus and are by no means obvious, and they tried
to claim that the Essay is well constructed beyond, it seems, what the
evidence will allow. Again, as Huby 1995 put it in her review, “they at
least succeed in showing that the work is less episodic than might at first
appear.”

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65 Thus, for example, as the final aporia of the Essay he formulates a general question
about teleology (“quali sono i limiti del finalismo e della possibilità della spiegazione
teleologica della realtà?”), covering the text 10a22–12a2. But in this section there are
actually four aporiae mentioned by Theophrastus (22–25 according to my numbering),
including the one about spontaneous causation (23) and the very significant concept
for the Essay of apprehending the boundaries in nature of the extent of teleological
explanation (24).
The two views of the structure of the Essay are not mutually exclusive. That it is explicitly structured in terms of the aporiae cannot be seriously doubted; its very nature, as discussed in the previous section, imposes this structure. On the other hand, it is also clear that these aporiae are not about any subject whatsoever but about first principles, whence the thematic unity characterizing the work which operates as a “leitmotif” and runs like a “red thread” through its entirety,\(^{66}\) namely, understanding the connection between the intelligible and sensible worlds. Accordingly what should form the focus of attention is the aporiae themselves which follow each other in sequence, establishing the major subjects within the discussion of the first principles.

Seen from this perspective, the major subjects around which the aporiae are sequentially clustered, as one leads into the other, appear to be three. The first and main subject, occupying more than half of the Essay, is, understandably, the study, nature, and properties of the first principles (aporiae 1–17, 25). This is followed by two extensive appendices, one might say, investigating problems relating to the main subject, one on epistemology and the methods of knowing everything from the first principles down to inanimate beings—and hence, presumably, the nature of the connection between intelligibles and sensibles—(aporiae 18–21), and another on teleology, testing one view of the application of a first principle to the universe (aporiae 22–24).\(^ {67}\) In outline, the contents are as follows (the numbers refer to the aporiae):

A. The first principles: their study, nature, and properties

1–2, 25 Marking the boundaries of the study of first principles, as distinct from the objects of nature, to which, however, they are to be related. The concluding aporia presents the two approaches as one, the study of the universe investigating the ontological categories (intelligibles, mathematicals, sensibles) into which all beings belong and their interrelations.

3–5 The nature, number, identity, and causality of the first principles.

\(^{66}\) Theiler 1958, 102–104/292–294, and Laks & Most p. xxv, respectively.

\(^{67}\) Theiler 1958 (“Anhang,” 102–105/292–297) identified and discussed three “leitmotifs” in the Essay, which generally correspond to the three main subjects discussed here, though he neither localized them in particular parts of the text nor related them to specific aporiae. For his part, Brandis 1860, 340, had already seen the Essay as breaking into two major sections, conflating what I present here as the two appendices into one part on epistemological principles and their application, which may be a different way of saying the same thing.
6–8 The previous aporia on the causality of the first principles brings up the question of the motion of the celestial spheres, first part.

9–10 The previous aporia on the celestial spheres brings up the question of how they relate to the sublunar world.

11–12 After the interlude on the sublunar world, the discussion on the motion of the celestial spheres is continued, second part.

13 Review of the views of the wise (endoxa) on the relation of the first principles to the rest of the universe.

14–17 Properties of the first principles: whether they are indeterminate, determinate, or both (and if the latter, how to understand the division of beings into matter and form), and how to understand their property of being at rest.

B. Epistemology: knowledge and knowing all reality

18–21 The observation that all reality consists of contraries brings up the question of knowledge in general insofar as an understanding of contraries—starting from the major opposition between intelligibles and sensibles, whose connection to each other is the main subject of the Essay, to the fact that nature itself consists of differences and similarities—leads to knowledge.\(^6\) After establishing the principle that each thing has its proper way of being known, the knowledge of the first principles is said to be through a method other than that used in natural science.

C. Teleology: Testing one view of the application of a first principle to the universe

22–24 The principle that everything has a final cause (is for the sake of something) and that nature does nothing in vain is tested by an assessment of its indiscriminate application and a brief review of alternative views.

As for the specific contents of the aporiae, each section in the commentary in Part III begins with a detailed paraphrase intended to bring out the particular issues which Theophrastus is addressing and which, given the elliptical nature of his writing, need to be spelled out for a contemporary audience. Each aporia can be accordingly judged on its own terms. Some aporiae Theophrastus simply mentions but does not discuss (e.g., §7 on the number of spheres mentioned in Aristotle’s *Metaphysics* Lambda), others he discusses in detail and with syllogistic arguments (e.g. §24.1 on the one and the indefinite dyad), still others he lets his opinion about

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\(^6\) Cf. the discussion of the third leitmotif in the Essay by Theiler 1958, 104–105 / 296.
them indirectly be known (e.g., § 14 on the composition of the first principles, where he lets his preference for the third alternative be known by not raising any objections against it), and for yet still others he simply asserts his preference without argument (e.g., § 2 on the connection between intelligibles and sensibles), etc. 69

The advantage of perceiving this aporetic structure of the Essay and studying each aporia on its own merit, albeit against the background of the broader theme and the “red thread” running through it, is that we can better perceive the significance of each detail for Theophrastus’s immediate milieu and thus better gauge its historical moment. This is philosophy in the making, actual philosophical discussions taking place among history’s premier philosophers, and the Essay gives us front row seats for that specific day. The Essay bears no explicit date, but the live issues themselves, and the determination of what argument was important for whom and when, do. As discussed in the first section of this chapter, that point in time was in all likelihood the Academic circle as reconstituted in Assos, with Speusippus in Athens as the head of the Academy. 70

69 For details on the form of argumentation in all aporiae see the commentary. 70 The following publication appeared too late to be utilized in the present study: M. Crubellier and A. Laks, eds, Aristotle: Metaphysics Beta. Symposium Aristotelicum, Oxford: Oxford University Press, 2009.

The detailed analysis of the Aristotelian aporiae amplifies my discussion of the subject above (in section 3). Furthermore, the two editors point out (p. 19) the similar aporetic structure of Aristotle’s Metaphysics Beta and Theophrastus’s Essay, on the basis of which both they and I, independently of each other, structure our respective commentaries by the underlying aporiae. S. Menn’s observation (p. 214n3) that Theophrastus uses ἀρξί and πρῶτον “equivalently” provides further evidence for my argument, following White 2002 (pp. 30–31 above), in favor of the original title of this Essay as Περὶ ἀρξίων.
CHAPTER TWO

THE GREEK TEXT: MANUSCRIPTS, TRANSLATIONS, STELLA CODICUM

1. The Greek Manuscripts

The text of Theophrastus’s *On First Principles* survives in eighteen Greek manuscripts dating from the ninth to the sixteenth centuries, a medieval Arabic translation from the second half of the ninth, a medieval Latin translation from the middle of the thirteenth, two further Latin translations from the Renaissance, and an Aldine *editio princeps* from 1497 which, for the purposes of the establishment of the text, has the value of a manuscript (Burnikel 29–30). It is a rich and diverse tradition, which has engaged the attention of scholars for some time, as a result of which not only the main lines but also the details of transmission have become relatively clear. In particular after the fundamental researches of Burnikel (1974) on the manuscripts of the Essay and his establishment of a stemma codicum, and the equally fundamental edition by Laks & Most (1993) which built upon and further corroborated Burnikel’s results,¹ it is now possible to proceed more expeditiously and to concentrate on all the essential evidence for the establishment of the text, eliminating what is redundant, derivative, and misunderstood.

Briefly, the situation with the Greek manuscript tradition of the Essay is as follows. It divides into two major families, one of which is represented by the single manuscript P (Paris. gr. 1853), and the other by two sub-families: manuscripts JCL (Vindobonensis phil. gr. 100, Venet. Marcianus gr. Z 211, Florent. Laurentianus 28,45) and the manuscripts in sub-family Σ (as called by Burnikel, pp. XXXVIII–XXXIX), which includes fourteen manuscripts and the Aldine edition of 1497. These manuscripts are described and discussed extensively by Fobes (pp. xxvi–xxxiii), Burnikel, and Laks & Most (pp. xl–lxxx) in a way that renders

¹ The approach and conclusions of Burnikel in this study were also favorably reviewed by N.G. Wilson in *Gnomon* 51 (1979) 59–60.
repetition nugatory; the interested reader is referred to these works. Here only the manuscripts and translations immediately relevant to the establishment of the text of the Essay in this edition will be discussed.

**P Paris. gr. 1853**

One of the two most ancient (tenth century) and reliable manuscripts containing the works of Aristotle (manuscript E of the Aristotelian treatises), the Parisinus has been repeatedly studied and analyzed in the literature, most recently by Hecquet-Devienne 2000 and 2004. It “is the result of a strong ‘editorial’ project . . . carried out by three scribes capable of correcting transliteration errors and other types of copying errors. It is the result of a collation of models [i.e., exemplars], which were themselves carefully executed” (Hecquet-Devienne 2004, 172). It contains both the *Metaphysics* of Aristotle and the Essay by Theophrastus, in that order, and at the end of the Essay it has the Scholium about its authorship and nature (12a3–12b5) discussed above in Chapter 1.2. The fact that other scholia of this nature in the same manuscript transmit information also from the commentary on Aristotle’s *Metaphysics* by Asclepius, the student of Ammonius (fl. early sixth century), and that these scholia must have been present in at least one of the exemplars from which P was copied and with which it was collated, constitutes another indication among others that will be discussed later, that the text of Theophrastus’s Essay in this manuscript ultimately goes back to a Neoplatonic archetype from the period of Asclepius. This information accords well with the findings resulting from a study of the readings in P of the Essay: P has by far the largest number of correct readings in common with Ψ, the Greek exemplar of the Arabic translation, which itself also ultimately derives from the same Neoplatonic archetype but from a line independent from that of P (see the list of these readings below in this chapter, section 3). This indicates the reliability of the text in P vis à vis that in the other extant Greek manuscripts. However, P was copied from (a) minuscule manuscript(s) (e.g., at 11b5 ἀνευ, corrected as such by the scribe, was written originally ἄν ἐν) ultimately deriving from the same transliteration from uncials to minuscule writing as manuscript J.²

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² For a discussion and the evidence see Irigoin 1997, 183–187.
Sub-family JCL

J Vindob. phil. gr. 100, the famous Viennese Aristotle, also contains Theophrastus’s Essay together with Aristotle’s Metaphysics, but in this manuscript the Essay precedes the Metaphysics and does not contain the Scholium at the end. It is our earliest witness to the text in the Greek tradition, and is completely independent from P, having no common errors with it. Burnikel 119 records only two such, a spelling error of ἐνμόρφους at 7a6, which has little evidentiary value, and ἕχουσαι at 10b22, which is almost certainly not an error but the correct text (see the commentary on that passage). J itself was copied from a minuscule manuscript, as it appears from its error at

6b12 δόξειν ἄν P Ψ CL A: δόξει ἐρῶν J

as noted by Fobes (p. xxvi). This variant also indicates that C and L, which have the correct reading, were not copied from J but from a common ancestor, independently of each other. C (Venet. Marcianus gr. Z 211) and L (Florent. Laurentianus 28,45) exhibit numerous errors of transcription due mostly to misread abbreviations, of omission, and of commission in editorial attempts. In particular the Florentine manuscript (L) contains an inordinate number of errors which would indicate a lengthy tradition of copying from the common ancestor it has with C (Burnikel 113).

Although CL do derive ultimately from a common ancestor with J, they nevertheless have been so corrupted in the process of transmission that they no longer carry any correct readings, independently of J, which are not due to conjectural emendations. This can be shown in the following table of all readings in CL that are not present in either of the two independent manuscripts, P and J, and their correctors. To complete the documentation, the table also contains the readings of the other two independent manuscripts, Ψ and Λ, as they become evident from the Arabic and Latin translations respectively (for which see sections 2 and 4 below). The readings adopted in the text as correct are always listed first.

4a6 ταύτα Λ (eadem) C2 Tiph. Steph.: ταυτα P, ταυτα J CL: τα αὐτα A
: Ψ om. in lac.] The correct reading in C (ταυτα) does not come from an independent source but is a correction by a second hand. But the evidence of C here is not needed as the correct reading is found in Λ. The Arabic translation is missing the first page of the text where this passage occurs.

5b8 κοιεῖτων PJ Ψ: κοιεῖτων Λ Α, κοιεῖτων C] Here the PJ and Ψ reading is the correct one, even if only for stemmatic reasons (see the
stemma codicum in section 6 below), though Burnikel 121 suggests that L A should be preferred (see the commentary); but even if that were so, ξοείττων in L A would still not be more that an “obvious” conjectural emendation.

10a4 ἥ μερον CL et Spengel, sed corruptelam susp. ego : ἦ μερον PJ, ἦ μερον A : (τῶν εἰς) ἦμενων ut vid. Ar. (allatī quīnā), an etiam Ψ? : Lat. om. in lac.] It is almost certain the reading ἦ μερον is corrupt; the wrong breathing in PJ and the nonsensical reading in A of the Σ sub-family (“tame”?) suggest a deeper problem than the one for which the too obvious scribal correction in CL would provide a solution. It is not impossible that some form of εἰρημένων, the reading in the Arabic translation, may underlie the corrupt form. In any case, CL do not offer an independent reading but a conjectural correction of the reading in the paradox as represented by PJ.

10a12 κινεῖται CL B : κινήται PJ Ψ A [Λ] This is an instance of a correction necessary for the sentence to become complete; a verb in the indicative is needed to provide an apodosis, which otherwise would be lacking, in the temporal clause. It is not evidence of an independent source of CL (and B, which belongs to the Σ sub-family). 10b22 ἔγινον ΠJ Ψ A : ἔγινο CL A] ἔγινο is almost certainly the correct reading; see the commentary. The presence of ἔγινο cannot be explained other than as a conjecture intended to restore the broken syntax of the sentence.

This evidence indicates that all that CL contribute to the text is the conjecture emending to the indicative at 10a12; the dubious separation of the two words at 10a4 is an attempt to correct the probably corrupt passage. One may safely conclude that CL do not have any independent and original readings beyond what is to be found in PJ and Ψ and Λ. As a result, they contribute no independent readings for the establishment of the text and hence their evidence need not be taken in the main apparatus except, for the purposes of full documentation, in problematic passages. Their readings are, however, fully registered in the supplementary apparatus.

Sub-family Σ

According to Burnikel’s researches (66), further corroborated by Laks and Most, this large sub-family of manuscripts derives from a single late thirteenth century manuscript,

A Vaticanus gr. 1302. It belongs to the same family as JCL, but since it and those that directly derive from it cannot be subsumed under any of the three, JCL, they form their own sub-family (Burnikel 121).
For a listing of the other manuscripts in this sub-family see the Sigla, and for a description see Burnikel and Laks & Most. Manuscript A is distinctive through a number of unique characteristics. It is the oldest extant manuscript that contains the Essay by Theophratus together with eight other of his opuscula and independently of Aristotle’s other works and especially the *Metaphysics*. It also contains the Scholium (12a3–12b5) about the history of the text. Its quality as witness to the text, however, is marred by numerous peculiar mistakes. These alterations to the text are due both to errors and to a substantial revision of the text at some point in the forebears of A (Burnikel 121). In addition, the corrections that have been effected on the manuscript itself by at least two hands appear to be all based on conjecture rather than on readings from other manuscripts, and hence there is no question of contamination (Burnikel 69). Because of these shortcomings, both Ross and Fobes as well as Jaeger 1932 in his review of Ross & Fobes showed little appreciation for the manuscript. Their verdict is basically correct. As Burnikel summarizes it (123), A has no original and independent readings against the consensus of P and J. In the entire text, manuscript A and any of the other manuscripts in sub-family Σ have a reading that is not carried by P and J and their correctors only in the following passages (as in the preceding table, the readings of Ψ and Λ are also included, and in the entries the reading adopted as correct in the text is listed first):

423 αὐτῶν Ψ Λ O : αὐτῶν P : αὐτῶν JCL A] αὐτῶν is a correction by the learned scribe of manuscript O (Ottobonianus gr. 153) of the sub-family Σ. Theodore of Gaza. His conjecture, however, is not needed for the establishment of the text since the original reading is independently provided in Ψ and Λ.

429 ἔχον Ψ Λ C : ἔχοσαν Λ A] ἔχοσας is the lectio difficilior and is to be retained (though Burnikel 121 argues for the singular form); see the commentary. The unnecessary “correction” to the singular was independently made both by Λ and in modern times, by Usener.

4218 πιστικωτέρως Ψ Λ CL A : πειστικωτέρως D] The difference here is a matter of spelling: there is no doubt that the paradosis had the spelling with iota only, and that the epsilon iota was added conjecturally by the knowledgeable scribe of manuscript D (Ambrosianus P 80 sup.), for D was ultimately copied from A which has πιστικωτέρως. I believe that the form with the iota only is correct for the reasons I discuss in the commentary.

528 κρείττον Ψ : κρεῖττον Λ A, κρεῖττον C] The neuter form in Ψ is correct. This was discussed above, under the sub-family JCL.
Whether there is crasis or elision here, and if the former, whether a coronis is to be used to write it, are all matters of orthography and editorial preferences, whose conventions changed over the centuries; this has no bearing on the question of independent readings in Σ. I prefer to adhere to the oldest recoverable paradosis, τὰ ἄλλα.

Here the scribe of manuscript D corrected the primitive error by haplography in the entire paradosis as it appeared in his source, manuscript Λ (ἐνέργειαν ἐν τιμεταλλακτέΡΥκρονν). The scribe of manuscript Ρ corrected the primitive error by haplography in the entire paradosis as it appeared in his source, manuscript Ω (μεταλλακτέΨκρονι). HerescribeofmanuscriptDcorrectedtheprimitiveerrorbyhaplographyinthe entireparadosisasitappearedinhissource,manuscriptA(ἐνέργειαν ἐν τιμεταλλακτέΨκρονν).

Thisvariantindicatesthateanuncials(seebelow,section2).ThecommonsourceofPandJhadthusἔν,whichwascorrectedbyTheodoreofGaza(thescribeofΟ)andthe correctorofBintodήν.

Thisvariantindicatesthatmanu-
scriptsΨandΡderivefromdifferenttransliterationsfromuncials
(seebelow,section2).ThecommonsourceofPandJhadthusἔν,
whichwascorrectedbyTheodoreofGaza(thescribeofΟ)andthe correctorofBintodήν.

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whichwascorrectedbyTheodoreofGaza(thescribeofΟ)andthe correctorofBintodήν.
Arabic translation has the correct form reflecting τὰς μεταψωλάς (at-taqāyīr), but even if \( \Psi \) read \( τε \) for \( τὰς \) the translator would have made the obvious correction in his version.

This evidence indicates that \( A \) and the manuscripts of sub-family \( \Sigma \) contribute no independent readings but only two conjectures, at \( 7b13 \) and \( 10a12 \). Three other correct readings, the nominatives at \( 8b20 \), the rough breathing for the reflexive form at \( 4a23 \), and the accusative feminine plural article at \( 11b14 \) are found as original readings in \( \Psi \) and/or \( \Lambda \) but must be seen as conjectures in \( A \) and sub-family \( \Sigma \) and hence do not constitute independent evidence. In the remaining cases the reading of the oldest two Greek manuscripts, \( P \) and \( J \), is indeed the correct one and not that of the manuscripts in sub-family \( \Sigma \) (as thought by some earlier editors). As in the case of \( CL \), the manuscripts in sub-family \( \Sigma \) and especially \( A \) have no independent readings to contribute and accordingly can be ignored in the establishment of the text except in these few instances where they provide ancillary help. Burnikel 73 calls sub-family \( \Sigma \) “nahezu Bedeutungslos” for this purpose, and he is right. Only his admiration for the editorial and scribal work of Theodore of Gaza (manuscript O) makes him advise (122) that “der Apparat einer Neuausgabe der Mt [Metaphysik] müsste die konjekturale Tätigkeit des Gazes gebührend berücksichtigen.” The advice is well taken, though hardly necessary, for the exemplar of the Arabic translation (which Burnikel did not know) actually provides a number of those readings.

2. Manuscript \( \Psi \), Exemplar of the
Arabic Translation by Ishāq Ibn-Ḥunayn

\( \Psi \) The only information that we have about the Greek manuscript on which the Arabic translation was based (\( \Psi \)) is what we can gather from the translation itself; there is no external evidence. The translation was made by Ishāq ibn-Ḥunayn, and because we know that Ishāq did translate a number of books of Aristotle’s *Metaphysics* (but not \( A \); see now Bertolacci 2005, 270), we could guess that the manuscript also included the Aristotelian work, as do both of our earliest Greek manuscripts, \( J \) and \( P \). It may also be possible to speculate that Aristotle’s work followed that of Theophrastus, as in the Greek manuscript \( J \), and that since \( \Psi \) most likely contained the Scholium at the end of Theophrastus’s Essay (see Chapter 1.2), this may have caused the misunderstanding that Book A of
Aristotle's *Metaphysics* was actually by Theophrastus and hence led to its not being translated into Arabic—*but* there is no evidence for any of this with regard to manuscript Ψ. As a matter of fact, Book Alpha eventually was translated as part of Aristotle’s *Metaphysics* by Naẓīf in the second half of the tenth century; but we know the reason neither of what led to the translation of Alpha in the tenth century nor of its neglect over a century earlier at the time of al-Kindī.

With regard to Ψ itself, there is some evidence in the translation that it was a manuscript in a minuscule hand; in at least two passages there is a mistaking of omicron iota for alpha, a mistake which is more likely to have happened in minuscule:

4b10 πρώτας a Λ : πρώτας Ψ ut vid.
6a4 δύοια a Λ : ἄμα ἄ Ψ

If this is so, the question arises whether Ψ derives from the same transliteration from an uncial ancestor as J and P. The evidence is provided by the variant at

8a11 ὃν Ψ B2 O : ἤν a

where the erroneous reading ἤν came about through a confusion of the round capital letters O and E in an uncial exemplar. This indicates that Ψ derives from a transliteration from an uncial manuscript that is different from that of J and P. This is also suggested by the fact that whenever Ψ P and J do not all have the same reading, Ψ agrees almost as many times with J as it does with P, something which would not have been the case had Ψ been related with either through the same transliteration. Ψ therefore, through the Arabic translation, represents a tradition of the text that has no immediate relation to that of J and P and is therefore a primary carrier of a number of independent readings. As a matter of fact, Ψ carries the correct reading over J and P, and thus helps establish the text, in no less than 31 passages; in some of these, the correct reading had already been divined either by knowledgeable scribes or emenders in

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3 This is an old hypothesis that goes back to Albert the Great; for some recent discussions see Martini 2002, 81–84.

4 Cf. the same mistake, also deriving from two different transliterations, in Aristotle’s *Met.* 1025b8, listed by Irigoin 1997, 186.

5 Counting variants due to accents and breathings, Ψ agrees with J against P 17 times, and Ψ agrees with P against J 23 times; see below, section 3.
some late Greek manuscripts\(^6\) or by modern scholars, whose conjectures have been thus dramatically corroborated. Some others are also to be found in the exemplar of the Latin translation (Λ), also registered below, which indicates the independence of that branch of the tradition, as will be discussed later (in section 4 below). In his introduction to the edition of Laks & Most and then in his article, Crubellier (p. LXXVI in Laks & Most, and p. 39156 in Crubellier 1992) signalled some of the correct readings independently carried by Ψ as they can be recovered from the Arabic translation; I give here a complete list, together with the names of scribes and scholars who corrected them in the Greek text.

\(^{6}\) Burnikel 6o (also 121–122) again praises the editorial acuity and accuracy of the manuscript edition of six of Theophrastus’s opuscula copied by Theodore of Gaza in the third quarter of the fifteenth century (Ottobonianus gr. 153), “ein Werk, das der Aldina ebenbürtig ist;” see above, section 1.
3. Relation of $\Psi$ to $J$ and $P$

The relation of $J$ to $P$ has been investigated and established by Burnikel and then by Laks & Most, as briefly mentioned above. In addition, because $J$ and $P$ are two of the most important manuscripts for a number of Aristotelian works and in particular his *Metaphysics*, their relationship has been independently studied and verified, as already mentioned, and needs no further discussion.\(^7\) The question now is to determine how our third independent source for the Greek text of Theophrastus’s Essay, manuscript $\Psi$, is related to the other two, so that it can be placed in the stemma accordingly. The agreement of $\Psi$ with either one against the other provides the answer.

$\Psi$ agrees with $P$ against $J$ in the following 23 passages; when the agreement is in error, it is marked with an asterisk. The (correct) reading adopted in the text is given first, while for later reference the readings of the fourth independent source for the Greek text, the exemplar of the Latin translation ($\Lambda$), are also given.

4a16 τῶν ψάρτων $\Pi^\Psi$ $\Lambda^\Psi$ : τῶν ἄφθαρτων $J$
4a23 περιτιθέντων $P$ $\Psi$ $\Lambda$ : -τεθ- $J$
4a23 αὐτῶν $\Psi$ $\Lambda$, αὐτῶν $P$ : αὐτῶν $J$
6a1 δι $P$ $\Psi$ $\Lambda$ : δεί $J$
6a13 εἰ $J$ $\Pi^\Psi$ $\Lambda$, εἰ $P$ : η $J$
6a27 ὅσον $P$ $\Psi$ $\Lambda$ : ὅσον $J$
6b12 δόξεων ἄν $P$ $\Psi$ : δόξει ἐρῶν $J$ : Lat. om. in lac.
7a19 τὰς $\delta'$ $P$ $\Psi$ $\Lambda$ : τὰς $J$
7b18 λογωίδες $\Psi$ : λογωἰδεῖς $J$ : λογωἰδεῖς $\Pi^J$ : λογωἰδεῖς $\Lambda$
*7b19 καὶ $J$ $\Lambda$ : om. $P$ Ar. (an etiam $\Psi$?)
8a16 κατ' αὐτήν $P$, $\Psi$ ut vid.: καθ' αὐτήν $J$, καθ' αὐτήν $\Lambda$

\(^7\) See in particular, Harlfinger 1979 and his stemma codicum on p. 27.
\(^8\) The Latin has *corruptibilibus*, which prima facie would seem to indicate τοῖς ψάρτωις, and hence in agreement with neither $P$ nor $J$, but it appears that Bartholomew used the ablative, as with the preceding *principis*, because he understood the word ψάρτων to be governed by the preposition *sub* (for ὑπό), despite the accusative in ὑπὸ τὰς ἄρχας. Alternatively, Burnikel 129 thinks that the confusion may arise from an incorrect reading by Bartholomew of an abbreviation for the suffix in ψάρτ-ων. In either case, what determines the reading in $\Lambda$ and its affiliation with $P$ and $\Psi$ and not with $J$ is that the word in Latin reflects ψάρτως and not ἄφθαρτος, as in $J$. 
For its part, \( \Psi \) agrees with \( J \) against \( P \) in the following 17 passages, agreement in error being marked again with an asterisk. The correct reading adopted in the text is listed first and the readings of the Latin exemplar, \( \Lambda \), are also given.

If then \( \Psi \) agrees with \( P \) against \( J \) 23 times and with \( J \) against \( P \) 17 times, \( \Psi \) agrees with \( J \) one fourth fewer times than it does with \( P \). This \( 4:3 \) (23:17) ratio is statistically consistent (in a relatively small sample that is the short text of Theophrastus's Essay) with an assumption that there is no direct stemmatic affiliation of \( \Psi \) with either \( J \) or \( P \) after the translitera-

9 The Latin has *hec reliquerunt* for τούτοις κατάλοιπον in the Greek, which would stand for ταῦτα κατέλιπαν, as Kley 26 suggests. However, it appears that Bartholomew did not understand the Greek, which may have been corrupted in his exemplar.
tion of their respective uncial parents into minuscule. Accordingly, the agreement of \( \Psi \) with either one of them carries the correct reading while the odd man out represents an individual error by that manuscript or its immediate source. This is what happens with great preponderance in the two lists of agreements just given. Problems for the accuracy of this stemmatic relationship among the manuscripts concerned arise when \( \Psi \) agrees with either J or P in error, which implies that either an identical error or an identical correct conjecture was made by two scribes independently of each other. These problematic passages, marked with an asterisk in the two lists, need to be discussed.

The agreement of \( \Psi \) with P is almost perfect: in 22 of the 23 instances of congruence they do indeed carry the correct reading and, correspondingly, J or its immediate source is in error. Only in one passage (7b19) do they agree in error, omitting the conjunction \( \kappa \alpha i \). Crubellier (in Laks & Most p. LXXVI note 151) makes a good case that we cannot be certain that \( \Psi \) did not carry \( \kappa \alpha i \), for the translator may have seen it in his source (\( \Psi \)) but decided not to translate it; in which case the omission would be unique to P. However, the variant itself (the presence or absence of \( \kappa \alpha i \)) is of such great currency that other alternative explanations may be just as valid. To begin with, the original reading in the parent manuscript may have been without the conjunction (the passage makes just as good sense without it) and its addition would be a deliberate insertion by J or its immediate source; or two scribes may have indeed omitted it independently of each other. In short, not much can be made of this particular variant.

The situation with the agreement of \( \Psi \) with J is at first sight more problematic, insofar as six of the seventeen instances of agreement between them are in error (i.e., the cases marked in the list above with an asterisk), but upon closer inspection there are only two contestable passages. To begin with, 5b17 is a matter of accents and not a common error properly speaking, given the practices of scribes, while 5a28, 10a17 and 10a18 concern word breaks which were not at all or not evenly observed in either uncial or early minuscule manuscripts.

This leaves only two problematic passages which present a stemmatic incongruity: 7b12 (\( \tau i \zeta P : \tau i \zeta J \Psi \Lambda \)) and 11a19 (\( \tau i P \Lambda : \tau e J^{11} \Psi \)). If \( \Psi \) and J, and indeed, also \( \Lambda \), agree on a reading, then according to the stemma (below, section 6) it must be correct; they cannot agree in error unless one assumes independently made identical errors or conjectural corrections. In the first of these two passages, it is unlikely that all three independent sources (J \( \Psi \) and \( \Lambda \)) would have committed the same error (\( \tau i \zeta \)) for a
reading transmitted correctly only by P (τις); the correct reading in P has accordingly to be seen as a correction made by P or its immediate source of the primitive error in the Neoplatonic archetype (the source of all our manuscripts together).\(^\text{10}\) In the second passage, the correct reading is carried by both P and the exemplar of the Latin translation (Λ); the identical erroneous readings in Ψ and J\(^\text{11}\) can only be seen as having occurred independently of each other.

In short, the agreement of Ψ with J also favors the view of the independence of Ψ from both J and P, suggesting the stemma given below. The two passages (7b12 and 11a19) which seem to contradict this view do not, in the end, present difficulties substantive enough to counterbalance the overwhelming evidence supporting it.

\[\text{4. Manuscript } A, \text{ Exemplar of the Latin Translation by Bartholomew of Messina}\]

The Latin translation by Bartholomew of Messina commands attention by its very date: it was commissioned by King Manfred of Sicily (reigned 1258–1266). It survives in a unique manuscript in Padua, Antoniana XVII 370 (ff. 62\textsuperscript{r}–64\textsuperscript{r}), dating from the early 14th century.\(^\text{11}\) An annotated transcription of the text, without editorial intrusions (a diplomatic edition), was prepared by Kley 1936, which was reviewed extensively by Dirlmeier 1938 and briefly by A. Mansion 1938 and Ross 1938. The accuracy of the transcription was further confirmed by Most 1988c, who also added a few corrections (p. 170n6).

Bartholomew based his translation on a lost Greek manuscript to which I give the siglum Λ. Most 1988c argued at length that Λ is, in fact, the manuscript of the Viennese Aristotle, J, or a manuscript directly deriving from it. Accordingly, the edition of Laks & Most disregarded Bartholomew's Latin translation as evidence for the Greek text. Most based his argument both on a comparison between the readings in Λ and the Greek manuscripts, and on external circumstances. In the latter case, William of Moerbeke, who himself used J for his translation of Aristotle's *Metaphysics*, took the manuscript with him from Constantinople to Italy between 1260 and 1267. Since this is precisely the period during which

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\(^{10}\) According to Hecquet-Devienne’s analyses (2000; 2004, 172) of the copying of P, this would be due to corrections made to P in the process of its constitution.

\(^{11}\) See the detailed description by Franceschini 1935.
Bartholomew prepared the translation of Theophrastus’s Essay, it is not unlikely, Most 1988c, 181, argued, that Bartholomew had access to J or to a copy deriving from it. This circumstantial evidence, however, cannot be decisive, as Vuillemin-Diem 1995, 311, remarked, for it cannot be proven that Bartholomew and William actually met. More importantly, the evidence from the comparative readings in Λ and the Greek manuscripts that Most collects fails to establish a close connection between the Latin translation and J (or the identity of Λ and J). Of the four passages listed by Most to this end, only one is a unique error in J which is repeated in the Latin translation, an omission of ξαί; but this is hardly decisive, for as Most himself notes (180), the Latin text in the Padua manuscript “elsewhere occasionally omits ξαί.” The other three readings occur in other Greek manuscripts as well and thus cannot show a unique relationship between J and the Latin translation. Furthermore, and more significantly, the Latin translation has the correct reading when J is in error in twenty-five (25) places, as listed by Most 1988c, 181–183. This lack of agreement in error is fatal to Most’s argument, even though Most explains it away by claiming (183) that none of the correct readings in the Latin translation “was beyond the capacity of the divinatio of Bartholaeus.” But, first, Bartholomew was not the kind of translator who would correct his exemplar in the course of his work; his extant translation of two Hippocratic treatises from a Greek manuscript which we actually possess, Vaticanus gr. 276, shows that he was a literal and slavish translator, reproducing all the unique readings and errors of his exemplar. And second, twenty-five is too large a number of correct readings in such a short text to qualify as divinatio by such a translator, especially when they are attested in the other manuscripts of the tradition. Besides, if Bartholomew was ingenious and sophisticated enough to correct all those errors in J, the question remains why he failed to correct some others that were more obvious, like, e.g., ἦ at 8α6 (correct: ἦ), or τῆς at 7β12 (correct: τις). It appears certain that neither J nor a copy of it were the source of Bartholomew’s Latin translation.13

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12 Most 1988c, 179; the fifth passage, 11α4, occurs in the last section of J, JII, which was copied after Bartholomew’s translation, and thus we do not know what J originally had.
13 Vuillemin-Diem 1995, 311, makes all these points convincingly. In note 121 on p. LXIV in Laks & Most, Most claims that Vuillemin-Diem reported to him privately that the possibility could not be excluded that the Latin translation was based not on J but on a closely related (“très proche”) manuscript. In her 1995 book on the Latin
Already in 1974, Burnikel, who made a complete collation of the Latin translation with the Greek, found that it is not possible to associate its Greek exemplar, Λ, with a specific family of Greek manuscripts because the errors that Λ has in common with them are distributed fairly evenly among them (“ziemlich gleichmässig,” p. 128). This indicated to Burnikel (129–130) that Λ was a representative of a separate family in the manuscript transmission, and Vuillemin-Diem 1995, 311, fully concurred.

If this is so, the question then is from which point in the transmission of the text Λ and its source branch off. A first test would be to examine whether it shares the primitive errors found in the Greek manuscripts PJ and in Ψ in order to establish whether or not it descends from the same archetype. From the table of these primitive errors given in section 5 below, it becomes clear that Λ shared them with the rest of the extant witnesses for the text and thus it does not derive from an archetype different from that represented by the Greek manuscripts and Ψ.

Next, Λ shares the key common mistake with all the main Greek manuscripts (PJ CL Λ = α) against Ψ at

8a11 pr. ὑν Ψ : ἕν Λ (unum).

This indicates that Λ derives from the same transliteration from uncial as the extant Greek manuscripts but not from that of the source of Ψ. If then Λ is related to the two families of the Greek manuscripts (the one represented by P and the other by the two sub-families JCL and Σ), but it does not belong to either one of them but has its own family, as stated above, it must be placed in the stemma close to but separate from the common ancestor of the two families, i.e., from the “Constantinopolitan recension,” as identified by Burnikel (127).

These stemmatic relations, as indicated by the researches of Burnikel and Vuillemin-Diem on the basis of common errors in manuscripts, are further corroborated by an analysis of the correct readings which Λ shares with Ψ and the two Greek families of manuscripts. In the first place, Λ shares some correct readings with Ψ against the Constantinopolitan recension (P and J CL Λ = α), something that would have been impossible had it been dependent on the latter. Of the correct readings

Metaphysics (p. 310n67), she wrote that note 121 in Laks & Most appears to be based on a misunderstanding ("der Anmerkung n. 121 scheint allerdings ein Missverständnis zugrunde zu liegen").
that are particular to $\Psi$ and absent from all extant Greek manuscripts that were listed above in section 2, the following are also found in $\Lambda$:\(^{14}\)

\[423\; \alphaυτών \; \Psi \; \Lambda \; (se\; ipsa): \; \alphaυτών \; P, \; \alphaυτών \; JCL \; A\]
\[6b7\; \piως \; \Psi \; \Lambda^{15}: \; \piως \; P\]
\[8\text{a}22\; \piε\muε\rho\gammaια \; το \; \zeta\eta\epsilonιν \; \Psi \; \Lambda \; (otiositas\; inquirere): \; \piε\muε\rho\gammaια\; \tauο\; \zeta\eta\epsilonιν \; \alpha\]
\[8\text{b}20\; \gammaενυ \; \ldots \; \epsilonι\deltaη \; \Psi \; \Lambda \; (genera \ldots species) \; \Lambda^{16}: \; \gammaενυ \; \ldots \; \epsilonι\deltaευ \; P \; J \; CL^{1}\]
\[8\text{b}25\; \kου\nuη \; \Psi \; \Lambda \; (comuni): \; \kου\nuη \; P \; J\]
\[10\text{a}16\; \alphaυτα\; \Psi \; \Lambda \; (utrum) \; O^{17}: \; \alphaυτα\; \text{P,} \; \alphaυτα\; \text{JCL \; A}^{18}\]
\[11\text{b}12\; \epsilonν \; \Psi \; \Lambda \; (in): \; \text{om. \; \alpha}\]

To these may be added two further correct readings which are unique to $\Lambda$:

\[4\text{a}6\; \tauαυτα\; \Lambda \; (eadem): \; \tauαυτα \; P, \; \tauαυτα \; J: \; \text{Ar. \; om. \; in \; lac.}\]
\[11\text{a}8\; \alphaυτο\; \Lambda \; (hoc): \; \alphaυτο\; J^{11} \; CL \; [\Psi]: \; \alphaυτο\; P, \; \alphaυτο\; \text{A}\]

Second, in the preceding section (3), the agreement in readings among $P$, $J$, $\Psi$, and $\Lambda$ were listed in two lists, one of the agreement of $\Psi$ with $P$ against $J$, and the other the agreement of $\Psi$ with $J$ against $P$. Of the forty variants that were discussed in the two lists combined, the reading in $\Lambda$ agreed 20 times with $J$ against $P$ and 15 times with $P$ against $J$; in the remaining five instances either the Latin text was missing or its evidence was inconclusive.\(^{19}\) This almost equal distribution of agreement of $\Lambda$ with $P$ and $J$ in correct readings also shows the independence of $\Lambda$ from either one of them. Furthermore, in these forty instances, $\Lambda$ never agrees in error with $P$, though it agrees with $J$ in error in ten of them. However, the nature of the errors in these instances is such that it is stemmatically inconsequential. One of them ($7\text{b}12$) is a primitive

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\(^{14}\) Some of these were first pointed out as uniquely correct readings in $\Lambda$ by Dirlmeier 1938, 136, and Ross 1938, neither of whom, however, knew of the Arabic translation. Thus although not all of their suggestions in this regard can be accepted on the basis of our knowledge now of $\Psi$ (see the commentary for a discussion of the passages in question), they deserve credit for taking the text represented by the Latin translation seriously, Dirlmeier more so than Ross.

\(^{15}\) The Latin has omnimode for $\alphaπαντα\; \piως$, which Bartholomew took as a single semantic unit (whether it was written as one word or two), similar to $\alphaπαντα\; \piως$ or $\piα\nu\tauα\; \piως$. $\alphaπαντα\; \piως$ is clearly the reading in $\Lambda$ and not, as Kley 21 suggests, a different wording such as $\piα\nu\tauα\; \piως$, etc.

\(^{16}\) The correct reading in $A$ is conjectural.

\(^{17}\) The correct reading in manuscript $O$ is a conjecture by the redoubtable Theodore of Gaza.

\(^{18}\) Cf. Kley 26 and Ross 1938, 16.

\(^{19}\) These uncertain passages are, $5\text{b}17$, $6\text{b}12$, $6\text{b}14$, $9\text{b}27$, and $10\text{a}3$. 
error of the Neoplatonic archetype (see the next section) that is carried by all witnesses except P, which indicates that the correction is due to the editors of P (see above, section 1). Three others are erroneous word divisions (5a28, 10a17, 11b24), one is the result of an ètacism (10a5), another is a matter of spelling (7b18), and yet another a matter of breathings, with the rough breathing occasioning a scribal correction of κατ’ to καΨτΡetatwo (8a16). The wrong variant (8b12) ὑπερΨβάλλει may have been an original error during the transcription from uncialss (possibly occasioned by the preceding ὑπερβατός at 8b9), and thus carried by both Λ and J but corrected by the editors of P, while the correct ὑποβάλλει in Ψ would be the original reading from the archetype; and similar would appear to be the cases with the two remaining common errors at 8b27 and 10a1. None of these errors is such as to point incontrovertibly to a stematic dependence of Λ from the source of J; to the contrary, as already mentioned at the beginning of this section, twenty-five errors in J are not reproduced in Λ.

Genetically, therefore, Λ represents a witness to the Greek text that is independent of the Constantinopolitan recension, or the extant two families of Greek manuscripts. The independent derivation of Λ is also evident in, and supported by, two other peculiarities: the environment in which it is transmitted, and the title it gives to the Essay. The Padua manuscript of Bartholomew’s Latin translation of the Essay includes the following treatises:20 Problemata, De principiis (i.e., Theophrastus’s present Essay), Mirabilium auscultationes, De eupragia, Physiognomica, De signis, De inundatione Nili, De mundo, De animalibus, De differentia spiritu et animae, De motu animalium. These are all mostly pseudo-Aristotelian treatises. Since as a rule it is the availability of source texts that determines what texts are to be translated, it is reasonable to assume that the Greek exemplar (Λ) from which Bartholomew worked also contained some or most of these treatises.21 Hence Theophrastus’s Essay was transmitted in this manuscript together with other pseudo-Aristotelian works, not the canonical corpus, as is the case with the oldest extant Greek manuscripts, J and P (see above, Chapter 1.2). This would indicate that the Theophrastean Essay, after its transliteration from uncial, was transmitted initially in its traditional environment—the mature Aristotelian treatises and especially the Metaphysics—as represented by

20 See the contents of the manuscript given by Franceschini 1935.
21 See Harlfinger 1971a, 62–63, about the transmission of these pseudo-Aristotelian works: “Die Entscheidung darüber, was übersetzt wird, ist also offensichtlich eng mit der Frage des Zugangs zu bestimmten Texten verbunden.”
the manuscripts P and the sub-family JCL. After a while, however, it was detached from this environment and on the one hand was joined to the other extant opuscula in the ancestor of manuscript Λ of the Σ sub-family, and on the other was associated with several Aristotelian pseudepigrapha in the tradition from which derives the recension of the ancestor of manuscript Λ.

Secondly, the title of the Essay is given in Bartholomew's Latin as Liber Aristotelis De principiis, or, in Greek, Ἀριστοτέλους Περὶ ἀρχῶν. Valentin Rose 183–185, who first looked into these matters in some detail, took this evidence seriously and concluded that this is the original and ancient title of Theophrastus's Essay. Usener almost completely disregarded the issue, while subsequent scholars paid little attention or importance to the evidence of the Latin translation and Rose's suggestion. The demonstrable independent derivation of Λ, however, as just indicated, requires that the question be revisited (see Chapter 1.5). These peculiarities of Λ indicate that although it is derived from the same transcription from uncial as both families of the Greek manuscripts, it represents a separate recension, one possibly prepared for or in Messina, which accordingly was named “recensio Messanensis” by Burnikel 127. There is a good analogue to this situation in the two recensions, Constantinopolitan and Messinan, of the Eudemian Ethics, as discussed by Harfinger 1971b, 6–9. The Messinan recension of Theophrastus's Essay, and the ultimate parent for Λ, branch off from the transcription into minuscule before the formation of the Constantinopolitan recension.22

The readings of Λ, as they can be reconstructed from Bartholomew's Latin translation, are accordingly consulted and recorded. The value of Λ as a fourth independent witness to the text, in addition to preserving the original title of Theophrastus's Essay and the two unique correct readings listed above, also lies in corroborating the state of the text as transmitted, after one transliteration into minuscule, in the two oldest representatives of the two families of Greek manuscripts, J and P, and, after another transliteration, in the Arabic translation reflecting manuscript Ψ (whence its agreement with Ψ against P and J in the seven passages listed above). The value of this attestation provided by Λ lies in the greater confidence that it imparts in the transmitted readings (unless they manifestly belong to the primitive errors of the Neoplatonic archetype, for which see the next section). For this reason the readings of the paradoxis

22 Burnikel 130: “B ist also … Zeuge eines Zustandes vor der byzantinischen Edition.”
deserve careful scrutiny before they are emended. It has been possible in this edition to rehabilitate and preserve the largest possible number of the transmitted readings, eliminating some of the hasty conjectures of earlier editors.

On the other hand, it is also clear from the state of the Latin translation that it contains numerous unique errors due to the transmission both within Greek between the transliteration and manuscript $\Lambda$, Bartholomew’s exemplar, and within Latin after the translation by Bartholomew.\textsuperscript{23} The evidence from either of these stages of corruption is of no interest for the establishment of the Greek text and accordingly it is not registered in the apparatus.

5. The Neoplatonic Archetype of the Extant Manuscript Tradition

The two uncial manuscripts, from which derive the minuscule transliterations that were the sources of $\Psi$ on the one hand and $PJ$ and $\Lambda$ on the other, go back to a common ancestor, for there are certain errors in the text—I call them primitive errors—that are common to the representatives of all families of manuscripts: the exemplar of the Arabic translation, $\Psi$; the exemplar of the Latin translation, $\Lambda$, representing the Messinan recension, and the two independent Greek manuscripts, $J$ and $P$, representing the Constantinopolitan recension. These primitive errors indicate the most ancient stage of corruption from which all our extant manuscripts and translations derive.

In the following list of these primitive errors, the first variant in each entry is that of the erroneous reading as contained in all four independent sources for the text—the Greek manuscripts $PJ$ and the exemplars of the Arabic and Latin translations, $\Psi$ and $\Lambda$ respectively—followed after the colon by the emendation and its first author. In the case of manuscript sigla, the reference is to the manuscript whose scribe or source made the emendation. The details about the readings in each case can be found in the corresponding entries in the apparatus criticus. This list of the errors of the archetype revises the one first given by Fobes, pp. xxvii–xxviii. Some of the errors on that list have been shown not to have been those of the archetype, insofar as $\Psi$, which was not known to Fobes, had the correct reading, and some others turned out not to have been errors at all. The readings in each case are discussed in detail in the commentary.

\textsuperscript{23} Many of these errors are discussed by Kley in his notes.
We have no direct evidence for the identity and provenance of the manuscript that contained these errors and ultimately became the archetype from which all our knowledge of the text of the Essay derives. But we know that it contained the Scholium at the end of the Essay and that this Scholium, as I hope to have demonstrated (above, Chapter 1.2), derives from the Neoplatonic school in late antiquity. We also know that some of the other scholia in manuscript P on the Metaphysics, scholia which necessarily derive from this archetype, are by Asclepius, the Neoplatonic philosopher. Both these indications clearly point to the sixth Christian century as the terminus a quo for the archetype, assuming that the scribes and editors of P took both their text of the Metaphysics with Theophrastus’s Essay and the accompanying scholia from the same archetype and not from two different manuscripts. Since

24 It is not clear that this is a primitive error in the uncial Neoplatonic archetype; it could also have arisen in the transmission in minuscule, as represented in all the extant Greek manuscripts. See the commentary.
the latter alternative seems rather unlikely, it appears relatively certain that the archetype dates from the sixth century.

With the identification and correction of the primitive errors in this archetype listed above, our reconstruction of the text can aspire to go beyond the sixth century. The hope is that the text as established in the present edition might represent its state in the Roman edition of the first century BC, or even earlier; but we have no way of knowing.

6. Stemma Codicum

(Dates in parentheses are conjectural and are intended merely as suggestions to provide some plausible time frame.)

(-I.) Roman edition of Aristotle

(VI) Neoplatonic archetype

(VI–IX) o o

(IX. 1/4) transliteration transliteration

(IX. 1/2) Ψ Constantinopolitan recension

IX. 3/4 Arabic translation ‘Edition’ of P J

X. 1/2 P 'Edition' of Σ sub-family

XI. 1/2 T Messinian recension

X–XIII

XIII. 1/2 A Latin transl.

XIII. 3/4 C A

XIV. 1/4

XV. 1/2 rest of Σ sub-family

1630 B (Burnikel 90; Laks & Most, p. LXXIX)
7. Sources and Principles of the Greek Edition

a. Sources of the text

As discussed in the preceding analysis, represented in the stemma codicum, there are four independent witnesses for the text of Περὶ ἀρΨκΡΥῶν by Theophrastus: the Greek manuscripts J and P, the Arabic translation by Ishāq ibn-Ḥunayn based on the lost Greek manuscript Ψ, and the Latin translation by Bartholomew of Messina based on the lost Greek manuscript Λ. In preparation for the edition, I accordingly (1) collated anew manuscripts J and P from high quality photographs, (2) prepared a critical edition of the Arabic translation (below, Part II, 2) in order to elicit with accuracy the readings of Ψ, and (3) examined in detail, for the same purpose, the Latin translation in the diplomatic edition by Kley (presented below, Part II, 3). The edition is based on these primary sources and on the corrections of their primitive errors (above, section 5) that have been offered over the centuries by scribes and scholars.

According to the analysis in section 1 above, manuscripts CL of the sub-family JCL, and manuscript A of the sub-family Σ do not contribute any independent and correct readings, apart from four conjectural emendations by scribes, and in addition have many mistakes of their own. In particular L and A are error ridden. Accordingly I did not examine any manuscripts in sub-family Σ and manuscripts CL in sub-family JCL but reproduced instead the evidence as presented in the apparatus of the edition by Laks & Most. Insofar as whatever acceptable readings they have are the result of scribal emendations, their readings can be treated like the emendations of modern scholars and have been reported in the main apparatus sporadically, with their sigla listed under the rubric “raro citatur.”

b. The apparatus criticus: main and supplementary

The main apparatus includes all the readings of P and J, the relevant readings of Ψ and Λ as they are reconstructed on the basis of the Arabic and Latin translations respectively, and the appropriate scribal and scholarly emendations. In particular, the main apparatus contains the following information:

(1) All the variant readings of P and J, except for those of a merely orthographic nature (such as movable final ν) and those which show
differences of breathing and accents, when in both cases they do not represent real alternatives. Variants which are due to the slip of the pen and produce nonsense (what we would call today “typos”, as, e.g., τινός in P at 6b10 for τινός, and δέγγονται in J at 6a10 for δέγγονταί) have been recorded in the supplementary apparatus.

(2) All the relevant variant readings of Ψ as they are reconstructed from the Arabic translation, according to the rules established in the Excursus following Part I below. By “relevant” is meant those readings that bear upon the establishment of the Greek text. In essence, what is recorded is all instances of departure by the Arabic translation from the transmitted Greek text which are not clearly due to corruption strictly within the Arabic tradition—i.e., corruption of a text which, though correctly translated and reflecting the Greek text we have, was manifestly due to the vicissitudes of transmission from one Arabic manuscript to the other; such variants which are of no relevance to the establishment of the Greek text are listed in the apparatus criticus of the edition of the Arabic translation (Part II, 2). The decision to include in the apparatus, irrelevant mistakes apart, all the evidence provided by the Arabic translation is justified by an analysis of the possible ways of corruption of the Arabic text, as discussed in the Excursus. In more general terms, it is justified by the fact that the Arabic translator, Ishāq ibn-Ḥunayn, is the very first commentator on our text, and much closer than we are to both the ancient Greek manuscript tradition and the tradition of Aristotelian scholarship and understanding of late antiquity. In this regard his opinion about and understanding of Theophrastus’s text is to be respected and documented—in any case, it certainly is not any less respectable than those of the Renaissance humanists and modern scholars; the fact is, the Graeco-Arabic translators of the early ‘Abbāsid era are our first humanist scholars after continuous Greek scholarship came to an end in late antiquity, and for the reasons just listed their opinions ought to be recorded.

Readings in Ψ are not recorded when it is impossible to tell from the Arabic what the Greek had, either because in general terms the syntax and word order of the Arabic do not reveal the details of the Greek or because, more particularly, certain characteristics of Greek, like most particles and variations of accents that do not affect the meaning of the word, cannot be adequately represented in Arabic. In all such cases where the Arabic translation does not yield the reading in Ψ, this is indicated in the apparatus entry with square brackets placed around the siglum, [Ψ].
The Arabic evidence which explains and justifies my derivation of the readings of Ψ, as recorded in the apparatus, is discussed in every instance in the notes to the translation of the Arabic text, except when such explanation or justification becomes obvious from my translation. I have added in the apparatus the Arabic word(s) behind the reconstructed Greek, in transliteration, only when the reconstructed reading does not agree with an extant Greek reading; that is, in cases where the Arabic fills a lacuna, corroborates an emendation, or presents an alternative reading. In such cases I did not translate the Arabic into Latin, as Irigoin recommends, for I considered it superfluous: readers who do not read Arabic will understand what it says from the conjectural Greek reading included in the apparatus.

(3) All the variant readings of Λ, as they are reconstructed from the Latin translation, that bear upon the establishment of the Greek text. The Latin translation, as opposed to the Arabic, is painfully literal and follows the Greek word order, conspicuously reflecting the underlying Greek text. Accordingly, variants that are due to unique errors in the Greek forebears of Λ and in the subsequent Latin tradition, and are of no relevance to the establishment of the Greek text, are not recorded at all.

(4) Selected readings from later manuscripts (recentiores) when they contain scribal emendations that are adopted in the text, or are useful in providing full documentation for the readings adopted or rejected.

(5) Selected emendations by modern scholars. As already mentioned, this Essay by Theophrastus has enjoyed inordinate attention from scholars, and indeed from among the most competent and influential in both classical scholarship and ancient philosophy. This has proven overall extremely beneficial, for many primitive errors in the common Neoplatonic archetype of all our main manuscripts have been restored to reasonable soundness (see the list of primitive errors above, section 5). However, each age has its own approach to scholarship, and the alacrity with which classical philologists in the nineteenth and the first half of the twentieth centuries fell to “correcting” any Greek text they encountered resulted in numerous unnecessary emendations.25 Our age tends to be

25 This is not intended to cast doubts on the practice of offering emendations, or deny some of our great predecessors their insight—and the credit due to them—when their emendations are corroborated by the Arabic translation or other evidence.
more conservative in this regard (I consider myself a staunch supporter of this attitude); already the most recent edition by Laks & Most restored many of the readings of the manuscripts. The apparatus, however, should not continue to be burdened with some of the less felicitous suggestions of our great forebears, so that some weeding is necessary.\textsuperscript{26} Accordingly, the main apparatus contains selected conjectures by previous scholars only when they have been confirmed by $\Psi$ (in order to acknowledge their merit) and when they suggest a fruitful line of approach to the passage. These conjectures or corrections are registered only in the name of the scholar who first made them, not those of subsequent editors who also adopted them.

However, the information that has been withheld from the main apparatus for the reasons just given is not completely superfluous. An apparatus containing it may be consulted for fuller documentation of the readings in the manuscript tradition, the character of individual manuscripts and their scribes, and the fruits of all past scholarship on the text. To this end I have included a supplementary critical apparatus in Part II at the end of the Greek text and the facing English translation.\textsuperscript{27} It contains all the readings of manuscripts CL and those in sub-family $\Sigma$ (that are not included in my main apparatus) as recorded by Laks & Most, other incidental or mistaken readings of the main manuscripts, as well as the suggestions for emendations and comments offered by modern scholars. In the latter case I collated anew all the editions beginning with that by Brandis (1823); for the earlier editions, including the Aldine (for references to which see Ross and Laks & Most), I presented their readings again as recorded by Laks & Most.

The apparatus is essentially mixed, positive when the variants presented are real alternatives, negative when they are aberrations. In the presentation of the material in the apparatus, I bunch together the readings that represent one alternative, separated by commas, and I use the colon, more than once if necessary, to separate alternative readings.\textsuperscript{28} Thus shortened and sharpened, the apparatus will be more accessible, I

\textsuperscript{26} I consider Irigoin’s well-phrased statement of the purpose of the apparatus sufficient justification for this weeding (p. 23): “L’apparat critique a pour but de fournir au lecteur non pas toute l’histoire de la tradition ni celle des éditions imprimées.”

\textsuperscript{27} A practice actually recommended by West 86n12.

\textsuperscript{28} I have found helpful the guidelines offered by West, especially pp. 86 ff. In general I have found them more flexible and more expressive than those suggested for the Budè series by Irigoin.
hope, to readers, more responsive to the needs of researchers, and more conducive to a better understanding of this fascinating text and its transmission.

c. The apparatus of parallel passages (Loci Paralleli)

Given the highly referential character of the Essay, I have thought it useful to add to the text an upper apparatus of parallel passages as a study aid. Two things need to be emphasized about it. First, it is an apparatus of loci paralleli and not an apparatus fontium. Its aim is to cite not only passages in the works of other philosophers to which Theophrastus was responding or referring, but also those passages in Aristotle, mainly, to which Theophrastus’s aporiae may have given rise; also passages which reflect the oral discussions between Aristotle and Theophrastus, which may have found their way formulated in one of Aristotle’s subsequent treatises. Second, it is selective; its aim is to include the passages that earlier scholars and I have found to be most immediately relevant to the subjects discussed by Theophrastus, but both the extent and immediacy of the choice can claim neither comprehensiveness nor infallibility.

d. Punctuation

I have revised throughout the punctuation of the Greek text to accord with the flow of the argument as indicated by the syntax and choice of particles, and restore the cohesion and sequence of meanings intended by Theophrastus. In a number of instances in previous editions not only a period but even a paragraph and chapter break were placed between two parts of the same sentence, as, e.g., at 7b5–11 and 8b8–12, both cases of clear μέν ... δέ sentences. Such practices, usually established by an earlier and respected editor and followed dutifully by subsequent ones, hinder the understanding of the internal cohesion of the work and on occasion lead to unusual interpretations.

Traditional punctuation of classical Greek texts tends to use the Greek colon (a point above the line) to excess; none of the several languages I know uses naturally so many major breaks within the same sentence, and certainly not classical Greek. To a certain extent, this may reflect manuscript usage, but this is the convention of writing Greek from the ninth to the fifteenth centuries, not that of the time of Theophrastus, and in any case we do not write in perfect imitation of the Greek manuscripts. I see no reason to follow these conventions rather than one that is closer
to our custom of reading texts. I have thus introduced (like others before me) two additional punctuation marks to the traditional Greek four. I have employed the dash rather more frequently than has been customary (though H.H. Joachim's edition of Aristotle's *De generatione et corruptione* uses it to great benefit, as does Ross’s edition of the *Metaphysics*), and I have also used, though sparingly, the English colon (:) according to our usage, for in some instances it is clearly preferable to the Greek colon or comma (e.g. at 5b13).

e. Layout of the editions

Hermann Usener’s critical edition of 1890, like that of Bekker for Aristotle, has set the standard form of reference to this work by Theophrastus. It covers pages 4 to 12 in his edition, in two columns, which are accordingly referred to as a and b, exactly as in the case of Bekker’s Aristotle. Usener had a different conception of the structure of the Essay, judged by almost all subsequent students of it as inappropriate, and thus his division into sections and chapters cannot be easily adhered to. However, because of the established convention—now a hundred and twenty years old—of referring in secondary literature to the text by his page, column, and line numbers, these must necessarily be followed to the extent feasible. For this edition, I have followed the paragraph breaks indicated by the series of aporiae discussed by Theophrastus (see above, Chapter 1.4) and thus have introduced many more paragraph breaks than those used by Usener. This has necessitated a variation in the contents of some lines, but to the extent possible I have kept precisely to the line lengths and numbers in Usener’s original edition.²⁹ I have, however, added into the text new paragraph numbers, in bold, to correspond to the number of aporiae discussed, but also printed in the right margin Usener’s “chapter” numbers in Roman numerals and section numbers in Arabic numerals in brackets. Words divided between two lines are always referred to, in the commentary, the glossaries, and elsewhere, by the line in which they begin (e.g., the word πολυ-χουστέρα would be referred to as occurring at 4a3, not 4a3–4).

²⁹ An inevitable shift in this regard has also occurred in the editions of Ross and Laks & Most. In this edition, the only lines that do not match Usener’s exactly are the following: 5a13–22, 8b9–14, and 11b23–12a1.
The line numbers being the one invariable standard, I have also added them in raised numerals into the Arabic and Latin translations. This only minimally disturbs the reading of the text but it facilitates and simplifies reference and obviates the need to introduce yet another set of numbers for references to the translations. In their case, Greek words divided between two lines are also counted as belonging to the line in which they begin, and thus the translation of the Greek word that follows the divided word is counted as starting the next line. For the layout of the Arabic text in particular see also below, Chapter 3.5.

f. The translation and annotation of the Greek text

Given the aporetic nature of Theophrastus’s Essay and the context of live discussion which it betrays and to which it aims to contribute, his style of writing is challenging to the translator. He is brief, elliptic, referential, allusive; and if at times he seems ambiguous, the ambiguity is rather to be imputed to our ignorance of the full context and the references and allusions, than to his style; for he is also grammatical and intelligible. “Fidelity is the only virtue which a translator need cultivate,” avers Jonathan Barnes (1994, xxiii), further specifying, “fidelity in the matter of sense.” Yes, but the question is, which sense? or, whose understanding of the sense? Even if the answer to the first be, “the sense intended by the philosopher,” in reality it is reducible to the answer to the second, “the translator’s” — the translator’s understanding of the sense or the translator’s understanding of the sense intended by the philosopher. Fidelity therefore in this context requires that the translator inform the reader where the author’s sense ends and the translator’s understanding of it begins. I have done so by adding in square brackets those words and phrases which are not in the Greek but are required either by English syntax or the Greek sense, as I understood it; the only exception is that I have not bracketed the unexpressed verb εἰμί (to be) when used as copula. In cases where an adequate English version could present the same ambiguity as that perceived by me in the Greek, I explained the situation in a footnote. I have also used the footnotes to present problems relating to key terminology as well as to identification of personalities mentioned and subjects discussed.

In my understanding of the sense and sweep of each argument in the Essay I found it useful to pay special attention to the particles. This is hardly a novel observation but I believe in this instance it bears repeating in order to explain my vigorous translation of them, using whatever
phrases in idiomatic (but not slangy) English are commonly added to our language to indicate emphasis, tone, and color to what we say. Written English does not use these particles as freely, but the style and meaning of Theophrastus are enhanced by their use so that an English translation that highlights them benefits the rendering of the corresponding sense. In this effort van Raalte’s commentary has proven invaluable, and if I sometimes disagree with her it is only because she has quickened our attention to the particles. In the commentary I discuss as a rule the particles and my choice of translation.

My translation tries to steer a middle course between an interpretive version and a slavishly literal one that offends English usage by means of the compromise of discriminating, through the use of bracketed words and phrases, between what the Greek definitely says and what (I argue) it implies, and of explaining the latter in the notes and commentary. This may rob it of some elegance but makes it more objective and a better tool for study, which is the aim of this publication. My task was lightened considerably by the existing fine translations of my predecessors: whenever I agreed with their interpretations of the Greek and the style of their translated sentences or phrases, I did not hesitate to borrow freely the wording of the English versions of Ross and van Raalte, or, in Anglicized form, the versions in languages other than English. It is my pleasure to acknowledge my debt and gratitude to these scholars as I restate my belief in the principle that there is no point in reinventing the wheel just to be “different” or “original.”

The commentary

The transmission of the text of the Essay is complicated, as described. The choice of variants in each case needs to be explained and justified, especially when the evidence is in Arabic or Latin. The commentary accordingly discusses all such cases of editorial decisions, as well as of choices in the translation, with the aim to help the reader understand the philosophy of the Essay by establishing a text that is as sound as

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30 There are numerous disquisitions on the appropriate method of translating Greek philosophical texts into modern languages, the most useful of which I have found to be those by Jonathan Barnes in the first and second edition of his translation of Aristotle’s *Posterior Analytics* as well as his comments in the CWA, p. xi, and by Henrich, in a more theoretical vein, in his introduction. But being aware of the difficulties and challenges presented by the enterprise and consciously trying to solve them while translating are more important than talking about them.
philologically possible. Given the aporetic nature of the work, also as described, the meaning and purpose of Theophrastus in the Essay will continue to be debated for a long time; but it should be possible to agree for the time being on those aspects of it which can be settled philologically.31

Thus conceived primarily as a study aid, the commentary is divided into the aporiae which constitute the building blocks of the work, and it opens with a paraphrase, in italics, of the argument of Theophrastus, together with whatever discussion is necessary to give a basic understanding of it. As a rule, I have engaged in a discussion of the philosophical content of the aporiae only to the extent necessary to establish the text; for strictly philosophical analyses, the reader is referred to the commentaries of Ross, Laks & Most, van Raalte, and especially Henrich, and to the many publications in the secondary literature cited.

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31 To borrow the elegant phrasing of F.M. Cornford 1937, p. v, the Essay by Theophrastus On First Principles, "is a subject on which agreement may never be reached; but there is some hope of persuading scholars that a Greek sentence means one thing rather than another."
CHAPTER THREE

THE ARABIC TEXT: MANUSCRIPTS, TRANSMISSION, EDITIONS

1. The Arabic Manuscripts

The Arabic translation of the Essay by Theophrastus On First Principles survives in two known manuscripts, one in the Malik library in Tehran and the other in the Bodleian at Oxford. The first,

Tehran Malik 5925, pp. 2–28, according to the numbering of the pages by Crubellier 2013, is written in an airy and slightly angular scholar’s nash, almost completely devoid of diacritical points. The title page and the first page are missing; the text of the Essay thus begins at 4a12 (see the apparatus of the Greek text). It is dated 461 Hijra/1069 AD in its colophon, which reads,

The treatise by Theophrastus, the advocate of Aristotle’s arguments in metaphysics, ⟨in⟩ the translation by Ishāq, is finished.

I, Yahyā ibn-Jarīr, the physician from Tikrit, transcribed it from a corrupt copy, in Mayyafāriqin in the year 461. Praise be to God.

It was collated with its exemplar, which was very corrupt.

The scribe is the Jacobite Christian medical scholar and theologian, Abū-Naṣr Yahyā ibn-Jarīr at-Tikriti, student of Ibn-Zur’a, the Baghdad Aristotelian philosopher from the school of Yahyā ibn-‘Adī. According to Ibn-Abī-Uṣaybi’a, who has a brief notice on him (I,243), he was still alive eleven years after he copied this manuscript, in 472/1079–1080. His medical works mentioned by Ibn-Abī-Uṣaybi’a concern sexual hygiene (Graf 1947, 260, refers to possible extant copies), but he also wrote an astrological piece which is extant, though its authorship is contested (GAS VII,19; GALS I,862, Graf 1947, 260). His major theological work is Kitāb al-Murṣid, The Guide, in which he mentions that he visited Constantinople in 450/1058 (Graf 1947, 260–262). Like most of the scholars of his time he was a man of many talents and of apparent interest
who deserves to be studied beyond the few essays that have been devoted to his theological views.\textsuperscript{1}

The manuscript was copied in Mayyāfāriqīn, just west of lake Van in eastern Anatolia, at the sources of the Tigris. It contains, following Theophrastus's Essay, al-Fārābī's *Principles of the Opinions of the People of the Perfect State* (*Mabādi’ ārā’ āh l al-madīn a l-fādīl a*), and it was used by R. Walzer 1985 for his edition of that text (cf. pp. 22–25). The manuscript has marginal notes and corrections by the same scribe, one of which, in both Syriac and Arabic in the part on al-Fārābī, refers to “Gregory of Nyssa or some other Gregory” (Walzer p. 24). The manuscript is defective both at the beginning and end; it is missing at least two pages at the beginning—a title page and the first page of Theophrastus’s text—and a few pages at the end of al-Fārābī’s text. This is unfortunate, because we are deprived of the title which Theophrastus’s Essay carried in this manuscript; the colophon gives a description of its contents, which in all likelihood reflects the Scholium in some Greek manuscripts (see above, Chapter 1.2), but not the title.

The probable provenance of this manuscript bears some discussion, given that it is the chief witness for one independent branch of the transmission of the text of Theophrastus’s Essay. It was copied, as just mentioned, in Mayyāfāriqīn in 1069–1070. Mayyāfāriqīn at that time was the seat of the court of the Marwānid dynasty which ruled the region of Diyarbakr (380/990–478/1085).\textsuperscript{2} The city had come to prominence as political and cultural center already during the time of Sayf-ad-Dawla and the previous dynasty of the Ḥamdānids, who were overthrown by the Marwānids in 380/990–991, and it enjoyed a further period of cultural efflorescence under the long and illustrious reign of the Marwānid Naṣr-ad-Dawla (401/1011–483/1061). Yaḥyā’s brother, al-Fadl ibn-Jarīr, served as the physician of Naṣr-ad-Dawla (Ibn-Abī-Uṣaybi’ā I,243), and in all likelihood Yaḥyā moved to Mayyāfāriqīn together with his brother, where he stayed and worked also through the reign of Naṣr-ad-Dawla’s successor, his son Niẓām-ad-Dīn (453/1061–472/1079). It was during the rule of Niẓām-ad-Dīn that Yaḥyā copied our manuscript, and it is interesting to note that Ibn-Abī-Uṣaybi’ā gives this ruler’s date of death as the year through which Yaḥyā was known

\footnotesize{\textsuperscript{1} For this, his major surviving work, see Mouawad 1997, with further references.} \textsuperscript{2} For the Marwānids see, most conveniently, the article by C. Hillenbrand in *EP*, VI,626–627.
to have lived. We do not know whether this coincidence is significant for the date of Yaḥyā’s own death and his relation with Nizām-ad-Dīn.

The fact that the manuscript contains also al-Fārābī’s *Principles (Mabādi’)*, a work that was completed in Damascus towards the end of his life in 943, points to its probable provenance. At that time al-Fārābī had left Baghdad and lived in Syria, where he died, as his biographers say, in 339/950–951 “under the protection” of Sayf-ad-Dawla, the Ḥamdānīd ruler at Aleppo. Since the Marwānids were, in essence, the successors of the Ḥamdānīds in the area and particularly in Mayyāfāriqīn, and adherents (and inheritors?) of their cultural policies, it stands to reason that manuscripts both by al-Fārābī himself and in his possession would be available and accessible, after his death, not only in Damascus and Aleppo but also in Mayyāfāriqīn. It is accordingly most probable that the Essay by Theophrastus, just like al-Fārābī’s *Principles (Mabādi’)*, came ultimately from the library of al-Fārābī himself. It is known that al-Fārābī started his *Principles* in Baghdad but finished it in Damascus;³ which means that when he moved from Baghdad to Damascus after the end of 330/September 942, he carried with him his library, or at least some portion of it. Theophrastus’s Essay, as translated in Baghdad by Ishāq ibn-Ḥunayn, was among these books.

Yaḥyā ibn-Jarīr twice tells us in his colophon that the exemplar from which he copied Theophrastus’s Essay was corrupt, “very” corrupt. It is not entirely clear whether “corrupt,” *saqīm*, literally “diseased,” refers to the physical state of the manuscript—i.e., torn or worm-ridden—or to the state of the text in it, error-ridden. The former seems more probable, given that some of the omissions in the text are in all probability due to a physically defective exemplar. There are certainly numerous places in the text where the mistake is clearly due to defects in the Arabic writing, and obvious corrections can be made on the basis of the Greek (see the apparatus of the Arabic edition). In some cases, however, these mistakes occur in clusters, where it would appear that there may have been some sort of physical damage to the exemplar in those places; e.g., section 9b20–21, where there are three important omissions (see below, section 2). If that is the case, then it is almost certain that the exemplar of T, a manuscript affiliated with al-Fārābī, was an old copy from Baghdad, transcribed in the circle of the Baghdad Aristotelians to whom al-Fārābī belonged. It was thus very close to Ishāq’s autograph, its

³ For the details of al-Fārābī’s life at the end of his life and his literary activities see my article on his biography in *Elr.* IX,210a.
direct provenance from which can hardly be disputed. That the exemplar of T was in al-Fārābī’s possession means that he had read it, and it remains to be investigated whether an echo of it can be found in his writings. The same applies to the scholar scribe, Yaḥyā ibn-Jarīr, despite the fact that he does not indicate in his colophon that he had copied it for himself (li-naḥṣiḥ).

The second manuscript,

B Oxford, Bodleian, Ouseley 95, ff. 92v–95v, is part of a larger miscellany (majmū‘a) of philosophical treatises, written in a beautiful Persian ta‘līq, almost fully provided with diacritical points. It is not dated, but it is written in Şafavid times and can be dated ca. 1630 AD.4 It is unfortunate that it has been destroyed apparently by book worms, so that all the pages are torn obliquely with very few lines surviving intact; as a result, about half of the text is missing (cf. Margoliouth 1892, 192). The loss, however, hardly matters, for it is quite certain that this manuscript (B) was copied, through an intermediary, from the Tehran manuscript (T), for the following reasons.

First, that B derives from T, whether directly or at some remove, is indicated by the following:

(1) B also omits the first paragraph and a half of the text and begins in the middle of a sentence with exactly the same words as T, minhā munfasilun. If B was copied from an exemplar that derived from a manuscript other than T, then it will have to be assumed against all odds that T and that other manuscript finished the first page of the text at exactly the same place independently of each other, and that the opening page of that manuscripts was also lost.

(2) At 8a26, the name of Euripides is spelled with exactly the same skeletal text (rasm) in both manuscripts: اورسوس. Not only are all the ridges after the rā’ and after the second wāw the same, despite the lack of diacritics—something difficult to achieve even in direct copying—but the two transcriptions also share the same mistake, writing a second wāw towards the end of the name instead of the original dāl or ḍāl.

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(3) At 11a23, T has the šīn (ṣīn) in a peculiar way, doubtless due to the scribe’s momentary carelessness: the first of the three ridges of the šīn is written much taller than the other two, thus giving the impression that the first ridge constitutes a different letter from the following two. B reproduces this as the šīn, interpreting the first ridge, justifiably, as a tāʾ, but failing to see (or disregarding) that the following ridges are two, not three, and do not constitute a šīn or ṣīn.

(4) At 11b15 T has, but the initial hāʾ is written in a way that the first downward stroke of the letter goes straight down rather than at a slant and it is not later met at the top of the letter by the upward stroke to close the circle, so that that first downward stroke can look like a dāʾ, while the loop on the left side of the letter looks accordingly as a separate letter, in fact like hāʾ or fāʾ. Thus the reading in B for this comes out as hāʾ, a misreading that could have occurred only in a copy made from this particular manuscript (T).

(5) Finally, at 11b6 T writes but the initial kāf is written without the top bar and with the loop of the kāf more closed than open so that it is possible to misread it as a fāʾ or qāf, which is how B read it for he writes, فا. In all of these cases the mistranscription is due to the peculiarities of the particular manuscript T, and not to normal copying errors in Arabic manuscripts.

Second, B does not seem to derive directly from T but through at least one intermediary.

(1) At 11b8 T writes for يضيغون صعون. Although the loop of the fāʾ is written slightly above the line and the line connecting it with the previous letter is slightly longer than normal, the letter is still recognisable as a rasm of fāʾ/qāf. But B writes صعون, misreading the letter as an ʿayn. Though one can understand why the misreading has occurred, it still cannot be justified on the basis of T, so it seems plausible that there was an intermediary that caused the error.

(2) More significantly, at 6b10, T writes without diacritics for ان سن بين. B misreads this as ان من سن, which is unwarranted on the basis of T, for the three ridges in سن cannot be misread as a mīm. There accordingly must have been at least one intermediary where the three ridges were transcribed in a way that could evoke a mīm.
(3) Finally, B, or the intermediary, was copying the text of T only, without the marginal material. The few explanatory additions in the margins of T are not included in B, and neither is the marginal correction of the text at 4b1.1b.

It is thus established that the Bodleian manuscript (B) derives from the Tehran manuscript (T) through at least one intermediary. This makes it impossible for B to carry any independent readings, but the fact that the Arabic skeletal text is pointed throughout is useful in determining the readings in T and the extent to which the scribe understood what he was copying.

By the same token, the Bodleian manuscript cannot inform us about the title of the Essay; not only does it derive from T, and hence has no independent information to offer, but is itself mutilated and the colophon, if there was one, is missing. The scribe of B just added at the beginning of the text as title, Maqāla li-Ṭawūfrais tus, Essay by Theophrastus, which indicates that he took the name of the author from the colophon in T and its copy.

2. The Arabic Translation

The Arabic translation is of high quality, indicative of the translator’s competence and familiarity with the subject matter. The relatively frequent inaccuracies in the translation are partly due to mistakes in the Greek exemplar upon which it is based, and partly to the difficulty of the text. All in all, the translation is accurate and quite faithful, and it helps establish the Greek text in a number of places, as discussed above in Chapter 2.2.

At the same time, the Arabic translation differs from the Greek text as we have it in certain ways which have to be properly described and assessed. In the first place, as mentioned in Chapter 2.2 above, the Arabic translation is based on a Greek manuscript (Ψ) that derives from a different transliteration from uncial than that which formed the exemplar of the extant Greek manuscripts. The textual differences between the Greek text and the Arabic translation that derive from this fact were analyzed above; this feature makes the Arabic translation an indispensable witness for the establishment of the Greek text.

Second, other discrepancies between the Greek text as we have it and the Arabic translation have different sources: some are additions and others omissions. Minor additions of a few words (there are no major
insertions of extraneous material in this brief Essay) are as a rule glosses and explanatory remarks with reference to a particular word or sentence in the text. The origin of these glosses is not insignificant. The Essay was translated in Baghdad, by a scholar who was close to the Aristotelian school, on the basis of a lost Greek manuscript about whose origins we have no information. It is likely that this Greek manuscript itself may have carried some marginal glosses, or that some of the scholars in Baghdad who first studied this treatise added their own comments, or finally that even the scribe himself, Yaḥyā ibn-Jarīr, who was educated in the same tradition, may have been responsible for some of them. These glosses occur in the following passages: 4b6, 5a13, 5b27, 8a10, 11b5, 11b6. The first two are marginal, the last four have been inserted into the text; they are all translated in the notes to these passages.

Third, minor omissions of a word or two may be either accidental, having occurred either in the Greek or the Arabic tradition, or deliberate, on the part of the translator; their precise nature has to be assessed because of their potential interest to the establishment of the Greek text. The guidelines and principles on the basis of which these minor discrepancies are to be registered in the Greek and Arabic apparatuses are described in detail in the methodological Excursus at the end of Part I.

Finally, there are a few omissions of some length in the Arabic translation. The origins of such omissions are notoriously difficult to assess. They (1) may have already been present in the Greek exemplar of the Arabic translation; (2) the translator himself may have been responsible for them either (a) by accidentally skipping a line or a phrase as he was translating, or (b) by deliberately not translating a sentence or phrase, for a variety of reasons; and finally, (3) even if the text was translated faithfully, some sentences or phrases may have fallen out accidentally in the course of the transmission within the Arabic tradition. Assessing in which category an omission belongs is significant for the way in which and where it will be recorded. Case (1) is of significance for the establishment of the Greek text in one way and of the Arabic text in another. A verifiable omission in a Greek manuscript that is no longer extant—as is the case with all Greek texts translated into Arabic—may be significant evidence that the phrase or sentence in question was itself an addition in the Greek tradition and not part of the author’s original text; it is therefore imperative that it be recorded in the Greek apparatus. By the same token, such an omission in the Greek exemplar of a translation signifies that the Arabic text itself from the very beginning lacked that passage
and hence was integral without it; that is, in trying to edit the translation and reconstruct the text as it left the pen of the translator, that particular passage plays no role and hence cannot be considered as a lacuna in the Arabic text; if at all, it will be recorded in an Arabic apparatus only for the purposes of comparison of the two texts and not of the establishment of the Arabic text. Cases (2) and (3), by contrast, do not concern the establishment of the Greek text, though in different ways, relatively and absolutely. Case (3) does not absolutely, for obvious reasons: the fact that some Arabic scribe neglected to copy a phrase or two of a text that was an accurate and complete translation of the Greek original is of no interest to the Greek editor. In case (2a), however—in cases, that is, of accidental omissions—there is almost never any certainty that the line or phrase accidentally omitted by the translator was also not missing from the Greek exemplar (for very much the same reasons of haplography, homoeoteleuton, etc.). This uncertainty makes it necessary, for the sake of completeness, to record that omission in the Greek apparatus so that it may be compared with similar omissions, if they exist, in the extant Greek manuscripts of the work. Case (2b), on the other hand, is of no interest to the Greek editor—for it does not say anything about the Greek text, which was fully present in the translator’s exemplar, but only about his decision not to, or inability to, translate the passage in question—except for comparative purposes. Also for comparative and not textual purposes are of interest to the Arabic editor both cases (2a) and (2b); for regardless whether the omissions occurred by accident or design, the fact is that the Arabic text that was produced by the translator did not have those passages, and hence its reconstitution in the edition need not take them into consideration. Case (3), by contrast, though of no use to the Greek editor, as mentioned, is central to the Arabic apparatus and should be dutifully recorded.

In this treatise there are eight cases of such omissions, briefly listed below; the details of their occurrence are discussed fully in the commentary.

1) 6b25–26, the words ὡσπερ ὀσοι πῦρ καὶ γῆν ἡ μεμορφωμένας are not translated at all, the omission being manifestly due to a homoeoarcton: somebody skipped in the Greek text from ὡσπερ in line 6b25 to ὦς in line 6b26. This was either the scribe of the Greek manuscript from which the translation was made (Ψ, or possibly one of his predecessors), or the translator himself as he was reading the manuscript. The omission is an example of case (1) or (2a) above.
2) 8b27, the words ἡ ἐξ ἁμφοῖν εἰοι δ’ were omitted either in the Greek exemplar Ψ, or by the translator as he was reading it, by haplography: someone skipped from δ’ before ἡ ἐξ to δ’ before ἔναι. This is also an example of an omission in case (1) or (2a) above.

3) 9α16–17, the Arabic words corresponding to ἔχει δὲ καὶ ... τὰ μαθη-ματα were omitted by a scribe in the Arabic tradition, who skipped from the word at-ta’ālim to at-ta’ālim in fi t-ta’ālim 〈aydan fa-inna li-t-ta’ālim〉 anfusihā ḥtilāfan. A proper lacuna in the Arabic text, it represents case (3) above.

4) 9b20–21, the words καὶ περὶ τὰς ἔτι πρωτέρας were translated but dropped out in subsequent Arabic tradition because of an omission by homoeoteleuton; they are easily restored: 〈ilmu umūri t-ṭabī‘ati 〈wa-’ilmu mā qabla t-ṭabī‘ati〉. This is another example of a proper lacuna in the Arabic text, as in case (3) above.

5) 10a10–12, the translation of the words τοῦ οὐρανοῦ ... καθ’ ἐκαστον was omitted in the Arabic tradition; see the discussion of the details of this omission in the commentary. This is also a proper lacuna in the Arabic text, and another example of case (3) above.

6) 10b8–9, the words καὶ τοῖς ἥλεοις ἡ πρόεσις εἴπερ μή συμβάλ-λεται, on female emission, were not translated. There is no break in the Arabic syntax, which would suggest that the omission was deliberate, either because of the difficulty of the passage or, though less likely, because of the sensitivity of the subject. This is an example of case (2b) above.

7) 10b13–16, the longish passage, καὶ ὡς ἔνια δὴ ... λάβοι τις ἄν τοιαύτα, consists of a few more examples of apparent purposelessness in animal life. There is again no break in the Arabic syntax, and the omission appears to be deliberate, most likely on account of the difficulty of the passage or, technical terms involved, in addition to the fact that the philosophical point about teleology had already been made. This is yet another example of case (2b) above.

8) 11a11–12, the words καὶ ἐν τῇ μέσῃ κοιλίᾳ τῆς καρδίας τὴν κράσιν ἄριστην ὃτι τὸ μέον τιμῶτατον are missing in Arabic. This is a difficult case to call, for theoretically the omission could have occurred both in
the Greek and Arabic tradition. For reasons discussed in the note to the translation, it appears more likely that it was deliberate on the part of the translator, and thus an example of case (2b).

The results of this analysis of the differences between the Greek text and the Arabic translation have been entered accordingly in the critical apparatuses of the two texts.

3. The Translator, Ishāq Ibn-Ḥunayn

Concerning the identity of the translator, the ascriptions are not unanimous. The scribe of the Tehran manuscript, Yahyā ibn-Jarīr, explicitly ascribes it in the colophon to Ishāq ibn-Ḥunayn (d. 910–911; see EI² IV,110), as cited above. In his Index, however, which was completed in 987, Ibn-an-Nadīm says (Fihrist 252.9, fr. 3A FHS&G) that the translation was made by Yahyā ibn-‘Adī (d. 974; see EI² XI,245), the Aristotelian scholar in Baghdad, a statement to which the great Syriac scholar Bar-Hebraeus (d. 1286) later added that the translation was done from Syriac into Arabic (fr. 3B FHS&G). Now the evidence in the colophon of the manuscript should be decisive, especially in the case of this manuscript which, as discussed above, descends from an exemplar in all probability copied some time in the tenth century in Baghdad in the Aristotelian circles frequented by al-Fārābī. On the other hand, Ibn-an-Nadīm received his information about philosophical manuscripts and translations from Yahyā ibn-‘Adī himself, and his authority cannot be easily impugned. The two ascriptions need not necessarily be in conflict, though, insofar as Ishāq could have translated it in the first place and Ibn-an-Nadīm’s report could mean either that Yahyā ibn-‘Adī revised Ishāq’s translation or that he, Ibn-an-Nadīm, heard of or possessed a copy of Theophrastus’s Essay from the library of Yahyā ibn-‘Adī. In this case, however, the evidence provided by Bar-Hebraeus, that Yahyā’s translation was done from the Syriac, cannot stand, for that would mean that Ishāq translated the Greek text into Syriac and Yahyā the Syriac text into Arabic, whereas in the colophon the scribe ascribes to Ishāq the Arabic translation which he has just finished copying. Since the evidence provided by the scribe, Yahyā ibn-Jarīr, must trump all others, it is most likely that the translation was transmitted as just described: Ishāq ibn-Ḥunayn made the translation into Arabic from the Greek, and this translation became current in the circles of the Baghdad Aristotelians where al-Fārābī found it and acquired a copy. Yahyā ibn-‘Adī, the scholarch of
the Aristotelians after al-Fārābī’s departure from Baghdad in mid-tenth century, either corrected or most likely “edited” or “published” the text, and Ibn-an-Nadim learned about it on the authority of Yahyā ibn-‘Adī and inaccurately reported it as having been translated by Yahyā. As both Ishāq and Yahyā ibn-‘Adī are known to have translated books of Aristotle’s *Metaphysics*, they doubtless found the Greek text in the Greek manuscript(s) of the Aristotelian work which would have included, as discussed in Chapter 1.2, also the Essay by Theophrastus.

The stylistic peculiarities of the translation provide additional corroboration that it came from the pen of Ishāq ibn-Ḥunayn. It is true that, in general, we are far from the stage where we can distinguish with absolute certainty, on this basis, between the styles of Ishāq and Yahyā ibn-‘Adī. It is also true that very few translations by Yahyā are extant; however, in this particular case the following indications appear to be conclusive.

Ishāq ibn-Ḥunayn was arguably the most accomplished translator of Greek philosophical texts, and Yahyā was active at a time when the translation movement was winding down and coming to an end; accordingly the translations had reached a high level of accuracy, sophistication, and consistency in technical terminology. Under these circumstances, it becomes difficult to argue conclusively about identities of translators on the basis of words chosen to translate technical terms. The assumption must be, and given the ubiquitous practice of later scholars of revising or “touching up” earlier translations, that such terminology would be similar enough and flexible enough as to make definite pronouncements about the identity of the translator inadvisable. What remains is to analyze the way in which some very common, functional, words are translated and seek to identify turns of Arabic phrase that may be unique to a translator. That said, we can have a look at Aristotle’s *Sophistics*, almost the one work which we know for certain to have been translated by Yahyā ibn-‘Adī, and the *Physics*, a work translated beyond the shadow of a doubt by Ishāq.

The word ṭīwāz (perhaps) occurs eight times in the *Sophistics*. In four of these Yahyā consistently translates it with ‘asā (175b23, 180a14, 181b32, 33), once with ḥa’lla (179b26), once literally, ‘alā l-musāwāt (170b21), and twice he does not translate it at all (170a22, 180a16). In the Arabic translation of the *Physics*, Ishāq translates the word in a number of ways, depending on the context, but most frequently by ḥāliqun an (185b11,

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5 See the detailed discussion in Bertolacci 2005, 270, and passim.
200b4, 202b33, 212b18, 224b15, 228a15, 231a16, 241b15, 253a15, 261b12) and aḥlaqu bi- (217a8, 252b31). By contrast, he uses ʿasā only once (256b12) and laʿalla only twice (202a22, 229a29), rubba-mā once (223b7) and, characteristically, also fi-mā ʾaḥṣibu (238b9, 253a13). In the Essay by Theophrastus, ḫωζ occurs four times, in one of which (6a6) it is not translated at all, and in the other three it is translated by aḥlaqu bi- (4b13), ḥaliqun an (8a3), and fi-mā ʾaḥṣibu (6a12). The close correspondence between the idiom of Ishāq in the Physics and the translator of the Essay is obvious. Particularly noteworthy is the use of the expression fi-mā ʾaḥṣibu (“as I reckon”) to render ḫωζ. It is a brilliant rendering, and also uncommon, in that it gives not the strict lexical meaning of the word but its sense in the particular context. I am not sure whether this rendering of ḫωζ is unique to Ishāq, but in this case it points to the identicalness of the translator of both the Physics and Theophrastus’s Essay.

A similar conclusion is obtained from a consideration of the translation of the word μάλιστα. Yahyā ibn-ʿAdī translates it essentially in two ways in the Sophistic. The first is the painfully literal, but in the Arabic context rather barbaric expression, ḥktara, “more” or “most” (165b18, 176b27, 182b32 and 33, 182b38 twice; katıran 169a33); the second is the generic ḥāssatan (169a35, 172b13, 174b9, 176a26, 176b21). In only one case does Yahyā use a more elegant construction to express the sense of the word, translating μάλιστα δομινὺς with the elative only, ḥaddu (183a3). The procedure adopted by Yahyā in translating μάλιστα in this way is understandable. Since he was translating from a Syriac translation of Sophistici Elenchi and not from the Greek, he was bound by the choices that had been made by the Syriac translator, and hence he translated mechanically the Syriac term with the same Arabic word in each occurrence; in other words, he did not have the possibility to express the nuances of the use of the word that a Greek context would have given him. But this is precisely what we see in Ishāq’s translation of the Physics, where he renders the word μάλιστα in a variety of ways, always sensitive to its meaning in context. First, Ishāq never uses plain ḥktara to translate it, but in the few places where he does use this elative form, he uses it either in the expression ḥktaru mā (197b32, 199b30, 203b22), or ḥktara

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6 With the word ḥāssatan added here above the line in the Paris manuscript which has preserved the Arabic translations of the Sophistic.

7 It is interesting to note that in these three passages just referred to, somebody wrote ḥktara above the word ḥāssatan in the Paris manuscript.

8 The Syriac translation was made, we are told by Ibn-an-Nadīm (Fihrist 249.27), by Theophilus of Edessa (d. 785), the court astrologer of the caliph al-Mahdī (775–785).
followed by the *mafʾal muṭlaq* of the word modified by *μάλιστα* (199a20, 262a12). Second, other than these uses of *aktar*, Ishāq does not use only *ḥassatan* (198a11, 204a1, etc.), like Yahyā, but numerous other ways to translate *μάλιστα*. In both these aspects the translator of Theophrastus’s Essay does the same: he never uses *akṭara* and he always translates according to sense. The following instances show the identical procedures in the translation of the *Physics* and in the Essay. In a few places, Ishāq translates *μάλιστα* in the *Physics* with *awlā bi-* (265a5, 267b4) and *ahaqqu bi-* (247b2); the translator of the Essay also uses *awlā bi-* (5b9, 11b17), and in one place even *ahaqqu waawlā bi-* in hendiadys (6b26).

Second, noteworthy is the extremely innovative but accurate rendering of the difficult expression ὅτι μάλιστα in the two translations: With *Physics* 205b6 ὅτι μάλιστα μὴ κινεῖται τὸ ὁλὸν = abʿad al-mawāḍiʿ min an tataḥarraka ilayhi jumlatun (p. 244 Badawi), and *Physics* 210b13 ὅστʾ εἶ ὅτι μάλιστα ἐν ὀλλήλοις εἶπεν = fa-in kāna qad yajūzu bi-wajhin mina l-wujāhi an yakāna kullu wāhidin minhumā fi sāhibihim (p. 295 Badawi), compare the Essay 8a4, ὅτι μάλιστα σύμφωνον ἔστι = (fi) ḡayati mā yumkinu an takūna ʿalayhi mina l-ittifāqī. Similarly note the similarity in rendering the superlatives with *ahaqqu bi-* in *Physics* 223b19, (ἡ κυκλοφορία ἡ ὀμαλῆς) μέτρον μάλιστα = fa-ahaqqu l-ḥarakāti bi-an takūna al-muqaddirata (l-ḥarakatu ʿalā l-istidārati l-mustawiyati) (p. 479 Badawi), and in the Essay 6a1 τὸ θειότατον = ahaqqu l-ašyāʾi bi-annahū llāhu.

From this comparison there clearly results that the translators of the *Sophistics* on the one hand and of the *Physics* and Theophrastus’s Essay on the other were two different people, and if Yahyā ibn-ʿAdī was the translator of the *Sophistics*, then he could not have been the translator of the other two. There also results that if Ishāq was the translator of the *Physics* then it is highly probable that he was also responsible for the translation of Theophrastus’s Essay. This probability comes close to being certainty in such cases when it is noted that some other peculiarities of expression, or mannerisms, in the *Physics* translation are also present in the translation of the Essay. The first is the habit of Ishāq on occasion to introduce a direct or, mostly, indirect question with the Arabic expression, *layta šīrī*, “I wish I knew.” From the relative frequency and casualness of its use in the *Physics* translation—casual in the sense that the Greek text has no word or structure indicating urgency in the question that is being asked—it would seem that the expression had lost its strict literal meaning and was used as a question marker in the Arabic of Ishāq’s BaghdaDownload.pdf. Thus, for example, Ishāq uses it in *Physics* 185b12 and 203b32 to
translate questions introduced by πότερον ... ἢ and ποτέρως (pp. 13 and 214 respectively), and in 185a22 and 215a6 to translate questions introduced by πῶς (pp. 10 and 362 Badawi, respectively). The same use of layta ʾšīʾrī is also seen in the translation of the Essay by Theophrastus, marking questions introduced by ἀξιωσόμεν ἄν (6a16), ἄρα (10a16), and πόθεν (10a24).9

Another mannerism is Ishāq’s habit of adding the word aʾnī, “I mean,” when he introduces subordinate clauses, explanatory or parenthetical phrases, or attributive phrases following a noun in the Greek, when they run the risk of being misunderstood if rendered paratactically in Arabic. For example, Physics 252a19–21, δύστερ βέλτιον ὡς Ἐμπέδοκλῆς ... ἐν μέρει τὸ πᾶν ἰσιμεῖν καὶ κινεῖται πάλιν = fa-inna qawla Anbāduqlis ... ajwadu, aʾnī anna l-kulla yaskunu marratan tuamma yataharraku (p. 814 Badawi); and Physics 234a19–20, ἀνάγκη τὸ αὐτὸ εἶναι τὸ ἐν ἐκκατέφω νῦν = fa-wājibun an yakūna l-āna wāhidan biʿaynī, aʾnī l-āna llaḍi fi kulli wāhidin minhumā (p. 640 Badawi); etc. This use of aʾnī is also quite frequent in the translation of the Essay by Theophrastus (7a16, 7a21, 7b20, 8a8, 8a22, 8b12, 9b14, 10b24, 11a5). This particular mannerism may not be unique to Ishāq, for it is also encountered in the earlier translator of De caelo, Yahyā ibn-al-Bītrīq (see GALex I, p. 17†), but it appears not to have been common among translators of Ishāq’s generation and later.

Finally another rendering that is common to the translations of both the Physics and Theophrastus’s Essay is the term ἄλγοςν, translated as ʾgayr munqās, “unreasonable.” This is an unusual rendering, and indeed one that Ishāq uses only once in the Physics (255a10) although the Greek term itself occurs frequently enough, but it also occurs in the Essay at 7a10 and later, in the form laysa bi-munqās, to translate μὴ ἔχειν λόγον at 10b25. Apart from the startling occurrence of this unusual term in the two translations, its derivation also bespeaks an advanced stage in the development of technical terminology. Since λόγος was usually translated also with the word qiyās, Ishāq—if it was Ishāq who first thought of using munqās in this connection—thought that he would use a word in Arabic etymologically deriving from the same root as qiyās, just

9 Ullmann in WGAÜ 552 registers two more uses of layta ʾšīʾrī in the translation of Themistius’s paraphrase of the De anima; this is as it should be, for all indications are that this work was also translated by Ishāq. However, the evidence collected here indicates that layta ʾšīʾrī does not properly translate enclitic ποτε, as Ullmann has it, but simply introduces the questions that follow in the text.
as ἀλόγον derives from λόγος in Greek. He thus used munqās (“logos-ed,” i.e., reason-ed, reasonable), the participle of the passive verbal form infa’ala, together with a negative.

The whole question of the identity of the translators of individual Greek works during the Graeco-Arabic translation movement remains a thorny and difficult field, not yet fully researched, though significant advances have recently been made. Under these circumstances, the evidence collected here indicating that the translator of Theophrastus’s Essay was indeed Ishāq ibn-Ḥunayn makes the identification as certain as can be achieved at present.

4. Editions of the Arabic Text

1) Margoliouth. The article by Margoliouth 1892 was the first to study the Arabic translation, only about half of which was available to him in the damaged Bodleian manuscript; the Tehran manuscript was not discovered until much later. Margoliouth’s purpose in this article was to introduce, edit, and translate a Persian version of the Book of the Apple (Kitāb at-tuffāḥa) from the Bodleian manuscript, which also contains the Essay by Theophrastus, so his interest in the latter was only incidental. In the introduction he devoted a few pages (192–201) to the work, in which he presented a transcription of a whole passage (11a1–11b1) and numerous other sentences for the purpose, primarily, of assessing the value of the Arabic translation for the establishment of the Greek text. In a few places his readings and suggestions for the text are accurate and have been adopted (indicated in the apparatus), while his critical comments have been referred to in the commentary. But in several other places his transcription is inaccurate or wrong, given the deficient manuscript from which he was working. These need not clutter the Arabic apparatus, for they contribute nothing to the establishment of the text, but are listed in a separate apparatus in Part II at the end of the Arabic text and facing English translation.

2) Alon. The first complete edition of the Arabic translation, based on both extant manuscripts, was offered by Alon 1985 in an article that

drew upon his doctoral dissertation. Alon’s edition is very uneven. At times he offers valuable readings and suggestions for corrections, though almost always without indicating that he is altering the manuscript readings; and at other times his text contains numerous serious mistakes in transcription,\(^{11}\) omissions, and inaccurate information about manuscript readings. These also need not clutter the main Arabic apparatus and have been listed in the separate apparatus at the end of the Arabic text and English translation.

Whenever I accepted one of Alon’s corrections of a faulty reading in the Arabic manuscripts because it was consonant with the translator’s practice and the Greek text, I took the liberty, following my practice, of indicating in parenthesis next to the corrected reading in the apparatus the reading of the Greek text on whose basis this correction is warranted, even if Alon himself did not make such an explicit justification for the correction. Thus at \(10a10\) Alon reads \(hāssatan\) (p. 200, translated as “especially,” p. 214) instead of the manuscript reading \(hāssiyya\). Alon’s reading is correct because it translates \(καὶ μάλιστα\), a standard earlier occasion at \(9b19\). I note this in the apparatus in parentheses next to his correction, although Alon has no note about it but only a vague reference to the following lacuna without even specifying its extent or exact location in the text.

3) Crubellier. The publication of the 1992 article by Crubellier marked an advance in the study of the contribution the Arabic translation could make to the establishment of the Greek text. In this study, undertaken in conjunction with the preparation of a new edition of the Greek text by Laks & Most, Crubellier offered a close translation of the Arabic text with copious notes explaining the Arabic translation and offering corrections and emendations. Many of these contributions to the history of the Greek text found their way in the apparatus criticus of Laks & Most under the siglum “Iṣḥaq”\(^{12}\) or, when “Iṣḥaq” agreed with all the Greek manuscripts, under the siglum of \(ω\). I refer to Crubellier’s article with the siglum Crub.\(^1\)

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\(^{11}\) Such mistakes were not without consequences. For example, Alon’s mistranscription \(munqasiman\) for the reading \(munfasi˘han\) attested in the manuscript at \(5a4b\) led Pines (in Alon 1985, 186n24) to conjecture unnecessarily a reading of \(λέγωτο\) for the actual \(λύ-\) 

\(^{12}\) For the inadequacy of this siglum, because it covers a number of discrete phenomena, see section III in the Excursus and note 11.
At the same time Crubellier had prepared the draft of a new edition of
the Arabic translation, which he most generously placed at my disposal
(see the Preface). I have gratefully benefited from this draft edition, to
which I refer with the siglum Crub.2

5. The Present Edition and Translation of the Arabic Text

The Arabic edition aims to reproduce, to the extent possible, the state
of the text as established by the translator in order to derive maximum
benefit in divining the readings of its Greek exemplar, Ψ. The procedure
that has been followed is described in the Excursus on Graeco-Arabic
editorial technique at the end of Part One.

In the edition of the Arabic text, the enumeration of the lines with
small raised numbers follows that of the Greek text. Since Greek and
Arabic syntax are different and do not follow the same word order, the
following guidelines have been adopted in order to reduce arbitrariness
in assigning the line numbers. Normally, the line number is placed
before the Arabic word translating the first complete Greek word in
that line (divided words in the Greek are included in the line in which
they start). If, because of the requirements of Arabic syntax, that word
is integrated in the sentence of the preceding or following line, then
the line number is placed before the second full word of the line. In
cases where this happens with more than two or three words, then the
line numbering is split into two segments (in exceptional cases three)
identified with a and b (and c in the exceptional case) after the number
of the line. This is a general rule of thumb which it may not have been
possible to apply absolutely consistently. But on balance, and despite
the somewhat distracting presence of the numbers inside the text, this
procedure appeared less cumbersome and infinitely less confusing than
introducing yet another set of numbers to refer to the lines of the Arabic
translation. As it is, the reader can identify on the spot the precise passage
that corresponds to the Greek text because it bears precisely the same
number.

The critical apparatus accompanying the Arabic text is positive. With
only one, essentially, manuscript at our disposal for the establishment
of the text, it has been possible to give full documentation of all the
evidence in the apparatus without unduly cluttering it. In practice, and
with regard to diacritical points, which are almost entirely absent in T,
this means that in all instances in which even a slight doubt existed about
the reading of a word lacking its diacritics, the skeletal form of that word, as well as the reading offered in B, have been fully recorded. In the case of the personal prefixes of verbs in the imperfect, variants between the two manuscripts and among editors due to the pointing of the third person masculine and feminine, and first person plural, have been mentioned only when absolutely crucial for the meaning. Meritorious suggestions and readings offered by earlier editors have also been recorded, while the obvious errors in the transcripts of Margoliouth and Alon are listed in the supplementary apparatus at the end of the Arabic edition and English translation.

Given the nature of the mistakes in a manuscript that are due to the peculiarities of Arabic writing, it is important to discriminate among them and register them differently in the apparatus. These are, to list them by their Arabic name, (a) tahrif, mistakes due to a miswritten skeleton (rasm), whose correction is indicated in the apparatus by writing “corr(ected by),” or “corr(ection in)”; (b) tashif, mistakes due to different pointing of the same skeleton, indicated in the apparatus by writing “read(ing by or in)”; and (c) tahrīk, variants due to different vowel signs placed on the same skeleton with the identical pointing, indicated in the apparatus by “voc(alization by or in)”.

On occasion it has been possible to correct the Arabic text on the basis of the Greek. In such cases, it is clear that the suggested emendation or reading, which constituted a translation of the text as it appeared in the Greek exemplar, Ψ, existed in the translator’s autograph but that it was corrupted in the process of the Arabic transmission. These emendations are registered with an asterisk (*) following the name of the scholar who made them, itself followed in parentheses by the Greek word(s) justifying the emendation.

The English translation of the Arabic text tries to be literal without sacrificing intelligibility. In places where the Greek and Arabic say exactly the same thing, an attempt has been made to render the Arabic text with the same words as the Greek, to make meaningful the comparison of the two translations. The translation is also heavily annotated. This seemed preferable to both adding a second commentary for the Arabic text alone and to incorporating the Arabic notes into the Greek commentary. The notes discuss every deviation of the Arabic from the Greek as well as any other peculiarity of the translation in order to explain the choices that I made for the readings of Ψ that I registered in the Greek apparatus criticus.
EXCURSUS

PRINCIPLES OF GRAECO-ARABIC
TEXTUAL CRITICISM AND EDITORIAL TECHNIQUE

Establishing the Arabic Edition and the Greek Apparatus

The edition of the Arabic translation of Theophrastus’s *On First Principles* (or the Arabic translation of any classical Greek text) contains the following parts: (a) a critical edition of the Arabic translation; (b) apparatus criticus for the Arabic text; (c) apparatus criticus for the Greek text, containing information for the Greek text that is gained from the Arabic edition; (d) English translation of the Arabic translation; (e) philological commentary on the details of the Graeco-Arabic translation; (f) Greek-Arabic and Arabic-Greek glossaries. The purpose of each part and what it ought to contain are briefly described below.

1. Stages in the Transmission of Texts

The Arabic translation of *On First Principles* (or of any classical Greek text) represents three different stages in the transmission of the text which have to be kept separate if the Arabic edition can be of use to the establishment of the Greek text. Starting with the known and proceeding to the unknown, we have:

1. *Extant manuscripts*. The Arabic text of the translation as found in the extant manuscripts (in this case, manuscripts T and B). These all derive ultimately from the translator’s autograph, or final clean copy. They contain, however, numerous variations from that autograph or clean copy which are due to mistakes, misreadings, miscopyings, omissions, inclusions, interpolations, etc., that occurred in the process of the transmission of the text within the Arabic tradition. The purpose of the Arabic apparatus (b) is to register the appropriate information which these manuscripts contain.
(2) The translator’s autograph or clean copy. This is not physically extant, but since all the extant manuscripts derive from it, it is possible to reconstruct it to the extent allowable by the evidence provided in the manuscripts and the Greek text. The purpose of the Arabic edition of the text (a) is to reproduce, to the extent possible, the text as it stood in the translator’s autograph or clean copy.

(3) The Greek exemplar used by the translator, also not extant. This is the manuscript on the basis of which the translation was made (in this case, \(\Psi\)); the translation, therefore, as it stood in the translator’s autograph, reflects the readings of this manuscript. The readings of this Greek exemplar, to the extent that they can be recovered with certainty from the Arabic translation as established in the critical edition (a), will be recorded either in the edition of the Greek text or, in case they are not accepted by the editor in the edition, in the Greek apparatus criticus (c). When they cannot be established at all because the Arabic translation is not precise enough or specific enough to express the underlying Greek word (as in the case of particles, for example), this fact is registered in the Greek apparatus with square brackets placed around the siglum of the Greek exemplar, \([\Psi]\) (see above, Chapter 2.7b, § 2).

2. Relation between Stages 1 and 2

Establishing the translator’s autograph or clean copy (Stage 2) from the extant manuscripts (Stage 1) is done as in any edition of an Arabic text with regard to selecting variants and identifying and correcting errors. The variants that have not been selected for inclusion in the text and the various erroneous readings are registered in the Arabic apparatus and marked by the siglum which represents the manuscript where they occur. However, in establishing the critical edition of the Arabic translation of a Greek text we have an additional source of information which tells us what the autograph should have said: the Greek original. If we can ascertain that the translator translated a particular passage or word accurately but that the correct original translation was subsequently corrupted in the transmission within the Arabic tradition, it is possible to correct such mistakes and misreadings on the basis of the Greek text. These corrections are registered in the Arabic apparatus (b) in a special manner, with an asterisk next to the name of the person making the correction, followed by the Greek word in parentheses (see the Sigla
for the Arabic apparatus below). When this correction is also used to corroborate the reading in the Greek text, then it is registered in the Greek apparatus (c) with an asterisk following the siglum representing the Greek exemplar of the Arabic translation (Ψ*).²

3. Relation between Stages 2 and 3

Determining how the Arabic translation relates to the Greek exemplar from which it was made involves comparing the received Greek text with the Arabic edition, as established in section II above. If there is disparity between the Greek and the Arabic at any specific point, its cause is either determinable or indeterminable, each of which must be registered differently in the Greek apparatus (c).

(1) A disparity whose cause is determinable is when it can can be ascertained that the Greek manuscript used by the translator (Ψ) had a different reading from that of the Greek received text. If that variant also appears in other Greek manuscripts of the work, the siglum Ψ will be added to those representing the variant in the Greek apparatus. If that variant does not appear in any known manuscript, then it will have to be reconstructed in Greek and registered in the Greek apparatus (c) under the siglum Ψ (see the Sigla for the Greek apparatus), followed in parentheses with the transliterated Arabic word(s) which led to the reconstruction.

(2) Frequently, however, the cause of the disparity is indeterminable. This means that it is not possible to determine at which of the three stages in the transmission of the text (as described in section I above) the disparity occurred. This occurs most frequently with omissions in the Arabic translation: (i) they may be due to the scribe(s) of the extant

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¹ For this and all following examples, see the entries in the Greek and Arabic apparatus to which reference is made. For an example of the use of the Greek text to emend an erroneous Arabic word, see Crubellier’s correction of the mistaken mawjūd to madḥūl for ἐπεισωδῶδες at 4414, a mistake based on the misreading of a similar skeleton in Arabic for the two words. In the footnote to the translation, references are given from the translation literature further to substantiate this correction.

² For example, at 4b11 the transmitted id (ἐπει) is corrected to in (ei) because id does not fit the sense of the sentence, and the correction is registered also in the Greek apparatus because there is some variation in the Greek evidence.
manuscript(s) or to their immediate source from which they derive—the possibility that such an omission may have taken place is very large when only one or two manuscripts of the work survive, as in the present case; (ii) they may be due to the translator himself, who either neglected to translate or skipped over a word or words; (iii) and they may also be due to the Greek exemplar used for the Arabic translation (Ψ), even if such omission may not be attested in any extant Greek manuscript. 3

Other kinds of disparity, however, are just as difficult to determine. An addition of a word in the Arabic translation may indicate an extra word in the Greek original, but then it may be a semantic elaboration on the part of the translator. A disparity may also occur from a misreading by the translator of the Greek exemplar or from a correct reading of a slightly different Greek original than the received text, the precise nature of which may not be readily identifiable. All such information from the Arabic translation, despite its indeterminacy, could possibly relate to the Greek exemplar and is thus of interest to the Greek editor. It should therefore be registered in the Greek apparatus in a distinct way and attributed to the Arabic tradition in general, using the abbreviation “Ar.” (see the Sigla). This indicates what the Arabic text has in its extant form and informs the reader that it cannot be specified to which of the three stages of the transmission of the text this reading is to be attributed. 4

However, when a disparity between the Greek and Arabic texts can be explained within the context of the Arabic tradition itself and corrected accordingly, then this variant in the Arabic tradition will not be registered in the Greek apparatus with “Ar.” Example: in 9α16–17 the Greek has, ὡςπερκαὶἐντΨο;ΥκροῖςμαΨτΡεταῖςἡματικΨο;ΥπρέταοιςΨειδὲκαὶαὐτὰτὰμαΨτΡεταῖςΨπροςΨειδὲκαὶαὐτὰτὰμαΨτΡεταῖςΨράν. The Arabic manuscripts read, ka-ma fi t-ta‘ālim anfusīhā ihtilā‘an, which is clearly defective: some Greek words are not translated (καὶ ... ἔχει δὲ καὶ ... τὰ μαθήματα), and the accusative of ihtilā‘an has no governing word. The latter provides the clue that something has been omitted within the Arabic manuscript transmission and is not due to something omit-

3 The Greek manuscripts used by the translators were either old uncial manuscripts of the sixth or early seventh centuries or the newly minted minuscule manuscripts of the ninth (no Greek secular manuscripts were copied between about the mid-seventh to the early ninth century). In either case, the Greek manuscript used by the translator could well represent a branch in the transmission that left no descendants, as with the present work.

4 Examples: 4α19, 6α6 (omission); 5α3 (addition); 6α4 δήμων—ὁμα ἁ (misreading due to minuscule exemplar).
ted in the Greek manuscript or misread by the translator. The omitted
words can be easily reconstructed and the omission itself attributed to
haplography: one thus adds to the Arabic text, ka-mā fi t-taʿālīm (aydan
fa-inna li-t-taʿālīm) anfusihā ḫīlāfan, where one scribe skipped from
the first taʿālīm to the second and omitted the intervening words. In such
cases, the omission and its correction are registered in the apparatus of
the Arabic text but not in that of the Greek text.5

There are three cases of disparity, however, in which it is possible
to be more precise about its cause and thus further specify the general
designation “Ar.” in the apparatus:

(2.1) The translator may have had the same text as the received text
but interpreted it either according to his own understanding of the sub-
ject of the treatise (which may be different from our own) or accord-
ing to the purposes for which he was making the translation.6 In either
case, his interpretation is of interest for the establishment of a diffi-
cult text, to say nothing of its significance for the history of ideas. It
should therefore be registered in the Greek apparatus with the specifi-
cation, “ut interpr(etatur est) Ar.” (“as interpreted in the Arabic;” see the
Sigla).7

(2.2) The translator may have had the same text as the received text but
misunderstood it either because he did not understand the vocabulary
involved or did not parse or punctuate the sentence correctly. However,

5 A slight problem in this correction is generated by the fact that the Greek has
two different words in this text, τοῖς μαθηματικοῖς and μαθήματα, both of which
are translated by taʿālīm. Μαθήματα occurs only once in this work, but there is no
doubt that its translation is properly and correctly at-taʿālim, since that is what the
word means in both Greek and Arabic, the science of mathematics. Τοῖς μαθηματικοῖς,
however, refers to mathematical objects, not to the discipline, and its translation by at-
taʿālim, if the addition proposed in the emendation of the text is to be correct, would be
inaccurate. It seems, however, that the translator did in fact mistake τοῖς μαθηματικοῖς as
referring to the discipline rather than to its objects, and thus our addition of at-taʿālim,
representing the translator’s mistake, is correct. In the two other passages in this work
where τὰ μαθηματικὰ (with the article) occurs (4a18, 11b20), referring to the objects of
mathematics, the translator renders the word also with at-taʿālim and not with al-aṣyāʾ
(or al-unmār) at-taʿalimīyya, as he does in 6b9, where the Greek word is found without
the article and thus clearly refers to mathematical “things” and not to the discipline
itself.


7 Examples: 4a15, 5b8–9, and see the corresponding notes in the translation of the
Arabic text.
the possibility that he might have had a slightly different text than the received text, or a corrupt text, can never be entirely ruled out. How the translator misunderstood the sentence is of potential interest to the Greek editor of the text and should therefore be registered in the Greek apparatus with the specification, “ut intell(exit) Ar.” (“as understood in the Arabic;” see the Sigla). 8

(2.3) In some cases of omission, i.e. when the Arabic does not translate a word in the Greek, it is possible to attribute the omission not to any of the three reasons given above but to the translator’s deliberate decision not to translate the text. This may occur for two reasons:

(a) The translator may have decided not to translate a word because he felt that the Arabic sentence as constructed somehow included the sense of the word left untranslated. This occurs most frequently with the translation of Greek particles: In their case, there is first the question of the extent to which the Graeco-Arabic translators understood their precise force and implication; the subject of how well scholars of Greek in ninth and tenth century Byzantium and their colleagues in the Islamic world knew the classical Greek particles has, to my knowledge, not been investigated. But in addition to particles, the same observation applies to related words—adverbs, conjunctions, pronouns—which lend nuance and emphasis to the sentence rather than a concrete concept. In all such matters of nuance, the translator, even if he understood the full force of the particles or related words, may have felt either that Arabic could not express it adequately or that the way in which he had translated the Greek sentence by and large covered the said nuance without the need for a specific and additional Arabic word or phrase. Thus the absence of a specific Arabic word or phrase translating any of these Greek words would not indicate that that Greek word was absent at any one of the three levels indicated above, but that it is due to the translator’s decision not to translate it. In these cases the Greek word not translated will be indicated by the notation “non vert(it) Ar.” However, in the case of particles, it would be otiose to record the relatively frequent absence of their translation with this notation every time it occurs; in this regard the editor will have to exercise his judg-

8 Examples: 4b15 (example of auditory mistake), 7b19, and see the corresponding notes in the translation of the Arabic.
ment and record only those instances in which the particle in question contributes decisively to the signification of the sentence. Apart from this, all the other similar words not translated for this reason will be noted by “non vert. Ar.” (“not translated in the Arabic”); see the list of Abbreviations.9

(b) The translator may have decided not to translate a word, sentence, or passage in the Greek text because mainly he did not understand it or somehow felt that the text, as he found it in his exemplar, did not contribute anything to the subject of the treatise being translated. This kind of deliberate omission during the work of translation is explained by no less an authority than Ishāq’s father, Hunayn himself, when he mentioned that while translating Galen, he would omit some poetic passages (Aristophanes) because he neither understood them nor found them germane to Galen’s treatise.10 In Theophrastus’s On First Principles, examples of such passages which were not translated are the sentences with biological content at 10b8–9 and 10b13–16, apparently because Ishāq did not properly understand them. In these cases, the notation “non vert. Ar.” in the Greek apparatus is used to indicate that there was no omission or lacuna in the Greek exemplar (or, a fortiori, in the Arabic manuscript tradition), something that the notation “om. Ar.” is intended to convey. This is the difference between “om. Ar.” and “non vert. Ar."

9 Examples: 10a14 κἂν; 10b4 αὐτή. With regard to the latter, it is to be noted that the translator is selective in his translation of emphatic αὐτή: in some cases he translates it properly with nafs (e.g., 7b22, 9b14), but in others he does not. With regard to this intensive pronoun, an interesting case illustrating how the way in which a sentence was translated into Arabic may adequately cover the nuance of such words in Greek is the Homeric citation in 8b17, where emphatic αὐτή occurs twice. Ishāq translates, jabarahum ḥawla l-arḍi ma’ā l-bahri kullihī, where the word kullihī at the end clearly intends to cover the signification of the second αὐτή. In this context, if Ishāq had attempted to translate also the first αὐτή and said something like either ḥawla l-arḍi kullihā or ḥawla l-arḍi nafsihā, the Arabic style of the resulting sentence would have been rather unsatisfactory. Thus it seems that Ishāq decided not to translate the first αὐτή and was content to allow the word kullihī at the end somehow to convey the force of both intensive Greek pronouns. Yet another example of Ishāq’s decision not to translate something because he thought it redundant is provided by the passage at 10b1 where ḥī tīvōc is not translated. The notation “non vert. Ar.” in the apparatus draws attention to this fact, for it can hardly be thought that he did not actually have ḥī tīvōc in his exemplar (Ψ); whereas a notation “om. Ar.” could have implied that it would be permissible to suppose that Ψ actually had omitted these words.

10 See the discussion in Gutas 1998, 140.
Finally, a word of caution. The apparatus of the Greek text should not be cluttered with information that belongs strictly to the apparatus of the Arabic text. A discrimination has to be made between variant readings that are due solely to the transmission within the Arabic tradition and those that are due to the transmission within the Greek tradition as represented by the Greek manuscript used by the translator.\footnote{For example, in the apparatus at \(8\alpha\tau\), Laks & Most register two omissions by “Ishāq”. This entry, however, does not belong here but in the Arabic apparatus. The text of the original translation as written by Ishāq was not the one transmitted in the existing Arabic manuscript T because the latter makes no sense and it has to be assumed that Ishāq wrote intelligible Arabic. The text of this sentence was therefore corrupted within the Arabic tradition—and not because of any mistake in Ishāq’s exemplar—and has to be corrected in order for it to make sense grammatically (see my correction of the Arabic text). But this mistake then and its correction have no bearing on \(Ψ\), the Greek exemplar of the translation, since it contained the correct Greek text. Accordingly the references in the apparatus of Laks & Most to the omission of these words are inappropriate because they say nothing about the transmission of the work in Greek (which is the purpose of the Greek apparatus); they should be transferred to the Arabic apparatus. For another example see \(4β\) and \(10\) (\(Ω\)ḷịγοις — \(περιττοῖς\)) and the corresponding note in the translation of the Arabic text.}

4. Accessories

1. The \textit{English translation} of the Arabic translation is of benefit to the Greek scholar. It conveys in detail what the translator read in his exemplar, how he punctuated each sentence, and how he understood the sweep of the argument. It is also of benefit to the Arabic scholar interested in the history of the translated texts and their doctrines, and in their diffusion and acceptance in Arabic philosophy.

2. A philological \textit{commentary} always accompanies the English translation (in this case as running notes to the text). Its purpose is to analyze every discrepancy between the Greek text and the Arabic translation and explain in detail the precise way in which each Greek word and sentence in the exemplar of the translation (\(Ψ\)) was either (mis)read and (mis)understood by the translator or represents the correct text that has been corrupted in the extant Greek manuscripts. This in turn will give the reader to understand the editorial decisions that went into the making of the Arabic and the Greek apparatus.
The need for and benefits of the Greek-Arabic and Arabic-Greek glossaries are obvious as indices of words used. They also contribute to Greek and Arabic lexicography in general and most particularly to the continuing efforts to compile lexica of the translated literature.\footnote{For the benefits of the Graeco-Arabic translated literature for Arabic lexicography see WKAS II,2, pp. IX–XI. For Graeco-Arabic lexicography see, in general, \textit{GALex}, and especially the recent glossaries compiled by M. Ullmann, \textit{WGAÜ} and \textit{WGAÜS}.}
PART II

THE TEXTS AND TRANSLATIONS
1. THE GREEK TEXT WITH ENGLISH TRANSLATION
SIGLA

Semper citantur

J Vindobonensis phil. gr. 100; ca. 850 AD
J II manus recentior (saec. XIV) librarì qui f. 137r–v supplevit
P Parisinus gr. 1853; saec. X
Ψ archetypus graecus translationis Isaaci arabicae deperditus; saec. IX
Ψ* lectio cod. Ψ a nobis correcta
[Ψ] quid interpres legerit ignorantus
Ar. lectio in transl. Arab. incertae originis, aut e cod. Ψ sumpta aut interpretis coniecturâ vel errore orta
Λ archetypus graecus translationis Bartholomaei latinae deperditus; saec. XIII (?) (= recensio Messanensis)
[Λ] quid interpres legerit ignorantus
Lat. lectio in transl. Lat. incertae originis, aut e cod. Λ sumpta aut interpretis coniecturâ vel errore orta
ω codicum JP Ψ Λ consensus (4a1–11a1), JII Ψ Λ consensus (11a1–12a2)

Raro citantur

C Marcianus gr. 211; saec. XIII exeuntis vel XIV ineuntis
L Laurentianus 28,45; AD 1445
A Vaticanus gr. 1302; saec. XIII exeuntis vel XIV ineuntis
α codicum JP CLA consensus (4a1–11a1), JII CLA consensus (11a1–12a2) (= recensio Constantinopolitana)

Occasione oblata citantur

B Bernensis 402; saec. XV
D Ambrosianus P 80 sup. (gr. 630); saec. XV
H Leidensis Vossianus gr. Q. 25; ca. 1487 AD
N Neapolitanus III D 1; 20/i/1497 AD
O Vaticanus Ottobonianus gr. 153; saec. XV

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1 See Burnikel 116n11.
2 See the Excursus §II.
3 See the Excursus §I.3.
4 See the Excursus §III.2.
### SIGLA

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⟨⟩ | nostra vel aliorum coniectura suppleta |

|  | lectio in Ψ et Λ quae in codd. deest graecis |

[] | nostra vel aliorum coniectura seclusa |

** * * | lacuna coniectura nostra indicata |

X¹ | librarius X se ipsum corrigens |

X² | secunda manus |

#### Contractiones⁵

- add. | addidit |
- adn. | adnotatio (= Part III, Commentary) |
- alt. | alterum |
- app. crit. alt. | apparatus criticus alter (= Part I, Chapter 2.7b) |
- codd. | codices |
- coni. | coniecit |
- corr. | corregit |
- del. | delevit |
- dist. | distinxit |
- dubit. | dubitanter |
- edd. | editores, editiones |
- fort. | fortasse |
- inc. | incipit |
- ind. | indicavit |
- iter. | iteravit |

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⁵ For the abbreviations of the names of scholars and the references to their publications see the list of Abbreviations and the Bibliography.
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<td>ut intell.</td>
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<td>vert.</td>
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\(^6\) See the Excursus §III.2.2.

\(^7\) See the Excursus §III.2.1.

\(^8\) See the Excursus §III.2.3.
2 (1) Πῶς ἀφορίσασθε τοις πρώτοις τῶν ὑπὲρ τῶν I [1] πρώτων θεωρίας; Ἡ γὰρ δὴ τῆς φύσεως πολυ- χουστέρα καὶ, ὡς γε δὴ τινὲς ἡσυχοῦν, ἀπαχοτέταρα, 5 μεταβολῶν ἐφούσα παντοῖς: ἢ δὲ τῶν πρώτων ὑμιμένη καὶ ἀεὶ κατὰ ταυτά, διὸ δὴ καὶ ἐν νοη- τοῖς οὐχ αἰσθήτοις αὐτὴν τιθέασον, ὡς άκαίνιτοις καὶ ἀμεταβλήτοις, καὶ τὸ ὅλον δὲ σεμιστέραν καὶ 9 μείζω νομίζουσον αὐτήν.

2 (2) Ἀρηθή δὲ, πότερα συν-

9 αἰσθήτω καὶ ὄνομα υιονία πρὸς ἀλλήλη τοῖς τε νοητοῖς καὶ τοῖς τῆς φύσεως ἡ ὑδεμία, ἀλλ᾽ ὡσ- περ ἑκάτερα κεχορισμένα, συνεφόντα δὲ πῶς εἰς

4a1  ἘΘΕΟΦΡΑΣΤΟΥ ΠΕΡΙ ΑΡΧΩΝ

1a  [τῶν μετὰ τὰ Φυσικά]  

Usener


(1) How and with what sort of [things] should one mark the boundaries of the study of the first [things]? For surely the [study] of nature is more multifarious and, at least as some actually say, more lacking in order, involving as it does all sorts of changes; but the [study] of the first [things] is bounded and always the same, for which reason, indeed, they even place it among the intelligibles but not the sensibles, on the ground that the [intelligibles] are unmovable and unchangeable, and on the whole consider it more venerable and more important.

(2) The starting point is, whether [there is] some connection and something like a mutual association between intelligibles and the [things] of nature or [there is] none, but the two are, as it were, separated, though
τὴν πᾶσαν οὐσίαν. Ἐνυλογώτερον δ’ οὖν εἶναι τινα συναφῆν καὶ μή ἐπεισοδίωδες τὸ πᾶν, ἀλλ’ οἶον τὰ μὲν πρότερα τὰ δ’ ὑστερα, καὶ ἀρχὰς τὰ δ’ ὑπὸ τὰς ἀρχὰς, ὡσπερ καὶ τὰ ἁδίᾳ τῶν φθαρ-τῶν.

17 (3) Εἰ δ’ οὖν οὕτω, τίς ἡ φύσις αὐτῶν καὶ ἐν ποιίς; Εἰ μὲν γὰρ ἐν τοῖς μαθηματικοῖς μόνον [3] τὰ νοητὰ, καθάπερ τινὲς φασιν, οὔτ’ ἤγαν εὐ-σημος ἡ συναφῆς τοῖς αἰσθητοῖς οὕθ’ ὅλως ἀξιο-χρεα φαίνεται τοῦ παντός. Οἶον γὰρ μεμηχανημένα δοκεῖ δ’ ἡμῶν εἶναι σχήματα τε καὶ μορφὰς καὶ λόγους περιπλέκονταν, αὐτά δὲ δὴ αὐτῶν οὐδεμιᾶν

415 ἐξεῖ φύσιν εἰ δὲ μὴ, οὐχ οἶα τε συνάπτειν τοῖς τῆς φύσεως ὡστ’ ἐμποιήσα σακθάπερ ἐμήν καὶ κίνησιν αὐτοῖς, οὐδὲ γὰρ αὐτὸς ὁ ἀριθμός, ὃ νπρότον καὶ χυριώτατον τινες τιθέασιν.
somehow both contributing to [bring about] all of existence. At any rate, it is more reasonable that there is some connection and that the universe is not episodic, but rather that the former are, as it were, prior and the latter posterior—and first principles, too, and the latter subordinate to the first principles—just as eternal [things] too are to the perishable.

(3) If so, then, what is their nature and among what sort of [things are they]? For if, on the one hand, [it is] among the mathematical only that the intelligibles are, as some say, neither is [their] connection with the sensibles very conspicuous nor do they appear to be at all serviceable with regard to the universe. For they seem, as it were, to have been devised by us as figures, shapes, and proportions that we ascribe [to things], while they in themselves have no nature at all; or, if not, they are not able to have a connection with the [things] of nature that would produce in them something like life and motion—no, not even number itself, the very one which some people rank as first and most dominant.

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5 Existence (ousia) here is used in the sense of all that exists. See the commentary on the various uses of the word in this Essay.

6 I.e., it does not consist of a series of disconnected and unrelated episodes, “like a wretched tragedy,” as Aristotle says, using the literary term (Poet. 1451b33–34) in a metaphysical context (Met. 1090b19, 1076a1) to criticize Speusippus to whom Theophrastus too is alluding; see the commentary on Diaporia 2.

7 I.e., “are [prior] to the perishable,” as also in the Arabic translation.

8 I.e., the intelligibles. The plural pronoun could refer either to the first things or to the intelligibles. But the preceding paragraph, on the basis of which (“if so”) Theophrastus now asks the main question, has in essence made “the intelligibles” coextensive with “the first things” (cf. van Raalte 100n6), and the following sentence speaks of “the intelligibles” as the subject under discussion, so there can be little doubt about the referent of the pronoun.

9 Theophrastus is referring to both Speusippus and Xenocrates here, though views differ. See Henrich 81–83 for a discussion of the alternatives.

10 I.e., if they have not been devised by us.

11 I.e., is able to do this.

12 The Pythagoreans and their followers in the Academy, Speusippus and Xenocrates.
(4) Εἰ δ’ ἐτέρα τις οὖσια προτέρα καὶ κρείττον ἐστὶν, [4] ταύτην πειρατέον λέγειν πότερον μία τις κατ’ ἀριθμὸν ή κατ’ εἶδος ή κατά γένος. Εὐθυγονέον δ’ οὖν ἄρχης φύσιν ἐχούσας ἐν ὀλίγοις εἶναι καὶ περιττοῖς, εἰ μὴ ᾣρα καὶ πρώτος καὶ ἐν τῷ πρώτῳ.

(5) Τίς δ’ οὖν αὕτη καὶ τίνες, εἰ πλείους, πειρατέον ἐμφαίνειν ἄμοις γέ ποις εἰτε κατ’ ἀναλογίαν εἰτε κατ’ άλλην ὁμοίωσιν. Ἀνάγκη δ’ ἰδῶς δύναμει τινὶ καὶ ὑπεροχῇ τῶν ἄλλων λαμβάνειν, ὥσπερ ἂν εἰ τὸν θεόν· θεία γὰρ ἢ πάντων ἄρχης, δι’ ἦς ἄπαντα καὶ ἐστὶν καὶ διαιμένει. Τάχα μὲν οὖν ὥδειν τὸ οὔτως ἀποδοῦναι, χαλεπόν δὲ οὖσα·

(5.1) Τοιαύτης δ’ οὖσης [5] τής ἄρχης, ἐπείπερ συνάπτει τοῖς αἰσθητοῖς, ἢ δὲ φύσις ὡς ἀπλώς εἰτεῖν ἐν κινήσει καὶ τούτ’ αὐτῆς τὸ άδιον, δῆλον ὡς αἰτῶν θέτειν ταύτῃ τῆς κινήσεως. Ἐπεῖ δ’ ἀκίνητος καθ’ αὐτῆς, φανερὸν ὡς οὖν ἂν εἰ τῷ κυνείοθα τοῖς τῆς φυ·

4b6 εἰ ... ἐστὶν] Arist. Met. A 6, 987b14–18 Πλάτων ... παρὰ τὰ αἰσθητὰ καὶ τὰ εἴδη, τὰ μαθηματικὰ τῶν προγράμμων εἶναι φημα μεταξὺ, διαφέροντα τὰ ... εἰόν τοῖς τὰ μὲν πολλ᾽ ἄττα ὁμοία εἶναι τὸ δὲ εἴδος αὐτὸ ἐν ἐκαστὸν μόνον. 4b7–8 πότερον ... γένος] Arist. Met. Z 1, 1028b4–6 τίς ἢ οὖσια· τούτῳ γὰρ οἱ μὲν ἐν εἶναι φασιν οἷς δὲ πλείω ἢ ἐν, καὶ οἱ μὲν πεπερασμένοι οἱ δὲ ἀπεστα. Δ 6, 1916b31–32 τὰ μὲν κατ’ ἀριθμὸν ἐστίν ἐν, τὰ δὲ κατ’ εἶδος, τὰ δὲ κατὰ γένος, τὰ δὲ κατ’ ἀναλογίαν. 4b8–11 εὐθυγονέον ... πρῶτον] Arist. PA 665b14–15 ὁποῖον γὰρ ἐνδέχεται, μίαν (sc. ἀρχὴν εἶναι) βέλτιον ἢ πολλά. 4b11 τίς ... πλείους] Arist. Met. A 8, 1073a14–15 πότερον δὲ μίαν θέτεσσεν τὴν τοιαύτην οὖσιαν ἢ πλείους, καὶ πόσα, δεὶ μὴ λανθάνειν. 4b15 θεία γὰρ ἢ πάντων ἄρχης] Arist. Met. A 2, 983a8–9 ο τὸ γὰρ θεὸς δοξεῖ τῶν αἰτίων πάσης ἐναι καὶ ἄρχης τῆς. K 7, 1064a3b4–11 εἴτε ὑπάρχει τὰς τις οὖσια τοιαύτην, λέγω δὲ χωριστὶ καὶ ἀκίνητος ... ἐνταῦθαν εἰν ποικίλοις καὶ τὸ θεόν, καὶ αὐτή ἂν εἶν (ἡ) πρωτὴ καὶ κυριωτάτη ἄρχης. 4b16 δι’ ἦς ... διαιμένει Arist. DC 279a18–30 τάξαι [sc. σύμφωνα τοῖς] ... ἀναλλοίωτα καὶ ἀπαθῆ ... διατελεῖ τὸν ἄπαντα αἰώνα ... δόθην ... ἐξηρτηθεῖ ... τὸ ἐναι τε καὶ ἦν.

But if, on the other hand, some other substance is prior and more powerful, one ought to try to say whether it is one such in number, or in species, or in genus. At any rate, it is more reasonable that, having the nature of a first principle, they are among few and extraordinary things—if not, indeed, even among the first things as well as the first.

What, at any rate, this is, or what they are, if they are more, one ought to try to reveal somehow or other, whether by analogy or by some other procedure through similarity. Perhaps it is necessary to apprehend [it or them] by means of some power and superiority over others, as if [we were apprehending] god, for divine is the first principle of all, through which all things both are and abide. And yes, maybe it is easy to provide an explanation in this manner—but more explicitly or more convincingly, difficult.

Such being the first principle, then, since it is connected with sensibles, and nature is, to put it simply, in motion (which is the property unique to it), it is evident that it should be posited as the cause of movement. But since it is in itself motionless, it is obvious that it could
καὶ κατ ἄτομον ὁ ἀρτιός ὁ λόγος, ἄρχην τε ποιών μίαν πάντων καὶ τὴν ἐνέργειαν καὶ τὴν οὐσίαν ἁποδοιχός, ἵνα δὲ μὴ διαιρετόν μηδὲ ποιών τι λέγων ἄλλ’ ἀπλῶς ἔξαιρον εἰς κρείττο τινά μερίδα καὶ θειότεραν (οὕτω γὰρ μᾶλλον ἁποδοτέον ἢ τὸ διαιρετὸν καὶ μεριστὸν ἁφανετῶν ὡμα γὰρ ἐν ψυχοτέρῳ τε καὶ ἀληθινωτέρῳ λόγῳ τοῖς λέγοναι ἢ ἀπόφασις), τὸ δὲ μετὰ ταύτ’ ἡ λόγου δεῖται πλείονος περὶ τῆς ἐφέσεως, ποία καὶ τίνος, ἐπειδῆ πλείον τὰ κυκλικά καὶ αἱ φοραὶ τρόπων τινὰ ἔπειναται καὶ τὸ ἀνήνυτον καὶ οὐ χάριν ἁφανεῖς. Εἴτε γὰρ ἐν τὸ κινοῦν, ἄτομον τὸ μὴ πάντα τὴν αὐτήν· εἴτε καθ’ ἐκαστὸν ἐτερον αἳ τ’ ἄρχαι πλείους—ὡστε τὸ σύμμωνον αὐτῶν εἰς ἀρχήν τε πλείονς καὶ διαιρετῶν ἐστι· ἡ τὸν ἀδιαίρετον ἐστι καὶ ἀμερὲς καὶ οὐδὲν ἐστίν εἰς τὸν ὀξεῖον τόπον, τοῦ δὲ χύλῳ σώματος οὐκ ἀποτροπέον τὸν μὴ διαιρετόν ἐστι, ἄτι πάντων ὧδε· ἀρχήν τε πλείους καὶ ἐπειδῆ πλείος γὰρ ἐστιν καὶ ἔτι δὲ μὴ διαιρετῶν μὴ διαιρετών ὑπερέστερον καὶ τὸ ἀνήνυτον καὶ οὐ χάριν ἁφανεῖς. ἕκαστα τὴν ἐνέργειαν καὶ τὴν οὐσίαν ἐν ἑκάστῳ τῶν ἀρχάγγελων καὶ ἐν μὲν δὴ ταύτῃ ἀρτιῷ ἀλλὰ λόγῳ ἄλλη τινὶ δυνάμει κρείττο.
not be a cause to the [things] of nature by being in motion but, as the remaining [alternative], by some other, superior and prior, power; and such is the nature of the desirable, from which [there springs] the circular, continuous and unceasing [motion]. And so on this [basis] \( \text{also} \) [the difficulty] could be resolved that there can be no beginning of motion unless something in motion initiate it.\(^{20}\)

\(6\) Now up to these [arguments], the account has all its parts in place, so to speak: it both posits a single first principle for all [things] and provides [its] actualized state\(^{21}\) and essence,\(^{22}\) and it further says that it is neither something divisible nor quantifiable, but exalts it in an absolute sense to some better and more divine rank (for it is better that one should provide such an account rather than that one should remove [from it] divisibility and partitionability, because those who make the negative statement [above make it] in an argument that is at the same time loftier and closer to truth);\(^{23}\) but what [comes] immediately after these [arguments] needs further discussion about the impulsion\(^{24}\)—of what kind and towards which [things] it is—because the rotating [bodies] are more than one and the [ir] motions are somehow opposed, while [their] interminableness and “[that] for the sake of which”\(^{25}\) are not apparent. For if the mover is one, it makes no sense that all not with the same [motion];\(^{26}\) and if it is different for each and the first principles are more than one, [the consequence is such] that the concord of [the rotating

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\(^{20}\) I.e., establishing the desirable as a first principle accomplishes two objectives: it (a) accounts for movement in nature (b) and ensures that it is initiated by an unmoved mover; it “also” resolves, that is, the difficulty generated by the Platonic (and Pythagorean and atomist) position that only something in motion itself can initiate motion in others.

\(^{21}\) \textit{Enérgeia}, in this special sense used by Aristotle and Theophrastus. See the commentary.

\(^{22}\) Essence here and elsewhere translates one of the meanings of \textit{ousía}; see the commentary at 4113.

\(^{23}\) I.e., slightly to paraphrase the explanation by Ross 43, it is better to say that the first principle belongs a priori (because it is divine?) to a class of things which could not be divisible into parts than it is to put it into a class, like that of material things, which would naturally be divisible, and then deny divisibility of it.

\(^{24}\) I.e., towards the unmoved mover. Theophrastus uses here a different word (\textit{éphesis}) for desire than the one he uses elsewhere (\textit{órexis}, at 5220, etc.). See the commentary for the apparent nuance differences.

\(^{25}\) I.e., the final cause of the motions.

\(^{26}\) I.e., either “that all the rotating bodies do not move with the same motion,” or “that the mover does not move all the rotating bodies with the same motion.” See the commentary.
5420 δρεξέν ίόντων τήν ἀρίστην οὐθαμώς φανερόν. (7) Τὸ [8] δὲ κατὰ τὸ πλῆθος τῶν σφαιρῶν τῆς αἵτίας μείζονα ζητεῖ λόγον· οὐ γάρ οἶκείος ὁ γε τῶν ἀστρολόγων.

(8) Ἀπορον δὲ καὶ πῶς ποτε φυσικήν δρεξέν ἔχοντον οὐ τὴν ἤρεμιαν διώκουν ἄλλα τὴν κίνησιν. Τί οὖν ἁμα τῇ μιμήσει φαινέται ἐκεῖνον ὁμοίως δους τοῦ εἶναι καὶ ὅσιοι τοὺς ἁριθμοὺς ἕλγουσιν; καὶ γὰρ αὐτοὶ τούς ἁριθμοὺς 28 φαινέται τὸ ἐν.

(8.1) Εἰ δὲ ἡ ἕφεσις, ἄλλως τε καὶ τοῦ

bodies], as they proceed in fulfillment of the best desire, is by no means obvious. (7) As for the [matter] of the great number of spheres, it calls for a fuller account of the reason [for it]; for the one [given] by the astronomers, at any rate, is not pertinent.

(8) Also a matter of aporia is how on earth it is that they, though possessed of a natural desire, pursue not rest but motion. Why, then, is it at the same time with imitation that this is maintained, alike by those who uphold the one and by those who uphold the numbers?

(8.1) And if impulsion, especially towards the best, entails soul, then unless one speak by simile and metaphor, the [things] in motion will be ensouled. But movement also seems at the same time to pertain to soul (for [soul] is life to those who have it—and from it also [start] the desires for each [thing]—just as [it is] to animals, too, for even sense-

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27 I.e., the concord of the motion of the spheres as they proceed in fulfillment of their desire for the best, the unmoved mover. See the commentary.
28 I.e., the account given by the astronomers Eudoxus and Calippus in Aristotle’s *Metaphysics* Lambda 8 to which Theophrastus is directly referring. See the commentary.
29 On the use of the word aporia see Chapter 1.2, note 14, and for its importance in this Essay, Chapter 1.3.
30 I.e., the rotating bodies.
31 I.e., the statement that they pursue not rest but motion. See the commentary.
32 These are, variously or even jointly, the Pythagoreans and Plato, together with his followers Xenocrates and Speusippus.
33 I.e., the numbers are unmoved like the one because they are ultimately derived from it and reducible to it, as Xenocrates reportedly maintained. For the point of this rhetorical question and the passage in general see the commentary.
34 I.e., at the same time as desire or impulsion. See the commentary.
καίπερ ἐν τῇ πάσχειν οὖσαι δε' ἐτέρουν, ὃμως ἑπιψύχους· γίνονται). Εἰ δ' οὖν τῆς κυκλικῆς αἰτίαν τὸ [9] πρῶτον, οὐ τῆς ἁρίστης ἢ εἰς κρεῖττον γὰρ ἡ τῆς ψυχῆς, καὶ πρῶτη δὴ καὶ μάλιστα τῇ τῆς δια-
νοιαῖς, ἄφε' ἦς καὶ ἢ ὁρέξεις.

(9) Τάχα δὲ καὶ τοῦτ' ἢν τις ἐπιζητήσειν, διὰ τί τὰ κυκλικὰ μόνον ἐφετισά, τῶν δὲ περὶ τὸ μέσον οὐθὲν καίπερ κινητὸν ὄντων: πότερον ὡς ἄδινατα ἢ ὡς οὐ δικυκλεῖν 
τοῦ πρῶτου; Ἀλλὰ τοῦτο γ' ἀτοπον, εἰ δ' ἀσθε-
νειαν ἰασωτέρου γὰρ ἢν τις ἀξιώσειν τοῦ 'Ομή-
ρου Διός, ὃς φησίν,

ἀὐτῇ ἐν γαῖᾳ ἐρύσαιμ' ἀὐτῇ τε θαλάσσῃ.

Ἀλλὰ λοιπὸν ἤσσερ ἀδεκτὸν τι καὶ ἀσύνδετον εἶναι.
perceptions, though they consist in being affected by others, yet take place in [animals] as ensouled [beings]). If, then, the first [mover] is the cause of the circular [movement], it will not be [the cause] of the best [movement]; for the [movement] of the soul is a more effective [thing], and first indeed and foremost is the [movement] of thought, from which the desire also [starts].

(9) Perhaps one might incidentally ask this, too, why the rotating [bodies] alone are actuated by impulsion, but none of those about the center, although they are mobile: is it because they are incapable, or because the first does not get through? But certainly the latter would make no sense, if because of weakness—for one would expect [the first] to be stronger than Homer’s Zeus, who says,

With the earth would I hale [you] up, and therewithal the sea.

So then what remains is to be like something unreceptive and unconnected.

35 And not, that is, by the soul.
36 The movement of the soul—i.e., movement whose source is the soul (as the parallel formulation by Theophrastus in his fr. 159,28 FHS&G has it), and especially thought—is more effective than the unmoved prime mover in causing movement because it is itself the source of desire in the moved object. For a different understanding of the referent in the phrase “that [i.e., movement] of the soul” in the Arabic translation see the corresponding note.
37 I.e., the sublunar world, considered to be the center of the universe. It is the realm of generation and corruption (Aristotle, GC 335a25), or, as Theophrastus says in the beginning of his Physics (fr. 143 FHS&G), the world of motion and of alteration and being affected.
38 Iliad VIII,24. The translation is by Arthur S. Way, The Iliad of Homer done into English verse, London: Sampson Low, etc., 1886, vol. I, p. 184, whose Victorian version, in addition to being surprisingly literal, perhaps conveys the same distance existing between it and modern English as there existed between Homer’s Greek and Greek in the time of Theophrastus.
39 The Greek does not specify whether what is like something unreceptive and unconnected is the center itself (singular subject, so interpreted by Ross, Tricot, and Reale 1964) or “those about the center” (plural subject, so interpreted by Laks & Most, van Raalte, and Henrich). The singular neuter adjectives “unreceptive” and “unconnected” would tend to favor the former.
(10) Tácχα δὲ πρότερον ξητήρειεν ἃν τις πώς ἦχε, πό-

5b20 τερα μέρη ταύτα ἢ οὔ μέρη τοῦ οὐρανοῦ, καὶ εἰ 

μέρη, πώς μέρη· νῦν γὰρ οἶον ἀπεωσμένα τῶν 

ἐντιμιστῶν οὐ μόνον κατὰ τὰς χώρας ἀλλὰ καὶ 

κατὰ τὴν ἐνέργειαν, εἴπερ ἡ κυκλικὴ τοιαῦτη συμ-

βαινεῖ γὰρ οἶον κατὰ συμβεβηκός ὑπὸ τῆς κυκλι-

25 κῆς περιφορᾶς καὶ εἰς τοὺς τόπους καὶ εἰς ἄλληλα 

26 τὰς μεταβολὰς.

(10.1) Εἰ δὲ καὶ τὸ ἀρίστον ἀπὸ τοῦ 

ἀρίστου, κάλλιον ἢν τι παρὰ τοῦ πρῶτον δέοι τῆς 

κυκλοφορίας—εἰ μὴ ἄρ’ ἐκολώτεστι τῷ μὴ δύνασθαι 

6a1 δέχεσθαι—τὸ γὰρ δὴ πρῶτον καὶ θείοτατον πάντα 

τὰ ἁρίστα βουλόμενον. Τάχα δὲ τούτο μὲν οἶον 

ὑπερβατὸν τι καὶ ἄξιότητον—ἀξιός γὰρ τὸ 

τέλον ἀπανθ’ ὁμοία καὶ ἐν τοῖς ἁρίστοις εἶναι, 

5 μικράν τιν’ ἢ μιμείμας ἔχοντα διαφοράν— (11) τόδε δ’ [11] 

ἀν τις ἢς ἀπορήσειεν πρὸς αὐτὸν τὸν πρῶτον
But perhaps one might ask beforehand what the situation is: whether these⁴⁰ are or are not parts of the heavens, and if parts, how so;⁴¹ for as it is,⁴² they have been pushed, so to speak, away from the [things] held in highest honor not only as regards the [locations] but also as regards the [activity]—if indeed the circular [movement] is such:⁴³ for it happens as it were by accident that the [changes] both into the [places and into each other, [take place] by means of the circular rotation.

And if, too, the best [comes] from the best, something better than rotation will be needed [to issue] from the first—unless of course they were prevented⁴⁴ by being unable to receive—for surely the first and most divine is that which wills everything that is best. But while this [claim] is perhaps like something inordinate and unexamined—for he who maintains this demands that everything should be alike and among the best, having little or no differentiation⁴⁵—(11) the following aporia might fairly be raised with reference to the first heaven itself: whether

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⁴⁰ I.e., “those about the center.”
⁴¹ Aristotle (*De caelo* 278b10–21) identified three senses for “the heavens” (*ouranos*), one of which is the entire universe, whence Theophrastus’s question.
⁴² “As it is” (the temporal adverb *nun*) could refer either (a) to Theophrastus’s account of the Aristotelian cosmos given in the preceding paragraphs, or (b) to the way things actually are.
⁴³ I.e., one of the things held in highest honor; for the sublunar elements do not move naturally in a circle.
⁴⁴ The subject of this verb is not stated explicitly by Theophrastus and opinion has been divided about it. Some have claimed that it is the heavenly spheres (“the rotating bodies”), while others think that it continues to be “those about the center,” i.e., the sublunar elements and bodies which, it is suggested, not only lack rotation, but even had they had it it would not have been the best possible outcome of the influence by the first. I tend to favor the second alternative (which is also supported by an apparently authoritative gloss in the Arabic translation); see the discussion in the commentary at Diaporia 10.1.
⁴⁵ Cf. 8a27–8b1 and 11b7–10 where Theophrastus refers again to this objectionable theory, apparently of Plato (cf. Dillon 2002, 179; Berti 2002, 350); see the Loci Paralleli.
ἡσύμΨpΡΥtwoυσιςὑστάτηκατὰτὴνγένεσιν
tῶνἀριΨtΡetatwoμῶντὰσημεῖακαὶτὰςγραμμὰςτάτεἐπίπεδασΨkΡΥήματακαὶτὰστερεά
eΨpΡΥtwoεΨksΥῆς
ἐΨpΡΥtwoέσει
σώματα
νΨΥotasubscrΥptoω
τἆλλα
A[eighteen]
εἱ
Ψo;ΥkronὕτωςἀΨpΡΥtwoΨo;ΥkronμΨo;ΥkronιῶνταῖςψήΨpΡΥtwoΨo;ΥkronιςτὰςμΨo;ΥkronρΨpΡΥtwoὰςτῶνΨpΡΥtwoυτῶν
ἀλλὰκατὰσυμΨbetatwoεΨbetatwoηκΨo;ΥkrongraveςΨo;Υkronὕτωκινεῖται
πΨo;ΥkronacuteτερΨo;Υkronν
μὲνἂνἡπεριΨpΡΥtwoΨo;ΥkronρὰΨΥotasubscrΥpteĒκινΨo;ΥkronυμένηκαὶΨo;Υkronasper najbliższς
καὶὡςΕὔρυτΨo;ΥkronςἔταττετίςἀριΨtΡetatwoμΨo;ΥkrongraveςτίνΨo;Υkronς
δυάδα πΨo;ΥkronιΨo;ΥkronῦντεςΨperΥodcenteredgreek τΨo;Υkronὺς γὰρ ἀριΨtΡetatwoμΨo;Υkronὐς γεννήσαντες
πΨo;Υkronτ
ἑτέρων λΨo;Υkronacuteγων
ΨpΡΥtwoΨtΡetatwoείρΨo;Υkronι ἂν τΨo;Υkrongraveν Ψo;ΥkronὐρανΨo;Υkronacuteν
ὑπὲραὐτῆς
ὑπὲρ αὐτῆς τῆς κινήσεως ἀπΨo;Υkronρεῖν
καὶ Ψo;ΥkronὐΨtΡetatwoὲν κωλύει τΨo;Υkronιαῦτανταῦτανταῦτα
παραλείπΨo;Υkronυσιν πλὴν Ψo;ΥkronasperacuteσΨo;Υkronν ἐΨpΡΥtwoαπτΨo;ΥkronacuteμενΨo;Υkronι καὶ τΨo;Υkron
παύΨo;Υkronνται
Νῦν δμΨo;ΥkronacuteςΨpΡΥtwoΨo;ΥkronυςΨperΥodcenteredgreek λέγειν γὰρ ὡς Ψo;Υkronasperacuteδε μὲν ἀνΨtΡetatwoρώπΨo;Υkronυ Ψo;Υkronasper ἀριΨtΡetatwo
ΤΨo;ΥkronῦτΨo;Υkron γὰρ τελέΨo;Υkronυ καὶ ΨpΡΥtwoρΨo;ΥkronνΨo;ΥkronῦντΨo;Υkronς Ψo;Υkronasperacuteπερ ᾿ΑρΨkΡΥύτας
dΨo;Υkronacuteναι καὶ μὴ μέΨkΡΥρι τΨo;Υkronυ πρΨo;ΥkronελΨtΡetatwoΨo;Υkronacuteντα παύεσΨtΡetatwoαι
ἀρΨkΡΥῶν ἀΨksΥιώσειεν ἄν τις
καΨtΡetatwoάπερ καὶ Ψo;Υkronἱ τΨo;Υkrongrave ἓν καὶ τὴν ἀΨo;ΥkronacuteριστΨo;Υkronν,
ἤεἰδὲσταίητΨo;ΥkronῦτΨo;ΥkronὥσπερδεΨtΡetatwoέν,
τῆςτεμΨo;ΥkronνάδΨo;ΥkronςκαὶτῆςἀΨo;ΥkronρίστΨo;ΥkronυδυάδΨo;Υkronς
Λ
῎Ισως δ
...
εἴπερ ἐΨpΡΥtwoέσει τινὶ καὶ Ψo;ΥkronΩenΥsρέΨksΥει
ἄλλων ἄρ
..
the rotation is of its essence and with cessation it would perish, or, if indeed [the rotation occurs] through some impulsion and desire, [it is] accidental—unless, of course, desiring is innate to it and nothing prevents some beings from being such.\textsuperscript{46} (12) But perhaps one might, even while setting desire aside,\textsuperscript{47} raise an aporia about the motion itself, whether its removal would destroy the heavens.\textsuperscript{48}

(13) Now this may well be [more appropriately] discussed elsewhere,\textsuperscript{49} but for the present it is from this or these first principles\textsuperscript{50} (and perhaps also from the others, I suppose, were one to assume [them]) that one could demand that [they] provide right away an account of the [things that come] next and not, having proceeded up to a [point], stop. For this is what a sensible adult [would do], which is exactly what Archytas once said Eurytus did as he arranged certain pebbles: for Eurytus said [according to Archytas], that this happens to be the number of man, this of horse, and this of something else.\textsuperscript{51} At present, however, having arrived at a certain [point], many, certainly, stop completely, as do too those who posit the one and the indefinite dyad;\textsuperscript{52} for having generated numbers and planes and solids, they leave out almost everything else except to the extent

\textsuperscript{46} I.e., innately desiring, or acting upon their innate desire. See the commentary.
\textsuperscript{47} I.e., removing it from consideration in the discussion in the second part of this apparent thought experiment; the first is stated in the preceding sentence.
\textsuperscript{48} “The heavens” here may be taken in any one of its three significations (see above, note 41), but the net outcome would be the same; Theophrastus is clearly referring here to the very existence of everything.
\textsuperscript{49} Theophrastus touches upon the related question whether the motion of the heavens is essential to them later in this Essay (10a9–19), but it is not clear whether he actually discussed the subject (and the thought experiment?) elsewhere. See the commentary.
\textsuperscript{50} The reference is to the preceding discussion of first principles at 4b11–5a5, before it was interrupted for a critical review of the theory of desire.
\textsuperscript{51} The Pythagoreans Archytas and Eurytus, both of Tarentum, were roughly contemporaries of Plato; Archytas had special relations with him. See \textit{DPhA} I, §A322, and III, §E150 (both by Centrone).
\textsuperscript{52} The Pythagoreans and Plato, to whom Theophrastus explicitly ascribes this doctrine below (at 11a27–11b5), and perhaps also Plato’s "orthodox" followers in the Academy other than Speusippus and Xenocrates who are mentioned separately later in the paragraph (as Ross 54 observes; cf. also Happ 1971, 244n833).
6b2 τὰ δ’ ἀπὸ τῶν ἀριθμῶν καὶ τοῦ ἐνός, ὁ θὺ ψυχή[1] Xenocrates fr. 68, 14–21

Heinze γενέσθαι τὸν ἀριθμὸν τοῦ ἐνός ὀρίζοντος πᾶσας ἑνδέχετος ... τοῦτον δὲ μέρος ψυχῆς τοῦ ἀριθμοῦ εἶναι ... τοῦτο τοῦ ἐνός καὶ τοῦ ἐτέρου συμμετέχοντος ... ψυχήν γεγονότα Arist. DA 404b19–21 Ρλάτων ἐν τῷ Τιμαίῳ (35a–36d) ... αὐτὸ μὲν τοῦ ἔμφρον ἐξε τῆς τοῦ ἐνός ἱδέας καὶ τοῦ πρώτου μέρους καὶ βάθους. 6b3–4 ψυχή καὶ ἄλλ’ ἄττα: χρόνος τ’ ἄμα καὶ οὐρανός] Plato Tim. 368b–e, 55–7 ἐπεὶ δὲ ... πᾶσα ἡ τῆς ψυχῆς σώσεσις ἐγεγένησε, καὶ ἄλλα πάν τοι κατὰ τῆς ἀρίθμους ἑνδέχετο αὐτῆς ἐτεκτάνετο ... καὶ τὸ μὲν δὴ σῶμα ὁρατόν οὐρανόν γέγονε ... χρόνος δ’ οὖν μετ’ οὐρανοῦ γέγονεν, ἵνα ἁμα γεννηθῆναι ἱδία καὶ λείψανος. Arist. Met. Λ 6, 1072a3–2 ὑπέροι γάρ (sc. τῆς ... καὶ ἁμα τοῦ οὐρανοῦ, ἡ ψυχή, ὡς φησιν (sc. τοῦ Ρλάτων). 6b7–9 Ἑνορθάτης ... θέα Arist. Met. Z 2, 1028b24–27 ἄνευ δὲ τά μὲν εἰδή καὶ τοὺς ἀριθμοὺς τὴν αὐτήν εἴηνα φασὶ φύσος, τά δὲ ἄλλα ἐρωμένα, γραμμάς καὶ ἑπιτελεῖα, μέχρι πρὸς τῆς τοῦ ἀριθμοῦ οὐσίαν καὶ τα ἐνορθάτη. 6b11–15 Ρλάτων ... εἰρημένην[Arist. EN I 4, 10953a–b1 διαφέρουσιν οἱ ἀπὸ τῶν ἁρώνον λόγοι καὶ οἱ ἐπὶ τῶν ἁρών ἐν γάρ καὶ ὁ Ρλάτων ἠτοι τὸν καὶ ἐξῆται, πότερον ἀπὸ τῶν ἁρών ἡ ἐπί τῶν ἁρών ἡ ἐπὶ τῶν ἁρών ἡ ὡς διώκουσιν. Arist. Met. X,258 κατά τὸν Πλάτωνα ... ἐπιστή τειν θα ἅτι ἡμνὸ ἁμα τοῖς ἀριθμοῖς τῶν ἁρώνον, οἱ κατά μετοχὴν τὸ ἐν ἡ τα δύο ἡ ἡ τρία ἡ τὰ τοῖς ἐπὶ πλείονα ἐπικατηγορείται αὐτῶν.

6b2 ψυχή Ρ Ψ λ, ψυχή J, ψυχή J1 3 χρόνος θ’ ἁμα καὶ οὐρανός [θ’ coni. Us.1] Ψ (mīla ... az-zamāni ma’a s-samā’i): χρόνος δ’ ἁμα καὶ οὐρανόν a Λ 3–4 post πλείον (non post ἀττα) dist. Ar. χρόνος—πλείον del. J1, om. L, sed. Us.1 2 5 δ’ οὐδ’ Ψ Λ: θ’ Ρ 7 post γάρ del. ἐν J1 | πος Ψ (’αλα waḥin min al-wuḏāh) Λ (omni)(mode) v. cap. 2.4 notam 15 : πος P J | περιπίθηνον P Λ [Ψ]: διαπίθησιν prop. Us.2, coni. van Raalte 8 post ἑμοίως dist. Ar. 10 ἐστιαῖς: οὐ αἰών Ρ, οὐτε ως οὐκ ὡς (?) Λ (est quod) [Ψ] 12 post ἁρών add. τά ὑπὸ τῶν ἁρών J1 | δόξειν ἀν Ψ Ρ: δόξει ἐράν J: Lat. om. in lac. 12–14 δόξειν—ἀρχής Λ vel interpres om. e homoeteleuton (ἀρχής—ἀρχής)
of apprehending and declaring only this much, that some things are [generated] from the indefinite dyad—such as place, the void, and the infinite—and others from the numbers and the one—such as soul and some others: time together with the heavens, and quite a few more—but of the heavens and the rest they make no further mention whatsoever. And likewise neither do those around Speusippus nor anyone of the others except Xenocrates, for he does somehow provide everything about the universe, alike sensibles, intelligibles, mathematicals, and, what is more, the divine [things]. Hestiaeus, too, tries, up to a [point], and not, as mentioned, only with regard to the first [things]. And yes, in reducing [things] to the first principles, Plato would seem to be treating of the others by relating [them] to the ideas, these to the numbers, and

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53 Given the high degree of congruence between the ideas presented here and the Platonic cosmogony in the *Timaeus*, it is clear that Theophrastus is referring to discussions in the Academy. See the commentary on 6b3–4.
55 Fragment 26 Heinze 1892, 100 Isnardi Parente 1982.
56 Of Perinthus, an otherwise little known disciple of Plato. For a review of all the extant information on him see DPhA III, § 111 (Dorandi).
58 I.e., of the things other than the first things.
ἀριθμούς, ἐκ δὲ τούτων εἰς τάς ἀρχάς, εἶτα κατὰ τὴν γένεσιν μέχρι τῶν εἰρημένων οἱ δὲ τῶν ἀρχῶν μόνον—ἐνοικ τοῦ ἐλήθειαν ἐν τούτοις: τὰ γὰρ ύπά τοις αἰ ἀρχάς. Συμβαίνει δὲ τοῦνατιῶν ἢ ἐν ταῖς ἄλλαις μεθόδοις ἐν ἐκείναις γὰρ τὰ μετὰ τὰς ἀρχὰς ἐσχότερα καὶ οἴον τελεώτερα τῶν ἑστηκόμων τάχα δὲ καὶ εὐλόγως ἐνθά μὲν γὰρ τῶν ἀρχῶν, ἐν δὲ ταῖς λοιπαῖς ἀπὸ τῶν ἀρχῶν ἡ ἦττημι.

(14) Πῶς δὲ ποτε χρή καὶ ποίας τάς ἀρχάς ὑπόθεσθαι, τάχυ ἄν ἀπορηθείειν τις, πότερον ἀμόρφους καὶ οἴον δυναμικάς, ὅσπερ δόσι πῦρ καὶ γῆν, ἢ μεμορφωμένας, ὡς μάλιστα δέον ταῦτας ὑρίσθαι, καθάπερ ἐν τῷ Τιμαῖῳ φησίν τοῖς γάρ τιμωτάτοις οἰκειοτάτων ἢ τάξις καὶ τὸ ὤρισθαι.

7α1 (Φαίνεται δὲ καὶ ἐν ταῖς λοιπαῖς σχεδὸν ἕχειν οὕτω πλὴν ὁλίγαις, καθάπερ ἡ γραμματική καὶ μουσική, καὶ ταῖς μαθηματικαῖς, συνακολούθει δὲ καὶ τὰ μετὰ την ἔνωσιν τῶν ἀρχῶν ἢ [Σφίνχ]

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6b14–15 κατὰ τὴν γένεσιν] v. ad 6a17. 6b16–17 ἐνοικ δὲ καὶ τὴν ἐλήθειαν ... τάς ἀρχάς Arist. Met. α 1, 993b19–31 ὄρθως δ’ ἔχει καὶ τὸ καλείσθαι τὴν φιλοσοφίαν ἐπιστήμην τῆς ἐλήθειας ... ὀλίγαν ἐν τῷ ἐλθὲς ἀνεν τῆς αἰτίας ... ὅστε καὶ ἐλθθεστερόν (αἰ) τοῖς ὀστέοις αἴτιον τοῦ ἐλθὲιεν εἶναι διὸ τῶν αἰ ὀστῶν ἀρχάς ἀναγκαῖον [αἰ] εἶναι ἐλήθεστατος ... ὅστε’ ἔκαστον ὡς ἔχει τοῦ εἶναι οὕτω καὶ τῆς ἐλήθειας. 6b25–26 δόσι πῦρ καὶ γῆν] Theophr. Peri τῶν φυσιῶν, fr. 227C,8–9 FHS&G Παρμενίδης ... δύο ποιῶν τάς ἀρχάς, πῦρ καὶ γῆν, τὸ μὲν ὡς ἦλθη τῷ ό ο ἀίτιον καὶ ποιοῦν. 6b27 ἐν τῷ Τιμαίῳ Plato, Tim. 302b–6 βουλήθηκε γὰρ ὁ θεὸς ἀγαθά μὲν πάντα ... πᾶν δοσιν ἡ ὁριστὸν παραλαβέν τῶν ἡρμήνεαν ἄγον ἀλλὰ κανονίσαν πλημμελός καὶ ἀτάκτως, εἰς τάξιν αὐτῷ ἔγαγεν ἐν τὰς ἀτάξιας, ἡγησάμενος ἑκείνῳ τοῦτον πάντως ἦμεν. 6b28–7α3 ἢ τάξις καὶ τὸ ὄρισθαι ... τάς μαθηματικὰς Arist. Met. M 3, 1078a36–b2 τοῦ δὲ καλοῦ μέγατα εἰδή τάξις καὶ συμμετοχικό καὶ τὸ ὄρισμέν, ἡ μάλιστα δεινώνουν αἱ μαθηματικαὶ ἑπίστημαι.

from these to the principles,\textsuperscript{59} and then, in order of generation, all the way [down] to the [things] mentioned;\textsuperscript{60} but the others [treat] of the principles only—and some, even, [say] that reality itself consists of these,\textsuperscript{61} for the [things] that exist pertain exclusively to the first principles. This is the opposite of what happens in the other disciplines: for in those, the [parts] of knowledge [that come] after the principles are firmer and, as it were, more complete; but maybe reasonably so: for here\textsuperscript{62} the search is for the first principles whereas in the rest it is from the first principles.

(14)\textsuperscript{63} Perhaps one might raise the aporia, how and of what sort one should at all suppose the first principles to be: whether shapeless and, as it were, potent (as [do] those who [posit] fire and earth),\textsuperscript{64} or already shaped, on the ground that it is necessary most of all for these to be determined, as he says in the Timaeus;\textsuperscript{65} for order and being determined are most appropriate to the [things] of greatest value. (This, incidentally, seems to be so also in almost all the rest [of the disciplines,] except for a few\textsuperscript{7} like grammar and music, as well as in the mathematical ones, while the [things] after the first principles, too, follow suit; and further,

\textsuperscript{59} The anacoluthon is in the original. Theophrastus here changes the construction of the sentence, which was based on the verb “relating [them] to” (\textit{anápt¯on}); from here on and for the next phrase an intransitive verb of motion, like “proceeding,” is apparently to be understood (cf. van Raalte 274).

\textsuperscript{60} I.e., the things that “come next” in the sensible world mentioned earlier, at 6a17, as examples of which Theophrastus cited the theories of Eurytus about men and horses; see the commentary. Also to be noted is the reservation implied in Theophrastus’s circumspect expression and the fact that he mentions Plato after Xenocrates and Hestiaeus; see the commentary.

\textsuperscript{61} The neuter pronoun refers to all the various first principles mentioned previously—the one, the indefinite dyad, etc. See the commentary.

\textsuperscript{62} I.e., in the study of the first principles, what was later to be called metaphysics; this appears to be a direct reference to the title of the Essay, “On First Principles”.

\textsuperscript{63} The argumentation in this aporia and the following diaporiae is too convoluted to include the precise numbering of the different sections in the text and translation; see the discussion in the commentary.

\textsuperscript{64} It would seem that the reference here is to Parmenides, who viewed earth and fire as the material and efficient principles, or possibly even to a Pythagorean like Philolaus. See the commentary.

\textsuperscript{65} This is not an exact quotation but a general reference to views expressed in Plato’s dialogue at 30a.

(14.1) Ἀλογον δὲ κάκευνος δόζευεν ἄν, εἰ δὲ μὲν ὄλος οὐρανὸς καὶ ἐκάστα τῶν μερῶν ἄπαντ᾽ ἐν τάξεί καὶ λόγῳ, καὶ μορφαῖς καὶ δυνάμεις καὶ περιόδοις, ἐν δὲ τάς ἀρχαῖς μηθέν τοιοῦτον ἅλλ᾽ ωσπερ «σάχες, εἰκῇ κεχυμένον ὁ κάλλιστος», ἦς τῶν Ἀμάλκειτος, «χοίρος». Καὶ κατὰ τούλαχιστὸν δ᾽ ὡς εἰπεῖν λαμβάνοντον ὁμοῖος ἐν ἀφροὶς καὶ ἐμμοῦς ὁμοιούμεναι γὰρ ἐκάστην αἰς χρόος ὡς εἰπέσθαι αὐτοῖς εἰμὶν, τὰς δ᾽ ἀρχαῖς ἀροίστοις εἰναι.

(14.2) Χαλεπόν δὲ πάλιν αὐτὸ τοῦ λογοῦ ἐκάστος περιθείναι


[this is] similarly [so] also in accordance with the crafts, which, in fact, imitate nature: both the instruments and the rest [are] in accordance with the first principles.66) So, then, some [suppose that there is] nothing but enshaped67 [first principles], others only material ones, and still others both, on the ground that whatever is complete consists of both since all of existence68 is [constituted], as it were, from opposites.

(14.1) It would, however, seem unreasonable69 even to these [people] if, on the one hand, the entire heavens and each of the parts were all orderly and formally principled in respect of shapes and of powers and of periods [of time], while on the other hand there were nothing of the kind in the principles, but [it were] like “flesh,70 of [things] poured out at random, the most beautiful,” ῥας1 Heraclitus says, “arrangement.”71 And they even take it [to be so] as a rule down to the smallest [thing], alike in inanimate and animate [things]; for the natures of each [set] of them are, as a rule, determinate—even when they come into being spontaneously—but the principles [they say], are indeterminate.

(14.2) Again, it is difficult72 to ascribe to each [set of things] its [own] formal principles by a collective referral to “for-the-sake-of-which”73 in

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66 The exceptive phrase in this parenthetical statement, preserved only in the Arabic translation, provides some discrimination, with regard to the order and determinacy of their respective first principles, between grammar and music on the one hand and mathematics on the other. See the commentary.

67 I.e., enounced with shape and form; cf. “ensouled”. The Greek word, ἐμμορφος, appears to be a neologism, most likely coined by Theophrastus himself, for this is its first occurrence in extant Greek literature, and was used very sparingly after him—interestingly, mostly by Christian authors.

68 Existence (ousía) in the sense of all that exists. See the commentary at 4a13.

69 This first set of objections to the “materialists,” introduced by “unreasonable,” is followed in the next paragraph (14.2) by objections to the “formalists.”

70 I.e., the fleshly contour of the human body; see the commentary.


72 This second set of objections to the “formalists” follows upon the first directed at the “materialists” in the preceding paragraph.

73 I.e., a final cause.
πρὸς τὸ ἑνεκά του συνάγοντας ἐν ἀπασιν —καὶ ἐν ζῷοις καὶ φυτοῖς καὶ ἐν αὐτῇ πομφόλυγι— πλὴν εἰ συμβαίνει τῇ ἐτέρῳν τάξει καὶ μεταβολὴ μορ-
7b1 φάς τε παντοίας καὶ ποικιλίας γίνεται δὲ τῶν περὶ τὸν ἄερα καὶ τὴν γῆν ὅν δὴ μεγιστῶν τινες παράδειγμα ποιούντα τὰ περὶ τῶν ὀφρας τάς ἐτη-
σίους ἐν αἷς καὶ ζῷοιν καὶ φυτοῖν καὶ καρπῶν 5 γενέσεις, οίον γεννώντος τοῦ ἡμίου.

(15) Καὶ ταῦτα μὲν ἑνταῦθα που ζητεῖ τὴν σχεῖσιν, ἀφορισμὸν ἀπατοῦντα μέχρι πόσου τὸ τεταγμένον καὶ διὰ τὸ πλέον ἀδύνατον ἢ εἰς τὸ χεῖρον ἢ μετάβασις,
(16) ἐν δὲ ταῖς ἄρχαις, ὧς ἐνεπ. δὴ καὶ ὁ πρώτος λόγος, εἰκότως ἃν τις καὶ τὸ περὶ τῆς ἡρεμίας ἀποφήσειν. Εἰ μὲν γὰρ ός βέλτιον, ἀνάφθειν ἃν ταῖς ἄρχαις· εἰ δ’ ὡς ἄρχια καὶ στέρησις τῶν κινήσεως, οὐχ ἀνάφθει, ἀλλ’ ἐπετρέ, τὴν ἐνέργειαν ἀντιμεταλ-
λακτέον ως προτέραν καὶ τιμωτέραν, τὴν δὲ κ’ ἑνὶ νησι [ἐν] τοῖς αἰσθητοῖς. Ἐπεί τὸ γε διὰ τοῦτ’


all [cases]—both in animals and in plants and even in the very bubble—unless it happens that, by reason of the order and change of others, there come about all manner of shapes and varieties of atmospheric and terrestrial [things]; of which in particular some make the greatest paradigmatic [cause] to be the [things] relating to the seasons of the year, in which [seasons] there are generated alike animals and plants and fruits, with the sun being, as it were, the begetter.

(15) Now while these call for investigation somewhere here, demanding that one mark the boundaries of how far what is endowed with order [extends] and [answer] why more [of it] is impossible lest the change be for the worse, (16) yet regarding the first principles—from which, it is to be noted, the very discussion first [began]—one might reasonably raise an aporia also about their rest. For if [rest is taken] as [something] better, one would ascribe [it] to the first principles; but if as cessation and a certain privation of motion, one will not [so] ascribe [it]—but no, if anything, an actualized state should be substituted in [its] stead, on the ground that it is prior and more valuable, while motion [should be ascribed] to the sensibles. For to be at rest on account of this—[viz.,] that it is impossible

74 In all likelihood Theophrastus is referring here to a minimal form of organic life, or to the moment of transition from inorganic to organic life in spontaneous generation. According to Aristotle (GA 762a21–25, p. 1180 CWA), “living things form quickly whenever this air and vital heat are enclosed,” and “the corporeal liquids being heated, there arises as it were a frothy bubble.”

75 The reference is apparently to Peripatetic circles; cf. van Raalte 319 and Laks & Most 53n24.

76 I.e., in this Essay. Theophrastus returns in §§22–24 below to the issue of the determinacy of the principles and to answering the two questions he asks in this paragraph, viz., how far what is ordered extends and why more of it would be for the worse.

77 Theophrastus restates here the main subject of his essay and obliquely also refers to his title.

78 *Enérgeia*, for which see the commentary at 5a7.

for what causes movement to be [itself] in every instant moved, because then it would not be first—a runs the risk of being [an argument] of [mere] words and otherwise not worthy of belief, and rather calls for some better reason [to be given for it].

(16.1) And even sense-perception seems in some manner to concur in that it is possible for what causes movement not to have to be different from what it moves on the ground that [it] both acts and is acted upon—and beyond this, [the same holds true] if one were to apply [it] to intellect itself and to god.

(16.2) Neither does the other thing that has been said make any sense, that the [things] that desire what is at rest do not imitate; for why aren’t they accompanied by that of the others? Except that, perhaps, one should not conceive [of these things] in the same way as if he were reducing to something without parts, but rather in such a way that the entire heavens too—which, famously, they maintain to be most perfect—shall be as much as possible in harmony with themselves and

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79 I.e., because it would require something else to set it in motion, and so on in an infinite regress.
80 For the interpretation of this phrase see the commentary. Theophrastus here appeals to the observable fact of self-movement in living beings (cf. Ross 63.), something granted also by Aristotle (Phys. 259b1 ff.), but without accepting Aristotle’s further and ultimate refutation of self-movement.
81 That is, the same argument of the identity of mover and moved—of the possibility of self-movement—also applies, and much more cogently, to objects that the senses cannot perceive, intellect and god.
82 I.e., at 5223–25 above.
83 The Greek has no object for “imitate;” it has been understood that the reference is to “what is at rest,” or “it.”
84 The text of this elliptical sentence is uncertain. As reconstructed, it may mean, “why in the case of the heavenly bodies is desire not accompanied by imitation, as in all other cases?” See the commentary.
85 The heavens are used here in the sense of the entire universe; see above, note 41.
τι τῶν μεριστῶν ἢ καὶ ὁ ὅλος οὐρανός, ὃν δὴ φασιν εἶναι τελεώτατον.

(17) Ἐπιστοθεὶ δὲ τινὰ καὶ τὰ τοιάδε λόγον: πῶς VI [17] ποτὲ τῶν ὄντων ὁ μερισμὸς εἰς ὅλν καὶ μορ-

8α10 φήν: πότερον ὡς τὸ μὲν ὄν, τὸ δὲ μὴ ὄν, δυνά-

μει δ’ ὄν καὶ ἀγώμενον εἰς ἐνέργειαν; ἢ ὄν μὲν,

ἀοριστὸν δὲ, καθάπερ ἐν ταῖς τέχναις, ἢ δὲ γέ-

νεος ἢ οὐσία γ’ αὐτῶν τῷ μορφωθοῦσα κατά
tοὺς λόγους; Ἀλλ’ οὕτω γ’ εἰς μὲν τὸ βέλτιον
15 τάχ’ ἢν ἡ μετάβασις εἰ, τὸ δ’ εἶναι οὐθὲν ἢ

hotmail τὰλθεῖς ὑπάρχοι κατ’ αὐτὴν (οὐ γὰρ ἄν

οὐδὲ γίνοιτο μὴ ὑπάρχουση), ἀλλὰ τὸ μῆτε τὸ

μῆτε μῆτε ποιοῦ ὑμᾶς, ὡς ἄοριστον τοὺς εἰδείαν,

δύναμιν δὲ τιν’ ἔχουν. "Ολως δὲ κατ’ ἄναλογιαν

20 ληπτέον ἐπὶ τὰς τέχνας καὶ εἰ τις ὁμοιότητις άλλη.

(18) Δόξειεν δ’ ἢν καὶ τοῦτ’ ἔχειν ἀπορίαν, εἰ μὴ VII [18]

άρα περιεργια τὸ Ἰτεῖν, τί δὴ ποτὲ ἢ φύσις καὶ

ἢ ὄλη δ’ οὐσία τοῦ παντὸς ἐν ἐναντίως ἐστίν,

καὶ σχεδὸν ιομοιωτί τὸ χεῖρον τῷ βέλτιον, μᾶλ-

25 λὸν δὲ καὶ πολλῷ πλέον ἐστίν, ὅστε δοξεῖν καὶ

Εὐδοκίδην καθὸλου λέγειν ὡς


φύσις ἐπιστήμην κατ’ ἄναλογιαν ὡς γὰρ πρὸς ἀνδριάν ταῦτα ιομοιωτί \ ... τοῦ ἄμορφου ἔχει πρὸς ἄλλο, τῇ 

τὰλθεῖς ὑπάρχοι 


τοῦ ἄμορφου ἐφ’ ἄλλο \ ... ἐπιστήμην \ ... ὑπεναντίως γάρ

τοῦ ἄμορφου ἐφ’ ἄλλο \ ... ἐπιστήμην \ ... ὑπεναντίως γάρ

τοῦ ἄμορφου ἐφ’ ἄλλο

πλέον ἐστίν| Plato Theat. 764a5–6 οὔτ’ ὑπεπλέσθαι τὰ κακὰ δυνατὸν, \ ... ὑπεναντίως γάρ

τοῦ τὸ ἄγαθον ἄπτε σαῦρα \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \ ... \...
integrated, as if they were a city or an animal or something else with parts.86

(17) In addition, also the following require some discussion. However is the division of beings into matter and shape [to be taken]? Whether the one as being and the other as not-being, but as being potentially and driven88 towards actuality? Or, as being, but indeterminate, as in the crafts, while generation, or at any rate their89 substance, 90 [would come about] through being shaped in accordance with formal principles? But of course, in this [latter] way on the one hand the change would be likely for the better, and on the other, being would be no less truly predicated [of things] with respect to [their matter] (for they would not even come into being at all if [matter]91 did not exist), though [it would be being], as something indeterminate with regard to forms, that is neither this nor such nor so much but having a certain potentiality. In general, our understanding must be based on analogy with reference to the crafts and, if [there is] any other similarity, [on that one].

(18) It would seem that the following, too, involves an aporia—unless it is pedantry [even] to inquire—why in the world it is that nature, and indeed the entire substance92 of the universe, consists of contraries, with the worse almost equaling the better—or rather being greater by far—so that even Euripides would seem to be making a universal statement when

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86 Theophrastus here is apparently arguing that the imitation in question should be of the harmony and orderliness of the first principle and not of its rest.
87 Or, according to Laks & Most, "how is the division into matter and form at all [to be related] to beings?"
88 The Greek participle, *agōmenon*, is ambiguous: it could be either middle voice, "in progress towards," or passive, "being led towards" (cf. van Raalte 364–365). "Driven" is intended to reproduce this ambiguity: either driven inwardly or by an external agent.
89 The pronoun must refer to the "beings" mentioned in the initial question in 8a9; see the commentary.
90 *Ousía*, as used in this sense in the corresponding Aristotelian passage (*Phys.* 191a11); see the Loci Paralleli and the commentary at 4a13.
91 Both here and in the preceding line the feminine pronoun and participle refer unequivocally to matter (*hylē*).
92 *Ousía* here in the sense of formal constitution; cf. 10a3 and 11b26 and see the commentary at 4a13.
οὐκ ἂν γένοιτο | χωρίς ἐσθλά.

8b26|27 Ὁ δὲ τοιοῦτος λόγος ἐγγὺς τοῦ
8b1 ζητεῖν ὁ τι οὐ πάντε ἀγάθα οὐδὲ πάντα ὤμοια, καὶ ὁ τι κατὰ πάντων μὲν τὸ εἶναι λέγομεν, οὐθὲν δὲ ὤμοιον ἀλλήλοις, καθάπερ τὰ λευκὰ καὶ
4 μέλανα ἐν αὐτοῖς.

(18.1) Ἐτι δὲ τὸ δοκοῦν παραδοξότερον, ὡς οὐχ οἶδον τὸ ἄνευ τῶν ἑνεκτιῶν.

(18.2) Οἱ δὲ ἐπὶ πλέον τῷ παραδοξῷ χρώμενοι καὶ τὸ μὴ ὁμοίως γεγονός μηδὲ μέλλων προσκαταρτιμοῦσιν εἰς τὴν τοῦ παντὸς φύσιν. Ἀλλ' ἢδε μὲν οἶον ὑπερβατῶς τις σοφία, τὸ δὲ ὦν ὅτι πολλαχῶς, VIII [19]

8b3-4 καθάπερ τὰ λευκὰ καὶ μέλανα ἐν αὐτοῖς] Arist. Cat. 1420a–22 λευκὸν μὲν γάρ καὶ μέλαν ἐν τῷ αὐτῷ γένει χωρίς γάρ αὐτῶν τὸ γένος. 8b6-8 τὸ μὴ ὄν ... φύσιν] Theophr. Phys. Opin. fr. 8 (Diels 483–484) ἐτι δὲ οὐδέν μᾶλλον τὸ ὄν ἢ τὸ μὴ ὄν ὑπάρχειν, καὶ αἰτία ὤμοιος εἶναι τοῖς γεγομένοις ἁμαρτ. ... τῷ κενῷ ... ὡς αὐτὸν ὄν ἐκάλει καὶ οὐκ ἔλαττον τοῦ ὄντος εἶναι φημα. 8b9 τὸ δὲ ὦν ὅτι πολλαχῶς] Arist. Met. Γ 2, 1003b5–10 τὸ ὄν λέγεται πολλαχῶς ... μὴ ὧν φημεν. 8b10-12 ἢ γὰρ αἰτίας ... ὑποβάλλει τῇ διανοίᾳ] Theophr. fr. 301B FHS&G Θεόφραστος δὲ τὴν αἰτίαν ἀρχήν εἰναι πιστείς φημαν' ἀπὸ γὰρ ταυτός αἱ ἁρχαὶ πρὸς τὸν λόγον τοῦ ἐν ἡμῖν καὶ τὴν διάνοιαν ἐκτείνονται. 8b10–11 διαφοράς, αἰτίας] Arist. HA 491a9–12 ἵνα πρῶτον τὰς ὑπαρχόντος διαφοράς καὶ τὰ συμβεβηκότα πάσι λάβομεν, μετὰ δὲ τοῦτο τὰς αἰτίας τοῦτον πειράτευν εὑρεῖν.

he says,

“Good things cannot come to pass alone.”

But such a way of speaking comes near to wanting to know why [things] are not all of them good or all of them alike, and why, though we predicate being of all [things], there is nothing [through which they are] similar to one another as [there is between] white and black [things] among them.

(18.1) Further, what appears more paradoxical: that being cannot be without contraries.

(18.2) And again, those who indulge in even greater paradox add to the nature of the universe also that which is not and has not been and will not be. Now this in particular may well be a sort of “wisdom” that has gone too far, but that “that which is” is manifold, is evident. For sense perception both observes the differences and seeks the causes; though perhaps it is closer to the truth to say that it prompts the faculty of thought partly by simply searching and partly by producing an aporia through whose consideration, even if it is not able to advance, some light still makes its appearance in the non-light as [we] search further. Knowing, then, [does] not [occur] without some difference. For both, if [things] are other than each other, there is some difference, and, in the case of universals where the [things that fall] under the universals are more than one, these too differ of necessity, be the universals genera or species.

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93 Aeolus, fr. 21 Nauck. The sense of “even” here in “even Euripides” (kai Euripidēn), “Euripides, too,” would seem to be that even a literary person and not a philosopher could be making universal statements with philosophical import. Cf. van Raalte 384.

94 I.e., asking why nature consists of contraries.

95 I.e., the genus color shared by black things and white things.

96 I.e., the differences distinguishing one being from another and their causes. Cf. the Arabic translation.

97 The subject of this verb is taken universally by commentators to be the faculty of thought.

98 I.e., without the presence of some difference.
(18.3) Σχεδὸν δὲ καὶ ἐπιστήμη πάσα τῶν ἰδιῶν· ἢ τε γὰρ οὐδαί καί τὸ τί ἢν εἶναι καθ’ ἔκαστον ἰδιον, τὰ τε θεωρούμενα καθ’ ἑαυτά καί οὐ κατὰ συμβεβηκός ἢν ἂν τί κατὰ τινὸς.

(18.4) "Ολος δὲ τὸ ἐν πλείοισιν τὸ αὐτὸ συνιδεσμὸν ἢν ἀριετταμως ὡτα τὰυτὰ λέγεται καί ὧν ἡ κρονὴ μια

(19) Πλεονοχώς δ’ ὄντος τοῦ ἐπίστασθαι, πῶς ἐκαστα μεταδιωκτέων; Ἀρχή καί κέγιστον ὁ ὀίκειος τρόπος, οἶον τὰ πρῶτα καί νοητά, καί τὰ κινητά καί ὑπὸ τὴν φύσιν, αὐτῶν τε τοῦτων τὰ ἐν ἀρχήν.
(18.3) In addition, almost all knowledge is of unique properties, for both, on the one hand, the essence and “the what-it-is-to-be” for each are unique properties, and, on the other, what [things] are observed essentially and not accidentally would be in each case something of something.99

(18.4) In general, though, to perceive simultaneously the identical in many is [the task] of knowledge, whether, in fact, it is said [of them] in common and universally or in some unique way with regard to each, as, for example, in numbers and lines, and animals and plants; complete is the one [consisting] of both. There are, however, some [knowledges] whose end is the universal (for therein is their cause), while of others it is the particular, those in respect of which division100 [can proceed] down to the individuals,101 as in the case of [things] done and [things] made: for this is how their actualized state is.102 Well, the identical we come to know with respect to essence, to number, to species, to genus, to analogy, and with respect to a division besides these, if there is one at all; across the greatest [distance], though, [we come to know] that [which is identical] with respect to analogy, insofar as we are, as it were, the farthest removed, partly owing to ourselves, partly to the subject matter, and partly to both.

(19) Since, then, knowing [occurs] in very many ways, how is each [class of things] to be pursued? The starting point and the most important is the appropriate manner [of pursuing each class], such as the first and intelligible [things], the [things] that are movable and [fall] under

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99 I.e., an essential attribute belonging to some concrete thing. The least interpretive reading of this clause would be, “what are observed [to be] essential and not accidental [attributes] would be in each case a certain thing [belonging] to some other [particular] thing.” See the commentary.

100 Division here and in what immediately follows refers specifically to the systematic classification of things into categories as practiced in the Academy (cf. Laks & Most 66n24).

101 In the original, etymological sense of individual, in Greek (átomon) as in English, indivisible entity.

102 ἐνέργεια; see the commentary at 5a7.
καὶ τὰ ἑπόμενα μέχρι ξύλων καὶ φυτῶν καὶ ἔσχατων τῶν ἀνφύχων. "Εοσίν γάρ τι καθ’ ἑκατὸν γένος ἵνα, ὡσπερ καὶ ἐν τοῖς μαθηματικοῖς ἔχει [23] δὲ καὶ αὐτὰ τὰ μαθήματα διαφοράς καί τερομηγενῆ πως ὄντα διήρηται δ’ ἱκανῶς. Εἰ δὲ καὶ ἐνια γνωστά τῷ ἀγνώστοι εἰναι, καθάπερ τινὲς φασιν, ἵδιος ἃν ὁ τρόπος εὐθεῖα ἀρνεσεως δέ τινος δεῖ τα τάχα δ’ ἐφ’ ὄν ἐνδέχεται, κατ’ ἄναλογαν οἰκείωτερον λέγει ἢ αὐτῷ τῷ ἀγνώστῳ, καθάπερ εἰ τὶς τῷ ἀοράτῳ τὸ ὀράτου.

nature, and of these latter, those at the head\textsuperscript{103} and \textit{those} that follow, right down to animals, plants, and lastly to inanimate [things]. For there is something unique\textsuperscript{104} relating to each genus [of things], as also in mathematical[s]; furthermore, even mathematics itself is differentiated despite being somehow homogeneous—but the distinction has been made sufficiently.\textsuperscript{105} And if, in addition, some [things] are known by being unknown, as some maintain, this manner would be unique [to them] but needs some sort of division\textsuperscript{106} though perhaps, for those [cases] in which it is possible, it is more appropriate to call [this manner of knowing knowing] by analogy than by the very [attribute of being] unknown, as if one [were to call seeing] what is seen by means of [its being] unseen.\textsuperscript{107}

(20a) One should try to distinguish, then, how many manners [of investigation there are], and in how many ways knowing [occurs]. (20b) The starting point with reference to these [things] themselves and the first [step] is to mark the boundaries of what knowing is. But this would seem more difficult,\textsuperscript{108} for it is not possible to apprehend something universal and common in the case of [things] said in very many ways. (20c) Or actually this is a matter of aporia, or at least not easy to say, how far and up to which [things] search for causes should extend, alike in the case of sensibles and of intelligibles, for the route to infinity is in both cases inappropriate and destructive of understanding. (Both are, in some manner, starting points: perhaps the one for us and the other absolutely, or the one is an end and the other some starting point of

\textsuperscript{103} I.e., the celestial bodies.

\textsuperscript{104} I.e., in the manner of being investigated.

\textsuperscript{105} Presumably, as Ross 67 observes, in the Peripatetic School.

\textsuperscript{106} I.e., some sort of list arrived at by division as practiced in the Academy (for which see Ross 1951, 144–145, and Laks & Most 66n24), and especially by Speusippus (if this passage refers to him; see the Appendix); cf. the divisions list mentioned in the preceding paragraph at 9a5–6.

\textsuperscript{107} For the analysis that led to the translation presented here see the Appendix. It is not known precisely to what and to whom Theophrastus is referring in this passage, though it is more than likely that he has Speusippus in mind (as elsewhere in this Essay) who held that a thing is defined (and thus known) through the complex of its relations to all other things.

\textsuperscript{108} I.e., marking the boundaries of knowledge, or determining with precision what its objects are, is more difficult than distinguishing the different ways of knowing; see the structure of this whole argument given in the commentary at 9b1.
ἀρχή. Μέχρι μὲν οὖν τινὸς δυνάμεθα δι’ αἰτίου [25] θεωρεῖν, ἀρχῆς ἀπὸ τὸν αἰσθήσεων λαμβάνοντες· ὅταν δὲ ἔτ’ αὐτὰ τὰ ἀκραὶ καὶ πρῶτα μεταβαίνο- μεν, οὐκέτι δυνάμεθα, εἰτε διὰ τὸ μὴ ἔχειν αἰ- τίον εἰτε διὰ τὴν ἡμετέραν ἀσθένειαν ὡστε πρῶτο τὰ φωτεινότατα βλέπειν. Τάχα δὲ ἐκεῖνο ἀληθέστερον ὡς αὐτῷ τῷ νῷ τῶν τοιούτων ἢ θεωρία ἴχνοντι καὶ οἶον ἀψυμενό, διὸ καὶ οὐκ ἔστιν ἄπατη περὶ αὐτά. (20c2) Χαλεπὴ δὲ καὶ εἰς αὐτὸ [26] τοῦθ’ ἢ σύνειας καὶ ἢ πίστις· ἐπεὶ καὶ ἄλλως μέγα καὶ πρῶτος καθ’ ἐκπαίδευσεν ἀναγκαίον καὶ μάλιστα τὰς μεγίστας· ἐν τίνι ποιητέον τὸν ὄρον, οἶον περὶ τῇ τάξει τῆς φύσεως καὶ περὶ τάς ἐπί πρωτέας. Οἳ γὰρ ἄπαντων ἰκτισθῆναι λόγον ἀναι- ρούσιν λόγον, ἀμα δὲ καὶ τὸ εἰδέναι· μάλλον δ’...
ours.\textsuperscript{109} Up to a point, then, we are able to conduct studies by means of a cause\textsuperscript{110} by taking starting points from sense-perceptions; but when we move on to “the first and highest” [things] themselves, we are no longer able to, either because they have no cause or because of our own lack of strength, as it were, to look in the direction of the brightest [things]. But perhaps that is closer to the truth, that the contemplation of such [things] is by means of the intellect itself as it makes contact with and touches [them], as it were, which is also why there can be no deception about them.) (\textsuperscript{20c2}) So, reaching understanding and conviction, seeing that it is otherwise important and necessary in studies of each particular [thing] and especially [in] the most important ones, is difficult with regard to this very [issue] here: at which [point] to set the boundary—[the boundary], that is, both regarding "the" [studies] of nature and regarding those even prior.\textsuperscript{111} For\textsuperscript{112} those who seek proof of everything do away with proof, and at the same time with

\textsuperscript{109} The chiasmus in this construction has been noted by the commentators. The sensibles constitute the starting point for us (who proceed from down up) while the intelligibles are starting points absolutely (i.e., containing, as they do, the explanation of the universe from top down); but if so, as absolute starting points in this sense, they also constitute the end toward which we tend when we start from some sensibles.

\textsuperscript{110} I.e., we are able “to acquire knowledge of them by identifying their cause” (van Raalte \textsuperscript{454}), which is in keeping with Theophrastus’s statement about the search for causes. Studies by means of a cause, however, cannot go on indefinitely because “the route to infinity”—infinite regress—must be avoided.

\textsuperscript{111} I.e., studies on subjects that are prior to the objects of nature, viz., mathematics and metaphysics. For the concept of boundaries existing in reality and which should be observed in the search for knowledge see Part I, Chapter 1.3 and note 58.

\textsuperscript{112} The function of “for” (gar) here is to give the reason why setting a boundary in the various disciplines of inquiry is difficult: if no boundary is set, one would go on seeking proof for everything ad infinitum. See the commentary at 9b24 for a statement of the argument.
ἀληθεύετον εἰσεῖν ὅτι ζητοῦσιν ὅν οὐκ ἔστιν οὐδὲ πέφυκεν (*** ὅσοι τὸν οὐρανὸν ἄδιον ὑπο-
λαμβάνουσιν, ἐτὶ δὲ τὰ κατά τὰς φορὰς καὶ τὰ [27]
μεγέθη καὶ τὰ σχῆματα καὶ τὰς ἀποστάσεις καὶ
ὅσα ἄλλα ἀστρολογία δείχνουσιν, τούτως κατάλοι-
pον τὰ τε πρῶτα κινοῦνται καὶ τὸ τίνος ἐνεκα λέ-
γειν καὶ τὶς ἢ φύσις ἐκάστον καὶ ἢ πρὸς ἄλληλα
θέσεις καὶ ἢ τοῦ σύμπαντος οὐσία, καὶ ὑποβαίνοντι
δὴ πρὸς τὰ ἄλλα καθ’ ἐκαστον τῶν εἰδῶν ἡ με-
ρῶν ἄχρι ζῴων καὶ φυτῶν.

(21) Εἰ οὖν ἀστρολογία συνεργεῖ μέν, οὐκ ἐν τοῖς πρῶτοις δὲ, τῆς φύσεως
ἐτερα τὰ κυριώτατ’ ἂν εἰ ἔφορο λαπέ ἰρ καὶ γάρ
δὴ καὶ ὁ τρόπος, ὡς οἶόνται τινες, οὐ φυσικῶς ἡ
οὐ πᾶς. Καίτοι τὸ γε καὶ κατέστη καὶ ἀπλῶς τῆς
φύσεως οἴκειον καὶ μάλιστα τοῦ οὐρανοῦ. Διό καὶ
(εἰ) ἢ ἐνέργεια τῆς οὐσίας ἐκάστου καὶ τὸ καθ’ ἐκα-
στον ὅταν ἐνεργῇ καὶ κινεῖται, καθάπερ ἐν τοῖς
ζῴοις καὶ φυτοῖς (εἰ δὲ μη, ὁμόνυμα), δήλον ὅτι
κὰν ὁ οὐρανὸς ἐν τῇ περιφορᾷ κατὰ τὴν οὐσίαν
εἰ, χωρίζομενος δὲ καὶ ἠρεμῶν ὁμόνυμος ὁ οὖν
γάρ ζωῆς τὶς ἢ περιφορά τοῦ ποιητῶς. Ἄθ’ οὖν εἰ [28]
ge μὴ ἐν τοῖς ζῴοις τῆς ζωῆς ἡ ὠδὶ ζητητέον,
knowing, too;113 or rather, it is closer to the truth to say that they seek [proof] of [things of] which there neither is nor by their very nature can be any. (* * *) those who assume the heavens to be eternal114 and, further, 9b25 what has to do with the movements and the sizes and the figures and the distances and whatever else astronomy shows—for these [people] it remains to state both the first movers and “that for the sake of which,” 10a1 as well as what the nature of each is, the position of the one relative to the other, and the substance115 of the universe; and then, for someone progressing downwards to the rest [of the things, there remains to state the same] for each species or part116 individually down to animals and plants.

(21) If, then, astronomy helps, but not with regard to the first [things], the principal [things] will be other than and prior to nature;117 and certainly also the method, as some think, is not that of nature,118 or not entirely. In fact, being in motion, at least, is proper both to nature in general and to the heavens in particular. Hence, (if) the actualized state119 of each [thing] is of its essence, and each individual [thing] is also in motion when in an actualized state, as in the case of animals and plants (otherwise [they would be animals and plants] in name [only]), then it is obvious that the heavens, too, in [their] rotation, would be in accordance with their essence, but when divorced [from movement] and at rest, [they would be the heavens] in name [only]—for the rotation of the universe is, as it were, a kind of life. So I wonder, if even in the case of animals life is not to be investigated except in this way,120 isn’t then also movement, in the case

113 Proclus, who cites a similar passage by Theophrastus (In Tim. 35A = fr. 159 FHS&G), says that this is directed against Plato’s inquiry into the origins of the soul in the Timaeus.
114 It is necessary to assume a lacuna at this point. See the discussion in the commentary. The missing sentence would have read something like, “(Though finding such a boundary is difficult, one should on the other hand beware of stopping too short in the quest of causes, as is done by) those who assume the heavens to be eternal . . . .”
115 Substance (ousia) here in the sense of formal constitution; cf. at 8a23 and 11b26 and see the commentary at 4a13.
116 In all likelihood “or part” is a corruption and should be substituted by “mentioned above,” i.e., “for each species mentioned above,” as in the Arabic translation. See Chapter 2.1, section on “Sub-family JCL.”
117 I.e., either mathematical or the intelligibles studied in metaphysics.
118 I.e., that used in the study of nature, or physics.
119 Enérgēia, see the commentary at 5a7.
120 I.e., an explanation of life, or movement, is to be investigated in a metaphysical inquiry on first principles by considering it as belonging to the essence of animals.
οὐδ’ ἐν τῷ οὐρανῷ καὶ τοῖς οὐρανίοις τὴν φορὰν ἦ τρόπον τινὰ άφορισμένον; Συνάπτει δὲ πως ἦ νῦν ἀποφαία καὶ πρὸς τὴν ὑπὸ τοῦ ἀκινήτου κίνησιν.

(22) Ὕπερ δὲ τοῦ πάνθ’ ἐνεκα τοῦ καὶ μηδὲν μά- την, ἄλλως (ἢ’ ὁ άφορισμός οὐ ὄδιος, καθάπερ πλεονάκις λέγεται (πόθεν δ’ ἀφαίταις χρή καὶ εἰς ποῖα τελευτάτα), καὶ δὴ ἐνια τῷ μὴ δοκεῖν ἔχειν οὐτός ἀλλὰ τὰ μὲν συμπτωματικῶς τὰ δ’ ἀνάγκη τινί, καθάπερ ἐν τε τοῖς οὐρανίοις καὶ ἐν τοῖς
25 περὶ τὴν γῆν πλείοσιν.

(22.1) Τίνος γὰρ ἐνεκα αἱ ἐφο- [29] δοι καὶ ἀνάφοραι θαλάττης, ἡ τίνος αἱ προχωρή- σεις ἢ καὶ ἀναχωρήσεις ἢ ἀναξεράφησεις καὶ γνώ- τητης, καὶ ὅλως πρὸς ἄλλοτ’ ἄλοο μεταβολαὶ καὶ φθοραί καὶ γενέσεις, ἢ αἱ μὲν ἐν αὐτῇ τῇ ἁ ἄλ- 5 λοώσεις καὶ μεταβολαὶ γίνονται πρὸς ἄλλοτ’ ἄλοο μεθυσταμένων καὶ ἑτερα δ’ οὐκ ὀλίγα παρόμοια 7 τοῦτοις;

18 οὐδ’ ἐν Ρ Λ : οὐδὲν J, οὐδὲν Ψ 22 μάτην secl. Zeller 23 ἄλλως [ἀλλοὶς P] PJ Ψ L : ἄλλ’ ὁς Α Β Ρ Σ [post ἄλλως dist. Ar. Zeller | θ’ add. Us.1,2] 24 λέγεται PJ Λ : λέγεται Ψ (sa-naqāli) | δ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’ θ’
of the heavens and the heavenly [bodies, not to be investigated] except in some manner whose boundaries have been marked?\textsuperscript{121} The present aporia\textsuperscript{122} is in a way also connected with the movement [caused] by the unmoved.

\begin{itemize}
\item \textbf{(22)} With regard to “all [things] are for the sake of something” and “nothing is in vain,” marking the boundaries is in any case not easy, as is frequently stated—from which point is it necessary to begin and at what sort [of things] to end?\textsuperscript{123}—and in particular some [things are not easily marked within boundaries] by not seeming to be thus,\textsuperscript{124} but rather [by] some of them [seeming to occur] by coincidence and others by some necessity, as in the case of both celestial and the majority of terrestrial [things].

\begin{itemize}
\item \textbf{(22.1)} To wit: for the sake of what [thing do] incursions and refluxes of the sea [occur], or of what [thing] advances and regressions, or drynesses and humidities, and, in general, changes now in this direction and now in that, and passings-away andcomings-to-be\textsuperscript{125} through which there occur the alterations and changes in the earth itself as [things] shift now towards this and now towards that place, and not a few other [things] besides, similar to these?
\end{itemize}
\end{itemize}

\textsuperscript{121} I.e., in a manner proper to metaphysics (“not that of nature,” at 10a8 above), whose objects of study are well marked off, as the opening sentence of this Essay wishes to investigate.

\textsuperscript{122} I.e., the question that was asked in the preceding sentence, where Theophrastus hints that the metaphysical investigation into the movement of the heavens—that is, that it is essential to the heavens and thus not to be sought beyond this—bears directly upon, and obviates, Aristotle’s theory of the unmoved mover. For a different interpretation see van Raalte 484.

\textsuperscript{123} Theophrastus returns here to Aporia 15 which he mentioned earlier at 7b5–8. “Marking the boundaries” refers to the question he posed there, “mark the boundaries of how far what is endowed with order extends,” and where disorder begins, as he repeats here.

\textsuperscript{124} I.e., they do not seem to be manifestly for the sake of something and not in vain.

\textsuperscript{125} Theophrastus is apparently referring here to the entire set of issues eventually discussed in Aristotle’s On Coming-to-be and Passing-away (whose title is here adumbrated), viewed as problematic when considered from the point of view of their final cause.


10b7 (22.2) "Ετι δ’ ἐν αὐτοῖς τοῖς ζῴοις τὰ μὲν ὄσπερ μάταια, καθάπερ τοῖς ἄρρεσιν οἱ μαστοὶ καὶ τοῖς θήλεσιν ἡ πρόσεις, εἶπερ μὴ συμβάλλεται, καὶ πώγωνος δ’ ἐνίοτε ἢ ὀλίγη τριχών ἐκφυσὶ ἐν τοῖς τόποις: ἐτι δὲ κεράτων μεγέθη καθάπερ τῶν ἐλάφων τοῦτοι καὶ λελοβημένοι κινήσει τε καὶ παραιωρήσει καὶ ἐπιπροσθήσει τῶν ὁμιμάτων καὶ ως ἔναι δὴ βία ἢ παρὰ φύσιν, ὦςπερ ὁ ἐφροδίος ὀχεῖ καὶ τὸ ἡμερόβιον ζῆτι καὶ ἐτερα οὐκ ὀλίγα λάβοι τις ὁ τοιαύτα. Καί τὸ μέγιστον δὴ καὶ μάλιστα δοκούν περὶ τὰς τροφὰς καὶ γενέσεως τῶν ζῴων οὐδένος γὰρ ταῦθ’ ἐνεκα, ἀλλά συμπτώματα καὶ δὴ ἐτέρας ἀνάγκας. "Εδει γὰρ, εἰπερ’ του’ χά- 
10b8 τοῖς ἄρρεσιν οἱ μαστοὶ Arist. PA 688a17–22 τὰ μὲν τετράποδα τῶν ζῴων οὖν ἔχει μαστοὺς ... τοῖς δ’ ἀνθρώπους διὰ τὴν εὐφυγχαρίαν καὶ τὸ σκεπάζεσθαι δεν τὰ περὶ τὴν καρδίαν ... τοὺς μὲν ἄρρεσιν διὰ τὴν εὐφυγχαρίαν αὐτῶν. 10b9 τοῖς θήλεσιν ... μὴ συμβάλεται Arist. GA 739a20–21 ἢ γνωμονέαν ἱγρότης μετὰ τῆς ἱρονής τοῖς θήλεσιν οὐδέν συμβάλλεται εἰς τὸ κύμα. 10b10 πώγωνος δ’ ἐνίοτε Arist. Apo. 96a10–11 οὐ τὰς ἀνθρώπους ἄρρεν τὸ γένεσιν τριχοῦτα, ἀλλ’ ὡς ἐπὶ τὸ πολὺ. 10b11 τριχών ἐκφυσὶ ἐν τοῖς τόποις; Arist. PA 658a18–24 σκέπης γὰρ χάριν αἱ τρίγες ... τοῖς δ’ ἀνθρώπους ἐπεὶ ξοῦ διὰ τὴν ἰθώπητα τὰ πρόσθητα τὸς ὑπαθησίας, τοῖς τιμιτεροῖς ὑπέγραψεν ἡμερῆς τὴν ἤθηπεν. 10b12 κεράτων μεγέθη Arist. PA 663a10 τὸ γὰρ μέγεθος αὐτῶν (σκ. τῶν κεράτων) ... καὶ λάβεται ἢ ὕφεσιν (σκ. τὰς ἐλάφως). 10b14–15 ὦςπερ ὁ ἐφροδίος ὀχεῖ Arist. HA 609b24–25 χαρίζε τε γὰρ καὶ αμφότεροι, ὡς μαστοί, ἂν μέγαπον ἢν τῶν ὀψίματι ὀξύων. 10b15 τὸ ἡμερόβιον ζῆτι Arist. HA 552b21–23 ζῆτι δὲ καὶ κατέτασκε μέχρι δελτίος, καταφαίμανθαι ἐν τοῦ θῆλου ἀπομακρύνθησθαι καὶ ἄρμα ὁμοίων αὐξανθῆσαι μενέκαθ' ἡμέραν μιᾶν, διὸ καὶ καλέσθαι εὐρήμην. 10b17 τροφὰς καὶ γενέσεις Arist. GA 778a10–11 περὶ μὲν οὖν τής ἐσοβαν τροφῆς τῶν ζῴων καὶ τῆς θήρας γενέσεως ἐτύγχαν, cf. GA IV,10. 10b18–19 συμπτώματα ... ἀνάγκας Arist. GA 777b29–30, 778a3–4 τούτων (σκ. τῶν γενέσεων καὶ ψυχροτοῦ τῶν ζῴων) δ’ ἔχουσιν τὸ πέρας καὶ τῆς ἀρχής καὶ τῆς τελευτῆς αἱ τούτων κινήσεις τῶν ἄστρων. ... τῆς δὲ τῶν ἄστρων τούτων περιφέρεσι τάς ἐντετάν Π τίνες εἰς ἄρρες.
(22.2) Furthermore, even in the case of animals\textsuperscript{126} some [things] are, as it were, purposeless, like the breasts in males and the emission in females (if indeed it makes no contribution), and the growth of beard in some or of hair altogether in certain places; and further, the large size of horns, like those of deer, by which they are even harmed as the [horns] sway, dangle, and block [their] line of vision; and then again, the way in which some [things] are with violence or unnatural, like the copulation of the heron\textsuperscript{127} and the life of the day-fly—one could cite quite a few other [things] of this kind. And finally, the most important and most generally accepted [thing] has to do with the [different kinds of] food and generation of animals; for these are not for the sake of anything, but are rather coincidences and due to other necessities. For if indeed they were for the sake of something,\textsuperscript{128} they would have to be ever uniform and invariable.

\textsuperscript{126} “Even (\textit{autoís}) in the case of animals” because animals seem to illustrate best Aristotle’s teleology.

\textsuperscript{127} Aristotle says that (\textit{HA} 609b23–25) the ash-colored heron “screams during the union, and it is said drips blood from its eyes” (p. 950 CWA).

\textsuperscript{128} The structure of this paragraph about animals is in ascending order of difficulty for maintaining teleology: first are mentioned parts of animals which seem to have no purpose, then parts which actually hamper their living, and then behavior which does violence to them or is against nature. These three sets represent individual difficulties that apply to some animals and not to others. The paragraph ends by mentioning the most difficult problem with teleology of all, one that applies to all animals, insofar as it affects their nourishment and generation: the bewildering variety of forms of nourishment and generation cannot all be for the sake of the same end; for if they were, they would all have to be uniform and invariable. Theophrastus uses the same argument against the theory of the prime mover causing movement by being desired: if this were so, and the prime mover is one and invariable, then all celestial bodies would move with the same motion (above, 5a17–18).
τὸν άριστον καὶ ἐπὶ τῶν ὑψώτων ήπιστεύεται τίνας ιδέας ἢ πρὸς ἄλλα διαφοράς.

11a1  (24) Εἰ δὲ μὴ τοῦθ’ ἐνεξά του καὶ [31] εἰς τὸ ἀριστον, λήπτεν τὸν ὕψος ὅρους καὶ οὐκ ἐπὶ πάντων ἀπλῶς θετέον, ἐπεὶ καὶ τὰ τοιαῦτα ἔχει τινὰ διστασμὸν καὶ ἀπλῶς λεγόμενα καὶ καθ’ ἐκαστὸν. ’Απλῶς μὲν ὑπὲρ τὴν φύσιν ἐν ἁπλῶς ἠγάπησι τοῦ ἀριστον καὶ ἐρ’ ὄν ἐνδέχεται μεταβλητὸν τοῦ ἀεὶ καὶ τοῦ τεταγμένου, ὡς δ’ αὐτὸ καὶ ἐπὶ τῶν ζῴων ὁμοίως: ὅπου γὰρ οἷον τὸ βέλτιον, ἐνταῦθα οὐναὶ παραλεῖπετεῖν, οἷον τὸ ἐμπροσθεν τὴν φάρυγγα τοῦ οἰσοφάγου—τιμωρίας, τῇ τοῦ ὄλου περιφορὰς Arist. GC 336a31–b4 οἷς ἡ πρώτη φορὰ αἰτία ἐστὶ γενέσεως καὶ φιλοσοφῶν ἄλλως ἢ κατὰ τὸν λογὸν κώλυτον. τῇ τῆς μὲν συνεχείας τῆς μὲν ὑψώτατον καὶ ἐπὶ τοῦ ὑγίου καὶ τοῦ ὑγίου εἰς τὸ βέλτιον, διὰ τὸ τοῦτο ἐκεῖ καὶ τοῦ τεταγμένου ἡ θεία ἀδιαφορία ἀπαντάται τοῦ ὑπόπτου καὶ τοῦ ὑπόπτου ἀναφερόμενα, οἷον τὸ ἐμπροσθεν καὶ τοῦτὸν τοὺς μεταξὺ δύναμεν τινὲς ἢ ἀπόκειται τῶν ἐνδεχομένων περὶ ἕκαστος. ἤτοι τὸ βέλτιον, τοῦτον τοῦτον ἀπεικονισθεῖν ἀσύνετο καὶ εἰς τὸ βέλτιον, τοῦτον τοῦτον ἀπεικονισθεῖν ἀσύνετο.
(22.3) And yet again, ⟨those⟩ [generations and changes],¹²⁹ in the case of ¹⁰b₂₀ plants and still more of inanimate [things], which have, as they seem, a fully determinate nature pretty much in terms of shapes and forms and powers, one might investigate for whose sake these [things] are. (23) For this very thing is a matter of aporia, that these [things] too have no cause in other agents [that are] prior and nobler—for which reason there seems to be some credibility in the account that, allegedly, these acquire certain forms or differences in relation to one another spontaneously and through the rotation of the universe.

(24) But if this is not “for the sake of something” and “with a view to the best,” one should apprehend some boundaries¹³⁰ and not posit [these two principles] for everything without qualification, for in fact the likes of the following are somewhat ambiguous when said both without qualification and with reference to each [species]. Without qualification, when [it is said] that nature in all [things] desires the best and, wherever possible, gives a share in the eternal and orderly;¹³¹ and [with reference to each species] when something like this [is said] similarly about animals: for where the better is possible, there it is never lacking, like the windpipe being in front of the oesophagus—for it is nobler—and the mixture [of

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¹²⁹ For the assumption of these words in the structure of this sentence see the commentary.
¹³⁰ I.e., as exhibited in things themselves or in objective reality; see Part I, Chapter 1.3 and note ⁵⁸, and cf. Repici 1990, 187–193.
¹³¹ Literally, gives a share in the "always" and the "orderly arranged."
τερον γἀρ—καὶ ἐν τῇ μέσῃ κοιλίᾳ τῆς καρδίας τὴν χρῶσιν ἀρίστην—ὅτι τὸ μέσον τιμώτατον— ὀσαύτως δὲ καὶ ὅσα κόσμου χάριν. Εἰ γὰρ καὶ [32] ἢ ὄρεξις οὐτῶς, ἀλλ’ ἐκεῖνο γ’ ἐμφαίνει δίοτι πολὺ
tὸ οὐχ ὑπακούον ὅπερ δεχόμενον τὸ εὖ, μάλλον δὲ πολλῷ πλείον ὄλιγον γὰρ τι τὸ ἔμψυχον, ἀπειρον δὲ τὸ ἄμυχον καὶ αὐτῶν τῶν ἐμψύχων ἀκαριαῖον, κάν ἐβέλτιον, τὸ εἶναι. Τὸ δ’ ὄλον σπάνιον τι καὶ ἐν ὀλίγως τὸ ἀγαθὸν, πολὺ δὲ πλήθει τὸ κακὸν τούχ εἴτ’ ἀριστιά τε δὲ μόνον καὶ οἴον ὑλῆς εἶδη, καθάπερ τὰς τῆς φύσεως ἀμαθεστάτους τε καὶ γὰρ οἱ περὶ τῆς ὄλης οὐσίας λέγων-τες, ὀσπερ Σπεύσιππος σπάνιον τι τὸ τίμιον

11a11–12 ἐν τῇ μέσῃ ... τιμώτατον] Arist. PA 665b18–21 ἔχει δὲ καὶ ἡ θέας αὐτῆς (sc. τῆς καρδίας) ἀριστιά χῶρον: περὶ μέσου γὰρ. ... ἐν τοῖς γὰρ τιμώτεροις τὸ τιμώτερον καθιδρυσεν ἡ φύσας. 11a20–21 ἀριστιά ... φύσεως ἀμαθεστάτου] Arist. GA 778a4–7 βούλεται μὲν οὖν ἡ φύσας ... τὰς γενέσεις καὶ τὰς τελευτάς, οὐκ ἀκριβοὶ δὲ διὰ τε τὴν τῆς ὑλῆς ἀριστιάν καὶ διὰ τὸ γίγνεσθαι πολλάς ἀριστιῶν, αἱ τὰς γενέσεις τὰς κατὰ φύσιν καὶ τὰς φθοράς ἐμποδίζουσαν πολλάς αἰτίαι τῶν παρὰ φύσιν συμπιπτότων εἰσίν. 11a23–25 Σπεύσιππος ... ἐκατέρωσθεν] Arist. EN 1109a 20–30 ἐστιν ὡς ἢ ἡμικρ πεσός ... δύο κακῶν, τῆς μὲν καθ’ ὑπερβολὴν τῆς δὲ κατ’ ἐλλειψιν ... διὰ τὸ στοχαστικῷ τοῦ μέσου εἶναι. ... ἐν ἐκατάστη γὰρ τὸ μέσον λαβέν ἐργὸν ... διάπερ τὸ εὖ καὶ σπάνιον καὶ ἑπανετόν καὶ καλὸν. Μετ. Λ 7, 1072b31–34 Σπεύσιππος τὸ κάλλιστον καὶ ἀριστότον μὴ ἐν ἀρχῇ εἶναι ... τὰς ἀρχὰς αἰτία μὲν εἶναι, τὸ δὲ καλὸν καὶ τέλειον ἐν τοῖς ἐκ τούτων.

the blood] being the best in the central ventricle of the heart—because the center is the noblest—; and similarly with whatever [is said to be] for the sake of order. For if it is true that desire [functions] in this manner, this here, nevertheless, clearly reveals that there is much that neither obeys nor receives the good—or rather, it is much more by far: for the animate is something little, while the inanimate is infinite; and the existence of the animate [things] themselves, though better, is momentary. In general, the good is something rare and in few [things], whereas evil is much in number, †not if† indeterminacy only and, as it were, the forms of matter, just like those of the nature of a most ignorant one; †if for in fact, those who speak about all of existence, just as Speusippus makes the noble, which is about the place of the center,
ποιεὶ τὸ περὶ τῆν τοῦ μέσου χώραν, τὰ δ’ ἄχρα καὶ ἐπιτέρωθεν. Τὰ μὲν οὐν ὅντα καλῶς ἔτυχεν ὄντα,

(24.1) Πλάτων δὲ καὶ οἱ Πυθαγόρειοι μαχαν τὴν [33]

11b1 ἀπόστασιν, ἐπιμείωσθαι τ’ ἐθέλειν ἀπαντά: καὶ τον παρατηρεῖν τὸν τειχὸν καὶ καὶ τὸν ἐν τῷ ἐν ὕπνοι καὶ τὸ ἄτακτον καὶ πάσα ὡς εἰςεν ἀμορφία καθ’ αὐτῆς, ὁλος δ’ οὐχ οιόν τ’ ἀνευ ταυτῆς τὴν τοῦ ὅλου φύσοιν, ἀλλ’ οιόν ἰοσμοιρεῖν ἦ καὶ ἅπερεξεν τῆς ἐτέρας, ἦ καὶ τὰς ἀγάιν ἐναντίας. Διὸ καὶ οὐδὲ τὸν θεόν, ὅσοι τῷ θεῷ τὴν αἰτίαν ἀνάπτοουσιν, δύνασθαι πάντ’ εἰς τὸ ἄριστον ἀγέιν, ἀλλ’ εἴπερ, ἔρ’ ὅσον ἐνδέχεται τάχα δ’ οὐδ’ ἂν πορεύστι, εἴπερ ἀναιρεῖσθαι συμβήσεται τὴν ἀγέιν ὄσιαν εἰς ἐναντίους ὄσιαν.

(24.2) Φαίνεται δὲ [34]

καὶ ἐν τοῖς πρῶτοις ἐπιθεωροῦμενα πολλὰ καὶ ὡς ἔτυχεν, οἰον τὰ περὶ τὰς τῆς γῆς γῆς λεξενθεντα μετα-

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11a25–26 Τὰ μὲν οὖν ὅντα καλῶς ἔτυχεν ὅντα] Arist. Met. Λ 10, 1076a3–4 Τὰ δὲ ὅντα οὐ βουλέτα πολιτείας καλῶς. 11b7–9 οὐδ’ ὅσοι θεόν . . . δύνασθαι πάντ’ εἰς τὸ ἄριστον ἀγέιν] Theophr. Mete 14.14–17, Daiber 1992, 242–243. (Neither thunder nor anything of what has been mentioned is from god. The reason is that we should not posit god [to be] the cause of the disorder of the world but the cause of its harmonious order, this is because we ascribe its harmonious order to god and the disorder of the world to the nature of the world.) 11b8–10 τὸν θεόν . . . δύνασθαι πάντ’ εἰς τὸ ἄριστον ἀγέιν . . . ἐρ’ ὅσον ἐνδέχεται] Plato Timaeus 29b–3, 30a6–7 ἀγαθός ἤν (sc. θεός) . . . πάντα ὅτι μάλιστα ἔργουτή γενεσθαι παραπλήσια ἐαυτοῦ. . . . τιμής δ’ οὐτ’ ἦν οὐτ’ ἐστιν τῷ ἀριστο δράν ἄλλο πλήν τὸ κάλλιστον.

something rare, and the rest, extremes and on either side.\textsuperscript{137} The things \textsuperscript{1125} that are happen to be good;\textsuperscript{138}

(24.1) Plato and the Pythagoreans [make] the distance\textsuperscript{139} a great one and [make] all [things] wish to imitate fully; and yet, they make a certain opposition, as it were, between the indefinite dyad and the one, in which [dyad reside] the infinite and the disordered and, in general, all shapelessness as such, and [they make] the nature of the universe altogether impossible [to be] without [the dyad], but rather [make the dyad] almost balance, or even predominate over the other [first principle]; on which account, [they make] also the first principles contrary [to one another].\textsuperscript{140} For this reason, those who ascribe the cause to god [claim] that not even god is able to lead all [things] towards the best, but, if [at all, only] so far as is possible; though perhaps he wouldn’t even choose to, if indeed it would result in the destruction of all existence,\textsuperscript{141} given that it [is constituted] from contraries and consists of contraries.

(24.2) Even in the case of the first [things] there appear upon closer inspection many [things which are] also at random, such as what has

\textsuperscript{137} The sentence, as we have it in the corrupt text, has no finite verb.

\textsuperscript{138} Theophrastus here seems to be echoing Aristotle’s final words in \textit{Metaphysics} Lambda 10, 1076a3–4: “The things that are do not want to be badly governed;” though because of the corruption in the preceding sentence, the precise force of the statement and its connection to the rest of the sentence about Plato remain ambiguous.

\textsuperscript{139} I.e., the distance separating the first principle(s) and everything else, apparently in contrast to Speusippus; see the references in van Raalte 565–566.

\textsuperscript{140} An implied syllogism in this sentence is rejected for another. The implied syllogism, “All things wish to imitate the first principles, the first principles are the best, therefore all things imitate the best,” is rejected and is substituted by, “All things wish to imitate the first principles, the first principles are contrary and include both order and disorder, therefore all things imitate and include order and disorder.” The words “and yet” signal the beginning of the argument that leads to the major premise, “the first principles are contrary,” which is substituted for the implied one; see the commentary.

\textsuperscript{141} \textit{Ousia} in the sense of all that exists. See the commentary at 4a13.
11b15 boláς: ὠς τὸ βέλτιον ὁυτὲ τὸ τινὸς χάριν, ἀλλ᾽ εὑπερ, ἀνάγηῃ τινὶ κατακολουθεῖν πολλὰ δὲ καὶ ἐν τῷ ἄερι τουαῦτα καὶ ἐν ἄλλοις. Μάλιτα δ᾽ ἂν ἄδοξεν ἔχειν τὴν γε τάξιν τῶν μὲν αἰσθητῶν τὰ οὐφάνια, τῶν δ᾽ ἄλλων, εἰ μὴ ἀρα καὶ πρὸτερα τούτων, τὰ μαθηματικὰ: εἰ γὰρ καὶ μὴ πάν, ἀλλ᾽ ἐν τούτοις πλέον τὸ τεταγμένον (πλὴν εἰ τὶς τοι- αύτας λαμβάνοι τὰς μορφὰς οἰὰς Δημιοχρῖτος ὑπο- τίθεται τῶν ἀτόμων) ἀλλὰ δὴ τούτων μὲν πέρι σχετένο, ὦ δ᾽ ἔξ ἀρχής ἐλέγχη, πειρατέον τινὰ λαμβάνειν ὄρόν, καὶ ἐν τῇ φύσει καὶ ἐν τῇ τοῦ σύμπαντος οὐσία, καὶ τοῦ ἐνεκὰ του καὶ τῆς εἰς τὸ βέλτιον ὀρμῆς. (25) Αὕτη γὰρ ἄρχῇ τῆς τοῦ σύμπαντος θεωρίας, ἐν τίσιν τὰ ὁντα καὶ πώς ἔχει πρὸς ἄλληλα.

[Θεοφράστου τῶν μετὰ τὰ Φυσικά.
Τοῦτο τὸ βιβλίον Ἀνδρόνικος μὲν καὶ Έρμηππος ἅγνοοῦσιν, οὐδὲ γὰρ μνείαν αὐτὸῦ ὄλος πεποίην- ται ἐν τῇ ἄναγραφῇ τῶν Θεοφράστου βιβλίων. Νικόλαος δὲ ἐν τῇ θεωρίᾳ τῶν Ἀριστοτέλους μετὰ τὰ Φυσικά μνημονεύει αὐτοῦ λέγων εἶναι Θεοφράστου. Εἰσὶ δὲ ἐν αὐτῷ οἷον προδιαφορία τινὲς ὁλί- γαι τῆς ὅλης προσματείας.]


been said about the changes of the earth,¹⁴² for [they are] neither “the better” nor “that for the sake of which” but, if anything, [appear] to comply with some sort of necessity; there are many things of this sort both in the air and elsewhere. And it would seem that among sensibles, the celestial [things] above all would possess at least order, and, among other [things],¹⁴³ the mathematicals (if, that is, there are no [things] even prior to these): for if it is true that the ordered is not everything, it is nevertheless the greater part in these (unless one were to take the shapes of atoms to be such as those Democritus assumes¹⁴⁴); but while these [are all things] one should certainly look into, the main [point] that has been made¹⁴⁵ [is that] one should try to apprehend some boundary, both in nature and in the substance¹⁴⁶ of the universe, and both for “that for the sake of which” and for the impulse towards “the better.” (25) For this is the starting point of the study of the universe, among what [things] beings are¹⁴⁷ and how they relate to one another.

[The book] by Theophrastus of Those [that Come] after [Aristotle’s] Physics. Andronicus and Hermippus do not know this book, for they make no mention of it at all in the list of Theophrastus’s books; Nicolaus, though, does mention it in his study of Aristotle’s [books that come] after the Physics, saying that it is by Theophrastus. It contains some few “pre-diaporiae,”¹⁴⁸ so to speak, relating to the entire treatise.¹⁴⁹

¹⁴² Above, at 10a25–10b7.
¹⁴³ I.e., the intelligibles.
¹⁴⁴ I.e., ordered, as Theophrastus himself mentions on another occasion (see the Loci Paralleli), and thus ontologically prior to both the heavenly bodies and mathematicals.
¹⁴⁵ I.e., at the beginning of this Aporia (24), at 11a1–3, which is here repeated.
¹⁴⁶ Substance (ousía) in the sense of formal constitution; cf. 8a23 and 10a3, and see the commentary at 4a13. For the concept of boundary referred to here see Part I, Chapter 1.3 and note 58.
¹⁴⁷ I.e., as in the opening aporiae, the determination whether beings are among intelligibles, mathematicals, or sensibles (on the use of the preposition en see the commentary on 4a17–18).
¹⁴⁸ I.e., preliminary reviews, or runnings through, of aporiae, apparently a neologism. See the commentary.
¹⁴⁹ I.e., Aristotle’s Metaphysics. For a discussion of this crucial Scholium see Part I, Chapter 1.2.
1A. SUPPLEMENTARY CRITICAL APPARATUS TO THE GREEK TEXT


6a1 δὴ CL A | 2 post βουλόμενον add. ἢν L 3 τι CL A² Tiph.: τε Ψ: γε O 4 post ἠμια
ἐν τῷ ἱερρομενοῦτος ΚΑ 2 αυτῶς ΚΑ Λ ἐν τοῖς θείοις. Σ.2 3 ποστ οἰον ἄν. Η 5 ποστ άν. ΚΑ 6 και ΚΑ.1 7 δη ἐν. Μ.2, μὲν κοιν. Β.1 12 δι τοῦ ᾽ΟΙ.ΚΑ 13 ἤ—τοῦ ΚΑ.Τ Τ.ΟΥΣ ΚΑ Λ.ΤΟΥΣ ΚΑ Λ.ΙΣΤ.ΚΑ. ΚΑ.1 14 βελτίστου ΠΙ.ΚΑ Λ.ΚΑ.Τ.ΙΣΤ.ΚΑ. Τ.ΟΥΣ 15 τοῦ ΚΑ.ΚΑ.2 16 ποστ άν. ΚΑ.ΚΑ.2 17 ποστ άν. ΚΑ.ΚΑ.2 18 ποστ άν. ΚΑ.ΚΑ.2 19 ποστ άν. ΚΑ.ΚΑ.2 20 ποστ άν. ΚΑ.ΚΑ.2 21 ποστ άν. ΚΑ.ΚΑ.2 22 δε ἐν ΚΑ.

8a1 μιμοῦνται ΚΑ Λ ΤΟΥΜΕΡΟΜΕΝΟΤΟΣ ΚΑ 2 αυτῶς ΚΑ Λ Λ ἐν τοῖς θείοις. Σ.2 3 ποστ λριτένου ἄν. Δ.Ε 5 ποστ άλ. ἄν. ΚΑ 6 και ΚΑ.1 7 ἐν. Μ.2, μὲν κοιν. Β.1 12 δι τοῦ ᾽ΟΙ.ΚΑ 13 ἤ—τοῦ ᾽ΟΙ.ΚΑ. Τ.ΟΥΣ ΚΑ Λ.ΤΟΥΣ ΚΑ Λ.ΙΣΤ.ΚΑ. ΚΑ.1 14 βελτίστου ΠΙ.ΚΑ Λ.ΚΑ.Τ.ΙΣΤ.ΚΑ. Τ.ΟΥΣ 15 τοῦ ΚΑ.ΚΑ.2 16 ποστ άν. ΚΑ.ΚΑ.2 17 ποστ άν. ΚΑ.ΚΑ.2 18 ποστ άν. ΚΑ.ΚΑ.2 19 ποστ άν. ΚΑ.ΚΑ.2 20 ποστ άν. ΚΑ.ΚΑ.2 21 ποστ άν. ΚΑ.ΚΑ.2 22 δε ἐν ΚΑ.
2. THE ARABIC TEXT WITH ENGLISH TRANSLATION
SIGLA

T         Tehran, Malik 5925, pp. 2–28, dated 461 Hijra/1069 A.D.
T1        additions or corrections by the original scribe
T2        additions or corrections by a second hand
B         Oxford, Bodleian, Ouseley 95, ff. 92v–95v, dated ca. 1630 A.D.
B1        additions or corrections by the original scribe
{B}       text missing because of physical damage in the manuscript
Alon      edition of the Arabic text in Alon 1985
Bertolacci private communication by Amos Bertolacci
Crub.1    readings suggested by Crubellier 1992
Crub.2    unedited draft edition of the Arabic text
Gutas     contributions to this edition
Marg.     readings suggested by Margoliouth 1892
Treiger   private communication by Alexander Treiger
{ }       editorial additions to the transmitted text
[ ]       editorial deletions from the transmitted text
***       editorial conjecture of a lacuna in the transmitted text
*         An asterisk after the name of an editor indicates that the Arabic reading or emendation suggested by him is based on the Greek text (provided immediately following in parentheses; see the Excursus §II).

Abbreviations

add.      added by, addition in
app.      critical apparatus
appar.    apparently (ut videtur)
codd.     codices, when all the manuscripts agree on a reading
conj.     conjectural reading of a word or words admitted in the text, in lieu of what is transmitted in the extant manuscripts
corr.     corrected by, correction in, in cases of changes to the skeleton of a word (taḥrif; see Chapter 3.5)
del.      deleted by, deletion in
ind.      indicated by or in
indetem.  indeterminable
interpr.   interpreted by, interpretation in
lac.      lacuna in
mrg.      margin
om.       omitted by, omission in
prop.     proposed reading suggested by, in an apparatus or commentary
SIGLA

read. reading by, of unpointed or wrongly pointed skeleton (*tašīf*; see Chapter 3.5)
secl. secluded by
voc. vocalized by or in (*taḥrīk*; see Chapter 3.5)
w.p. without points; completely unpointed skeleton (*rasm*) of a word
[مقالة لثاوفرسطس]}

(2) * × * 12 (كل واحد) منها منفصل عن الآخر (إ) إلا أنَّها تعاونان على وجه من الوجه على الجوهر والأولى في [اتصال] القياس أن يكون بينهما 14 أتَّصال وألا يكون الكل مدخولاً لكن كان 15 بعضها متقدمة ومبادئ وبعضها متأخرة 16 وتحت تلك المبادئ كتَّقدم الأشياء الأزلية للأشياء القابلة للفساد.

(3) فإنّ كان الأمر كذلك فإنها طبيعتها وفي 18 آي الأشياء وجودها فإنّه إن كانت الأشياء المعقلة إنّها هي في التعليل فقط 19 وحدها يتلخص ببعض الناس فليس 20 ينتميها بالأشياء المحسولة بيتاً ولا هي بالجملة ما يحتج إليه.

Title added by the scribe of B on the basis of the colophon; see Part I, Chapter 3.1 4a12

1 The Arabic manuscripts, lacking the first page of the text, are missing the original title. This title is given to the treatise by the scribe of B, on the basis of the mention of Theophrastus's name and metaphysics in the colophon. See above, Part I, Chapter 3.1.

2 The manuscript has li-annahumā, for which there is no basis in the Greek tradition of the text. The correction to illā annahumā is warranted. For illā anna translating δὲ (in συνεργΨο;Υκρονῦντα δὲ πως) without a preceding μέν see GALex I,266, illā anna 3.1.

3 Ishāq chose the meaning of "substance," jawhar, for οὐσία. The omission of πᾶσαν could be attributed to any stage in the transmission.

4 Ishāq used here the etymological translation al-awlā fi l-qiyās, “more according to analogical reasoning,” for εὐλΨο;ΥκρονγώτερΨο;Υκρονν; elsewhere (4b8) he will translate it simply by al-awlā, “it is more reasonable.” The manuscript reads, al-awlā fi ittisal al-qiyās, but the word ittisal manifestly has been mistakenly introduced into this place from the following line and is to be deleted.
(2) * * * 〈each one〉 of the two is separate from the other, except that they cooperate somehow with regard to substance. It is more reasonable that there is a connection between the two and that the universe is not uncoordinated, but that some [parts] of it, as it were, are prior and principles, and some [others] are posterior and subordinate to those principles, just as eternal things are prior to the perishable.

(3) If this is so, then what is their nature and in which things do they exist? For if intelligible things are just in mathematicals alone, as some people say, then their connection with sensible things is not obvious, nor are they, in general, among what is needed and of use with regard

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5 The Arabic does not have here the indefinite particle mā, “some,” that would correspond to Greek τινα; Ishāq apparently felt that the indefinite ittiṣālin covered sufficiently the concept.

6 The Arabic does use here the verb to be, yakūna, but this need not reflect a Greek eīna; either after μή, as in L, or after ἑπεισδιώκεις, as in J[II], apparently two scribal “corrections” in the Greek manuscripts; the addition of yakūna is required by the Arabic syntax.

7 For the correction of the transmitted mawjūd to madḥūl here see Crubellier 1992 27113. ἑπεισδιώκεις is glossed as madḥūl in the Arabic translation of the Poetics 1451b33–34, ed. Tkatsch I,240.20 and note 33 = ed. Badawi 105.3–4 and note 1. In Arabic madḥūl essentially means “unsound,” “defective” (see Lane, s.v., and cf. J. Ragep, “Freeing Astronomy from Philosophy,” Osiris 16, 2001, p. 66); in this context, where the defect can be cured by having prior and posterior elements, and principles which provide coherence and subordinate elements that follow them, it would have been possible for the Arabic reader to elicit the sense of “uncoordinated” from the word.

8 Ishāq understood, if not actually read in his exemplar, two sets of τα μέν ... τα δέ clauses, viz., τα μέν πρότερα τα δέ ὑπότερα, και τα μέν ἄγας τα δέ ὑπό τας ἄγας (as the Greek text is actually corrected in J[II]), and combined the two μέν phrases and the two δέ phrases.

9 Ishāq definitely read ποῖος, but translated it in its Middle Greek meaning of “which” rather than in the classical “what kind of”.

10 The stage at which ἄγαν was omitted here is unspecifiable.

11 Ishāq undertranslated χαίνειν, “appear,” through the use of an indefinite expression, “they are among.”

12 Ishāq translated ἄξιωθεα with a hendiadys, in which he used both senses of the constitutive χαίνει in ἄξιωθεα, need and use.
be accidental or an attempt to change the reading to a smudge on top of the could either be accidental or an attempt to change the reading to view in the following maf'al mutlaq) | B, add. mrg. T | 4b after break (.) ind. T | 6 Arabic al-kull, with the article, means the universe, thus translating του παντος, also with the article. Margoliouth 1892, 195 (followed by Alon 1985, 206), had suggested reading πάντως, but there is no evidence for this; apart from the fact that, as discussed in the commentary on the Greek text, πάντος is not a viable alternative in this passage, in two translations which are almost certainly the work of Ishāq, the NE and Phys., πάντος is translated, not by fi l-kull, the text we have here, but by lā mahālata (NE 11249b = 263.16 ed. Badawi, 11285 = 281.5; Phys. 251b2 = 807.2 ed. Badawi), 'alā l-wujāhi kullihā (Phys. 1985 = 140.16), and 'alā kullī hālīn (Phys. 217b22 = 401.2). The sense of the Arabic passage here is very close to the Van Raalte's (105) interpretation of the Greek: mathematicals are not of use with regard to (explaining) the universe because “they are not real enough or not powerful enough to account for the universe as we know it.”

14 Ishāq misread the syntax of this sentence and wrongly took “figures, etc.” as the object of both participles (μεμηΨκΡΥανημένα = nahtari'uhū, and περιτιΨτΡητων = nadda'uhū wasfan). The latter translates etymologically the Greek participle: wada'a translates τιθημι and wasf renders the concept of enveloping something with a description, included in the preposition περι-. In the other two instances in the treatise where the same verb occurs (6b7 and 7a20) Ishāq used different words according to sense.
to the universe. The reason is that figures, images, and proportions may be thought to be like something which we devise only ourselves and posit as descriptions—but as for them in themselves, they have no self-standing nature. And if they do not have a self-standing nature, then it is not possible for them to connect with the things of nature so as to produce in them life and movement, for example; the reason is that number itself—let alone anything else—about which some people believe that it is the first of these and the most significant, has no self-standing nature.

(4) But if there is another substance prior and superior, we ought to seek to say about it whether it is one in number, or one in species, or one in genus. What is more reasonable, given that their nature is the nature

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13 The Arabic qā‘ima, “self-standing,” is a semantic elaboration added by Ishāq intended to temper the absolute sense of the Greek οὐδεμίαν. The implication, even in the Greek, is not that intelligibles, if they consist only of mathematicals, have absolutely no nature—they would be ineffable otherwise—but that they would have, in this understanding, no constitutive nature in things, a nature that could be described as self-standing or having independent subsistence.

14 Ishāq took εἰ δὲ μὴ not as negating δοκεῖ μειηχαγημένα εἶναι, but as a specific negative affecting only the immediately preceding verb, ἐχει (ἐ’όνα).

15 The Arabic laysa yumkinu almost certainly translates here an original οὐχ οἶν τε or οὐχ οἶν τοι; yumkinu invariably translates οἶν τε whenever it occurs in this work: 8b5, 9a27, 11a8, 11b5. On the basis of the Arabic it is not possible to decide between the two Greek alternatives, though the structure of the Greek sentence would suggest the second; see the commentary.

16 This phrase is not a gloss but renders the force of αὐτὸς as amplified by the negative οὐδὲ in οὐδὲ γὰρ αὐτὸς ὁ ἁμαρτίμος.

17 “Self-standing nature” is added by Ishāq to complete the elliptical sentence—as is done by modern translators also—though he understands it differently; see the commentary.

18 This marginal gloss added by the scribe, Yaḥyā ibn-Jarir, explains, “He means the nature of intelligible things.”

19 In the construction qad yanba‘ī for πειρατένων yanba‘ī renders the suffix -τένω while the particle qad followed by the imperfect lends emphasis. This use of the particle with the imperfect, which can be either emphatic, as here, or factual, though not noted in formal grammars (neither Wright’s nor Fischer’s grammar has it), is frequent not only in this text and in other Graeco-Arabic translations but also in standard medieval Arabic generally. For the emphatic use see H. Reckendorf, Die syntaktischen Verhältnisse des Arabischen, Leiden: E.J. Brill, 1895–1898, 300, and for the factual G. Graf, Der Sprachgebrauch der ältesten christlich-arabischen Literatur, Leipzig: Harrassowitz, 1905, 34.

20 The Arabic translation scrupulously preserves the plural in ἐγχοῦσας, with the general reference to substances being understood. See the commentary.
with the first. If this is so, then Theophrastus apparently intended here, “extraordinary.” If this is so, then his choice of meaning for περίττως, which he understood in its primary sense, “beyond the regular number, excessive,” rather than what Theophrastus apparently intended here, “extraordinary.”
of a principle, is that they exist in many and excessive things\textsuperscript{23}—unless, \textit{of course}, there are first [things]\textsuperscript{24} whose existence is in the first.

\textbf{(5)} We accordingly ought to try and make clear somehow what substance this substance is, if it is one, or what substances they are, if they are many, in an exposition about this either\textsuperscript{25} by way of comparison or by some other way of similarity. It is likely that in this regard we need to apprehend god as he is in himself,\textsuperscript{26} through some power and superiority [he has] over the rest of things. The reason is that the first principle of all things, all of them, is divine, and through it all things exist and abide. It is likely that carrying this out in this manner is not\textsuperscript{27} easy; furthermore, following another way which would be clearer than this or more credible may be\textsuperscript{28} difficult.

\textbf{(5.1)} Since the first principle is such due to\textsuperscript{29} the fact that it is connected with sensible things, and nature, absolutely speaking, is in motion—something which is its unique property—it is evident that we ought to posit this as cause of motion. But insofar as it is motionless in itself,
κίνησις imply that the word was present in the manuscript, as Usener conjectured. The Arabic translation, just like the modern language translations, could not be as elliptical as the Greek original.
it is evident that it is not the cause of motion for natural things, but what remains is that it moves them by some other, superior and prior, power, and this is the nature of the desirable, from which there comes into being the continuous circular movement that does not abate. From this it becomes necessary that the view—which maintains that it is not the source of motion, or that it does initiate motion it does by being [itself] in motion—be invalidated also.

(6) Up to this point, then, it is as if the account is complete, since it makes the first principle of all things [to be] one, describes its activity and substance, and mentions about it that it is not something divisible or quantitative but raises [it] absolutely unto a rank that is better than that and more like god. For that it should be described in such a manner is more appropriate than that division and partition be removed from it. The reason is that the negative statement, by those who maintain it in this connection, is on a level that is loftier and closer to truth. As for what [comes] after that, it is in need of a more extensive account than

32 “The view,” al-qawl bi-(a doctrine which one holds), renders the implication of τὸ in τὸ μὴ εἶναι.
33 Ishāq failed to understand the use here of the disjunctive ἢ in the sense of πλὴν.
34 The addition of muḥarrikan here to complete the thought seems to be necessary. The transmitted sentence in Arabic can be read two ways. (a) In kāna yuḥarraku, fa-huwa bi-tahrīkīhi yakūnū, assuming Ishāq did not understand the sentence and translated literally and blindly, because this corresponds one to one to the Greek, εἰκινΨιςΨοςνυμενΨοςν = in kāna yuḥarraku, κινήσεις (sc. εἰκινΨιςΨοςνυμενΨοςν) = bi-tahrīkīhi. The final yakūnū can be taken to be either elliptical, i.e., yakūnū yuḥarraku, translating the presumed εἰκινΨιςΨοςνυμενΨοςν ἔσται, or a repeated yakūnū harking back to yajibu min dālika an yakūnū t-qawlu . . . yakūnū munfasiḥan. (b) Assuming Ishāq did understand the sentence, then by changing the tahrīk to taharruk for εἰκινΨιςΨοςνυμενΨοςν and adding muḥarrikan to complete the thought, a perfect match to the Greek sense can be obtained, since it is clear that Ishāq had exactly the same Greek text that we do.
35 The Arabic reads ayyān, which indicates that Ψ read καὶ κατ᾽ ἐκεῖνο. Usener’s conjecture (and Camotius’s) was thus partly correct, in that καὶ does not substitute for κατ᾽ but is to be added to it.
36 The words “better than that” (asfāl min dālika) would seem to render the force of the indefinite tāν, which is not otherwise translated: “some better rank” is a “rank that is better than that,” i.e., other ranks.
37 Under “negative” there is a marginal gloss by the scribe, Yahyā ibn-Jarīr, that is partly legible: “He means that the knowledge of God . . . .” Cf. below at 5b27.
38 What is to be understood is clearly, “is (an argument λόγος) that is) on a level,” where Ishāq did not explicitly translate λόγος, since it is adequately covered by as-salb, “negative statement,” and added the implied “level,” or “rank,” martaba.
39 Ishāq translated the very common locution āmi ta καὶ with a simple “and” (wa-).
الأشياء يتشوق إليه المشوق من قبل أن الأشياء الدورانية ليست بواحدة بل أكثر من واحد وحركاتها متضادة على وجه من الوجه، ومما يتجلى أيضاً من أمرها أنها لا تفتر، والسبب في ذلك هو صار ذلك كذلك فإن المحرّك إن كان واحداً بشئين ولا تكون كلّها إنها تتحرّك حركة واحدة بعينها وإن كان لكلّ واحدة منها محرّك غير المحرّك للآخر والمبادئ أكثر من واحد فيكون اتفاقها حتى 20 صارت إلى هذه الشهوة التي هي أفضل الشهوات ليس هو بنّاً بوجه من الوجه (7) فأما كثرة الأكر فإن السبب فيها يقتضى كلاماً 21b وأجل من ذلك فإني لم آنس إلى كلام المنجممين في ذلك (8) وما يتحير فيه أيضاً السبب الذي له صارت هذه الأكر ما كانت فيها شهوة طبيعية إنّها تطلب الحركة ولا تطلب السكون في وقت من الأوقات لمّا صار القائلون بالواحد والقائلون بالأعداد يقولون مع

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40. Ishâq took the phrase oṕ χαρα, “for whose sake,” i.e., the “reason,” to mean the “reason for the interminableness” of the movements of the celestial spheres. This seems to be due to the fact that this phrase (oṕ χαρα) does not have the article το prefixed to it, which would have made it unambiguously refer to the final cause. Without the article, Ishâq took the phrase to refer to the reason for which the interminableness (το ἀνήνυτον) exists, and so what his Arabic sentence means is, “What is also unknown about the movements of the rotating things is, first, that they do not abate, and second, the
this account on desire: what [kind of] thing it is and what things the one who desires desires, insofar as the rotating things are not one but more than one and their movements are somehow opposed to one another. What is also unknown about [the movements] is that they do not abate and the reason why that is so.\(^{40}\) For if the mover is one, it is unseemly\(^{41}\) that not all of them move with the identical one motion only; and if each one of them has a mover different from the mover of the other, and\(^{42}\) the first principles are more than one, then their concord, with a view to\(^{43}\) arriving at this desire which is the best of desires,\(^{44}\) is by no means evident. (7) As for the multiplicity of spheres, the reason for it requires a discussion more weighty than this, for I did not find congenial\(^{45}\) the discussion on the subject by the astronomers.

(8) Also perplexing is the reason why these spheres, having a natural desire, have come to seek only motion and not rest at any time.\(^{46}\) Why, then, have the adherents of the one and the adherents of numbers come reason for which they do not abate.” Modern interpretations tend to view the οὐ χάριν phrase to refer to the final cause of their movement, not the (proximate) cause of their interminable movement.

\(^{41}\) For the Arabic translation of ἄτόπος here and at 5b14 and 7b23 see the commentary.

\(^{42}\) The manuscripts have fa- here, which would make this point the beginning of the apodosis of the second conditional εἰτε sentence, but it is difficult to see how Ishāq could have made this error. Since the apodosis begins properly with fa-yakūnu in the next clause, the fa- in fa-l-mabādi` is in all probability a mistake within the Arabic transmission, in which case the original wa- of Ishāq is to be restored.

\(^{43}\) Ishāq took ὧστε not as introducing the apodosis (correctly; see the commentary), but with the participle (apparently against normal usage), ὧστε εἰς δεξιὰν ἰόντων, ἣττα σαρὰτ ἱλὰ ἡδινὶ ἕ-σ-ἀ-ẖwa.

\(^{44}\) Ishāq took “the best of desires” literally, rather than as “desire for the best;” see the note to the translation of the Greek and the commentary.

\(^{45}\) The verb used here, lam ānas, is first person singular jussive of anisa, the masdar of which, anasatun, is used in the Arabic translation of Aristotle’s Rhetoric to render οἰκεῖος; in all likelihood it stands for οἰκεῖος in this passage (see GALex I,523). It would seem that Ishāq took οἰκεῖος as meaning “congenial or familiar” to “me”, i.e., Theophrastus, rather than the intended “proper to the subject under discussion,” and thus added the first person singular, fa-innī lam ānas. It seems more probable to assume this than the other alternative, namely that Ψ read μοι οἰκεῖος, which would make less sense in the Greek context, because it would then mean, “an account that is proper or belonging to me, Theophrastus,” rather than the subject under discussion.

\(^{46}\) Ishāq misread ποτε as a temporal enclitic instead of intensive or exclamatory.
قولهم بالتقيل 

هذا القول على مثال واحد فإن القائلين أيضا بالأعداد يقولون إن الواحد في الأعداد

(8.1) فإن كان ها هنا تشوق وكان مع ذلك تشوق إلى أفضل الأمور 

فذلك مع نفس إلا أن يقول قائل إن بالشبه والاختلاف تكون الأشياء المتحركة ذات أنفس وقد يرى أن مع وجود النفس الحركة وذلك أن لما شاهد 

له نفس قلها حياة، عنها تكون الشهورات الداعية إلى كل واحد ما يشتهى 

كما نجد ذلك في الحيوان فإن الحواس وإن كان وجودها إنها هو في الانفعال 

بغيرها إلا أن لها على حال تستب إلى أن لما أنفسا فإن كان الأول إنها هو سبب

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47 This elliptical sentence baffled Ishāq as much as modern interpreters. To begin with, Ishāq took то ев to be the subject of the sentence in indirect speech, not то ев άριθμοι, as modern translators do. For the rest, we have two alternatives: either Ishāq interpreted the Greek to mean "the one is among (fi) the numbers" in order to avoid translating literally the Greek sentence and ending up with what he may have felt was relatively meaningless, "the one is the numbers," or, there is a slight textual corruption with the preposition fi, "in," which does not exist in the Greek, and which can accordingly be corrected to huwa for fi, thus reading, yaqūlūna inna l-wāhida huwa l-a’dādu, "they say that the one is the numbers," rendering precisely the Greek with то ев as the subject, as mentioned earlier. Either of these alternatives seems more plausible than assuming that Ishāq had a variant Greek text in Ψ, something like εν то ев άριθμοι of των άριθμον for то ев άριθμοι, as suggested by Crubellier 1992, 30122.

48 Ishāq read in Ψ ει διη, the reading also in J, and not ει δ' η. See the second following note.

49 Ishāq read here διαΨιψιpsi
to maintain, at the same time that they adhere to imitation, this statement in the same way? For the adherents also of numbers maintain that the one is among the numbers.\(^{47}\)

(8.1) And if there is\(^{48}\) desire, and there is along with it desire towards the best of things, then this involves soul, unless one were to maintain that it is through resemblance and variance\(^{49}\) that things that are in motion come to possess souls.\(^{50}\) As a matter of fact, it seems\(^ {51}\) that with the existence of the soul there is motion,\(^{52}\) the reason being that whatever has soul also has life, from which there come the desires propelling toward each individual object of appetite, as we find that [to be the case] with\(^ {53}\) animals. For although the existence of the senses consists only in being affected by others, they are nevertheless such due to the fact that they have souls.\(^ {54}\) So if the first is the cause of just the circular motion, then it

\(^{50}\) Ish\(\text{h}aq\) understood as follows the syntax of the original: εἰ δὴ ἔστιν (sc. ἐστιν), ἄλλως τε καὶ τοῦ ἄριστου (sc. ἐστιν ἔστιν), μετὰ ψυχῆς (sc. ἄφαι): εἰ μὴ τις λέγοι, ὅτι καθ᾽ ὀμοιότητα καὶ διαφωρὰν ἔμψυχον ἄν εἰ Ἕ τὰ καινούμενα. I would think that it was his misreading of the syntax that led him to assume ὅτι after λέγοι (and thus everything after λέγοι as part of the reported speech) rather than that ὅτι actually was present in his manuscript \(\Psi\), as Usener\(^ {1}\) conjectured. It is to be noted that in \(5\) inna (that) is used without a following accusative, a characteristic of Middle Arabic; see Blau § 402.2 (p. 512).

\(^{51}\) Wa-qad yur\(\text{h}a\)\(\text{a}\), factual use of qad with the imperfect; see above, note \(21\).

\(^{52}\) The presence of the word \(wuj\(\text{d}u\)\) indicates that Ish\(\text{h}aq\) took the Greek υπάρχειν to mean existence (and not, to belong to, with the dative), which led him to the following analysis of the sentence (leaving boxæ aside): ἅμα τῆς ψυχῆς καὶ κίνησις υπάρχει = ἅμα τῆς υπάρχει τῆς ψυχῆς καὶ κίνησις υπάρχει, transferring the concept of υπάρχειν also to ψυχή, which is implied in the Greek anyway. Then in order to avoid redundancy, he translated only once the concept expressed by υπάρχειν, thus: ἅμα τῆς υπάρχει τῆς ψυχῆς καὶ κίνησις = \(\text{ma}'\text{a} wuj\(\text{d}u\) n-nafsi l-haraka\). It is clear that Ish\(\text{h}aq\) read ψυχή in the dative, corroborating Usener’s conjecture, though in his case he understood \(\text{āma}\) as a preposition governing the dative and not as an adverb (see the commentary). The Arabic follows closely the Greek word order (\(waj\) qad yur\(\text{h}a\) anna \(m\) \(a\) wuj\(\text{d}u\) n-nafsi l-harakata). The nominal sentence used here would normally have the subject come first because it is definite (al-harakata), and it would read, \(\text{inna l-harakata ma}'\text{a} wuj\(\text{d}u\) n-nafsi\). The inversion does have the desired effect of emphasis, though it seems a bit forced.

\(^{53}\) Ish\(\text{h}aq\) misunderstood the syntax of τοῦς ζῶσις; he did not realize that it is parallel to τοῖς ἐξομολογοῦν and translated it as “with regard to,” \(\text{fi}\).

\(^{54}\) The Arabic indicates that the Greek in \(\Psi\) read ὁμος ὡς ἐμψύχως, with ill\(\text{h}a\) annah\(\text{a}\) rendering ὁμος, \(\text{a}l\text{a} ἅλιν ὡς\), and tuns\(\text{a}b\) il\(\text{a}\) anna lah\(\text{a}\) anfus\(\text{a}\) ἐμψύχως; tuns\(\text{a}b\) il\(\text{a}\) in particular renders the dative in ἐμψύχως. Usener’s conjecture is spectacularly corroborated.
The neuter form κρεῖττων confused Ἰσχαq—as it did later Greek scribes who “corrected” it to the feminine form, κρεῖττων, to go with ἡ κίνησις (see the commentary). But having too much respect for his text to attempt facile emendations, Ἰσχαq, unlike the Greek scribes, tried to understand it in context. If κρεῖττων is neuter, Ἰσχαq thought, the only noun it could refer to in the sentence would be τὸ αἰτίων of the preceding line. He thus translated, “the cause is better,” apparently interpreting the feminine article in ἡ τῆς ψυχῆς as ἡ (αἰτία), allowing Theophrastus the licence to alternate between the neuter and feminine forms of the word. For consistency, Ἰσχαq continued with the same refer- ence, cause, also in the next sentence, and translated ἡ τῆς ἀρίστης also in the neuter as if it were τοῦ ἀρίστου: “the best of things” instead of “the best movement.” The resulting mistranslation inadvertently shifts the discussion from a comparison of motions—the one initiated by the first versus the one by the soul—to a comparison of causes: the first cannot be just the cause of circular motion, because then the cause of
will not be the cause of the best of things; the reason is that the cause of the soul is better than it, prior to it, and more fitting that it be the cause of comprehension, from which springs desire.\textsuperscript{55}

(9) There is a point to be investigated and researched also in what I will now say, namely, why the rotating bodies alone have come to possess desire. As for the rest of the bodies that are adjacent to the center, there is among them not even one that has desire, despite [the fact] that they are mobile. Is that due to their weakness and impotence or due to the [fact] that the first does not reach them? Except that if it does not reach them on account of [its] own\textsuperscript{56} weakness and fatigue, that would be unseemly.\textsuperscript{57} The reason is that [the first] is throughout\textsuperscript{58} stronger than Zeus, about whom Homer\textsuperscript{59} says that

he restored them\textsuperscript{60} around the earth,\textsuperscript{61} together with all the sea.
فقد بقي أن يكون ذلك من طريق أن هذا شيء غير قابل ولا محتمل لارتباط
(10).
واخلع بباحث أن يبحث قبل ذلك عمماً أننا قائله كيف الحال في هلى هذه الأجسام أجزاء للسيرة أو ليست أجزاء لها وإن كانت أجزاء لها فكيف
صارت أجزاء لها وذلك أننا نجدوا كأنها قد قذفت بها عنها وأقصيتها الأجسام
التي هي في غاية الشرف في أماكنها و في فعلها إن كانت الحركة الدورية
كذلك فإننا نجد أنها26a من موضع إلى موضع وبعضها إلى بعض كأنه
عرض لزمها عن الحركة الدورية
(10.1)
وإن كان ما هو في غاية الفضيلة إنها يكون ما هو في 27ga الفضيلة
فقد يُحتاج من الأول إلى شيء هو أفضل من28 الحركة الدورية إلا أن يكون
إذا امتنع ذلك منها عن قبل عجزها عن3a قوله فإن الأول إنها كان أحق
الأشياء أيضاً بأنه الله لأنه لا يشاء من الأمور كأنها إلا أفضلها فاما هذا
المعنى فأخلص به أنه يكون كما3 موضع تحقى بما لا يقع فيه بحث4 عن

62 Ishâq mistook the genitive of separation in τῶν ἐντιμΨο;Υkronτάτων as referring to the subject.
There remains that it should come about because this is something that is not receptive or admitting of connection.

(10) One might likely investigate beforehand what I am about to say—how the situation is: Are these bodies parts of heaven or are they not parts of it, and if they are parts of it how have they come to be parts of it? The reason is that we find them as if they have been thrust and driven away by the bodies which are the most noble with respect to their localities and activity, if the circular motion is such. For we find that their change from place to place and of the one into the other is as if it were an accident that accompanies them as a result of the circular motion.

(10.1) And if what is best comes only from what is best, something that is better than circular motion may be required from the first, unless this is unattainable for them on account of their inability to receive it. For the first is also the most deserving of things to be god, because it wishes only the best of all things. As for this concept, it is likely that it is, as it were, something that is passed over and what is not investigated; for he

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63 Ishāq here does not follow the Greek structure of the sentence, oὐ μόνον . . . ἀλλὰ καὶ, but joins the two parts with a simple “and”, wa-. Cf. M. Ullmann in Der Islam 60 (1983) 3–36.

64 After “the first” there is added in the text in T a gloss by the scribe, Yahyā ibn-Jarir, also copied in B, “He means the bodies which are adjacent to the center.” Cf. the gloss at 5a13a above.

65 The gloss in both Arabic manuscripts astutely identifies the referent here as “the things about the center.” See the note to the translation of the Greek and the commentary on Diaporia 10.1.

66 “Most deserving . . . god” translates the superlative θειότατον, most divine.

67 Ishāq read this sentence with the implied verb “to be” (ἐστί) understood as coming after θειότατον rather than the final βουλόμενον, thus making θειότατον the predicate of πρῶτον and the conjunction καὶ to mean “also”. This in turn caused βουλόμενον to be understood as a circumstantial participle (li-annahū, “because”).

68 Vocalizing the Arabic skeleton as tuḥyttiyya, which literally translates ὑπερ-βαίνω, pass over; for the usage cf. al-Kindī’s Rasā’il in the edition of M. Abū Rida, Cairo 1950, I,293.7, and see Abū Rida’s note 4.

69 After bahṭ, investigation, there is added in the manuscript the prepositional phrase ‘an hādā l-ma’nā, “on this subject.” This is a doublet from the preceding clause (hādā l-ma’nā) and clearly redundant, perhaps added as a gloss; it is to be deleted.


This meaning] then the speaker, in that he answers [in] all the objects of the addresser, or say, or not, which is also among other things [9] a fact that there is a difference in the matters [10] so that one speaks another statement (11) so that we can set it aside and make the observer in the heaven [7] so that one may set aside tano samki (7) and has a clear view and has a clear view so that it is a matter [11] of a given statement as its meaning (12) and the interpretation also from another statement always has been possible [13] and it is possible to determine it while another statement has also been possible (13) and one says that the word is in this meaning (15) but this meaning does (15a) not provide a given statement in the transmitted text. So either it is a given statement or from this beginning or from this beginning (15b) of the statements or from the statements, one may have a given statement and the statements that are fixed from the statements that are fixed (16b) to 18 before the end and T, onward. But there are [in the transmitted text] many possible things and it is not certain that it would be coined as a passive form expressing it.

70 “Together, which are those,” stands for ma’an wa-hiya llati, which translates ḍīma, ḍīma, a misunderstanding of ḍīma in the transmitted text. So either Ψ actually read, or Ishāq misread, ἄπειρα ἄμα, ἄμα, ἄμα ἐν τοῖς ἠρείστοις.

71 Illa an here would seem to translate the concession expressed by the circumstantial participle in the Greek ἐξοντα; cf. GALex I,259, illa an 9.

72 The Arabic omits πρώτος, “first” heaven. The stage at which this omission occurred is indeterminable.

73 Reading garīziyyan, as in B instead of garīzan [?] the reading suggested by the skeleton in T. The reading in B may be a correction of that in T, as garīz appears to be unattested in this signification (for ἑκμπντος) and unlikely that it would be coined as a passive form expressing it.
who maintains this requires all things [to be] together, which are those that may be found also among the best things, unless there is between them slight or no difference at all. (11) As for what I am about to say, it is a place to raise doubts when one looks into the question of heaven and investigates whether its motion is of its substance and with its cessation there would come about the annihilation of heaven, or whether it is by means of desire and craving and thus it comes about accidentally—unless, indeed, desire is innate in it and nothing prevents some existing things from being like this. (12) As I estimate, an investigator also might take away desire and make his inquiry on the question of motion itself: whether, once it is removed, there would come about with its removal the annihilation of heaven.

(13) One might more appropriately say that this is not the place to discuss this subject, though one would wish to believe (that), from this principle or from these principles, or from the rest of the principles together, there come about at once the rest of the things that are connected with them, and that it is not the case that they go up to a certain moment only and then break off and dissipate. For this is the act of a perfect and intelligent man, which is what Archytas once said,
العقل والحوادث فلا يعقل ما يجعله سلسل الجري بعد أن يصير له حرص ما فإن يقل أن هذا العدد المشار إليه من شأنه أن يكون للإنسان ولهذا العدد للفريد وهذا العدد لشيء آخر غيرهما إلا أن نجد الكثير من الناس إذا يبلغون بهذه إلى موضع من المواضع ثم يجعلونها بمثلة القوم الذين يقولون بالواحد وبالإثناء غير المحدودة فإن هؤلاء لآمن ولدوا من هذين الأعداد والسشع والأجسام كادوا أن يمسكوا عن سائر ما سوى ذلك إلا أنهم يقدر ما يدركون ذلك وبدلون عليه فقط قالوا إن بعض الأشياء كان من الإثناء غير المحدودة مثل المكان والخلاء وما لا تناهي، ويعبرها كان من الأعداد ومن الواحد مثل النفس وغيرها والزمان مع السيء وأشياء أخر كثيرة فأمّا النظر في أمر السيء وفي سائر الأشياء فلم يذكره أصلاً فضلاً على أن يشروا فيه ولم يذكر ذلك ولا شيء سبسب ولا أحد غيره ما خلا كسانقرطيس فإن هذا يجعل على وجه من الوجه جميع الأشياء في العالم على مثال واحد المحسوسة منها والمعلقة والتعالية ومع ذلك الإلهيّة ويروم أن يبين أنه يتناول إلى مدة ما ولا يقف عند

78 Ishāq mistook the proper name here for an adjective, which he translated etymologically, deriving it from ἐὖ and ἦ (ἐὖ + ἦτος); he thus read the main clause as, τούτο γάρ τέλευτο καὶ ἄριστον: ποιεῖν εὖτεύτον, i.e., “for this is [the act] of a perfect and intelligent man: to make [the thing he makes] easy to flow.” Ishāq’s etymological analysis is quite accurate and not “inexacte” (pace Crubellier 1992, 32n28). It is only to be noted
to make the thing he makes easy to flow, after there having accrued to him some allotted parts. For he says that this particular number by its nature belongs to man, and this number to horse, and this number to something else other than the two. Except that we find many people take these as far as a certain point only and then stop using them, like those who hold the doctrine of the one and the indefinite dyad: for once these [latter people] have generated from these two [principles] numbers and planes and solids, they disregard almost everything else except that, to the extent that they grasp that and point to it only, they say that some things come from the indefinite dyad, like place, void, and the infinite, and some [others] come from the numbers and the one, like soul and other things—time together with heaven and many other things. But as for investigating the question of heaven and the remaining things, they did not mention it at all let alone broach it. This was mentioned not even by the followers of Speusippus, nor by anyone else except Xenocrates, for this [man] somehow assigns all things in the universe equally—the sensible things, the intelligible, the mathematical, and, additionally, the divine. He wishes to make clear that he is deliberating up to a certain

that Ishāq added the verbal noun fi‘l and the indefinite verbal complement mā yaj‘aluhū to flesh out his translation of πουὶς, an yaj‘ala, thus using three words to translate one. This is parallel to the translation of Laks & Most, who also use three words to flesh out πουὶς: “Carc' est le fait d'un homme ... de procéder comme Archytas jadis affirmait qu‘ Eurytos le faisait ...”.

“Allotted parts” translates hisas (ψῆψις), as in the manuscript, rather than Alon’s emendation of the manuscript reading into ḫāsan to make it mean “pebbles,” an emendation also approved by Crubellier 1992, 32n29. Ishāq translated the Greek word ψῆψις in the metaphorical meaning, “lots, votes”, rather than the literal one of “pebbles.”

Ishāq added a plural pronoun here. Its proximate antecedent would be hisas, the allotted parts just mentioned; in context, however, it appears that the antecedent is the “principles” of the preceding sentence, to which the final “them” in this sentence also refers.

The addition of the phrase “let alone ...” here would appear to render the emphasis in the original indicated by ēti at 6b5.

Ishāq placed the comma after ὄμοιος (6b8), not before, as do the modern editions.

It seems clear that Ishāq misunderstood another proper name, that of Hestiaeus, and translated what he understood of it. Crubellier’s 1992, 32n30, attempt to read the name of Hestiaeus in the skeleton of the words in the manuscript, an yubayyina is not very successful. In all likelihood yarimu an yubayyina stands for πειράται only, whereas καὶ Ἑστιαῖος is somehow understood to mean anahā t yutadāwala, “he is deliberating.” The subject is clearly Xenocrates, continuing with the previous sentence to which Ishāq’s understanding of the meaning comes as an acceptable sequel.
الأوائل فقط على ما وصفنا فَأَمَّا إِفْلاَطَانُ فَإِنَّهُ عِندَ رَدِّهُ ١٢ إِلَى الْبَيْدَاءِ فَقَدْ يَطَّنَّ أَنَّهُ قَدْ شَرَعَ فِي سَائِرِ الأَشْيَاءِ ١٣ بِأَنْهُ رَدَّ الأَشْيَاءِ إِلَى الْصُّوْرَ وَرَدَّ الْصُّوْرَ إِلَى الأَعْدَادُ وَتَرْقَى مِنَ الأَعْدَادِ إِلَى الْبَيْدَاءِ فَلَمْ أَخْذَ فِي النَّمْلَةِ ١٥ بِإِنَّ الْحَقَّ أَيْضًا إِنَّهُ ١٦ هُوَ فِي هَذِهِ فَإِنَّ الْمَوْجِدَاتِ إِنَّهُ هُوَ فِي الْبَيْدَاءِ فَقَتُ وَقَدْ عَرَضَ١٨ أَنَّ الْمَآخِذُ فِي هَذِهِ السَّبِيلِ وَالْمَآخِذُ فِي سَائِرِ السَّبِيلِ (مَتَضَادَانِ)١٩ وَذَلِكَ أَنَّ (فِي) سَائِرِ السَّبِيلِ مَا خَلَى هَذِهِ السَّبِيلِ مَا بَعْدَ الْبَيْدَاءِ (مِنْ) الْعَلُومِ أُقْوَى٢٠ وَكَأَنَّهُ أَكْمَلَ، وَأَخْلَقَ بَذْلِكَ أَنْ يَكُونَ ٢١ وَاجِبًا مِنْ قُبْلِ أَنَّ الْبَحْثَ فِي هَذِهِ السَّبِيلِ إِنَّهُ هُوَ عَنْ الْبَيْدَاءِ أَنْفَسَهَا وَالْبَحْثُ فِي٢٢ سَائِرِ السَّبِيلِ يَآخَذُ مِنَ الْبَيْدَاءِ (١٤)٢٣ وَأَخْلَقَ ِبِلِ الْإِنْسانِ أَنْ يَشْكُكَ أَنْ تَوْضِعَ٢٤ وَأَنَّ الأَشْيَاءَ هِيْ هَلْ هِيْ غَيْرِ مَشْكُوَة٢٥ كَأَنْتَاهَا أَشْبَهَ بِالْقْوَى٢٦ مِنْ قِبْلِ أَنَّ الْبَيْدَاءَ أَحْقَ فَأَوْلَى٢٧ بِالْتَّحْدِيدِ كَأَنْ يَقُولُ فِي الْذِّكْاَرِ الْمَسْنُوبِ إِلَى طِبْيَاءٍ فَإِنَّ التَّرْتِبِ وَالْتَحْدِيدِ هُوِ بِأَشْرَفِ الأُمُورِ أَوْلِى٢٨ وَأَحْقَ١ وَقَدْ نَجَدَ ذَلِكَ كَذَٰلِكَ١٧٠

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١١ after (١:) ind. T ١٢ B (though there is a dot or smudge over the ﯽ): T (w.p.), Crub.١٢ (w.p.) ١٢ second B (though it may be missing because of the damage in the MS), om. Marg. ١٨ before the second B (though a smudge before it may be the letter ﯽ) and later in T: ﯽ and om. B | ﯽ | ﯽ | ﯽ | add. Gutas* (tròvavrov: cf. ١١٧–١١٧) ١٩ Alon | ﯽ | add. Crub.٢٠ (Ey) | ﯽ | ﯽ | ﯽ | ﯽ | add. Alon: ﯽ (١٢) (١٨) ٢١ add. Crub.٢٢ (٢٠) | ﯽ | ﯽ | ﯽ | ﯽ | prop. Crub.٢ (٢٨) add. Crub.٢ (٢٩)
moment and that he does not stop at the first principles only, as we described. As for Plato, in referring [things] to the first principles, he may be thought to have gone into the remaining things by referring the things to the forms and the forms to the numbers, and by progressing from the numbers to the first principles; and once he began the discussion on generation, he arrived at the forms. Some people mentioned the first principles only, and some [others] said that reality also is only in these, for the things that exist are [found] only in the principles. But it happens that the procedure in this method and the procedure in the other methods (are opposite); the reason is that in the other methods except (in) this one, the sciences that [come] after the principles are more powerful and, as it were, more complete. It is likely that this is unavoidable, insofar as the investigation in this method is of the very principles themselves, while the investigation in the other methods begins from the principles.

(14) One might likely raise doubts concerning the first principles: how they ought to be posited and what [kinds of] things they are—are they shapeless and, as it were, more like powers, insofar as first principles are more deserving of and better suited to being defined, as it is said in the book of Timaeus? For being ordered and being defined are better suited to and more deserving of the most noble things. Now we find this to be 

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84 Κατά is misunderstood here to mean “about”.
85 Ishāq understood “the forms,” as-suwar, to be what τῶν εἰρημένων, “the things discussed,” refers to.
86 Ishāq understood the regular meaning of “method” from the Greek μεθόδος rather than the sense of “discipline” intended here.
87 Ishāq took the genitive of τῶν ἐπιστημῶν with μετὰ τὰς ἀρκράς; cf. the commentary.
88 The Arabic omits here the words, δοσερ ὁδι πῦρ καὶ γῆν, ἣ μεμορφωμένας. The omission is due either to a homoeoaercon in Ψ, where the scribe (or one of his predecessors) jumped from ὁσερ in the omitted phrase to ὁς in the next phrase, or to Ishāq who himself skipped those words as he was reading his manuscript. The Arabic sentence is grammatically correct, thus nothing seems to be missing here, though the resulting contradiction in the principles’ being described both as “unshaped,” gayr muṣakkala, and “better suited to being defined,” awlā bi-t-tahdid, should have bothered the readers.
في سائر العلوم، بما خلا الشاذ من تها مثل الكتابة والموسيقى، وكذلك يجري الأمور في التعاليم وتتبع ذلك ويلزمه ما بعد المبادئ وعلى هذا المثال تجري الأمور أيضا في الصناعات فإن آلاتها، وسيئا فيهما تقتيل في طبيها المبادئ وتجرى بحسبها فبعض قال إن المبادئ كلها مشكلة وبعض قال إن المشكلة منها إلى هي المبادئ المشاركة للمادة فقط وبعض قال إن الصنفين جيما كذلك إذ كان الكمال إنا هو فيها جيما وذل ذلك أن الجوهر كله كأنة عن المضايقات لأولئك أن يقولوا إن هذا غير منقاس لأن تكون السواء بأسرها وكل واحد من جميع أجزائها تجرى على نظام ونسب وأشكال وقوى وأدوار ولا يكون في المبادئ شيء من ذلك لكن أجل الأمور بمنزلة

(14.1)

89 "Except for a few," mā ḥalā ʾ-š-ṣādd minḥā, after säʾir, may stand for one of two things: (a) it may render Greek σigteqaνις (Crubellier 1922, 331 n34), which Ishq took to modify ἐν ταῖς λοιπαῖς rather than οὕτω. Σigteqανις is translated in exactly the same way in Aristotle’s Categories 1029, σigteqανις ἐπὶ πάντων, ἵνα ἰαμτὴ ἅλλα ἐ-σ-ς-σδδί ἱμδν (Badawi Māntiq I,59.5). ʾAṣ-ṣādd here has the meaning of "a few," as is evident also from the use of yasir in the paraphrastic translation of σigteqανις in Top. 154b18, σigteqανις ἐκ ταῖς λοιπὰ πᾶντα, wa-jamーター ḡ-ṣa[y]aʾl ḡ-ṣa[b]iyati ... ḡlā ḡ-yāṣiru (Badawi Māntiq II,686–2, ed. 1952). The only difference between this phrase in these examples and in the Arabic translation of Theophrastus is that in the latter the exceptive particle is mā ḥalā rather than ḡlā. However, (b) the expression mā ḥalā ʾ-š-ṣādd minḥā may render an additional
so in the rest of the sciences except for a few,99 like writing and music, 7a1 and the situation is the same with the mathematical [sciences]. This is followed and attended by what comes after the first principles. Similar also is the case with the crafts, for their instruments and everything else in them imitate by nature90 the first principles and act in accordance with them. Some people say that all the first principles are endowed with shape, others say that those endowed with shape among them are the first principles which partake of matter only, and still others say that both classes together are such, since completeness consists precisely in both of them together, the reason being that substance, in its entirety, consists, as it were, of opposites.

(14.1) It is up to them to say that this is unreasonable:91 that heaven in its entirety and each one of all its parts would involve order and proportions92 and shapes and powers and periods, while in the first principles [themselves] there would be none of that but the most sublime thing would be like flesh scattered to no purpose, as Heraclitus said.93 Indeed

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90 Τὴν ψυχὴν was understood as an accusative of specification (synecdoche) by Ishāq, as if it were a dative of respect, so the translation รกิจิ่ะ is accurate from this point of view. The question is why—and how—Ishāq took “principles” as the object of the verb to “imitate”: most likely he read—or understood—_seat for รกิจิ่ะ. Then the subject of รกิจิ่ะ became necessarily รกิจิ่ะ รกิจิ่ะ รกิจิ่ะ, but this would also necessitate the omission of the first รกิจิ่ะ in line 7a5, unless Ishāq took รกิจิ่ะ to mean “both … and,” which he did not explicitly render in his translation.

91 For “unreasonable” = รกิจิ่ะ munqās see above, Part I, Chapter 3.3 at the end.

92 Ishāq apparently understood the plural รกิจิ่ะ for รกิจิ่ะ here.

93 Ishāq read this sentence as follows: รกิจิ่ะ ṝotepr รกิจิ่ะ ṝex ṝeχυμενή ṝe κάλλιστος, ṝe ṝψην ṝΗρακλεῖτος, ṝοσιμος. See the commentary.
لحم مثير باتلاً15b على ما قال إبراهيم. وقد 16 يستعملون أيضاً النظر في أصغر الأمور مثلاً. على هذا المثال أعني 17 في ذوات الأنفس والعديدة للنفس فإن طبائع كل واحد من هذه محدودة18 مثلاً وإن كانت تحدث من ذاتها19 فمَا مبادئها فغير محدودة

وقد يصعب19 أيضاً أن نجمع حدودها حتي نرد كل ما فيها إلى11 الواحد في جميع الأشياء أعني12 الحيوان والنبات وفيها هو أيضاً بين الحيوان والنبات إلا22 أن يكون قد يلزم نظاماً أشياء وتغيرها 1 حدوت صور آخر 7b غيرها كثيرة مختلفة بما في12 الأهواء وفي الأرض وقد يجعل بعض الناس أعظم دليل على ذلك13 أمر أوقات السنة 4 فإنه يولد فيها أصناف الحيوان والنبات والشتار 5 كأن الشمس تولدها

(15) فأما هذا المعنى 6 فقد يحتاج في هذا الموضوع إلى بحث 7 يقتضي أن نحدد إلى11 أين يبلغ المنظوم ومِم3 صار الأكثر عاجزاً إن كانت النقلة إلى ما هو أحسن وأما المبادئ وهي التي منها ابتدأ (ننا) بالكلام 10 بالواجب قد يتحرر الإنسان من أمرها في أمر السكون 11 فإنه إن قال إن ذلك لها على طريق الأمر الأفضل فقد شاب12 المبادئ وإن قال (إن) يدل على طريق التطرف وعدم الحركة 13 فلم يسبها لكن قد ينبغي أن يتغير الفعل14 إذ كان أشد تقدماً وفضاً.

15b إبراهيم
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they engage also in theoretical inquiry, for example, into the smallest of
things in this manner—I mean into the animate and the inanimate; for
the natures of each one of those are definite, for example, even though
they come about by themselves; but as for their first principles, they are
indefinite.

(14.2) But again, it is difficult for us to collect their definitions in order
to reduce each of its contents to the one in all things—I mean [in] animals and plants and in what is also between animals and plants—unless the order and transformation of things should be accompanied by
the origination of many and various other forms of what is in the air and
on the earth. As a matter of fact, some people make the seasons of the
year the greatest evidential proof for that, for [different] sorts of animals,
plants, and fruits are generated in them as if the sun were generating them.

(15) As for this subject, it may need here an investigation that requires us
to delimit how far the ordered extends, and why what is most has come
to be incapable, if the transition is to what is baser; (16) but as for the
first principles, which are those from which we started the discussion,
one might be duly perplexed about them with regard to the issue of [their]
rest. For if he says that they possess this [rest] by way of what is the best,
then he has tarnished the first principles; and if he says that it indicates
the manner of suspension [of activity] and the privation of motion,

94 Here ἐκάστοις, taken as a dative of attribution, is translated as if it were ἐκάστων, ἣδειδαίῇ, the attached pronoun -hound rendering ἐκάστοις. The Arabic would also seem to corroborate Zeller’s emendation of the transmitted reading αὐτῶν to αὐτό.
95 Ishāq read, or understood, ἓν ἐκάστοις instead of ἓν ἐκάστῳ in the extant Greek manuscripts.
96 Apparently Ishāq did not understand the word ποιμόνεις, if he had it in his text, and wrote something generic in its stead (as Crubellier 1992, 34n38 notes), perhaps taking as model a similar statement at 7a8–9.
97 Noteworthy is again the factual use of qad with the imperfect, translating the Greek particle δή in 7b2.
98 Ishāq translated τὸ πλέον ἀδύνατον literally, choosing to render the second word as “incapable” rather than as “impossible.” It is doubtful that he understood the precise import of this phrase.
99 Ψ read εἰ for ἥ here together with some of the other independent witnesses.
100 Ishāq did not perceive that the intended object of ἄναψειεν is ἡ ἠρεμία and thus took the verb to mean “to attach to” the principles something bad, i.e., to tarnish or adulterate them.
101 Ψ read the genitive article τῆς for the indefinite τῆς here.
الحركة في الأشياء المحسوسة وذلك أن السكون لا يكون إلا من قبل عجز المحرك عن أن يكون محركاً دائماً فإنه ليس يخف أن يكون الأول غير ذا نطق ولا ذلك أيضاً بما يستحق أن يصدق به، لكن الأمر يقتضي سبباً هو أعظم من ذلك

وقد يُظن بأن الحس يشهد على وجه من الوجه بأن ذلك ممكن أعني أنه ليس يجب أن يكون المحرك غير الشيء الذي يحركه من قبل الفعل والانفعال والإنسان أيضاً أن يرى هذا القول إلى العقل نفسه إلى الله

ومن القبيح أيضاً القول الآخر الذي قبل فيه إن الأشياء المشوِّقة ليس تقنتى بالساقن فإنه وإن كان يتبع وجودها وجود سائر الأشياء فإنه

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102 For τι μετάλλακτεν in the Greek manuscripts, the Arabic manuscript T has what appears to be yunṣara, “to be defended, supported,” which is rather unwarranted in the context. Alon’s correction of the Arabic skeleton to yataγαyyara is plausible, though what Ishāq understood by it is unclear.

103 The Greek exemplar of the Arabic translation, Ψ, together with all extant Greek manuscripts, read καίνοὐν here; καίνοYLES is Ross’s emendation.

104 The Arabic translation reads as if the Greek text had, κίνδυνος τὸ πρῶτον. It appears, however, that this is how Ishāq understood this difficult passage rather than that he had a text different from that in J and P.

105 It is to be noted that the use of qad with the imperfect is also connective continuative, adding a new point (“furthermore,” “also”), like that of qad with the perfect.

106 Ishāq did not translate και before ἡ αἰσθήσεις; it is not clear whether this was because the word was missing in Ψ, as in P, or because Ishāq felt that the notion of “also” was already covered by the qad yuẓanun formulation he just used (see the preceding note).
then he does not tarnish them, but it becomes necessary for activity to undergo change since it is prior and of higher merit, while motion is present in the objects of sense. The reason is that being at rest does not come about except on account of the inability of the mover always to be producing motion, for there is no fear that the first would be without speech, nor is this again something that deserves credence, but the matter requires a cause that is greater than this.

(16.1) It is also thought that sense-perception somehow attests that this is possible, namely, that it is not necessary for what imparts movement to be different from the thing which it moves on account of acting and being-acted-upon. One may also refer this argument to intellect itself and to god.

(16.2) Bad too, is the other statement that has been made about it, that desire do not imitate what is at rest, for even if

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107 Ishāq clearly read some form of δεῖ in Ψ; the question is whether he read δεῖ or the infinitive δεῖν as required by the syntax and corrected by Laks & Most. Judging from the fact that Ishāq breaks the continuity of the Arabic sentence with the inclusion of the word a’nī, “I mean,” “namely,” i.e., he makes two sentences out of the (theoretically correct) one Greek sentence ἐνδεχόμενον μὴ δεῖν ... , it would appear that he read δεῖ and, properly taking it not to belong to the same syntactical structure as ἐνδεχόμενον but as anacolouthon, he read the sentences as if there were a colon after ἐνδεχόμενον, as follows: ὡς ἐνδεχόμενον: μὴ/οὐ δεῖ τὸ λογοῦν ... He thus translated δεῖ as if it were a finite verb in an independent sentence (pace Crubellier 1992, 351-42). It seems that δεῖ is one of the primitive errors of the Neoplatonic archetype; see Part I, Chapter 2.5.

108 For the Arabic translation of ἄτοπον see the commentary at 5a17.

109 That is, on this subject.

110 The addition of (al-ašyā’) al-mutasawwiqa for τὰ ὀρεγόμενα is necessary here; al-mutasawwiqa by itself, as in the transmitted text, would mean “the group of people who desire,” i.e. as if it were translating οἱ ὀρεγόμενοι, which is not a variant attested in the tradition. Furthermore, in the next sentence, al-mutasawwiqa is referred to by the pronoun -hā, which indicates that the referent is a thing and not a personified entity (in which case the pronoun would have been -hum).

111 Ishāq appears to have read, or understood, τὰ ἡρεμοῦντα for τοῦ ἡρεμοῦντος (cf. the similar correction in J), which he took as object of μιμοῦντα, not of τὰ ὀρεγόμενα as in the Greek. However, given that the Greek μιμοῦτα, which takes its object in the accusative, has no object in the sentence, it is also likely that Ishāq may have understood even the genitive τοῦ ἡρεμοῦντος as the object of μιμοῦντα. Hence it is not certain that Ψ had τὰ ἡρεμοῦντα, and thus the reading of the translation is listed in the apparatus as “ut intell. Ar.”
خليق أن يكون ليس ينبغي أن تأخذ على مثال واحد حتى ترد إلى ما لا جزء
له٤ لكن على أنها (في) جزء ممكن أن تكون عليه من الألفاظ والنظم بمنزلة مدينة أو حيوان أو شيء آخر٥ من الأشياء الجزئية أو بمنزلة السياء بأسرها وهي التي٦ يقولون فيها إنها (في) جزء الكلام

(17) وقد تقتضى هذه الأشياء أيضا التي أنا ذاكرها الكلام فيها [و] أعنى كيف٦ صارت قيمة الأشياء الموجودة هي إلى المادة والصوره٧ (أ) ذلك على أن إحداهما (وجود) والأخرى غير موجودة إلا أنها بالقوة موجودة وقد تخرج إلى الفعل أو على أنها موجودة٨ إلا أنها غير محدودة بمنزلة ما في الصناعات لكن حدوثها٩ أو وجودها إنها هو يقول الصورة على حسب نسبها إلا أن الأمر إن كان (ك) ذلك٨ 5ا فأخلقت بالنسبة أن تكون إلى الأمر الأفضل٧٦ إلا أن القول بأنها موجودة ليس يكون من الصحة على دون ما

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112 Manuscript Ψ had the same reading here as all the Greek manuscripts, ἐι ... οὐνόμαν, and Iṣḥaq understood the participle in its existential sense, “being, existing.” Under the influence of this understanding he then took the pronoun ἦν in ἦ τῶν ἄλλων as referring to a supposed subject ὑπόνοια. He thus read the passage as follows, εἰ γάρ οὐνόμαν, ἀκολουθεῖ ἦν (ὑπόνοια) τῶν ἄλλων: “for (even) if they, while existing, are followed by the existence of the others,” and took the clause beginning with ἐπίλημμα οὐνόμαν as the apodosis of the conditional sentence beginning with εἰ.

113 According to the structure of the Arabic here, the subject of the verb tuḥada (ληπτέψον) can be either “the things that desire” or “the rest of the things,” most likely the latter. If the verb were to be read in the masculine, yuḥada, then the referent would be wujūd, existence, which makes little sense in the context.
their existence is followed by the existence of the rest of the things, it is nevertheless likely that they ought not to be taken in the same manner as being reduced to what has no parts; but [they should be taken] as being the highest [level] of congruity and orderliness that is possible for them, like a city or an animal or something else with parts, or like the entire heaven, about which they say that it is the highest [level] of perfection.

(17) Also these things which I am about to mention require discussion, namely, how has the division of existing things into matter and form come to be? (Was it) as one of them (existing) and the other not existing but potentially existing and sometimes brought out to actuality? Or, as existing, but unlimited, like what [obtains] in the crafts, whereas their origination, or their existence, comes about through their reception of a form precisely in accordance with their proportions? If this is so, however, the transference is likely to be towards the best thing, except that the statement professing its existence is no less sound than the statement about the other. The reason is that they are not such...

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114 Reading *turaddu* (not in the subjunctive) in the passive, referring to the things, rather than in the active, *naruddu*, as the Greek would require (*ἀγωντος*), because in that case the Arabic would have to supply an object (*narudduhâ*), as in the preceding sentence, where it provides the missing object in the Greek, *ἀγη τις*, which is rendered as, *li-l-insâni an yarudda hâdâ l-qawla* (with the addition of *hâdâ l-qawla*).

115 A marginal note in Arabic, which has actually entered into the text here, explains, "He means 'matter.'" But as Crubellier 1992, 35145 notes, this marginal note was inserted after the wrong word, for it explains the term "the other" that follows immediately.

116 "Whereas," *lâkin*, translating δὲ, as in all the Greek manuscripts.

117 "Proportions," *nisab*, translates λόγονς, indicating that Ishâq opted for a mathematical interpretation of the word.

118 Ishâq took the pronoun *αὐτήν* in *κατ’ αὐτήν* to refer to *sûra* (*μορφή*), form, so he understood the prepositional phrase to mean "than the statement about the other" (*al-qawlu fi l-ufrâ*), i.e., about form, in order to complete the comparison implied in the Greek "less" (*ήπτως*). He says, in effect, "The statement professing the real existence of matter is no less sound than the statement about the real existence of form" (= the "other" item in the two subjects which this paragraph discusses).
على القول في الأخرى وذلك أنها لم تكن لتحدث لو لم تكن موجودة (إلا 17)
لا تكون هذا الشيء المشار إليه ولا كيف ولما كأنه للصور خروج عن الحد 18 إلا أنه قوة ما لها وباجملة فقد ينبغي أن نفهم الأمر في ذلك على قياس ما 19 هو في الصناعات وإن كان هاهنا مشاكلة في شيء من غير الصناعات
وقد يظن أن في هذا أيضاً موضوع تشكيك — إن لم يكن البحث (18) عن مثل هذا هو من الفضول — أعني لم صارت الطبيعة 20 وجود الكلي بأسره إنها وجودهما في المضادات 21 ويؤكد أن يكون الأخش من الأمور معادلاً للأخلف منها بل 22 هو أكثر منه كثيراً حتى قد يظن أن أقل أوربيديس قول صواب وهو أنه قال إنه ليس توجد الخيرات على الانفراد وهذا القول قريب من أن تكون البحث فيه لم لا كانت الأشياء كلها خيراً ولم لا كانت كلها متشابهة 23 ولم صرينا نقول في الأشياء كلها إنها موجودة وليس 24 هي متشابهة بعضها لبعض بمنزلة الأشياء البيض 25 والأشياء السود فيها
ما يظن به أنه أبدع من هذا 26 أنه ليس يمكن أن يكون الموجود خلواً من المضادات

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119 The absence of a clear subject for γίνηστα is reflected in this verb, apparently to be read as li-tahduta, where the feminine pronoun could stand for an unidentified “it” or an understood plural “things” (al-āṣyā'). But if the singular “it” is understood, it could
as\textsuperscript{119} to come into being had it not existed, \langle except\rangle that they do not become this particular thing or quality or quantity, as if the forms had indeterminacy,\textsuperscript{120} but they have some potentiality. In general, we ought to understand this issue by analogy with what is in the crafts and if there is a similarity in anything other than the crafts.

\textbf{(18)} It may be thought that doubts can be raised about this point also—if investigating the likes of this were not superfluous—namely, why is it that the existence of nature and of the entire substance of the universe is\textsuperscript{121} just in the contraries? And the meanest thing is almost equivalent to the most excellent (no, rather it is more than it by far), to the point that it may be thought that Euripides’ statement is true?\textsuperscript{122} He said, namely, that the good things are not found by themselves. This statement comes close to our inquiring about why all things are not good and why they all are not alike, and why we come to affirm of all things that they exist and yet they are not alike, one to another, like the white things and the black things among them.

\textbf{(18.1)} That [opinion] which is thought to be more uncommon\textsuperscript{123} than this is that it is impossible for what exists to be devoid of contraries.

\textsuperscript{119} Ishâq mistranslated the indicative mood in the Greek εὐθείας ἐν τῷ έξώδειον τῷ αὐτοπλήρειον τῷ τόιον as "what is good thing in the middle of the end thing," which is intended to mean "middle thing which is good thing," and he interpreted this as evidence that all things are perfectible.

\textsuperscript{120} Ishâq translated the Greek ἄν θὲ γίνεται ἢν τῷ, as "if it were not to become," in the sense that this is not possible unless it is possible in the first place.

\textsuperscript{121} Ishâq thought that the Greek εὐθείας ἐν τῷ έξώδειον τῷ αὐτοπλήρειον τῷ τόιον was intended to mean "middle thing which is good thing," which is intended to mean "middle thing which is good thing," and he interpreted this as evidence that all things are perfectible.

\textsuperscript{122} Ishâq translated the Greek ἀν θὲ γίνεται ἢν τῷ, as "if it were not to become," in the sense that this is not possible unless it is possible in the first place.

\textsuperscript{123} Ishâq did not explicitly translate ἦν. If he took it to complement παραδεξότερον, then in all likelihood its meaning would be included in the comparative force of the elative, ἀπὸ μιν ἄντων.
(18.2) 6 وقد استعمل قوم من الشناعة ما هو أبدع من هذا 7 فأدخلوا ما ليس

بموجود ولا كان موجوداً ولا يكون موجوداً في عدد 8 ما يدخل في طبيعة

الكل 9 لكن هذا الأمر كأنه 9 حكمة تتجاوز كل حدًا وأما الموجود فمن البين

أنه على أنجح شتي 10 وذلك أن الحس يقفر على فصوله 11 ويبحث عن أسبابها

وأخلص بهذا القول أن يكون أصح 12 أعني أنه يُوقَّع للفكر أشياء 13 يبحث عنها

على الإطلاق وأشياء تحدث لهالشك والخيرة 14 فهو وإن لم يتهبّ له بالفكر أن

ينجح فيها إلا أنه على حال قد يظهر له 15 شيء من الضوء في الموضوع الذي لا

ضوء فيه إلا نحن أممّنا في البحث والتفتيش، 16 والمعرفة إذن ليس تكون بغِير

اختلاف 17 ما وذلك أن الأشياء إن كان بعضها غير بعض فقد وقع الاختلاف

والأشياء الكلية إذ كان ما تحتها كثيرة 18 فقد يجب ضرورة أن تختلف هذه

أيضاً كانت الكليات أجساداً أو كانت أنواعاً 20

وذلك أن الجوهر 22 وما هو الشيء الخاص في كل واحد من الأشياء والأشياء

التي تُعْلِم 23 بذاتها لا على طريق العرض إنها هي شيء في شيء 24a

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7 prop. to seclude as a gloss Crub.1 9 after break (∴) ind. T, blank space of

three letters B 10 corr. Alon* (αἰσθητος) T: T refusal (قيق) corrig. Gutas+

(θεοφει); cf. 8b24, 9a4, 11a2: 11 read. Alon: T: T refusal: B, perhaps

T: T refusal: B: perhaps read. Gutas+ (πνοεοιειν) T: 12 read. Alon: T

T: T refusal: B, T (w.p.): 13 by Alon: T: T refusal: by Crub.2 14 by Crub.2


17 Alon* (tū καθόλου) appar. T 21 repeated in T

124 “Others which produce in it” = ασύα’a tuḥdiṭu laḥū s-šakka wa-l-hayrata, is sup-

posed to render τοῦ δ’ ἀλοχοῖν ἐνεγκαξομεν, though the Arabic text as it stands now

would be translating ἐνεγκαξομεν, the subject being τοῦ δ’. The feminine participle in

Greek refers to sense-perception, which is the subject that produces the aporia. In Arabic,

if the text as transmitted is kept, the subject of the verb in this relative clause would have

to be the “things”, ασύα’a tuḥdiṭu. The translation would be more accurate if we read ασύα’a
(18.2) And some people employed unreason that is more uncommon than this and introduced what does not exist, did not exist, and will not exist among what is included in the nature of the universe—but this is, so to speak, a wisdom that has exceeded all bounds. As for the existent, it is evident that it comes in various modes. The reason is that sense-perception perceives its differences and investigates their causes; but it is more likely that this statement is truer, namely that [sense-perception] submits to [the faculty of] thought some things which it simply investigates and some others which produce in it doubt and perplexity. So [sense-perception], even if it is not able to succeed through [the faculty of] thought with regard to these [things], it nevertheless is such that some light does appear to it in the place where there is no light when we are assiduous in inquiry and investigation. Knowing, therefore, does not occur without some difference. The reason is that if things are unlike each other, then difference occurs; and since what [falls] under the universal things is many, these too must differ of necessity, whether the universals are genera or species.

(18.3) It is more likely for every knowledge to be knowledge only of things that are [unique] properties; the reason is that substance and what a thing is are proper to every single thing, and the things that are known essentially and not accidentally are something precisely in something.

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yuḥdītu lahū (bihā) ʿš-šakka wa-l-ḥayrata “and others, (by means of which,) it (= sense-perception) produces in it (thought) doubt and perplexity,” where the (bihā), though it does not appear in Greek, is required by the Arabic syntax.

125 Ishāq took the feminine pronoun in δι᾽ ἦς to refer to ὑάνονα and not to ἀπορία, most likely because he understood the subject of ὑάνητα to be αἰσθήμας and not ὑάνονα.

126 “Such that” translates ‘alā ḥālin, which does not appear in the Greek. Normally this expression renders Greek ὡς, as in 5b6, where we have the same Arabic, illā annahū ‘alā hālin rendering Greek ὡς ὡς. Here it does not seem that there was an identical Greek text, with ὡς again being lost in transmission. In all likelihood ‘alā hālin was added by Ishāq to complete the sense as he understood it.

127 Ishāq translates here σχέδον with the term normally used to translate τάχα, ablaqu bi-, whereas in the three other occurrences of the word in this work it is rendered either with the more usual term kāda (6a26, 8a24) or with qad and the imperfect (7a1). It would appear that Ishāq interpreted the force of σχέδον as applying to the whole phrase and not only to one word, like Laks & Most (“au sens d’une affirmation atténue,” p. 64).

128 It is interesting to note that the technical phrase τὸ τί ἦν εἶναι is rendered here literally by mā huwa ʿš-šay’ and not by the more usual term māhīyya.

129 Ishāq also took the technical term τί κατὰ τινός in its ontological and not predicative sense; see the commentary.
(18.4) وباجملة فإن بمعنى المعرفة الوقف على شيء بعينه الذي يقال في أشياء كثيرة إما عاميًا كليًا 26 وإما خاصيًا في كل واحد بمنزلة ما يقال في الأعداد وفي الخطوط 27 وفي أصناف الحيوان والنبات والمعرفة الكاملة هي 26 27 من الأمور الكلية كلاً من القصص إليها فإن السبب إنيا وجوده في هذه 26 27 وهي من الأمور الجريئة بقدر القسمة 28 إلى الأشخاص بمنزلة ما يوجد في الأشياء التي تعمل وتعمل فإن فعلها يجري هذا المجراء وقد نقف على أن الشيء واحد بعينه 5 بالجوهر وبالعدد وبالصورة وبالجنس 6 والمقايضة ومع ذلك أيضاً بالقسمة إن كانت القسمة خارجة عن هذه 29 إلا أن أكثر ما نقف به على ذلك بالمقايضة إذ كنتا بعد بها بعداً 8 كثيراً في بعض الأمور من قبلا أنفسنا وفي بعضها 9 من قبل الشيء الموضوع وفي بعضها من قبلها جميعاً.

27 after break (:) ind. T 91 the props Gutas T B| | B | the props T B| | B | props Marg. | prop. | the props Marg., T B| | B | prop. | the props T B| | B | prop. | the props Marg. | prop. | the props Marg., T B| | B | prop. | the props Marg. | prop. | the props Marg. | prop. | the props Marg. | prop. | the props Marg. | prop. 4 T B| | B | the props | prop. | the props | prop. | the props | prop. | the props | prop. | the props | prop. | the props | prop. | the props | prop. 4 T B| | B | the props | prop. | the props | prop. | the props | prop. | the props | prop. | the props | prop. 4 T B| | B | the props | prop. 130 One would have expected yuqâlu ‘alâ, “is predicated of,” rather than yuqâlu fi here. 131 Ishåq read a defective Greek text here due to homooeoteleuton: either the Greek text in Ψ or Ishåq himself in reading it jumped from δ᾿ to δ᾿ in line 8b27, skipping over the words η ἐξ ἐμφασίν ἐστιν δ᾿ (and thus missing not only ένια as indicated by Crubellier 1992, 37152). Ishåq accordingly read, τέλεος δ᾿ (sc. ἐπιστήμην ἐστι) ένια τῶν μὲν καθόλου (ὡς) τέλος ... τῶν δὲ ..., with ὡς apparently understood by Ishåq himself in order to make τέλος fit the syntax of the mutilated sentence. That Ishåq skipped the words indicated above is clear from the fact that he omitted translating ἐμφασίν, a word which he diligently translated in the other five instances in which it occurs in this small work: in 747, 748, 999, and 9b6 ἐμφασίν is translated by the dual of the noun or pronoun concerned with the addition of jamī‘an, and in 9b5 with the dual only; it is only in this passage that
(18.4) In general, the task of knowledge is to perceive the same thing which is said with regard to\textsuperscript{130} many things, either in common and universally or in a particular way with regard to each—like what is said with regard to numbers and lines and to the [different] kinds of animals and plants. Perfect knowledge consists of [some of] the universal matters as the goal aimed at,\textsuperscript{131} (for the existence of the cause [resides] in this alone), and of [some] of particular matters commensurate with the division into individuals, like what is found with regard to things which are done and made, for their actuality is of this kind. Now we recognize that something is the same\textsuperscript{132} through substance, number, form,\textsuperscript{133} genus, and analogy, and, additionally, also through division, if indeed division is not among these.\textsuperscript{134} However, for the most part we recognize [the same] by means of analogy,\textsuperscript{135} since by means of it we are at a very great distance—in some things on account of us ourselves, in others on account of the subject matter, and in yet others on account of them both.
فلمَا كانت المعرفة قد تكون على وجه كبيرة كان الوقوف على الطريق الذي به ينفع أن نبحث عن كلٍّ واحد من الأشياء على الوجه الملامّ هو مبدأ الأمر وملاك له ومثال ذلك البحث عن الأوائل المعقوفة وعن الأشياء المتحركة الداخلة تحت الطبيعة وما من هذه في المبادئ وما منها لواحق إلى أن ينبع إلى الحيوانات والنباتات وتنتهي بأيّة إلى التي لا نفس لها وذلك أن في كل واحد من هذه جنسًا خاصًا كيا في التعاليم (أيضاً فإن للتعليم) نفسها اختلافًا على أنها 18 كأنها من جنس واحد وقد تُحصى ذلك تلخيصًا بالغاً وإن كان ها هنا أشياء 19 تعلم من طريق أن لها غير معطومة على ما يقول بعض الناس 20 فجهة البحث عن هذه خاصية وتحتاج إلى قسمة ما 21 وأخلق بالقول بالمقايضة فيما يمكن فيه أن يقال بالمقايضة أن يكون 22 أيّة من القول به يُتعلم من طريق أن لها غير معطومة كأ 23 لو قال قاتل في شيء من الأشياء فإن بصير من طريق أن لها غير مصير

(20a) فقد بقى أن نلتمس تمييز الجهات التي تقع بها المعرفة وعلى كل يقال في الشيء فإن يُتعلم (20b) والبدأ في ذلك وأولو أن نلخص 26 المعنى في قول القاتل فإن الشيء يُتعلم ما هو وقد يظن بهذا الأمر أنه أصعب من ذلك 27 وذلك

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(19) Since knowledge comes about in many ways, recognizing\(^{136}\) the method by means of which we ought to investigate everything in an appropriate manner is the starting point and basic prerequisite. An example of that is the investigation of the intelligible first [things], of the movable things that fall under nature, and of the latter, those that are among the principles and those of them that are concomitants, until we reach animals and plants and finish in the end with the inanimate. The reason is that each one of these has a uniquely proper genus, just as in mathematics (also, for mathematics)\(^{137}\) itself has a differentiation although it is, as it were, a single genus; this has been set down with sufficient precision. And if there are things which are known by way of being unknown, as some people say, the way to investigate them is uniquely proper [to them] and in need of some sort of division; it is more likely that arguing by analogy, with regard to those [things] for which it is possible to argue by analogy, is more fitting than an argument through which knowledge is gained by way of being unknown,\(^{138}\) just as if one were to say about something, that it is seen by way of being unseen.

\(^{136}\) The transmitted text \textit{fa-idan} is almost certainly a corruption of \textit{kāna}; \textit{fa-idan} is hardly correct in context, and there is no justification for it in the Greek. Although Ishāq recast the initial two sentences in the Greek (the interrogative and the nominal one following it) into one affirmative sentence, he did, in the end, say the same thing as the Greek; \textit{fa-idan}, “therefore,” as a semantic addition to the text is not indicated, and the inferential implication it adds in Arabic is already covered by the initial \textit{lammā}, just as in the Greek it is expressed by the genitive absolute.

\(^{137}\) These words were omitted in the Arabic manuscript tradition through extended haplography by jumping from \textit{at-ta’ālim} to \textit{at-ta’ālim}, as suggested by Crubellier 1992, 38153. The accusative in \textit{ihtilāfan}, which otherwise would be unexplained, is the fossil that indicates this. It needs a word that governs the accusative, and this is \textit{fa-inna} in the missing words, \textit{aydan fa-inna li-t-ta’ālim}. Ishāq mistook the first “mathematical” as referring to the discipline of mathematics and not to its objects.

\(^{138}\) Ishāq quite properly understood, and accordingly translated, this sentence by supplying the implied words: τάχα δὲ, \textit{ἐφ’ ὄν} ἐνδεχεται (\textit{kατ’ ἀναλογίαν λέγειν}), \textit{κατ’ ἀναλογίαν οἰκεῖοτερόν} (\textit{ἔστιν}) \textit{λέγειν ἢ} (\textit{λέγειν}) \textit{αὐτῷ τῷ ἄγνωστῳ} (\textit{γνωστόν}). It appears that he understood \textit{αὐτῷ} as a personal rather than an intensive pronoun.
أنه ليس يمكن أن يؤخذ شيء كائن عامي في الأشياء التي تنازل من جهات شتى (20c1) ولعل هذا ما يرتبط فيه أو ليس بالسهل أن يقال إلى أي موضوع ينبغي أن ينتهي الطلب في الأشياء التي ينبغي أن نبحث عن مبادئها وأي الأشياء هي في الأشياء المحسوسة والأشياء المعقولة على مثال واحد فإن سلوك طريق ما لا نهاية له فيهما مجيب غير مألوف وخارج عن المعقول ٦ وهما جميعاً مبادئ على وجه من الوجه إلا أنه أقول إن الأخلاق بتلك أن تكون مبادئ لنا ٧ وهذه مبادئ على الإطلاق أو تكون تلك غاية يقصد لها وهذه مبادئ لنا ٨ فأما إلى موضوع من المواضع فقد يمكننا أن ندرك أساباها ٩ بأن نأخذ لتلك أوائل من الحواس ١٠ فأما إذا ترقبنا إلى الأطراف الأول أنفسها (٥) بقدر حينئذ على ذلك إما من قبل أنه لا سبب لها إما من قبل أجزنا نحن أنفسنا بمنزلة ١١ أما يعرض لنا عند التباس النظر إلى الأشياء التي في غاية الظاهرة واخلق بهذا القول الآخر أن يكون أصح أعني أن النظر في أشياء هذه من الأمور كان (ب) العقل نفسه [فيها] ١٢ بمساس الأمر المطلوب وكأنه ياسم وذلك صار لا يقع فيها الزلزال (20c2) والبحث أيضًا عن هذا نفسه صعب.


١٣٩ In order to complete the comparative χαλεπότερον, Ishâq adds “than that,” which is to be understood, in context, as referring to the precise determination of what knowledge is; in other words, he seems to have understood the sentence as saying that the problem of the different ways and aspects of knowledge is more difficult than the mere determination of what the meaning of knowledge precisely is.
than that; the reason is that it is not possible to receive a universal and common thing in the case of things which are said in various ways. (20c1)  

Perhaps this is something which is intractable, or it is not easy to say up to which point should extend the search for things whose principles we ought to investigate, and which things these are, alike among the sensible things and intelligible things; for following the path to infinity in both cases is to be avoided and not accosted, and it is unreasonable. These two together are starting points in some manner, except that I would say that it is more likely for the former to be starting points for us and the latter starting points absolutely, or for the former to be an end aimed at and the latter starting points for us. Up to a certain point, then, it is indeed possible for us to perceive causes by taking starting points from the senses for those [things]; but when we advance to the first extremes themselves, we are not able then to do that, either because they have no cause or on account of our impotence, like what happens to us when we attempt to look at things that are extremely bright. It is likely that this other statement is more correct, namely, that the theoretical investigation into the likes of these things is (by means of) the intellect itself through contact with, and as if it touches, the object sought; and for this reason no error can occur about them. (20c2) Also,
The Arabic text here (q817) has ḥālīt, which corresponds to ζήτησις, as in 6b22. It has to be assumed that Ψ had actually ζήτησις rather than the transmitted σύνεσις, for it is difficult to see how this well known word (σύνεσις) could have been misunderstood by Ishāq.

Ishāq translated πίστις in its later, Christian, meaning of “belief.”

Ishāq appears not to have grasped the implication of ἄλλως, unless it is assumed that he understood something like ὀλοκληρώσει from it.
the investigation\textsuperscript{148} of this [question] itself is difficult, and so is believing it.\textsuperscript{149} The reason is that this matter is of great moment\textsuperscript{150} and there is, in addition, necessarily need for it in every one of the sciences, and especially in the grandest of them—namely, at which thing we should set (the boundary)\textsuperscript{151} of that, such as the science of the objects of nature (and the science of what is prior to nature).\textsuperscript{152} For those who seek proof in (all)\textsuperscript{153} the sciences actually destroy proof and destroy knowledge as well; rather, the more correct of the two statements is the statement of those who believe that heaven is eternal: they attempt [to find] proof in connection with what neither admits of proof nor is in its nature to admit of proof.\textsuperscript{154} Also, for those who mention [heaven’s] movements, sizes, figures, distances, and everything else that is explained by astronomy, there remains to mention the first movers, the reason (on account of)\textsuperscript{155} which this came to be so, what the nature of each one of them is, their position relative to one another, and the substance of the entire universe; and when they\textsuperscript{156} descend to the rest of the things they mention the like of this concerning the species we talked about\textsuperscript{157} until they reach animals and plants.

\footnotesize
\textsuperscript{148} The word, which dropped from the text in the Arabic transmission, clearly needs to be restituted.
\textsuperscript{149} The phrase wa-‘ilmu mā qabla t-‘abā‘a dropped from the text through homoeoteleuton.
\textsuperscript{150} Alon’s (1985, 199) addition of kullihā here to reproduce ἀπάντητον (9b21) is necessary for the sentence to make sense.
\textsuperscript{151} Due to the lacuna in line 9b24 in Ψ, as in all Greek manuscripts, Ishāq read this sentence (9b23–25) as follows: Μᾶλλον δ’ ἀληθέστερον εἶπεῖν ὅτι ζητοῦσιν (λόγον) ὅν οὐκ ἔστιν οὐδὲ πέρικεν ὅσοι τὸν οὐρανόν ἀώνον ὑπολαμβάνουσιν, making ὅσοι the subject of ζητοῦσιν in the ὅτι clause (as suggested by Crabellier 1992, 39158). Alon’s (1985, 200n104) rearrangement of the Arabic to fit the Greek is unnecessary.
\textsuperscript{152} Lahū is to be added here: wa-s-sabar alladi (lahū) sāra‘ dālīka, translating καὶ τὸ τίνος ἔνεκα; cf. τίνος γὰρ ἔνεκα οἱ ἐξοδοὺς ... (10a28), translated as, as-sabar alladi lahū sāra l-amr yajri ... .
\textsuperscript{153} In line 10a3 ὑποβαίνοντι, singular in Greek, was understood by Ishāq as referring to the plural τούτος at 9b27 and translated as plural, inḥāṭṭū. Laks & Most 17155 also understood it this way, a misinterpretation based on improper appreciation of the particle ὅτι in line 10a4; see the commentary at 10a4.
\textsuperscript{154} In 10a4 after καθ’ ἔκκοστον τῶν εἴδων Ishāq apparently read τῶν εἰρήμενον, i.e., “those we mentioned” one by one, allati qulhā. It is not unlikely that Ψ may indeed have had this reading instead of the rather pointless ἡ μεταφόρον (if that is how the manuscript readings are to be understood).
If a person was a maker of the stars, they would set a fixed time for everything. The angels' actions are to their own end. And if you expected another, you would believe this. This is what the heavens expect. For the beauty of the heavens, few the magnificent who is this? This is what the heavens expect. For the beauty of the heavens, few the magnificent who is this? This is what the heavens expect. For the beauty of the heavens, few the magnificent who is this? This is what the heavens expect. For the beauty of the heavens, few the magnificent who is this? This is what the heavens expect.

It was indeed read from Alon, T (w.p.) {B} 6, but it was not read. Crub.1,2 and was omitted. Crub. prop. 10, 10 and was omitted. Crub.1,2 T {B} | and was omitted. Crub. T {B} | and was omitted. Crub.1,2 10–12 lac. (τοῦ οὐφαντοῦ ... καθ’ ἐκαστὸν) ind. Crub.1; see above, Part I, Chapter 3.2 11 read. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστὰ) T (w.p.) {B} | and was omitted. Crub.2* (καὶ ἐκαστ.alibaba

158 Ishāq also read, like most modern scholars, τοῖς πρῶτοις δὲ τῆς φύσεως, without a comma after δὲ.

159 Farthest away,” i.e., in time; ašadu bu’dan translates πρῶτος, apparently intended to be taken in a temporal sense.

160 A line is missing here from the translation, apparently a copyist’s omission within the Arabic tradition. Crubellier 1992, 40n60, had already correctly identified the extent of the Greek text to which this omission corresponds (τοῦ οὐφαντοῦ ... καθ’ ἐκαστὸν, from 10a10 to 12), placing the lacuna in the Arabic text correctly after what the manuscript (T) has as ἡσσίῳα. He ascribed the omission to a homoeoteleuton in the Arabic transmission, thinking that the word ἡσσίῳα, as we actually have it in the manuscript, formed a homoeoteleuton with the same word in a presumed expression al-asyā’ al-ḥassiiyya which, he claimed, stood for τὸ καθ’ ἐκαστὸν at 10a11–12 at the other end of the lacuna. However, in this translation, ἡσσίῳα, whether with al-asyā’ or without it, never stands for καθ’ ἐκαστὸν, for which almost uniformly Ishāq uses kull wāhid (e.g. at 51a9, 8b22, 8b26, 9a15, 9b18, etc., and see the Glossary), but it uniformly translates ὅσον and its derivatives; as a matter of fact, at 8b21, al-asyā’ al-ḥassiiyya translates τὰ ὁδόν. The word ἡσσίῳα in this passage, which should actually be read ἡσσίατα, stands for Greek μᾶλιστα at 10a10, as it does at 9b19, where the exactly identical expression, καὶ μᾶλιστα, is translated as
So if astronomy does help somewhat but does not investigate the first [things] of nature, the things which are of the highest moment and farthest away are other than these. For this discipline, as some people think, is not about nature, or it is not entirely about nature, despite the fact that motion in an absolute sense is something suited to nature and proper to it, and especially comes about only when it acts and is in motion, as is the case with animals and plants. If they are not homonymous then it is clear that heaven, when in a state of motion, is in accordance with its substance, such that when it is separated from the motion and is at rest, it is homonymous—the reason is that the motion of the universe is like some sort of life. I thus wish I knew whether life is...
لا يوجد نص بباللغة العربية، ويرجى التحقق من البيانات المقدمة.
not something belonging to animals, or we ought to investigate this also: motion is not something that belongs to heaven and the heavenly bodies, or that is in some manner limited, except that this doubt is, as it were, connected with the doubt concerning motion [caused] by the unmoved.

(22) As for the precise delimitation of this matter with a view to knowing that all things come to be on account of something and that there is nothing that is in vain, meaningless, it is not easy, as we shall state in many places. From which things, I wish I knew, ought we to begin? And at which of them ought we to stop? For we do find things of which it is thought that they do not follow this course, but some of them occur by way of coincidence and accidentally, while others occur by a necessity that brings them about, as we find this [to be the case] in connection with many celestial things and terrestrial things.

(22.1) For one may ask about the reason why things are as they are: [why there are] incursions of sea water sweeping [things] away and spreading out, [why there is] its ebbing from places which dries them

not something that belongs to heaven and the heavenly bodies," even if this is taken as a hypothetical question. Consequently, “that” in the following sentence, dālika, has no proper referent; it cannot refer to motion because ḥaraka is feminine, except perhaps in a general way. It is regrettable that this work was not studied in the Arabic tradition; it would have been interesting to see what a philosophically minded reader would have made of this passage.

166 Ishāq read here in Ψ, as in all the Greek manuscripts, μηδὲν μάτην ἄλλως, ὁ ἀφορομονός οὐ ἄνεος, which he translated as, ἔλαια σαί'αν ὄμητι λαύμα ἕα-λαύμα ὑπο-λαύμα (sc. talḥis ḥāḍā l-amr) bi-sahlin, where ṣibṭil translates μάτην and ἕα-λαύμα translates ἄλλως in its sense of precisely “purposeless, meaningless.” Without any particle following ἄλλως, he read μηδὲν ἄλλως as a hendiadys.

167 Ishāq used the future tense, indicating that he read in the Greek text λέγεται for λέγεται, or at least so understood the text.

168 Ishāq understood, καὶ δὴ ἔνια (ἔστι) τῶν/τῷ μὴ δοκεῖν, “there are some things of/by which it is thought [of them] that they do not . . . ,” which gave rise to the translation, “for we do find things of which it is thought that they do not . . . .” As for the contested reading τῶν/τῷ, it appears that the Arabic translation most readily would derive from a reading of τῶν in Ψ, though it is also possible that a reading of τῷ could have occasioned a similar translation; the Arabic is not specific enough to allow a definite decision.

169 “Incursions” stands for madāḥib, translating ἐκοῦσι.

170 Mujtarifat wa-taša ‘ub, hendiadys for misunderstood ἕναρμονοι.
(22.2) وقد يكون في الحيوان أيضاً أشياء كثيرة باطلة بمنزلة الثقدين في
الذكرية واللحية في بعضها و بالجملة نبات الشعر في 11 مواضع من البدن ومما
يجرى أيضاً هذا المجرى القرون العظيمة التي توجد لبعضها بمنزلة الأيائل
حتى أن بعضها قد يتآدِى في الحركة والاستقلال وست العينين 16 وأعظم ما
يدخل الشك فيه من ذلك وأحصَّهَه ب أمر تولد الحيوان وأغذيته 18 فإن هذه
ليست من قبل شيء بل إنها هي أعراض لزمت 19 من قبل أشياء آخر ضرورة
والذِكَّال أنَّها لَو كانت من أجل شيء 20 لَقد كان يجب أن تكون دائماً على حال
واحدة وعلى مثال واحد

171 The Greek-Arabic correspondences here are the following: jazr = ἀναχωρήσεις, jafaf = ἀναξιόμας εν, madd = προχωρήσεις, and ball = ὑγρότητες. Ishāq took ἀνα-
χωρήσεις with ἀναξιόμας εν and προχωρήσεις with ὑγρότητες. "For why is there the
ebbing of the sea from places and its drying them up, and the flowing into places and
its moistening them?" Thus Ishāq had what would, strictly speaking, correspond to, ἕτε
νος σι ἀναχωρήσεις καὶ ἀναξιόμας εν, καὶ προχωρήσεις καὶ ὑγρότητες; But it seems
clear that Ishāq himself joined ἀναχωρήσεις with ἀναξιόμας εν and προχωρήσεις with
ὑγρότητες for the sake of meaning, and that the text in front of him had what is estab-
lished here. Alternatively, the Arabic may suggest that the Greek text was, ἕτε νος σι
up, and its flowing into places and drenching them,\textsuperscript{171} and, in general, \textsuperscript{10b2} [what the reason is] for the changes into one thing after another which take place in this connection, and for the various sorts of coming to be and passing away. One may similarly ask about the alterations and changes and the shifting from one thing into another that occur in the earth, and about other things, which are not few, similar to these.

\textbf{(22.2)} In animals, too, there do occur\textsuperscript{172} things which are purposeless, as it were, like breasts in males\textsuperscript{173} and beards in some, and in general the growth of hair in some parts of the body. What is also analogous to this is the enormous horns which are found in some of them, such as deer, to the point that some of them actually suffer harm\textsuperscript{174} as [the horns] move, rise high [above the deer’s head],\textsuperscript{175} and cover their eyes.\textsuperscript{176}

The most important [thing] of all this about which there is doubt and the one to which [doubt] most properly belongs\textsuperscript{177} is the matter of the generation and nourishment\textsuperscript{178} of animals, for these are not for the sake of anything, but rather are accidents that are concomitant only on account of other, necessary things. The reason is that, had they been for the sake of something, they would have been necessarily always in the same state and in the same way.

\textsuperscript{171} The emphatic qad with imperfect here render the emphasis in αὐτοῖς τοῖς ζῷοις.

\textsuperscript{172} “And the emission in females, if indeed it makes no contribution” (10b8–9, καὶ τοῖς ὑήλεοι … συμβαλλέται) was not translated by Ishāq. Since there is no break in the syntax the omission would appear to be deliberate. See Part I, Chapter 3.2.

\textsuperscript{173} It is not possible to decide whether Ψ had λέλωμενον or -μενοις. Ishāq clearly took τοῖς δὲ and λελιοβ- to refer to the deer (ba’dahā), but if he had -μένοις in front of him he would still have understood it from the context to refer to τοῖς.

\textsuperscript{174} This seems to be the intended meaning of istiqāl, which renders παφανορθόσει. See Kazimirski s.v. The suggested emendation by Alon 1985, 201, and Crubellier 1992, 41162, istilāq, is not attested in the dictionaries.

\textsuperscript{175} The next few lines in the Greek text, 10b13–16 (καὶ ὡς ἕνια … τοιαύτα), are left untranslated. It may be that Ishāq could not decipher either the elliptical syntax or the rare vocabulary, or possibly both. See Part I, Chapter 3.2.

\textsuperscript{176} Ishāq correctly took the noun implied by τὸ μέγιστον δὴ καὶ μᾶλλον δοξών to be ἀπορία. He perceived the rhetorical crescendo in the paragraph and ended with the intended phrase, “and the greatest aporia of all is …”

\textsuperscript{177} Ishāq transposed the two words, apparently in order to list them in chronological sequence, taking τροφής to refer to actual feeding.
The Greek has “inanimate things,” and it is tempting to correct the Arabic al-‘anfus to read 〈m〉a ḥarāt naṣṣa ḥalāh, but it does not seem that this was what Ishāq wrote. See the commentary.
One also ought to investigate, with regard to plants—or still more, with regard to souls—the reason why they have a nature that is delimited, as they believe, by forms, species, and powers; (23) for this very [thing] is perplexing, namely, that it is not reasonable for this to be [so] and then to be applied to something else which is prior and nobler than they. So the argument that is more likely to contain something that should be relied upon is that these are apt to be receiving forms and different sorts just spontaneously from the movement of the universe.

If, then, these do not come about on account of something through which the best is aimed at, we ought to recognize certain boundaries and not posit this statement for all things without qualification. The reason is that it is as if a statement about these things tends toward two directions, when it is said without qualification and when it is said for each individual. By “statement without qualification” I mean that nature in everything desires the best and that it bestows order and perpetuity upon whatever can admit them. The same applies in the case of animals. The reason is that wherever the best is possible, it does not fail in any place. For example, the windpipe is placed in front of the

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180 Ishāq selected the inappropriate of the two meanings of εἶδος, form and species, apparently because he already translated μορφὴ as “forms.”

181 For Arabic munqās rendering ἔχειν λόγον see above, Part I, Chapter 3.3 at the end. The form of the word as it is used here is beyond dispute (cf. above at 7a10), for the skeleton of the word in the Tehran manuscript is clearly that of munqās. The Bodleian manuscript, through a metathesis of the second and third letters in the word bmnq′, reads bmny′s (bi-miqyās), which is almost tolerable (and accepted by Crubellier) except that miqyās is a noun meaning a measuring instrument.

182 Ishāq took ποιοῦσιν not as a participle but as a verb, “they do/apply,” which he then translated in the passive, “to be applied.”

183 Ishāq apparently read the following Greek text in Ψ and punctuated it thus: οὕτω γὰρ τούτο ἀποφεί, τὸ μὴ ἔχειν λόγον [καὶ] τούτῳ ἐν ἐτέρῳ δὴ ποιοῦσιν προτέρους καὶ τιμοτέρους, apparently disregarding καὶ.

184 It is not clear how al-asmāf al-muhtalifa is supposed to be translating πρὸς ἀλλήλας; a textual corruption may be involved.

185 Unless one is to emend the Arabic text and add ⟨wa-⟩min, Ishāq appears not to have translated καὶ in 10b27, understanding the following phrase as complementing and explaining the preceding.

186 Aporia 24 was translated by Margoliouth 1892, 194.

187 Ishāq read in his manuscript the transmitted μὴ τοῦθ’ and punctuated after ἄριστον: εἰ δὲ μὴ τοῦθ’ ἐνεκα τοῦ καὶ εἰς τὸ ἄριστον, ληπτέον ....

188 Margoliouth’s suggestion to read ka-anma here (instead of kāna) is well taken: it expresses the indefiniteness of τινά in ἔχει τινά διστασμῶν.
189 The words καὶ ἐν τῇ μέσῃ κοιλίᾳ τῆς καρδίας τὴν κράσιν ἀρίστην Ψο;Υkronasperacuteτι τΨo;Υkrongrave μέσΨo;Υkronν τιμιώτατΨo;Υkronν are missing in Arabic. It is difficult to decide what caused this omission. On the face of it, there is no reason why Ishāq should not have translated this passage on the excellence of blood mixture in the middle ventricle of the heart. However, in view of the fact that (1) Theophrastus has just said that body parts occupying a front position are nobler, this statement about the center being “the noblest” may seem contradictory; as a matter of fact, there may indeed be a doctrinal problem with this passage, as discussed by Laks & Most. So it is doubtful that an omission even in the Greek tradition can be ruled out. Secondly, (2) the presence of the words τιμιώτερΨo;Υkronν and τιμιώτατΨo;Υkronν at the end of two sentences may have given rise to a textual corruption in the Greek through homoeoteleuton (even if not exact; i.e., τιμιώτερΨo;Υkronν γάρ at 14a14–15 and τιμιώτατΨo;Υkronν at 14a15). On the other hand, the same two considerations may have been operative, and perhaps more plausibly so, in the Arabic tradition. Ishāq, who was certainly knowledgeable and sensitive to cultural and philosophical issues, (3) may not have translated the sentence for the same doctrinal reason—the center could not be the noblest—while (4) it is more likely that the same Arabic word for both the comparative τιμιώτερΨo;Υkronν and the superlative τιμιώτατΨo;Υkronν, ašraf, could have given rise to a homoeoteleuton omission within the Arabic tradition. I decide in favor of option (4) because there are two additional considerations. First, the Arabic syntax before and after the missing sentence is immaculate, and thus an accidental omission in the Arabic tradition is rendered more improbable; second, and more important, are considerations of context. Ishāq understood the word κόσμος in the following sentence to mean “ornament” (see the following note, and cf. Laks & Most 83n39) and missed or
oesophagus because it is nobler than it,\textsuperscript{189} and whatever is conducive to ornament,\textsuperscript{190} if\textsuperscript{191} desire functions in this manner, is similarly placed; except that it does appear that what neither complies with it\textsuperscript{192} nor receives the best is much—no, rather, it is much more by far than what does receive it. The reason is that the animate is scarce\textsuperscript{193} while the inanimate is immeasurably plentiful, and faster of generation than the animate and better of being.\textsuperscript{194} In general, the good is little and in few things, while the bad is great of number, and the departure of this from the limit only is like what happens in the nature of extreme igno-

\textsuperscript{189} Interestingly, Is’håq, just like Ross in modern times, chose this meaning of κψυρν as most appropriate in this context. See the commentary.

\textsuperscript{190} For \textit{idâ} translating \textit{εἰ} see \textit{GALex} I,161–163, §§2.1–2.3. It is interesting to note that Is’håq did not translate \textit{γάρ} in 11210, and so took the words ωσαύτως … ούτως as one sentence. It is impossible to know whether he had a defective text or had problems with γάρ similar to those faced by modern readers and decided not to translate the word; see the commentary.

\textsuperscript{191} The feminine singular pronoun here would be taken to refer, because of the context and the following \textit{al-amr al-afdal}, “the best,” to \textit{zîna}, “ornament,” rather than to the immediately preceding \textit{ṣahwa}, “desire.”

\textsuperscript{192} Greek τι is not translated in the Arabic.

\textsuperscript{193} Is’håq took ἄψυρν also as the subject of the following clause, and the final τὸ εἶναι as an accusative of respect (unless he read the dative τῷ εἶναι in Ψ which would amount to the same thing). He thus read the genitive in τῶν ἐμψυρν as the genitive after the comparative βέλτιον and the positive ἀκαριαίον, which he interpreted as a comparative (more momentary = faster): ἄπειρν δὲ τὸ ἄψυρν καὶ αὐτῶν τῶν ἐμψυρν ἀκαριαίον καὶ βέλτιον τὸ/τῷ εἶναι. It is interesting to see that in order to make his rendering fit what he interpreted as two comparatives in the Greek text, he translated τὸ εἶναι twice, in two different meanings of the word, generation and being. Is’håq must have thought that “faster of generation,” i.e., faster to be generated, refers to the fact that inanimate things do not need a long gestation period to be generated. (The discussion of this passage by Merlan 1968, 140, is based on an inaccurate understanding of the Arabic.)
In all likelihood looked like this, with curly brackets placed around words he did not translate: Τὸ δὲ ὄλον, ἐπάνων τε καὶ ἐν ὑάλοις τὸ ἄγαθον, πολὺ δὲ πλήθος [ἡ] τοῦ κακῶν οὐ [καὶ] εἰ ἢ ἄμα θατόν (de) μόνον [καὶ ὅλος ἡλίας ἔδη] καθάπερ τὰ τῆς φύσεως ἀμαθετάτου. First, it is clear that he read οὐ ή for οὐς εἰ, either because that is what he had in his text or, more probably, because that is how he interpreted it; see the commentary. Second, since the bad is presented in the text as being numerous, he interpreted ἀμαθετία—literally translated as “departure from the limit”—as referring to the boundless instances of the bad itself, not to the indefiniteness and unformed nature of prime matter (as modern scholars do). And third, in the final phrase, he understood ἀμαθετάτου as being the genitive of τὸ ἀμαθετάτου (the state
ranc.\(^{195}\) For those who spoke about substance in its entirety, like Speusippus, placed\(^{196}\) the noble in the center place, as something scarce and rare.\(^{197}\) As for the extremes and what is on either side of the center, they are, in their opinion, as they should be.\(^{198}\)

(24.1) As for Plato and the followers of Pythagoras, they put the matter at a very great distance\(^{199}\) because they thought that all things imitate\(^{200}\) this, though they posited their\(^{201}\) cause in opposition to the indefinite dyad and to the one, which [dyad]\(^{202}\) includes a departure from finitude and from order, and, in general, from form. In general, it is impossible for the nature of the universe to be free of that,\(^{203}\) but it corresponds, as it were, to the other\(^{204}\) or is superior to it, or\(^{205}\) the principles are also contrary to each other. On account of this, those who attribute the cause to god have come to say that not even he is able to guide all things to the

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\(^{195}\) This is a hendiadys for σπάνιος, with qal\(\) emphazizing the numerical rarity of the thing and ‘aziz its preciousness.

\(^{196}\) Ish\(\)aq punctuated after Σπεύσιππος and read, or interpreted, ποιεῖ as if it were ποιοῦσιν, thus compensating for the absence of a finite verb in the sentence. See the commentary.

\(^{197}\) Tarán 1981, 444–445, are based on inaccurate analysis of the text.)

\(^{198}\) Taqayyala, “to imitate,” not broadly attested in medieval dictionaries, would appear from this passage to have been more common. Cf. Dozy s.v.

\(^{199}\) I.e., of all things.

\(^{200}\) The manuscript has the masculine pronoun, fihi, which, however, cannot be what Ish\(\)aq wrote because further down, ll. 5–6, the same entity, the dyad, is referred to with feminine pronouns, tilka lakinnah\(\).\n
\(^{201}\) After “that” (tilka) the manuscripts add what is obviously a later marginal gloss, yā’ni ar-rada’ata, “i.e., badness,” which cannot be attributed to Ish\(\)aq.

\(^{202}\) After “the other” (ētē⊃yς = uhirā), the manuscripts add another marginal gloss, yā’ni al-ḥayrūrata, “i.e., goodness,” also not to be attributed to Ish\(\)aq.

\(^{203}\) Ish\(\)aq read in Ψ η as in all the other manuscripts; η is Ross’s emendation.
أيضاً ألا يكون يشأ ذلك أصلاً إذ كان قد يعرض أن يرتفع جوهرها بأسره من قبل أنه من أشياء متضادة 12 وفي أشياء متضادة.

(24.2) وقد نجد 13 أيضاً في الأوائل أشياء كثيرة لحقت على طريق الاتفاق مثل ما ذكرنا من التغيير التي تعرج في الأرض 15 فإن هذه لم يقصد بها الأمر الأفضل ولا جعلت من أجل شيء 16 لكنها لزمت وتبعت إماماً ضروريّاً وقد نجد 17 في الهواء مثل ذلك وفي أشياء أخرى غيرها إلا أن أولى الأشياء بأن 18 يُظن بها أن فيها نظاماً إما من الأشياء المحسومة 19 لأن الأجزاء السياوية وإما من سائر الأشياء – إلا أن تكون هذه متقدمة 20 لتلك – فالتعليم فإن هذه وإن لم تكون كلها 21 على نظام فكثرها كذلك إذا أن يعتقد معتقد 22 ما كان يعتقده ديموقريطس في صور 23 الأجزاء التي لا تن저اً إلا أن هذا أمر ي ينبغي أن نبحث عنه فأنا ما قلناه منذ أوّل الأمر فقد ينبغي أن نلمح 25 حدّاً ما في الطبيعة وفي 26 جوهر الكلّ ولهما هو من أجل شيء 27 للحركة إلى الأمر الأفضل 25 فإن هذا مبدأ النظر في الكلّ ونظر أيضاً في أشياء وجود الموجودات وكيف 2 حالاً بعضها عند بعض.
best, but since he is in a position [to do so as well, they say] that he would not wish that at all since their entire substance would come to be eliminated as a result, given that it is from contrary things and in contrary things.

(24.2) We also find among the first [things] many things attached [to them] by way of chance, like the changes we mentioned that happen in the earth, for neither the best was intended by these nor were they effected for the sake of anything, but rather they concomitantly follow some leading necessity. We find in the air their likes and others in other things. However, the thing that is most deserving to be thought of as having order is either the heavenly bodies among sensible things, or among the rest of the things—unless these are prior to the former. For even if not all of these possess order, yet most of them do—unless one believes what Democritus used to believe about the forms of atoms—though this is something on which we ought to do research.

As for what we said from the very beginning, we ought to search for some boundary in nature and in the substance of the universe, and for what is for the sake of something and for the movement toward the best, (25) for this is the starting point of the theoretical investigation into the universe; and we also [ought to] investigate in which things beings exist and how they relate to one another.

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206 ‘The Arabic has, lākin id kāna bihi aydan; see WKAS I, 452 for kāna bihi.’
207 “The changes,” at-taġayr, most likely translates Greek τὰς μεταβολάς so that it can be assumed that the text in Ψ read, τὰ περὶ τὰς τῆς γῆς λεχθέντα μεταβολάς. See the discussion of this passage in Part I, Chapter 2.1, in the section on “Sub-family Σ”.
208 Literally, “some necessary leader,” though it is clear from the context that “leader” (imām) is not to be taken anthropomorphically.
209 Isḥāq clearly understood the structure and meaning of the sentence; accordingly, the manuscript reading of bi-t-ta‘allum (though unpointed in manuscript T, العلم; B is lacunose at this point) needs to be corrected. Crubellier effected the first correction, changing the initial particle from bi- to fa-, to coordinate it with fa-l-ajrām in the preceding clause, and ta‘allum to ta‘lim to designate mathematics. However, in other passages in this work (see the Glossary) Isḥāq uses properly the plural form, ta‘ālim, to denote mathematics, so this correction is also necessary.
211 Isḥāq properly took this last sentence as completing the previous paragraph; see the commentary.
212 “In,” fi, here means, as it normally does, “in” in the sense of “with respect to,” which is quite unambiguous, pace Repici 1900, 191 n.22.
[تمّت مقالة ثاوفون طسق القيم بحجج ارسطوطالس في ما بعد الطبيعة
(ب)ترجمة إسحاق
وكتبتها أنا يحيى بن جرير المتطبب التكريتي من نسخة سقيمة بميفرين سنة
۴۶۱ وله الحمد
قوبل بها من أصلها وكان سقيماً جداً]

Colophon (ب)ترجمة add. Gutas
The treatise by Theophrastus, the advocate of Aristotle’s arguments in metaphysics, (in) the translation by Ishāq, is finished.

I, Yaḥyā ibn-Jarīr, the physician from Tikrit, transcribed it from a corrupt copy, in Mayyāfāriqīn in the year 461. Praise be to God.

It was collated with its exemplar, which was very corrupt.
The following apparatus contains readings in the texts edited by Margoliouth and Alon that are not included in the main critical apparatus; see Part I, Chapter 3.4. The sigla and signs used are the same as those in the main apparatus.

4a20 ṭamar /lam/ mim⏎/lamjim/alif /ba

TB: ṭamar /lam/ mim⏎/lamjim/alifU/faalimaqU

Marg.

4b8 /nun/ ha/nun⏎


5a2 ṭalim삭/ alim⏎/wawU/lamali/alifU/wawU

TB: ṭalim삭/ wawU/alifU

Marg.

5b2 ṭakoon T {B}: ʼanā ʼa heḵa ʼa Anon behalf T {B}: ʼa heḵa ʼa Alon 18

Waqayah: ṭakoon T {B}: ʼanā ʼa heḵa ʼa T {B}: ʼa heḵa ʼa Alon 24

6a1 ṭakoon T {B}: ʼanā ʼa Alon behalf T {B}: ʼanā ʼa Alon 14

Waqayah: ṭakoon T {B}: ʼanā ʼa Alon behalf T {B}: ʼanā ʼa T {B}: ʼanā ʼa Alon 17

6b1 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon and 19 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 20

7a2 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 16

Waqayah: ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 20

7b9 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 20

Waqayah: ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 23

8a3 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 4

Waqayah: ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 4

8b3 ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 7

Waqayah: ṭakoon T {B}: ʼanā ʼa Alon instead of ṭakoon T {B}: ʼanā ʼa Alon 14a

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1 Frequently Alon is given to blaming the translator (Ishäq) for his own misreadings or misunderstandings. In this case, he misreads li-l-irtibaṭ as li-l-awsaṭ, and says, “The Arabic lil-awsaṭ is Ishäq’s addition, which hardly makes this sentence any clearer” p. 189, note 41.

2 Though the translation is correct: “the infinite.”
8b4 T B: Bunclear: Alon

9a3 T B: Bunclear: Alon

9b10 T B: Bunclear: Alon

10a20 T (w.p.) B: Bunclear: Alon

10b2 T B: Bunclear: Alon

11a3 T (w.p.), B: Bunclear: Alon

11b4 T B: Bunclear: Alon

Alon even adds a note (135) saying that “the Arabic text omits to translate the Greek aitia (cause)”!
3. THE LATIN TRANSLATION BY BARTHOLOMEW OF MESSINA
INTRODUCTION

Bartholomew’s Latin translation of the Essay, which survives in a single manuscript in Padua, Antoniana XVII 370, ff. 62r–64r, was published in a diplomatic edition by Kley 1936, 3–13, with a slight philological commentary (14–28). Because of its significance for the establishment of the Greek text (see above, Part I, Chapter 2.4), and in order to provide in one volume all the evidence regarding it, I am copying it here. As a diplomatic edition, Kley’s text reproduced exactly the wording, spelling, capitalization, and punctuation in the manuscript. Not having seen the manuscript myself, but also because of the nature of the slavishly literal translation, I have thought it best to print the text here as published by Kley except for the following features which are intended to enhance the usefulness of the Latin translation for the student of the Greek text of Theophrastus.

I have eliminated all periods from the text which, according to Kley, are to be found in the manuscript, because they are randomly and erroneously placed and hamper the reading of the text. I have, however, not introduced any punctuation or capitalization, but rather divided the text into my numbered aporiae of the original Greek and introduced Usener’s line numbers for easy reference. Finally, Most 1988c, who collated the manuscript against Kley’s edition, found a few mistaken transcriptions (p. 170n6), and I have accordingly incorporated his corrections into the text. None of this changes the text from being an exact copy of that in the manuscript.

The Latin text presented as such here is adequate for the purpose of providing evidence for the establishment of the Greek text. The Latin translation, however, may also deserve treatment in its own right and a proper edition, but for this it would be necessary to consult the Padua manuscript, something that could not have been undertaken in the present work. For the same reason, it would have been incautious to have added a Latin and Greek glossary without having first ascertained the readings in the manuscript and their status in the transmission of the text. But given the extremely literal nature of the translation, any Greek-Latin or Latin-Greek correspondence can be easily identified by
reference to Usener’s page and line numbers that I have introduced into
the Latin text. Finally, in order to facilitate the understanding of the Latin
text for our present purposes, but without any pretense to providing a
critical apparatus, in a very light annotation I have merely registered
some indispensable notes and corrections, some of which were made by
Kley and Most and others by me. Matteo Di Giovanni had the kindness,
amid a very busy personal schedule, to read through the Latin translation
in Kley and offer some further suggestions, which I gratefully incorporate
in the annotation (with the abbreviation MDG).
translatus de greco in latinum a magistro bartholomeo de messana in curia illustrissimi maynfredi serenissimi regis Sicilie scientie amatoris de mandato suo

(1) 2Quomodo determinare oportet et quibus speculationem que est de 3primis que enim utique est natura multiplex est 4et ut quidam utique aiunt ingenita 5transmutationes habens omnimodas que autem est primorum 6determinata et semper secundum eadem propter quod utique et in intelligibilibus 7non sensibilibus ipsam posuerunt sicut immobilibus 8et intransmutabilibus et universaliter autem venerabiliorem et 9maiorum cogitant ipsam

(2) Utrum autem principio contactus 10quis et ut communicatio ad se invicem 11intelligibilibus et hiis que sunt nature aut nullus sed quemadmodum 12utraque separatia cooperantia autem quodam in 13omnem substantiam rationabilius autem igitur est esse quendam 14contactum et non confusum universum sed ut 15hec quidem priora hec vero posteriora et principia hec autem 16sub principiis sicut et sempiterna corruptibilibus

(3) 17Si autem igitur ita est que est natura ipsorum et in 18quibus si quidem enim in mathematicis solum 19intelligibilia quemadmodum quidam aiunt neque valde bene designatus 20et contactus sensibilibus neque omnino inutilia 21videntur ab universo ut enim excogitate 22videntur per nos esse figure et forme et 23rationes circumponentium ipsa autem per se ipsa nullam 2habent naturam si autem non non sicut copulare 2eis que 3sunt nature ut fac sicut vita 4et motus ipsa neque enim ipse numeros 5quem utique primum et principalissimum quidam posuerunt
(4) *si autem altera quedam substantia prima et melior est* hanc temptandum dicere utrum una quedam secundum *numerum* aut secundum speciem aut secundum genus rationabilius autem dicetur principii naturam habentes in paucis esse et imparibus si non quia primit et primo

(5) quod autem igitur hoc et que sed plura temptandum manifestare verum quodam modo sive secundum aliam similitudinem necesse autem fortassit potentia quadam et excellentia aliorum accipere quem-admodum utique quid divinum divinum enim omnium principium per quod omnia et sunt et permanent fortassit quidem igitur facile ita assignare difficile autem manifestius aut credibilius

(5.1) tali autem existente principio quum autem copulat se sensibilibus natura autem ut simpliciter dicere in motu et hoc est ipsisius proprium manifestum ut causam ponendum ipsum motus quum autem immobile secundum se ipsum manifestum quod non utique erit in movendo eas que sunt nature causa sed alii cuidam potentie melior et priori talis autem aut appetibilis natura aqua circularis continua et irrequietaque secundum illud solveretur utique non esse motus principio aut si motum movebit

(6) usque ad hec utique ut par sermo principio faciens unum omnium et actum et substantiam assignans amplius autem neque divisibile neque quantum quid dicens sed simpliciter auferens in meliorem quandam particulam et diviniorem sic enim magis assignandum quam divisibile et partibile auferendum simul enim in altiori et veriori ratione dicentibus negatio quod autem post hec utique ratione indiget multa de desiderio quale et quorum quum autem et plura circularia et motus quodam modo subcontrarii et inutile et cuius gratia inmanifestum sive enim unum movens, inconveniens non omnia secundum idem sive secundum unumquodque alterum principia enim plura quare consonum ipsorum in appetitum euntium optimum minime manifestum que autem secundum multitidinem sperarum causa maiorem querit rationem neque enim que est astrologorum

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(8) dubium autem et quomodo naturalem appetitum quandoque habentia non quietem sequuntur sed motum quid igitur simul imitationi aiunt illud similiter quicumque unum et quicumque numerum dicunt et enim ipsi numeros aiunt unum.

(8.1) si utique desiderium aliter et optimi cum anima nisi aliquis dicat secundum similitudinem et differentiam animata utique erunt que movetur anima autem simul videtur et secundum motum inesse vita enim habentibus a qua et appetitus ad unumquodque quemadmodum et animalibus quia et sensus quamvis in patiendo existens per alia tamen amati si igitur circularis causa est primum non utique optime erit melior enim que anime et prima utique et maxime que intellectus a quo appetitus.

(9) fortassis autem et hoc utique quis inquiret propter quid circularia solum desiderativa eorum autem que sunt circa medium nullum quamvis mobilibus existentibus utro sicut impossibilita aut sicut non accedentia ad primum sed hoc est inveniensi per inbecillitatem fortius enim utique quis dignificabit homeri jove sicut ait ipsa quidem terra librabit ipsa in mari sed igitur sicut inreceptibile quid et incompositum esse.

(10) fortassis autem primo inquiret utique aliquis quomodo se habet utrum partes hec aut non partes celi et si partes quomodo partes nunc enim remota a dignissimis non solum secundum regiones sed secundum actionem si quidem circularis huius contingit secundum accidens a circullari circulatione et in loca et in advicem transmutationes.

(10.1) si autem et optimum ab optimo melius utique aliquis de primo indigeat circumallatione non igitur prohibetur non posse recipere primum enim utique et divinissimum omnia optima volens forte autem hoc quidem ut transcendens quid et investigabile dignificat enim qui hoc dicit omnia similia et in perfect es esse parvam quandam aut neque unam habentia differentiam hoc autem dubitabit utique aliquis fortassis apud ipsum primum celum referens utrum circulatio substantie.
est ipsius et simul in quiescendo corumpetur aut si desiderio quodam et appetitu secundum accidens si non igitur conatum ipsi appetere et nichil prohibit talia quedam entium existere forte autem utique erit et auferentem appetitum de ipso motu dubitare si ablata corumpet utique celum

(13) et hoc quidem sicut ab aliis rationibus assignare de hac aut ab hiis principiis dignificabit utique aliquid fortassit autem et ab aliis utrum utique aliquid ponit que consequuntur confestim assignare et non usque hoc adveniens pausare hoc enim perfecti et sapientis quod architas aliquando ait ample co disponentem quodam numeros dicere enim sicut hic quidem hominis numeros hic autem equi hic vero alius cuiusdam existit nunc autem multi usque ad aliquid venientes quiescunt quemadmodum et qui unum et indefinitam dualitatem facientes numeros enim generantes et superficiem et corpora fere alia praetermittunt nisi quantum tangentes et tantum solum manifestantes quom hac quidem ab indefinita dualitate ut locus et ricuum et infinitum hoc autem a numeris et uno ut anima et alia quedam tempus autem simul et celum et alia quodam plura de celo autem et reliquis neque unam utique faciunt mentionem similiter autem neque circa peusippum neque aliorum nullus nisi xenocrates iste enim omnimode circumponit circa mundum similiter sensibilia et intelligibilia et mathematica et adhuc utique divina temptat autem et est quod usque ad aliquid non sicut dictum est de primis solum plato quidem igitur in reducendo ad principia deinde secundum generationem usque ad dicta hii autem principiorum solum quidam autem et veritatem in hiis entia enim solum circa principia accidit autem e contrario quam in aliis methodis in illis enim que sunt post principia fortiora sciens forte autem et rationabiliter ubi quidem enim principiorum in reliquis autem a principiis questio

(14) quomodo autem quandoque congruit et qualia principia supponi fortassit utique dubitatit aliquid utrum informa et ut potentialia quemadmodum quicumque ignem et terram aut formata ut maxime conveni enter hec terminari sicut in timeo ait honoratissimis namque
valde propria ordinatio et terminari videtur autem et in reliquis fere habere ita quemadmodum gramatica et musica et mathematicis consequitur autem et que post principia amplius autem et secundum artes similiter que quidem naturam imitantur et instrumenta et alia secundum principia hii quidem omnia formata hi vero solum materialia hii autem utraque formata et que materie sicut in utrisque perfectum ut enim ex oppositis universam substantiam

(14.1) irrationale illis videbitur utique si quidem totum celum et singule partium omnes in ordinatione et ratione et formis et potentiis et periodis in principiis autem nichil tale sed quemadmodum caro si confusorum pulcherimus ait heraclitus mundus et secundum minimum autem ut dicere accipiunt similiter in animamatis et animatis determinate singularum nature ut dicere quamvis a casu factorum principia autem indefinita esse

(14.2) difficile autem iterum hoc rationes singulis circumponi ad propter aliquid congregantes in omnibus et in animalibus et plantis et in ipsa ampulla nisi secundum accidens aliorum ordinatione et transmutatione formas omnimodas et varietate fieri eorum que sunt circa aerem et terram quorum utique maximum quidam exemplum faciunt que circa tempora causas in quibus et in animalium et plantarum et fructuum generationes ut generante sole

(15) et hec quidem hic ibi inquirunt considerationem determinationem expetentia usque quo ordinatum et propter quid plus impossible si ad peius transitio in principiis autem unde utique et prima ratio convenienter utique quis et quod est de quiete dubitabit si quidem enim ut melius reducet utique principiis si autem ut otium et privatio motus non reducet sed si quidem actionem transmutandi sicut priorem et honorabiliorem motum autem in sensibilibus quum propter hoc quiescere sicut impossibile semper movens esse non enim utique erit primum periculum non speciem rationis et aliter non fide dignum sed maiorem causam querit

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7a 16 secundum cod. (Most) : secundum (Kley) 17 animamatis cod. (Most) : animamatis (Kley) : inanimamatis legendum (ἀψύΨkΡΥΨo;Υkronις; cf. 10b22) 7b 1 fort. varietate(s) legendum (πουμλίας) 8 tus (tus Most : ctus Kley) post peius expunctum in cod. (Kley)
(16.1) videtur autem et sensus quodammodo 20 consonare sicut contingens non oportet movens 21 alterum esse et quod movet propter agere 22 et pati amplius autem si quis agit ad ipsum 23 intellectum et deum

8a (16.2) inconveniens autem et alterum dictum 1 aut non mictantur adpetentia quiescentem 2 si enim ipsis entibus consequetur aliorum 3 verum fortassis non similiter sicut impartibile 4 agentes sicut quomodo quum maxime consonum ipsi 5 et dependens sicut multum ut animal aut aliquid 6 aliud partibilium aut et totum celum quod utique 7 aiunt esse perfectissimum

(17) 8 querunt autem quedam et huius rationem quomodo 9 quandoque eorum que sunt partitio in materiam et formam 10 utrum sicut ens potentia 11 autem unum et ductum in actionem aut ens quidem 12 indefinitum autem quemadmodum in artibus generatio autem 13 substantia autem ipsorum in forme secundum 14 riationes sed ita autem in melius quidem 15 forte utique transitio erit esse autem nichil 16 minus verum existit secundum se ipsum non enim utique 17 neque fieret non existente sed neque hoc 18 neque quantum sicut indefinitum speciebus 19 potentiam autem quandam habens universaliter autem secundum rationem 20 sumendum ad artes et si qua alia similitudo

(18) 21 videbitur autem et hoc habere dubitationem nisi 22 quia otiositas inquirere quia utique natura 23 et tota substantia universi in contrariis est 24 et fere eque participat peius meliori magis 25 autem et multo magis est quod videtur et 26 euripedes universaliter dicere quod non utique fieret 27 seorsum bona
8b talis autem sermo prope 1 inquirere est quod non omnia bona neque omnia similia 2 et quod de omnibus esse dicimus nichil 3 simile ad invicem quemadmodum alba et 4 nigra in se ipsis

(18.1) amplius autem quod videbitur inopinialis 5 sicut non possibile ens absque contrariis

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7b20 20 oportet cod. (Most) : omne (Kley)  8a 1 aut cod. (Kley) : ut legendum ( sóc) | mictantur cod. (Kley) : imitantur legendum (μιμούνται) | 5 ut Kley (cod.?) : aut legendum || 10 τό δὲ μὴ ὅν εἰς ρεκα. Lat. e homoeotel.  8b 4 quod] d expunctum in cod. (Most)
(18.2) 6qui autem pluri inopinabili utentes et 7non ens non autem factum neque futurum connumerant 8in universi naturam sed hoc quidem ut 9suprascendens aliqua sapientia ens autem quum multipliciter 10manifestum sensus enim et differentias 11considerat et causas querit forte autem verius 12 dicere sicut suprascendit intellectui hec quidem 13 simpliciter querens hic autem dubitationem operans 14per quam quamvis non possit procedere tamen appareat 15 quodam lux in non luce querentibus 16 in plus scire quum non absque differentia 17 aliqua sive enim alia ad invicem differentia 18 aliqua in his que sunt pluribus entibus eis que sunt sub 19 universali differre necesse et hec sive 20 genera universalia sive species

(18.3) fere autem et omnis scientia 21 propriorum substantia enim et quod 22 quid erat esse unumquodque proprium que videntur 23 secundum sit si quid de 24 aliquo

(18.4) universaliter autem quod in pluribus idem simul videre 25 scientie aut comuni et secundum quod dicitur 26 aut propria unumquodque quod modo singulis ut numeris lineis 27 animalibus plantis finis autem ex utrisque sunt autem 1 quodam eorum quidem que sunt universalia finis in hoc enim 2 causa quod autem est in parte secundum quecumque divisio 3 in athoma quemadmodum in practicis et factis 4 sic enim ipsorum actio idem autem scimus 5 et substantia et numero et specie et genere 6 et proportione et si quum circa hec {63 v} divisione 7 plurimum autem quod secundum analogiam sicut hec per nos ipsos hec autem 9 per subiectum hec vero per utraque

(19) 10 multipliciter autem existente scire quomodo singula 11 persequendum principium autem et maximum proprius 12 modus sicut prima et intelligibilia et mobilia 13 et secundum naturam ipsorum horum que in principio 14 et consequentia usque ad animalia et plantas et ultima 15 inanimamata est enim aliquid secundum unumquodque genus 16 proprium quemadmodum in mathematicis habent 17 autem et ipse discipline differentiam unius 18 generis quodam modo entes divisum est autem suf-

7 connumerant cod. (Most): connumerant (Kley) 9 multipliciter cod. (Most): muti- (Kley) 23 post secundum lac. ind. Kley 25 communi (MDG) 9a 7 analogiam cod. (Most) : analogiam corr. Kley 15 inanimamata cod. (Most): inanimamata (kley) : inanimata legendum (v. supra ad 7a17)
ficierent si autem et quedam 19 nota in existendo ignota quemadmodum quidam aiunt 20 proprius utique modus erit divisione autem quadam indigent 21 fortassì autem in quibus contingit secundum analogiam proprius 22 dicere aut ipso ignoto sicut 23 si quis invisibili visibile

(20b) 26 difficilius autem utique videbitur 27 non enim possibile universal sale in 13 multipliciter dictis 27 et comune quid accipere (20c 1) aut et hoc 2 dubium aut non facile dicere quo et 3 quorum querendum causas similiter in sensibilibus 4 et intelligibilibus via enim in infinitum 5 in utrisque aliena et interimens sapere 6 principium autem quodam modo utrumque fortassì autem hec quidem nobis 7 hec autem simpliciter aut hic quidem finis hec vero nostrum quoddam 8 principio usque ad aliquid quidem igitur possimus per causas 9 considerare principia a sensibús accipientes 10 quando autem ad ipsa extrema et prima transcendimus 11 non amplius possimus sive propter id quod non habemus causas 12 aut propter nostram imbecillitatem quemadmodum 13 ad lucidissima videre fortassì autem illud 14 verius sicut ipso intellectu 15 consideratio habenti et ut tangenti propter quod non 16 est fallatia circa ipsa (20c 2) difficilis autem et in hoc 17 ipsum et intellectus et fides quum aut et aliter magnum 18 et ad secundum singula negotia necessarium 19 et maxime maxima in quodam faciendum 20 diffinitionem ut de natura et circa adhuc 21 priora qui enim omnium querentes rationem interimunt 22 rationem simul autem et scire magis autem 23 verius dicere quum querunt quorum non est 24 neque aptum naturam est quicumque celum perpetuum arbitran tur 25 amplius autem que secundum motus et 26 magnitudines et figuras et distantias et 27 quecumque alia astrologia demonstrant hec reliquerunt 1 prima autem moventia et cuius causa dicere 2 et que est natura uniu sciususque et que 5 ad animalia et planta

(21) astrologia quidem igitur 6 cooperatur quidem non in primis nature 7 altera principalissima utique 8 et modus ut opinantur quidam non fisi cus aut 9 non omnis et etiam moveri et universaliter 10 nature proprium et maxime celi propter quod et 11 actio uniuscuiusque 12 quando agit et movetur quemadmodum in 13 animalibus et plantis si autem non equi-

19 nota in cod. (Most) : notam (Kley) 21 analogiam cod. (Most) : analogiam corr. Kley 23 inivi post quis exunctum in cod. (Most) 23–26 πόσοι . . . ἐπίστασθαι om. Lat. 9b 16 fallatia cod. (Most) : fallacia (Kley) 27 demonstrat (MDG) 10a 2–5 post et que (πρὸς ἀλλήλα . . . μετόν) lac. (e homoeoteleuton) ind. Kley 7–8 post utique (εἰ . . . δὴ) lac. (e homoeoteleuton) indicavi 11 τῆς οὕσιας om. Lat. 11 καὶ τὸ καθ' ἐκαστὸν om. Lat.
voca manifestum quum quamvis celum in circulatione secundum substantiam erit separatum autem et quiescens equivocum ut enim anima quedam circulatio universi utrum sive nichil animalibus vitam utique querendum neque in celo et celestibus motum aut secundum aliqua modum diffinitum copulat autem quodam modo que est nunc dubitationem et ad motum ab immobili

(22) de omnibus autem propter aliquid et nichil frustra sed ut determinatio non facilis quemadmodum multociens dicitur Unde autem incipere congruit et in qualia finire et iam quedam in eo quod non videntur habere sed hec quidem contingenter hec vero necessitate quadam sicut in celestibus et in his que sunt circa terram pluribus

(22.1) cuius autem causa egressus sursum discitiones maris aut cuius inundationes aut desicationes et humiditates et universaliter ad aliiud transmutationes et corruptiones generationes aut quidem in ipsa terra alterationes et transmutationes fiunt ad aliiud transmutatis et alia non paucam simili

(22.2) amplius autem in ipsis animalibus hec quidem ut frustra sicut maribus mammæ et feminis emissio si quidem non conferunt et generativus quibusdam aut omnino pilorum ortus in aliquibus locis amplius autem cornuum magnitudines sicut cervus et per unum diem vivere et alia non paucam accipiet quis utique talia et maximum utique et maxime videtur circa alimenta et generationes animalium nullius enim hec causa sed synthomata et per alias necessitates oportebat enim si horum gratia semper secundum hec et similiter

(22.3) amplius autem in plantis et maxime inanimatis determinatam quandam habentes naturam sicut videntur in formis et speciebus et potentiis cuius causa hec queret utique ipsum enim hoc indubitabile non habere rationem et hec in aliis non facientibus et honorabilioribus quam videtur ratio habere aliquid credibile ut quia acasu hec et circulatione totius accipit aliquas ydeas aut ad invicem differentias

10b 2 humiditates cod. (Most) : humoritates (Kley) || 12–15 τοῦδε ... ὤχεύει non vert. Lat.; cf. Kley p. 26 ad loc.
(24) si autem non hoc causa huius et in optimum sumendum querun-
dam terminos et non in omnibus simpliciter ponendi quom et huius habent aliquam dibietatem et universaliter dicta singulariter universal-
liter quidem quia natura in omnibus appetit optimum et in quibus con-
tingit tradere id quod semper et ordinatum ut hoc autem et in anima-
libus similiter ubi enim possibilis est medius hic nequaque deficit ut
anterius guttur ysofago honorabilius autem et in medio ventre cordis
complexionem optimam quum medium honoratissimum similiter autem et quecumque ornatus gratia si enim appetitus ita sed illud autem
manifestat propter hoc quia multum quod non obedit neque recipiens
bene autem multo magis paucum autem quid animatum inanimatum
autem inanimatum et ipsorum animatorum modicum et melius esse
universaliter autem rurum aliquod et in paucis bonum multa autem
multitudo est malum non autem infinitas solum et sicut materie spec-
cie sicut nature indisciplinate si enim et de universa substantia dicentes
sicut speusippus rurum quid honoratum facit quod circa mediis region-
em extrema autem et utrinque quod quidem igitur entia bene existunt

11b (24.1) plato vero et pithagorii longinquam distantiam inmutari autem
volunt omnia et quemadmodum compositionem quandam faciunt indefinite
dualitatis et uniis in quo et infinitum et inordinatum et omnis ut dicere informitas secundum se ipsam universaliter autem non est
possible absque hac totius naturam sed ut eque participare aut et super
excellere alteram aut et principia contraria propter quod et neque deum
quicumque deo causam attribuunt posse omnes in optimum ducere
sed in quantum contingit forte autem neque utique eliget si quidem
interimi contingit universam substantiam ex contrariis autem et in
contrariis existentem

(24.2) videtur autem et in primis visa multa et contingit ut que circa
terram dicta secundum transmutationes neque enim optimum neque
cuius gratia sed si necessitatem quandam consequi multa autem et in
aere huius et in aliis maxime autem videbitur habere ordinationem sen-
sibilium quidem celestia aliorum autem nisi et priora mathematicis
si enim et non omne sed in hiis plus ordinatum nisi si quis huius

11a 4 dubietatem (MDG) | 14 appetitus (Kley): appetitus legendum (cf. supra 5b9) | 21
indisciplinate cod. (Most): indissi- (Kley) 11b 1 inmutari cod. (Kley): imitari prop. Kley
accipiat formas quales democritus supponit atomorum sed de his
perscrutandum temptandum quod in principio dictum quendam
accipere terminum et in natura et in universis substantia et huius causa
et in melius motus (25) hoc enim principio universi considerationis in quibus entia et quomodo se habent ad invicem

Explicit

24 perscrutandum (MDG) || 27 principio | o extinctum in cod. (Kley).
PART III

COMMENTARY
Introduction

The commentary is structured by the Aporiae. Each Aporia is introduced by its extent, given in the page, column, and line numbers of Usener, followed in parentheses by the Greek word or words which identify the question asked in the Aporia, separating it from the rest (see Part I, Chapter 1.4 and notes 62–64). Then follows a paraphrase of the Aporia and the succeeding Diaporiae (if there are any) in italics, with my additional explanatory remarks in parentheses. Whenever not immediately apparent from the paraphrase, the structure and argument of each Aporia and the succeeding Diaporiae are then analyzed in Roman type, followed by pertinent bibliographical references. Comments on the individual words, phrases, and sentences in the body of the Aporia and the Diaporiae are then introduced by the line number in which they occur.

The philosophical context in which On First Principles was written and to which it refers is crucial to its understanding. To that end, but also to avoid prolixity and repetition here, the Loci Paralleli have been provided as a study aid in the upper apparatus of the Greek text. Although typographically distinct, they nevertheless constitute an integral part of the Commentary and should be consulted in all cases.


Title. See Part I, Chapter 1.2.


Aporia 1

4a2–9 (πῶς καὶ ποίος): How and with what sort of objects are the boundaries of the study of first things to be marked? (i.e., marked off from the study of nature)?

The opening paragraph, containing an aporia as a direct question and followed by a brief diaporia, is crucial for an understanding not only of the starting point of Theophrastus’s argument and the course he is about to follow, but also of his aim and approach in the entire Essay. The force of his argument, made apparent through his use of the particles that bind it together (see the commentary below on γὰρ δή at 4a6 and on διὸ δῆ καὶ at 4a6), can be paraphrased as follows.

Diaporia 1. The subject of the Essay is to mark the boundaries of the study of the first things, i.e., to identify the objects involved in such a study. If someone objects and says, Is it possible to do so, because, in the case of natural science, the objects of study are so many as to be practically innumerable, the answer is, Yes; although the study of nature is clearly more diverse given its incessant variability, the study of the first things is nevertheless bounded and always the same, and thus it should be possible to enumerate with precision its objects. Having said this, however, the fact is that some philosophers have gone to the other extreme and said that the study of first things is concerned only with intelligibles (because they are immutable), disregarding the objects of sense.

In this manner the opening paragraph directly addresses the question of the identification and classification of the sciences, and in particular the science that was later to be called metaphysics. The statement of the aporia here should be seen in dialectical relationship to the numerous efforts by Aristotle to tackle the same problem in the various books of what was to become his Metaphysics. Of the major discussions on this subject attempted by Aristotle in that work, i.e., in books Α 1–2, Γ 1–3, Ε 1, Κ 7, and Λ 8, the statement by Theophrastus in this opening paragraph is closer to the tentative remarks of Aristotle in Α 1–2 and Λ 8 than to the more developed theories in Ε 1 and Κ 7 (pace Zeller 1877, 146–147); besides, in the latter two sections, Aristotle talks about theology or first philosophy as treating being qua being, while in Α 1–2 and Λ 8, just as in the entire Essay by Theophrastus, there is no mention of this subject. What Aristotle says in book Α 1–2, that what is called
“wisdom” (σοφία) is to be identified as the science which investigates the first principles and causes (see the Loci Paralleli), actually either echoes or gives occasion to the title of Theophrastus’s Essay. In Λ 8, 1073b1–8, Aristotle talks in tentative terms of two of the three theoretical sciences, with metaphysics, which as yet has no specific name but is simply called φιλοσοφία, being superior to mathematics, whose astronomical part, nevertheless, is “most akin” (οἰκειοστάτη) to “philosophy.”¹ Theophrastus directly reacts to these formulations both in Aporiae 7 and 21 of this Essay, where he disputes the value of astronomy for the study of first principles (see the commentary on these Aporiae below), and also in this opening paragraph, where he silently disavows the appellation of metaphysics as “philosophy” and calls it descriptively “the study of the first things.” In the rest of the Essay he tries so to identify the objects of this science and the ways to study it as to include in them an account of the connection existing between the first things and the sensible world. And this is the major theme which, as noted by Theiler and Laks & Most, runs through the entire Essay.²

This analysis has implications for the dating both of Theophrastus’s Essay and of the books of Aristotle’s Metaphysics. The direct verbal and contextual congruence between Λ 8 and this Essay make it certain beyond a reasonable doubt that the former antedates the latter; and since it is now equally clear that Theophrastus’s Essay is early and can be dated with certainty in the period between the residence of the philosophers in Assos and the very beginning of Aristotle’s return to Athens, i.e., in 347–335 (above, Part I, Chapter 1.1), the perennial question of whether Λ 8 was composed after the rest of Lambda should be settled definitively in the negative. As for Theophrastus, it appears that his Essay is situated in the initial stages of Aristotle’s metaphysical speculations and was composed precisely in order to raise aporiae on the subject of first principles as was discussed in the Academy and in Aristotle’s early metaphysical work, including Metaphysics Lambda. Theophrastus never revisited the subject of metaphysics in his writings, as far as we know; in the collection of his fragments in FHS&G, no titles other than this Essay are listed as belonging to obviously metaphysical works (fr. 246), and no fragments are cited from any reliable source as belonging to a metaphysical

¹ Cf. the discussion on this passage in Reale 1980, 297 and 371–372, and Devereux 1988, 173.
treatise (frs. 247–250). But even so, if his aporiae in this remarkable Essay were instrumental in the elaboration of Aristotle’s mature metaphysical theories, then his contribution to the discipline at its very inception was momentous.

2 ποίοις] Theophrastus here asks about the method (πῶς) to be followed in marking the boundaries of the study of the first things, and the sort of things (ποίοις) with which this study can be delimited or identified, i.e., of which things it will consist. The following sentence is intended by Theophrastus to explain the question in the first (see the second comment after next). By asking about the method of metaphysical study, Theophrastus wishes to indicate that it is different from that followed in the study of nature and how it is different, and by asking about the sorts of things involved in this investigation, he wishes to identify the objects of study marking its boundaries. Both of these questions are fully discussed in the body of the treatise (principally at 9a10 ff., and 4a17 ff., respectively). Ποίοις, therefore, rather than having the more general sense of “characteristics” (Ross, Tricot, Reale, van Raalte), is a specific reference to the objects of metaphysical study (cf. Laks & Most and Henrich, though strangely Henrich 80 understands ποίοις to depend not on the obvious ἀφορίσαν, but on a presumed or understood θείναι or εἶναι).

4a2 ὑπέρ] The use of ὑπέρ instead of περί here would appear to be determined by stylistic considerations (Einarson and Link 1976, pp. xliii–xlvi); otherwise they are synonymous. See further van Raalte 71.

4a3 θεωρία] For the various senses of this word in Theophrastus’s time see van Raalte 71–73; here it means study in the basic sense of application of the mind to a subject. In this treatise, Theophrastus never names these two kinds of study under discussion here, i.e., metaphysics and physics, other than to call them “the study of the first things” (ἡ τῶν πρῶτων θεωρία 4a3, ἡ τῶν ἀρχῶν ζήτησις 6b21–22) and “the study of nature” (ἡ τῆς φύσεως θεωρία 4a3) respectively; at most he refers to the way of studying the latter as φύσικος τρόπος (10a8). As Reale 1964, 30, suggests, this would indicate on the one hand that Aristotle at the time of the composition of Theophrastus’s Essay had a fluctuating terminology (“terminologia fluttuante”) to designate metaphysics, and on the other that the early Peripatos had not yet developed a fixed expression (“espressione fissa”) for this study. See further the comment on Aporia 1 above and Chapter 1.1 on the date of this treatise.
4a3 γὰρ δή] This particle combination, coming as it does after a question, implies the following. Upon hearing Theophrastus’s initial question, and especially the question about identifying precisely the sort of things (ποιοις) which would be included in the study of the first things and thus delimit it, one may reasonably object whether it is at all possible to do it, given that it is difficult to do the same in the study of nature because of its diversity. Theophrastus forestalls this objection by providing the answer, which is introduced by γὰρ δή: “Yes (assentient γὰρ: Denniston 244), surely (δή) the study of nature is more diverse—some even say it is more disorderly because of its variability—but the study of the first things is bounded and hence, the implication is, it should be possible to mark its boundaries accurately, or at least discuss the problems relating to this project, which is what this treatise will discuss.” The presence of ὡρισμένη at 4a6 makes this reading recommended. Theophrastus starts his whole argument from the fact that the study of the first things is bounded, and then asks how these boundaries are to be marked, though rhetorically the question comes first; the contrast with the study of nature both highlights the feasibility of Theophrastus’s project and helps introduce into the discussion the sensibles and their incorporation in such a study for the further development of the argument.

4a4 τινὲς φασιν ἀτακτοτέρα] The reference is certainly to Platonists, but also in all likelihood to Aristotle. The question has been raised as to whether Aristotle would have thought of the study of nature as “lacking in order” (ἀτακτος). Commentators (except van Raalte) think not, some of whom have cited passages from the treatises in which Aristotle says that nature means order, not the lack of it, as in the following: ἢ γὰρ φύσις αἰτία πᾶσιν τάξεως (Physics 252a11–12, cited by Henrich 21), to which one could also add, ἐτι τὸ ἀτάκτως οὐθέν ἐστιν ἐτερὸν ἢ τὸ παρὰ φύσιν ἢ γάρ τάξις ἢ οἰκεία τῶν αἰσθητῶν φύσις ἐστίν (De caelo 301a4–6). However, two things are overlooked when this claim is made. First, in these passages Aristotle is talking about sensible objects and not the study of them, which is what Theophrastus is talking about, and second, Theophrastus does not say that the study of nature is lacking in order absolutely but that it is more lacking in order than the study of the first things; he uses the comparative degree (cf. van Raalte 77). Now if we look at Aristotle we find that he makes a similar distinction in the amount of order inherent in things: at the beginning of Meteorology he says that the object of this study (μέθοδος) is “those things that happen according to nature, certainly, but [according to a nature that is] more
lacking in order than that of the first element of bodies (i.e., the ether)’” (ταύτα δ’ ἐστὶν ὅσα συμβαίνει κατὰ φύσιν μέν, ἀτακτοτέραν μέντοι τῆς τοῦ πρῶτος οὐσίας τῶν οὐσιῶν, 338b20–21). Thus it is clear that although Aristotle does indeed maintain that nature is the principle of order in sensible things, he nevertheless admits different levels or degrees of order exhibited by various parts of nature; in this case, sublunar elements exhibit less order than ether. If then, on the principle that a study is as ordered as its objects, we are allowed to extrapolate from this, it stands to reason that the study of the most ordered things—the first things—would be invariable and immobile, while that of the less ordered things—the things of nature, composed of the four elements more lacking in order—would have “all sorts of changes,” and that this is the clear implication of Aristotle’s words in the beginning of the Meteorology. It thus seems more than likely that Theophrastus is referring to this very passage in his opening sentence, or at least to an earlier formulation of it, something which also has implications for the date of this Essay (see Chapter 1.1). Besides, in all extant Greek literature up to and including Theophrastus, the comparative ἀτακτότερας is used only 11 times, five of which are in Thucydides and hence irrelevant for our purposes, four in Aristotle and two in Theophrastus. Of the uses in Aristotle, only the one just quoted from the Meteorology is contextually relevant to what Theophrastus is talking about. Naturally it is possible that Theophrastus may have had in mind either works that have not survived or even oral statements by Aristotle to this effect. But the very close relation his opening paragraph bears to the introduction of Aristotle’s Meteorology can hardly be accidental.

4a5 μεταβολὸς ἐξουσία παντοῖας] This clause of the circumstantial participle, by its position, explains either both comparatives (πολυχωσι-τέρα, ἀτακτοτέρα) or the one it immediately follows; no reason is given by those who maintain that it explains only πολυχωσιτέρα (Laks & Most 25, Henrich 81). I believe it rather explains ἀτακτοτέρα because of the parallelism in the structure of this sentence: Theophrastus first presents his own views about the study of nature and of first things, and then the views of the other philosophers, followed by the reasons for which they say what they do. In tabular form:

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3 Vallance 1988, 27 and note 8, already suggested that this passage in Aristotle may be referred to by the word ἀτακτοτέρα here, though he understood the adjective in the Essay to apply to “the works of nature” and not to the study of nature, as Theophrastus says.
subject | Theophrastus | others | reasons given by the others
---|---|---|---
ἡ θεωρία τῆς φύσεως | πολιχνοστέρα | ἀτακτοτέρα | μεταβολός ἔχουσα παντοῖας
ἡ θεωρία τῶν πρώτων | ὡρισμένη καὶ άεί κατά ταὐτά | same as Th. | ἐν ἀκίνητοι καὶ ἀμεταβλήτοις

4a6 ἀεί κατὰ ταὐτά, sc., ἔξει or ἐστί, which is the usual turn of phrase (see the examples from Plato and Aristotle in van Raalte 79–80 and Laks & Most 26). The bare use of this expression, without any other qualification or specification, “[being] always the same” refers to the study of first things (as does the preceding and exactly parallel epithet, ὡρισμένη), not to its objects, as Reale (1980) 392 translates (“identical in its subject matter”) and as van Raalte 81 and Laks & Most 26 are also willing to entertain; it is especially not the case that “there is possibly some confusion between natural science and its subject-matter” (Ross 41). That the objects are also unchangeable, which is not Theophrastus’s concern here, is implied not by the syntax of the passage but conceptually. In this opening paragraph it is assumed rather than argued for that the study of the first things is well defined and circumscribed, never varying in what it does, while the study of nature is constantly changing and open ended. That this is due to their respective objects (the invariable first things versus the infinite variability of nature) is beyond any doubt but—and this is important because frequently misunderstood—it is left unsaid, because uncontested: it was a philosophical commonplace in all schools of the time, and Theophrastus is not interested either in mentioning it or discussing it. As Laks & Most 25–26n5 note, both Plato and Aristotle, and hence their followers, held that theoretical propositions on eternal things were themselves eternal and unchanging, just as the opposite was true for variable and corruptible things. A statement such as the following by Aristotle, De anima 430a4–5, ἡ γὰρ ἐπιστήμη ἡ θεωρητικὴ καὶ τὸ οὐτοῦ ἑπιστήμην τὸ αὐτὸ ἐστιν is echoed by Theophrastus himself, ἡ ἐπιστήμη ἡ θεωρητικὴ ταῦτα τοῖς πράγμασιν (fr. 319.7 FHS&G).

4a6 διὸ δὴ καὶ[ The particles here appear to express some disapproval or disagreement on the part of Theophrastus. The two clauses, “they place ... and consider” (τιθέσαιν ... νομίζουσιν) introduced by διὸ δὴ καὶ add Theophrastus’s report about what the philosophers he is referring to infer from the invariable nature of the study of first things and do not constitute his own inference and argumentation. The emphasis of this clause seems to be that these philosophers put the study of the first things to
be exclusively in the realm of (ἐν, see the next comment) the intelligibles to the exclusion of the sensibles, because otherwise the argumentation would have been inverse, a good case of hysteron proteron (as Henrich 195 mistakenly claims for Theophrastus: “Theophrast argumentiert umgekehrt”). In other words: if the διώ δή clause is read as the conclusion by these other philosophers from the premise that the study of the first things is invariable, then it would have been an inverse argument because the study of the first things is not regarded as being about intelligibles because it, the study itself, is always the same and unchanging, but the other way round: the study is well-defined or bounded because it is about unchanging intelligibles. So since clearly no one made this inverse argument, Theophrastus could not be reporting about it in this sentence, and hence his emphasis is as I stated above. This is further indicated by his explicit mention of the sensibles in this sentence, where he says, διώ δή καὶ ἐν νοητοῖς, οὐκ αἰσθητοῖς, αὐτήν (sc. τὴν θεωρίαν) τιθέαιν (447). Had the point of the sentence been the inverse argument I mentioned above, namely, that because the study of the first things is invariable it is about intelligibles, Theophrastus should have just said, διώ δή καὶ ἐν νοητοῖς αὐτήν τιθέαιν. The emphatic mention of the sensibles in the sentence implies that the placement of the study of the first things among the intelligibles only and not also among the sensibles is somehow surprising and contrary to what Theophrastus would have wished or expected. The particle δή here, in the causal clause, adds a tone of surprise or disapproval (Denniston 231). Finally, what demonstrates that this is indeed the course of Theophrastus’s argument, that he disapproves of those philosophers who merely look at intelligibles because he feels that the study of the first things should also consider the sensibles, is that the intelligibles and the sensibles together, and their connection, constitute the beginning of the first sentence of the following Aporia 2: “The starting point is, …”

4a6 ἐν, “among”) The preposition ἐν describes the boundaries within which, or in reference to which, the study of the first things operates, according to the philosophers whose views Theophrastus is reporting. This is one of the basic meanings of the preposition ἐν with the dative; see the discussion and examples in Humbert 306 (“dans les limites de”) and also below the commentary on 4a17–18. Cf. similar uses of the preposition with τίθημι in Plato, Sophist 246c8: τὸν ἐν εἶδειν αὐτήν (sc. τὴν οὐσίαν) τιθεμένον, or especially Simplicius In phys. 453.26 Diels (CAG): τὴν δὲ ἄφοιτον δυνάμα καὶ ἐν τοῖς νοητοῖς τιθείς. The sentence
ἐν νοητοῖς αὐτήν πιθέωσιν thus indicates, quite unambiguously, that this study, or “view” (in order not to forget the resonance of the word θεωρία to a Greek speaker), is operative among the intelligibles and hence it reflects upon and regards, or is in reference to, the intelligibles and not, as Theophrastus emphasizes (as discussed in the preceding comment), the sensibles. This then would appear to be the reason why Theophrastus uses this preposition rather than περί or ὑπέρ, as he did in the very first sentence, to describe the object of the study of first things; he is not interested in the objects as such of which it is a study (περί or ὑπέρ), but rather in indicating the level of applicability within which this study operates (ἐν), according to these philosophers, and this is the realm of the intelligibles and not that of sensibles.

The first verb in third person plural has the indefinite subject τινές, while the last two have no explicit subject; all three verbs occur in the same sentence, and all three introduce views which are reported by Theophrastus as not being his. In this grammatical and semantic context it would be unnatural to assume, as all translators do, that the last two verbs refer to a different subject; if Theophrastus was interested in this passage in assigning views to specific philosophers and intended to say so he would have somehow made it explicit. It cannot be precluded that he is not referring to a different subject, but it seems that his purpose here is to refer generically to the overall mistaken approach by his contemporaries (perhaps all, or perhaps all who count) of disparaging the study of nature as disorderly and concentrating on the study of the first things with reference only to the intelligibles. This is the import of this passage; it is doubtful that we can, or need, be more specific than this.

4a4, 7, 9 τινές φασιν ... πιθέωσιν ... νομίζουσιν] The first verb in third person plural has the indefinite subject τινές, while the last two have no explicit subject; all three verbs occur in the same sentence, and all three introduce views which are reported by Theophrastus as not being his. In this grammatical and semantic context it would be unnatural to assume, as all translators do, that the last two verbs refer to a different subject; if Theophrastus was interested in this passage in assigning views to specific philosophers and intended to say so he would have somehow made it explicit. It cannot be precluded that he is not referring to a different subject, but it seems that his purpose here is to refer generically to the overall mistaken approach by his contemporaries (perhaps all, or perhaps all who count) of disparaging the study of nature as disorderly and concentrating on the study of the first things with reference only to the intelligibles. This is the import of this passage; it is doubtful that we can, or need, be more specific than this.

Aporia 2

4a9–17 (πότερα ... ἢ): Whether or not there is some connection between intelligibles and natural objects.

Diaporia 2. (Since the diaporia of the opening paragraph revealed that some philosophers think that the study of the first things can be conducted only within the realm of the intelligibles, disregarding the objects of sense,) the discussion can start by first determining whether there is in fact some connection between them. But if such a connection is doubted, it would
mean that there is no contact between intelligibles and natural objects, and hence that the universe is episodic and disjointed. But it is more reasonable, (patently in the opinion of the many or the wise,) not to think so, but rather that there is some kind of ontological or causal relationship of priority and posteriority between them.

Theophrastus begins the discussion, after the initial question that set the subject matter to be treated, with the aporia concerning the connection between intelligibles and sensibles because he has just hinted in his opening remarks at the inadequacy of the study of the first things that neglects to study also the sensibles. This aporia is resolved in proper dialectical fashion by an appeal to an *endoxon* ("it is more reasonable," εὐλογοτέρον), the connectedness between intelligibles and objects of nature, which becomes a first principle on the basis of which future aporia are resolved.

The critical reference to Speusippus in this passage has been widely commented upon; see Theiler 1958, 293n58; Tarán 1981, 321n122; and others. On Speusippus’ episodic ontology and the sets of problems it raises see Happ 1971, 212–227; Tarán 1981, 49–52.

4a12 συνεργοῦντα ... εἰς] Van Raalte 92 rightly raises the question whether there is any difference between the verb συνεργοῦντα with the preposition εἰς, as here, and προς, used by Theophrastus and others elsewhere. The distinction she draws is accurate: the former indicates the actual effect the contribution brings about, as here (both contribute to bringing about all of existence), while the latter emphasizes the proceeding towards the goal. For this causal usage of εἰς in Theophrastus see in particular Müller 1878, 8–9. The verb with the preposition, συνεργέω εἰς, here can only mean “to contribute to”, not “to cooperate [in order] to;” cooperate implies a deliberate working together, something which would make no sense in this context where the two entities supposed to be cooperating, the intelligibles and natural objects, are separated, κεκροσμένα.

4a12 δέ, “though,” is adversative (and not merely additive; pace van Raalte 91), balancing the preceding opposing idea of κεκροσμένα, though without μὲν to follow it; cf. Denniston 165.

4a13 οὖσιον is used in this work 15 times, in four different Aristotelian senses. (1) In a general way, and always in the phrase ἡ (ὁ)πᾶσα οὖσιον or
ἡ ὄλη οὐσία, to mean “existence” in the sense of “all that exists”: 4a13 (this passage), 7a10, 11a22, 11b11 (cf. this use of the word in Aristotle listed in Bonitz Index s.v. οὐσία 2); (2) in the main Aristotelian sense of “substance” as the first category, a subject of which the other nine categories are predicated: 4b6 (and see below on that passage), 8a13 (Bonitz Index s.v. οὐσία 3b); (3) in the Aristotelian sense of “the what it is to be,” τὸ τί ἦν εἶναι, formal substance or essence: 5a8, 6a7–8, 8b21 (where it occurs literally as a synonym for τὸ τί ἦν εἶναι), 9a5, 10a11, 10a14 (Bonitz Index s.v. οὐσία 3f); (4) in the looser sense of οὐσία as form, i.e., as something’s nature or formal constitution or configuration, as described by Bonitz Index s.v. οὐσία 3g: 8a23, 10a3, 11b26. It is significant that in the last three passages οὐσία is always used by Theophrastus in conjunction with ψύχεις, apparently as a discriminating marker. This, and the turn of phrase ἡ ὄλη οὐσία mentioned above under (1), indicate that Theophrastus chose his words carefully.

4a13 δ’ οὖν, “at any rate”] After an enumeration of the preceding alternatives and questions and their import, the particle combination indicates that whatever the case might be (“at any rate”), the speaker wishes to concentrate on the point that he is interested in making; see Dennis-ton 463. For this basic use of the particle combination see also Humbert 429, §750: “C’est un peu comme si le sujet parlant disait: «j’en viens donc à ce point, logiquement fondé sur ce qui précède, qui présente beaucoup plus d’intérêt à mes yeux».” Theophrastus uses this particle combination relatively frequently in this Essay.

4a15 τὰ μέν ... τὰ δὲ, as a construction, could refer either to “the former ... the latter,” i.e., to the intelligibles and the things of nature in line 11, or to generic “some things ... other things” (Ross, Tricot, Laks & Most). In context, the former alternative seems beyond doubt: Theophrastus just said that it is more reasonable that there does exist a connection, i.e., a connection (συναΨπρύ) between intelligibles and sensibles, as in lines 10–11, and he is giving here an example (οἶνος) of what that connection might consist in, that of priority and posteriority (cf. van Raalte 98).

4a15 καὶ ἀρκότες, without τὰ μέν, meaning, “and [the former,] first principles, too ...”. Τὰ μέν is clearly implied here and it was both added in the text by the scribe of JII and so interpreted by Isẖaq (though it cannot be precluded that Ψ also carried it). The omission, however, is not an error; see the references in Laks & Most 27n3 and van Raalte 98–99.
4a16 τῶν φθαρτῶν, στ. πρώτερά ἐστι, “are [prior] to the perishable,” is the only plausible reading in context (as also understood by Ishāq), similar to Aristotle, *Met.* θ 8, 1050b6–7 (cf. van Raalte 99, Laks & Most 27n4); there is no particular difficulty here (pace Laks & Most 27n4) given the structure of Theophrastus’s sentence. Usener’s original (1861, 264) conjecture, later abandoned by him (Usener 1890 *ad loc.*) but endorsed by Reale (1964, 167n7), to emend the text to read, καὶ ὡσπερ αἰτία τὰ ἀέιδα τῶν φθαρτῶν, is too speculative and not supported either by the manuscript tradition or the context; it is also unnecessary.

**Aporia 3**

4a17–4b5 (τίς καὶ ἐν ποιοῖς): *What is the nature of the intelligible first things and among what sort of things are they found?*

**Diaporia 3** brings up the question of mathematicals, one of the major issues under discussion in Academic circles, and one which Aristotle himself had to deal with extensively. Theophrastus quickly disposes of it: *If the intelligible first things are mathematicals, they cannot account for the connection between intelligibles and objects of nature; accordingly this alternative is to be rejected on the basis of the principle established from the endoxon in the preceding Aporia 2.*

4a17 εἰ δ’ οὖν, “If (really) so,” to give the particle combination its full force, introduces the question to which the “more reasonable” theory that there is a connection between the intelligibles and the sensibles leads (cf. van Raalte 100).

4a17–18 ἐν ... ἐν] In the Essay, Theophrastus uses the preposition ἐν, with the verb εἶναι either expressed or understood, eleven times to indicate that something belongs to, or is found among, a particular set of items and hence that it consists of them. In this sense, the preposition is very close in meaning to its use with the verb τίθημι at 4a6, as stated in the commentary above. However, even within this sense, it is evident that two different aspects of it are expressed, one of which emphasizes the set among which something finds itself in order to differentiate that set from others, and the other emphasizes the
fact that this set indicates the constitution of something, what it consists of. In the former case it is translated as “among” (at 4a17, 4a18, 4b9, 4b10, 6a4, 12a1), and in the latter as “consists of” (at 6b16, 7a8, 8a23, 11b12, and “consist in” at 5b6). This point is implicitly raised in Dillon’s (2002, 176n6) adaptation of a translation by Ross, though I do not agree with him on the rendering of the particular passage (4a18).

In the sentence ἐν τοῖς μαθηματικῶις μόνον τὰ νοητά, “[it is] among the mathematical only that the intelligibles are,” Theophrastus emphasizes mathematics by inverting the word order and putting the predicate first.

4a18 εἰ μέν, “if, on the one hand,” is answered by εἰ δ’, “if, on the other hand,” at 4b6.

4a20–21 ἀξίωρεα ... τοῦ (τοῦ J Ψ Λ : om. P) παντός] ἀξίωρεως c. gen. rei means more than just ἀξιος c. gen. rei; the latter means just “worthy” or “adequate” to do something, whereas the former, taking into account its two components, ἀξιος and χρεο/ως, means, “worthy or adequate for, i.e., to perform, what is needed or called for by the specific occasion,” something like “rise to the occasion,” with the genitive specifying the respect in which the adequacy is to be understood. Cf. the Demosthenian passages cited by Ross 42 and van Raalte 105n6, and also Isocrates, Philippus 138,3, μᾶλλον γὰρ ἄν ἀξίωρεως οὐτος ἔδεξεν εἶναι τῆς ὑπεράσπεσως. If that is so, then παντός, without the article, can only mean “everything” (the suggestion by Jaeger 1932, 293, to read πάντος instead of παντός, “in all ways,” also means the same); with the article, however, παντός would mean “the universe.” The former cannot be the sense because it is palpably wrong to maintain that mathematics “are not at all equal to the task with regard to everything”, which is the interpretation of both Laks & Most (“à la hauteur de toute chose”) and Henrich (“allem gewachsen zu sein”)—clearly mathematics are useful with regard to some things (Ross’s [not] “equal to their whole task” is not a viable interpretation of παντός). What they are not adequate to perform at all, in context, is to be the principles which will provide a

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4 These two aspects of the use of ἐν in this sense by Theophrastus were already identified by Müller 1878, 6: “So wird auch durch ἐν mit ... εἶναι, τι ἐν εἶναι ausgedrückt, zu welcherGattungdiesedieroderjeneArtgehört,gerechnetwird;”and“An andernStellenbezeichneteivai mit ἐν, wonitwasbesteht, worin es sein Wesen hat.”
connection between intelligibles and sensibles so that the universe will not be episodic (4a14) and thus contribute to the constitution of all being (4a13).

The reading τοῦ παντός is also attested in Ψ: the Arabic has al-kull, a standard translation of the word to mean the universe. Margoliouth 1892, 195, unaware of this usage in Arabic, wrongly suggested that the Arabic supports the reading πάντως: the phrase fi l-kull does not mean “on the whole,” as he translated it, but “with regard to the universe.” Finally, Bartholomew’s Latin translation also points to a reading τοῦ παντός in Λ: inutilia videntur ab universo. Although Kley 16 may be right in saying that it is not absolutely clear what lies behind ab universo, the preposition ab can be most reasonably explained by assuming that Bartholomew took the genitive of the article in τοῦ παντός to indicate agency (“by”) after the passive videntur; otherwise, given his slavish word by word translation, if the reading were only παντός, he would have written just universi. Furthermore, universum most plausibly can be taken to mean “the universe” rather than “all together;” if Bartholomew had been translating πᾶν without the article in his exemplar (Λ), he would have most probably used omnis, as elsewhere. By the same token, the suggestion by Jaeger 1932, 293, to read πάντως also is off the mark.

With three of the four independent witnesses (PJ Ψ Λ) for the text supporting the reading τοῦ παντός, the omission of the article in P can be seen as a peculair error; and if in later tradition the article is also omitted in A, this can have no significance on its own, given the stemmatic relation of the manuscripts (see Chapter 2.1 and 2.6).

An example of this use of ἀξιόχρεως, as a first principle that can effect what is needed for a specific purpose, is offered by Euripides, Orestes 597, ἢ οὖν ἀξιόχρεως ὁ θεός ἀναφέροντι μοι μίασμα λύσαι. Τοῦ παντός in line 21, therefore, harks back to τοῦ πᾶν in line 14 because they are both part of the same argument in which Theophrastus spells out the precise areas of his concern with regard to the quest for the first things: he is not interested in discussing possible candidates for first things with regard to their usefulness in everything but only in explaining, or constituting, a mutually connected universe. (Henrich’s 84 reference to πάντων and ἁπάντως at 4b15–16 has nothing to do with this particular argument in which τοῦ πᾶν is to be understood as the universe.)

4b2 ἔχει, “they ... have”] Theophrastus uses the indicative instead of an infinitive to express his conviction that mathematicals have in fact no
nature of their own. The infinitive would have placed the sentence as reported speech in subordination to the preceding θέλεται or δοκεί, “they seem,” and thus diminish the value of the expression as a statement of fact. All manuscripts and independent witnesses concur in the reading; only a second hand in a late MS (B) “corrected” it to the infinitive. After a verb in the infinitive as part of reported speech, Theophrastus on occasion deliberately reverts to finite verbs in order to state something as factual by contrast (cf. Laks & Most 1017 and 2919). These passages are not to be “corrected” to the infinitive, as in some late manuscripts and modern editions. In this case in particular ἐχετι does not represent one of the primitive errors of the archetype, as listed by Fobes, p. xxvii.

4b2 εἰ δὲ μή, “or, if not,” referring, as Ross notes, to οἶον γὰρ in 4a21. Clearly the negative alternative refers to the totality of the preceding sentence: “or, if mathematicals are not devised by us but have a proper nature …”.

4b2 οἶα τε] The Arabic translation suggests a reading in Ψ of either οὐχ οἶα τε or οὐχ οἶον τε (see the corresponding note to the Arabic translation). Given the structure of the Greek sentence, εἰ δὲ μή … τιθέασιν (4b2–5), what is required is the former construction, which makes τὰ μαθηματικά the subject of ἐπιτοῆσαι, as opposed to the latter, impersonal construction, which would leave the verb without a subject. The presence of the next subject, ὅ ἄρτιμος in b4, which is parallel to τὰ μαθηματικά, also requires the personalized construction οὐχ οἶα τε: it needs to fit the same structure as the subject of the preceding sentence in order for the elliptical expression to make sense, i.e., οὐδὲ γάρ αὐτὸς ὅ ἄρτιμος, sc. οἶος τε συνάπτετι τοῖς τῆς φύσεως ὦστ’ ἐπιτοῆσαι ζωῆν. The indefinite expression οὐχ οἶον τε would derail the parallelism.

The reading οὐχ οἶα τε is also preferable to the other actual or suggested readings because the alternatives have grave problems. The extant Greek manuscripts have οὐχ ὦστε, and apparently so does Λ,⁵ but the

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⁵ Bartholomew’s Latin has non sicut, which stands for οὐχ ὦστε. It is not true, as Kley 16 states, that Bartholomew translates ὦστε with quare; in the five instances in which ὦστε occurs in this Essay, it is translated by quare (5a4, 5a20), sicut (here, 4b2), ut (4b3), and quod (8a25). On the other hand, sicut translates mainly three words, ὡς (447, 5b13, 6a21, etc.), ὄπετο (4a16, 5b18, 6b10, etc.), and καθάπετο (4b3, 6b27, 10a27, etc.). ὡστε, which also begins with ὡς, is thus translated by sicut here as well.
recurrence of ὅστε four words further down in the same sentence makes it “very awkward” (Ross 42), if not impossible, to retain (despite van Raalte’s valiant efforts, 112–113, and Henrich’s approval). Besides, if, in order to retain the reading of ὅστε, ψύσις needs to be taken as the subject of συνάπτειν and ἐμποιήσαι (as van Raalte 37, 112, suggests), then it would not be parallel, as subject, to ὅ ἄριστος (as indicated in the preceding comment), and thus the syntax of the οὐδὲ γάρ clause would not conform to that of the main sentence, ruining the parallelism and the meaning. Usener’s 1890 emendation to οὐτως γα,⁶ adopted by Ross and Laks & Most, has the problem, as noted by van Raalte (112), that it presupposes the conjecture ἔχειν for ἔχει in 4b2 in order to justify the infinitive in συνάπτειν and put everything in reported speech dependent on δοξέι at 4a22. Ross is consistent in this regard for he prints ἔχειν ψύσιν and translates συνάπτειν, “they seem not to connect with the things of nature”, but not Laks & Most. However, the reading of ἔχειν for ἔχει in 4b2 has been ruled out (see the preceding comment). There remains the reading in Ψ, which makes good sense and has the authority of one of the oldest independent witnesses. Van Raalte’s (113) objection, that the intransitive συνάπτειν is “somewhat awkward” with the following active ὅστε ἐμποιήσαι is without any basis, especially since the two verbs are in two different clauses. Palaeographically, the corruption of οἰατε to οἰστε would appear to have taken place, possibly because of assimilation to the following ὅστε, in a minuscule rather than an uncial environment (ΟΙΑΤΕ ΩΣΤΕ?), through a misreading of οι as ω and of οι as the στ ligature.

⁴b4 οὐδὲ γάρ, “no, not even,” assentient γάρ, with οὐδὲ echoing οὐχ in line 4b2 (see Denniston 86–88, especially 88 § 2). This does not preclude the particle combination introducing an a fortiori argument (cf. Laks & Most 29112, van Raalte 115).

⁴b5 ὅντει δή, “the very one which,” emphatic περ further strengthened by δή (Denniston 490).

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⁶ Which is not, as Kley 16 claims, supported by Bartholomew’s Latin; see the preceding note.
4b6–11 (πότερον … ὅ): Whether a substance that is prior and more powerful (than mathematical) is one in number or in species or in genus.

Diaporia 4. The diaporia that follows makes use of another endoxon to settle this question, something that is considered “more reasonable” by the many or the wise, namely that such intelligible first substances, insofar as they are principles, would be few or possibly just one.

4b6 οὐοία, “substance”] Theophrastus asks this question in the same spirit as that in which Aristotle discusses the number of “substances” different philosophers postulated (Met. Z 2). For the different uses of οὐοία in this work see above, at 4α13.

4b9 δ’ οὖν, “at any rate,” see 4α13 above.

4b9 ἐχούσας] The plural feminine ἐχούσας here can only refer to a presumed plural οὐοία of the only feminine noun actually mentioned in the paragraph, οὐοία in 4b6 (and this is why Usener 1861 and 1890 tried to “correct” the text, unnecessarily, by preferring the late reading ἔχουσαν and adding δ’ οὖν ⟨οὐοίαν⟩). Most of the modern translations, following the Greek, use the plural pronoun, “they”, “ils”, “sie,” generating the impression that the antecedent is the mathematical objects. The plural form in the Greek, which is certainly correct—the Arabic and Latin translations, and thus Ψ and Λ also have it—implies the following: “It is more reasonable that, having the nature of a first principle, substances like the one that was just assumed—a substance prior and more powerful than the mathematical—are among few and extraordinary things.”

4b9–11 ἐν ὀλίγοις … τῷ πρῶτῳ] There are two interrelated difficulties in this passage. The first concerns the precise meaning of ἐi μὴ ἄρα, and the second the progression of the thought. ἐi μὴ ἄρα, which is a favorite expression of Theophrastus both in this work and elsewhere (he uses it five times in this Essay, at 4b10, 5b28, 6a10, 8a21–22, and 11b19; cf. van Raalte 122), means, “if not, perhaps,” “unless, indeed” (“indeed” suggesting the uncommon nature of the thing introduced by the hypothesis), or, affirmatively stated, “possibly even,” with ἄρα denoting a just realized and novel alternative (cf. Denniston 37; van
Raalte 122). The question here is whether ἄρα is also ironic and, as is frequently the case with εἰ μὴ ἄρα, expresses that the alternative introduced is improbable or undesirable (Smyth § 2796; Humbert 382: “hypothèse ... à peine croyable”). But this does not seem to be the case in the actual usage of the expression by Theophrastus (cf. the evidence and the discussion in van Raalte 122–123). What it does indicate is that the alternative introduced is actually preferable even if some people, Theophrastus appears to be implying, might not have actually thought of it or even might find the suggestion somewhat novel or perhaps surprising. Thus “if not, indeed,” in the sense described above, would appear to fit Theophrastus’s meaning.

If then the alternative introduced by εἰ μὴ ἄρα is not improbable but something which Theophrastus wishes actively to suggest, the next question is, how much of the εἰ μὴ ἄρα clause (i.e., how many of the words following it) is an alternative to what has preceded. There are two possibilities, and both have been taken by different scholars. The first is to take only καὶ πρῶτοις as belonging to the εἰ μὴ ἄρα clause and view the final καὶ ἐν τῷ πρῶτῳ as a further addition to the progression that began with ὀλίγοις and continued with περιττοῖς, so that πρῶτῳ would be the third item in it (with the εἰ μὴ ἄρα clause qualifying the preceding one or two items), punctuating after πρῶτοις to indicate the division (Laks & Most, Talanga 1995, 19). The second is to view the entire clause, καὶ πρῶτοις καὶ ἐν τῷ πρῶτῳ as part of the alternative introduced by εἰ μὴ ἄρα, in which the original suggestion, that these substances which are superior to mathematicals can be found among few and extraordinary things (ὀλίγοις and περιττοῖς), is substituted by the alternative that they can be found rather among the first things and indeed in the very first itself. Thus what is contrasted here is the first thing(s) and non-first things. I tend to favor the second alternative, for two reasons. First, if καὶ ἐν τῷ πρῶτῳ is taken as a third item in the progression—ὀλίγοις, περιττοῖς, πρῶτῳ—but in a progression in which the second element at least, περιττοῖς (if not the first also, ὀλίγοις), is “corrected” by the εἰ μὴ ἄρα clause which substitutes for it the item πρῶτοις, then the element of “first things” will have been already introduced into the discussion, and the further addition of πρῶτῳ, as a third element, would be redundant. Secondly, and perhaps more importantly, in this entire sentence in which the εἰ μὴ ἄρα clause appears, Theophrastus makes what may be called a dialectical argument on the basis of what is more “reasonable” to suppose, one with which he could expect most of his audience readily to agree: most Greeks of his time would have found it reasonable to
claim that intelligible substances which are prior and more powerful than mathematicalss and which have the nature of first principles are few and extraordinary; but it is very doubtful that they would have found it equally reasonable to say that these substances are actually the very “first thing,” which is what the sentence would imply if we read it with a comma after πρώτοις in πρώτοις, και and if we take ἐν τῷ πρώτῳ as the third item in the progression ὀλέγοις, περιττοῖς, πρώτῳ (according to the first alternative mentioned above). It is thus semantically more correct to take και πρώτοις και ἐν τῷ πρώτῳ as part of the alternative clause introduced by εἰ μὴ ἄρα (for philosophical arguments see van Raalte 123 and Henrich 85–86); Theophrastus expects most people to agree that these entities are few and rare, and he adds his personal qualification that these entities could even be among the “first things” or the very “first thing” itself. The preposition ἐν in ἐν τῷ πρώτῳ is apparently to be understood in the sense (see above the comment on 4a17–18) that the set of things among which these entities are to be found includes only the “first thing,” and thus these entities consist of just the first “thing” (cf. Laks & Most 31116).

4b10 εἰ μὴ ἄρα, “if not, indeed”) See the first paragraph of the preceding comment.

Aporia 5

4b11–5a5 (τίς καὶ τίνες): What this first intelligible substance is, or what they are, if more than one, can be revealed through (a diaporia by) analogy or some other comparison.

It has been suggested that this aporia reflects an “epistemological pessimism” which implies that this substance (or substances) that has the nature of a first principle is not directly accessible to human knowledge (Laks & Most 31117). Cf. below at 9a18–23 and the Appendix.

Diaporia 5 (4b13–18). The discussion is divided into two separate diaporiae. The first argues by analogy, as just suggested, and makes use of yet another endoxon: (According to the opinion of the many or the wise,) the first principle of all is divine. By analogy, the first principles being sought should be assumed to have power and superiority over others, just like god is superior to all other beings.
For Theophrastus’s conception of the divine and its relation to the philo-
sophical and general ideas of his time see the study by Pötscher 1970,
75–112.

Diaporia 5.1 (4b18–5a5). Since the first principle is superior to others, as
just mentioned, and is connected with the sensibles (according to the en-
doxon established as principle in Aporia 2), and since, moreover, the objects
of nature have the unique property of being in motion, the first principle
must be posited as the cause of motion. Since the first principle is motion-
less in itself (reference to the axiom of the impossibility of infinite regress), it
causes the incessant circular motion of the heavenly spheres by being their
object of desire. In this manner Theophrastus introduces into the discus-
sion Aristotle’s major innovation concerning motion, his theory of desire.

In the final sentence in this Diaporia (5a4–5) Theophrastus refers to what
may be seen as an earlier aporia (and which could perhaps be numbered as
Aporia 5a): If motion is initiated only by something that is itself in
motion, does this not lead to an infinite regress? The theory of the unmoved
mover resolves the question of the origin of movement.

4b11 δ’ οὖν, “at any rate,” see 4a13 above.

4b11 αὕτη could refer either to οὖσια in the preceding paragraph or
to ἀρχή, and the answer given to this question at the beginning of the
following paragraph makes it clear that it is ἀρχή (Henrich 86 also
points out that the explanatory θεία γὰρ ἔτοι τῶν ἀρχῶν indicates the same).
However, strictly speaking, and given the immediately preceding
sentence, the reference should be, for τίς, to ἀρχῆς υσία ἔχουσα οὖσια,
and for τίνες, ἀρχῆς υσίν ἔχουσαι οὖσιαι.

4b13 ὁμοίωσις, “[procedure through] similarity,” or likening, is an act of
showing that some things are similar to each other. As such it is different
from ὁμοιότης, just plain similarity (in 5b1–2 and 8a20), which is the
quality, or the methodological principle, on the basis of which the act of
likening one thing to another is effected. Laks & Most 31 rightly point to
the fact that analogy in this passage, as also in 8a20, is a species of the
genus of proceeding through similarity or likening.

4b15 τὸν θεόν] The accusative makes it clear that the noun is the object
of a verb, which is clearly λαμβάνειν in this context. The juxtaposition of
the immediately following \textit{θεία}, the repetition of a word from the same root at the end of a clause and the beginning of the next (cf. J.D. Denniston, \textit{Greek Prose Style}, Oxford: Clarendon Press, 1960, 92–96), together with the inverted word order in the following \( γάρ \) clause, give the latter its stately and proverbial feel and its appeal to deeply held beliefs; see the following comment.

\textbf{4b16–17} τάχα \( μὲν \) \( οὖν \), “and yes, maybe”] \textit{Tάχα}, which occurs very frequently in this small treatise, sometimes presents a corrective reaction to a preceding statement in the form of internal dialogue, as in the present case (cf. van Raalte 135). Theophrastus has just noted that the first principle can perhaps be apprehended, analogously to a divine being, by taking into consideration its power and superiority over all else, which is the quality that makes it comparable to a divine being. To provide an explanation (\( γάρ \) \textbf{4b15}) for why the first principle should at all have this divine quality, he gives as reason the statement, “divine is the first principle of all, through which all [things] both are and abide.” Having said this, he imagines someone (or himself) saying that this is an easy explanation to give—presumably because it is a traditional explanation, an \( ἔνδοξον \), that one could expect easily to gain assent; Laks & Most \textbf{311} even suggest that it may be a proverb—to which Theophrastus responds by assenting to the objection (assentient \( οὖν \) but qualifying it in two ways. First, he casts the assent in doubtful terms (“maybe”), and second, he makes an important distinction in the manner in which an explanation is given for the statement, “divine is the first principle of all, through which all [things] both are and abide:” if it is in general and vague terms, as here (cf. van Raalte 135), then such explanation is easy; but if one wants a more explicit and (philosophically) convincing explanation, then it is very difficult. The particle combination \( μὲν \) \( οὖν \) here underscores this distinction by emphasizing the prospective \( μὲν \) (“yes, maybe on the one hand thus to explain is easy”) which is answered by Theophrastus’s objection to the objection by \( δέ \) (“though on the other hand it is indeed difficult”); see Denniston 473–474.

\textbf{4b17} \( οὖτως \), “in this manner”] Given the corrective reaction that this sentence presents to the preceding one, as just discussed, the adverb \( οὖτως \) can only refer to the explanation contained in the \( γάρ \) clause, “divine is the first principle of all, through which all [things] both are and abide.” (Cf. the exactly parallel use of the expression \( οὖτως \) \( ἀποδιδότα\) and its referent, a few lines further down, at \textbf{5a10–11}, where the explanation
referred to is the clause ἀπλῶς ... ἁπλῶς). Thus what is contrasted in the μὲν ... δὲ sentence here is not this easy explanation versus another, more convincing but difficult, explanation (as Laks & Most 311 n. 19 argue), but the manner in which this same explanation is given: either in lapidary or “proverbial” form or terms, as here, which is easy, or in terms philosophically more explicit and convincing, which would be difficult.

4b18 πιστικωτέρως] All manuscripts agree on this spelling, except for D, which has πειστικωτέρως, allegedly the older spelling of the word (LSJ), and hence, the reasoning goes, the form most likely to have been used by Theophrastus. However, it is not at all clear how far back the form πιστικός goes, and whether it may not have been already in use in Theophrastus’s time. We do find it in Plato (Gorgias 455a3), and the manuscripts there also waver between the two spellings, but Burnet prints πιστικός; I do not think that the issue has been resolved. There is also the question whether πειστικός and πιστικός mean exactly the same thing, given their respective etymologies (πείσω and πιστεύω). So in order not to eliminate good evidence from the text and prejudge the issue, I prefer to follow the reading of all the independent and oldest witnesses, including Ψ and Λ. The Arabic has an etymological translation for πιστικωτέρως, aqrab il- tqdıq, “more credible” (literally, “closer to being believed, or producing belief”), where tqdıq is used elsewhere (9b17) to render ἰστις (in the sense of “belief”), thus verifying for us the πιστικωτέρως spelling that must have existed in Ψ. Similarly, the Latin has credibilis, which also stands for πιστικωτέρως. The spelling in manuscript D is clearly a Renaissance scribal emendation, for there is no evidence that D had access to an independent ancient source other than the manuscripts we already possess.

4b18–19 τοιαύτης ... ἔπειπερ] In context, “such” can only refer to the immediately preceding declarative statement (before the modificatory τάχα sentence) which specifically describes the first principle as “divine”: ἡ πάντων ἠρχή ... τοιαύτης δ’ ὀνομάζεται ἠρχήν. The rhetorical connection and physical proximity of these two statements are such that they cannot be disputed. Clearly in the background there looms the entire preceding discussion that led to the declaration of the first principle as divine, but the immediate referent of τοιαύτης is ἡ θεία (not, as Laks & Most 32 suggest, “l’ensemble des acquis intermédiaires,” or “vague,” van Raalte 137). Besides, in all nine out of the ten uses of the word τοιαύτης in this Essay (see the Glossary), the referent of the word is always what has
immediately preceded; in the one instance where it is not (11b21–22), it points forward to the following clause. If this is the case, then the absolute genitive of the ςς clause is declarative, stating a premise for a conclusion that is to follow (4b21), and it cannot even be considered that it is concessive (Laks & Most 31–32). And this perhaps explains the emphatic πε in ἐπείπε: the conclusion that this first principle must be posited as the cause of movement (4b21–22) has two sorts of premises; the first is the general one of the divine nature of the first principle, “through which all [things]”—and hence also motion—“both are and abide,” as summarized in the absolute genitive clause beginning with τοιν, and the second is the specific quality of being in motion that characterizes the natural world, which requires a mover. Ἐπείπε introduces the second set of premises, and the particle emphasizes this point.

4b20 ἐν κινησιτι, “in motion,” for nature is, strictly speaking, inappropriate; nature itself is the principle of motion. Φύσις here must stand, or be an abbreviated expression, ως ἀπλως εἰπειτι, for what Theophrastus properly calls four lines later in the passage, τα τοις φύσεως, “the [things] of nature.” Theophrastus used exactly the same phrase, πάντα γαρ ἐν κινησιτι τα της φύσεως, in his Physics, a fragment from which is preserved by Simplicius, In Phys. 20.17 ff. Diels (CAG) = fr. 1.43 FHS&G. For an analysis of this fragment and its relation to this Essay see Laks 1998 and Sharples 1998, 36–40.

4b21 τοιν, referring to ἀρχη, of course, and not φύσις.

4b22 ἐπει δ’ introduces yet a third premise, after the genitive absolute and ἐπείπε, to arrive in the end to the desired conclusion of the object of desire.

5a1 ἄλλα λοιπόν] See below the comment at 5b18.

5a3 ἀρχης] The feminine pronoun can only refer to φύσις in grammatical terms, and not to ἀρχη (pace Henrich 88), though what is meant by this prepositional phrase is clearly, ἀπο της τοις ἄρχης φύσιν ἐχούσης ἀρχης.

5a4 ἐκείνο] The phrase has generated difficulties for scholars. To begin with, the referent of ἐκείνο can be ambiguous, insofar as Theophrastus uses the pronoun in this Essay in two ways: either to refer
back to something that immediately preceded (5a26, 6b19), or forward to an immediately following item (7a10, 9b13, 11a14). In this case, it was thought by Camotius and Usener to point forward and so they emended the transmitted reading κατ’ ἐκεῖνο to κάτεκεῖνο and καὶ ἐκεῖνο respectively, to mean, “and so this also would be resolved: that motion cannot begin …”. However the transmitted reading κατ’ ἐκεῖνο can be retained, for the phrase is a perfectly acceptable relational locution, parallel to κατὰ τὸ τοῦτο, “in accordance with this, in this respect, on the basis of this” (LSJ s.v. κατά; cf. van Raalte 144), with ἐκεῖνο pointing to the immediately preceding thought (as ἐκεῖνο normally does, cf. LSJ s.v.), namely, the desirable nature of the first principle from which the incessant and continuous circular motion derives (Reale, Laks & Most; Ross’s and Tricot’s understanding of the referent to be specifically τὸ ὁρόστον does strain κατὰ, as van Raalte 114 remarks, “to an intolerable degree”). The Arabic translation, finally, adds the word “also” in the sentence, which indicates that the translator read ὥστε καὶ κατ’ ἐκεῖνο in the Greek (fa-yajibu min dālika ... aydan). In the Greek transmission, καὶ before κατ’ could have easily been omitted by haplography. ὥστε καὶ adds the further consequence of establishing the desirable as the first principle: it helps resolve the difficulty involved in the Platonic position of a self-moved mover (for ὥστε καὶ see Denniston 299). For this last position see the references in Ross 42–43 and the other commentators.

5a4–5 τὸ μὴ εἶναι ... κινῆσαι] Comparative ἦ following a negative here means “except,” “unless” (Smyth § 2863a), not “or” (the literal translation by Ross 42 of this compressed clause is somewhat misleading). ἶκικη ἦ here means literally “beginning,” “starting point” (Ross, Henrich), not “principle” (Tricot, Laks & Most, van Raalte), since the problem addressed is precisely the origin of movement.

_Apria 6_

5a5–20 (δεῖται λόγου, ποία καὶ τίνων, 5a14–15): What kind the impulsion of the rotating heavenly spheres is and towards which things it is.

In the first half of this paragraph (5a5–13) Theophrastus reviews the attributes of the first principle discussed in Aporiae 2–5 and exalts it to a divine rank adding that it is also indivisible and unquantifiable. This summary leads to the next Aporia with its accompanying
Diaporia 6 (5a13–20): Manifestly the rotating heavenly spheres are many and their motions are opposed. Their opposed and interminable motions, as well as the final cause of their motions, cannot be explained by assuming either one or multiple first movers as the goal towards which they are impelled, i.e., as the object(s) of desire. For if the mover is one, it is absurd to suppose that the resulting movements would not be the same, and if it is not one, then it is equally absurd to suppose that they would be in concord.

After a summary statement of the Aristotelian position on the unmoved mover(s), in the immediately following Aporiae (6–12) and in Aporia 16 Theophrastus turns to raising problems about that theory. The question whether Theophrastus in the end abandoned the unmoved mover has been variously answered, though the majority opinion would appear to be that he had, with qualifications. See the statement of the problem by Sharples 1998, 87–88 and his references. For wider discussions of the issue of motion that the problem involves see Skemp 1969, D. Frede 1971, and Berti 2002.

5a6 μὲν δή [The long μὲν clause (5a5–13) sums up what has been said; it is answered by δέ in line 13. The two clauses are part of the same sentence and should not be broken up into two separate paragraphs as in previous editions. The particle δή is transitional and connective, summing up as accepted what preceded (“now”), but not inferential or consequential (“then”), without, presumably, losing its primary function of strengthening μέν (cf. Denniston 257–259).

5a6 ἄρτιΨο;Υκρονς means the parts of a whole being functionally well in place (cf. the telling passage about the vertebrae cited in LSJ, s.v.: οἱ σπόνδυλοι ... ἄρτιοι εἰσὶν ἀλλήλοιοι, Hippocrates, De articulis 45). What is normally given as words explaining it is εὐκρασία (well mixed together, in right measure and proportion: SVF III,278.28, p. 68), πληρότης (fullness or completeness, in the sense that no part is missing or out of place: Etymologicum Magnum 150.27), among other references given by van Raalte, 147–148. Henrich’s discussion, 189–191, who translates the word as “richtig,” is quite off the mark. Whatever λογώδης might mean in 7b18, its antonym (Gegenteil) is not ἄρτιος. Clearly the word implies soundness and health, insofar as proper arrangement and disposition of the parts are prerequisites for the functioning of the whole, but this is not its primary significance.
ἐνέργεια is normally translated in philosophical terms either as “activity” or “actuality,” depending on the context, in the specific senses given to the term by both Aristotle and Theophrastus. Theophrastus says that ἐνέργεια in the sense that he is using it here is “prior and more valuable” than movement (below, 7b14), and defines it as “the essence and peculiar form of each thing” (fr. 152 FHS&G; see the Loci Paralleli). In this context, a rendering of the term as “actualized state” better reflects what Theophrastus intends than “actuality.” For a discussion of the term see Blair 1967, Rudolph 1988, 233–237; van Raalte 148–150; Sharples 1998, 66–70.

The negative goes with the participle, to which the following ἀλλὰ responds (cf. van Raalte 151–153). For the structure of the sentence and its implication see the comment below on 5a13.

The dative plural in line 13 refers to the participle in line 9.

The English adverbs “simply” and “absolutely” cannot easily convey the sense here: the argument Theophrastus is advocating exalts the first principle to a class by itself in the absolute sense, without qualifications.

For the meaning of μερίς as “class, division” (“rank,” as in the Arabic translation, which I adopt) see LSJ s.v. II and III, and especially the reference to μέρος IV.3; cf. van Raalte 153–154.

Happ 1971, 616 and note 288, makes the point that although ἀφαίρεσις had acquired the status of an epistemological technical term in the older Academy, Theophrastus uses it in the conventional sense in this passage as he does later at 6a12–13.

It is important to note that ἀπόφασις, negation, here does not refer to the actual structure of the sentence in Theophrastus’s words in the text above (i.e., to the actual wording in lines 5a8–9, ἢτι δὲ μὴ … λέγον: Laks & Most 34332, Henrich 90), but to the proposition to which Theophrastus’s words here point. So when Theophrastus actually says that the argument he is discussing “says that it [the first principle] is not something divisible” (μὴ διαιρετόν … τι λέγον, lines 8–9), he is pointing to the proposition, “the first principle is not divisible” (in Greek,
οὐκ ἔστι διαφανές ἢ ἄρχή; cf. Aristotle, *De Interpretatione* 19b27), and this is the ἀπόφασις that he is talking about in line 13. This negative proposition is then used *in* (ἐν, line 5a12) an argument (and is not itself the argument), based on the divinity of the first principle, which overall is loftier and closer to truth than others. Aristotle frequently so describes the unmoved mover (see the Loci Paralleli), but a question may be raised (as, apparently, van Raalte 151–153, did) whether the statements that he is making on this subject are negative or affirmative; for when Aristotle makes statements like, τὸ πρῶτον κινοῦν ἀδιαίρετον ἔστι, “the first [unmoved] mover is indivisible”, etc., these statements are formally affirmative and not negative, so the question is whether Theophrastus is objecting even to Aristotle’s way of putting the argument. But it appears very doubtful that Theophrastus is at all interested in this context in the logical semantics of Aristotle as set forth in *De Interpretatione*.

5a13 δέ, responding to μέν in line 5a6; see above.

5a14 ἔφεσεος] With reference to the desire for the unmoved mover, Theophrastus uses here and at 5a28 and 5b11 a different word, ἔφεσεος, than the one he uses elsewhere, ὄρεξις, at 5a2 (in ὄρεξτόν), 5a20, etc. However, at 6a9 he uses both words together in asking whether the rotation of the bodies is “through some impulsion and desire,” ἔφεσει τινι καὶ ὄρεξει, which would indicate that the two words are synonymous. The same appears to be the case with Aristotle’s use of the two words in a related context in *EE* 1218a24–33, where ἐφοίτεσα, ὄρεγέτεσα, and ὄρεξις seem to be used interchangeably. Simplicius, *In Phys.* 250.22–23 Diels (CAG), explains the difference by saying that ὄρεξις is what animate beings have, ἔφεσις inanimate natural bodies. This would appear to be indicated by the passage below in the Essay (at 5a28), where Theophrastus implies that if impulsion entails soul then it is desire—but given the nine centuries of Greek usage separating Simplicius from Theophrastus, it is not clear whether Simplicius may not just be rationalizing (cf. further the references in van Raalte 165). On the other hand, on the basis of the passage in the *Eudemian Ethics* just referred to, Berti 2002, 344–345, saw in ἔφεσις a reference to Academic doctrine, suggesting that Theophrastus here is criticizing Platonists rather than Aristotle.

5a15 The genitive interrogative pronoun τίνον could theoretically refer either to the object towards which the impulsion is directed or the subject being impelled, as the commentators note, but there can be little doubt,
in context, that the genitive is objective. The argument that immediately follows, in response to ποία καὶ τίνων, raises precisely the problem of how the object towards which the impulsion is directed is to be understood.

5a16 ϕοραί] The reference is to the motions of the celestial bodies as they are “carried along” across the heavens. Theophrastus’s reference here is directly to Aristotle’s *Metaphysics* Λ 8, where the word ϕορά is repeatedly used, and where Aristotle describes the six different motions of these bodies, conveniently summarized by Ross 43. It is accordingly inaccurate (and anachronistic) to render this word as “orbit” or “orbiting” (Umlaufbahn, Henrich).

5a16–17 καὶ τὸ ἀνήνυτον … ἄφανές] This phrase, which seems to have caused unnecessary problems, can be most naturally understood to refer to the motions of the spheres (ϕοραί), the interminable nature and goal of which do not seem to be apparent; i.e., one is to understand, καὶ τὸ ἀνήνυτον αὐτῶν [sc. τῶν ϕορῶν] καὶ οẑ χάρων ἄφανές. This can be best brought out by eliminating the comma traditionally placed after ὑπεναντίας. Van Raalte 169–171, who has a different interpretation and suggests a different punctuation, nevertheless cites two passages (Plato, *Phaedo* 84a5–6 and Ps.-Plato *Axiochus* 371e8) which best bring out the meaning of ἀνήνυτον: the futile interminableness of Sisyphus’s rolling of the stone (Σισύϕου πέτρος ἀνήνυτος) and Penelope’s weaving of her web (ἀνήνυτον ἔργον πράττειν Πηνελόπης). The οẑ χάρων phrase lacks the article τὸ immediately before it, but it is not necessary (cf. van Raalte 169n1); the article before ἀνήνυτον serves for both. It can be misleading, though, and it apparently misled Ishâq; see the corresponding note to the Arabic translation.

5a17 ἀτοπον, “it makes no sense”] The word refers to something that is out of place, that does not fit, and hence, in Theophrastus’s philosophical usage, something that is logically inconsistent and incongruous. See his usage of the term in *Ign*. §4,3, ἀτοπον φαίνεται πρῶτον αὐτό (sc. τὸ πῦρ) λέγειν καὶ οẑ ὄρχην, εἰ μὴ οẑ ὄν τ’ ἐἶναι χορῆς ὀλῆς (p. 5, line 14 Coutant), i.e., to say both that fire needs “matter” or fuel in order to exist and that it is a primary and first principle does not make sense because contradictory. The word thus means more than “strange” in its accepted meanings of “alien, unfamiliar, and unaccountable” (Ross, Tricot, Laks & Most, Henrich; “puzzling,” van Raalte; though more accurately, “assurdo,”
Reale 1964), for it points to the logical incongruity of two (sets of) facts. Cf. further Baltussen 2000, 203–204, and his references to Le Blond.

The word occurs three times in the Essay; here and at 5b14 and 7b23. Ishâq translates the first two instances with šanī‘ (repugnant, horrid) and the last with qabīh (bad, ugly), which are, essentially, ethical terms referring to negative moral qualities, not intellectual incongruity. Ishâq’s choice of words is difficult to gauge. Either these terms, in 9th century Baghdad Arabic, also had an intellectual reference to them, which, however, is not recorded in the dictionaries, or, what seems more likely, Ishâq’s understanding of the term was colored by its Christian use, meaning “wicked;” cf. Lampe s.v.

5a18 τὸ μὴ πάντα τὴν αὐτὴν] In the elliptical sentence of Theophrastus, the infinitive that complements the substantialive use of the article τὸ can be either active or middle, κινεῖν or κινεῖσθαι, i.e., either τὸ μὴ πάντα τὴν αὐτὴν κινεῖν κίνησιν, or τὸ μὴ πάντα τὴν αὐτὴν κινεῖσθαι κίνησιν, in which case the noun πάντα will function either as the object or the subject of the verb, respectively (“why it [the mover] does not move all with the same motion,” or “why all do not move with the same motion”). Ross prefers the former alternative, and everybody else, including Ishâq, the second. Berti 2002, 345, takes the pronoun αὐτὴν to refer to ἐψεὺς and translates, “è assurdo che tutti non abbiano lo stesso desiderio,” which seems quite improbable in context, as the above analysis of the clause indicates.

5a19 ὡστε, which seemingly introduces the apodosis of a conditional sentence, has long baffled scholars and does not appear to be fully understood. Hermann Bonitz wrote a substantial article on its use in Aristotle in the 1860s,7 in which he also cited earlier references in the works of his German predecessors. He made two basic points. The first is that such use of ὡστε, beyond being a mere indication of anacolouthon in Aristotle’s works, is rather a grammatically inaccurate (“sprachlich ungenau”) stylistic peculiarity of his (p. 75). The second is that, once this is understood, it should affect the punctuation of Aristotle’s works

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7 Originally published in the Sitzungsberichte der philosophisch-historischen Classe der kais. Akad. der Wissenschaften in Vienna, 1862, 72–90, it was reprinted in his Aristotelische Studien, Hildesheim: Olms, 1969, 202–220. Bonitz also listed the Aristotelian passages which exhibit this use of ὡστε allegedly “in apodosi” in his Index 873a31–44.
where it appears in a way that will reflect it (p. 80). Minute analyses of numerous passages in Aristotle where this occurs accompanied Bonitz's observations. In the summary of his research in the Index (873a31–44), Bonitz mentioned that in most cases the anacolouthon is due to the longish protasis of the conditional sentence which contains many subordinate phrases (per plura membra continuata vel parenthesibus intercepta), though he admitted that in some instances it is also found after brief and simple (brevem ac simplicem) protases. Ross apparently followed this concise statement of the case in the Index rather than Bonitz's full study, for he repeated it both in his commentary on this text of Theophrastus (pp. 43–44) and in his commentaries on Aristotle's works (e.g., Aristotle's Physics, Ross 1936, p. 643 ad 233b7–11). As a matter of fact, it appears that Ross was rather uncomfortable with the appearance of this feature in short sentences, and in one instance at least he accordingly followed an inferior manuscript reading which eliminates the problem by dropping the particle δέ (Physics 232a12 and note on pp. 640–641; this incidentally, is the very text which Ross had given in the commentary on Theophrastus as example of the occurrence of this feature in short protases!). Subsequent commentators on Theophrastus mostly referred to Ross.

However, valuable as Bonitz's study is, and despite the acceptance by modern commentators of his analysis, it cannot be thought that ὡστε can introduce a conditional apodosis. Van Raalte, exceptionally, writes in a brief note (171n1) about the passage in Theophrastus that the ὡστε clause “takes the place of an apodosis rather than constituting an exceptional instance of ὡστε in apodosi.” The question is, how. This is not the place to go into a detailed study of the issue (clearly a desideratum), but a few remarks are in order. First, since this passage occurs in a work by Theophrastus, it cannot be maintained that this was a stylistic feature peculiar to Aristotle alone. I could not check thoroughly in the time at my disposal all the extant works by Theophrastus or other related Greek literature, but if the style of Theophrastus's Essay, because of its aporetic nature, is close to that of Aristotle, the possibility ought to be investigated whether this feature may not be more at home in the style of oral disputation because of the semantic jump it requires from the protasis of the conditional clause to the result clause of an assumed apodosis (as discussed below). Secondly, Bonitz’s (and following him, Ross’s) attempted

8 The comprehensive Greek grammars by K.-G. and Schwyzer do not mention a feature of ὡστε “in apodosi” simply because it does not exist.
explanation of the feature as deriving from anacolouthon in sentences with long protases cannot hold because of its obvious appearance in shorter ones as well (see the references in Bonitz’s article and Index).

The following example would appear to give a clue about the grammar and function of this use of ὥστε: De anima 432b21–26: εἰ οὖν ἡ φύσις μήτε ποιεῖ μάθην μηθὲν μήτε ἀπολείπει τι τῶν ἀναγκαίων, πλὴν ἐν τοῖς πηρόμασι και ἐν τοῖς ἀτελέσιν, τὰ δὲ τοιαῦτα τῶν ζωὸν τέλεια καὶ οὐ πηρόματά ἐστιν (σημεῖον δ’ ὅτι ἐστὶ γεννητικὰ καὶ ἀκμὴν ἔχει καὶ φύσιν)—ὡστε εἰχὲν ἄν καὶ τὰ ὀργανικὰ μέρη τῆς πορείας. This is a good example of the precise function of ὥστε in the apodosis because the passage is unambiguous, in the sense that though the protasis is not particularly short, no part of it can be misconstrued as the apodosis. The function of the ὥστε clause here, then, is not to be the entire apodosis but a part of it, the part that expresses the result or consequence of an assumed grammatical apodosis. This is clear from the unambiguous sense of the text and it appears in almost all translations of the passage, which add a clause or a phrase to express the apodosis in the Greek which is implied but not actually stated: “then it follows too that” (D.W. Hamlyn, Oxford 1968), “il en résulte que” (Bodéüs, Paris 1993), and, most significantly, “dans ces conditions donc” (Barbotin, Paris 1966), etc. It is thus clear that the use of ὥστε in these cases is consecutive. As such, it has a number of uses (Schwyzer II,677–681), two of which would appear to be relevant here: introducing a result clause after demonstrative adjectives or adverbs (οὔτως etc.) in the principal clause, and (perhaps as an extension of this most common usage?) introducing independent sentences in the sense of “consequently” (Schwyzer II,680 §7), where apparently a principal clause, to which ὥστε answers, can frequently be semantically assumed. It thus appears that ὥστε in these conditional sentences does not so much introduce the apodosis as constitute the consequence of an assumed and unexpressed grammatical apodosis, such as, “If x and y and z obtain, ⟨then, these stated conditions are such—or, the situation so develops⟩ that the consequences are as follows.” It may be too much to assume that some such phrase as, εἰ . . . , ⟨οὔτως ἔχει⟩ ὥστε . . . , is to be understood in every instance of this use of ὥστε, but clearly its function has become one which expresses the consequence of the condition in the protasis with greater emphasis than a regular apodosis without ὥστε could have done.

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9 I follow the text and punctuation in the edition by Ross 1961, of whose dash before ὥστε I fully approve.
5a19–20 τὸ σύμφωνον ... τὴν ἀρίστην] The clause is quite clear both in its syntax and meaning; the complications raised by Laks & Most 35n39 (followed and subscribed to by Henrich 91–92) appear to be unnecessary. Laks & Most translate, “leur accord en matière de désir, quand ils suivent la meilleure [des translations], n’est absolument pas manifeste.” But first, the context cannot support this interpretation; the concord must refer to the concord of movements, not desires, as they claim, because the objection to the preceding alternative was also based on the concord of movements: if the mover is one, Theophrastus’s argument goes, it is absurd to suppose that the resulting movements would not be the same; and if it is not one, then it is equally absurd to suppose that they would be the same, i.e., be in concord. And second, for Laks & Most’s interpretation to stand, the wording in the Greek ought to have been different and differently punctuated, as follows: ὥστε τὸ σύμφωνον εἰς ὄρεξιν, ὴντων ἄυτών τὴν ἀρίστην, οὐθαμώς φαινοῦν. Since the text is not thus worded, and the words εἰς ὄρεξιν ὴντων τὴν ἀρίστην clearly belong together, then ὄρεξιν ἀρίστην must mean that the desire is “best” in the sense that it is desire for the best, and hence the object of the desire would not be desire itself (thus the difficulty identified by Laks & Most does not exist), but the Best itself (so in a sense Tricot in his translation should have capitalized Meilleur rather than Désir).10 The correct evaluation of the preposition εἰς in the clause is important; it does not express place (“in the direction of,” Jaeger 1948, 349; Ross), but purpose and end (cf. LSJ s.v. V), “in the fulfillment of;” for this causal use of εἰς, where “εἰς zunächst den Zweck angiebt, welcher bei etwas verfolgt wird,” see Müller 1878, 8–9.

For the cosmological and ontological implications of Aristotle’s ordering of the spheres, skeptically countenanced here by Theophrastus, see Happ 1971, 363–367. For the one system in which Aristotle argues that all the spheres for all the planets must work together, see Beere 2003, 5 ff.

Aporia 7

5a20–22 (ζητεῖ λόγον): The great number of celestial sheres (and their separate movers) needs an explanation more pertinent than the one provided by the astronomers.

10 Skemp 1969, 219, interprets, “as they move towards the most excellent form of desire,” which does not avoid the difficulty raised by Laks & Most.
This is a reference to the account by the astronomers Eudoxus and Calippus which Aristotle provisionally invokes in *Metaphysics Λ 8* in explanation of the number of spheres. Aristotle introduces that section by calling astronomy “most pertinent” or “most akin” to philosophy, but ends, after having presented the astronomers’ theories and his adaptation of them, by leaving the improvement of the discussion to more competent hands. Theophrastus takes Aristotle at his word and echoes the sentiment here. On the questions raised here by Theophrastus on the relevance of astronomy to metaphysics and on Aristotle’s competence in astronomy, see Lloyd 2000.

δέ introduces here the related but incidental (though not necessarily parenthetical, pace van Raalte 176) aporia about the multitude of spheres and their numerous movers that the immediately preceding sentence brought to Theophrastus’s mind. The main subject under discussion in the paragraph of Aporia 6, the desire for the unmoved mover(s), is interrupted for a moment for Theophrastus to register his dissatisfaction with, apparently, Aristotle’s astronomical theories in *Metaphysics Λ 8* (see the next comment and the Loci Paralleli), and is then continued with the following Aporia 8. The use of the subordinating copulative δέ here is too common to require comment.

The missing word at this point in all the extant Greek manuscripts and the Latin translation (Λ), noted by most editors, is supplied with the help of the Arabic, which has the verb *anisa* (*lam ānas*), here most likely rendering οἶκεῖος (see the corresponding commentary on the Arabic translation); there seems to be little doubt that this is the missing word. Besides, Theophrastus here is echoing Aristotle’s words in *Metaphysics Λ 8, 1073b4*, where astronomy is called the science “most relevant” or “most pertinent” (οἶκειοτάτη) to philosophy with regard to establishing the number of celestial motions and hence of the spheres that cause them (see the Loci Paralleli). Theophrastus begs to differ, and is calling for a philosophical discussion of the reason for the number, and also, one would think (and as Laks & Most 351n40 suggest), for the necessity of a multiplicity of movers. In a way, Theophrastus takes up, and demands more of, the conclusion to that section by Aristotle (1074a13–17): “Let then the number of the spheres be that many, whence it is reasonable to suppose that there are as many unmoved substances and first principles. (I say “reasonable” and not “necessary”) because (γάρ) necessity ought to be left to more powerful [thinkers] to state.” Theophrastus seems not to
find this supposition reasonable, and wants a detailed discussion of the reason for it, or the necessity for it, challenging precisely Aristotle’s disclaimer that this discussion ought to be left to better thinkers.\(^{11}\) Aristotle appears to have taken Theophrastus’s admonition to heart, for, as Owen 1961, 90, astutely remarked, he later changed his mind about the ability of (astronomical) observation to provide knowledge about the “divine” beings, i.e., the stars and the celestial spheres; in their regard, he says, “there are few things that are evident to the senses” (\(\delta\lambda\lambda\gamma\alpha\, \tau\alpha\, \varphi\alpha\nu\varepsilon\varrho\alpha\) \(\kappa\alpha\tau\alpha\, \tau\iota\nu\, \alpha\iota\sigma\theta\eta\iota\omicron\nu\), \(PA\ 644b24–28\).

The expression \(\text{o}ι\chi\varepsilon\iota\omicron\varsigma\ \lambda\dot{o}g\omicron\varsigma\) in the sense of “relevant, pertinent argument” is common in the vocabulary of both Aristotle and Theophrastus. A passage from Aristotle’s \textit{Physics} (264a7–9) gives us a good idea about what the issue raised by Theophrastus here is. With regard to the question of the circular \(\varphi\omega\varphi\alpha\) of the celestial bodies, Aristotle provides an account of its continuous nature by having recourse to two kinds of arguments: one based on the nature of rectilinear and circular motion, which would be a physical argument, and another based on logical considerations concerning opposites, which he calls a “logical” (\(\lambda\dot{o}g\iota\kappa\iota\omega\varsigma\)) argument (see the analysis of the passage in Ross’s commentary in his edition, corr. ed. Oxford 1966, p. 715). The former, physical argument, Aristotle characterizes as “pertinent” to the subject (\(\text{o}ι\chi\varepsilon\iota\omicron\varsigma\ \lambda\dot{o}g\omicron\varsigma\)), insofar as the question is a physical one and so the argument most pertinent to it is also physical. The point that Theophrastus is thus making here is what has just been stated in the preceding paragraph, that the argument of the astronomers is a mathematical argument that does not satisfy the requirements of an explanation for a metaphysical subject.

For a similar use of the expression \(\text{o}ι\chi\varepsilon\iota\omicron\varsigma\ \lambda\dot{o}g\omicron\varsigma\) in Aristotle see \textit{Politics} 1323b38–39; Theophrastus, as a matter of fact, even wrote an essay on the subject with the very title, \(\Pi\epsilon\omicron\ \text{o}ι\chi\varepsilon\iota\omicron\\nu\ \lambda\dot{o}g\iota\nu\\nu\nu\ \alpha\) (FHS&G fr. 1,280). It is not clear whether he may have been responding in this essay to the peculiar use made of the concept by Antisthenes, as discussed by A. Brancacci, \textit{Oikeios logos. La filosofia del linguaggio di Antistene}, Napoli 1990.

For \(\text{o}ι\chi\varepsilon\iota\omicron\varsigma\) in this context see also the fragment by Eudemus quoted by Simplicius \textit{In Phys. 48,8–26} Diels (\textit{CAG}) = fr. 34 Wehrli.

\(^{11}\) “The question of necessity is left in abeyance,” says G.E.R. Lloyd 2000, 273, of this passage; the problematic nature of Aristotle’s words here is discussed by Lloyd at 262–263.
Aporia 8

5a23–5b10 (ἄπως κρόνος): Why the rotating celestial spheres, desiring (an) immobile mover(s), pursue not rest but motion.

This aporia is discussed in three stages, in one diaporia immediately following (Diaporia 8), in a second following that (Diaporia 8.1), and in a later discussion at 7b23–8a7 (Diaporia 16.2).

Diaporia 8 (5a25–28). Concerning desire, the aporia is how it can be that the celestial spheres, though possessed of a natural desire for the unmoved mover (as Aristotle claims), pursue, (contrary to all logic,) not rest but motion. (But leaving Aristotle aside,) why is it that this (i.e., the pursuit of motion) can be maintained, (in an even more manifestly illogical way,) at the same time with imitation this time, also by (Platonists and Pythagoreans)? For they, too, maintain that the numbers are the one (as being derived from it and unmoved like it, and hence the spheres should be imitating not motion but rest).

This diaporia, stated in one sentence only as a rhetorical question, has presented difficulties of interpretation. An initial problem is how to understand the semantic transition from Aristotle’s theories (desire for the unmoved mover) to those of the Platonists and Pythagoreans (imitation of the one), and the precise rhetorical meaning of τί οὖν which opens the sentence. Is it an indirect criticism of Aristotle for having failed to base his theory of desire on a theory of imitation like the Platonists, as Laks & Most 36n42 suggest, or is it a rhetorical expression of indignation that not only Aristotle, with his theory of desire, failed to see the contradiction between the desire for the unmoved mover and the pursuit of motion rather than rest, but especially the Platonists, and in a manifestly more illogical manner, with their theory of imitation? The style in which this sentence is written, with the emphasis clearly laid on imitation, ὁμα τῇ μιμήσει, suggests the latter.

The main difficulty, however, is presented by the elliptical nature of the final καὶ γάρ clause in the sentence. To understand it, it is imperative to follow Theophrastus’s argument closely and especially the point he wishes to make. Having first stated the self-contradictory nature of Aristotle’s theory of desire because of the discrepancy between the desire of the celestial bodies for the unmoved mover and their pursuit of motion rather than rest, with the next sentence Theophrastus now points out a
similar discrepancy in the views of those who uphold the one and the numbers as ultimate principles through whose imitation the heavenly bodies and, by extension, sensible things are in motion or come to be. As Ross explains, the similarity “is that, whether we say that the sensible world ‘desires’ or that it ‘imitates’ the first principle, we should expect to find it in that case having the same characteristics as the first principle—not movement but rest.” The discrepancy in the case of Aristotle’s theory is obvious, in that the ultimate principle which is desired by the heavenly bodies is expressly identified as the “unmoved mover”, and hence whatever desires it should pursue not motion but rest, as Theophrastus says. In the case of those who uphold the one and the numbers as ultimate principles whose imitation brings about motion, the situation is not as clear. The discrepancy, in the case of those who uphold the one, is real only when the one is taken to be motionless, in which case those who claim that things both imitate the one and are in motion can justifiably be said to fall into contradiction. Now the one is unmoved (cf. the passage from Xenocrates cited in the Loci Paralleli: immutabile). The problem is with the position of those who uphold the numbers as ultimate principles: they can be said to fall into contradiction only if the numbers are, as first principles, unmoved. Theophrastus’s rhetorical question τί οὖν ... λέγοντι claims that this discrepancy exists equally (ὁμοίως) in the position of those who uphold the numbers as it does in that of those who uphold the one, and the emphasis Theophrastus puts on the word ὁμοίως implies that the position that numbers as first principles are unmoved was not something that was known as commonly, or that people were willing to accept as readily, as that which claimed immobility for the one as principle. So the phrase with the word ὁμοίως points this out to the audience (“you know,” Theophrastus is saying, “it is not only those who uphold the one who say that it is immobile and hence fall into this contradiction, but equally those who uphold the numbers”), and the following καὶ γάρ clause provides the explanation; καὶ γάρ explains ὁμοίως. In other words, the raison d’être of the καὶ γάρ clause is to state or explain the immobility of the numbers, so that the discrepancy in the position of those who both say that things move or come to be in imitation of the numbers and at the same time claim that numbers are immobile can be real; in the context, the καὶ γάρ clause can have no other purpose. Thus Henrich (95) is right in pointing out that the καὶ γάρ clause refers not to the theory of imitation but to that of numbers (“ergänzt nicht die Theorie der μίμησις, sondern ausschliesslich die Zahlenlehre”).
If this is so, then the καὶ γὰρ clause can be taken at its face value to mean, “for these people too say that the numbers are the one,” in the sense either that they are ultimately the one, being derived from it, and hence also unmoved, or that they are like the one, unmoved, a position ascribed to Xenocrates (fr. 16 Heinze; see the Loci Paralleli). The reference to Xenocrates would appear to be also behind the problematic passage in Aristotle’s *Eudemian Ethics*, 1218a24–28, as Brunschwig 1971, 212–216, argues, where Aristotle says, οἱ ἄφθοι ἐφέπνεα, the numbers are impelled, presumably towards the one, though the transmitted text does not say so, despite the numerous attempts by scholars at emending it to do precisely that (Fritzsche, Richards, Ross; see Walzer and Mingay’s critical apparatus *ad loc*.). But regardless how scholarship resolves the object that is the goal of the numbers’ impulsion in this passage of the *Eudemian Ethics*, what is relevant for our (and Theophrastus’s) argument here is that if numbers are impelled and have desire, they must undergo some kind of κίνησις, change or movement, for they would have to have life—to say that they are lifeless is an “audacious” (παρὰ βετας) and absurd statement, as Aristotle notes in criticizing this theory. Thus the implication that one would derive from such a theory, even if its adherents do not say (as Aristotle remarks) precisely how it is that numbers desire, is that numbers are moved. Theophrastus then would seem to be reacting to this implication of the theory about numbers, that they may be moved (in which case, the movement of sensible things in imitation of numbers would not be paradoxical, as Theophrastus wants to argue in the passage under discussion), and he accordingly stresses that this is not so, that even those (like Xenocrates?) who uphold the numbers say that they are the one, unmoved like it.

If the point and force of Theophrastus’s argument here is as just described—to show that the numbers, *when taken as principles*, are just as unmoved as the one itself, so that the assumption of the generation of the moving sensible world through imitation of the immobile numbers would be contradictory, as Theophrastus claims—then the καὶ γὰρ clause cannot be assumed to have missing here an infinitive like μιμεῖσης or διώκειν (“for the latter themselves speak of the numbers as imitating the one,” Ross, followed by Tricot; Theiler 1958, 103 / 293; Reale 1980, 394; Laks & Most; for διώκειν see Skemp 1969, 218). Because if the numbers imitate or pursue the one, they are either unmoved like it or moved. But if they are moved—as one would expect them to be since the sensibles, which imitate the one, are also moved—then they themselves would be in motion, and thus when numbers act as principles and sensible
things imitate them, the resulting motion of the sensible things would not be contradictory, and hence the very point that Theophrastus wishes to make about imitation (imitation is untenable because imitation of unmoved principles cannot lead to movement) cannot be made. So if the numbers imitate or pursue the one, they must be unmoved. But this time the objection would be, if imitation leads to immobility when the numbers imitate the one, why does it lead to motion when sensible things imitate it or them? Thus in this case also Theophrastus cannot make the point he is making in the text because if numbers are unmoved this means that imitation does work, at least in the case of the numbers imitating or pursuing the one, and he would then have to discuss and explain the special circumstances concerning sensible things, in whose case imitation does not work. But neither does Theophrastus enter into such a discussion nor is there any indication that he wishes to take the argument there. Thus the point of the καὶ γάρ clause cannot be imitation (or pursuit) because it does not fit the argument that Theophrastus is making here, and the clause cannot be read by assuming a missing infinitive μιμεῖσθαι or διώκειν.

Van Raalte (and, following her, Henrich and Dillon 2002, 178 and note 11) does not think that μιμεῖσθαι or διώκειν is the missing word here either, but she offers an emendation of the text whose upshot is that it coalesces the two positions, that of those who uphold the one and that of those who uphold the numbers, which, though in the right direction, misses the point about the motion of the numbers. She records a possible emendation of the text on the suggestion of van Ophuijsen, καὶ γάρ αὐτοὶ (οἱ) τοὺς ἀριθμοὺς (sc. λέγοντες) φασιν (sc. εἶναι) τὸ ἕν, which she translates as, “for the adherents of the numbers themselves too postulate the One” (“For those who favour numbers also postulate the One,” Dillon 2002, 177). The emendation is quite ingenious, because palaeographically plausible, but it cannot be entertained not only because it does not fit the analysis of the argument as stated above, but also on stylistic grounds. First, the repetition of οἱ τοὺς ἀριθμοὺς (sc. λέγοντες), whether with or without λέγοντες, right after διὸ τοὺς ἀριθμοὺς λέγουσιν, which is already repeated in αὐτοὶ, would be more than unbearably pleonastic, it would be untenable. Second, if Theophrastus wanted to say what van Raalte wants him to say in her reconstructed sentence, he would simply have said, καὶ γὰρ αὐτοὶ φασὶν εἶναι τὸ ἕν, or even just καὶ γὰρ αὐτοὶ φασιν τὸ ἕν. The presence of τοὺς ἀριθμοὺς in the clause, just four words after they have already been used in the sentence, makes it clear that Theophrastus wants to say something different about them,
not use them in the same phrase as before, and according to the analysis I offered above, it is precisely the fact of their immobility that he wants to stress.

**Diaporia 8.1** (5a28–5b10). *If the heavenly bodies have impulsion or desire, then they must have soul; and if they have soul, then they must have movement in the form of thought, but also of desire, which springs from thought. Thus the movement of the soul in the form of thought and desire is primary, whereas the rotating movement of the spheres, if it is caused by desire for the prime mover, is secondary. Hence the prime mover cannot be the cause of the best movement (because it would be contrary to the implied endoxon in this Aporia that the first must be the best).*

Theophrastus’s argument at 5b7–10 would appear to be addressed at Aristotle’s *Metaphysics* Λ 8, 1072a26, where the ὀρεκτόν causes directly the circular movement of the spheres, without explaining how this actually works.12 So Theophrastus’s objection claims that the ὀρεκτόν does not cause directly the circular movement, but it moves the soul, or even better, the intellect; and it is the soul or intellect, which are the best of things as principles (as Aristotle was later to state in *De anima* 410b12–15), that cause the circular movement through the ὀρεκτόν they develop for the first. Aristotle responds to this criticism by developing in the later in date *De anima* the mechanism of the causation of movement. In Γ 10, 433b13–21, he says there are three things:13 (1) that which causes movement, which is subdivided into (1a) that which is unmoved (i.e., the good to be achieved by action) and (1b) that which causes movement and is itself moved (i.e., the faculty of desire, for actual desiring is a movement); (2) that with which it causes it (i.e., the corporeal organ by which desire causes movement); and (3) that which is moved (i.e., the animal). Thus Aristotle qualifies his earlier position that there can be no self-movement by saying that “it is by virtue of having desire that an animal moves itself” (433b27–28; Ross 1961, 315). In this fashion what the unmoved mover sets in motion is not the circular movement of the spheres but the desiring movement in their souls, and it is this desiring movement which in turn sets them in circular motion. This means that Theophrastus could not have written his diaporia in this passage the way

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12 Only Berti 2002, 349, thinks that Theophrastus is here using a doctrine by Plato against Plato’s followers.

13 Borrowing freely Ross’s rendition of the argument in his *De Anima* 1961, 315.
he has if the *De anima* had already been written, for it seems that the passage in the *De anima* is an actual response to this difficulty raised by Theophrastus.

Grumach 1966, 51–54 and 62–64, first associated this diaporia by Theophrastus with the *De anima* passages from Aristotle and drew out its implications for the position of the Stoa (Grumach’s arguments were summarized by Reale 1980, 384–385); Reale 1964, 37–55 (and especially 46–50), then discussed it at length. The issue of the movement of the celestial souls due to desire, which became subsequently standard Peripatetic doctrine, was thus first raised by Theophrastus, as pointed out by I.M. Bodnár in a written communication to G. Endress, who reports it in “Alexander Arabus on the First Cause,” in C. D’Ancona and G. Serra, eds, *Aristotele e Alessandro di Afrodisia nella tradizione araba*, Padova: Il Poligrafo, 2002, 41.

5a26 The referent of the pronoun ἐκεῖνοι here has been much discussed, unnecessarily, it seems; for the various theories see van Raalte 184–185 and the summary by Henrich 92–93. The most natural way to read the sentence, in the rhetorical sweep of the argument, is to take the neuter pronoun to point to what Theophrastus has just said (ἐκεῖνοι referring, as it normally does, “to what has gone immediately before,” LSJ s.v.), viz., the whole statement (and not just one word) that sensibles “pursue not rest but motion” (οὐ τὴν ἡρέμιαν διώκουσιν ἀλλὰ τὴν κίνησιν). Without any hint of having had difficulty, Ishāq also understood it in this way, “this statement” (ḥadā l-qawl). There is danger in disregarding the regular meaning of words and coming up with ad hoc “rules,” as Ross 45 does when he says that Theophrastus “tends to revert to the neuter when he is referring to anything inanimate;” see below the commentary at 6b16–17.

5b3 ψυχή ... ὑπάρχειν] This brief sentence has exercised all students of Theophrastus’s work, including Ishāq. The problem has been both the case in which the opening word, ψυχή, is to be read, and the proper understanding of the word ἄμα and the correct appreciation of the emphasis indicated by its position in the word order. The Greek manuscripts and the Latin translation have ψυχή in the nominative, except for C, which has both ψυχήν and κίνησιν in the accusative, an obvious (and negligible) scribal emendation intended to read δοκεῖ as impersonal. If, then, ψυχή is read in the nominative (as done by Wimmer and van Raalte following the Greek manuscripts), it has to be taken together with κίνησις, in which case the sentence could yield two possible understand-
ings of ἁμα: (1) ψυχη δ' ἁμα καὶ κίνησις δοξοῦσιν ὑπάρχειν14 where adverbial ἁμα nuances the conjunction καί,15 and (2) ψυχη δε καὶ κίνησις δοξοῦσιν ἁμα ὑπάρχειν, where adverbial ἁμα modifies ὑπάρχειν. Version (1) would mean, “Soul together with movement seem to exist,” which may be an inelegant way of saying what version (2) says, “Soul and movement seem to exist together,” or, as understood by van Raalte: “Soul seems to be coexistent with movement.” Next, if ψυχη is read in the dative, as originally corrected by Usener (1861) and accepted by all modern editors, then we have essentially one way to understand the sentence, (3) ᾅμα δε δοξει καὶ κίνησις ὑπάρχειν ψυχη, where adverbial ᾅμα modifies δοξει ὑπάρχειν, with the dative ψυχη complementing ὑπάρχειν but placed first in the sentence because of emphasis. The meaning would be, “At the same time movement also seems to pertain to soul” (as in the translation of Laks & Most). Laks & Most 38n46 mention another possibility of reading the sentence, namely, (4) δοξει δ' ᾅμα (τη) ψυχη καὶ κίνησις ὑπάρχειν, where prepositional ᾅμα is directly connected with ψυχη in the dative, and meaning, “It seems that movement also exists together with soul.” It would be difficult to maintain this because of the position of ψυχη preceding ᾅμα in the original sentence16 and because one would have expected an article before ψυχη, though if this were to be the reading, ψυχη δ' ᾅμα would echo μετά ψυχης in 5b1 and yield a parallel meaning. In any case, Ishāq did understand the sentence as in version (4), translating, “It seems with the existence of the soul [there is] motion” (for a discussion of this version see the corresponding commentary in the Arabic translation). It is clear that Ishāq read in his Greek exemplar, Ψ, ψυχη in the dative, which corroborates Usener’s conjecture.

The course of the argument, which may indicate which alternative reading of those offered above is most likely to be correct, is the following: Theophrastus starts with the position of Aristotle, that the heavenly bodies desire the unmoved mover. From this he derives the following consequences. If the heavenly bodies have desire, then they must have soul

14 In this reconstruction of the sentence it is necessary to use the plural form, δοξοῦσιν; in the actual text, as van Raalte 193 suggests, the singular δοξει can be explained by the fact that it precedes the second subject, κίνησις. In Theophrastus, in fact, δοξει does precede a plural subject when it consists of a series of singular nouns, e.g., δοξει δ' η άνδρόδρακλη και ο κόμαρος τα μεν κατω φυλλοβολειν, HP I.9.3, line 9; cf. HP I.9.7, line 2; II.1.3, line 6, etc.
15 Cf. van Raalte’s apposite citation, 193, of examples for this usage, including the one from HP V.4.2, ἵση ἁμα καὶ ἑφαγεν το ξυλον.
16 A search in the TLG data base revealed no instances in Theophrastus where prepositional ᾅμα follows the noun to which it is attached in the dative.
(5a28–5b2). But if they have soul, then they must also have movement (5b3). There follows a brief parenthetical section (ζωὴ γάρ ... γίνονται, 5b3–7) explaining the statement just made, i.e., the connection between movement and soul: soul implies movement just as desire implied soul precisely because desire is movement of the soul; as a matter of fact, Theophrastus argues, desires for all objects, as well as sensations and, as he is going to say a few lines later, thoughts, are all movements of the soul. So, the argument then resumes, if the unmoved mover were really the cause of circular movement, it would not be the cause of the best movement because these other movements of the soul, and especially thought, would be better and prior, because thought gave rise to the desire for the unmoved mover to begin with. Thus, the conclusion is that “what is put forward as the cause of movement (i.e., the impulse [or desire]) presupposes the existence of movement,” that of the soul in the form of thought (Ross 46). Hence Aristotle’s theory of the unmoved mover as the original source of movement cannot stand.

As for the significance of ἅμα and καί in this understanding of the Greek in line 5b3, it appears that Theophrastus is saying that movement also seems at the same time as desire to pertain to soul, because, in fact, as he explains later, desire is a movement of the soul. Thus the force and purpose of the sentence in 5b3 is not to say that soul and movement co-exist (versions 1 and 2), or that movement exists together with soul (version 4, assuming it is a viable reading), but that just as desire pertains to soul, so does at the same time and a fortiori movement (version 3), because desire is, in fact, a movement of the soul.

5b4 ἀψ’ ἦς] In the parenthetical section (ζωὴ γάρ ... γίνονται, 5b3–7) the tone and the references are set by the opening clause, ζωὴ γάρ τοῖς ἔχουσιν, whose subject is understood to be ψυχή, as universally acknowledged, reading ζωὴ γὰρ ἡ ψυχὴ τοῖς ἔχουσιν αὐτὴν (or, as Skemp 1969, 218, has it, ζωὴ γὰρ τοῖς ἔχουσιν ἡ ψυχὴ ἐστιν). This being the case, the antecedent of the feminine pronoun in ἀψ’ ἦς must necessarily be ψυχῆ because it is closer to the understood ψυχή in the immediately preceding clause than to κίνησις in the clause before that (pace Ross 47; cf. van Raalte 1999: “Like ζωή in the preceding parenthesis,

17 This is also indicated by Theophrastus’s choice of particles. He has just said at 5b2 that things in motion have soul, so if he meant to repeat or explain this in the next line at 5b3 by saying that soul and motion co-exist, he would (or should) have used an explanatory particle like γάρ rather than the oppositional δέ in ψυχῆ δ’.
ἀψ’ ἄς refers to ψυχή”). As for the force of the preposition ἀπό in ἄψ’ ἄς, it is similar to what Aristotle says when he talks about the affections of the soul as movements reaching to it and starting from it (ἀπ’ ἐκείνης), De anima 408b13–18 (see the Loci Paralleli).

5b6 ὡς ἐμψυχοῖς. The Greek exemplar (Ψ) used by Ishāq had, ὡς ἐμψυχοῖς γίνονται (illā annahā ‘alā ḥālin tunsabu ilā anna laḥā anfu-san), with the ὡς disappearing through haplography in the extant Greek manuscripts. Thus the correct text is as Usener (1861) had originally suggested, ὡς ἐμψυχοῖς γίνονται. The presence of ὡς in Ψ makes Ross’s emendation, ἐν ψυχή, untenable. Besides, it is difficult to imagine that the textual corruption would go from the lectio facilior, ἐν ψυχή, to the lectio difficilior, ἐμψυχοῦ, in all the manuscripts. The dative in ἐμψυχοῖς is indicated by the Arabic tunsabu ilā, the phrase literally meaning, “in a state (‘alā ḥālin = ὡς) that pertains (tunsabu = -οῖς) to the fact that they have souls (ἐμψυχό-).”

If it is certain that Ψ read ὡς ἐμψυχοῖς, it is also clear that it is the correct reading for it makes good sense. Theophrastus’s point is that soul is the active agent, which through desire initiates motion. He introduces sense perception to make the further point that even when a body is supposed to be passive when it receives influences from others, as in sensation, yet nevertheless this being affected happens to it only insofar as it is an ensouled body. So the primacy for initiating both action and being acted upon belongs to the soul, and a prime mover can accordingly not be the primary mover.

5b7 εἰ δ’ οὖν indicates that the parenthetical remarks (ζωή γάρ … γίνονται, 5b3–7; see above, comment on 5b3) have come to an end and Theophrastus is returning to his main argument, where he left it off at 5b3, κίνησις ύπάρχειν. This also explains why Theophrastus can take for granted that κίνησις would be immediately understood to be referred to in τῆς κυκλικῆς without the need to repeat the word. The force of the particles is, as Laks & Most 38n50 indicate with reference to Denniston 465, a disapproving statement of a position that is not acceptable. For this use of εἰ δ’ οὖν see above the comment at 4a17.

5b8 κρείττον] The neuter here is the lectio difficilior and present in three of the four independent witnesses (in P) and Ψ; it is certainly correct. Naturally one would have expected the feminine form, κρείττον (and Burnikel 121 recommends it as the preferable reading), since in the text
ἡ (χίνησις) τῆς ψυχῆς is feminine, and κωείττον is taken to refer to κίνησις (for the different interpretation of Ishāq see the corresponding note), but Theophrastus is using here an impersonal construction (and the translations should accordingly reflect this). But to the scribes of the later manuscripts (including Λ, Bartholomew’s exemplar) the impersonal construction did not sound natural and the word was accordingly “corrected” to the feminine form.

5b9 πρώτη δὴ καὶ μάλιστα] The expression, relatively common in classical texts, is usually fully adverbial, πρῶτον καὶ μάλιστα, as in Plato (Philebus 15e4, Charmides 157a1, Republic 377d8, 406b1, 415b3, etc.), and means something very much like the English “first and foremost” (suggested but not adopted by van Raalte 140), where “foremost,” just like μάλιστα, emphasizes importance rather than numerical order (“most importantly,” Webster’s Third New International Dictionary). The inflectionality of the first word in Greek, however, as opposed to English, lends the expression flexibility and adaptability to context. Thus Aristotle, for example, can use the regular adverbial suffix rather than the neuter form in the Categories 2a11 (οὐσία δὲ ἐστὶν ἡ κυριώτατά τε καὶ πρώτως καὶ μάλιστα λεγομένη), while Theophrastus uses it here (πρώτη) as an adjective modifying κίνησις. Exactly parallel is the use in his HP VIII.1,2.4: ὥραι δὲ τοῦ ὀπόρου τῶν πλείστων δύο: πρῶτη μὲν καὶ μάλιστα ἡ περὶ Πλειάδος δύον, where Hort translates (p. 143), “There are two seasons for sowing most of them; the first and most important is about the setting of the Pleiad.”

Aporia 9

5b10–18 (ἄν τις ἐπιζητήσεις διὰ τί, πότερον ... ἦ): Why are the heavenly bodies alone actuated by an impulsion or desire (for the unmoved mover and hence, by implication, move in a circle), while the sublunar elements are not?

The assumption behind this Aporia is that everything that is actuated by a desire for the first would move with a circular motion (Laks & Most 39n53); since the sublunar elements manifestly do not, despite their capacity for motion, they must accordingly not be so actuated. Ross 47, followed by Tricot 10n2, suggests that this objection of Theophrastus is invalid.
Diaporía 9. (In answer to the question, Theophrastus argues that) this can be either because the sublunar elements are unreceptive of and unconnected with the first principle (with the implication that this would go against the principle of connectedness established through the endoxon in Aporia 2), or because the first principle is too weak to influence them, which is impossible according to the endoxon established in Aporia 5: the first principle, which is divine, is stronger than Zeus.

5b11 ἐψετικὼς, formed from the verbal adjective ἐψετός of ἐφίεμαι, is attested only here in all of extant classical and Hellenistic Greek; after Theophrastus it is first encountered in Clement (Stromateis V.5.28) and Hippolytus (Refutatio omnium haeresium V.20.2–3). Subsequent uses are either legal (court appeals) or grammatical (expressing desire). As properly defined by LSJ, it means here “actuated by impulsion/desire,” with reference to motion, which is at the center of discussion in this passage. The point Theophrastus is making (cf. Ross 47) is that if we admit that both celestial and terrestrial bodies are impelled towards (ἐψετικώς) the prime mover, then we cannot explain why the former move with a circular and the latter with a linear motion. So in order to avoid having the same impulsion lead inexplicably to two different kinds of motion, ἐψετικώς must apply to only one of the two kinds of bodies, celestial and terrestrial, as an explanation of their motion. But since terrestrial bodies are manifestly actuated by a host of causes other than a desire for the prime mover (if they are moved by this desire at all), then the inevitable conclusion is that only the celestial bodies are actuated by this impulsion (τὰ κυκλικὰ μόνον ἐψετικώς).

5b14 τούτῳ γ’ ἄτοπον] For ἄτοπον see the comment at 5a17. Τούτῳ refers to the immediately preceding alternative, i.e., to the latter alternative, that the first does not get through to the sublunar world, but restated with the added explanation why not. Thus Theophrastus restates the latter alternative in the form of a conditional sentence, as follows: “if the first did not get through to the sublunar world because of its own weakness, then this (τούτῳ γ’), i.e. that it doesn’t get through, would make no sense,” because the first cannot be weak, as the following γάρ clause explains; the Greek intended would be, εἰ δὲ ἄσεις οὐ δικαιεῖται τὸ πρῶτον, ἄτοπον. The particle γ’ emphasizes the pronoun it follows (as it preponderantly does in Greek literature; cf. Denniston 121–123), and in this way Theophrastus eliminates the second of the two alternatives.
he mentions in the πότερον clause so that he can turn his attention in ἀλλὰ λοιπὸν (5b18) to the former alternative. The alternative that the first principle, because of weakness, cannot “get through to,” or influence, the sublunar world is not attributed by Theophrastus to anyone; Happ 1971, 766n430 does not think that Theophrastus had any particular philosopher in mind but rather used the argument by way of example.

5b17 Jaeger 1948, 357 and note 2, associates Theophrastus’s quotation of this Homeric line with that by Aristotle in MA 699b37–700a2, but the context is not similar, as he and also Ross 47 and van Raalte 1988, 199, claim (cf. Laks & Most 39n54); see the commentary by Nussbaum 1985, 320–321.

5b18 ἀλλὰ here, as in 5a1, is progressive (Denniston 21–22; cf. van Raalte 228); it continues the argument by directing attention to the first alternative which has not been discussed yet (ἀδύνατα in 5b13): “So, since the second alternative is impossible, there remains only the first.” The combination ἀλλὰ λοιπὸν has a curious history in Greek. It is extraordinary that in all classical and Hellenistic literature it is attested in our extant sources only in these two passages in Theophrastus; this would tend to indicate that ἀλλὰ and λοιπὸν, having maintained their individual meanings and not coalesced into a single expression, just did not happen to have been used together in the extant Greek writings. After Theophrastus the expression occurs first in Herodianus (Περὶ ῥημάτων, in A. Lentz, Grammatici Graeci, Leipzig: Teubner 1870, III,2.804), and then, with greater frequency in later literature, especially in the Christian Greek of the Church Fathers. By then the word λοιπὸν had acquired its later (and present) meaning as particle, “so, then,” and the combination ἀλλὰ λοιπὸν would appear to have meant, “So then, what is left next to discuss.”

5b18 ᾧσύνδετον| Margoliouth 1892, 196, first noted that the Arabic translation indicates that the reading was ᾧσύνδετον, as correctly proposed by Usener 1890 in his apparatus, instead of the reading ᾧσύνθετον transmitted in the extant Greek manuscripts and the Greek exemplar (Λ) of the Latin translation (which, however, was defended by Henrich 98, “nicht Zusammengesetztes”). Usener also pointed out in his apparatus that ᾧσύνδετον would refer to τὸ μέσον as the subject. The implied connection with συναφῆ mentioned at the outset (Aporia 2) is obvious.
5b19–6a5 (ζητήσειν ἀν τις πῶς, πότε οὖν . . . ἢ): Is the sublunar world part of the universe? If it is (which it must be according to the endoxon in Aporia 2), how is it part?

Diaporia 10 (5b21–26). The available theories do not provide the answer: they do not explain how the rotations of the heavenly spheres bring about changes in the sublunar world, for such changes seem to come about accidentally.

This aporia with its diaporia, together with those at 6a5–14, 10a10–16, and 11b17 raise the question of the composition, in terms of their elemental structure, of the supralunar and the sublunar worlds, and in particular the issue whether Theophrastus accepted Aristotle’s position on the fifth element, ether. The lengthy discussions on the whole issue are summarized by Sharples 1998, 88–94. A particularly subtle and illuminating recent analysis is that by Bodnár 2002.

Diaporia 10.1 (5b26–6a5). Some claim that the first, or the best, produces only what is best. However, the sublunar elements not only lack rotation (as discussed in Aporia 9), which is considered an effect from the first (and the best) in the case of the heavenly spheres, but even if they had had it it would not have been the best possible outcome of what the first produced. Besides, if only the best came out of the best, there would have been no differentiation among the things that were produced by the first and best.

The precise thrust of this diaporia and its position in the argument have been difficult to determine. All scholars until van Raalte took it to follow directly upon 5b7–10 (the last part of Diaporia 8.1), before the interruption of the flow of the argument by the two Aporiae 9 and 10 on the sublunar world (5b10–26). Van Raalte, and following her, Henrich, on the other hand, see it as continuing the discussion about the sublunar world (i.e., in Aporia 10). This makes a difference, because the ambiguity depends on the unexpressed subject of ἐκωλύεται in 5b28: the former group of scholars take it, judging by their translations, to be (presumably) τὰ κυκλικὰ (i.e., the heavenly spheres), while the latter take it (explicitly) to be τὰ περὶ τὸ μέσον in 5b12 (van Raalte 237, Henrich 99). Although both sides seem to have good arguments, the latter are almost certainly right.
Apart from the breakdown of the text in explicit aporiae by Theophrastus himself, which make Diaporia 10.1 part of Aporia 10, as I present the text, there are primarily philological considerations. The two intervening Aporiae 9 and 10 on the sublunar world (5b10–26) are too long, even for Theophrastus’s elliptical style, to allow him to refer, without any explicit word or other hint, to a preceding subject (τὰ κυκλικά, 5a16, repeated in 5b11) in another aporia and bypass the one (τὰ περὶ τὸ μέ-οον, 5b12) about which the discussion had been progressing for some time. Furthermore, Theophrastus introduces this Diaporia 10.1 (5b26–6a5) with εἰ δέ (5b26), which normally indicates a continuation of the immediately preceding argument with the addition of a new consideration, but not a change of subject; see the use of εἰ δέ in 5a28 and 5b7. For a change of subject, or a new line of thought, Theophrastus uses explicit language, as at the beginning of Aporia 9, 5b10–11 (τοῦτ’ ἄν τις ἐπιδήμησεν), etc. Indeed, when Theophrastus is finished with Diaporia 10.1 about the sublunar elements at 6a5, he marks the beginning of a new Aporia 11 with a similar expression, τάδε δ’ ἄν τις ἴσως ἀπορήσει (6a5–6). Finally, in order to allow no room for misunderstanding, he refers to his new subject—or his reversion to the old one in Diaporia 8.1 (5b7–10)—in explicit terms: αὐτὴν τὸν πρῶτῃ ὦρα-νόν.

Another point, though not necessarily binding, is of historical significance. In the Arabic translation, what must have been manifestly a gloss, marginal or otherwise, has entered into the text, which identifies the subject of the verb in question (ἐκωλύετ’): “He means the bodies about the center.” Since this gloss is incorporated into the text copied by the scribe at-Tikriti and not a marginal note by some subsequent (i.e., post 11th century) reader of the Tehran manuscript, it means that the gloss was either added by some member of the 10th–11th century Baghdad Aristotelians, from whom at-Tikriti received his exemplar of the text he copied (Part I, Chapter 3.1), or by the translator himself, Ishāq. In either case there is a very good possibility that it goes back to a Greek marginal gloss in the Greek manuscript tradition or even in manuscript Ψ itself. And since Theophrastus’s text went unnoticed in Greek philosophical history, this gloss (and a couple of others in the Arabic translation) constitutes the only commentary we have on the text from the ancient tradition. If the gloss, then, goes back to a Greek source, it demands our absolute attention; if it is due to Ishāq or a Baghdad Aristotelian, it demands no less attention: they were as close to the late antique philosophical tradition as we can get, and they were astute.
In addition, arguments from content also indicate that Diaporia 10.1 (5b26–6a5) still refers to the sublunary world and not to the heavenly spheres. In the first place, the whole passage on the sublunary world, and its rectilinear as opposed to circular movement, cannot but be related to Aristotle’s *De generatione et corruptione* B 10, and especially 336b25–337a7. This whole chapter in Aristotle is about the generation and corruption of the things “about the center” (ἐν τῷ περὶ τὸ μέσον τόπῳ, introduced in the preceding chapter, 335a25), in which Aristotle argues that “in all things nature desires the better” (336b27–28, see the Loci Parallel), a statement reflecting Theophrastus’s τὰ ἀριστὰ βουλόμενον (6a2). Now for Aristotle nature is the same as god; a few lines further down in the same passage he refers to the same subject that always desires the better, φύσις, as god, θεός (336b32), and in *De Caelo* 271a33 he says as much: ὃ θεός καὶ ἡ φύσις οὐδὲν μάτην ποιοῦν. In the passage from *De generatione et corruptione* Aristotle then tries to explain that some things, obviously those in the sublunary world, cannot enjoy the kind of existence enjoyed by the rotating heavenly bodies because they are “too far removed from the first principle” (διὰ τὸ πόρρω τῆς ἀρκετῆς ἀριστωσθαι, 336b30–31), echoing Theophrastus’s οὐ διωνυσίμον τοῦ πρῶτου (5b13–14). Because of this they cannot move in a circle and hence are not eternal, since the only motion that is eternal is the circular one. However, Aristotle continues, god “strung together” (συνείρη, 336b33, echoing Theophrastus’s main concern about συναρή in this Essay), or provided continuity between the heavenly and sublunar realms by making perpetual (ἐνδελέχη, 336b32) not individual sublunar beings but their generation and corruption instead, and thus bringing them most close to the immortality of the supernal beings by granting them eternal generation. Now the agent of generation and corruption is the circular motion, and it is this which sublunar beings imitate by coming-to-be and passing-away, and in this fashion, Aristotle concludes, “it is by imitating circular motion that rectilinear motion [of the sublunar bodies] too is continuous” (GC 337a7, CWA 552).

It is noteworthy that in this passage Aristotle satisfies at least three of Theophrastus’s concerns, or objections, regarding the cosmic significance of circular motion. First, he establishes that not only the rotating bodies are actuated by desire and hence move in a circle (διὰ τὴν μόνον ἐφετηκά, 5b11) but also sublunar bodies, which desire to imitate the circular motion; the difference though, is that their rectilinear motion ends in circular generation and regeneration of their species, not in circular motion for the individual. Second, it is not ἀτομον that the
first principle appears to be unable to get through and influence sublunar life; the reason that this appears so is the great astronomical distance separating the first principle from the sublunar world, which dilutes the effect. However, god’s desire for the best sees to it that sublunar things too enjoy immortality in species by perpetual generation and corruption. Third, sublunar bodies have not been “pushed away” from the things held in highest honor (ἀπεωσμένα τῶν ἐντιμοτάτων, as Theophrastus says, 5b21–22) like circular motion, and circular motion is not accidentally causing their changes; to the contrary, god made generation of sublunar bodies perpetual (336b32) by making circular motion the agent of generation and corruption. Aristotle makes the point explicitly: “The cause of this [perpetual generation] as we have often said, is circular motion; for that is the only motion which is continuous” (337a1, CWA 552). The final and major point that this whole discussion in Aristotle makes is that there is coherence (συνειρμίος, 336b33) between the supralunar and sublunar worlds, “because that coming-to-be should itself come-to-be perpetually is the closest approximation to eternal being” (336b33–34, CWA 552), which should satisfy Theophrastus’s concerns about lack of συναφί between the two worlds.

The trend of this passage in De generatione et corruptione is such that it makes it difficult to assume that Theophrastus could have written what he did in this passage had he known this particular Aristotelian text, because it seems clear that Aristotle is responding to Theophrastus, not that Theophrastus is objecting to Aristotle’s theories. This understanding of the passages involved has implications for the relative dates of composition of Aristotle’s De generatione et corruptione and Theophrastus’s Essay; see above, Part I, Chapter 1.1.

To resume the discussion about Diaporia 10.1 in Theophrastus (5b26–6a5) and that it refers to the sublunary world and not to the heavenly spheres, a final point in support of this position needs to be considered. Theophrastus says that the argument of the philosopher who claims that the first, or prime mover, wishes, and hence effectuates, only what is best would require that everything, i.e., both heavenly spheres and the sublunar world, be identical or little differentiated, and among the best (6a3–5). The unstated conclusion of this argument is that evidently all things are neither identical nor the best, and thus the claim of that philosopher is invalid. Now if this passage were referring to the heavenly spheres, this objection would not hold: the spheres, if not identical, are nevertheless little differentiated from each other, and they certainly are among the best (ἐν ἀρίστων)—the belief in the divinity of the spheres
was commonplace. Hence the ἀπανθή' in 6a4 cannot refer to the spheres and neither does ἐκωλύετο, and so the passage is most naturally to be taken to be continuing the discussion about the sublunary world.

The two Aporiae 9 and 10 with Diaporia 10.1 (5b10–6a5) therefore neatly summarize the status of, and hence the problem about accounting for, the sublunary world, in three stages: (a) Aristotle’s theory of the heavenly circular movement by means of desire for the unmoved mover does not hold because the sublunary world does not have this movement, and since it does not, it means either that the first does not penetrate in its influence to the sublunary world or that the sublunary world is unreceptive and unconnected. Since the first is absurd, the sublunary world is unconnected, and hence Aristotle’s theory cannot explain the entire universe. (b) This presupposes a previous and related aspect of the same problem, whether the sublunary world is part of the universe or not, and if so, how it is connected. The Aristotelian theory that says that it is connected insofar as the circular movements of the heavenly spheres (5b24–25) cause the changes in the elements is at best dubious because no direct connection can be established between the circular movements and those changes: it appears that the connection is at best accidental (κατὰ συμβεβηκός, 5b24); and thus this theory cannot explain the entire universe either. (c) The theory (patently of Plato in the Timaeus, given the similar wording; see the Loci Paralleli) that explains the connection between the first and the sublunary world by saying that the best does only what is best is patently and evidently an invalid exaggeration that has not been properly thought out (ὑπερβατόν καὶ ἄζητητον). For all these reasons, there is no theory that satisfactorily explains the connection between the first and the sublunary world.

5b23 συμβαίνει, the reading universally attested in all witnesses, was corrected into λαμβαίνει by Usener 1861, a plausible conjecture as the mistake would have happened “in anticipation of” the following συμβεβηκός (Usener 1861 and note 1, Laks & Most 6n58). Συμβαίνει, however, sometimes with the omission of the infinitive εἶναι or γίγνεσθαι, is regular Theophrastean style and is to be retained (see the parallel passages cited by van Raalte 233–234 and her reference to Hindenlang); it is not one of the primitive errors of the Neoplatonic archetype, as listed by Fobes, p. xxvii.

5b25 εἰς τοὺς τόπους appears slightly ambiguous, again because of Theophrastus’s elliptical style. But it is clear that Theophrastus is speaking
of the sublunary elements and their movements into the places where they would naturally tend (up or down) when not forced into the opposite direction. The article has a distributive function, "towards the place where each of them goes" when not forced (van Raalte 234–235). Similar is the use in Plato, *Phaedo* 112c6, καὶ εἰς τοὺς τόπους ἐκαστὰ ἀφίκνυμενα εἰς οὓς ἐκάστος ὡδοποίηται, different streams of water “find their way to their several places” (Jowett); of course, in Plato’s full style εἰς τοὺς τόπους is further modified by the following εἰς οὗς ἐκάστος ὡδοποίηται, but one could supply in the passage of Theophrastus the phrase, εἰς οὗς τεῖνουσιν. Ishāq had the right idea: “from place to place.”

6α1–2 πάντα ... βουλόμενον] As it is, this participial clause can only mean “willing everything that is best,” there is no justification in the text or the meaning to take βουλόμενον circumstantially as a participium coniunctum and then be forced to add a supposedly understood main verb like “does” or “operates” (πράττει, van Raalte 239); in any case, not much is gained by this reading: “willing everything that is best” means roughly the same as van Raalte’s preferred reading, “operates wishing all things to be the best.” Even more inaccurate is the predicative interpretation of τὰ ἄριστα, “vuole che tutte le cose siano ottime” (Reale 1964, 173; Tricot); if that were the meaning, the Greek should have read, τὰ πάντα ἄριστα.

Jaeger 1948, 451π4, sees in this statement, which he takes to represent the views of Theophrastus, as reflecting Aristotle’s theory of a self-thinking mind in *Met. Λ 7.*

6α3 ἀζήτητον is passive, equivalent to οὗ ζητηθέν, “not having been [properly] looked into,” “unexamined” (cf. ἀμύητος, “uninitiated,” ἀκλαυτος “not wept for” [Sophocles, *Antigone* 847]), but not in the sense of οὗ ζητητέον, “not to be looked for,” as in all the translators’ versions; and it certainly does not mean “transcendental,” as in the interpretation of Jaeger 1948, 349. What is meant here is that whoever made such a hyperbolic statement did not properly investigate its logical coherence before making it, and thus there ensues the absurd position stated by Theophrastus in the following γάρ phrase.

6α2–5 τοῦτο μὲν ... τόδε δ’] The μὲν ... δ’ structure of this sentence is significant and should not be sundered apart as in all previous editions. As elsewhere in this Essay (see above, Part I, Chapter 1.4), Theophras-
Aporia 11

6a5–12 (ὅν τις ἀπορήσεις, πότερον ... ἢ): Whether rotation is essential to the first heaven and with its cessation it would perish, or, if the rotation is through desire, it is accidental, unless desiring is innate to the first heaven and nothing prevents it from desiring.

This aporia simply states the problem. It is to be noted that Theophrastus is entertaining here three alternatives, not two; (1) one is expressed in the first part of the ‘whether ... or’ construction (if rotating is essential to the first heaven it will perish when it stops), while the second part itself includes two alternatives: (2) if rotating is through desiring, and if desiring is not innate to the first heaven, then it is accidental, and (3) if rotating is through desiring, and if desiring is innate to the first heaven and nothing prevents it from innately desiring, then it is not accidental. See the extensive discussion in Henrich 99–103, who brings out these distinctions.

On the question of the relevance of this aporia to Theophrastus’s views on ether see the comment at the end of the discussion on Aporia/Diaporia 10.

6a11–12 καὶ οὐθέν ... ὑπάρχειν, “and nothing ... from being such:” this is the interpretation of Ishāq and of Ross, Tricot, and Reale, as opposed to that of the other translators (Laks & Most, van Raalte, Henrich), “nothing prevents some such beings from existing.” The statement καὶ οὐθέν ... adds yet a further condition to that of the preceding clause (ἐὰν μὴ ὄρος), as indicated by the use of the conjunction καὶ (Tricot has the right translation and punctuation); most interpreters consider this as a justification of the preceding statement (punctuating it either with a dash or a semi-colon), but this would have required
οὐθὲν γὰρ κωλὺσει, not καὶ οὐθὲν κωλὺσει. This being the case, the verb ὑπάρχειν is to be understood with τοιχῦτα, “being such,” i.e., having innate desire, and not as implying existence, something which would have no meaning for the present argument. The qualification that Theophrastus has in mind is that nothing prevents some things from acting upon the dictates of the innate desire, not from existing. The question of existence with regard to any of these beings is not at all part of the discussion, whereas having innate desire and being able to act upon it is very much so; with reference to the celestial beings, having innate desire means being ensouled, an issue Theophrastus argued for in the opening lines of this argument (ἐμψύχει ἂν εἴη τὰ κινούμενα, 5b2). The import of the εἰ μὴ clause then, would be, “unless, of course, desiring is innate to the first heaven and it is granted that it is ensouled.”

Aporia 12

6a12–14 (ἀπορεῖν εἰ): Whether the heavens, desire apart, would be destroyed if they are considered to have no movement.

This is a reformulation of the first alternative in the preceding Aporia (see above). If the heavens were to cease to exist if they were to be motionless, this would mean that motion is of their very essence.

Aporia 13

6a14–6b22 (ἀξιώσειν ἂν τις, 6a16): The task at hand is, beginning from a first principle or first principles like those mentioned in Aporia 6, to proceed to account for the rest of reality and not stop at a certain point.

The diaporiae that follow take the form of brief references and discussion of positions taken on the subject by a number of philosophers (endoxa).

Diaporia 13.1 (6a19–22). Eurytus, as reported by Archytas.

Diaporia 13.2 (6a23–6b5). *Plato and the Pythagoreans.*

This is one of two testimonia passages in this work which informs about Plato’s unwritten doctrines: Testimonium Platonicum 30 (Gaiser 1968, 493–494, with notes); Testimonium Platonicum 8 (Krämer 1982, with Italian translation = Krämer 1990, with English translation); Testimonium Platonicum B4 (Isnardi Parente 1998, with Italian translation and commentary); and cf. Isnardi Parente 1997, p. 394. Also see Isnardi Parente 1971; Laks 1988; Henrich 320–326, 333–334; and the commentary below on 6a24–25.

Diaporia 13.3 (6b5–6). *Speusippus.*

Speusippus fr. 51 Lang; fr. 59 Tarán 1981, with commentary (379–382); fr. 87 Isnardi Parente 1980, with Italian translation (168) and commentary (322–325); also included in the longer extract constituting Testimonium Platonicum 30 (Gaiser 1968, and notes thereto), see the preceding entry on Plato. Cf. Tarrant 1974, Henrich 326–330.

Diaporia 13.4 (6b7–9). *Xenocrates.*

Xenocrates fr. 26 Heinze; fr. 100 Isnardi Parente 1982, with Italian translation (199–200) and commentary (333–335); also included in the longer extract constituting Testimonium Platonicum 30 (Gaiser 1968, and notes thereto), see the second preceding entry on Plato. Happ 1971, 241–247 discusses this passage in detail, and especially the levels of being that are indicated for Xenocrates’ system here (intelligibles, sensibles, etc.) and their derivation from the first principles. See further Henrich 330–333.


Fr. 2 Lasserre 1987, with French translation (314) and commentary (533–534); see also Laks 1988; Henrich 326.

Diaporia 13.6 (6b11–16). *Plato, as distinct from the Pythagoreans and all his other disciples.*

This passage, in which Theophrastus says that Plato held the numbers to be hierarchically superior to the ideas, was the focus of a good part of the controversy last century regarding Plato’s unwritten doctrines. Robin’s 1906 book gave credence to this statement by Theophrastus against the evidence presented by Aristotle, who repeatedly claimed that for Plato the ideas were numbers. Ross 58–59 tried to reconcile the two views, but was famously criticized by Cherniss 1945, 26–27.
Gaiser 1968 dealt comprehensively with the issue, and Henrich 321–325 summarized the controversy with some bibliography. An accessible account of what may be taken to be, in general terms, a mainstream view is provided by Dillon 2003, 16–29. A very recent contribution with a conspectus of the issues and the latest bibliography is that by Ferber 2007.

Diaporía 13.7 (6b16–17). *Some unspecified Academics.*

The reference here is unclear. Reale 1964, 180n20 suggests Aristotle, but is disputed by van Raalte 276–277. Laks & Most 47n87 suggest a general Platonic orientation, which would appear likely, given the context of the reference. Cf. also Henrich 33–334.

Incidental Diaporía 13 (6b17–22) on the characteristics of knowledge arrived at in the different sciences: *In studies of things other than the first principles, knowledge of what comes after the first principles is firmer than the knowledge of the first principles; this is reasonably so, because in those studies the search is from the principles whereas in studies of the first principles themselves like the present Essay, the search is of the first principles themselves.*

For the two methods of analysis referred to in this diaporía—from and to the principles—which were regular practice in the Academy, see Gaiser 1968, 81–88; Happ 1971, 158 ff. and n421; Krämer 1990, 81–82.

6a14–15 *καὶ τοῦτο μὲν ... ἀπὸ δ′ ὁν’* The μὲν ... δέ construction here also (see above at 6a2–5) is not easily to be ruptured, as all editors and translators do rather cavalierly. The meaning is, “Now (καί) X may be so, but it is Y that we are talking about (δ’ οὖν), and this is as follows.” Cf. the same construction below at 7b5–9. Καί is copulative (but cf. van Raalte 249), adding a further piece of information about the immediately preceding subject (referred to by τοῦτο), which then the following μὲν clause defers to another discussion. For δ’ οὖν, which brings the discussion back to where Theophrastus wants it (“but for the present”), see the comment on 4a13. The genitive in ἐτέρων λόγων is of belonging: the discussion of this subject belongs “more appropriately” elsewhere, hence my rendering. Furthermore, it is also clear from this μὲν ... δέ sentence that Theophrastus is referring to his own (prospective? existing?) discussion of the subject and not to one by somebody else: since the second half of the sentence obvi-
ously refers to his argument (which follows immediately), so must the first. But it is not clear to what Theophrastus is precisely referring. The subject is eternal or destructible bodies in motion. Later on in this Essay (10a9–19) he touches on the related question whether the motion of the heavens is essential to them; though there he says that the heavens, when divested of motion, would be the heavens only in name, not that they would be destroyed. Theophrastus’s qualified way of expressing himself here would tend to indicate that he is talking in theoretical terms rather than referring to a specific treatise of his, but given the loss of most of his works, there can be no certainty. On the subject cf. his fragments 137.2, 137.8, and 184 FHS&G; and van Raalte 248.

6a17 ἄρα’] The reading transmitted in the two independent Greek manuscripts, PJ, ἄρα’, ἄν τις τίθηται, has been unnecessarily doubted. It is true that we cannot know what the third witness, Ψ, had, for the Arabic suggests that Ishāq understood (rather than read?) ἄμα for ἄρα, but this difficult sentence taxed his capacities also and is mistranslated (see the note to the Arabic translation), and we cannot be certain about what precisely Ψ read. In the Latin translation, Bartholomew read, or perhaps understood, ἄρα (utrum) for ἄρα. As for the Greek, first, the conditional phrase itself, ἄν τις τίθηται, is perfectly fine and rather common; the problem has been to account for the particle ἄρα and its position, but that, too, is relatively standard. ἄρα here is used in a context of reported speech (“one could demand that …”), and its function is, as Denniston 38 puts it, either to convey “actual scepticism” or to disclaim “responsibility for the accuracy of the statement.” The latter is closer to Theophrastus’s meaning, for in the parenthetical statement he is introducing an alternative about whose accuracy he is not certain, and this is the reason for his doubly circumspect expression, “perhaps” and “were one to assume”. The particle adds a further note of uncertainty (“I suppose”). Theophrastus uses ἄρα in reported speech also later on (10b27), this time with ὅς, a common construction. In such uses of ἄρα the particle may be easily placed quite late in the sentence. A good example of both the use and position of this ἄρα is provided in Plato, Gorgias 524d3–4: ταύτων δὴ μοι δοκεῖ τούτ’ ἄρα καὶ περὶ τὴν ψυχὴν εἶναι, “And I should imagine that this is equally true of the soul,” in Jowett’s translation, where δοκεῖ ἄρα is represented by the phrase, “I should imagine,” with the English subjunctive rendering very aptly the force of the particle.
6a19 τέλειον καὶ φρονοῦντος] If, as Aristotle says in Metaphysics Δ 16, 1021b15–17 (cited by van Raalte 587), a perfect physician or musician is he who lacks nothing in his own kind of virtue, then Theophrastus’s τέλειος here would be he who lacks nothing in a particular virtue, identified by the following participle, φρονοῦντος, i.e., having a sound mind (φρένες), being “sensible.” It is to be noted that the virtue in question is not specifically related to education, so “adult” is to be taken in its basic meaning indicating completion (τελέευ) of one’s development. This is very close to the other possible meaning of τέλειος, one who is “complete” of age, i.e., adult (see the references in van Raalte 586–587). The combined expression “sensible adult” may appear to contrast with the depiction of Eurytus, for whom these laudatory epithets are intended, as somebody playing at philosophy with pebbles, but it may be Theophrastus’s way of disapproving of the other philosophers’ procedures which stop after the first principles: despite the seeming naïveté of Eurytus’s ideas, he was consistent enough to provide an account for the entire universe. So Theophrastus clearly wants to refer favorably to the theories of Eurytus with the pebbles as those of a thinker who thought things through in order to arrive at an explanation of the entire universe and who did not stop after the first principles; it does not appear that his description of him as “sensible adult” is ironic. For if Theophrastus is being ironic here, then he must be heaping even greater ridicule on some of his contemporaries whom he goes on to accuse of not providing accounts of the entire universe even as minimally consistent and thorough as that of Eurytus. But if Theophrastus’s irony extends this far, it would be inconsistent with the rather somber and decidedly non-playful tone of the entire Essay. Cf. further Laks & Most 43n75.

6a21 λέγειν, “according to Archytas”] The indirect speech reported by Archytas is indicated by the infinitive in λέγειν.

6a23 νῦν δ’, “at present, however”] The temporal reference of νῦν is assured by the presence of ποτ’ in the preceding sentence (6b20). Theophrastus’s main subject from the beginning of the Essay is to investigate the connection (συναφή) between the first principles and the sensible world. He begins this Aporia by restating the question (6a15–18): one should not stop without providing a complete account of reality. That is what sensible philosophers of old did, like Eurytus, as Archytas once said. At present, however, many philosophers stop short of giving a complete account.
καταπαύονται, “stop completely”; the preposition κατά in compound verbs emphasizes the base meaning of the simple word. Cf. LSJ s.v., E.V.

καθάπερ καί, “as do too”] Happ 1971, 244n833, rightly notes that καί in this passage is used in the sense of “for example, among others,” and refers to the same philosophers as does οἱ ἄλλοι at 6b6.

οἱ τὸ ἐν καὶ τὴν ἰδιότητα ποιοῦντες] This passage (6a24–6b17) has been much discussed, for it presents crucial evidence on the theories of the Old Academy concerning the first principles and cosmogony as well as the controversial issue of Plato’s unwritten doctrines. A good part of the discussion has been centered on identifying “those who posit the one and the indefinite dyad,” and on how they relate to the rest of the philosophers named later in the passage. Given the relatively charged atmosphere of this controversy, the passage has been given opposing interpretations which tend to overlook its context, the sweep of the argument, and the grammar. As mentioned in the third preceding comment (at 6a23), Theophrastus’s main subject is the investigation of the connection between the first principles and sensible reality, and at the beginning of this Aporia he complains that many philosophers of his time posit the first principles but do not proceed therefrom to the derivation of all reality, stopping short at some point. As example, or as the group of philosophers that do this, he cites “those who posit the one and the indefinite dyad.” Now to begin with, it is incontestable that he means by this the Pythagoreans and Plato because he himself ascribes to them the very doctrine later in the Essay, at 11b2–12. But he also uses the expression more broadly as a blanket description of all Platonists and members of the Academy; this is clear from the rhetoric of the passage in which he later names the exceptions (πλήν, 6b6) to this blanket statement, all from the Academy. Thus in this passage Theophrastus is not interested in listing in a doxographic fashion three groups of philosophers as examples of those who hold this view (i.e., Plato and the Pythagoreans [6a24–25], Speusippus, and “the others” [6b6], as Happ 1971, 244, maintains), but describes what all of them do wrong: they posit the one and the indefinite dyad and generate the first level of beings, but then make absolutely no mention of the specifics in the constitution of the heavens and inferior reality, as exemplified by such Platonists as Speusippus and “the others.” Thus the generic blanket description is indeed meant to cover all Platonists. However, having mentioned one prominent Platonist by name,
Theophrastus then proceeds to respond to the expectations and possible objections generated in the reader about his evaluation of other Platonists. And at this point he introduces his first and major exception to the blanket statement, Xenocrates, as the only philosopher to have both posited the one and the indefinite dyad and to have then proceeded to discuss the generation of all reality. This is followed by a further qualification, the case of another philosopher who may be thought to be an exception, Hestiaeus, who, however, is not to be entirely absolved of this neglect because apparently he did not complete the derivation of all reality from the first principles but went up to a certain point (μεχρι τινός, 6b10). And this brings Theophrastus to a second case of a seeming exception, Plato. In anticipation of an objection by the reader, Theophrastus says, “And yes, Plato may be thought to be another exception, insofar as he would seem (δοξεύειν ἄν) to be treating of the sensibles and providing an account of all reality through his method of proceeding from the principles and to the principles (as Aristotle also says that Plato did, EN 1095a30–b1 = Gaiser 1968, Test. Plat. 10 = Krämer 1990, 204 no. 6; see the Loci Paralleli)—but in fact his derivation, unlike that of Xenocrates, also is incomplete, like that of Hestiaeus.” This is the meaning of the reservation implied in the optative δοξεύειν with ἄν. See the discussion by Gaiser 1968, 529, 490, 493–494, 366n101, 380n146; and Happ 1971, 111n166, 161n442, 244n833, referring to Gaiser.

6a27 ἐφαπτόμενοι, “apprehending,” has proven difficult for the translators to pinpoint (as the relatively divergent and imprecise translations show), especially in this passage where it is used without an objective complement, which it normally takes in the genitive; ὁσού in this sentence is adverbia. The verb in the middle voice had a very wide array

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18 Pace Happ 1971, 244, who thinks that we cannot infer from this passage anything about Xenocrates’ doctrine of first principles. But this is clearly implied in the reading I propose here, while the doctrine of the one and the indefinite dyad as principles is otherwise well attested for Plato, Speusippus, and Xenocrates. Even if as a technical term, “indefinite dyad” was introduced by Xenocrates (as Tarán 1981, 225, suggests, though Happ 1971, 140n327, argues for the opposite view), the fact remains that Plato’s “great- and small”, Speusippus’ “multiplicity”, and Xenocrates’ “unlimited” or “everlasting” stand for the same principle of indeterminacy. See the useful summary of the positions of these thinkers in Dillon 2003.

19 Henrich’s 51 translation, “ausser den Bereich, den sie behandeln” renders ὁσοῦ ἐφαπτόμενοι, not ὁσοῦ, as does Tricot’s 15, and van Raalte’s 45: “so much as they do lay hold of.” But there is no manuscript evidence for ὁσοῦ unless one take seriously the reading ὁσοῦ in J which, however, makes no sense in context and shows itself to be a
of uses in Attic Greek; its occurrence in Plato clearly shows this, but it also helps delineate the precise meaning when the word refers to mental action, as it does in this passage of Theophrastus. In the *Phaedo*, Plato twice uses τοιούτων ἑφασπομένη with reference to the soul to indicate the two kinds of things which it grasps or apprehends, the changeable things of this world and the eternal and unchanging things; its apprehension of the latter constitutes φρόνησις (79c8, d6). In another passage, in the *Theaetetus* (190c6), the soul lays hold of and apprehends two contrary objects about which it could make a judgment (λέγειν, δοξάζειν). In more general terms, Plato uses the expression ἑφάπτεσθαι τῶν ὄντων to indicate someone’s “grasp of reality” (*Sophist* 234d5, 259d6): young people διὰ παθημάτων ἄναγκαζομένους ἐναργῶς ἑφάπτεσθαι τῶν ὄντων, “forced by experience to apprehend things clearly as they are” (Cornford 1957, 194). Thus the word means “to apprehend” and, despite the temptation of its etymology, ἑφάπτομαι τινος with reference to mental activity does not mean “to touch upon” something (Ross; Laks 1988, 239), or “effleurer” le sujet (Laks & Most), or “fare un accenno” (Isnardi Parente 1998, 18). In another passage in Plato, *Cratylus* 404d2, this verb is used together with another one (ἐπαφήω) that does mean “to touch” and thus the difference in meaning between the two is highlighted: ἅτε γάρ ἐφιSTSμένων τῶν πραγμάτων τὸ ἑφασπόμενον καὶ ἐπαφὴν καὶ δυνάμενον ἑπακολουθεῖν σοφία ἂν εἴη, “for seeing that things are in motion, that which apprehends and touches and is able to follow [them] is wisdom.” If that is so, a number of interpretations of this passage that are based on the understanding of ἑφασπόμενοι as “touch upon” cannot stand (mainly those of Laks & Most 44–45, Isnardi Parente 1998, 18).

6b1 τόπος καὶ κενόν καὶ ἄπειρον] Ross 54–55 suggests that place, void, and the infinite refer to “Plato’s doctrine of χώρα” in the *Timaeus*. Happ 1971, 110–113, 162n445, in general agrees with Ross despite the presence of some terminological difficulties in this position which he discusses.

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scribal emendation. The Arabic reads bi-qadri mā yudrikūna, “to the extent that they grasp,” and the Latin quantum, both obviously reflecting ὅσον.

20 A parenthetical note: It may be just the requirements of the etymological context of this passage in *Cratylus* that make Plato express himself thus, but he appears to be contradicting himself: it was the apprehension of immobile and eternal things that he called φρόνησις in the *Phaedo* passage cited previously, whereas here he calls wisdom the apprehension of things in motion.
6b3–4 χρόνος … πλείω] The transmitted text of this phrase, with the two masculine nouns in the accusative, cannot stand by itself, and this was felt as early as the 14th century, when the corrector of manuscript J (JII) deleted it, and later, the scribe of manuscript L (mid-15th cent.), omitted it. H. Ritter in 1826, Usener on both occasions he dealt with the text (1861, 1890), and Reale secluded the phrase. But there are no grounds for doing so; all four independent witnesses (PJ Ψ Λ) have it, which indicates that it was also present in the Neoplatonic archetype of the Essay (Part I, Chapter 2.5). It may be that the phrase represents some kind of gloss that entered the text before that stage, or that something significant dropped out of the text, but apart from the fact that we cannot know that, we cannot argue for it either.

Most recent scholarship has tended to be more conservative and retained the phrase, but tried to explain it by assuming syntactical acrobatics on the part of Theophrastus’ prose, most prominently by assuming that a verb γεννῶσι, reflecting γεννήσαντες in line 6a25, is to be understood as governing the accusatives of the phrase (Ross and others following him, Tarán 1981, 380n192; Laks 1988, 240–242; van Raalte 261–262; Henrich 105). Ross 46 points to similar ellipses at 5a27 and elsewhere. However, just as in the case of 5a27 (see the comment on Diaporia 8, 5a25–28, above), here also the ellipsis cannot be assumed. The intervening πλήν sentence (6a27–b3) changed the flow of the argument and its grammatical structure: the governing construction now is δηλΨο;Υkρον成功举办Psiο;Υkρον瘐Psiο;Υkρονper acuteτι with the implied verb in the reported speech being either an intransitive γέγονεν or a passive ἐγεννήθη. As a result, an active verb γεννῶσι would not naturally fit the syntactic imagination and expectation of a reader of

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21 Reale 1964, 178n14, and see the references in Laks 1988, 252n51.
22 Cf. van Raalte 261, and Dillon 2002, 180n19, who gives a graphic account of how “an indignant reader” could have added the comment in the margin by citing the Timaeus passage at 38b6, χρόνος δ’ οὖν μετ’ οὔρανοῖ γέγονεν, and then adding what amounts to “etc.; καὶ ἔτερα δὴ πλείω. “This was then witlessly incorporated into the text by a scribe, being adapted to give grammatical coherence.”
23 A variant of this position is the solution preferred by Isnardi Parente 1971, 54n12, who views the accusatives as directly dependent on the preceding γεννήσαντες without the ellipsis of a presumed γεννῶσι. The resulting anacolouthon, as Laks 1988, 241, rightly remarks, is “intolerably rough.”
24 Ross is rather cavalier in assuming ellipses in the style of Theophrastus. Of the ellipses he mentions on p. 46, only those at 6b16, 6b25, and 10a25 exhibit the requisite obvious and grammatical implication that puts them within the acceptable limits of prose style. The rest, at 5a27, 6b3, and 8a2, are not ellipses at all but require a different parsing of the syntax and meaning of the text; see the commentary on these passages. For an analysis of the ellipses that may or may not be assumed see the discussion at 6b16–17.
the sentence χρόνος ... πλείω. Even less plausible is Laks & Most’s suggestion (44n80) to understand a γεννῶσι as the implied verb of the participle ἐφαπτόμενοι. Even if γεννῶσι had been actually present in the text it would have been difficult to connect it, after the intervening πλην sentence, with ἐφαπτόμενοι, let alone that it is not even expressed. Besides, if the participle ἐφαπτόμενοι needs a finite verb, the one that is to be supplied mentally is, of course, οὐ παραλείποντοιν, implied by παραλείποντοιν at 6a27 and πλην, which supplies the negative (i.e., to paraphrase, “they leave out almost everything else except the things which, ἐφαπτόμενοι, (they do not leave out”). Furthermore, the meaning of ἐφαπτόμενοι is not, as discussed in the preceding comment, “effleurer,” as they claim, and hence the negative meaning that ἐφαπτόμενοι must have in order for their interpretation to be valid (“but they only touch upon;” i.e., they do not do it thoroughly) is simply not there.

There remains the possibility that the Arabic translation was based on the correct text. It reads, “They say that ... some [other things] come from the numbers and the One, like soul and other things—time together with heaven and many other things. But as for investigating the question of heaven, ...” The Arabic translation implies a small variant from our transmitted text, the reading not of δ’ in 6b3 but of θ’, as Usener’s 1861, 270n1, proposed emendation has it. In this rendering, then, the phrase beginning with χρόνον/χρόνος identifies the preceding ἄλλ’ ἄττα and does not belong to the same sentence as the next phrase, τοῦ δ’ οὐφαντοῦν πέρι, because the translator felt that they say two different things. If this rendering is accurate, the Greek text should be read and punctuated as in the Arabic: time and heaven are further examples, like the soul, of things generated by the numbers and the one, and they are in the nominative. It is true that this alternative does not explain the lectio difficilior of the accusative nouns as transmitted in the Greek manuscripts, but this reading eliminates the need for a verb to justify the accusatives in the received text and makes it unnecessary to consider this phrase parenthetical. Also, if the need to supply a verb is eliminated so is the dilemma whether to have the supplied verb have a positive or negative connotation so that it would fit the meaning of what is said just before and just after (cf. the analysis by Laks & Most 44n80). Theophrastus simply enumerates the things that are only derived from the one and the indefinite dyad in the theories of the philosophers he mentions, and in the next sentence, which can be paraphrased as follows, he lodges his complaint and brings out the contrast with what he has just enumerated: “but as far as the details about heaven are concerned, they did not do anything more
beyond generating it” (cf. the comment by Ross 56); this emphasis is the meaning of the inverted order of the preposition (τοῦ δ’ οὐρανοῦ πέρι instead of περὶ δὲ τοῦ οὐρανοῦ) and the particular force of ἔτι. Thus, there is no discontinuity in meaning either: if we take the phrase χρόνος θ’ to be a listing amplifying ἀλλ’ ἀττα, then it talks about the derivation of heaven, while the following sentence, τοῦ δ’ οὐρανοῦ πέρι, talks about heaven itself and the derivation of its particulars: its motion, that of the other celestial spheres, etc. And the ἔτι, which appears to have been largely disregarded in the previous discussions of this passage, removes any contradiction with what preceded: “yes, they did explain the derivation of the heavens, but once they did this they made no more mention of it.” I.e., they made no more mention of it regardless whether temporally or logically, as Laks 1988, 241–242, who does discuss ἔτι, wishes to discriminate. Theophrastus here is not interested in discussing whether or not these philosophers developed independent disciplines of cosmology, biology, etc., as Laks objects, but in the fact that when they talked about first principles they did not discuss the details of heaven and the rest either substantively (or logically) when they were actually deriving them from the soul (as in Plato’s Timaeus), or subsequently (temporally) in their further discussions and treatments of the same subject of first principles. In other words, they did not, simpliciter, effect the connection between the first principles and the rest of the universe that Theophrastus has been complaining about all along in this Essay. On the other hand, Laks 1988, 241, does disregard ἔτι when he criticizes Ross’s explanation of it as the details of celestial organization (as I do here). Laks says, “not making any mention of the heaven is not the same thing as not going into the details of its organization.” No, but “not making any more mention of the heaven” is.

Finally, one alternative (though less likely, in my opinion) which would enable us to retain the accusatives in the received text is to consider them as dependent on an understood verb that is commonly omitted, one meaning “I mean,” such as λέγω (χρόνον θ’ ἢμα καὶ οὐρανὸν (λέγω)), viewing the entire phrase as a remark by Theophrastus himself intended to explain ἀλλ’ ἀττα. But this understanding also would require changing into θ’ the transmitted reading δ’.

This is how far a philological analysis can take us. As for the issue whether deriving the heavens from the numbers and the one, as this reading of the text implies, is “philosophical nonsense” (Tarán 1981, 380n192), it is open to question. Two considerations are of relevance. First, what cannot be gainsaid is the obvious references in Theophras-
tus’s wording to the cosmogony in the *Timaeus*: Aristotle himself in *De anima* 404b18–27 explicitly identifies the *Timaeus* as containing an account of cosmogony in much the same terms as Theophrastus (see Ross 1951, 210 and 214, and Ross 1961, 178; cf. Laks & Most 44n80, and see the Loci Paralleli). In the *Timaeus* the soul is clearly derived from the numbers in the sense that it has a numerical structure (the geometrical progressions of 2 and 3, the “double and triple intervals,” κατὰ τὴν διπλασίον καὶ τριπλασίον διάστασιν, 36d3: Cornford [n.d.] 74, etc.), and οὐράνιος and χρόνιος are next “fitted” (προσκμιοτεν, 36e1) to this numerically derived soul; thus heaven and time do indeed explain and identify ὅλλ’ ἄττα in Theophrastus’s wording in this passage (cf. Laks 1988, 240). Second, as Dillon 2002, 181–182 pointed out, Plutarch offers an explanation of the generation of the soul in the *Timaeus* which purports to represent Xenocrates’ views (fr. 68 Heinze; see the Loci Paralleli), from which the generation of the soul ultimately from the one and more immediately from the numbers can be plausibly inferred; and if soul is thus generated, so is also heaven. Now whether Theophrastus meant by this to impugn Plato (whom he appears to exonerate a few lines later), or Xenocrates and other Platonists, or even the trend of discussions in the Academy, is debatable; but the passage in question does mean that the philosophers Theophrastus is talking about derived soul, the heavens, and time from the numbers and the one.

6b5 ὡσαύτως δ’ οὐδ’ οί περὶ Σπεύσιππων] This is the correct reading, with the Paris manuscript (P) being the only one of the four independent witnesses (PJ Ψ Λ) to omit οὐδ’. The reference to Speusippus is incontestably negative: what Theophrastus means is precisely that those about Speusippus τοῦ οὐρανοῦ πέρι καὶ τῶν λοιπῶν οὐδεμίαν που- οῦται μνείαν, i.e., they do not explain how “the lower entities can be derived from the principles assumed” (van Raalte 264). This is the theme of this entire Aporia, that some philosophers posit the principles and then stop without explaining the derivation of everything else from them. Theophrastus’s statements about Speusippus and all the others concern just this aspect of their works.

6b7 περιτίθησιν] The preposition περὶ in περὶ τῶν κόσμων need not indicate place (“in, dans, nell’; autour au sens de distribuer, im,” in the translations) but the object about which one is concerned, and the prepositional phrase then would naturally go with ἀπαντά (ἀπαντά περὶ τῶν
κόσμον); cf. Plato Symposium 193a8, πάντ’ ἄνδρα χρὴ ἀπαντᾶ παραγε-λεύσοντι εὔσεβεῖν περὶ θεοῦς, literally, “every man ought to be exhorted to observe [religiously] everything about the gods.” in which case, the verb περιτίθημι can have its regular meaning (“bestow, provide”) as in the other two instances Theophrastus uses it in this Essay (4223, 7220). So the meaning here would be, “provide everything that has to do with the universe: sensibles, intelligibles, etc.” This fits the context better, in which Theophrastus is concerned with showing not so much that Xenocrates assigns everything to its place but that he does not stop with the first principles but provides his universe—populates it, as it were—with all the proper ingredients and presumably also with how they are interrelated. In any case, there seems to be no need to emend to διατίθημι, as proposed by Usener 1890.

On the other hand, the Arabic translation does no help: it translates the verb by a simple yaj’alu, literally “he places,” which renders just τί-θημι, without specifying which preposition Ihāq read. The whole sentence reads, yaj’alu (the verb) ‘alā wajhin mina l-wujūhi (πως) jamī’a l-ašā’i (ἀπαντα) fi l-’alami (περὶ τὸν κόσμον) ‘alā mitālin wahidin (ὁμοίως): literally, “he places in some manner all things in the universe in the same way.” In the other two passages in this work where περιτίθημι occurs (4223, 7220), Ihāq uses different words according to sense.

6b8–9 αἰσθητὰ καὶ νοητὰ καὶ μαθηματικὰ καὶ ἕτερα τὰ θεια] The repeated conjunction καί clearly intends to distinguish among the four classes of entities. Ross 56–57, on doctrinal grounds derived from other witnesses of Xenocrates’ views, wants to reduce the number to three by conflating νοητα and μαθηματικα, and accordingly translates, “objects of reason or mathematical objects” (emphasis added), something for which Isnardi Parente 1982, 334–335, rightly takes him to task.

6b11 μὲν οὖν, “And yes;” assentient οὖν with prospective μὲν, answered by δὲ in 6b15 (for this μὲν οὖν see 4b16–17 above). The implication is that Theophrastus meets the expectation (assentient οὖν) of the reader.

25 Judging from the variety of prepositions used with the essentially intransitive verb εὔσεβεῖν, it is perhaps unlikely that it would take a direct object in the accusative, as the case seems to be here, though LSJ do register a usage εὔσεβεῖν θεοῦς. I would guess the accusative is one of respect.
to hear about Plato’s position and responds to his objection that Plato should not be included among those who stop short from deriving all reality from the principles. See the comment at 6a24–25.

It may also be mentioned, assuming that Theophrastus here has the *Timaeus* in mind (as in 6b27, and see the next comment below), that an additional reason for his reservation may be the narrative (ἐἰκὼς μὴ-θος, 29d2), and not analytical, nature of Plato’s account in the *Timaeus*.

6b11–15 Theophrastus’s statement here implies that Plato made a distinction between ideas and numbers, a statement which contradicts Aristotle’s view that Plato held that all ideas were numbers. On the accuracy of Theophrastus’s report see Cherniss 1945, 26–27 and n. 112; Ross 1951, 216; Tarán 1981, 379; Henrich 321–326, with review of the more recent literature.

6b14–15 εἴτα κατὰ τὴν γένεσιν μέχρι τῶν εἰρημένων] “The [things] mentioned,” cannot refer, of course, to “such things as τόπος, κενὸν, etc.” (Ross 59) because these are not the things that Plato derives from the indefinite dyad but those which Theophrastus is criticizing; on the other hand, the expression τὰ εἰρημένα is too specific to refer merely to τῶν ἄλλων (6b12–13) as objects of sense (as suggested by Tarán 1981, 381n194, and Laks & Most 47n85). This Aporia begins at 6a14, where Theophrastus demands of philosophers to proceed to the derivation of τὰ ἐΨϕ ῥως (6a17) and cites as examples the explanation given by Eurytus of ἄνθρωπος and ἵππος (6a22). Τὰ εἰρημένα therefore must refer to τὰ ἐΨϕ ῥως as exemplified by such objects of sense as men and horses. And in the case of Plato, who is the subject under discussion in this sentence, the reference must again be to the *Timaeus*, which goes into the very details of human anatomy. Theophrastus’s expression κατὰ τὴν γένεσιν is significant in this regard: the *Timaeus* indeed proceeds by describing the very composition of the universe and its contents “in order of generation.” Finally, εἴτα indicates a change of the upward progression to its opposite, as implied in the concept of “generation” (and which justifies the addition of “[down]” in the translation): the “order of generation” is from the principles on down, not the other way.

6b16 τῶν ἄρχον] As repeatedly noted, the genitive makes it certain that the verb to be understood here is ἄπτομαι from 6b12; the question, however, is whether what to be understood precisely is ἄπτονται (they treat),
or δόξεων ἄν ἀπτενθαί (they would seem to be treating), since both are possible. The answer depends on how one interprets the reservation implied by the optative (see the comment at 6b11 above). If the reservation is directed only to Plato, as I think it is, then clearly only ἀπτονται is to be understood.

6b16–17 τὴν ἀλήθειαν ἐν τούτοις. The difficult term ἀλήθεια here refers to its ontological and not epistemological dimension. For the use of the word in Aristotle in these two senses see Bonitz Index 31a39–42: "nominis usus modo ad τὸ ὄν et τὴν οὐσίαν, modo ad cognitionem et scientiam vergit." The Aristotelian passages he cites equate ἀλήθεια with τὸ πράγμα, ΨπΡΥτᾶ Ψοῦς, τᾶ ὄντα, i.e., the things as they are, objective reality. This is the sense in which Theophrastus is using the word here, as in any case the definite pronoun preceding it, τήν, indicates: the universe, the one reality, or "reality itself," as I render it. (See also the following comment at 6b17.)

The accusative of τὴν ἀλήθειαν makes it certain that a verb like φαοῖ or λέγοισι is to be understood; see Ross 79 note to 5a27. However, Ross exaggerates when he places all elliptical expressions on the same level as this one. Three categories should be distinguished: (a) Obvious implication. Even without any context, in a sentence like the present one, ἐνιὸς δὲ καὶ τὴν ἀλήθειαν ἐν τούτοις, the implied φαοῖ or λέγοισι can be automatically understood; there can be no other meaning. (b) Contextual (grammatical) implication. Some other elliptical expressions can be understood only in context, i.e., the syntax and context of a paragraph generate a certain structure in the reader's mind who is then able to provide the omitted word(s); e.g., 6b15–16, οἱ δὲ τῶν ἄρχων μόνων, where the genitive can only be understood in relation to the genitive complement (τῶν ἄλλων) of the verb ἀπτενθαί in 6b12. (c) No implication. In some cases, there is no implication, either obvious or contextual insofar as no writer would expect his reader to make such semantic jumps without deliberately causing obfuscation. And in this case there is no indication that Theophrastus sought to cause that, which means that these so-called elliptical expressions have to be interpreted differently, i.e., by not assuming the presence of an ellipsis.

In this particular sentence, the pronoun is neuter, τούτοις (rather than masculine), and refers not so much specifically to the feminine plural noun τῶν ἄρχων in the preceding line—for that Theophrastus should (and would) have used a feminine pronoun—but to the contents of the noun ἄρχαί, things like the one and the indefinite dyad, the
unmoved mover, etc., which are principles. Τοῦτοις thus here means “these things” with reference to the various items that have been taken in these philosophies to be first principles. It is dangerous to enunciate ad hoc grammatical rules, as Ross 45 does, “that Theophrastus tends to revert to the neuter when he is referring to anything inanimate;” they tend to distract one from understanding what the text really says. Of the three examples of this so-called “tendency” of Theophrastus that Ross gives, ἐκεῖνος in 5a26 does not refer to αὐτοίς (see my comment above), Τοῦτοις in the present passage just discussed does not refer to ἀφοχαί, as just discussed, and ἐκεῖνοις in 6b19 is a manifest scribal error for ἐκεῖνως, as discussed just below.

6b17 περὶ τὰς ἀρκΡΥαῖς] There appears to be almost unanimous agreement among scholars that the preposition here is to be interpreted as “in” (as in the case of 6b8); van Raalte even cites Müller’s 1878 study where he states that in the botanical works Theophrastus uses περὶ for ἐν. Be that as it may, and without having to do a complete study of the use of this preposition in Theophrastus, it seems strange that he should have said περὶ where he meant to say ἐν, especially in a context where abstract ideas are discussed, as opposed to the concrete meanings of the preposition in the botanical works. Clearly there must be semantic nuances that pertain to the use of περὶ in Theophrastus’s Greek and in that of his contemporaries that are not expressed with ἐν. This is why someone like Ross, who does translate with the preposition “in”, nevertheless gives a paraphrastic and not a literal translation of the entire sentence: “for they concentrate reality entirely in the ruling principles”—to say nothing of the even more paraphrastic version of Reale (1964): “Le cose, infatti, si fondano non su altro che sui principi;” for a literal rendering with the preposition “in” would make little sense: “For beings are only in the principles.” And if περὶ makes little sense as ἐν in the context, it is doubtful that it can be stretched to mean “in the realm of” (van Raalte), “dans le domaine des” (Laks & Most). Tricot, who also gives a paraphrastic version, nevertheless was headed in the right direction: “car la réalité tourne exclusivement autour des Principes.” For the preposition περὶ with the accusative does mean “concerning, about, having to do with, pertaining to,” and this meaning seems to fit the context better and more naturally: all things, i.e., all things that exist, τὰ ὁντα, are not “in” the first principles or are not themselves first principles (for what else would the statement, “they are in the realm of first principles,” mean?), but they have to do with and pertain to, insofar as they exist and have
being, the first principles. As Aristotle puts it in the passage from his *Metaphysics* α 1, 993b31, an understanding of which Theophrastus here echoes (cf. Reale 1980, 411n20, pace van Raalte 276–277), ἐκατότον ὡς ἔχει τοῦ εἶναι οὐτω καὶ τῆς ἀληθείας, “as each thing is in respect of existence, so is it in respect of reality.” This whole Aristotelian passage (for which see the Loci Paralleli) is about ἀληθεία in the ontological sense (as is clear also from the classification of relevant passages in Bonitz *Index* 31a39 ff.; see the preceding comment), and I accordingly change the word in Ross’s translation of this passage just cited (CWA, p. 1570) from “truth” to “reality.”

6b18 μεθόδοις means disciplines here. For what Theophrastus is contrasting is not the differences in procedure in the various fields but the knowledgeability of their subject matters. For this use of the word in Aristotle see Bonitz *Index* 449b60–450a30. This usage continued in later centuries; cf. Nicomachus of Gerasa, *Introductio arithmeticae* 8.4–9.5, where he gives examples of two disciplines: δύο μέθοδοι … ἀριθμητική … μουσική.

6b19 ἐν ἐκείναις] It is very difficult to insist, as all translators do, that the reading ἐκείναις in all Greek manuscripts (for what I correct to ἐκείναις here), taken as neuter, could refer to the immediately preceding feminine noun μεθόδοις. There is simply no explanation. The reason Ross 45 gives, “that T. tends to revert to the neuter when he is referring to anything inanimate,” does not apply in the two of the three examples he gives (the other two being 5a26 and 6b17; see my comments on these), and the third concerns the present case. If Theophrastus really did use the neuter to refer to inanimate things, then at least he would have been consistent and continued referring to μεθόδοις in the neuter when he next refers to them in the same sentence two lines down, ταῖς λοιπαῖς, but he does not; he uses the proper feminine pronoun, so he clearly did not “revert to the neuter.” Besides, to say ἐν ταῖς ἀλλαξ μεθόδοις ἐν ἐκείναις is also impossible Greek—to mention, that is, a noun and then, with the immediately following word that refers to it, change the gender. Nor is there any contextual justification. If μεθόδοις means here study, discipline, etc., as all agree (see the preceding note), then all the other presumably synonymous words that Theophrastus could have had in mind are also feminine (I pick the words from the parallels in Bonitz’s *Index*: πραγματεία, θεωρία, ἐπιστήμη, τέχνη, ζήτημα. And I cannot think of, nor anyone has suggested, anything else that Theophrastus could have
had in mind. The Arabic and Latin translations, finally, are correct, but all this means is that both translators understood the disputed word to refer to "μετρητας", as we do, regardless whether they read "ἐκείνοις" or "ἐκείνως". But the transmitted "ἐκείνοις" in the extant Greek manuscripts is wrong and cannot be justified. Though there can be no certainty, the mistake likely occurred in the minuscule stage of the transmission of the manuscripts: A and O in "ἐκείνοις" are not readily confused in uncials; on the other hand, it is just as likely that the scribal error may have come about due to the influence of "ἐν τούτοις" two lines up (6b17) which conditioned, through (a misunderstood) parallelism, the neuter dative in "ἐν ἐκείνως". In any case, Camotius corrected the gender to the obvious "ἐκείναις" and was followed by Usener 1890, both of whom I am happy to follow.

6b20 τῶν ἐπιστημῶν has created problems of interpretation and a number of readings have been proposed. The genitive phrase could function in one of the following ways: as partitive genitive depending on (a) "ἐξείναις" (as I emended, and as suggested by Laks & Most 47190: "in those of the sciences"), (b) τὰ μετὰ τὰς ὀρθὰς (see below), (c) ἰσχυρότερα καὶ τελεώτερα (van Raalte: "the stronger and more complete part of the sciences concerned"); (d) as objective genitive after ἰσχυρότερα καὶ τελεώτερα (Dalechampius, as cited by Laks & Most 47190: "ad parandam scientiam exactiora"); and (e) as genitive of comparison after ἰσχυρότερα καὶ τελεώτερα ("more complete than the sciences"). (e) is manifestly absurd; (a) is silly and redundant: if ἐπιστημῶν means roughly the same as μετρητας, then ἐν ἐκείναις by itself has already said what ἐν ἐκείναις τῶν ἐπιστημῶν is presumably intended to say; (d) seems very unlikely; objective genitives are in essence passive in meaning insofar as they express a frame of mind or emotion, or else are substitutes for prepositions in expressing the relationship to the word they modify (cf. K.-G. II.1,335–336): it is very doubtful that τῶν ἐπιστημῶν τελεώτερα could stand for τελειῶτας ἐπιστήμας; and (c) for van Raalte's reading to be possible the predicative ἰσχυρότερα καὶ τελεώτερα would have to be introduced by the article, τα, so that the partitive meaning of the genitive can be elicited. This leaves (b) as the only viable alternative. The question, then, is the precise meaning of ἐπιστημῶν. Henrich 108 makes the valid observation that Theophrastus here is talking about epistemology; the parts after the first principles are ἰσχυρότερα and τελεώτερα not in a metaphysical or ontological sense but epistemologically: they are known better and more completely. If this is the
case, then ἐπιστημῶν cannot and should not be translated as sciences but “knowledges,” or, given the partitive construction, “parts of knowledge.” This, incidentally—the little tolerance that English shows for the word “knowledge” in plural—is a frequent source of confusion and inexact renderings of the Greek word, unless one constantly keep the Latin etymon of the word ‘science’ in mind (which in regular modern English parlance one does not). For example, in a passage where “knowledges” is manifestly the intended meaning, translators still render the plural word as “sciences:” Aristotle, *Metaphysics* A 9, 990b12–13, εἴδη ἐσταὶ πάντων ὅσον ἐπιστῆμαι εἰσί, “there will be forms of all things of which there are knowledges (“sciences” Ross, Tredennick, etc.).” Aristotle goes on to give examples of such knowledges, forms of negation and perishable things, and it hardly makes sense to say that we have a science of negation or a science of perishable things. The same problem, by the way, exists also in English translations of philosophical Arabic, for the word for knowledge, ʿilm, pl. ʿulūm, is similar to ἐπιστῆμη in its polysemy.²⁶

*Aporia 14*

6b23–7b5 (πῶς καὶ ποίας, ἂν ἀπορησεῖν τις, πότερον . . . ἢ): *How and of what sort should one suppose the first principles to be?*

The argumentation of this aporia is convoluted. Theophrastus discusses three positions, and thus there are three diaporiae, numbered here in the commentary as 14.1, 14.2, and 14.3, but their various parts are actually interwoven in the text. They are disentangled here and presented consecutively. In order to avoid clutter in the presentation of the Greek text and the English translation, not all these numbers of the various parts of the diaporiae are actually given there. After the initial statement of Aporia 14 (6b23–24), Theophrastus continues:

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Diaporia 14.1a (6b24–26). The first principles may be shapeless and potent, like fire and earth. Diaporia 14.1b (7a7). Some suppose that there are only material principles. Diaporia 14.1c (7a10–19). (Objection to this position:) It would seem unreasonable even to these people (were they to think seriously about it) if the entire universe were orderly and formally principled in all aspects but the first principles themselves were not. For example, Heraclitus should have realized the absurdity of his own statement when he said that the human body, made up of elements “poured out at random” (i.e., by random and indeterminate first principles), is nevertheless the most beautiful arrangement of such elements. And yet these philosophers do maintain that the nature of everything among both animate and inanimate things, down to the smallest thing, is determinate, but not the first principles.

For references to this much discussed fragment of Heraclitus see the comment on 7a15 below.

Diaporia 14.2a (6b26–7a6). The first principles may be already shaped, since it is necessary most of all for these to be determined, as Plato says in the Timaeus, for it is appropriate for the most valuable of beings to have order and be determined. (Parenthetically Theophrastus adds that) except for a few disciplines like grammar and music, the rest have principles that are determined, and so do the crafts which, in fact, imitate nature. Diaporia 14.2b (7a6–7). Some suppose that there are only enshaped first principles. Diaporia 14.2c (7a19–7b5). (Objection to this position: In the case of these people) as well it is difficult to assign to each set of things its own formal principles by a collective referral to a final cause, unless it happens that, due to the orderly arrangement and change in other beings (viz. the celestial bodies and configurations), changes come about on earth and in the air, e.g., the seasonal generation of plants and animals under the influence of the sun.

Diaporia 14.3 (7a7–10). Some suppose that there are both material and enshaped first principles, on the ground that what is complete is composed of both, given that all of existence derives from opposites.

The last position is favored by Theophrastus. He returns to it in Aporia 18 below, to which this passage refers. For an analysis of this entire Aporia with its diaporiae as the introduction, thesis, and antithesis of the question whether the principles are determinate or not see Ellis 1988, 221–222.
6b25 οἶον δυναμικός, ὡσπερ ὅσοι πῦρ καὶ γῆν] The word δυναμικός first appears in the writings of the Italian Pythagorean Philolaus as quoted by Stobaeus (Eclogae 1.20.2, I.172.9 Wachsmuth = fr. 21, line 5 Huffman, Timpanaro Cardini). These writings, however, are considered spurious and hence more recent than Theophrastus, and thus the first unequivocal occurrence of the word is in the historian Theopompus (fourth century BC), who uses it to describe the efficacy of a poison (δυναμικὸν ἐναργῶς ὄν), fr. 181b Jacoby. It thus means having potency rather than potentiality (pace Schnayder 1973, 55n25), and Laks & Most 48n2 are doubtless correct when they associate it with the common expression further down, 8a19, δύναμιν δὲ τιν' ἐχον (cf. ὑλικὸς 7a7, “having matter”); for Aristotle, see, i.a., the opening sentence of the Poetics, ἣν τινα δύναμιν ἔχων, sc. τῶν τῆς σοφίας εἰδών. It should be noted that if δυναμικός is roughly equivalent to δύναμιν ἔχων, it does not mean the same thing as δυνάμει εἶναι, “potential”; LSJ list only Damascius (sixth Christian century) as evidence for the use of the word with the meaning “potential.” If the reference by Theophrastus here is indeed to Parmenides, about whom he explicitly says that he posited earth and fire as principles (see the Loci Paralleli), then δυναμικός would be a very apt synonym of the participle ποιοῦν used in that passage to describe the potency of fire. The use of οἶον just before δυναμικός in the text would appear to mitigate the contrast between the shapelessness of a first principle and the fact that it is nevertheless dynamic or efficacious.

The occurrence of the word among the Pythagoreans, and especially Philolaus, even though assumed to be spurious, may not be insignificant. If the passage quoted by Stobaeus has some basis in pre-Socratic Pythagorean writings, to which Theophrastus would have had access, the dualist theory mentioned here by Theophrastus (earth and fire as principles) may well be referring to some Pythagorean cosmogony, possibly even to Philolaus and his theory, in which central fire would indeed be the δυναμικὸν first principle, with earth and counter-earth as secondary (cf. Huffman 207–215, 246–248).

Alternately, commentators have also pointed out that “fire and earth” may mean “fire or earth,” and thus entertained the possibility that Theophrastus is talking about here monists rather than dualists, in which case the reference would be to Heraclitus, of course, and to Hippasus. As Ross 60 points out, though, Aristotle said (Met. A 8, 989a5–6) that no philosopher ever treated earth as a first principle, so reading the phrase above as “fire or earth” cannot stand. Finally, though it is difficult to be certain, the normal reading of καί in πῦρ καί γῆν (as opposed to, say,
πῦρ ἢ γῆν, or even better, ὅσοι πῦρ καὶ ὅσοι γῆν, which Theophrastus does not say) would be to have it join two items that belong together in the thinking of a dualist.

6b27 For a discussion of the comments by Theophrastus on the Timaeus see Baltussen 2003.

7a1 ἐν ταῖς λοιπαῖς refers, naturally, as in 6b21–22, to μεθόδοις, not to ἐπιστήμαι; see above, commentary on 6b18 and 6b20.

7a1 σχεδὸν] It is difficult to gauge the precise force of this adverb. (a) Most translators take it to modify what follows, ὥτω ἐξείν, so that the meaning is, “and in the rest of the sciences this seems pretty much to be so” (Ross, and similarly Tricot, Reale, Laks & Most, Henrich); whereas (b) Ishāq and van Raalte see it as modifying ἐν ταῖς λοιπαῖς. The point is not moot. In alternative (a), if the case is “almost” so in the rest of the disciplines, i.e., if the principles are “almost” shaped and determined in the rest of the disciplines, this means that they are not fully determined in any discipline other than metaphysics, the discipline in which Theophrastus is currently engaged. In case (b), the principles are shaped and determined in “almost” all the rest of the disciplines, which means that they are fully determined in most of the disciplines other than metaphysics, except for a few in which they are not. Now if (a) is what Theophrastus means, it would imply that, in the examples he provides next, mathematics would be a discipline without fully determined principles, something which would be difficult to maintain given Aristotle’s statement (see the Loci Paralleli) that most of all it is mathematics that displays determinacy. Furthermore, if (a) is meant, the examples that follow would be pointless: if all the rest of the disciplines have no fully determined principles, why single out three of them as examples? It thus appears that σχεδὸν should be read as modifying ἐν ταῖς λοιπαῖς, in which case the examples immediately following can be seen as providing explanation for σχεδὸν by discriminating those disciplines which do not have fully determined principles from those who do. See the following comment.

7a2 The transmitted Greek text of this line is problematic (καὶ ἐν ταῖς λοιπαῖς σχεδὸν ἐξείν οὕτω καθάπερ ἢ γραμματικὴ καὶ μουσική), as is evident from the many attempts by scholars to emend it. The Latin translation reads, et in reliquis fere habere ita quemadmodum grammatica
et musica, which shows that Λ had the same text as the extant Greek manuscripts. The Arabic translation, by contrast, points the way to the solution, indicating that Ψ had the correct reading. The error can thus be located in the common parent of the Messinan (Λ) and Constantinopolitan (α) recensions of the text but not in the archetype.

The Arabic translation of this passage reads, “Now we find this to be so in the rest of the sciences except for a few, like writing and music, and the situation is the same with the mathematical [sciences].” This is different from the Greek text we have in two important aspects. First, Išḥāq clearly understood writing and music as two examples of the few sciences that form the exception to the rule, exemplified by mathematics, the science with the most ordered and determined principles. Since this understanding cannot be achieved from the Greek text either as we have it or as emended by the scribe of J II and other modern scholars, either Išḥāq failed to understand the (relatively very simple) text, or he read before καθάπερ some word(s) that fell out in the extant Greek manuscripts, i.e., there is a lacuna before καθάπερ. Second, the Arabic does list the three disciplines one after the other, but separates the first two (writing and music) from the last (mathematics) by the expression, “the situation is the same with” (wa-ka-dālīka yajrī l-amru fi). It seems quite improbable that this entire phrase would be a mere translation of καί in καί ταῖς μαθηματικαῖς, the only word in the Greek text separating μουσική and μαθηματικαῖς, unless something preceded in the lacuna that would impart such a sense to καί. Expressions of this sort throughout this text in Arabic translate various Greek adverbs like οὕτως and όμοίως (see the Glossary), but this particular one, ka-dālīka yajrī l-amru, in another passage (11a8) translates ὡσάυτως. It is thus very probable that Ψ may have read, καί (ὦσάυτως ἐν) ταῖς μαθηματικαῖς, where ὡσάυτως would indicate that Theophrastus was reverting to his discussion about the order and determinacy of principles after the brief parenthetical note differentiating grammar and music from mathematics. These two aspects of the Arabic version taken together suggest that a lacuna has to be assumed at least before καθάπερ, if not also before ταῖς μαθηματικαῖς.

Apart from the evidence of the Arabic translation, a lacuna before καθάπερ has to be assumed mainly for two reasons: first, it is difficult to account for the nominatives of ἡ γραμματικὴ καὶ μουσικὴ in all the independent witnesses, including Ψ and Λ: they could hardly have arisen from a corruption of the text as originally reconstructed by the scribe of J II and accepted by almost all modern editors (i.e., the addition of
ἐν before the two nouns and of a iota subscript and circumflex of the
final η of both for the dative), and they do not appear to have been
a marginal gloss that was inserted into the text, as suggested by van
Raalte (209n2); if they had, and they are athetized, then the phrase
after οὔτω must read either καθάπερ καὶ ταῖς μαθηματικαῖς, or, if one
assumes that καθάπερ also was part of the marginal gloss, just καὶ ταῖς
μαθηματικαῖς. But of these the first seems unlikely and the second is
“rather pointless,” as van Raalte 290 rightly points out: to say καὶ ταῖς
μαθηματικαῖς after having just said καὶ ἐν ταῖς λοιπαῖς without any
intervening text to require the explicit declaration and affirmation of καὶ
ταῖς μαθηματικαῖς makes little sense; “one would at least have expected
καὶ δὴ ταῖς μαθηματικαῖς.” Thus the nominative in the following two
words after καθάπερ must be seen not itself as a corruption that needs to
be corrected but as a fossil of the correct text which indicates an adjacent
corruption, namely this lacuna.

Second, if σχέδον in 711 is taken as modifying ἐν ταῖς λοιπαῖς (see the
preceding comment), the examples that follow must provide some expla-
nation for Theophrastus’s statement by discriminating among the vari-
ous disciplines, and the two disciplines of grammar and music contrasted
with mathematics would indeed provide such a discrimination. Further-
more, if it is assumed that Theophrastus intended no such discrimina-
tion, it seems rather unlikely that he would have put grammar and music
at the very same level as mathematics with regard to the order and deter-
minacy of their principles, or, for that matter, cited grammar and music
before mathematics; for as it is, i.e., in the passage as reconstructed by
the scribe of JII, mathematics appears almost as an afterthought. But it
is difficult not to see in this passage of Theophrastus an echo of the
Aristotelian text in Metaphysics M 3, 1078a36–b2, τοῦ δὲ καλοῦ μέγι-
στα εἰδή τάξις καὶ συμμετρία καὶ τὸ ωριμένον, ἃ μάλιστα δεικνύ-
όμον αἱ μαθηματικοὶ ἐπιστήμαι. And if numbers are the principles of
mathematics, it is difficult to see that they can compare, with regard
to order and determinacy, with the principles of grammar and music,
which are, respectively, φωναῖ, articulate sounds (Met. Γ 2, 1003b21),
and φθόγγοι, notes (De mundo 396b16, despite the spurious attribution
of this work to Aristotle), both of which are produced by men and are
accordingly quite variable. Similarly, in Plato’s Philebus (18a6–d2), gram-
mar and music are presented as having an infinity of elements that have
to be reduced to order (18a6–d2) and as sciences based on conjecture,
having little that is certain and exact, as opposed to arithmetic (56a3–
d1).
It is possible to go even further. Depending on what Theophrastus had in mind with ἀρχαί in this passage, it may be possible to point to principles of music which are even further removed from order and determinacy than notes. In a passage preserved in Plutarch’s Table Talk (I.5.2 623A), we read that Theophrastus had said that the principles of music are three, “pain, pleasure, and inspiration,” λέγει δὲ μουσικῆς ἀρχὰς τρεῖς εἶναι, λύπην ἡδονὴν ἐνθουσιασμὸν (fr. 719A FHS&G). Affections such as these are neither orderly nor determinate. The same applies to “grammar,” in that it could be said to have principles that are themselves further removed from order and determinacy than articulate sounds. In the Topics Aristotle defines γραμματική in such a way as to make of it, as a discipline, a qualitatively very different thing than mathematics. It is, he says (142b31–33, p. 241 CWA), “the knowledge how to write from dictation and how to read” (τὴν γραμματικὴν ἐπιστήμην τοῦ γράφων τὸ ὑπαγορευθὲν … καὶ τοῦ ἀναγνωστῆν). The principles of literacy, if that is what Theophrastus had in mind here with γραμματική, cannot have the same determinacy as those of mathematics. This evidence sufficiently indicates that in this passage Theophrastus is somehow making a distinction between grammar and music on the one hand and mathematics on the other with regard to the order and determinacy of the principles of these disciplines, and that the clause with the two nouns in the nominative expressed this distinction.

The Arabic translation suggests that the structure of this entire sentence in Theophrastus was as follows: Theophrastus states a general state of affairs which he qualifies by using the word σχεδόν, opens up a parenthetical aside in which he registers an exception to this general state, gives two examples of this exception (grammar and music), and finally reverts to the general state by giving an example of it, mathematics. As it turns out, Theophrastus uses such a syntactic structure, with slight variations, relatively frequently. Most immediately parallel is the following passage from HP VII.6.1, lines 4 ff.: ἅπαντα γὰρ ἦστι τὰ γένη ταῦτα καὶ ἄγρια, καὶ σχεδόν τὰ γε πολλὰ παραπληροῖσαν ἔχοντα τὴν ὑψίν τοῖς ἠμέροις, πλὴν τοῖς γε φύλλοις ἐλάττω ταῦτα καὶ τραχύτερα … καθάπερ ἢ τε θύμβως καὶ ἢ ὄφειναν. The following two passages have a similar structure: HP III.9.1, lines 1 ff., καὶ σχεδόν τὰ γε πλείοτα διαρφοῦσι ἀφρενὶ καὶ θῆλει … πλὴν ὀλίγων ὑπὸ ἐστὶ καὶ ἡ πεύκη, and HP I.6.6, lines 1 ff., σχεδὸν δὲ καὶ τὸν λαχανωδὸν τὰ πλείοτα μονόφριζα … πλὴν ἔνια καὶ ἀποφυάδας ἔχει μεγάλας, οἷον τὸ σέλινον.

Since the Arabic indicates that what dropped out meant to say “except for a few” (mā ḥalā ʾs-sādḍ minhā), the evidence above suggests that
the lacuna must have included the word πλήν plus another word. Πλήν is in fact translated by mā ḥalā in this Essay (6b6), and the evidence of the translation literature indicates that šadd is rendered by παῦροι and ἐνιοί (see the commentary on the corresponding passage in the Arabic translation). Since Theophrastus uses παῦροι only once in his extant writings (HP VIII,7.4 l. 8), ἐνιοί would be a good candidate for the lacuna (it is used in the third example just cited), but so would ὀλίγοι, which is both used by Theophrastus (as in the second passage cited) and would fit the sense better in this context. It thus appears almost certain that the text that dropped out before καθάπερ here read, καὶ ἐν ταῖς λοιπαῖς σχεδὸν ἔχειν οὕτω τοῦ πλήν ὀλίγας, καθάπερ ἐν γραμματικῇ καὶ μονοσικῇ, καὶ ταῖς μαθηματικαῖς. If this is the Greek text that was translated by Ishāq, then it may be possible to derive the amplified meaning of “the situation is the same with” from καὶ in καὶ ταῖς μαθηματικαῖς, in which case one would not have to emend the following clause as well and read καὶ ὡσαύτως ἐν ταῖς μαθηματικαῖς.

7a4 ἐτὶ δὲ ... ὀμοίως, i.e., ὀμοίως ἔχει, the structure of the sentence paralleling the earlier one in 7a1, with ἐτὶ δὲ adding yet another item after δὲ in that line (cf. van Raalte 292, Laks & Most 5099).

7a4, 6 κατά, “in accordance with,” i.e., crafts, just like most of the disciplines, bear out, as analogues, the observation made in 6b6–28 that order and determinacy are most appropriate to the first principles. For an analysis of this sentence see Henrich 110.

7a6–7 The accusatives in ἐμμορφοὺς and υλικαῖς are parallel to those in ὀμορφοὺς and δυναμικαῖς (6b25) and thus dependent, after the long parenthetical argument in 7a1–6, on the verb ὑποθέσθαι (6b23), to assume.

7a7 πάσας here means “nothing but, just, only” (LSJ s.v. I,4), not “all.”

7a7–8 τὰς τ’ ἐμμορφοὺς καὶ τὰς τῆς ὕλης] The extant Greek manuscripts and the Latin translation add here this phrase, “both those possessed of shape and those of matter,” which is absent from the Arabic translation and hence from its Greek exemplar Ψ. This is clearly a marginal gloss that entered the main text in the manuscript transmission deriving from one transliteration from uncials (see the stemma codicum). In the highly
succinct style of this Essay, Theophrastus would have hardly wasted
words explaining something obvious while letting stand other, more
ambiguous expressions.

7a10 ἄλογον δὲ, introducing the objections to the “materialists”, is an-
swered by χαλεπόν δὲ in 7a19, introducing the objections to the “formal-
ists.” It is impossible in the English translation to place these two adjectives first in their respective sentences.

7a10 κἀκεῖνος, “these [people],” must refer to the “materialists,” i.e.,
those who assume only indeterminate material first principles, one of
the three groups of philosophers Theophrastus mentioned in Aporia 14.
There has been much discussion on this subject (for which see the com-
mentaries), with Laks & Most claiming that “them” refers to the “dual-
ists,” and everybody else the “materialists.” The arguments in favor of the
“materialists” are the following. First, the subject “they” indicated in λαμ-
βάνοντιν in the following sentence (7a16) cannot but be the same, in
context, as “them” referred to by κἀκεῖνος. Laks & Most may be right in
saying that it is not required that this be so (“il n’est pas requis,” 52n17,
which I take it to mean that there is no grammatical necessity that this be
so), but then Theophrastus was writing with the purpose of being under-
stood and, despite the elliptic nature of this Essay, he could not have
violated all rules of contextual intelligibility: a verb without a subject in
a sentence must necessarily refer to the subject expressed in a preced-
ing sentence, unless there are other pointers to the contrary, and in this
case there are none. Second, if it is assumed that “them” refers to anyone
else other than the materialists against whom Theophrastus is arguing in
this diaporia (14.1c), it would make no sense because it would be tauto-
logical: to those who held any one of the three positions mentioned by
Theophrastus, the other two must have naturally seemed “unreasonable;”
so why should Theophrastus say that it would seem unreasonable, using
even the conditional and not the indicative, as if the formalists and the
dualists might even consider it reasonable? And why, in addition, “even
or also (καὶ in κἀκεῖνος) to these [people]”?—wouldn’t it be normal, and
not exceptional, for the views of the materialists to seem unreasonable to
the formalists and dualists to begin with? Finally, the pronoun ἐκεῖνος,
since Theophrastus is going to argue against the materialists in what fol-
ows, points forward to them rather than backward (as elsewhere in this
Essay, at 9b13 and 11a14), and thus there is no point in arguing to which
of the preceding three groups the pronoun is referring (as Most 1988b,
Thus κακείνοις refers to the materialists, and Theophrastus is saying, “it is unreasonable for the formalists and dualists—but also for the materialists themselves, were they to think seriously about the matter—to say that the world is ordered but not its principles, as Heraclitus does.” The objection by Most 1988b, 244, in this instance that, if this were so, it would mean “that Theophrastus would be saying that Heraclitus would find one of Heraclitus’ own aphorisms absurd,” is precisely the case: Theophrastus is saying that were Heraclitus to think seriously about his paradoxical statement he might find it unreasonable. As a matter of fact, in Metaphysics K 5 Aristotle (and/or perhaps also Theophrastus?) is saying exactly the same thing about Heraclitus: “If we had questioned Heraclitus himself in this way we might have forced him to confess that opposite statements can never be true of the same subjects. But, as it is, he adopted his opinion without understanding what his statement involved” (Met. K 5, 1062a31–35, CWA 1678; referred to by Viano 1992, 472n53). The “opposite statements” in this instance, in the Heraclitus quotation cited by Theophrastus in what follows, are “things poured out at random” (εἰκῇ νεχυμένα) on the one hand and “the most beautiful arrangement” (ὁ κάλλιστος κόσμος) on the other, which Heraclitus claims both to be true of the same subject, “flesh” or human body (σάρκις); see the comment at 7a15 below.

7a12 (ἐν ...) λόγος, “formally principled”] This would appear to be the meaning of this polysemic word here and in the next paragraph (7a20), since what Theophrastus is talking about is the determinacy of the first principles in accordance with some “formula” or “plan” (Ross); these words, however, are hardly usable in this sense in contemporary English. “Proportion” (Ishāq, Tricot, Reale, van Raalte) is equally applicable, but if understood in these terms. By contrast, it seems implausible that the term would mean either “raison” (Laks & Most) or “Verhältnis” and “Erklärung” (Henrich). Given that Theophrastus quotes Heraclitus in this context, it may be also that he has this philosopher’s concept of λόγος in mind.

27 Cf. McDiarmid’s 1941, 493–494, similar analysis of Theophrastus’s motive for quoting Heraclitus: “to wrest from his [Heraclitus’s] own words an admission of an antithesis between the orderliness of the world of perception and the disorder of the principles from which the world is formed.”

28 On the question of the authorship of this book and its relation to Theophrastus see Aubenque 1983, and especially p. 343 where its closeness to this Essay by Theophrastus is noted.
This Heraclitean fragment (DK 22 B 124; fr. 107 Marcovich 1978, 2001; T 209 Mouraviev 1999) and its text have been much discussed; see Most 1988b, Viano 1992, van Raalte 301–306, Henrich 111–112, 298–315, Mouraviev 1999, 163–166 and their references to earlier literature. There are two contested readings in the Greek text, σάρξ and the article ὁ before κόσμος. Σάρξ is universally attested: all the Greek manuscripts and the Arabic (Ψ) and Latin (Λ) translations have it, so that if it is indeed erroneous it would be one of the primitive errors of the Neoplatonic archetype manuscript. With few exceptions, all scholars have thought it untenable and emended it, mostly with a word that means “a heap or a pile [of sweepings]” (σάρμα Diels, σάρον Bernays, σωρός Usener, etc; see the apparatus, and in particular the complete table of proposed readings in Mouraviev 1999, 165), so that the resulting text meant, “the most fair universe is like a rubbish-heap of things thrown anyhow” (Ross), and the like. However, what is untenable is this emendation, because it presents the wrong comparison and ruins the point that Theophrastus is trying to make. In this paragraph he is objecting to those philosophers who posit only indeterminate material principles but hold that everything that derives from these indeterminate principles is nevertheless determinate and ordered, and gives the quotation of Heraclitus as example for such a belief. Thus what we need to have in the quotation is an indeterminate principle and an ordered universe. Specifically, this means the following. It is to be noted that the Heraclitean quotation is parallel in a chiasmus to the structure of the preceding statement of the problem by Theophrastus: ὁ μὲν ὅλος ύψικαὶ … περιόδοις is repeated in ὁ κάλλιστος κόσμος, while ἐν δὲ ταῖς ἀρχαῖς μηθέν τοιοῦτον is paralleled by εἰκῆ κεχυμένων (cf. Ross’s 61 comment on the contrast indicated). In other words, the indeterminate principle in the quotation is represented merely by the adverb εἰκῆ and the implied agents (χέοντες) of the passive participle κεχυμένων,29 while everything else that derives from them is represented by ὁ κάλλιστος κόσμος. So what is needed in the quotation, in order for the point Theophrastus is making to be made, is to have the word(s) representing the random principles to stand by themselves in sharp contrast, and not be subordinated syntactically, to the orderliness of the universe. In the text as emended by most scholars, however, we get instead a disordered universe: This most fair universe (i.e., what derives from the principles) is like a rubbish-heap of things thrown about at random.

29 I.e., the indeterminate principle is not, as McDiarmid 1941, 494, thought, represented by κεχυμένα but by their agent(s) who did the outpouring.
Arguing along lines similar to those who would emend ὀἀοξ, but "taking εἰκῇ κεχυμένων as a partitive genitive attached to ὁ κάλλιστος, and ὁ κόσμος as a predicate defining that preceding phrase," Most 1988b, 246, suggested reading σωρῶν for ὀἀοξ as the plural word modified by κεχυμένων. He accordingly translated, "Just like the most beautiful of the heaps piled at random [is] the world-order." This is better, in that it makes what is derived from the principles to be the most beautiful of the heaps, but it is equally marred by calling it "heaps" of things, implying a pell-mell and not orderly arrangement. The problem with all these emendations is that by integrating the word that is substituted for ὀἀοξ into the syntax of the words that follow it, there inevitably results that this syntactic unit ("a heap of random things") becomes the phrase that in the end describes "the universe" (ὁ κόσμος). But according to the sense of the comparison that Theophrastus is trying to make, the universe is what derives from the principles, and for his comparison to work, the phrase that describes the universe must say that it is absolutely ordered and determinate. But these emendations say the opposite.

The objections I raised so far against these emendations are based on the syntax that results from these emendations and on the concomitant sense, which is the opposite of the one required. A more compelling objection, however, is presented by the transmission of the text and the manuscript affiliations, or stemmatics. The corruption of an allegedly correct σωρῶν or σῶμα or σωρόν, etc., into the transmitted σωρὸς, given the very nature of the corruption, could only have happened in the transmission of the text in minuscule copies (as Most 1988b, 247; Marcovich 2001, 548, etc., explain), i.e., after the transliteration of an uncial exemplar into minuscule copies. But this is impossible, for the reading σωρὸς is already to be found in the uncial Neoplatonic archetype: both the Arabic translation, which represents one transliteration from uncials, and the Greek manuscripts together with the Latin translation, which represent the second transliteration, read σωρὸς. Accordingly, unless one assumes that the same corruption of σωρῶν, etc., to σωρὸς occurred in both traditions independently of each other, the alleged corruption must have happened in uncials, something which is difficult to justify palaeographically.

All these considerations make it likely, therefore, that first, σωρὸς may be the right reading after all—it certainly is supported by all the manuscripts while its derivation from a corruption is decidedly not—and second, that it must be detached syntactically from what follows in order to avoid ending up, like the proposed emendations, as just described, with a sense that is the opposite of the one desired. H. Gomperz did precisely
that in 1922 (p. xxvi); he read the text of the quotation with a comma or a colon after οὐκ ξειτική κεχυμένον [ό] κακλιστος [ό] κόσμος, and he translated, “der Menschenleib: zufälliger Ergiessung (d.h. des Samens) vollkommene Wohlgestalt.” Diels, who printed this reading and translation in his 1922 Nachträge, dismissed them out of hand, without discussion. More responsibly, Most 1988b, 245, objected to this interpretation by finding (a) the exclusion of both articles, with the implication that there had been a double interpolation, “implausible,” (b) the “separation between οὐκ ξειτική κεχυμένον scarcely tolerable,” (c) the meaning of κεχυμένον as Ergiessung “quite strained,” and (d) the meaning of κόσμος in Heraclitus as Wohlgestalt unlikely, suggesting that it “should refer to the universe.” But none of these objections has any support. (a) It may be implausible to assume two masculine singular articles to have been interpolated in the passage, but not one, which is in fact what happened, as I will explain below. (b) Second, the separation between οὐκ ξειτική κεχυμένον is quite regular if the quotation is seen as a “definition,” as Viano 1992, 471 suggested; other instances of such separation in the fragments of Heraclitus can be seen, e.g., at fr. B 33 and B 67: νόμος καὶ βουλή πειθεοῦσαι ἐνός, and, θεός: ἡμέρη εὐπρόνη, κτλ. (c) As for Gomperz’s translation of κεχυμένον, a plural passive participle, with a singular gerund, Ergiessung, literally an “outpouring” but specified by Gomperz as “discharge of semen,” may not have been what Heraclitus had primarily in mind (though it can never be ruled out with this philosopher, so polysemic in his expression), but there can be no doubt that the word means “things poured out” in the sense of “things thrown about,” which is a most apposite signification in context. But whatever the primary meaning intended by Heraclitus, this does not affect Gomperz’s understanding of the syntax of the Greek, which reads οὐκ ξειτική καθ αὐτοῦ as syntactically separate from what follows. (d) Finally, not only does the word κόσμος in this fragment not refer to the universe, as the context, which I discuss next, makes clear, but, on the basis of all available evidence (presented in detail by Kirk 1970, 311–314), it cannot mean “universe” in Heraclitus but arrangement and order, perhaps ornament; the meaning of “world” or “universe” was a later development. 30

After Gomperz, the word οὐκ ξειτική and both masculine articles in the passage were retained by scholars representing two different approaches, those who kept οὐκ ξειτική as part of the Heraclitean fragment but removed

30 Most 1988b, 254n84, cites Kerschensteiner’s Kosmos (Munich 1962) in support of his statement but not Kirk’s discussion of the evidence against it.
from it the word κόσμος, and those who did the opposite. The first was introduced by McDiarmid 1941, who claimed the fragment consisted of only the following words, οὐρέξ εἰκῆ κεχιμένην ὁ κάλλιστος, which he translated as, “the fairest man is flesh composed of parts scattered at random.” This interpretation is problematic primarily because McDiarmid did not parse the fragment satisfactorily in its surrounding syntax (though his analysis of the context in which it is found and its intended effect is accurate), but it found the approval of Kirk 1970 who accordingly did not include the Theophrastean citation in his study of Heraclitus’s cosmic fragments. McDiarmid was followed by P. Friedländer 1942 who, perceiving the difficulty of forcing ὁ κάλλιστος to mean “the fairest man” without any other corroborating markers, suggested correcting the text to read, οὐρέξ εἰκῆ κεχιμένην(η ἄνθρωπος)ον ὁ κάλλιστος, by assuming the missing letters to have dropped out through a misreading of an abbreviation in a manuscript. But the evidence of the Arabic translation, to be discussed next, indicates that the omission which Friedländer supposed must have existed in the Neoplatonic archetype of Theophrastus’s Essay, which was in uncial; and uncial manuscripts of non-Christian Greek texts did not use such abbreviations by contraction like that posited by Friedländer. To this group would also belong the implausible reading suggested by Mouraviev 1999, who read the fragment as, ὡσπερ οὐρέξ εἰκῆ κεκυ(η μένων ὁ κάλλιστος, and translated, “tel de la viande (de fausse couche = môle) en vrac (est) le plus beau des enfants.”

The second approach to the text by those scholars who retained, like Gomperz, the word οὐρέξ is represented by the studies of Bollock & Wismann 1972, fr. 124, and by Viano 1992, 471. They saw both articles as

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31 See the objections by Most 1988b, 245–246.
33 On the basis of this translation one is to understand that Mouraviev took οὐρέξ εἰκῆ as the predicate of the sentence, but “flesh randomly,” or “miscarried embryo randomly,” as he interpreted the phrase, can hardly stand alone (the noun cannot be modified by the adverb); in other words, the syntax of the fragment can hardly be, ὁ κάλλιστος τῶν κεκυ(η μένων ἐστὶ ὡσπερ οὐρέξ εἰκῆ. Besides, the sentence as a whole, if it means, “The most beautiful of babies (?) children? embryos?) is like a miscarried embryo,” makes little sense both in itself and especially in the context in which Theophrastus is quoting the adage. In addition, Mouraviev introduced yet another emendation (κεκυ(η μένων) to the transmitted text without any basis; his reference to Diog. Laert. III,72, τοῦ κάλλιστου τῶν γεννητῶν as a description of κόσμος, with reference to Plato’s Timaeus, is hardly relevant, especially since he left κόσμος out of the fragment and otherwise did not integrate it into the overall sentence of Theophrastus.
part of the text and considered the word σάρκας, after which they punctuated the text, not as part of the Heraclitean fragment but as a word introduced by Theophrastus for the sake of comparison, while they admitted the word κόσμος into the fragment. They translated, respectively, “Des choses jetées là au hasard, le plus bel arrangement, ce monde-ci,” and “la più bella organizzazione di cose sparse a caso», dices Eracleito, «[si sarebbe] l’Universo». In this interpretation, to arrive at the meaning they desired, both Bollack & Wismann and Viano, read κόσμος twice in the text, the first time as if the words ὴ κάλλιστος by themselves implied κόσμος, as follows: ὡσπερ σάρκας, “εἰκῇ κεφυμένων ὴ κάλλιστος (κόσμος),” φημιν Ήράκλειτος, “ὁ κόσμος.” But this again is forced and unnecessary.

The main problem in all of these interpretations except Gomperz’s (both those which would emend σάρκας and those which would keep it) is that because of the context of the fragment, where Theophrastus speaks of ὴ ὀλος σοφονός just before quoting it (7α11), it has been assumed that the word κόσμος in it has to mean the universe. But the real point of the Theophrastean context is not to speak about the universe but about order, τὰς and λόγος (7α12), which, according to the materialists, is found in what derives from the principles but not in the principles themselves; thus for the Heraclitean quotation to serve Theophrastus’s purpose in the comparison, the word κόσμος must mean order and orderly arrangement, not universe.34

At this point it is useful to look at the Arabic translation; the Latin does not add anything new insofar as it has the same text as the Greek manuscripts without providing any clues about the two masculine articles in the quotation (caro si35 confusorum pulcherimus ait Heraclitus mundus). The Arabic, on the other hand, suggests the correct reading. For the words ἀλλ’ ... κόσμος it reads, “but the most sublime thing is like flesh scattered to no purpose, as Heraclitus said” (lakin ajallu l-umūri bi-manzilati laḥmin mantūrin bāṭilan, ‘alā mà qa ḍala ḣraqlīṭus). In Greek, following the Arabic syntax, this stands for, ἀλλ’ ὴ κάλλιστος κόσμος

34 This further corroborates the argument by Kirk 1970, 311–314, about the meaning of κόσμος in Heraclitus and at the same time obviates the need (felt by Kirk 1970, 313, following McDiarmid 1941 and Friedländer 1942) to consider the word in this fragment as not belonging to Heraclitus but to Theophrastus on account of its alleged meaning “universe.”

35 Si translates only the εἰ part of εἰκῇ, with the κῆ part most likely omitted by haplography with the following first syllable κε of κεφυμένων, as Kley 21 suggests. Mouraviev 1999, 166, without mentioning Kley’s explanation, suggests instead a misreading of εἰ for εἰκῇ.
ὥσπερ σὰρξ εἰκόνη ἔίκη, ὡς φησιν Ἡράκλειτος. Re-arranging the same words in the order of the actual Greek text, we get, ἀλλ’ ὡσπερ σῴζει εἰκόνη καλλιστος, ὡς φησιν Ἡράκλειτος, κόσμος. Now it is doubtful that the Greek exemplar (Ψ) of the Arabic translation actually had καλλιστος; in all likelihood it had the transmitted genitive plural, but because Ḥaṣq apparently could not understand καλλιστον after the feminine σὰρξ (reading, like his modern counterparts, σῶμα together with what follows rather than separating it) he translated it as if the participle were singular feminine. For the same reason it would appear that he rendered κόσμος in a general way as “things,” umûr, rather than literally. However, the Arabic version clearly has ὡς (ʾalâ mà) before φησιν (thus corroborating Hommel’s and Marcovich’s conjectural addition) and reads ὡς ἡ καλλιστος κόσμος (ajallu l-umûr) without the article ὡς before κόσμος. The presence of ὡς in Ψ helps explain how the second article ὡς was inserted before κόσμος. To begin with, ὡς must have dropped through haplography after καλλιστος in the other branch of the transmission represented by the Greek manuscripts and the exemplar of the Latin translation. Once ὡς disappeared from the text, the resulting reading ὡς καλλιστος φησιν Ἡράκλειτος prompted some copyist, “who took ὡς καλλιστος with Ἡράκλειτος,” to add the ὡς in ὡς κόσμος, as Ross 61 explains. The reading in Ψ, as it can be recovered from the Arabic translation, thus directs us to add ὡς before φησιν and eliminate the article ὡς before κόσμος.

The correct way to read the Heraclitean “definition” which Theophrastus is using in his argument thus becomes, σῶμα, εἰκόνη καλλιστον ὡς καλλιστος, ὡς φησιν Ἡράκλειτος, [ὅ] κόσμος, meaning, “Flesh [as the contour of the human body]: of things poured out at random, the most beautiful, as Heraclitus says, arrangement.” Gomperz was right, except that he secluded the first masculine article unnecessarily and rendered his reading less likely. Heraclitus is not talking about the universe but merely about the human body, by means of whose definition he can illustrate his theory, according to Theophrastus, that the disordered and indeterminate principles, responsible for the pouring out of the elements at random, bring about in actual fact perfectly arranged and orderly wholes. And this is precisely what Theophrastus is castigating him for, pointing out the utter lack of logic in this statement, as does Aristotle in the passage from Met. K 5, 1062a31–35, cited in the commentary on 7a10 above.

Heraclitus’s definition of the human body is in perfect accord with all we know about ancient Greek conceptions, for it was widely held that the outward part of the body, or the contours of the flesh, “adorn” (κόσμος)
the aggregate that forms the human body. In a similar context Galen expresses the same view, perhaps even with the saying or definition of Heraclitus, his Ionian countryman, in mind: καὶ τί γὰρ ἄλλ᾽ ἦ πρὸ πάντων τῶν χυμίων μερὸν εἰς ἁπασαν ἐκχειται βλάβην τὸ σαφέως γένος; οὕτως ἐξ ἁπάντων ἡ φύσις ὠφελεῖ τε ἁμα καὶ κοσμεῖ καὶ φρουρεῖ τὸ ζώον (De usu partium IV.10,3 Kühn).

There remains the question whether ὡσπερ belongs to the Heraclitean fragment or is Theophrastus's word. Given that Heraclitus wrote aphorisms and “definitions” rather than similes or homoeomata, which, by their very nature contain words like ὡσπερ (cf. A. Elter, Gnomica homoeomata, Bonn 1900–1904), the second alternative is preferable (cf. also Marcovich 2001, 549).

7a15–16 καὶ ... δ', “and ... even”] The conjunction καὶ here is used in a contrasting sense in an ascending climax (Dennistong 293): not only does the self-contradictory nature of their view just mentioned in the preceding sentence (i.e., the world is ordered but its principles are not) not seem unreasonable to them, but on top of that (καὶ) they take this to be the case even in the smallest detail, for animate and inanimate beings alike.

7a16 λαμβάνουσιν, i.e., in context, ἀπαντ' ἐν τάξιν καὶ λόγῳ ἐν δὲ ταῖς ἀρχαῖς μηθὲν τοιούτων, that is, they take things to be as described in the previous sentence.

7a16 ὡμοίως] Given the word order, the adverb ὡμοίως belongs with the following phrase, ἐν ἰψυχοῖς καὶ ἐμψυχοῖς (cf. van Raalte 307). If ὡμοίως were to be read with λαμβάνουσιν, as Laks & Most 52118 suggest, and the phrase ἐν ἰψυχοῖς καὶ ἐμψυχοῖς were an addition for specification, then Theophrastus would have said ὡμοίως λαμβάνουσιν ἐν ἰψυχοῖς τε καὶ ἐμψυχοῖς.

7a19 χαλεπῶν δὲ responds to ἀλογον δὲ in the preceding paragraph, 7a10.

7a20 πάλιν αὖ] The Arabic supports Zeller’s emendation of αὐτό of the Greek manuscripts to αὐτό; πάλιν is rendered by aydan, “also, again,” while there is no demonstrative pronoun that would correspond to αὐτό. The function of πάλιν here is to introduce a new set of objections to another doctrine, that of the “formalists.”
Note the article in τοὺς λόγους: not some formal principles but its own internal principles; τοὺς here contrasts with ἔτερων in line 7a23.

συνάγωντας, “collective referral”; see the relevant passages from Aristotle cited by van Raalte 312.

παράδειγμα] Rendered as “example” by all translators, the word nevertheless makes sense here if understood in its Platonic sense of “paradigmatic” cause, as also used by what has been argued is the early Aristotle, in Metaphysics Δ 2 and Physics B 3 (see the Loci Paralleli), where he equates it with the formal cause. This meaning is justified by the word λόγους (7a20) which Theophrastus is talking about in this Diaporia (14.2) and which, given the structure of his exceptive syntax, is then identified with the “shapes and varieties of atmospheric and terrestrial” phenomena. He says, in effect, that it is difficult to ascribe formal principles (λόγους) to everything in the realm of generation and corruption in all cases unless these formal principles can be assumed to be the atmospheric and terrestrial phenomena; that they can, in fact, be so assumed is implied in his use of πλὴν εἰ with the indicative (van Raalte 314). And he continues by saying that some philosophers (apparently his Peripatetic colleagues) do precisely that, claiming that whatever is entailed by the variation of the four seasons (i.e., the atmospheric and terrestrial phenomena) constitutes the greatest such paradigmatic cause in the realm of which is to be found (ἐν αἷς, the preposition being used roughly as at 4a6; see above and cf. Laks & Most 53n24) the very process of generation. The sun, he concludes, acts as if it were (οἷον) the begetter, echoing (and apparently referring to) Aristotle’s very passage (Phys. B 2–3, 194b13–29) where there is mentioned both the sun’s ultimate generative power and the definition of παράδειγμα. Furthermore, that παράδειγμα refers to a cause (and not to an example) is also evident from Aristotle’s words in a related passage in the Physics, Θ 5, 257b10, ὁλος γεννᾷ τὸ ἐχον τὸ εἶδος, “in general what possesses the form begets.” Theophrastus’s reference to the former Aristotelian passage (in Phys. B 3) cannot be accidental, for Aristotle’s point is the issue which concerns Theophrastus here:36 if the student of physics knows the formal and final cause up to

36 For Theophrastus’s apparent response to another passage in Aristotle’s Physics see Bodnár 2002, 79n10.
a certain point (μέχρι τοῦ, Phys. 194b11, the reading of manuscripts E and J) and it is the job of the metaphysician to know the essence of separable being, as Aristotle argues, then Theophrastus raises the question, first, of the extent to which this in fact can be accomplished beyond the admission of the causality of atmospheric phenomena, and second, with his one-word qualification of the sun’s generative power (οἶον), how that is to be understood. In his own Physics (fr. 176 FHS&G), Theophrastus says that things are generated by something that is similar, or opposite, or in actuality; the sun generates as a cause in actuality. See the comments on the fragment by Sharples 1998, 125–127, and especially the discussion by Bodnár 2002, 79–81.

If the mention of παράδειγμα here is indeed in its Academic sense (see Bonitz Index s.v. for the references), as I argue, then this has implications for the date of Theophrastus’s Essay (as discussed in Part I, Chapter 1.1). Ross 1936, 512, assigns this usage of the word to Aristotle’s “Platonic period,” during his first residence in Athens, and says that “it never occurs in his [Aristotle’s] later references to εἶδος.” It is justifiable to think that Theophrastus stands temporally close to this passage in Aristotle’s Physics. For the importance of the word in later developments in Platonic and Aristotelian philosophy see Merlan’s discussion in The Cambridge History of Later Greek and Early Medieval Philosophy, A.H. Armstrong, ed., Cambridge: Cambridge University press, 1970, 54–55.

7b3 τὰς ὥρας τὰς ἐτησίων] Usener’s 1890 conjecture of ἐτησίων for the corrupt words in the extant Greek manuscripts is corroborated by the reading of Ψ as reflected in the Arabic translation. As for ὄραμα in this context of generation caused by the sun and meteoric phenomena, there appears to be little doubt that it refers to seasons; cf. CP III.2.6 (cited by van Raalte 318), τούτο δ’ ἐν δυοῖν ὄρασι γίνεται … ἔαρι καὶ μετοπόρῳ … τότε γάρ … ὁ ἡμιθεομαίνων ἀγεὶ καὶ ὁ ἀθρομαλακός ἐστιν καὶ ἔφοιδής … κτλ.

Aporia 15

7b5–8 (ἀφορισμὸν ἀπαιτοῦντα μέχρι πόσου καὶ διά τί). This aporia is in two parts:

Aporia 15a, deriving from the immediately preceding diaporiae: How far what is endowed with order extends;
Aporia 15b, mentioned for future discussion (in Diaporia 24.1 at 11b7–12): Why what is endowed with order cannot extend beyond a certain point for in that case the change would be for the worse.

7b6–9 The μέν ... δέ construction is clear here: in the μέν part Theophrastus wraps up the previous discussion (6b23–7b5) on the nature of the principles—whether they are determined or not—and in the δέ part (7b9) launches the next question, that of their rest or immobility. If it is not justifiable to print the second part of the sentence as a separate paragraph even for editorial convenience, then the unity of the sentence must certainly not be broken by a full stop between the two parts.

7b7 ἀπαιτοῦντα ... καὶ διὰ τί] The object of ἀπαιτοῦντα for the first question, μέχρι πόσου, is clearly ἀφορμήμον, but for the second question, διὰ τί, it cannot be the same because of the sense: a “why” question cannot be answered by a delimitation or definition (pace Laks & Most: “que l’on définisse ... pourquoi”) but by an answer “because”; thus a word like ἀπόκρισιν ἀπαιτοῦντα is to be understood here (cf. Ross: “demanding ... an account of the reason why”).

7b8 τὸ πλέον, “more [of it],” i.e., of what is endowed with order; the reference to τεταγμένον is effected through the definite article in τὸ πλέον.

7b8 ἦ] There seems to be little room for the apparent disagreement among the commentators either for the correction by the scribe of J II of the original εἰ (also in Ψ and Λ) into ἦ, adopted by all modern editors, or for its meaning: the phrase ἦ εἰς τὸ χεῖρον ἦ μετάβασις explains the preceding question, “Why is more of order impossible?”; because, the answer is, otherwise (ἠ = or, (if more order were possible,)) the change would be for the worse. Van Raalte 326 points to the common use of ἦ in the sense of εἰ δὲ μή (Bonitz Index 312b36), while Theophrastus’s view of why more order is impossible is discussed later in the Essay, at 11b7–12. There are thus here only two subjects mentioned for future discussion: the extent of reality that is endowed with order, and the impossibility of reality being completely endowed with order on the ground that more order would lead to corruption.
Aporia 16

7b9–8a7 (περὶ τῆς ἠρεμίας ἀποφήσεων ἢν τις): Aporia about the rest at which the first principles are (how it is to be understood).

Diaporia 16 (7b11–19). If the rest is conceived as something better, then it would be worthy of the first principles, but not if it is conceived as privation of motion. But if rest is ascribed to them in order to avoid an infinite regress of prime movers who initiate motion by themselves being in motion, then they should be said to be in an actualized state (ἐνέργεια) rather than motion, for motion is ascribed to the sensible world.

Diaporia 16.1 (7b19–23). Sense perception seems somehow to corroborate the possibility of self-movement—i.e., the identity of mover and moved—on the grounds that the mover both acts and is acted upon, something which applies (with greater cogency) to intellect and god.

Diaporia 16.2 (7b23–8a7), re-statement and discussion of Aporia 8. To say that the (heavenly bodies) that desire (the first principle,) which is at rest, do not imitate it (because they are not at rest but in motion) is problematic: for why is their (desire) not accompanied by (the same outcome of imitation as) that of others? This case, however, should be thought of differently. For had the heavenly bodies done so and everything else followed them, then the universe, which is taken to be most perfect, would not be a well regulated whole like a city or animal with parts but something without parts (i.e., an undifferentiated mass at rest).

This aporia and the following analysis continue the discussion about the questions raised by the theory of the unmoved mover. See the references given in Aporia 6 above.

7b11 ὡς βέλτιον] The implied structure of this sentence is, ἀποφήσειν περὶ τῆς ἠρεμίας εἴτε ὡς βέλτιον τι εἴτε ὡς ἄργια καὶ στέρησις τις κινήσεως. The question raised about rest thus entails that one investigate whether it is to be taken as something better in itself or as some cessation of movement, and hence a negative attribute in itself. I take ἄργια καὶ στέρησις to be both complemented by the following genitive, κινήσεως (cessation and privation of movement). Cf. the various readings of this sentence in van Raalte 334 and Henrich 117.
aporia 16

7b13 ἀλλ’ εἶπε ... ἀντιμεταλλακτέον] With this sentence Theophrastus reacts to what he perceives is a false dichotomy in the way the problem has been expressed: with regard to what qualification to ascribe to the first principles, the choice is not between rest and motion—if rest, that is, is a cessation and privation of motion—but rather between rest and ἐνέργεια, because ἐνέργεια, as an actualized state, is better than motion because it is complete, while motion is “incomplete consummation” (ἐνέργεια ἀτελής, in fr. 153A, line 13, FHS&G, and cf. the commentary by Sharples 1998, 66 ff.; Rudolph 1988, 234). Objecting sharply to the false dichotomy (ἀλλ’), he says, if ⟨one is to ascribe (ἀνάπτειν) any qualification to the principles⟩ at all (εἴπερ), an actualized state of consummate being should be exchanged (-μεταλλακτέον) in the place of (ἀντι-) rest as their chief attribute. The hapax legomenon ἀντιμεταλλακτέον in the fifteenth century manuscript D would appear to be an apposite scribal emendation from τι μεταλλακτέον in A (from which D derives directly). Cf. Laks & Most 55π30 and van Raalte 336–337.

7b15 τὴν δὲ κίνησιν [ἐν] τοῖς αἰσθητοῖς, sc. ἀναπτέον] As mentioned in the preceding comment, Theophrastus says that it is an actualized state of consummate being that should be (-τέον in ἀντιμεταλλακτέον) ascribed to the principles, whereas motion, which was mentioned in the preceding clause (στέρησίς τις κινήσεως), should be ascribed, it is understood, to the sensibles. Thus Usener’s suggestion that the missing verb here that would require the accusative in τὴν κίνησιν ἀναπτέον is correct and necessary (and not “something like θετέον εἶναι,” Ross 63). This verb (ἀνάπτω) takes its indirect object in the dative and this requires that ἐν in ἐν τοῖς αἰσθητοῖς be secluded; in all probability it was added by a scribe who did not see the immediate connection between ἀνάψειεν and ἀνάψει in 7b11 and 13 and the dative in this passage. Ross’s reason (63 top) for keeping the manuscript reading on the grounds that Theophrastus’s style is “loose” is hardly justified: Theophrastus’s style is fast and elliptical but not sloppy, and he adhered to the minimum requirements of intelligibility.

7b18 λογοδέες] This is another rare word in extant classical Greek. The suffix -οδης, like -ειδης, indicates that the basic meaning is “having the nature or form of” (Schwyzer 418). In this case, having the nature of words without substance, mere verbiage. The actual spelling in J provides a clue to its transformation from λογοδέες to λογοειδές in the manuscript.
tradition. The scribe had originally written on the line λογοειδες, without accent, which he then changed by adding an epsilon over the iota of the word, thus resulting in λογοειδες. This must have later given rise to λογοειδες through a change from the omega to omikron. It is not clear why in the original spelling of J there should have been an iota after the omega, unless one suppose that some earlier scribe had taken the omega to be that of dative and added an iota adscript.

7b20 δεῖν is the reading corrected by Laks & Most for the transmitted δεῖ in the Greek manuscripts and apparently also in Ψ and Λ (thus constituting one of the primitive errors in the Neoplatonic archetype). See the corresponding note to the Arabic translation; and see Most 1988c, 176, for Kley’s suggestion of πᾶν for δεῖ, based on a faulty transcription of the Latin manuscript reading.

7b21–22 διὰ τὸ ποιεῖν καὶ πάοχειν provides the reason for something that has just been said, but because the expression is apparently elliptical, the question is for what. It has been taken by some to mean, διὰ τὸ ποιεῖν καὶ πάοχειν (ἐτερα εἶναι), “en vertu de la distinction entre agir et pârir” (Tricot), or “because the one acts and the other is acted on” (Ross, English translation in Reale 1980), understanding the phrase to explain the preceding ἐτεραν. Some others have opted for a neutral rendering, as if the phrase read, διὰ τὸ ποιεῖν καὶ πάοχειν (εἶναι), “parce qu’il y a agir et pârir” (Laks & Most, van Raalte, Henrich, Ishâq). This, however, eschews the responsibility of understanding what the phrase is used to explain: certainly there is acting and being-acted-upon, but is the acting and being-acted-upon being done by the same entity or by two different ones? The whole point is that Theophrastus wishes to support the first alternative—he claims, as in his fr. 271 FHS&G, that body and soul are self-movers—and that is why he uses the phrase; the neutral translation does not make this point. There is, finally, Usener’s 1861 and 1890 conjecture to read τὸ ποιοῦν instead of τὸ ποιεῖν (with the added refinement by Fobes to read τὸ (τὸ) ποιοῦν), adopted by Reale 1964, “perchè ciò che muove subisce anche movimento” (“because that which causes movement is also moved”), which everybody seems to like—since it obviously makes the point that Theophrastus is trying to make—but shies away from. But there seems to be no need even to emend the text to get this desired meaning. The presumably elliptical phrase is to be read with the emphasis on the καὶ in the sense of “also,” διὰ τὸ ποιεῖν καὶ πάοχειν, “because of both acting and being acted upon,” that
is, on the part of that which causes movement, τὸ κινοῦν, the subject of the subordinate clause. As the subject, the explanatory phrase would naturally be taken as referring to it, and thus there would be no need to add in that phrase, διὸ τὸ ποιεῖν καὶ πάσχειν (αὐτό). In English the subject pronoun has to be added, “on the ground that [it] both acts and is acted upon,” but the elliptical phrase turns out to be not so elliptical.

8α2 τί γὰρ ... τῶν ἄλλων;] The sentence is corrupt in all the Greek manuscripts, including Ψ and Λ; the version given here and by Ishāq depends on emendation and interpretation. Ross’s correction of the transmitted οὖσιν ἀναλογοθεί into οὐ συναλογοθεί can hardly be doubted, if the passage is to make any sense without substantial additions or alterations. Usener’s 1890 correction of the initial εἰ to τί may be more open to doubt, and has led van Raalte to assume a lacuna after this sentence, since reading “if” for “why” would make it into a conditional protasis without an apodosis. If the sentence is emended as Ross suggests, its interpretation then hinges on the identification of the referents of the pronouns. “They” (αὐτοῖς) could hardly refer to anything other than τὰ δρεγήμενα insofar as that is the only plural word that immediately preceded, and the particle γάρ makes it abundantly clear that this sentence is to be understood in close relationship to the preceding one. The problem is the feminine article “that” (ἡ) and, to a lesser extent, “the others” (τῶν ἄλλων). The singular feminine article (ἡ), given the three verbal forms in the preceding sentence (μιμηταί, δρεγήμενα, ἡρεμοῦντος), has been interpreted as referring to μίμησις (Laks & Most, Henrich), δρέξεις (van Raalte), and ἡρεμία (Ross, Tricot, Reale), while the Arabic interprets it as οὐσία, with reference to the immediately preceding οὖσιν in the manuscript reading of the sentence (see the commentary on the Arabic translation). The logic of the passage (cf. Henrich 120) would tend to support the choice of μίμησις, imitation, though immobility (ἡρεμία) is always implied, insofar as the imitation in question here would result in immobility, and it is the consequences of immobility that Theophrastus is using to find a way out of the difficulty of his own aporia. The argument seems to run as follows: “What makes no sense is that the things that desire the immobile do not imitate it. Why does this make no sense? Because (γὰρ), desire implies imitation, but in the case of the rotating celestial bodies (“the things that desire”), as we can observe, imitation (and hence immobility) does not accompany their desire.” This seems to be the force of the question, “For why aren’t they accompanied by that [i.e., imitation] of the
others?" (where the "others," according to Laks & Most 56n36, refers to everything else other than the things that desire), that is, "why is their imitation ineffective," if ἡ ἡμέρα τῶν ἄλλων means imitation as practiced by everything other than the celestial bodies; but this remains conjectural (and van Raalte's suggestion of a lacuna after τῶν ἄλλων remains very much a possibility). However, Theophrastus continues, if we assume successful imitation to be following desire universally and without exception, this would result in our reducing the universe to something that is undifferentiated and has no parts, because, successful imitation, i.e., followed by immobility, would make everything immobile and hence an undifferentiated mass which, though theoretically in possession of separate parts (viz., the unmoved mover, the unmoved celestial bodies, and the unmoved sublunar elements), would be practically indistinguishable.

Aporia 17

8a8–20 (ἐπιποθεῖ λόγον, πῶς, πότερον ... ἦ): How does the division of beings into matter and form take place (or is to be understood)?

Diaporia 17. Either: Form is being, and matter is not-being that is potentially being and driven towards actuality. Or: Form is being and matter is also being, but indeterminate, like (the raw materials) in the crafts, and generated by being shaped in accordance with formal principles. This alternative is better.

In this aporia on matter and form, which is related to Aristotle's discussion in Met. Λ 2–3, Theophrastus points to some difficulties in Aristotle's concept of matter, to which he also adheres; cf. Happ 1971, 811.

8a12 ἡ δὲ γένεσις] The particle δὲ is present in all the manuscripts, including Ψ and Λ. Fobes's suggestion to suppress it, followed by Laks & Most, is unjustified. The omission of δὲ would require the passage καθάπερ—λόγον to be read as one unbroken sentence, in which case the ellipsis of ἐστι, as Ross 64 observes, becomes "rather difficult." But the sense also requires a comma after τέχνας, for the καθάπερ clause is intended to provide an example of the indeterminacy of matter prior to its adoption of a particular form, which is what καθάπερ ἐν ταῖς τέχναις does (i.e., ἐν ταῖς τέχναις understood as καθάπερ ἡ ὕλη ἐν
ταῖς τέχναις). But if καθάπερ—λόγους is read as one sentence, then this does not talk about the indeterminacy of matter, as it should, but about its acquiring a form in accordance with its formal principle (cf. van Raalte 367 bottom). Finally, the reading preferred here (καθάπερ ἐν ταῖς τέχναις, ἡ δὲ γένεσις ἢ οὖσια γ’ αὑτῶν), which was suggested by Ross himself in the commentary and endorsed by Fobes in the apparatus and which was also adopted by van Raalte, is actually found in the Arabic translation (bi-manžilatī mā fī š-šināʾātī làkin ħudūṭuhā aw wujūdūhā) and reflects the reading of Ψ.

The pronoun “their” (αὐτῶν) must refer to the “beings” (ὄντων) mentioned in the initial question a few lines above in 8a9 (van Raalte 366), though a case has been made for the referent to be the products of the crafts (“things generated,” Ross) mentioned in the immediately preceding clause (also by Laks & Most 58n40). However, a few lines down (8a17), the subject of γίνοιτο would again have to be the beings (ὄντων) of line 8a9, and not any assumed products of the crafts, and Theophrastus cannot be jumping back and forth with the referents of his pronouns without confusing his readers.

The ἀλλὰ (ἀ) here is assentient (“but of course”), preceded as it is by a question; see Denniston 16, as noted by Laks & Most 58.

Ἀληθές υπάρχοι ... γίνοιτο] ὡς ὑπάρχειν, sc. αὐτῶ, could be taken in its logical sense here, as Ross did, whom I follow (“to be predicated of something”), or in its existential sense, “it exists.” Although both ultimately mean the same thing (being which is predicated of things, or being which exists [for/in things]), the former is preferable because it predisposes the reader mentally to add τοῖς οὖσι after υπάρχοι, an object which reappears in the immediately following clause as the pronoun implied by the third person singular verb, γίνοιτο, and referring to a neutral plural subject, τὰ ὄντα of line 8a9, beings or things. (For the misunderstanding of the Greek syntax in the Arabic translation see the note to the English translation thereof.)

There is a further issue with the function of ἀληθές, whether it is to be taken adverbially (Ross, Tricot, Reale, Ishāq) or predicatively (Laks & Most, van Raalte, Henrich). While both readings are theoretically possible, it would seem that the word order supports the adverbial reading: if Theophrastus intended ἀληθές predicatively, he most probably would have said οὖθεν ἂν ἦττον υπάρχοι ἀληθές.
8a17 ἄλλα τὸ μήτε, etc. refers back to τὸ εἶναι in line 8a15 and modifies it as something that has being but is otherwise indeterminate (i.e., has no specific substance, quality, or quantity) and potential.

8a19–20 The method κατ' ἀναλογίαν for knowing matter is discussed by Happ 1971, 667–670, with references to further literature (especially in 667n537).

Aporia 18

8a21–9a9 (ἐχεῖν ἀπορίαν, τί): (It seems paradoxical) why nature consists of contraries, with the worse being equal to or greater than the better (cf. Aporia 14).

Diaporia 18 (8a27–b4). Putting the question in such terms implies that all things should be good or alike (a patently indefensible position).

Diaporia 18.1 (8b4–5). What is seemingly even more paradoxical is that being cannot exist without contraries.

Diaporia 18.2 (8b6–20). Some maintain that the nature of the universe includes past, present, and future non-being. Now this is too paradoxical and beyond the pale, though clearly being exists in many ways (and contraries, i.e., the fact that reality consists of differences and similarities, serve to know them). Sense perception observes differences and seeks the causes, and accordingly knowing does not occur without the presence of difference, both among individuals and universal categories such as genera and species.

Diaporia 18.3 (8b20–24). Almost all knowledge is of unique properties, whether this be the essence or essential attributes of something.

Diaporia 18.4 (8b24–9a9). The task of knowledge is to perceive simultaneously the identical in many, whether it is said of them universally or particularly, though complete knowledge is of both. Nevertheless, there are some knowledges whose end is solely either the universal or the particular. We know the identical with respect to essence, number, species, genus, and, for objects of knowledge the farthest removed from our experience, by analogy, or any other division.
This epistemological aporia and the terms of its discussion reflect procedures in the old Academy and early Aristotle. See the elements enumerated by Krämer 1973, 211–213, and his references to earlier literature; see also Krämer 1968.

8a21–22 εἰ μὴ ... ζητεῖν] The dashes in the translation are intended to convey the force of the particle ἄρα: the realization on the spot of something else, a second thought (cf. Denniston 36–38). It may be too strong a translation to render the clause, “unless, coming to think of it, it is pedantry even to inquire.”

The noun περιεργία goes together with ζητεῖν and is not to be separated from it, as suggested by some scholars; cf. the indictment against Socrates, which accused him of “meddlesome inquisitiveness” (Σωκράτης ἀδικεῖ καὶ περιεργάζεται ζητοῦν τά τε ὑπὸ γῆς καὶ οὐράνια, Plato, Apology 19b4–5). The real question in this construction is whether to keep the transmitted reading in the Greek manuscripts, περιεργίαν τοῦ ζητεῖν, with the accusative followed by the genitive, or change it to the only possible alternative, the subject and predicate nominatives, περιεργία το ζητεῖν (sc. ἔστιν). There are two objections to the transmitted text in the Greek manuscripts. First, if the accusative in περιεργίαν is to be retained, it would have to be construed with ἔχειν in the preceding line, but the expression τοῦτ´ ἔχειν περιεργίαν is awkward and unusual, if not unidiomatic; in all instances in which περίεργον as adjective or περιεργία is used in such a context and with this meaning, the verb it is used with is εἶναι, not ἔχειν (see all the examples cited in Bonitz Index 580b56, Jaeger 1932, 293, and van Raalte 379–380). The reason is that the περιεργία does not lie in the subject matter itself that is to be discussed, as does the ἀπορία, but in the person who is doing the investigating. It is therefore more natural to say “there is pedantry in asking this” than “this thing has pedantry.” And in fact this is precisely what Ps.-Plato, Sisyphus 387d7 says: ἄλλα μὴ ἔμὴ περιεργία ἢ καὶ τὸ ἔρωτησαι σε περί τούτου; Dirlmeier 1938, 135, who first cited this passage, considers it decisive. This evidence indicates that the reading περιεργίαν τοῦ ζητεῖν, if at all possible, would be extremely awkward.

The second and more important objection comes from the two translations, the Arabic and the Latin. To start with the latter, it reads otiositas inquirere, which points to a reading of περιεργία το ζητεῖν in Λ, as noted and convincingly argued by Dirlmeier 1938, 134–135. Most’s 1988c, 176, objection that this construction results “in an awkwardly complicated sentence structure” is without foundation. The main sentence is very
straightforward, καὶ τὸν ἐξελέ ἀποφίλαν, τί δή ποτε ..., while εἰ μὴ ἄρα περιεργία τὸ ζητεῖν is parenthetical (as in any case indicated by the particle ἄρα, see above) and does not affect the main sentence. The Arabic translation also suggests a reading like that in the Latin translation: in lam yakuni l-baḥtu ‘an miṭli hāḍā huwa mina l-fuḍūlī, “if investigating the likes of this were not superfluous,” where the translator adds “the likes of this” to amplify the specific demonstrative force of the article τὸ (without this addition, Arabic al-baḥtu [= τὸ ζητεῖν] would have been taken to refer to research in general, and not to the specific investigation at hand), but the rest of the sentence translates exactly εἰ μή ἄρα τὸ ζητεῖν περιεργία ἐστίν.

Thus both Λ and Ψ read περιεργία τὸ ζητεῖν, which is the correct reading of the Neoplatonic archetype, while the Constantinopolitan recension represented in the extant Greek manuscripts corrupted the text to περιεργίαν τὸ ζητεῖν. The error is easily explained: ἀποφίλα in the preceding line led the scribe to write περιεργίαν in the next also in the accusative, which itself may have led to the change into the genitive of the following article or, alternately, the genitive may be due to a misreading of the ou ligature as o.

Finally, with regard to the meaning of περιεργία in the context in which Theophrastus uses it, the sense of “overdoing it” implied in the preposition περί of the noun does not denote meddlesomeness (as in the case of Socrates in the Apology passage cited above) or officiousness, but excessive zeal in asking insignificant questions, hence “pedantry” in my translation.

8a23 δ’ is found in all the Greek manuscripts, but the literal Latin translation by Bartholomew omits it, which led Ross 1936 to consider its absence as pointing to an original γ’, a particle which Bartholomew “habitually omits to translate” (the Arabic translation cannot make the distinction between a simple καὶ and a καὶ ... δέ, as here). However, καὶ ... δέ is a regular construction in Attic prose at the time of Theophrastus and used elsewhere by him (see the Glossary), and it also makes sense in this context: after the mention of nature (φύσις), δ’ introduces another, broader term (see Denniston 202–203).

37 It is interesting to note that although Ross prints in the text περιεργίαν τοῦ ζητεῖν he nevertheless translates both readings simultaneously, as if the text read, περιεργία τοῦ ζητεῖν ἢ τὸ ζητεῖν, “unless indeed it be a superfluity of inquisitiveness to ask the question.”
8a24 καὶ σχεδὸν] The clause introduced by καὶ here is semantically subordinate to the preceding one and does not introduce a second question, as normally translated, i.e., “Why is it that nature consists of contraries and why is it that the worse balances the better?” Rather, the sense requires that the worse and the better be one set, albeit the predominant set, of contraries of which the universe consists.

8a27 τοιοῦτος here refers to the original question asked by Theophrastus and not to the quotation of Euripides in which, in fact, contraries and the mixture of good and bad (σύγχρονος) are posited as something good (ἔχειν καλός). See the extensive discussion and the text of Euripides, a fragment from the lost Aeolus (fr. 21 Nauck) in Stobaeus, in van Raalte 383–385.

8b3 The elliptical sentence is to be understood as, καθάπερ τὰ λευκὰ καὶ μέλανα sc. ὁμοίων τι ἔχουσι (van Raalte 387).

8b4 μέλανα] Burnikel 121 may be right in suggesting that the reading in manuscript A τὰ μέλανα (with the article) is the correct reading, for otherwise the phrase τὰ λευκὰ καὶ μέλανα would be understood as a hendiadys—i.e., as one group of things having two qualities rather as two groups of things—but it seems that there would be little danger of such a misunderstanding in this context, given the meaning of the words: no one would take this phrase to mean “the white-and-black things.” Ishāq also translated as if he read τὰ μέλανα here, as in the correction in manuscript A, but there can be no certainty, for the same reason, that he actually read the article τὰ in Ψ.

8b4–5 ὦτι δὲ ... ἐναντίων] For us who cannot hear the inflection of the voice speaking this sentence, its syntax would appear ambiguous (cf. van Raalte 388). Τὸ δοξοῦν is the subject, but παραδοξότερον could be either predicative or attributive with respect to it; the clause introduced by ὦς merely lists the contents of δοξοῦν. If it is predicative, the initial ὦτι would appear to complement it, in which case the sentence would mean, “And that which appears [to us, namely], that being cannot [be] without contraries, [is] even more paradoxical.” If παραδοξότερον is attributive to δοξοῦν, then ὦτι δὲ would have its usual sense of introducing a further point, in which case the predicate of the sentence could be supplied from the beginning of the paragraph 18, τὸ δοξοῦν παραδοξότερον (ἔχει ἀποφίλαν), or some such phrase (Laks
& Most 61n6 even suggest—but reject—putting a comma after αὐτός in 8b4 and reading our phrase as a complement of λέγωμεν in 8b2), and the sentence then would mean, “And further, that which appears more paradoxical [also involves an aporia, namely,] that being cannot [be] without contraries,” or simply “And further, [there is] that which appears more paradoxical …” The former interpretation is preferred by Ross, Tricot, Reale, and van Raalte, the latter by Laks & Most and Henrich, as well as by Ishâq. As in other instances of apparent ambiguity, in defense of Theophrastus, the word order will have to provide the clue. If Theophrastus intended παράδοξον τέρν as predicate, he would most probably have said, ἐτὶ δὲ παράδοξον τὸ δοκοῦν ὡς …; as we have it, it can be taken most plausibly attributively (cf. also Laks & Most 61n6).

Henrich 124 objects to the use of the word “paradox” in modern languages to translate παράδοξον on the basis that it is “aus der Sicht gegenwärtiger Philosophie ungeschickt; Paradoxien sind Sätze, deren Wahrheitswert nicht festlegbar ist.” This may be so, but paradox in common English usage (and in German, if I am not mistaken) means “a seemingly contradictory statement that may nonetheless be true,” which would appear to be what Theophrastus is talking about: a thesis which is the opposite of ἐνδοξον, but because maintained by a serious thinker, to be entertained. For an understanding of how such arguments would be perceived in Academic and Peripatetic circles in Theophrastus’s time, see Aristotle’s discussion and classification of dialectical and other, including paradoxical, theses and problems in Topics I,10–11 (and cf. Baltussen 2000, 39–41).

8b8–9 ἀλλά … μέν … δέ] As Theophrastus wraps up the preceding discussion and moves on to the next subject (ἀλλά, progressive), he makes a last comment about an item in the preceding sentence (μέν after ἀλλά, cf. Denniston 378) which at the same time points forward to the subject of the following section (δέ). The mention of τὸ μὴ ὡν in 8b7 leads into a discussion of τὸ δὲ ὡν in 8b9. Van Raalte 393n1 aptly paraphrases the transition (“to count among the totality of being even τὸ μὴ ὡν etc. is going too far; but that τὸ ὡν applies to quite heterogeneous things is evident”). As frequently in this work, Theophrastus finishes a subject in the same sentence in which he begins a new one, and this cohesiveness of his argumentation should not be artificially sundered by breaking up the sentence in two independent paragraphs.
8b10–11 τάς ... τάς. Theophrastus uses the definite article twice with obvious reference to the possessive pronouns, as is usually the case. Ishâq translates with the appropriate pronouns instead, taking “causes” to refer to “differences”: “sense-perception perceives its [the existent’s] differences and investigates their causes.”

8b12 Intransitive ὑποβάλλει here most likely is to be taken in the theatrical sense of “prompting” (an ὑποβολέυς is a prompter) or the pedagogical one of “dictating.”

8b13–14 ἀπορίαν ... διὰ ἡς, “an aporia through whose consideration”] The feminine pronoun refers to the closest feminine antecedent, ἀπορία. Ishâq took it to refer to διάνοια, most likely because he understood the subject of δύνηται to be αἰσθηματαί and not διάνοια. The preposition διὰ together with ἀπορία expressed in the pronoun have the meaning of the verb διαπορέω, “to consider or work through an aporia” (see the discussion of διαπορέω in the commentary on the Scholium at 12b4); so light appears in the darkness not through the aporia itself but through the process of working through or considering it.

8b21–24 ἥ τε γὰρ οὖν οὐσία ... τί κατά τινός] Laks & Most 64n20 are in all probability correct in pointing out that this sentence posits that all knowledge is either knowledge of essence or of essential attributes. The dual objects of knowledge are ascertained by the construction, “both, on the one hand ... and, on the other” (τε ... τε, 8b21–22). Essential attribution appears from Theophrastus’s description of the things that are “observed essentially (καθ’ ἐαντά) and not accidentally,” a maddeningly elliptical phrase. But assuming that nothing has been left out but the verb to be, the simplest way to read that sentence would be, τὰ θεωρούμενα καθ’ ἐαντά (εἶναι) καὶ οὖ κατὰ συμμεβηκότα, i.e., “what are observed [to be] essential and not accidental [attributes].” The addition of “attributes” here is justified from the preceding ἰδιον, unique characteristic, which is the subject Theophrastus is discussing. The same (i.e., the addition of the verb to be) also applies to the formula τί κατά τινός which, when coupled with a verb meaning “to say”, is shorthand for predication (cf. Bonitz Index 368a34–35); here, though, there is no such verb, and if, as the simplest alternative, it is taken that the expression is, τί κατά τινός (ὁν), the phrase would mean, “a certain thing [belonging to, or being] of some other thing.” For this, ontological,
dimension of the expression τί κατά τινός see the fundamental but little noticed study by Tugendhat 2003, 5–23, 161.

Finally, the iterative use of ἄν with the imperfect in ἦν ἄν has been remarked upon a number of times, but it is important to note that the imperfect in itself has this function (past continuous); what distinguishes it from the form with ἄν is that the latter emphasizes, instead of the continuity of the action, the individual instances in which the act is being repeated (K.-G. II, 1 p. 211); hence the rendering above, “would be in each case.” The least interpretive reading of this clause would thus be, “and, on the other hand, what are observed [to be] essential and not accidental [attributes] would be in each case a certain thing belonging to some other [particular] thing.” For a different interpretation see Talanga 1995, 20, and for a discussion of all the alternative readings see Henrich 128–130.

8b25 ἐπιστήμη] It is quite clear in these Aporiae (18–21), which form a sort of appendix on epistemology (see Chapter 1.4 above), that Theophrastus is talking about knowing and knowledge, and not about “science” in the sense of disciplines of learning. Various forms of the verb from this root are strewn about in the passage (ἐπιστάμεθα 9a4, ἐπίστασθαι 8b16, 9a10, 9a26), as are related words (εἰδέναι 9a24, 9b22; γνωστά 9a19; τὸ γινώσκων 9b5), so the noun ἐπιστήμη has to be seen in this context and not be translated as science as in some versions. In particular this passage (8b25) about the identical has given rise to this misunderstanding, but it appears from the continuation of the discussion in 9a4 after the parenthetical interlude (8b27–9a4) that Theophrastus is talking about knowing the identical (9a4–5 ταὐτό δ’ ἐπιστάμεθα) and not a science of the identical or about science in general whose task it is to know the identical. Of course ἐπιστήμη here is to be understood in the Aristotelian sense of scientific knowledge, through causality (see ἐν τοῦτῳ γὰρ τὸ αἴτιον at 9a1–2, and cf. Aristotle, Posterior Analytics 71b16–19, etc.), and conceptually it comes close to the meaning of “understanding,” which is, indeed, the word used by Jonathan Barnes to translate this term in the Posterior Analytics (cf. his translation, Barnes 1994, 82).

38 For the meaning of κατά in the phrase Tugendhat 23 says characteristically, “Das λέγεσθαι κατά (κατηγοροεσθαι) bedeutet nicht eine urteilsimmanente Beziehung und meint auch nicht primär ... die Beziehung des Seienden zum Aussagen, ... sondern es steht für eine bestimmte Seinsstruktur.” Although paraphrastic, Ross’s translation (“particular attributes belonging to particular things”) thus expresses better the meaning than Laks & Most’s logical rendering (“ce qui est prédiqué de quelque chose”).
8b27 τέλεος is the reading in Ψ and Ρ; Λ and J read τέλος (scil. τῆς ἐπιστήμης) for τέλεος. It would seem that this reading could be equally viable, insofar as Theophrastus does discuss the end of knowledge (i.e., the specific object to which it is directed and the purpose behind it) in the next sentence. If that were the reading, what Theophrastus would be saying is that though the end of knowledge is to comprise both universals and particulars, in some cases it is just universals while in others particulars. Thus τέλος in 8b27 would be prefiguring the same word in 9a1. And in general there would be no discussion here of which knowledge is complete (τέλεος) but only the purpose or end (τέλος) for which a particular piece of knowledge is sought (cf. van Raalte 415: seeking a universal or qualified same “is relative to . . . a given stage of the inquiry.”). The one argument against this reading is that of the lectio difficilior. Having τέλος as the center of discussion in 9a1–4 could easily cause the corruption of τέλεος to τέλος in 8b27. But if τέλος were the original reading there would be little justification in the corruption into τέλεος. Besides, as the passage from De causis plantarum reminds us (cited by van Raalte 416), Theophrastus does believe in general that complete knowledge consists of theory and particulars: τὸ δὲ τέλεον εὖ ἄμφοτ (CP III,2.3).

8b27–9a1 εἰοί δ’ ἔνιαν μὲν ὄν | The impossible reading ἔνια τῶν μὲν, as all agree, is found in all manuscripts, including Ψ and Λ; J omits μὲν, though the original scribe corrects himself and adds the particle above the line in the space between τῶν and καθόλου. A number of emendations have been offered, but the most obvious one has been overlooked. The most common correlative constructions with ἔνια (in all three genders) are normally three, ἔνια answered by another ἔνια, or by τὰ, or by τινά, and in each case ἔνια is followed by μὲν and the answering pronoun by δέ. In the present passage the expression is of the second type, ἔνια μὲν . . . τὰ δέ (with the appropriate inflection and gender in accordance with sense, to be discussed next). Most pertinent examples, because they also begin with ἔστι, as in this passage, are Isocrates, Antidosis §10,2: ἔστιν γὰρ τῶν γεγραμμένων ἔνια μὲν ἐν δικαστήριῳ . . . τὰ δὲ πρὸς . . . , and one from Aristotle (and indeed very similar to this passage), Posterior Analytics 96a8: ἔστι δ’ ἔνια μὲν γινόμενα καθόλου . . . τὰ δὲ ἄλι μὲν οὐ . . . .

With regard to inflection, in the Theophrastus passage the second half of the sentence is not parallel to the first in that the article (at 9a2, τῶν), used as a pronoun in these cases, is in the genitive and not in the nominative, as in the first part (ἔνια). But this “dissymmetry” ought not to bother editors (Laks & Most 66n23) because in this μὲν . . . δέ
construction the two legs of the sentence are very flexible syntactically and each conforms to its own structure (e.g., Aristotle, Historia animalium 536a28: ἄδιδου δ’ ἔνια μὲν ὁμοίως τὰ ἄρρενα τοῖς θηλέοιν ... ἔνιον δὲ τὰ ἄρρενα μᾶλλον—or even Strabo, Geographia III, 2.4.24: ἐνίαι μὲν ... τινὰς δ’ ...; etc.).

The problem in the text as we have it is with the gender of the expression ἔνια ... μὲν ... τῶν δὲ. In the text the neuter is unambiguously transmitted, ἔνια, and it has been universally accepted. There is, however, a difficulty with the sense, in that if the neuter is retained the sentence would mean that there are certain things whose end is the universal and not knowledges which aim at the universal, as the sense requires (and Theophrastus manifestly intended). Translators normally finesse this difficulty by inserting into their translations knowledge as the ultimate subject, though against the expressed words of Theophrastus: “in the case of some things there is a universal end for knowledge” (Ross, and similarly Tricot, “la fin du savoir”), “in alcune cose, il fine della conoscenza è un universale” (Reale 1964), “il en existe certains dont la fin est le général” (Laks & Most, where en refers to a preceding savoir). Laks & Most are aware of the problem but they dismiss it by claiming that the neuter in ἔνια refers to the feminine ἐπιστήμαι anyway, and point to a similar occurrence at 6b9 with ἔν ἐκείνας. But this, I argued above in my commentary on that passage, cannot be maintained there and it cannot be maintained here. Only van Raalte tries to remain true to Theophrastus’s text and translates what he wrote, “there are some objects of study of which the end is universal.” In her commentary (p. 418) she suggests that these things which have the universal as end, or objects of study, are the intelligibles (τὰ νοητά), and then explains as follows the difficult concept of things having universals as an end: “Of some things, then, the objects of thought such as analytical concepts and explanations, the end is universal,” which I take it to mean, if the English sentence is so to be construed, that the end of the objects of thought of some things is universal, or, to put it differently, the end of some things as objects of thought is universal. But this again makes the object of thought have a universal as its end (and not the thing itself, as Theophrastus says), and an object of thought is a different way of saying knowledge. It thus appears that the sense would be less forced and the passage would conform more evenly to what Theophrastus is trying to say if one read ἔνια as feminine, ἔνια, to refer to the obvious antecedent, ἐπιστήμαι. This would also require to change the number of the initial verb, ἔστιν to εἰσί. The passage then will be emended to read, εἰσὶ δ’ ἔνιαι μὲν ὑπ’ ... τῶν δὲ.
Palaeographically, the correction of ἔνια to the feminine gender, ἔνιαι, is the most plausible means to explain the transmitted text. If the original text was ἔνιαι μὲν ὧν, as I suggest, the initial mistake occurred through the omission (as in J) or transposition of μὲν (as in the other manuscripts), thus leaving ἔνια ὧν. Next, ἔνια ὧν was read as ἔνια τῶν for a number of reasons: first, the iota could easily have been misread for tau; second, the iota could have been misread as tau especially under the influence of τῶν in line 9a2 and in an effort to make the two legs of the expression symmetrical; and third, ἔνια τῶν could have come about because of the impossibility of the hiatus generated by ἔνια ὧν, which even an average scribe would have recognized. The need to explain the misreading in ἔνια τῶν, which most plausibly can be accounted for by assuming it to derive from an already corrupt ἔνιαι ὧν, is the primary reason for preferring the feminine gender of ἔνιαι in the emended text I propose. This, however, also required reading εἰσί for ἔστιν, which can be accounted for as a scribal “correction” of the former to the latter once ἔνιαι had been changed to ἔνια, a neuter plural subject. Finally, after ἔνια ὧν had been changed to ἔνια τῶν, μὲν was added after τῶν either in the wrong place if it had been omitted, or, most likely, in order to balance τῶν δέ in 9a2.

The Arabic translation of the very beginning of the passage suffered its own peculiar distortion, but it is nevertheless clear that Ψ had ἔνια τῶν, like the extant Greek manuscripts (see the corresponding note). Since, however, Ψ on the one hand and PJ and Λ on the other derive from different transcriptions from uncialς, the corruption of ἔνιαι μὲν ὧν to ἔνια τῶν μὲν must have occurred already at the uncial stage of the transmission of the text and is one of the primitive errors of the Neoplatonic archetype (Chapter 2.5). The omission of μὲν in J, with its subsequent interlinear addition by the same scribe, appears to be accidental and not causally related to this process. That it happened again, however, indicates precisely the plausibility of the original omission which led to the generation of the error.

39 In all of extant Greek literature until the 14th century there is not a single instance of ἔνιαι ὧν, only one of ἔνια ὧν (Apollonius Dyscolus, De pronominibus II,1,1, p. 51.9), and only two of ἔνια ὧν (Aristotle, De Memoria et reminiscencia 451a29 and Photius, Bibliotheca 128b29 Bekker). Accordingly, such proposed emendations of the text in this passage as ἔνια ὧν (Laks & Most, van Raalte, Henrich) cannot be entertained, especially for an author like Theophrastus who avoided hiatus almost obsessively: see the valuable evidence presented by Einaron 1976 in the introduction to the Loeb edition of De causis plantarum.
This correction restores also the sense in context. Theophrastus is talking in this Diaporia (18.4) about knowledge of the identical in a plurality of objects. Perceiving the identical is the task of knowledge, he says, regardless whether the identical is understood as a universal or a shared quality in genera and species; complete knowledge, however, must consist of the perception of both. Nevertheless, he goes on, there are some kinds of knowledge which are complete without necessarily having as end a knowledge of both these kinds of the identical, but merely the universal, and that happens when one is seeking the ultimate cause (αἰτία) of something; and there are other kinds of knowledge, equally complete, whose end is the particular something (tà ἐν μέρει, 9a2), and that is when one is seeking knowledge of individual things made or done (9a3–4). It appears that the entire sentence εἰσὶ δ’... ἡ ἐνέργεια, 8b27–9a4, is a parenthetical qualifying statement following the generality stated in τέλεσις δ’ ἡ ἐμφασις. The main subject of this paragraph, that knowledge is knowing the identical, resumes then with the following sentence, ταὐτό δ’, 9a4.

9a4 δ’, “Well,”] After the introductory remarks about the identical (8b24–27), and the parenthetical comment (8b27–9a4) about knowledge whose end is only the universal or particular, δέ marks the transition to the main subject about the identical (cf. Denniston 170–171).

9a4–6 ταὐτό ... διαιρέσει] Henrich 132 duly notes that these datives are not instrumental but of respect: we know the identical not by means of formal substance or essence, genus, etc., but with respect to these divisions, i.e., that it belongs to the division of formal substance, genus, etc.; of relevance is Aristotle’s wording in the Topics 120b36, referred to by both Laks & Most and van Raalte. Theophrastus could just as easily have used κατά instead of the dative—as he does, as a matter of fact, in the next sentence, κατ’ ἀναλογίαν at 9a7—and as Aristotle did in Metaphysics Δ 6, 1016b31–35 in a passage clearly echoed here by Theophrastus; see the Loci Paralleli and the discussion by Devereux 183–184 and van Raalte 421. Aristotle lists some of the ways in which things are said to be “the same” essentially at Metaphysics Δ 9, 1018a6–7 (things whose matter is formally or numerically one, and things whose οὐσία is one) only after he has stated that “the same” is said in as many ways as “the one” (1018a5), thus referring the reader back to the preceding discussion in that book. At 1016b31–32 he says that things are one with respect to number, species, genus, and analogy, and at 1018a7 he adds οὐσία (which here is to be
understood as form, i.e., substance as form, or essence), thus completing the list of alternatives that Theophrastus gives in this passage. Stenzel 1959, 159–160, showed that the series number, species, genus, and analogy derives from the mathematical methodology in the early Academy.

9a6 διαιρέσει] With the datives in this line understood as datives of respect, there is no problem in keeping the dative διαιρέσει reading in all independent witnesses. The elliptical sentence, as it stands, can be read most obviously, and without the addition of words not easily justifiable, in only two ways: (a) καί, εἰ ἄρα παρὰ ταῦτα (sc. ἐστι διαιρέσεις, or ἡ διαιρέσεις ἐστι), διαιρέσει, “and, if indeed there is a division besides these,” or, “if indeed division is besides these, then with respect to division;” or (b) καί, εἰ ἄρα (τις ἔστι), παρὰ ταῦτα διαιρέσει, “and, if at all there is one, with respect to a division besides these.” The first is the way chosen by Ishāq, but it clearly makes no sense; “division” here means “category” in the common (English) sense of the term, and is the generic name applied to all the items that have just been listed (substance, number, etc.); “category” is not itself one of those items with respect to which we can know the identical, but a generic term describing them all. The meaning thus requires that Theophrastus say, “with respect to a category other than those just mentioned.” This meaning can only be elicited from reading (b): the sense requires that there be a word in Theophrastus’s formulation, if he is to be at all intelligible, that would express the concept of “other than” and this is provided by παρὰ ταῦτα. Παρὰ ταῦτα, therefore, has to be read with διαιρέσει, the word in the dative, “with respect to a category besides these,” and εἰ ἄρα by itself can support the burden of implying “if at all (there is one).” Εἰ ἄρα here is the affirmative of εἰ μὴ ἄρα, an otherwise favorite expression of Theophrastus in this Essay and elsewhere (cf. van Raalte 122). In any case, Theophrastus frequently uses incomplete conditional sentences as steps, too obvious to be mentioned explicitly, in building his arguments; cf. his use of ἂλλ’ εἰπεξ in 11b9, 11b16, and of εἰ τις in 8a20, etc. The only other acceptable alternative would be to add τις after εἰ and read, καί, εἰ (τις) ἄρα παρὰ ταῦτα, διαιρέσει (cf. the parallel expressions with τις in van Raalte 423). But without τις, it is impossible to read the sentence in other than the two ways suggested above, short of adding words not intended by Theophrastus.

9a7–9 διὰ πλείστου ... τάμφο] This part of the sentence has been variously understood and interpreted; for a discussion of the different views see Henrich 183–188. Given that Theophrastus uses long periods...
and that accordingly one ought not to be misled by modern punctuation (the upper point after διαιρέσει in 9a6 should be changed to a comma), it is most natural to read 9a7–9 as continuing the previous sentence. I thus read, διὰ πλεῖστον δὲ (ἐπιστάμεθα ταύτῳ) τὸ κατ’ ἄναλογίαν, which it is necessary to do if ἀπέχοντες (9a7–8), the correct reading in all Greek manuscripts, is to be integrated in the syntax. Of the translators, only Ishāq read the sentence in this way; Bartholomew apparently read (or understood?) ἀπέχοντα. Laks & Most on the one hand rightly suggest (67n29) that ἀπέχοντες is in apposition to ἐπιστάμεθα, but on the other read διὰ πλεῖστον δὲ τὸ κατ’ ἄναλογίαν as a nominal sentence (and so do Ross, Tricot, van Raalte, and Henrich) which creates the rough syntax they complain about. If τὸ κατ’ ἄναλογίαν is seen as the object of ἐπιστάμεθα, as I suggest, then the three adverbial phrases at the end (τὰ μὲν ... τὰ δὲ ... τὰ δὲ) naturally complement and explain διὰ πλεῖστον and ἀπέχοντες: as Laks & Most note (ibid.), the limitation of our faculties, the obscurity of the object to be known, or both these factors together create the distance referred to between us and the object. The different interpretation by van Raalte 427 assumes that the three adverbial phrases enumerate the three ways in which analogy helps us bridge the distance between us and the object of knowledge, but that does not seem to be what the Greek text says. It is rather that these three factors explain how that distance was created in the first place.

Aporia 19

9a10–23 (πῶς): Since knowing occurs in many ways, how is each class of things to be inquired into?

Diaporia 19. The starting point is to find the appropriate manner of investigating each class, from the intelligibles to inanimate things, because each genus of things has a unique way of being investigated. If there is a genus of unknown things that can be known by being unknown, they would require a unique manner of investigation, though it would entail some sort of division; however, for most of such cases the manner of knowing is by analogy.

9a10 πλεοναχῶς] It has to be assumed, though dictionaries do not seem to be making the distinction, that πλεοναχῶς, composed as it is of the
comparative form, has (or at least originally had) some implication of excessiveness (cf. πλεονάζω, πλεονέξια) as opposed to πολλαχώς, used just before (8b10). Theophrastus was not particularly free with its use, as opposed to Aristotle; it occurs only five times in his extant writings (two of which are in this Essay), while in Aristotle it occurs 69 times. Aristotle apparently used it synonymously with πολλαχώς: in the sentence, τό ἐν ὅτι μὲν λέγεται πολλαχῶς ... πλεοναχώς δὲ λεγομένου (Metaphysics I 1, 1052a15–16), the change from the one word to the other would appear to be for stylistic reasons. The much more restricted use by Theophrastus may imply that he was more careful with its use, especially if it carried that sense of excessiveness. Finally, of the very many things which Aristotle says λέγεται πολλαχῶς, interestingly ἐπιστήμη is not one.

9a10 ἐκαστα[ Since a number of scholars translate ἐκαστα in the singular (“object” of knowledge, van Raalte; “chacun des objets particuliers,” Laks & Most; “den einzelnen,” Henrich, etc.), it is worth noting that the word, in the plural, refers to a class or a group of things, as Ross translates it; if Theophrastus meant to say “each particular object” he would have said ἐκαστον (the actual reading in manuscript A, apparently an attempt, by this scribe—or textual tradition—which takes excessive liberties with the text, to express precisely this). That a “class of things” is intended, i.e., that ἐκαστα here means ἐκαστον γένος, is further manifest from the classes which Theophrastus does mention (τὰ πρῶτα, τὰ νοητά, τὰ κινητά, κτλ.) and from Theophrastus’s very words describing these plural terms in the list as ἐκαστον γένος (9a15–16).

9a12 τρόπος[ As usual with the long periods of Theophrastus’s prose in this Essay, he lets one sentence be heard in the next. The Greek to be understood here, if this were a fully explicit sentence, would be, ἄρχῃ καὶ μεγιστὸν ὁ οἰκεῖος τρόπος (τοῦ μεταδιώκειν ἐκαστα), οἶον τὰ πρῶτα καὶ νοητά, καὶ τὰ κινητά ... κτλ., as translated above, a sentence which does not generate any of the syntactical problems mentioned by Henrich 132. Thus οἶον in this construction provides concrete examples for ἐκαστα.

9a14 τὰ.[ The article τὰ, which according to the Arabic translation was present in Ψ, is necessary here, for the reason suggested by van Raalte 431n8, to separate the two classes of things, those that lead and those that follow; without it, ἐπομένα would be referring not to a different category from τὰ ἐν ἄρχῃ but to those very things: the things that both are at the head and follow, which is absurd. The absence of the article
in the immediately preceding two phrases has precisely this function: τὰ πρῶτα καὶ νοητά means “the first and intelligible things,” i.e., both first and intelligible, both belonging to the same category.

9a15–16 τι ... ἰδιον] I.e., each class of things has its proper manner or method of being investigated. Theophrastus expresses himself here in general terms by saying τι ... ἰδιον instead of ⟨τρόπος⟩ τις ἰδιος, as he does later in line 20 below, ἰδιος τρόπος.

9a17 An additional point, introduced by δὲ καὶ (on which cf. van Raalte 408 on 8b20), noted by Ross 67: these differentiations exist not only in mathematical objects but also in mathematical studies.

9a18 δύοιμοι δ’ ἵκανως, i.e., the matter has been sufficiently discussed and therefore needs no further comment; for the explicative δέ, noted by Laks & Most 68n35, see Denniston 169–170.

9a22 λέγειν could be taken in three ways here. (1) The first is to take the phrase λέγειν κατ’ ἀναλογίαν absolutely and as complete in itself, i.e., without the addition of understood word(s) needed to complete the sense, in which case it would mean “to argue by analogy.” (2) The second is to see the phrase as elliptical and complete it by taking the implied word τρόπον as the object of λέγειν, thus reading, λέγειν ⟨τὸν τρόπον⟩ κατ’ ἀναλογίαν, “to call this manner [of knowing knowing] by analogy.” (3) The third way is also to take it as elliptical and understand its object to be αὐτά (referring back to ἕνα in line 18), thus reading, λέγειν ⟨αὐτά⟩ κατ’ ἀναλογίαν; this has been the most popular way in which the word has been interpreted: Ross uses “describe” to translate λέγειν here, Merlan “express” (see the Appendix), Laks and Most “expliquer,” and Henrich “erklären.” (3a) Van Raalte has a variation on the third way, further adding to the ellipsis γνωστά as the object of the verb and reading, λέγειν ⟨αὐτά⟩ κατ’ ἀναλογίαν ⟨γνωστά εἴναι⟩. I prefer the second alternative (2) that makes τρόπος the implied word in the elliptical phrase and translate λέγειν by “call” because I think it is best justified by the context. The main subject of this Diaporia (19) is the οἰκεῖος τρόπος (9a11–12) and Theophrastus’s main concern is to identify it; then he says that some things which some people say are known by being unknown may have their own ἰδιος τρόπος, one which would have to be added to the divisions-list; and immediately after that he adds the “perhaps” clause. The thrust of the “perhaps” clause I take it to be, “but perhaps one need
not do that, i.e., add this ἰδιως τρόπος to the divisions-list, because in some cases it is more appropriate to call it τρόπος κατ’ ἀναλογίαν rather than by ‘being unknown,’ in which case the κατ’ ἀναλογίαν entry already exists in the divisions-list.” In any case, in the final analysis, whichever of the three alternatives is chosen, the fact remains that Theophrastus is actually comparing the two manners (i.e., by analogy and by being unknown) and finds them close enough as to suggest that one approach or appellation would be, in some cases, more appropriate than the other. Thus any one of the three ways of reading the passage would fit the interpretation I am giving here. For an analysis of this manner of something being known “by being unknown” see the Appendix.

Aporia 20

9a23–10a5. This Aporia has three parts, or succesive formulations (20a–c), the third part itself being in two parts (20c1–2). For an analysis of the structure of the argument in the entire Aporia see the comment at 9b1.

Aporia 20a, 9a23–24 (πόοος, ποοος ρως): How many manners of investigation are there, and in how many ways does knowing occur?

Aporia 20b, 9a24–9b1 (ἀφορίσα, τί): But first, how to mark the boundaries of what knowing is? This seems to be more difficult than (20a) because it is impossible to apprehend the universal and common characteristic of things that are said in many ways (i.e., of knowledge, which has many senses).

Aporia 20c1, 9b1–16 (ἄφωσιν, μέχρι πόοου καί τίνων): Or rather this too is a matter of aporia, identifying precisely, in order to avoid infinite regress which destroys understanding, the sensible and intelligible things for which causes are to be sought.

Diaporia 20c1 (9b6–16). Sense perception provides the starting point up to a point; beyond that, it is the intellect that contemplates “the first and highest” things.

The epistemological principle that knowledge starts from sense perception and from apprehending the phenomena (λαμβάνειν τὰ φανόμενα—see the discussion above in Chapter 1.3) was stated by Theophrastus
also in his *Physics*: see fr. 143 FHS&G and the discussion and references by Sharples 1998, 37–40.

**Aporia 20c2, 9b16–10a5** (ἐν τίνι): Re-statement of Aporia 20c1. *Not only in physics, but also in mathematics and metaphysics, the question is to know where to set the boundaries of the extent of the investigation before reaching an axiomatic first principle, in order to avoid infinite regress.*

**Diaporia 20c2 (9b21–10a5):** *Seeking to explain everything destroys explanation itself and even knowledge—or rather, seeking to explain everything is pointless because some objects of inquiry by their very nature are axiomatic and admit of no proof. *(Though identifying such objects is difficult, one should nevertheless beware of the other extreme, viz., stopping too short in the quest for causes, as is done) by those who posit the eternity of the heavens, taking as axiomatic the data provided by the astronomers. One should go beyond these, state the first movers and final causes, and show how everything relates to everything else all the way down to animals and plants.*

The epistemological principle that philosophical investigation should identify and apprehend the categories into which beings break themselves and take these boundaries as guideposts and thus delimit enquiry is fundamental in Theophrastus’s thought (Aporia 1 begins with this very question; see the discussion of boundaries in Chapter 1.4 and note 58). In addition to the Aporiae 20c1 and 20c2 here, it occurs elsewhere in his works. See Sharples 1998, 96–97 for references and discussion.

For an analysis of Aporia 20c2 and Aporia 21 as the introduction, thesis, and antithesis of the argument that the search for explanation should be limited to those cases where it is possible, see Reale 1980, 419–420n41, and Ellis 1988, 218–220.

9a23 τρόποι] Theophrastus has just spent an entire paragraph talking about finding the proper method of investigating (the proper manner of “pursuing”) each class of objects; the mention of the same word τρόποι at the beginning of the present paragraph where he summarizes the preceding and goes on to the next issue is obviously to be taken in the same sense. It is counterintuitive to argue otherwise or assume ambiguity in its use, as most commentators do.

9a26 χαλεπότερον] This is a true comparative degree and not one used merely to “soften” the expression: τὸ ἄφορόσια is more difficult than διελέειν.
All manuscripts have ἢ καί here, which Ross “corrects” to ἢ, “wherefore,” or “on which account,” instituting a causal connection and making the following statement a consequence of the preceding one. The “correction,” however, is not only not necessary (pace Laks & Most, van Raalte 444–445, and Henrich, who accept it), but it also appears to be wrong because of the sense. The argument here develops through a number of restatements or refinements of the precise nature of the aporia. Theophrastus is saying the following: (1 = [Aporia 20a]) We should try and distinguish in how many ways knowing occurs (9a24). But before we do that, (2 = [20b]) we should start by marking the boundaries, i.e., identifying precisely the objects, of what knowing is (9a26). But this would appear to be more difficult (χαλεπώτερον) than distinguishing the different ways of knowing because it is not possible to apprehend the common element of things said in many ways—i.e., to give a common and universal definition of knowledge, which has different senses in accordance with the objects known: whence the need to mark its boundaries, or identify its objects, in each case (9a27–9b1). (3a = [20c1]) Or rather (ἢ), (since the first task is to mark the boundaries of knowledge, we can specify the quest and say that) actually this (καί τοῦτο; emphatic καί, Denniston 320) is a matter of aporia—or at least it is not easy to say—how far and to which things the search for causes should extend in both sensibles and intelligibles (9b1–4). After a parenthetical discussion of sensibles and intelligibles as starting points (9b6–16, see the commentary on that passage), there is a reprise and repetition of (3a): (3b = [20c2]) So, reaching understanding and conviction is important, finally, with this very point, where to draw the line (how to “set the boundaries”) in the search for causes or reasons (λόγον) in physics, mathematics, and metaphysics (9b16 ff.). In this sequence of the argument, stages (1) and (2) are connected by the comparative χαλεπώτερον, which all commentators seem to ignore; stages (2) and (3a) are connected by οὐχ οἶον τε and καί τοῦτ’ ἄπορον, where the word ἄπορον, being a repetition of οὐχ οἶον τε, explains the καί (“actually”) in ἢ καί; and stage (3b) connects with stage (3a) through the repetition of the object of search (ἐν τίνι ποιητέον τὸν ὄρον is a reprise of μέχρι πόσου ζητητέον αἰτίας, and thus explains the precision expressed in the demonstrative αὐτὸ τοῦτο in 9b16–17, “this very [issue] here”), but it also connects with stage (2) through the use of the word χαλεπή in 9b16. According to this analysis, the connection between stage (2) and stage (3a) is not that the last clause in (2), “it is impossible to have a universal definition of knowledge because knowledge is used in more than
one sense,” gives the reason (ἥ, “wherefore,” Ross; “c’est pourquoi” Laks & Most), for stage (3a), “how far the search for causes should extend;” rather, having stated in (2) that the aporia is how to mark the boundaries of knowledge, Theophrastus rephrases the question in (3a). He rephrases the question in order to take into account the common, but unexpressed, notion that knowledge is searching for and understanding of causes (Aristotle, Met. B 2, 996a19; Γ 2, 1003b16–19; E 1, 1025b6–7, etc.). He thus specifies in (3a) that in this case “marking the boundaries” means establishing how far the search for causes should extend in each of the three areas of investigation, physics, mathematics, and metaphysics. The need to mark clearly the boundaries of the extent of the search for causes is twofold: one is to avoid infinite regress, which in the end destroys understanding (9b4–5), and the other is to stop the chain of causality because some objects of knowledge either have no cause or we have no direct causal access to them except through intellectual intuition (9b10–12). Hence Ross’s emendation of ἤ to ἦ is not acceptable here because the connection between stages (2) and (3a) is not causal but one expressing alternatives (ἤ, the transmitted reading), as analyzed above.

9b2 εἰπεῖν, “say,” that is, to put it in logically and philosophically coherent language, the difficulty stemming from the difficulty of the subject. For the use of the aorist infinitive, εἰπεῖν, in this meaning here see van Raalte 446 and note 2.

9b2–3 μέχρι ... τίνων] Μέχρι governs naturally both genitives after it, πόσου and τίνων (Berti, preprint, note 15); the first asks about the extent or level of inquiry, and the second about the specific things, among both sensibles and intelligibles, which should be included in the search. If τίνων were meant to be taken with αἰτίας, Theophrastus would probably have said, μέχρι πόσου ἐξητητέον αἰτίας καὶ τίνων. In any case, Theophrastus is not asking here the relatively pointless question of what things in general one should investigate the causes—the answer would be clearly of everything, both sensibles and intelligibles—but the more specific question, up to what particular things in the investigation of both sensibles and intelligibles the search for causes should extend.

9b6–16 The rest of this paragraph is parenthetical, taking off on a tangent from the mention of sensibles and intelligibles and seizing the opportunity to discuss in which ways they can be starting points for knowl-
edge and how far causality can extend. When Theophrastus returns to
the main subject with χαλεπὴ δὲ in 9b16, the digression makes neces-
sary the emphatic demonstrative αὐτὸ τοῦτο.

9b10 αὐτὰ τὰ ἄκρα καὶ πρῶτα, “the first and highest”, is something
that Plato may have used in the Academy, almost as a technical expres-
sion, to refer to the very first principles. He certainly used the pronoun
αὐτό before a neuter substantive (αὐτὸ τὸ καλὸν, αὐτὸ τὸ ἀγαθὸν; see
the Loci Parallei) to express the ideas (Berti, preprint p. 4). The only
other attestation of the phrase τὰ ἄκρα καὶ πρῶτα in all extant Greek
literature before the Christian era is in Plato’s Seventh Letter, 344d5, and
one is tempted to think that Theophrastus may be echoing its use by
Plato (and the Old Academy?); hence my quotation marks around the
phrase. Because of its extremely limited attestation, even in the mea-
ger remains of classical literature, it cannot be assumed to have been
a common phrase. In imperial and later times, it becomes more cur-
rent (perhaps because of its Academic use), both in pagan and Chris-
tian Greek, and both in its technical sense (Alexander of Aphrodisias,
In Met. 240.24 Hayduck (CAG): αἱ ἀκραταὶ τε καὶ πρῶται ἀρχαί;
Plotinus, Enneads V,1,1.24; Proclus, Platonic Theology I,118.12: τὸ μὲν
θεῖον ἀκραταῖον εἶναι καὶ πρῶτιστον) and a general one, “the very
best” (Theodoretus, Hist. relig., Vita 13, 1.14; Hephaestion, Apotelesmat-
ica 200,25–26).

9b13 The force of ἐκεῖνο is, as Laks & Most 70n46 observe, to point for-
ward (cf. van Raalte 456) to a third alternative known to Theophrastus’s
audience, the theory that holds as possible the direct apprehension of
ultimate principles by the intellect without the mediation of the search
for causes. This theory at the same time appears to deny the second alter-
native in the preceding sentence, the weakness of our faculties.

9b16 δὲ, “So”] Resumptive δὲ (Denniston 182–183) with χαλεπῆ harking
back to χαλεπώτερον in 9a26, and implied repetition of ἄπορον in 9b2.
See the analysis of the structure of this passage in the commentary on
9b1.

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40 Literally, the topmost and very first, but I borrow the translation from G.R. Morrow
(Plato’s Epistles, New York 1962, p. 241), who puts “first” first, because in English it sounds
more natural.
**Commentary**

**9b16–17** εἰς αὐτὸ τοῦθ’ ἢ σύνεσις καὶ ἡ πίστις. Εἰς indicates relation, i.e., reaching understanding concerning, with regard to, this issue (K.-G. II,1.471c, cited by van Raalte 460).

Αὐτὸ τοῦθ’ refers back to τοῦτ’ (and all that that entails, 9b2–4) in 9b1, and forward to ἐν τίνι ποιήτεον τὸν ὄρον in 9b19–20; see the discussion of the structure of the argument in the commentary on 9b1.

Σύνεσις must be understood in the way Aristotle defines and describes it in the *Nicomachean Ethics* VI,10, i.e., as learning and reaching a critical understanding περὶ ὧν ἀπορήσεων ἀν τις καὶ βουλεύσατο (1143a6), of issues that are subjects of aporiae and deliberation, precisely what Theophrastus is doing here. The Arabic translates σύνεσις with the word that normally translates ζήτησις, bahl. It seems likely that Ψ may have had ζήτησις instead of σύνεσις in this passage, and ζήτησις would make just as good sense, though it cannot be excluded that some marginal annotation to σύνεσις influenced Ishâq’s judgment, or that he himself simply understood σύνεσις as ζήτησις, complaining about the difficulty of which is otherwise a common enough motif in this Essay. For the range of the epistemological sense of σύνεσις in Aristotle see Bonitz *Index* 727b6. Πίστις is “persuasionis firmitas,” Bonitz *Index* 595b8.

**9b20** οἷον explains ὄρον, not πραγματείας, of which it was taken to provide examples. Cf. van Raalte 462n4 with reference to Bonitz *Index* 502a7–8.

**9b20** [τάς'] The reading of the Greek manuscripts, περὶ τε τῆς φύσεως καὶ περὶ τὰς ἔτι πρῶτος, where περὶ is used in a pair of balanced phrases with two different cases, genitive and accusative, is rather improbable (cf. van Raalte 462). The corrections suggested by various commentators have all concentrated on replacing τε with another word, such as τάς, τίν, τά. However, it seems difficult to justify the excision through substitution of τε, both on palaeographical grounds (the presumed corruption of τὰς or τίν or τά into τε cannot be easily accounted for) and on stylistic grounds, especially in this work by Theophrastus where the particle is liberally used (see the Glossary). The combination τε ... καὶ is very frequent, and in one other instance (10a27) it is used with a preposition: ἐν τε τοῖς οὐρανοῖς καὶ ἐν τοῖς ... πλείοσιν; thus the combination transmitted in the manuscripts, περὶ τε ... καὶ περὶ is perfectly fine and in need of no correction. Next, the pronoun τὰς in the second half of the phrase (καὶ περὶ τὰς ἔτι πρῶτος), which is unimpugnable, as well as the context of the entire sentence, which speaks
of studies (πραγματείας), clearly refer to these very studies, and thus the obvious balance between the first and the second half of the phrase requires the presence of τάς also in the first half. The Arabic translation also supports the reading of τάς in the first half of the phrase: the word πραγματείας in 9b18 is translated by al-ulûm, and this word is repeated in the oîon phrase, where the first half is rendered by, ’ilm umûr at-’tabi’a, where ‘ilm clearly renders Greek τάς properly understood as τὰς πραγματείας. If then τε should not be excised and τάς is needed because of both the sense and the evidence of the Arabic translation, τάς is to be added after τε, the omission of which in the MS tradition can be easily attributed to haplography. For an identical prepositional phrase see below at 11b14, οἶον τὰ περὶ τὰς τῆς γῆς λεγέντα μεταβολ-λάς.

9b24 The reason for assuming a lacuna here is the following. The argument in Aporia 20c2 (9b16–1oa5), a nodal point of which is the difficult passage in 9b24, runs thus: In physics, mathematics, and metaphysics, setting a boundary with regard to how far inquiry is to proceed is important for these disciplines, but also difficult. It is difficult because (γάρ 9b21) if no boundary is set, one would go on seeking proof for everything, thus triggering an infinite regress, which was rejected above (9b4–5). Theophrastus, however, corrects himself at this point (ἀληθεύειν εἰπεῖν 9b23) and restates the reason in a way which he considers more accurate and which does not involve an argument from the impossibility of infinite regress, but rather one from the very nature of some of the objects of inquiry: some of them do not admit of proof and are simply to be taken axiomatically. The question then becomes, How can one identify these axiomatic principles which are, by their very nature (πέΨpΡΥtwoυκεν Ψo;ΥκρασίασΨo;Υκρασίας 9b24), the boundaries of inquiry? It is easy to be mistaken in this regard, for some, trusting in astronomy as an unerring guide, stop too short in their search and take as the axiomatic and unprovable starting point the eternity of the heavens and all the other facts about their motion and shape (9b24–27). This, however, Theophrastus concludes, is not the unprovable boundary sought after because these people have yet to demonstrate other things which astronomy cannot prove, such as the first movers and the final cause (10a1–5).

The problem at the nodal point πέΨpΡΥtwoυκεν οἶοι (9b24) is that in the preceding sentence (9b23–24), Theophrastus just finished saying that those who seek causes for everything, including for those things which by their nature cannot have a cause, do away with proof. The next sentence,
commentary

after ὀοοι in the transmitted text, complains about exactly the opposite position, that some people who do in fact posit an entity that is primary and cannot be proven, viz. those who take the eternal heavens as such a boundary and do not seek beyond them, stop too short of the boundary. The transition from one sentence to the next is thus very abrupt and breaks the continuity of the argument, generating almost a non-sequitur. What is needed as a transition is some statement that will say something like my reconstruction above, viz., that “though finding such a boundary is difficult, one should on the other hand beware of stopping too short in the quest of causes, as is done by those who posit the eternity of the heavens.” Adding δέ after ὀοοι with Zeller (and those who followed him), despite its economy, does not solve the problem, because the particle δέ by itself cannot, in this context, carry the meaning of the sentence in quotation marks in my preceding reconstruction. As Laks & Most (72n50) suggest, δέ could have provided satisfactory text if κατάλΨοΥκρονι in 9b27 meant “leave aside, not mention,” instead of its opposite, “there remains to mention.” As it is, however, something more is needed, and hence the supposition of a lacuna, first proposed by Usener 1861. His hypothesis, according to which about a sentence must have dropped out from the text, would best seem to account for the discrepancy and rough transition discussed above.

Furthermore, palaeographically there is no good reason why the particle δέ should have fallen out of the text at such a crucial point. Without it the text truly runs the risk of being read as Ishāq read it, with ὀοοι being taken as the subject of ζητοῦοιν in 9b23, which would give the nonsensical sentence we find in Arabic, “those who assume the heavens to be eternal seek proof of things of which there neither is nor naturally can be any.” If there were no lacuna in the text, a particle after ὀοοι would be indispensable, so by the same token the text cannot stand without it, as printed by van Raalte and Henrich: book typography with paragraph breaks (both van Raalte and Henrich start a new paragraph with ὀοοι) may provide to the modern reader the illusion of the break needed after πέΨρΠΥτονυκεν, but that is not how Greek was written or read in Theophrastus’s time. Absence of particles in instances of “left dislocation” that van Raalte speaks of occurs in very explicit texts and is singularly inappropriate in this context: apart from the reasons of semantic discontinuity just given, the theme that supposedly should precede this asyndeton is exactly the opposite of what presumably the sentence beginning with ὀοοι provides: the theme of the last sentence is condemnation of the position which tries to provide causes for something which by its nature cannot have a
cause, while the following sentence beginning with ὁμοι gives an instance of the position in which something is in fact accepted as not having a cause.

In addition, if a continuous text is supposed in 9b24 and is doctored by the mere addition of δὲ, a further inconsistency occurs: without any qualifying context (such as that which would have dropped out in the lacuna), ὁμοι in the text as we have it gives the wrong impression that it refers to astronomers.41 The reason is that in the truncated sentence (due to the lacuna) as we have it, ὁμοι and τοῦτοις (9b27) have to refer to the same subject because the ἐτι δὲ clause needs a verb and this is supplied by ὑπολαμβάνουν of the ὁμοι clause (i.e., if the truncated sentence were considered complete, its structure would be, ὁμοι τὸν ὑπολαμβανόν ἄδιον καὶ ὡσα ἄλλα ἀστρολογία δείκνυον ὑπολαμβάνουσιν). And since those who assume whatever astronomy proves cannot but be astronomers, ὁμοι by extension would also have to refer to astronomers. But this cannot be so because first, astronomers do not say anything about the eternity of the world, and second, they would be charged with the absurd task of still having to investigate everything from final causes to plants; as Laks & Most correctly note (72n50), “L’argument reste un peu surprenant, en raison du caractère hyperbolique de sa formulation: on voit mal un astronome être convaincu de la nécessité de s’intéresser aux moteurs premiers ou aux plantes en tant qu’astronome.” And if this were so, i.e., if astronomers in this passage were charged with doing all that, then Theophrastus would be contradicting himself in the very next sentence when he says that though astronomy contributes to our understanding of causes it nevertheless cannot do so for those things which are prior (πρῶτες) to its objects. So that in 10a1 Theophrastus would be demanding of astronomers an account of the final cause (τὸ τίνος ἐν τοῖς πρῶτοις), and in 10a6 he would be denying them the capacity to contribute to a knowledge of “the first things” (οὐκ ἐν τοῖς πρῶτοις). To remove this discrepancy, ὁμοι must be somehow qualified to indicate that it refers not to astronomers, but to those who, taking over the data and the assumptions of the astronomers, stop too short of the boundary. The text in the lacuna would have provided this qualification.

41 A victim of which is Steinmetz 1964, 159, who prints the text in question as, τοῦτοις (sc. τοῖς ἀστρολογίαις) ὑπολογίσας, and who derives, as a result, a skewed interpretation of the passage. Theophrastus was not speaking against astronomers but against improper use of the knowledge they provide.
A lacuna is thus the only alternative which can explain all the evidence. In all likelihood a line has dropped out due to haplography or some other palaeographical mishap which, however, would appear to be difficult to conjecture.

10a3 The dative in ὑπὸβαίνοντι makes it clear that the structure of this new clause beginning with καί in this line is to be parallel to that of the clause beginning with τούτος (9b27), and thus the elliptical ὑπὸβαίνοντι clause is to be supplemented by the words, καί ὑπὸβαίνοντι δῆ πρὸς τὰ ἄλλα (κατάλοιπον ὅμοιος λέγειν).

10a4 δῆ, “then,” in a progressive sense, adding a new element in the rhetorical progression of the argument (cf. Humbert 405, “une sorte de tremplin,” Denniston 239; cf. also Denniston 254 for καί ... δῆ). The jump to the new element justifies the switch from the plural of τούτος to the singular in ὑπὸβαίνοντι and is not as “rude” as Laks & Most note (17n55).

10a4 ἢ μερῶν appears to be corrupt. See the discussion in Chapter 2.1, section on “Sub-family JCL.”

Aporia 21

10a5–21 (ζητητέον 10a17, ἢ γιὸν ἄπορία 10a20): By what method is the movement of the heavens to be investigated?

Diaporia 21. Astronomy does not provide information about the first things; the method of investigating them is accordingly not that of physics. In the case of animals and plants, but also in the case of the heavens, motion is of their essence; without motion they would not all be what they are except in name only. For it seems that the rotation of the universe is a sort of life. Thus, just as in the case of living things life is to be investigated as being of their essence, so also in the case of the heavens their motion is to be explained as being of their essence through an investigation that is marked off (as being metaphysical). This aporia is related to the theory of the unmoved mover. (Implied conclusion: Such an investigation would obviate that theory because it would study the motion of the heavens through their essence and not through its origin in an unmoved mover.)
This aporia identifies itself at the end rather than at the beginning, and the thrust of its argument, which hangs on a correct understanding of καίτοι at 10a9, has been difficult to ascertain; see the commentary on that word below. For the relevance of this diaporia to the question of Theophrastus’s views concerning ether, see above the commentary on Aporia/Diaporia 10.

10a6–7 τῆς φύσεως must be read with ἐτερα, as Laks & Most punctuate, and it is placed first in the phrase because it is emphasized, in anticipation of what follows: τῆς φύσεως ἐτερα is echoed in, and gives meaning to, οὐ φυσικής in 10a8: the most important things are other than nature (perhaps τῆς φύσεως is used here elliptically for ⟨τῶν⟩ τῆς φύσεως, “other than ⟨those of⟩ nature”), and consequently the method to study them is other than that employed in physics.


10a9 καίτοι, “in fact”] For progressive καίτοι, expressing an idea added as an inference or conclusion, see Humbert 415, Denniston 563–564 (“logical”). The sentence beginning with καίτοι here does not have the adversative sense in which it is normally translated (“yet” or “and yet,” “pourtant,” “obwohl;” only Reale 1964 has a progressive rendering, “infatti”): if it is thought, along with Henrich 141, that καίτοι is to be read as a concessive clause at the end of the preceding sentence, then the Diaporia 21 loses its meaning. Theophrastus introduces the problem of motion right after he has said that the method of studying the most important things is wholly or partly other than that of natural philosophy, meaning that it is wholly, or partly, metaphysical. He then goes on to say about motion that it may be thought that it is essential to the heavens, as it is essential to living beings, and thus, as the statement of the Aporia 21 in the final sentence of the paragraph hints (10a19–21), the metaphysical question of positing an unmoved mover as the cause of celestial motion becomes obviated. The study of motion, then, when conducted by other than a physical method, i.e. when conducted in a metaphysical way (the metaphysical approach is evident since Theophrastus is arguing from the essence of things and especially of the heavens), can answer metaphysical questions. If this is so, then the purpose of introducing here the problem of celestial motion, right after saying that the method of investigating the most important things is
wholly or partly metaphysical, is to provide a case in which the method, though it might be thought to be physical, is in actuality also metaphysical. Thus καίτοι in 10a9 is not concessive (“obwohl,” Henrich) because if it were, then the section about motion would have had to say that the method of investigating motion is only physical. Since, however, this section makes the claim that the method of investigating motion is metaphysical, or primarily metaphysical, a concessive καίτοι would make no sense. The use of καίτοι is accordingly progressive, expressing an idea added onto the argument as an inference from the preceding.

10a11 Reading καί (εἰ) ἤ, combining the two conjectures by Usener and Wimmer to produce what I believe is the proper text. The article, the reading of all Greek manuscripts (the Arabic translation has an omission at this point, while the Latin is inconclusive), is needed because it has possessive force: “each thing, its actualized state belongs to its essence.” Cf. 944, οὔτως αὐτῶν ἡ ἐνέργεια, and 5a7, τὴν ἐνέργειαν [sc. τῆς ἀρκρῆς] ... ἀποδιδοῦσι, where the function of the article is clearly possessive, as opposed to 8a11, ἀγὸμενον εἰς ἐνέργειαν, where the noun is used indefinitely. In addition, without the article the word ἐνέργεια runs the risk of being read attributively or as a predicate. Thus εἰ (which is clearly needed for the sentence to make sense, cf. van Raalte 479 top) should be added to the text, not substituted for ἤ.

10a10–11 διὸ καί ... οὐσίας ἐκάστῳ] Οὐσίας is emphasized, apparently, through καί after διὸ in a causal clause (Denniston 296–297).

10a12 κινεῖται] Three of the four independent witnesses (JP and Ψ) read κινήται; the Latin translation is inconclusive. With the subjunctive, however, the sentence is incomplete, and this led to the scribal correction into κινεῖται in later manuscripts. Unless, in an effort to preserve the readings of PJ and Ψ, one assumes a loss of that part of the sentence that would have completed it if κινήται is to be read, the corruption of κινεῖται into κινήται most likely occurred in an uncial manuscript and is accordingly one of the primitive errors in the Neoplatonic archetype.

10a17–19 μηδ’ ... ἤ, οὐδ’ ... ἤ] “H means “except” here, having the same use as that after a comparative (K.-G. II,304, Anmerk. 4, cited by van Raalte 482). Disjunctive ἤ would make no sense in this con-
text: Theophrastus just finished saying in the previous sentence that it is obvious (δῆλον) that in the case of both animals and the heav-
ens movement belongs to their essence. Hence the life of both should be investigated in accordance with this fact only. Disjunctive ἢ would
destroy this exclusivity that Theophrastus wants to present and make one of the alternatives possible, viz. not investigating the life of both at all (as in the translations of Ross, Tricot, Laks & Most, Henrich, and Sharples 1998, 97), which would be contradictory to the previous sen-
tence.

Aporia 22

10a22–10b24 (ἀψοφαιμός, τίνος ἐνεχθά 10a22, 28, 10b18, 23; μηδὲν μάτην 10a22, 10b): How is the final cause and that nothing is in vain to be understood? In general, it is difficult to mark the boundaries within which these considerations apply: where should one start and end? In particular, some objects seem to happen by coincidence and others by some necessity, and hence are not subject to these stipulations.

Aporiae 22–24, on the subject of teleology, have been rightly much dis-
=cussed in the literature, for they provide valuable insight into Theophras-
tus’s theory of scientific method; the question, though, has been to gauge accurately how to interpret the examples of “dysteleology” that he gives in the succeeding diaporiae and whether he accepts, partially or wholly rejects, or modifies the Aristotelian concept. See in particular Lennox 1985; Vallance 1988, 27–39; Repici 1990; Botter 1999; Lennox 2001, 226–227; and the comprehensive study of Aristotelian teleology by Johnson 2005, 35–39.

Diaporia 22.1 (10a28–10b7). Terrestrial and geological changes and gen-
eration take place for the sake of no obvious end.

This Diaporia, which appears wordy and repetitive, has exercised the commentators, perhaps because the precise reference of each technical term used in it is not grasped. The text, however, as transmitted in the four independent witnesses (JP Ψ and Λ), with the addition of καὶ ἄνοχοφής from Ψ, seems unimpeachable, and one would have to think of, and account for, a catastrophic alteration or interpolation at some much earlier stage of the transmission to justify the proposed
emendations. As it is, the sense of the paragraph is plain enough. For a discussion of the wording used in this paragraph see Vallance 1988, 28–30. The presumed references to the work of Aristotle have been problematic; see Lennox 1985, 156; Repici 1990, 202–204.

Diaporia 22.2 (10b7–20). In animals, the growth of certain body parts, or some biological functions, are for the sake of no obvious end, and neither is the variety of their nourishment or generation: had there been one specific end for all, they would not have exhibited wide divergences among them in these respects.


Diaporia 22.3 (10b20–24). Changes and generation in plants and inanimate things take place for the sake of no obvious end.

10a23 Usener’s 1861, 1890, conjectural addition of τε in ἄλλως (θ’) is convincing because it builds the parallel construction ἄλλος τε … καὶ δὴ (10a25), giving to the passage the sense of “in any case … in particular,” cf. the examples in Denniston 249–250 of τε … καὶ δὴ. For the particle combination itself see Plato, Sophist 259ε1: ἄλλος τε οὖν ἐμπελές καὶ δὴ καὶ παντάπασιν ἄμοιν στενός καὶ ἄμυλονοψόφου, literally, “[it] is in any case not graceful and in particular [the work] of an uncultured non-philosopher;” translated more elegantly and imaginatively, but using a “not only … but” expression for the combination, by Cornford 1957, 300, “not only strikes a discordant note but amounts to a crude defiance of the philosophic Muse.” Closer to Theophrastus’s use of the combination is Aristotle’s text in Physics 193b28–30.

Palaeographically, the omission of θ before ὁ can be easily ascribed to haplography in the uncial stage of transmission of the text (two successive round letters written as one; Ψ does not have it either). Without it, ἄλλος sits awkwardly in the sentence, and necessarily leads to reading ἄλλος with μάτην, as in the Arabic translation. This in turn has its own problems, and Zeller, who adopted it, felt the need to athetize μάτην, causing an even greater disruption to the transmitted text. The adoption of Usener’s addition of θ’ appears to be the least problematic alternative to restoring the text.
10b1–2 Usener’s 1890 conjectural addition of καὶ ἀναψωμεῖσις after προφυσιοποιεῖσις here is actually found in Ψ. See the corresponding note to the Arabic translation.

10b4 [η] Bignone’s correction of the transmitted η to η is necessary for both the syntax and the sense. The reference here is to the entire set of problems in Aristotle’s De generatione et corruptione viewed as problematic when considered from the point of view of their final end. The specific reference to these problems is also clear from the existence of the article αἱ in αἱ ... ἀλλωμοσεῖς ... γίνονται, which points to the alterations talked about in the Peripatos. Had Theophrastus been speaking in general terms here he would not have used the article. All this indicates that the whole clause η αἱ μὲν ... μεθισταμεῖσιν was intended by Theophrastus as qualification of φθοραί καὶ γενέσεις and is part of his text and not a marginal gloss to be athetized. Furthermore, the particle μὲν in the clause, without a corresponding δέ, would be pointless if this were only a gloss and the entire gloss (as Ross’s seclusion of the clause, 32, and Henrich’s express suggestion, 145, maintain). Laks & Most 77n10 make the additional point that Theophrastus is talking here about subterranean changes (if indeed that is what ἐν αὐτῇ τῇ γῇ indicates), a subject not mentioned in what preceded.

10b6 μεθισταμεῖσιν, “as [things] shift” places, is apparently to be taken in its literal sense, as frequently in Aristotle (cf. Bonitz Index 449b13 ff.). The absent subject of the absolute genitive is apparently to be supplied according to sense; cf. similar constructions at 5a24 and 8b15–16.

10b6 καὶ ἔτερα δ’, “and ... besides”] Preparatory μὲν in line 4 is answered by non-adversative καὶ (Denniston 374) in a καὶ ... δέ combination which introduces the last item in a series in “the form of an etcetera” (Denniston 202). MS A of the Σ group and the Latin translation omit the δ’, which Burnikel 129 seems to prefer by comparing it to 10b15; but the particle combination of the transmitted reading here (10b6) can hardly be doubted.

10b12 τοιοῦτον] Usener’s 1861, 1890, “correction” of this word is actually very close to the transmitted manuscript readings: τοιοῦτον P, without any accents, and τοιοῦτον, J written as one word but with a grave on the δέ (the Latin translation omits three lines here). Only Ψ must have had
τοῖς δέ, or at least Ishâq so read it, because he wrote, “to the point that some of them (i.e., deer) actually suffer harm” (ḥattā anna baʿdahā qad yataʿaddā). Usener’s reading is the only possible reading, given the text, and is not as unsatisfactory as Ross 71 thinks. Toōδε is part of the καθάπερ clause, and if read continuously in an expanded form (i.e., reading τοῖς κέρασι for τοῦδε), it presents no difficulties: καθάπερ τῶν ἐλάφων τοῖς κέρασι καὶ λελοβημένων κινήσει τε καὶ παραιωθῆσει καὶ ἐπιπροσθῆσει τῶν ὀμμάτων.

10b12 κινήσει τε καὶ παραιωθῆσει] Usener’s 1861, 1890, emendation of the transmitted κινήσει το κνήσει, brilliant though it is, does not yield better sense. Usener was led to his conjecture by the Aristotelian passage, Historia Animalium 61.1b16, ὅταν δὲ μηρέτι πονόσι (sc. οἱ ἐλαφοὶ) πρὸς τὰ δένδρα κινώμενοι αὐτὰ (sc. τὰ κέρατα), τὸτ’ ἐκλείσουσι τὸς τόποις τοῦτος διὰ τὸ θαρρεῖν ὃς ἐχοντες ὦ ἁμυνοῦντα, where the verb κνάω is brought into direct relationship with κέρατα. But the meaning in the Aristotelian passage is directly the opposite of that in Theophrastus: in Aristotle deer scratch their horns against trees to test them and thus ensure that their contact with something hard will not be painful to them; so the scratching is done for a beneficial purpose, whereas the word in question in Theophrastus, if it is indeed κνήσει, implies that harm is being done to the animal. Thus the two contexts are entirely different and the Aristotelian passage cannot be used to emend the text in Theophrastus. The word itself, κνήσεις, is not attested either in Aristotle or Theophrastus; the former uses κνησμῷς instead, and apparently the latter, too, in the derivative κνησμώδης (fr. 9 Wimmer). The meaning of κνήσεις, moreover, cannot be anything other than either scratching (rather than “rubbing,” Ross), or, apparently, its counterpart, itching (cf. LSJ; “abrasion” in van Raalte, and “Abschürfung” in Henrich, indicate the result of scratching, not scratching itself). Laks & Most prefer “itching” (défiant), but that can hardly be true for itching in itself is not harmful to the animal because the animal can easily cure it by scratching the affected part, if it can reach it, or by rubbing it against something, if it cannot. There remains the meaning of scratching and rubbing, two verbs, however, which need an object—scratch or rub against what? Ross and Tricot provide the missing object (“obstacles”), but that is not in Theophrastus, as opposed to the case of ἐπιπροσθῆσει, which does require an object, and which Theophrastus provides with the objective genitive τῶν ὀμμάτων. So if Theophrastus had meant to say “horns rub against obstacles/trees” he ought to have provided the object in
such an inexplicit context. Besides, judging from the next two words, παραιωρήσει and ἐπιπρωτόθησε, which have a parallel function in the sentence, it is clear that all three words describe qualities that horns have in themselves because of their size, regardless of their environment (i.e., regardless whether there are trees around for the horns to rub against). Thus “scratching” or “rubbing” does not yield a satisfactory sense either. Laks & Most’s comment (78n17) is to the point when they remark that the passage, as reconstructed with Usener’s emendation, “reste étrange.” For all these reasons, then, κινήσει cannot be sustained. The transmitted word, κινήσει, on the other hand, in addition to having the authority of all the Greek manuscripts and the Arabic translation (the Latin translation omits the passage), is perfectly compatible with the sense of the sentence as just described: because of their large size, horns of deer move (sway) in an ungainly way as the head moves, their extremes necessarily dangle (παραιωρήσει: the horns dangle, it is not that the deer are “hung up by their horns,” Ross 72, or “suspended,” van Raalte 61), and obstruct their vision in the direction where the horns dangle (the proper meaning of ἐπιπρωτόθησε, ἐπιπρωτόθησις, cf. Aristotle, Topics 148b27) presumably by restricting the free movement of the head.

10b14 Connective δή, “then again”; cf. Denniston 254, 240.

10b20–22 (αἱ ἐν ... τοῖς ἀψύχοις ... ἔχουσαι φύσιν] There is a significant problem here, with three interrelated parts, one grammatical, one codicological, and the third having to do with the Arabic translation. In the first place, the phrase τοῖς ἀψύχοις ὡρισμένην τιν’ ἔχουσαι φύσιν, in which the transmitted ἔχουσαι is “corrected” to ἔχουσα as accepted in all editions, cannot stand; the word order of the attributive participle ἔχουσα with the article τοῖς is wrong. There are five different ways in which this phrase can be said,42 but the one we have in the text is not one of them. The easiest way to emend this would be to adopt one of them, τοῖς ἀψύχοις (τοῖς) ὡρισμένην, and very plausibly blame haplography for the omission, but then we are confronted with the second part of the problem, the reading ἔχουσαι for ἔχουσα. ἔχουσαι is the reading...

42 I.e., as follows: (1) τοῖς ὡρισμένην τιν’ ἔχουσαι φύσιν ἀψύχοις, (2) τοῖς ἀψύχοις τοῖς ὡρισμένην τιν’ ἔχουσαι φύσιν, (3) τοῖς ἔχουσαι ὡρισμένην τινα φύσιν ἀψύχοις, (4) τοῖς ἔχουσαι ἀψύχοις ὡρισμένην τινα φύσιν, (5) τοῖς ὡρισμένην τινα φύσιν ἀψύχοις ἔχουσα. See K.-G. I,623f; Smyth § 1166 lists only four ways, omitting (5).
of all four independent witnesses, certainly of PJ and Λ, and apparently also of Ψ as reflected in the Arabic translation (see further below). Impugning this reading in the best witnesses is not easy, especially if it is difficult to account for the error—if it is an error, as in this case: how would ἔχουσα have arisen? In addition, the form accepted in the editions, ἔχουσα, is found only in CL and A, our least reliable manuscripts (see Part I, Chapter 2.1), and can hardly be more than a conjecture on the part of scribes or revisers; for according to the stemma codicum, CL and A could have gotten the reading ἔχουσα, assuming it is the correct one, only from their common source with J, and if so, then J would have committed an error by writing ἔχουσα. This might be acceptable if it were an isolated error, but P, a manuscript completely independent from the J tradition, also committed on its own the same error. This is straining credibility; but even if it is accepted, then we have the same error occurring independently for yet a third time in Λ and a fourth in Ψ, a manuscript which belongs not only to a different tradition from PJ and Λ but also to a different transcription from uncial. So ἔχουσα is difficult, if not impossible, to accept both because CL and A could not have gotten the reading from any independent source (other than conjecture), and because all four independent witnesses could not have made the same error and written ἔχουσα for a presumed correct original ἔχουσα.

Thus ἔχουσα cannot be a true reading, and is to be rejected, while ἔχουσα may or may not be the true reading; in other words, either the paradoxis has ἔχουσα which is a primitive error of the Neoplatonic archetype, or ἔχουσα is the true reading. At this point the Arabic translation interjects yet a third part of the problem; it reads, “One should also investigate with regard to plants—or rather, with regard to souls, the reason on account of which they have come to have a determinate nature” (wa-li-l-insāni aydān an yahbāta mina amri n-nabāti, bal min amri l-anfusi ‘ani s-sababi llaḥā šāra laḥā ṭabi‘atun mahdūdatun). The translator understood the structure of the sentence quite correctly, but there are some other difficulties. The first has to do with the word ἡψυῆ; Ishāq either read or interpreted what he read as ψυχαῖς, souls, and not inanimates. It is possible that the original version of the translation did read

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Burnikel 119 thinks that there are only two common errors between P and J; one of them is this one (which in reality is not an error), and the other is the spelling of ἔμμορφος at 746 (which, as a spelling peculiarity, could have arisen independently)—there are thus no common errors between P and J.
“inanimate” and the word was later corrupted within the Arabic tradition, but that seems unlikely. Alon in his edition silently corrected the reading of the manuscript, *al-anfus*, souls, to *al-l¯a-nafs*, the inanimate, but this is unacceptable; first “the inanimate” does not mean “inanimate things,” what Theophrastus is talking about here, and second the translator does not use this neologism with *l¯a* to render ἄψυχος: in two other places where the word occurs in the Essay it is translated by *m¯a l¯a nafs¯a lah¯u* (11a17) and *allat¯ı l¯a nafs¯a lah¯u* (9a15). If one were to emend the manuscript reading of *al-anfus*, therefore, it would be more plausible to suggest reading ⟨*m*⟩ā l¯a nafs¯a ⟨lah¯u⟩. In Arabic, ⟨*m*⟩ā l¯a nafs¯a is written in a practically identical way with *al-anfus*, while the following ⟨lah¯u⟩ could have been omitted as meaningless at a later stage, once the mistaken transition from *m¯a l¯a nafs¯a* to *al-anfus* was effected. However, there are two difficulties with this emendation. First, there seems to be no obvious reason why the mistake should have occurred, and second, the pronoun that is used right after this emended passage to refer back to it is feminine (-h¯a in ṣ¯a¯ra lah¯a ṭabʾatun), i.e., plural, while *m¯a l¯a nafs¯a lah¯u* would have taken the masculine pronoun. And lah¯a does not refer back to *an-nab¯at* either because of the intervening *bal*, which changes the subject to *al-anfus* (or *m¯a l¯a nafs¯a lah¯u*, as the case might be). In any case, it is clear from this plural pronoun that it refers to *al-anfus* and points to a reading of ἔΨχοςΨΥςαι in ψ; for the question is, what could have (mis)led the translator to assume that ψυχαι are somehow meant in the Greek, and the only thing I can think of is that he also read ἔΨχοςΨΥςαι in his manuscript and the only plural feminine subject he could find was to assume somehow ψυχαι from the ἄΨψυχοςΨΥςαι (or whatever else might have stood for it) in his source.

The Arabic evidence thus supports the reading ἔΨχοςΨΥςαι but does not prove it, so we are back to the question of whether to accept or reject ἔΨχοςΨΥςαι, and if the first, how so. Rejecting it would entail assuming some major corruption in the text which we would have no means of correcting. But the text in general seems to make sense along the general lines we have it, so it is worth considering how to explain ἔΨχοςΨΥςαι. Facing the same problem as Ishålq, the question we need to answer is what the plural feminine subject of the participle could be. The problem posed in this Aporia 22 (beginning at 10a22) is discussed in three diaporiae: In the first one (22.1, 10a28–10b7) Theophrastus asks the question about the τέλος of terrestrial and geological changes; in the second, introduced by ἔτι δέ (22.2, 10b7–20), he asks the same about animals, and in the third, also introduced by ἔτι δέ (22.3, 10b20–11a1), about plants and inanimate
things. The first Diaporia (22.1) ends by asking about the purpose of the μεταβολαί καὶ φθοραί καὶ γενέσεις on and in the earth, and the second (22.2) by asking about the purpose of the variety of τροφῶς καὶ γενέσεις of animals—nouns which are all feminine plural. It is thus not far-fetched to assume that a feminine plural participle, especially when introduced by a sentence beginning with ἔτι δὲ which would bring the other questions to mind, is referring to the same general feminine gender subjects, and perhaps specifically to μεταβολαί or γενέσεις (for elliptical ἔτι δὲ sentences in a series in this Essay see 8b4); μεταβολαί, in particular, hovers in the air in the last part of the Essay and it recurs, in the same context and with reference to this passage, at 11b14–15, τὰ περὶ τὰς τῆς γῆς λεξιθέντα μεταβολάς. Thus if it is assumed that the reader can see the word μεταβολάς or γενέσεις reflected in ἔξουσια, the sentence in question can be most easily emended to read correctly by the addition of the nominative feminine plural article, ἔτι δ’ (αἱ) ἐν τοῖς φυτοῖς καὶ μᾶλλον τοῖς ἀψυχοῖς ὡρισμένην τιν’ ἔξουσια φύσιν (sc. μεταβολάς or γενέσεις). The article would have fallen out through the similarity of sound, ε, in three consecutive vowels: in δ(ε), in the Middle Greek pronunciation of the article αἱ as unaspirated ε, and in ἐν—in a sense, all three ε sounds would be contracted into one in the resulting corrupt δ’ ἐν. It is also almost certain that Theophrastus would have written δ’ αἱ instead of δὲ αἱ to avoid at least one hiatus, though in his extant writings he tends to write δὲ αἱ three times as frequently as δ’ αἱ. The hiatus at αἱ ἐν was unavoidable but excusable; in one passage Theophrastus actually writes, ἄσασαι δ’ αἱ ἐνωδεῖς (HP VII.9.4.10).

Beyond saving the reading of our oldest manuscripts, one further advantage of this emendation is that it includes φυτῶν γενέσεις in the ταῦτα of line 10b23. Because without this emendation, with the phrase ὡρισμένην τιν’ ἔξουσι φύσιν taken to refer only to ἀψυχοῖς (Laks & Most 8on23), plants are left without any specific question having been asked about them. With the emendation proposed here, the purpose of the determinate nature of the generation of both plants and inanimates is questioned in the sentence. Furthermore, this emendation explains the source of the confusion of Ishāq and the resulting mistranslation through the introduction of souls in the passage, as discussed above.

10b21 τιν’] The indefinite τιν’ here following a participle with an adjectival function, has, in context, a strengthening effect. Cf. Smyth §1268; Humbert §29.
10b24–11a1 (ἄπορον): On spontaneous causation. These things must have a cause in something prior and nobler, whence the mechanistic view that appears credible, viz., that they come about spontaneously and through the rotation of the universe.

For Theophrastus’s hesitant attitude towards spontaneous generation, especially in plants, see Balme 1962.

10b24 αὐτὸ γὰρ τοῦτο ἄπορον] The expression αὐτὸ γὰρ τοῦτο provides a strong connection between the preceding and following sentence and points forward; the comma should come after ἄπορον. This is a further aporia in connection with teleology, though brief, but it is not parenthetical, as Ross translates. Cf. the parallel expression in Plato, Symposium 204a4, αὐτὸ γὰρ τοῦτο ἐστὶ χαλεπὸν ἁμαρθία, τὸ … δοκεῖν … (cf. LSJ s.v. ὁὗτος VIII.1).

10b25 λόγον] In this reading of the text λόγος seems to mean a cause in the Aristotelian sense, especially formal and final; cf. Aristotle, GA 715a5–9, PA 639b14–16, GC 335b6–7.

10b25 δὴ ποιοῦσιν] The transmitted reading in the Greek manuscripts and Λ, μὴ ποιοῦσιν, is problematic, as Laks & Most 80n26 note. Ross’s interpretation is difficult to maintain. First, as Laks & Most observe, reading ποιοῦσιν as masculine plural dative, presumably referring to some people, and sandwiching it between three neuter plural datives governed by ἐν, is more than “intolérable”, it is quite impossible Greek. One would have at least expected an article to indicate the different nature of that dative (τοῖς ποιοῦσιν), otherwise normal when referring to groups of people (cf. Aristotle, GC 330b13–14, 17–18, οἱ ποιοῦσις, etc.). Even more to the point is that the sense of the passage requires ποιοῦσιν to be read as “agents” together with the other datives. If the sentence that follows begins with ἦν, as emended, which means “for this reason,” “on which account,” then there must be something in this sentence to which ἦν refers. With ποιοῦσιν read as “agents,” the revolution of the universe mentioned in the following sentence finds its referent. Without it, there is no real reason why the assumption that plants and inanimates have no explanation should lead one to assume that everything is caused by the rotation of the heavens. Laks & Most’s
reading of the sentence is thus basically correct. The Arabic translation helps refine the reading. The phrase μὴ ποιωῦν is indeed problematic (and was accordingly considered corrupt by Usener 1861). The Arabic translation, however, does not have the negative particle but a word meaning “then” (tumma). Clearly Ishâq read something other than μὴ in Ψ, and indeed something that made him break the sentence before ἐν έτέρως; in other words, a particle. The particle that fits best this context would be δή, which was taken by the translator in its temporal and connective rather than emphatic function (see, for example, the use of connective δή above at 10b27). Reading δή instead of μὴ makes for a smoother sentence and removes the need to assume the “indirect” influence which Laks and Most talk about but not explain.


Aporia 24

11a1–11b27 (ληπτέον τινὸς ὀρὸς, διστασμός): So if this does not come about for the sake of an end, we should identify and apprehend (in nature and the universe) the boundaries (within which teleology is applicable) and not apply it indiscriminately.

Based on the epistemological principle enunciated earlier (Aporiae 19–20) that each class of objects has its proper method of being investigated, this crucial Aporia asks the main question of how to recognize and identify the boundaries existing in reality among the various classes of objects. The realization and apprehension of these boundaries (λαμβάνειν ὀρὸς, a key concept in Aristotelian and Theophrastean aporetic method—see the discussion in Part I, Chapter 1.3, and the comment below at 11a1), in connection with the teleological principle that states everything is for the best, will lead to investigating each thing by its proper method and avoid applying a principle such as teleology indiscriminately. The discussion of this aporia is wide-ranging and breaks down into three diaporiae. The first one, Diaporia 24, is marred by textual corruption toward the end, while the second, Diaporia 24.1, is particularly complex in its argumentation.
Diaporia 24 (11a1–26). Indiscriminate application of teleology is inappropriate because the following statements are dubious both when said without qualification and with reference to each genus of things. Without qualification, when it is said that nature (a) always desires the best, and (b) gives a share in eternity and order to those things that can accept it. With reference to each genus, as in the case of animals, when it is said that (a) the better is never lacking wherever it is possible (e.g., the windpipe is in front of the oesophagus because it is nobler), and that (b) there is orderly arrangement (no examples given). The reason why the statements above are dubious, making indiscriminate application of teleology inappropriate, is that even if the desire of nature is for the best, it is nevertheless obvious that what neither obeys nor receives the good in nature is by far much more than what does. The animate part of nature is little, the inanimate infinite. Hence, and in general, the good is something little, the evil much. (Corrupt text in the following three lines makes the flow of the argument unclear.) Speusippus claimed that the noble, which is only about the center of the universe, is something rare. Though (?) the things that are happen to be good.

For a discussion of the biological examples given here by Theophrastus (11a8–13) and their relation to the work of Aristotle see Lennox 1985, 149–155; Most 1988a, 229–231; Repici 1990, 197–200.

Diaporia 24.1 (11a27–b12). (In contrast with Speusippus,) Plato and the Pythagoreans make the distance between the principles and the sensible world great, and posit that everything wishes to imitate fully (the first principles). And yet, (from this premise, and from the one that the principles are the best, one should not conclude that nature imitates the best, because, in fact,) Plato and the Pythagoreans posit two contrary principles, the one and the indefinite dyad, in the first of which reside order and determinacy and in the other lack of order and shapelessness, and accordingly the entire universe cannot dispense with this principle of indeterminacy which equals, if not even exceed, the other; hence the principles are contrary to each other. (The unstated conclusion is therefore that everything imitates or derives from the two principles together, both order and disorder, and accordingly Plato and the Pythagoreans avoid the philosophically indefensible position that “everything is for the best.”) Because of this opposition in the first principles according to these philosophers, not even god is able to, or even would want to if he could, lead everything towards the best (and thus remove the principle of the indefinite dyad) because it would destroy the universe, whose very being consists in contraries.
This is the second of the two testimonia in this work which inform us about Plato’s unwritten doctrines: Testimonium Platonicum B3 in Isnardi Parente 1998 (with Italian translation and commentary), and cf. Isnardi Parente 1997, p. 394. Theophrastus provides here evidence for the dualist nature of Plato’s system, “despite the monistic tendencies” (Happ 1971, 169 and n478). But the passage is also significant for the discussion about teleology, as mentioned above in the comment on Aporia 22. Vallance 1988, 31, argues for an understanding of Theophrastus “as a dyed-in-the-wool Aristotelian,” while Botter 1999, 61–62, brings out Theophrastus’s closeness, on the matter of teleology, to the Platonic and Academic position.

Though the overall trend of the argument in this diaporia is clear, as just summarized, its precise logic has been difficult to determine, primarily because there are many variables, and as each one shifts so does the overall meaning. There is first a problem with the context: because of the corruption in the immediately preceding paragraph, it has not been possible to say precisely in what light Theophrastus cast the ideas of Speusippus, and hence we do not know with what kind of rhetorical momentum he is now introducing the ideas of Plato and the Pythagoreans on teleology. Secondly there is a textual problem—indeed three; the result, obviously, of the indeterminacy of meaning I just described which may have occasioned scribal manipulation of the text. The first two have to do with the transmitted words ἐπιμιμεῖσΨτΡetatwoαιγ at 11b1, and the third with δ at 11b5.

ἘπιμιμεῖσΨτΡetatwoαι, found in all Greek manuscripts, is a hapax legomenon, apparently, in the extant Greek writings up to the 14th century (according to the TLG), and thus either suspect or, if accepted, of indeterminate meaning. The Arabic and Latin translations, which both render it as “imitate”, could point as the reading in Ψ and Λ to either ἐπιμιμεῖσΨτΡetatwoαι or μιμεῖσΨτΡetatwoαι, since they cannot (or do not) give the precise sense of the preposition in the compound verb. Some scholars tried to resolve the difficulty by assuming a hiatus between ἐπι and μιμεῖσΨτΡetatwoαι, but their suggestions (for which see the Supplementary Apparatus) appear arbitrary and beyond discussion. Laks & Most, following a suggestion by Allan, emended the compound verb to read ἐπεὶ μιμεῖσΨτΡetatwoαι, an emendation subsequently approved by both van Raalte and Henrich. My argument against it would be that the sense it yields is wrong. As van Raalte translates it, “Plato and the Pythagoreans ⟨hold⟩ the distance to be a great one, seeing that all things wish to imitate ⟨the good⟩.” I would add in this translation, since van Raalte retains the particle γ that follows the
verb, “seeing that all things wish to imitate, at any rate, (the good).” But this means, as Theophrastus allegedly presents it,\textsuperscript{44} that Plato and the Pythagoreans believed the distance between the good and the sensible world to be great \textit{because} all things wish to imitate the good; but this can hardly be imputed to Theophrastus—if anything, what is, or should be, meant is the converse: all things wish to imitate the good \textit{because} they are separated by such a great distance from it. There is also the additional problem of the connection that is implied, through this emendation, between imitation and distance: if the emphasis in the first clause of this problematic sentence is on \textit{μακράν}, it is not clear why imitation should imply great distance rather than any other kind of difference. The emendation, therefore, though palaeographically sound and plausible in itself, cannot stand.

The original reading \textit{ἔπιμιμεῖσΨτΡεταω}, even though a \textit{hapax}, need not cause problems and can be retained. As for its meaning, it will have to be divined from the context, for the preposition \textit{ἐπί} is very versatile in compound verbs. LSJ offer “imitate further,” which I take it to mean “imitate additionally or besides,” insofar as the concept of accumulation or addition is one of the commonest meanings of the preposition in compounds, as in \textit{ἔπιμακραθάνω}. But this would raise the question, in context, ‘additionally to what?’ and accordingly van Raalte (564n2) rightly disagrees; she suggests instead, “go as far as actual \textit{μίμησις},” which is the meaning the preposition contributes in such compounds verbs as \textit{ἐπιτελεῖν}. However, the general meaning of “up to a point” of the preposition in \textit{ἐπιτε-}

\textit{λεῖν} does not mean “go as far as” but “go to the end of and actually finish” something.\textsuperscript{45} This latter, then, is in this instance the meaning of \textit{ἐπί}, for it functions to emphasize and intensify the root meaning of the verb; and hence \textit{ἔπιμιμεῖσΨτΡεταω} means “to imitate fully.”

The problem of the particle that follows the verb, \textit{γ’}, attested in all the Greek manuscripts, is closely related to it. If the original \textit{ἔπιμιμεῖσΨτΡεταω} is retained, and since there is no other particle connecting the verb with the preceding clause, \textit{γ’} can be taken in either of two senses, which are essentially one, epexegetic (Denniston 138) or quasi-connective and

\textsuperscript{44} According to Laks & Most 86n54, the willingness by all things to imitate (the one) is presented by Theophrastus as an indication of the great distance between the one and the many, without which, \textit{γι.ev} implies, imitation would not be meaningful (see also van Raalte 566 and n. 3).

\textsuperscript{45} Apparently basing themselves on this mistaken interpretation of the meaning of “up to a point” of \textit{ἐπί} in compound verbs, Reale 1964, p. 205, and Isnardi Parente 1998, p. 15, mistranslate as “tendono ad imitare” and “tendenza all’imitazione,” respectively.
commentary, like \( \gamma' \) (Denniston 144–145). To his credit, Ishq so took it, seeing a causal connection between the two clauses and translating, “because they thought that all things imitate it” (bi-mä ra’awhu mina l-aṣyā’i kullihā yataqayyaluhū). It is clear that the translator saw the particle \( \gamma' \) in his exemplar (Ψ) and not \( \varepsilon\tau\varepsilon\iota \) because in the five other instances where \( \varepsilon\tau\varepsilon\iota \) occurs in this work it is translated differently: by wa-ḍālika anna (7b15, 9b17, 11a3), min qibali anna (4b22), and fa-inna (5b5). The lighter causal connection indicated by bi-mä (as opposed to the stronger expressions used for \( \varepsilon\tau\varepsilon\iota \) in the other passages) is thus due to his taking the particle \( \gamma' \) correctly in its epexegetical sense. But if this is the meaning of the Greek sentence with \( \gamma' \), as also correctly understood by Ishq, then we have the same problem with regard to sense as we did with the proposed correction \( \varepsilon\tau\varepsilon\iota \): the fact that people wish to imitate the good does not explain the great distance between them but rather, if anything, the opposite.

Ross tried to resolve the difficulty by emending the particle to read δ’ (translating it as “but”) and was pleased to note, in his review (Ross 1938) of the subsequent publication by Kley of Bartholomew’s Latin translation, what he took as confirmation in the Latin text (autem) of his emendation. The problem, however, is that though autem does indeed occasionally translate \( \delta\varepsilon \) in Bartholomew’s version, it also translates \( \gamma\varepsilon \). The particle \( \gamma\varepsilon \) occurs fifteen times in Theophrastus’s Essay, and in five of these it is translated as autem by Bartholomew.46 There is thus little doubt that Bartholomew’s exemplar (Λ) also had the same reading as that in the extant Greek manuscripts, \( \varepsilon\tau\mu\mu\varepsilon\iota\sigma\theta\omega\iota \). Nevertheless, Ross’s thinking seems to be in the right direction, for a particle like δ’ removes the causal connection between the two parts of the sentence which yields the objectionable proteron-hysteron meaning discussed above, and replaces it with a parataxis. But if δ’ is difficult to defend on grounds both of transmission and palaeography, τ’ could be most plausibly suggested as the original reading whose corruption to \( \gamma' \), common enough in Greek manuscripts, should be counted among the primitive errors in the Neoplatonic archetype. τ’ also has the additional advantage that it removes any kind of connection between the great distance and imitation (even the slight adversative one implied by δ’), and simply states in sheer parataxis the two legs of the Platonic and Pythagorean position. In this context, the “great distance” (if, as suggested above, the emphasis in that

46 At 8a13 and 14, 11a14, 11b1, and 11b12. In nine other passages it is not translated at all, and in the tenth, at 4b12, ἀμοίγος \( \gamma\varepsilon \) πος is rendered by verum quodam modo.
first clause is on μακράν) would be seen as forming a contrast with what preceded: if Speusippus located the noble, rare as it is, about the center of the universe, i.e., among us humans, Plato and the Pythagoreans by contrast put it at a great distance from us. The sentence then will read, μακρὰν τὴν ἀπόστασιν, ἐπιμιμεῖσθαι τ’ ἐθέλειν ἀπαντα, and will depend, as Ross 74 suggests, on ποιοῦν, understood from ποιεῖ referring to Speusippus at 11a24.

This initial declaratory sentence, actually a categorical premise, and what follows it are best understood as a syllogistic argument. The clue to this is the word καίτοι (11b2), the adversative nature of which has been difficult to assess with precision. In syllogistic arguments of this sort, καίτοι usually introduces the major premise and the conclusion is usually left unexpressed (Denniston 561–563). In this case, the syllogism can be reconstructed when one keeps in mind the main subject of the entire Aporia 24, a discussion of the difficulties involved with the assumption of a teleological impetus for the best in nature (εἰς τὸ ἄριστον 11a2, εἰς τὸ βέλτιον ὄμη 11b27). In this context, once Theophrastus utters his opening sentence about Plato and the Pythagoreans, which can be taken as the minor premise of a syllogistic argument (in a categorical syllogism), the rest would be formed as follows in the mind of his audience:

Minor: everything (ἅπαντα) imitates the principles (11a27–b1);
Major: the principles are the best (universally accepted premise);
Conclusion: therefore everything imitates the best.

This conclusion, however, is precisely what Theophrastus wishes to contest, or has been contesting, by pointing out in the preceding paragraphs the numerous aspects of nature, “everything” or reality, where this conclusion is not valid. What Theophrastus is arguing for is a conclusion that would state that nature imitates both the best and its contrary, because that is what can be observed empirically and because reality (ὄνοια at 11b11) consists of contraries. In order to arrive at this conclusion, therefore, and given the minor premise which he has just expressed, he has to construct a different major premise, and this is precisely what the sentence beginning with καίτοι offers. The syllogistic argument that Theophrastus actually puts together, instead of the one most people would normally think of, as just stated, is the following:

Minor: everything (ἀπαντα) imitates the principles (11a27–b1);
Major: the principles are two contrary ones, one for order and one for disorder (11b2–7);
Conclusion: therefore everything imitates and includes both order and disorder (unexpressed but implied).
A final problem concerns the syntax of the passage containing the major premise and the conclusion, 11b2–7, centered around the presence or absence of particle δ’ at 11b5. Ross 75 points out that καὶ ὑπέρεξεν at 11b2 can be taken either adverbially with ἀντίθεσιν τινα, in which case the clause beginning with ὀλῳς would be coordinated with it and require the particle δ’ (“they create as it were some opposition . . ., and it is altogether impossible . . .”), or as introducing a subordinate clause which is answered by the main clause beginning with ὀλῳς, in which case the particle δ’ has to be omitted (“as they make some opposition . . ., then it is altogether impossible . . .”). The manuscript transmission is clearly in favor of retaining δ’. The particle is omitted only in the Paris manuscript (P), while all three other independent winesses, ΨΛ, have it. Stemmatically this can only mean that P is mistaken and the other three correct, for it is difficult to assume that all three erroneously added the particle independently of each other, though Ross 75, strangely, claims precisely this.47 The alternative, if one thinks that the absence of δ’ is the correct and original reading, would be to assume that its inclusion was one of the primitive errors in the Neoplatonic archetype, that it was naturally copied in the subsequent exemplars ΨΛ, and that the editors of the text as it was redacted in the Paris manuscript excised it, recognizing its spuriousness. But it would be too much to assume that these editors, capable as they were, could actually perform the kind of analysis of the meaning of the text undertaken here. Besides, the whole passage beginning with καὶ τοι (11b2–7) which aims to introduce a new major premise, as discussed above, concludes with τὰς ἀρχὰς ἐναντίας, which is the major premise, and the clause introduced by δ’ naturally fits into the progression of the argument leading to it.

47 Ross mentions as reason of the alleged confusion the “failure to notice the idiomatic use of the participle ποιοῦσιν” at 11b2, but I cannot see what he is aiming at; ποιοῦσιν is certainly not used as a participle in that sentence (cf. the commentary above at 10b25), but as the main verb on which depend all clauses, with εἶναι naturally understood after φύσιν at 11b6.

Diaporia 24.2 (11b12–27). Even among the first things one can observe many things (like the geological changes mentioned above) that are at random and thus happen not for the best or for the sake of some end, but comply with some sort of necessity. Among sensibles, the heavenly bodies possess order; among other things, the mathematical, for in these the ordered is the greater part (unless one follows Democritus’s understanding of the shapes of atoms).
Concluding summary and re-statement of Aporia 24. We should try and identify some boundary, both in nature and in the substance of the universe, both for the final cause and for the impulse for the best.

11a1 εἰ δὲ μὴ τοῦθ’] This is the reading in all Greek manuscripts and the two translations. Usener 1890 punctuated after μὴ, changing the meaning of the sentence and the flow of the argument, and he was followed by all subsequent editors. The original reading was restored by Repici 1990. Repici’s article is important for drawing attention to the meaning of λάμβάνειν ὡρός and ἀφορισμός in this Essay, namely, apprehending and identifying in nature and the universe the boundaries among things that exist objectively, and then basing our studies and analyses on these data rather than applying wholesale preconceived theories upon nature. The word ἀφορισμός is crucial in this Essay: Theophrastus wishes basically to mark the boundaries of the various disciplines, that is, identify the objects of study that are proper for each on the basis of discriminations that are provided by these objects themselves, and then find the appropriate method for their study.

11a3 ἀπλῶς] Laks & Most 81n30 and Henrich 149 make the distinction that the word ἀπλῶς, (“without qualification,” “absolutely”), because of its position, may modify either the prepositional phrase (“for everything without qualification”) or the verb (“posited without qualification”) and ask themselves whether Theophrastus is emphasizing the quantity of teleological explanation (the former case) or its modality (the latter); they prefer the former. But given that, in essence, the one affects the other, I am not sure I see the distinction: qualifying the positing (θετέον) can only have meaning with reference to the objects for which these rules are posited, and hence it also qualifies the “everything” (πάντων). Thus in a way ἀπλῶς modifies both the prepositional phrase and the verb; the implication is, “We posit these two teleological principles not absolutely for absolutely everything, but absolutely for some things and in a qualified way for other things.”

11a3 For ἐπεὶ καί, “for in fact,” see Denniston 297.

11a5 ὅτι] It appears that ὅτι is causal or explanatory, meaning “because/when,” i.e., something is the case. This meaning is required by, and explains, τοῦτο ἐξει τινά διστασμόν in 11a3–4, in which case the “irregularity” in the syntax seen by the translators (cf. van Raalte 544)
disappears as the infinitives in the sentence reflect reported speech dependent on λέγεται which, in context, is clearly to be understood after ὅτι ἀπλῶς μὲν ὅτι τὴν φύσιν ὀρέγεσθαι (λέγεται) καὶ μεταδίδοναι (i.e., one is not to read, ἀπλῶς μὲν (λέγεται) ὅτι τὴν φύσιν ὀρέγεσθαι, which ceases the problems with the following infinitives). To paraphrase what Theophrastus is saying, “there is some ambiguity in the following, both when they speak generally and with reference to particulars: generally, because/when they say that nature always desires the best . . . , and with reference to particulars, because/when they say . . . ”.

11a7–8 ὡς δ’ αὐτό is the reading of Λ, the exemplar of the Latin translation (ut hoc autem), which seems preferable to αὐτά if only for reasons of stemmatic affiliation. J¹, the only independent witness to have αὐτά, is nevertheless the later and restored text of the missing final bifolium of J, P has αὐτος, which may be a corruption of an original αὐτό, while the Arabic translation cannot give conclusive evidence. It reads, wa-ka-dālika yajrī l-amr, “thus” (literally, “like this runs the case with . . .”), which could translate either ὡς δ’ αὐτό or ὡς δ’ αὐτά; in addition, Ishāq does not translate ὁμοίως at the end of the phrase, doubtless because he felt that wa-ka-dālika yajrī l-amr covered both adverbs: this is contrary to his practice because in all other instances of ὁμοίως in the Essay he renders it with ʿalā mitāl wāhid (see the Glossary). Thus wa-ka-dālika yajrī l-amr must stand for both ὡς δ’ αὐτά/-ό and ὁμοίως, and accordingly it is not possible to say what Ishāq read in Ψ. Both αὐτό and αὐτά fit the context well by referring to the preceding teleological principles (either in the singular referring to the preceding ὅτι clause or in the plural referring to the two principles separately) which are next going to be applied to particular instances from the animal kingdom, as van Raalte 546 explains. The reading then, is, either ὡς δ’ αὐτό . . . ὁμοίως or ὡς δ’ αὐτά . . . ὁμοίως, a sentence which, when normally expressed, would read, ὁμοίως δ’ ὡς αὐτό καὶ ἐπὶ τῶν ζῴων (the expression ὁμοίως ὡς is too common to need special documentation; see above the text at 8a3 and also cf. Theophrastus, CP IV,9,1.5). I prefer the former for stemmatic reasons.

As for the other transmitted reading, αὐτως, there is no good manuscript evidence for it; it is carried only by Α, a manuscript representing a revised edition of the work (see Part I, Chapter 2.1). In addition, and regarding the style of the Greek text, the redundancy in having both ὡς αὐτως and ὁμοίως in the same phrase would be almost intolerable, and the allegedly “loose” style of this Essay is no excuse (especially
for someone who was nicknamed ὤσσων ἄντως). Besides, in the two other passages in this work where Theophrastus uses the adverb αὕτως together with the particle δ', he says ὡςαὕτως δε (6b5, 11a3) and does not split it as ὡς δ' αὕτως.

11a8 καὶ ἐπὶ τῶν ἐδομίων ὁμοίως (λέγεται) is understood here (see the second preceding comment). Having stated what the ἀπλῶς λεγόμενα are in 11a5–7, Theophrastus now proceeds to say what the καθ' ἐκαστὰ λεγόμενα are. Having mentioned in the former category the two absolute claims by those who make them, namely that nature [a] desires the best, and [b] bequeaths eternity and order, he engages in the second category to talk about individual cases for each one of the claims. He starts with [a] τὸ βέλτιον in lines 8–12 and then continues in line 13 with [b] κόσμος, which stands for τὸ ἀεὶ καὶ τὸ παρασκύπτων in line 7, without, however, providing any examples for [b]. He may have considered the case as self-evident, though Wimmer was moved to suggest a lacuna after χάριν. Κόσμος is a more comprehensive and traditional term for τὸ παρασκύπτων, while his complaint about the ἀκαριαῖς in line 12 indicates that he is including both τὸ ἀεὶ καὶ τὸ παρασκύπτων in his discussion of κόσμος.

11a8 γάρ introduces the list of examples of the best arrangement of biological matter in nature; ὀσσώτως at the end of the parenthesis refers to the orderly arrangement of the same.

11a9 παράλειπεῖν] There is patent need to read the infinitive παράλειπεῖν here: the view presented is reported speech, which depends on the presumed λέγεται of the preceding sentence (and not, as Ross suggests, the ὁτι of the preceding sentence). For an author like Theophrastus, writing reported speech in infinitives if he is not sharing that view—and here he is clearly not—would be automatic and independent of how “polished” or “rough” his style in any work is.

11a13 κόσμου] Given τὸ παρασκύπτων in line 7, it is clear that κόσμος here must be referring neither to ornaments nor to the universe (“the cosmos”), but to order as a teleological principle, eternally valid (cf. ἡ τοῦ κόσμου τάξις ἁδίως ἐστιν, Aristotle, De Caelo 296a33). A fragment attributed to Aristotle (Rose fr. 17) makes κόσμος an axiomatic principle permeating the world: the argument that there is only one ἄρχῇ hinges on the axiomatic truth that there must be κόσμος in the cosmos;
otherwise οὐκ ἐστὶ κόσμιος ὁ κόσμιος ἀλλ’ ἀξιομία. Bonitz Index 406a33 compares the similar notion in Plato, Gorgias 508A.

11a13 εἰ γάρ καὶ … ἀλλ’, “for if it is true that …, nevertheless,” is a common style of argumentation, especially with Aristotle (e.g., APo 79a8, 87b28, 92b20; Phys. 225a27, 254a24; DC 307a4; GC 316b12; Mete. 358a32; GA 716a27; Met. K 11, 1067b32; EE 1227a1, etc.); Theophrastus himself uses it once more further below, at 11b20. The conditional pro- tasis repeats or states a position that was being discussed, and the apodosis, beginning with ἀλλά, introduces an objection or exception to it. The particle γάρ is essentially epexegetic, explaining something that has been said; in this case it explains the word διοτασμών at 11a4: after the examples which corroborate the view that biological organisms do, in fact, exhibit excellent and orderly arrangement, γάρ introduces the reason why ambiguity exists about the universal applicability of this principle. The particle καί is asseverative (not “also” or “even”); it states what in fact the case may be, as described in the preceding discussion. The structure of this paragraph therefore is such that the main statement about the ambiguity concerning the universal applicability of the teleological principle (11a3–5) is followed by the reason for it in lines 11a13–18. The intervening lines provide the details and illustration of the original statement. This structure has not been properly understood and has accordingly led to a misunderstanding of the function of γάρ here; Tricot went even so far as to suggest emending it to δέ.

11a14 For ἀλλά … γε in apodosis see Denniston 12–13.

11a14 διότι here used as ὅτι; see Laks & Most 20141 and van Raalte 552.

11a18 κἂν] Laks & Most are doubtless right in adopting the marginal correction by an anonymous “homo italicus” in the margin of the Florentine Riccardiana copy of the Gemseuses (Oporinus) edition of this Essay. One of the arguments used by those who advance the doctrine of βέλτιον is that the animate is better than the inanimate (Aristotle, GA 731b29: τὸ δ’ ἐμψυχον τοῦ ἀψυχον βέλτιον). Theophrastus is throwing this back at Aristotle, saying, this may be so (κἂν βέλτιον), but what good is it given the momentary nature (ἀκαριαῖ) of our existence? This is related to Theophrastus’s complaint about the brevity of life in the saying attributed to him both by Cicero and the Siwān al-ḥikma (Gutas 1985, 92–93).
δ’] We are here entering a passage that appears to be corrupt beyond redemption, and I indicate the corrupt places with an obelisk. With manuscript J missing the original page (even if it was replaced at the turn of the 14th century by its copy) and the evidence from the Arabic and Latin translations inconclusive, our oldest witness for the text is the Paris manuscript P, whose readings I give in the text. The precise meaning of δ’ at this point depends on how one interprets the passage. For the different—valiant but, I believe, unsuccessful—attempts at restoration and interpretation of the text see the apparatus, the references below, the commentators, and Tarán 1981, fr. 83 and pp. 444–449. Since it is uncertain how the following phrases and clauses are to be connected to each other, I do not translate this and the following particles.

πληθυςι] The error πληθυςι at the very beginning of this corrupt passage can be corrected with certainty. All the main Greek manuscripts (PJ¹CLA) read πληθυςι η, with varying accents and breathing signs on the η. The Arabic translation also reflects the word πληθυςι in the nominative but disregards the following έτα (wa-r-radi’u katırū l-‘adadi, “the evil is much in number” = πολυ δε πληθυςι το μακων). The nominative πληθυςι also appears in the Latin translation, multitudine est, where the second word, est, must reflect how Bartholomew understood the έτα after πληθυςι. This error is accordingly one of the primitive errors of the Neoplatonic archetype (Part I, Chapter 2.5). The correction is simple and it was proposed by Laks & Most, who read πληθυςι for πληθυςι η. The dative of respect in πληθυςι is common after words indicating amount, and the very expression πληθυςι πολυ (i.e., “much/many as to number”) is found elsewhere in Theophrastus (HP IV,2,1,13 and IV,2,5,16) and also in Aristotle (HA 581a5: γινονται δε πληθυςι πολλοι). It is even more common in Plato (e.g., οντα πολλα πληθυςι Phaedo 111a2), one of whose favorite phrases is, απειρον πληθυςι, as in απειρον δε πληθυςι το μη ον (Sophist 256e6). Would this latter Platonic maxim resonate in Theophrastus’s sentence here?

As for the error itself, I would think it was occasioned by the neuter form πολυ at the beginning of the sentence, following which some scribe changed the dative πληθυςι to the nominative πληθυςι to agree with it. The following έτα in the manuscripts is difficult to account for. Usener 1861, pp. 279–280, suggested that it is an abbreviation for ειναι, but that, as Ross 74 explains, can be the case only if one reads ει instead of η, and ει is present only in the later manuscripts, i.e., RBHD in Ross. But RBHD derive ultimately from J, which has the έτα, and thus the corruption went
from *ëta* to *epsilon iota* and not the other way around as Ross suggests. The abbreviation theory explaining *ëta*, then, can hardly be correct. It may be that the *ëta* in the oldest Greek manuscripts represents the original ending of πλήθει, after it was corrupted to πλήθος, miswritten in a marginal note as η instead of ει and eventually incorporated into the main text. But there can be no certainty.

11a20 οὐχ] The Arabic omits or does not translate οὐχ, but rather has something which would seem to indicate that he read or understood the relative οὐ in its stead, reading, πλήθος τὸ κακῶν οὔ ἡ ἀριστία μόνον: wa-r-rādī kaṭīr al-‘adad wa-ḥurūj hādā (sc., ar-rādī) ‘an al-ḫadd faqaṭ, “evil is great of number and the departure of this (sc. of evil) from limit only,” where, as is frequently the case, ḥurūj ‘an, “departure from,” translates the alpha privatium in ἀριστία.

11a22–23 καὶ γάρ ... Σπεύσιππος] καὶ γάρ is well attested in the oldest Greek manuscripts, while εἰ γάρ καὶ and καὶ in C and L respectively would appear to be scribal emendations for the impossible εἰ καὶ γάρ in P and J. Sylburg’s emendation of ει και to εἰκη fails to convince both because of the sense and because of the syntax. As Laks & Most note (84.48), Theophrastus cannot be accusing Speusippus of “arbitrary” speech if he thinks that the theory about the center position of the noble is plain wrong (if this theory is interpreted cosmologically, i.e., as referring to the central position of the world-fire), or even less so, if he thinks that the theory about the center position of the noble is right (if this theory is interpreted ethically and is similar to that of Aristotle: see Tarán 1981, 444–449, and the parallel passages). To say nothing of the fact that it is inconceivable that Theophrastus could have used an expression like “a most ignorant person” (ἀμαθέστατος) to describe, however indirectly, Speusippus. Syntactically, the sentence as reconstructed with εἰκη and accepted by Ross (and then by Tarán 1981), is incomplete. It does not mean, as Ross, translates, “For quite random is the talk of those who speak of the whole of reality as Speusippus does when he makes the valuable element to be something scanty, namely, what is found in the region of the centre of the universe;” if that were the meaning of the sentence it should have read not as transmitted but instead as, εἰκη γάρ οἱ περὶ τῆς ὀλῆς οὐσίας λέγουσιν ὠστε Σπεύσιππος, οπάνων τι τὸ τίμων ποιῶν το περὶ τὴν τοῦ μέσου χώραν. The corruption stands: see the following comment. For the Speusippus fragment itself see also the texts and commentaries in fr. III 41 Lang, fr. 83 Tarán 1981, fr. 71 Isnardi Parente 1980.
11a22–25 καὶ γὰρ ... ἐκκατέρωθεν] The sentence has no finite verb in the Greek manuscripts and in Λ. In Arabic, Ishāq understood the verb referring to Speusippus, ποιεῖ, as the main verb and apparently interpreted it as ποιοῦσι. It is not clear whether this was also the reading in Ψ. Given our lack of certainty about what precisely the issues in question here are because of the corrupt text, it would be rash to supply a verb according to sense (οὗτος ὑπολαμβάνουσιν or ποιοῦσιν Laks & Most 84n48, λέγουσιν van Raalte 559).

11a25 μὲν οὖν] Since we do not know the precise sense of this corrupt passage, the connecting particle combination, μὲν οὖν, is ambiguous, for it could be either adversative (corrective to previous statements) or assentient (cf. Denniston 479–480), and it has accordingly been interpreted in both ways (Ross 74 vs. van Raalte 563, depending on the interpretation given to the passage). Again, I do not translate. It is certain, however, that μὲν οὖν rounds out the discussion of the preceding paragraph and points forward to the δὲ in the next sentence introducing the views of Plato and the Pythagoreans.

11a25 ἔτυχεν] If this brief sentence is indeed an expression of Theophrastus's own views, then the fortuitous element implicit in ἔτυχεν needs to be made explicit in view of ὡς ἔτυχεν further down (11b14). Cf. Laks & Most “se trouve être” vs. Ross “is and always has been.”

11b1 ἐπιμιμεῖσθαι τ’] τ’ is my correction from the transmitted γ’. See the discussion following Diaporia 24.1 above.

11b1 ἔθέλειν, “wish,” indicating natural tendency and disposition rather than actual desire; see the passages assembled by van Raalte 567–568.

11b2 Logical καίτοι (“and yet”) here introduces the major premise of the syllogistic argument. See the discussion following Diaporia 24.1 above.

11b2 ἀντίθεουσι] It is is interesting to note that the Latin translation has compositionem for this word, suggesting a Greek original οὐνθεοῦσιν. This may well have been the reading of Λ, if it was not a marginal comment incorporated into the text, because both ἀντίθεουσι and οὐνθεοῦσι would actually mean, in context, the same thing. As analyzed above in the discussion of Diaporia 24.1, the argument Theophrastus is making is that
the first principle for Plato and the Pythagoreans is actually two, one for order and one for disorder, and as such they are antithetical, and hence the original reading of the text (ἀντίΨτΡεταν). But they also work together as a team to “produce” all reality, with its ordered and disordered aspects, and thus present a synthesis at the highest level of principles, and hence the “correction” or marginal note of σύνΨτΡεταν in Λ.

11b5 δ’] Only P omits the particle δ’ here. See the discussion following Diaporia 24.1 above.

11b12 The word ἐν, added by scribes to manuscripts L and B, was present in Ψ.

11b16 κατακψοντάνειν with the dative, “to comply with or obey” (cf. LSJ), harks back to ύπακψονταν at 11a15. The infinitive indicates that it continues to be indirect speech dependent on “appear”, ψαίνεται, in 11b12.

11b17–19 Μάλιστα … οὐφάναιa] This passage was used by Steinmetz 1964, 158, to dispute Theophrastus’s adherence to the theory of ether, and was criticized by Gottschalk 1971, 764n418, and the comment on Aporia/Diaporia 10 above. For an analysis of the passage as it relates to Democritus see Henrich 317–320.


11b23–24 ἀλλὰ δὴ … μέν … δ’ δ’ εἶ ἄρχηζς] The ἀλλὰ δὴ sentence completes the previous thought; it does not start a new paragraph as originally printed by Usener 1890 and then, following him, by all the editors. The particle combination is resumptive, brushing aside the brief (and irrelevant?) digression of the mention of Democritus (cf. Denniston 241). As Theiler 1958, 102 / 292, remarks, and van Raalte 584–585 amply documents, ἀλλὰ δὴ is a typically Theophrastean way of wrapping up a previous argument before moving on to the next point, here marked by the particle, δ’, which summarizes the main and original (ἐξ ἄρχης; cf. LSJ, s.v. ἄρχη I.1.2) question of Aporia 24 at 11a1–3. Τούτων in this line thus refers back to the question of the amount of order possessed, respectively, by the heavenly bodies and mathematical, which are prior with regard to order. They all are, Theophrastus says, subsidiary subjects for further research.
Aporia 25

11b27–12a2 (ἐν τίοιν, πῶς): The initial aporia in the study of the universe is this: (to determine) among what (different sets of) things all beings belong and how they relate to each other.

The final aporia restates the initial one in a comprehensive manner, as a result of the investigation throughout the Essay. The question is to determine the different categories—in intelligibles, mathematical, sensibles, and the different sub-categories of each—into which all beings belong and the ways in which they are connected and associated with each other, in order to understand how all reality works. The initial aporia were asking about the boundaries of the categories or sets of things in which the first principles belong, but given the connectedness of all reality, which is the leitmotif of the Essay (see Part I, Chapter 1.4), the final restatement focuses on the study of the universe and hence on the assignment of all beings to their proper categories. For the use of the preposition ἐν in this context (ἐν τίοιν τὰ δντα;) see the comment on 4a17–18.

Scholium

12b4 οἶν προδιαπορία The term προδιαπορία bears some investigation, for it is not a common term. As a matter of fact, it is a hapax legomenon: this is the only recorded instance of the word. LSJ list it in the latest (1996) Supplement only (defining it as “preliminary problems”) and refer to its use in this scholium alone, while the TLG shows no record of it all up to the 12th century (apparently this scholium was not copied in their data-base). It is not so much its meaning that is problematic as its usage, which requires some analysis.

It is a doubly compound word, with the προ- prefix clearly intending to signify “preliminary,” as everybody agrees. Removing this prefix for the moment, we are left with the word διαπορία, which is the base upon which the προ- was added. Now διαπορία itself is not a common word. Again, for the period up to the 12th century the TLG lists only 14 occurrences. It derives from the verb διαπορέω, which is much more common, and which means, with the preposition διά adding the sense of intensity and completion, “to raise and run through problems/aporiae thoroughly,” or, in common usage, a more intensive form of ἀπορέω (cf. LSJ; Bonitz Index 187b11 defines Aristotle’s use of the word as,
The verbal noun, raising such a question, was διαπόρημα, while διαπόρημα and not διαπορία was the noun derivative from this verb (as in the title of Theophrastus's lost work, Περὶ τῶν ἀπλῶν διαπορημάτων, Diog. Laert. V,46 = fr. 1,178 FHS&G, or even Aristotle's own reference to the aporiae in Met. B as διαπορήματα, Met. M 2, 1076a39–b1, etc.). Διαπορία in the sense of διαπόρημα or even διαπόρησις (a vexed or difficult questioning), was not used or used very rarely, and hence its very low incidence in ancient literature. Exceptionally, Epicurus used the word διαπορία as the title of one of his books, and this accounts for eight of the fourteen occurrences of the word mentioned above; it was a good choice by Epicurus for it was distinctive in that it was a term not in use. Of all extant ancient literature the only place where διαπορία occurs outside of Epicurus is in Aristoxyenus’s Harmonics (62,13), where it appears to be used like ἀπορία. Of the remaining five recorded uses, one occurs in Galen and four in late antiquity. It is again surprising that the voluble Galen used it only once in all his extant writings, together with πλάναι to refer to the difficult problems faced by physicians (De plac. Hipp. et Plat. IX.1.4,2); clearly it was a rare term not in use either in medical or philosophical parlance in his time.

On the other hand, the uses of the word in late antiquity are instructive,48 for they are philosophical: they occur in the Metaphysics commentary of Syrianus (In Met. 29.17 Kroll [CAG]) and the De anima commentary of (Ps.-) Simplicius (In De an. 24,1 and 24,6 Hayduck [CAG]).49

This philosophical use and the reference to Aristotle are crucial for our purposes. Διαπορέω, of course, is a key term in Aristotelian dialectic method, and Book B, the aporetic book par excellence of his Metaphysics, starts off with a first chapter built around the term (995a28, 35, and 996a17). The subject itself is well known, but what is important is that Syrianus and (Ps.-)Simplicius use the noun διαπορία, in the pas-

48 With the exception of the one Christian occurrence in John Climacus, Scala Paradisi, ch. 7, col. 809, line 41, where it is apparently used in its Middle Greek sense of “doubt,” like διαπόρησις.

sages just indicated, precisely in the same way as Aristotle uses the verb διαπορέω in Met. B—Syrianus, as a matter of fact, expressly calls Book B διαπορητικών (διαπορητικών γάρ ἐστιν ὅλον τὸ B, 1,19–20 Kroll). In other words, Simplicius and the Neoplatonists of late antiquity used διαπορία as the noun for that verb, and this apparently for the first time. What is astonishing is that there is no record of this usage of the noun any time during the nine centuries separating Aristotle and these late antique philosophers, despite the extensive philosophical—and indeed, Aristotelian philosophical—Greek that has survived. In this instance the argument from silence is valid, it seems. I draw the conclusion that διαπορία rather than διαπόρημα or διαπόρησις became current in late antiquity among the Neoplatonic commentators as the noun for διαπορέω precisely because it began to be used as a technical term in the Aristotelian sense.

If that is the case, it has implications for the Scholium at the end of Theophrastus's Essay. In the first place, the word προδιαπορία which we see in the Scholium would appear to be a neologism either on the part of the author of the Scholium or his circle. If διαπορία in the restricted technical Aristotelian sense had little currency in late antiquity, then προδιαπορία must have hardly had any, and there is justification in seeing it as a neologism.50 As a matter of fact, just as διαπορία was used as the noun for διαπορέω in the Aristotelian sense by the Neoplatonic commentators, so also was προδιαπορία derived from the verb προδιαπορέω as its noun. The verb προδιαπορέω itself was very rarely used: we have only three recorded occurrences. The first is in Apollodorus Dyscolus (see LSJ), and the other two, again significantly for our purposes, are in the works of the Neoplatonic philosophers, both in the Aristotelian sense of a preliminary run-through of problems. Philoponus writes (In An. pr. 42.35 Wallies [CAG]), τούτων ἡμῖν ... προδιαπορημένων, ἀξέδων ἐστι καὶ τάς ... ἀπορίας ἐπιλύσασθαι; and Damascius (In Parm. 169,6 Ruelle), Περὶ τῆς τρίτης τῶν νοερῶν διακοσμήσεως τάδε προδιαπορη-τέον, ἐν μέν ... .

In addition, προδιαπορία would appear to be a slightly redundant term, and this redundance would also speak for its neologism status in

50 That (προ)διαπορία in this sense was not used before the Neoplatonists in late antiquity is also indicated, however circumstantially, by the variant προδιαπορήσεις in manuscript A of the Essay for the original προδιαπορία (P) in this Scholium (see the apparatus). Manifestly the scribe of A did not know the neologism προδιαπορία and wrote the usual προδιαπορησεῖς instead.
late antiquity (as languages develop, redundant use of prepositions and adverbs increases). It is redundant because the Aristotelian διαπορία by itself implies a preliminary consideration of a problem. At the very beginning of Met. B, where Aristotle establishes the importance of διαπορεόν, he writes (995a27–30), ἐστὶ δὲ τοῖς εὐπορήσασι βουλομένοις προφέρουν τὸ διαπορήσασα καλῶς· ἢ γὰρ ὑπερον εὐπορία λύσις τῶν πρότερον ἀπορουμένων ἔστι. Προφέρουν, which refers to διαπορήσασα, means doing something in advance for the furtherance of a project, and the πρότερον ἀπορουμένα are the objects of διαπορήσασα. Nine centuries later, (Ps.-) Simplicius does exactly the same, using διαπορία in a way which indicates that it is a preliminary undertaking. Commenting on Aristotle’s use of διαποροῦντας in DA 403b20 (a passage, incidentally, parallel to the one from Met. B cited above), (Ps.-) Simplicius writes, Διὰ τὴν μὴ αὐτοθυβαν ἢγάν τῶν πραγμάτων προεπίπτειν ἀλήθειαν, … προηγεῖται ἡ ζήτησις καὶ ἡ πρὸς τὰ ἀντικείμενα ἠμῶν φορά καὶ τούτων διαπορία. Finally, there is the evidence in favor of the neologism status of the word provided by the use of the word οἷον before it; the scholiast says, οἷον προδιαπορία. Οἷον here cannot cast doubt upon or qualify the προδιαπορία nature of the work of Theophrastus—in good Aristotelian fashion the Essay is a work raising problems about issues of first principles in a thorough manner in order to further their eventual resolution; it is not a work that “sort of raises,” or that “can be considered to raise” problems. Laks & Most, p. xvi, suggest, with reference to Stephanus’s Θέσαυρος, that οἷον here might be an annotator’s mark. But the word here is not used in a gloss and does not refer to a specific passage in the Essay, which is the proper usage of a glossator’s οἷον. Thus οἷον in this context would appear to point to a self-conscious use of the term προδιαπορία by the scholiast, aware of its novelty.

And this brings us to the date in which the last sentence of the Scholium was written. If προδιαπορία, which may be a neologism as it occurs in the Scholium, is based on the use of διαπορία and προδιαπορία as an Aristotelian technical term only in late antiquity, then this sentence was composed in late antiquity. And if this term was current among

52 As interpreted by Laks & Most, p. xvi, “en quelque sort,” and by Hecquet-Devienne 2004, p. 174, “what may be considered to be.”
53 On the strength of an argument based on the order occupied by the Essay among
the philosophers and commentators of the time, then it must have been composed by somebody in their circle. This conclusion is corroborated by the accuracy of the description of Theophrastus's Essay as a διαπορία, or προδιαπορία. The person who made this evaluation knew his Aristotle and he could associate the Aristotelian methodological procedure of διαπορεῖν, as set forth in Met. B and mentioned elsewhere (see the frequent use of the verb in Bonitz Index), with the actual performance of Theophrastus. Modern scholarship is gradually coming around to appreciate this evaluation of Theophrastus’s Essay. See the discussion in Part I, Chapter 1.1–3, on the date and nature of the work and the Scholium.

Aristotle’s works in the Paris manuscript (P), and the athetization of Book Alpha of Aristotle’s Metaphysics from some manuscripts in the medieval Arabic and Latin translations (on the grounds that the Scholium at the end of the Essay restored Book Alpha and not the Essay itself to Theophrastus), Jaeger 1932, 290–292, came to the conclusion that the author of the Scholium was the editor of the Roman edition of the works of Aristotle. Valuable as this argument is, it cannot be maintained in view of our current knowledge of the history of the texts preserved in the Paris manuscript as analyzed by Hecquet-Devienne 2004, 184–189. For his part, Theiler 1958, 102/292, simply guessed, without argument, that the whole Scholium was probably composed by Nicolaus of Damascus.
There is considerable uncertainty about what and whom Theophrastus is referring to in this passage. The general brevity of his style in this work, the presence of the paradoxical but philosophically cute phrase γνωστά τῷ ἄγνωστο εἶναι, and the existence of a variant in a crucial part of the argument (ὄφατών/ἀόφατον, 9a23), have indeed made the passage “notoriously” difficult to understand and translate (van Raalte 435).

The crux of the matter is to understand precisely what the people who used the phrase γνωστά τῷ ἄγνωστο εἶναι meant (and what Theophrastus understood by it). Since Theophrastus does not specify who said it (καθάπερ τινές φασιν) and how they meant it, we can only proceed by trying to see what Theophrastus is actually saying in this passage and eliminating the impossible interpretations.

First it is necessary to eliminate the impossible interpretation given by Ross, which appears unfortunately to have confused the issue much more than helped it. Ross (followed by Laks & Most) read this passage by Theophrastus in the light of the sophistry mentioned by Aristotle in the Rhetoric (1402a4–7): ἐπιστήμη τό ἄγνωστον, ἔστιν γὰρ ἐπιστήμη τό ἄγνωστον ὑπὶ ἄγνωστον (“the unknown is known, for the unknown is known to be unknown”). Ross thus interprets the whole passage in Theophrastus as a flippant sophistry and “a mere play on words” (“une position extrême, ou «éristique»”, Laks & Most 68n36).

Looked at closely, however, it is seen that the sophistry in the Rhetoric passage is not what Theophrastus is talking about here. First, the sophistry itself is not about the manner (τρόπος) of knowing the different classes of being—Theophrastus’s express purpose here—but rather is intended to prove and maintain, and indeed in a paradoxical way, that nothing is unknown, that the unknown does not exist: if we know that something is unknown, our mere knowledge that it is unknown makes it known and hence there is no unknown: the unknown does not exist epistemologically and, conversely, this would seem to imply (though it is not stated either by Aristotle or Theophrastus), that if we do not know that something is unknown, it does not exist anyway.
because our mere lack of knowledge that it is unknown makes it epistemologically non-existent.¹

Second, the sophistry, a play on words as it is, is not about the manner or respect in which, or the means by which, we may come to know the unknown—again, Theophrastus’s express purpose here—but rather about our knowledge that the unknown is unknown. But Theophrastus calls knowing τὸ ἄγνωστα εἶναι an ἰδίως τρόπος (9a20) of knowledge, while it is clear that knowledge that the unknown is unknown is not a τρόπος of knowledge but itself a piece of knowledge (arrived at, presumably, after a certain τρόπος has been employed).

Third, a comparison between the text of Theophrastus and that of Aristotle’s sophistry corroborates the previous two points: Theophrastus says that some people claim that some things are known τὸ ἄγνωστα εἶναι. The dative here is almost certainly instrumental, or possibly of respect; it is in any case clear that it is identical with αὐτῷ τὸ ἄγνωστῳ at 9a22, which is parallel in meaning to the κατά in κατ’ ἀνάλογίαν, which in turn is identical to the datives in the previous passage, 9a5–6. There is no doubt that what Theophrastus means is that some things are known through or by means of or with respect to (τῷ) their epistemological status or quality as unknown (τὸ ἄγνωστα εἶναι; cf. Henrich 134); the sophistry says that they are known that (ὅτι) they are unknown. It thus seems unavoidable to suppose that had Theophrastus had in mind the sophistry mentioned by Aristotle, he would have said at 9a19, γνωστὰ ὅτι ἄγνωστα εἶναι.

Fourth, in order for the parallelism between the known and seen things to hold up in Ross’s 68 reconstruction of the argument, Ross has to interpret ἔνια at 9a18 as if it meant τὰ ἄγνωστα. But reading this word in the context of this entire paragraph, there can be little doubt that ἔνια refers to the objects of knowledge whose proper manner of investigation is being sought; i.e., the Greek would presumably be, ἔνια (ὅν ἐπιθέται ὁ οἰκεῖος τρόπος τοῦ ἐπιστοσάθαι), viz., the list of things enumerated in lines 9a12–15, from the first to the inanimate things. These are simply beings as objects of knowledge, τὰ γνωστὰ in the descriptive sense (or, in logical terms, simpliciter), without reference to their inherent or actual epistemic status (i.e., to their modality as either possible or necessary objects of knowledge): things that we would like

¹ In a similar fashion, Merlan 1968, 188 note *, criticizes Ross’s interpretation by pointing out that “Theophrastus is speaking of a whole class of things … and not at all of sophisms as Aristotle does.”
to know about and for which reason we are seeking the proper method of doing so (just as, e.g., τὰ αἰσθήτα in the title of Aristotle’s Περὶ αἰσθήσεως καὶ αἰσθήτων is to be taken: study of things that are objects of sense perception, without reference to their inherent or actual capacity of being sensed). Thus it seems very inappropriate to call these things τὰ ἄγνωστα since Theophrastus does not intend to portray them as such. The same applies to the (un)seen thing at 9a23: with one exception, the manuscripts have all τὸ ὁρατόν; Ross’s preferred reading τὸ ἀόρατον in manuscript A only is clearly a scribal correction, to be disregarded, apparently introduced for the same reason that prompted modern editors to effect the same emendation (for this manuscript see Part I, Chapter 2.1, section on “Sub-family Σ”). Accordingly, both words necessary for Ross’s interpretation to work, a presumed τὰ ἄγνωστα at 9a18 and an actual τὸ ἀόρατον at 9a23, are neither attested nor implied in Theophrastus’s text.

Fifth, and perhaps most importantly, in order to make rhetorical sense, the phrase that Ross wants to read at 9a23, τῷ ἀόρατῳ ὁρατόν (instead of τῷ ὁρατῷ ὁρατόν, the transmitted reading), must provide, by analogy, the absurd consequence of the position of something being γνωστὸν τῷ ἄγνωστῳ. That is, the rhetorical argument would go as follows: if someone maintains that the unknown is known by being unknown (τῷ ἄγνωστον εἶναι γνωστὸν τῷ ἄγνωστον), as Ross wants to read it), then he must also maintain that the unseen can be seen by being unseen (τῷ ἀόρατον εἶναι ὁρατόν τῷ ἀόρατον, as Ross wants to read it), and since this latter position is manifestly absurd, so must the former. But this rhetorical reductio ad absurdum cannot be accomplished by adopting the reading τῷ ἀόρατον in line 9a23 simply because τῷ ἀόρατον εἶναι ὁρατόν τῷ ἀόρατον makes as good (perverse and sophistical) sense as τῷ ἄγνωστον εἶναι γνωστὸν τῷ ἄγνωστον (as Ross would have it): to follow Ross, who rephrased this interpretation accurately (p. 68), to say that the unknown “can be known because it can be known to be unknown . . . would be like saying that the unseen can be seen because it can be seen to be unseen.” Now to someone who accepts as a valid manner of knowledge of the unknown the proposition that the unknown can be known because it can be known to be unknown, the proposition that follows, that the unseen can be seen because it can be seen to be unseen, must appear equally valid; in other words, the latter proposition is not inherently or even in context absurd, and thus it cannot have the intended effect, to show by analogy the untenability of the former.
Because of all these reasons, Ross’s interpretation cannot stand. Another major interpretation that has been offered is also difficult to defend. Merlan’s 1968, 187–189, thesis that Theophrastus is here referring to what was later to become the Neoplatonic theory of *docta ignorantia* has two main problems, the text of Theophrastus itself, which can hardly be translated as Merlan does (187–188), and the fact that Theophrastus talks about knowledge “by being unknown” as if it were of the same order as knowledge by analogy and not, as Merlan would have it, as the *via negationis*, the negation of all positive forms of knowledge (see further below on this aspect and the references to the work of Krämer).

With the sophistical and the “Neoplatonic” interpretations eliminated, we come back to the question of the precise meaning of the phrase γνωστὰ τῷ ἄγνωστῳ ἐκ τῶν. First, and to eliminate another misconception, the existence of the word εἶναι in this formulation makes it clear that both in this phrase (at 9a19) and in the phrase αὐτῷ τῷ ἄγνωστῳ further down (at 9a22), the term ἄγνωστον denotes an attribute, or a quality, and not an object (as already noted by Henrich 134, pace van Raalte 439–440). The phrase thus means, “some things are known by way of/through their very attribute of being unknown/unknowable.” In order to know something about these things, then, one has to employ this attribute of theirs, their unknownness. The only positive signification that I can find for this statement (apart from being a mere verbal paradox, which, as discussed, is to be excluded) is that it means that some things cannot be known directly, and hence some knowledge of them can be gained by indirect means and in an indirect manner, perhaps by some kind of similarity or relationship that exists between the unknown object and something we know: it would seem this is what Theophrastus himself may be referring to when he says at 4b12–13, εἴτε κατ’ ἀναλογίαν εἴτε κατ’ ἄλλην ὁμοίωσιν, bringing together again the method by analogy in close proximity to some other method, as in this passage. Τῷ ἄγνωστῳ would thus seem to be some other kind of ὁμοίωσις, or at least Theophrastus would seem to be considering it as such, an indirect means of gaining access to the unknown object.

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2 The distinction between unknown and unknowable may well be, as van Raalte 436 observes, a problem for English, which makes it, and not for Greek, which does not, with its single term ἄγνωστος for both meanings. In any case, it is inconsequential in this discussion. The reader should concentrate on thinking about γνωστὸν and ἄγνωστον in Greek.
We do not know what the people who said this meant precisely by this indirect manner. But Theophrastus, who thought in terms of the discussions conducted in Aristotle’s circle, had a very clear idea about what the manners (τρόποι) of knowing were. He mentions them, with regard to knowledge of identity, in the list of διαίρεσις he provides at 9a5–6, a list which echoes that of Aristotle in *Metaphysics* Δ 6, 1016b31–1017a3. Now Theophrastus says that this manner of knowing, viz., through the object’s attribute of being unknown, would be another separate way of knowing and it would need to be placed in some scheme of such διαίρεσις (9a20–21). But, he adds, it would be more appropriate to call (οἰκειότερον λέγειν) this manner of knowing knowledge “by analogy” (κατ’ ἀναλογίαν) rather than “through the very attribute of being unknown.” This means, first, that knowledge through unknowness is of the same genus as knowledge by analogy, and second, that knowledge by analogy somehow covers the same area as, and is parallel to, knowledge by unknowness. Thus Theophrastus would seem to be saying that, although knowledge by unknowness may be acceptable in some cases,3 in others knowledge by analogy would be a more appropriate term to cover the same manner of knowing. Thus we may guess that the people who said that something is known by its being unknown indicated thereby an indirect manner (or indirect manners) of knowledge of some objects without apparently either specifying this manner (these manners?) more precisely or using a more intelligible (and less paradoxical) term. Thus Theophrastus’s objection is not so much to the manner of knowledge itself—the fact that he is willing to accord to this manner its proper διαίρεσις and the reservations expressed at 9a21 clearly prove this—as to its appellation. He seems to be saying that the manner by means of unknowness, τῷ ἄγνωστῳ, may indeed be a separate manner of knowing that would require its own διαίρεσις—this would have to be investigated—but, he goes on, in some cases at least, it would be more proper to call this manner of knowing knowing by analogy because the paradoxical expression (“known by being unknown”) is as counter-intuitive and absurd as saying that something is seen (thus keeping the attested reading τὸ ὁφατόν) is seen through its very attribute of being unseen. And just as, upon first hearing this, someone will find

3 The reserve shown by Theophrastus himself with the words τάχα δ’ ἐδήλῳ ἔνδεχεται (cf. van Raalte 438–439) would indicate that he, too, under certain conditions, might accept it.
this nonsensical, so also someone hearing the manner of knowing by analogy called knowing by unknownness will find it equally nonsensi-
cal.

The question is, who these philosophers—or philosopher—who held this view were. It would seem beyond serious doubt that they have to be sought in the Academy, given the closeness of Theophrastus’s Essay to a number of their positions; Berti even aired the thought that it might be Plato himself. But a more likely suggestion is that it was Speusippus, and his theory that “the essential nature of each thing is identical with the complex of all its relations to all other things,” in the words of Cherniss, or, as Tarán put it, “the very essence of anything is simply to be the focus of all the relations that make it different from everything else and that knowledge of anything requires knowledge of the whole system of relations.” This can be likened to an algebraic equation in which we stipulate the unknown, $x$, and, starting from the fact that it is unknown, we come to know it once we have all the determinate or known terms in the equation which express their relation to it. That something like this was the theory of Speusippus is derived from Aristotle’s passage on definition in the Posterior Analytics II, 13, 97a6–22 (fr. 63a Tarán 1981), who, however, does not mention Speusippus, and from the later commentators on this passage who do (frs. 63b–e Tarán 1981).

There have been divergent views about the precise purpose of Speusippus in making this argument and about the function of division as method in the process, but there seems to be agreement that at the very minimum Speusippus held that “to define a thing is to know the relations that this thing has with all surrounding things.” This is certainly an indirect way of coming to know something, and we know for a fact that Speusippus did maintain that some things are known indirectly. In a reference preserved by Proclus, Speusippus is reported to have said that “in the hunt for knowledge,” some things our mind “is unable to grasp immediately and therefore advances on them step by step and endeavors

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4 Berti, preprint, pp. 2–3, refers to Plato’s view that the ideas can never be known adequately (ἰδιανός, Resp. 505a5, e2). Although he admits that Plato never said that they can be known by being unknown, he entertains the possibility that such a thing could have been said in Academic circles.

5 Made to me privately by Paul Kalligas, for which I am most grateful.

6 See the detailed discussion by Falcon 2000; the quotation above is on p. 413. Cf. also the analysis of the Aristotelian passage by Barnes 1994, 245–247.
to capture them by their consequences"⁷ (κατὰ μετάβασιν ἐπ’ ἐκείνα [sc. τὰ οὐκ εὐθέως αἱρεῖν ἀδυνατοῦσα ἢ διάνοια] διαβαίνουσα κατὰ τὸ ἀκόλουθον αὐτῶν ἐπιχειρεῖ ποιεῖται τὴν θήραν, fr. 73 Tarán 1981).

It is not known whether Speusippus meant to call this knowledge that comes οὐκ εὐθέως but κατὰ μετάβασιν and κατὰ τὸ ἀκόλουθον as the knowledge that makes things γνωστά τῷ ἄγνωστα εἶναι, or what precisely Theophrastus meant when, for his part, he said that this manner of knowledge “by being unknown” would be more appropriately called knowledge by analogy, κατ’ ἀναλογίαν, and how this is to be understood in this context. In a number of studies, Krämer also identified Speusippus as the philosopher to whom Theophrastus is here referring by this manner of “known by being unknown,” but he has likened the process to the one κατ’ ἀφαίρεσιν, as developed in Middle and Neo-Platonism. Krämer did not explain, beyond these general statements, how objects known by a method κατ’ ἀφαίρεσιν could be γνωστὰ τῷ ἄγνωστα εἶναι, though it is true that he expressed himself with caution.⁸ The problem with Krämer’s analysis, though, is that Theophrastus himself never mentions ἀφαίρεσις in this Essay,⁹ and indeed neither does Speusippus in the few fragments we have, but he says, instead, as just cited, κατὰ μετάβασιν κατὰ τὸ ἀκόλουθον. The subject deserves more detailed scrutiny than can be afforded to it here; in general, though, it would seem to be a fruitful line of approach to investigate how Speusippus’s idea of reaching the unknown through its relations and especially its consequences, κατὰ τὸ ἀκόλουθον, relates to mathematical procedure and possibly the Aristotelian discovery of the middle term described in the Posterior Analytics.¹⁰

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⁸ I.e., “Die Erkenntnis der πρῶτα durch Negation, die Theophrast referiert ..., dürfte in diesem Zusammenhang der mathematisierenden Methode κατ’ ἀφαίρεσιν entsprechen, die im späteren Platonismus terminologisch fixiert ist,” Krämer 1973, 212; as opposed to the bolder unsubstantiated claims by Merlan mentioned earlier. See also similar general statements in Krämer 1967, 105–106, 350–351; Krämer 1968, 327 n. 125; Krämer 1971, 177–178. Theiler 1958, 105/296–297 also saw points of contact between later Platonism and this passage in Theophrastus, but without claiming this to be an expression of docta ignorantia, despite his reference to Merlan.

⁹ At 5a11 (for which see the commentary) the word ἀφαίρεσιν has its literal meaning “to remove,” without any epistemological implications, and similarly at 6a12–13.

¹⁰ The issue is also related to the knowledge, and hence derivation, of sensible objects from and through the principles, something which Theophrastus accuses Plato to have done not completely, and Speusippus not at all, at 6a24–6b15; see the commentary on this passage and cf. Gaiser 1968, 366 n. 101.
As to the question what these objects of knowledge are that can be known indirectly (though this question is not immediately relevant to this discussion), the answer depends on how ultimately the process described by Theophrastus is understood. If the reference is indeed to Speusippus, then in all likelihood the object of this indirect knowledge will be the sensibles, since the upper three substances in Speusippus’ ontology, numbers, magnitudes, and soul, are known directly (cf. Tarán 1981, 53–60). Alternately, in Aristotelian terms, direct knowledge cannot be had of objects like the ultimate principles, matter, etc. A statement like Aristotle’s ἡ δὲ ὑπὸσεμένη φύσις ἐπιστητὴ κατ’ ἀναλογίαν (Physics 191a7–8) seems to be relevant in this regard (see the evidence collected by van Raalte 436–437).

I conclude that knowing by unknownness is neither a sophism, as Ross would have it, nor what a loaded interpretation like that of Merlan suggests (a prefiguring of the Neoplatonic docta ignorantia), but merely an indirect manner of knowing for those objects of which there cannot be a direct knowledge. There is a very strong possibility that Theophrastus may be referring here to an aspect of Speusippus’s epistemology, but we have relatively little direct evidence, and it may appear strange, even given our scant knowledge of this thinker’s works, that there has survived no other testimony to it. Whether by Speusippus or not, in all likelihood the theory was part of internal discussions in the Old Academy before Aristotle and Theophrastus returned to Athens in 335, which the participants would recognize even when briefly referred to through the catch phrase γνωστὰ τῶ ἄγνωστα εἶναι, but which, through its very paradoxical nature and lack of explicitness, was soon abandoned, leaving just this trace in this Essay.
The Greek word index and glossary follows the alphabetical order and manner of citation of words in LSJ (i.e., words printed in bold). It includes all the words that occur in the text of Theophrastus except for the article, the various uses of which are listed only in representative samples; a complete index of its occurrence can be found in van Raalte 645–647. The words in the Scholium are listed in a separate index at the end.

In addition, because the word index is at the same time also a glossary, it includes all those words which, though they do not occur independently in the text of Theophrastus, are components of compound words, translated individually by Ishāq ibn-Ḥunayn in accordance with his etymological analysis of the compound word. For example, the word ἄστροςκρόνια at 9b27 and 10a5 is translated as šinaʾatu n-nuḡāmi, literally, “the science of the stars,” with the two Arabic words standing for ἄστρον and λόγος respectively. The word ἄστρον is accordingly listed independently in the word index, although it does not occur as such in the text of Theophrastus, while an additional reference to the translation of λόγος as “science” is added in its own entry.

In the compilation of the glossaries I followed the general rules adopted by Gerhard Endress and myself in our A Greek and Arabic Glossary (GALex), references to the entries of which are added in the Arabic-Greek glossary. Additional instances of a Greek-Arabic correspondence, with citations of passages from the translation literature, can be found in these references, listed under the Arabic word. Some of the technical terms used in the entries below, whose abbreviations are given in the list that follows, conform to the rules in GALex, but are for the most part self-explanatory. For more detailed information the reader is referred to the introduction in GALex. In addition, several signs have been used that are particular to this publication, the key to which is given at the end of the abbreviations.
Abbreviations

abs. absolute use; a word without any syntactic governance
acc. according
accus. accusative
act. active voice
add. adds, added (by)
adj. adjective(s)
adv. adverb(s), adverbial
affirm. affirmative
amplif. amplification
Ar. Arabic
Ar. synt. required by the Arabic syntax
circumst. circumstantial
comp. comparative
concentr. concentration
conj. conjunction
corr. corrected (by), -ion in
dat. dative
def. definite
demonstr. demonstrative
encl. enclitic
etym. etymology
expr. expression(s)
foll. following, followed (by)
fut. future tense
gen. genitive
Gr. Greek
hend. hendiadys
impers. impersonal
impf. imperfect
indef. indefinite
indic. indicative
inf. infinitive(s)
inflct. inflection
interpr. interpretation, -tive translation; as -ted by
interr. interrogative, -ion
intrans. intransitive
juss. jussive
lac. lacuna
masc. masculine
med. middle voice
morph. morphology
neg. negative
n.t. not translated (analysis of the omission is usually offered in the corresponding note to the Arabic translation)
obj. object
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>om.</td>
<td>omits, omitted by / in</td>
</tr>
<tr>
<td>opt.</td>
<td>optative</td>
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<tr>
<td>paraphr.</td>
<td>paraphrase, -phrastic</td>
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<tr>
<td>part.</td>
<td>participle</td>
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<tr>
<td>pass.</td>
<td>passive voice</td>
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<tr>
<td>perf.</td>
<td>perfect</td>
</tr>
<tr>
<td>pers.</td>
<td>person(al)</td>
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<tr>
<td>pl.</td>
<td>plural</td>
</tr>
<tr>
<td>prep.</td>
<td>preposition, -nal</td>
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<tr>
<td>pres.</td>
<td>present tense</td>
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<tr>
<td>pron.</td>
<td>pronoun(s), -nominal</td>
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<tr>
<td>ref.</td>
<td>reference</td>
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<td>sc.</td>
<td>scilicet</td>
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<tr>
<td>sem.</td>
<td>semantic</td>
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<td>sem. amplif.</td>
<td>semantic amplification</td>
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<tr>
<td>sing.</td>
<td>singular</td>
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<tr>
<td>s.th.</td>
<td>something</td>
</tr>
<tr>
<td>subj.</td>
<td>subjunctive</td>
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<tr>
<td>subst.</td>
<td>substantive(s)</td>
</tr>
<tr>
<td>superl.</td>
<td>superlative</td>
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<tr>
<td>synt.</td>
<td>syntax</td>
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<tr>
<td>transl.</td>
<td>translated, -tes, -tion</td>
</tr>
<tr>
<td>w.</td>
<td>with, used with</td>
</tr>
<tr>
<td>w.o.</td>
<td>without</td>
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</tbody>
</table>
Signs

1,2,3 a raised, exponential number next to a page-column-line reference indicates the first, second, or third occurrence in the same line of the word indexed.

* an asterisk following a page-column-line number indicates that the word so glossed is the result of editorial emendation and is not to be found in the manuscripts; for supporting arguments see the corresponding entry in the commentary (Part III) or the note to the Arabic translation.

{1a1} a page-column-line reference so bracketed indicates a different, inaccurate, or misapprehended interpretation by the Arabic translator; for explanation see the corresponding note to the Arabic translation.

1a1 (1a2) page-column-line references in parentheses following immediately after another such reference point to the occurrence of the word in the Arabic text in a different line than that in the Greek, and vice-versa for the Arabic-Greek glossary.

† a raised obelisk following a page reference indicates that the word in question is corrupt in the MSS.

| a vertical line separates different definitions within the same lemma.

■ a bold rectangle separates different lemmata within the same entry.

(a) a bold lower case letter in the longer entries separates different categories of meaning or usage for the word concerned.

-/- (e.g., τε/καί) a slash in Greek and Arabic entries indicates a correlative use of the words concerned. In such instances, when one side of the slash has only a hyphen and not a word, it indicates that one of the correlates is not expressed in the translation.
as the positive degree of κρείττων 468 faḍlun

τὸ ἀγάθον 11α19 al-ġayyidu

comp. → βελτίων, κρείττων → superl. → ὀρίστος

ἄγνωστος 4α19 n.t.

Ἄγνωστος 9α19, 9α22 ὑγρο

μα’lūmin

ἄγω 7β22, 8α4 (8α3) radda | 11β9 qāda = ἄγωναι pass. 8α11 ὑπηρίγα

ἀδεκτός 5β18 ὑγρο qābilin

ἀδυνάτος 7β8 ἀ’ģizun | 7β16 ἀ’ģzun ἄν | 5β13 in hend. ὑφ’ ήνων ἀ’ģzun

αἰτία 7β16, 10β20 δ’’ίμαν | 4α6 om. Ar. (in lac.) = τὸ αἰτία 11α7 ad-

δα’wāμυ

ἄζητητος 6α3 lá yaqa’u fihi bāṭṭun οἱ 7β2, 11β7 ḫaw’ūn

उ巡回ο 9β24 azaliyyun = τὰ ἀ’ḏwa 4α16 al-‘aṣyā’u l-azaliyyatu

αἰσθητικα (sense-perception) 7β19, 8β10 ḥissun = αἱ αἰσθητικα (the senses) 5β5, 9β9 al-ḥawāsū (sing. ḥāsūtan)

αἰσθητός 6β8 mahsūsun | 4α7 om. Ar. (in lac.) = τὸ αἰσθητό 4α20, 4β19, 7β15, 9β3, 11β8 al-‘aṣyā’u l-mahsūsatu

αἴτια 4β21, 5α1, 5α21, 7β19, 8β11, 9β11 sababun | 11β8 ’illumun | 9β3 mabda’un

αἴτιος = αἴτιον 5β7, 9α2 (9α1), 9β8 sababun

αἰασθενεῖς 11α18 ἀσρ’α’

αἰαυτός 4β22, 10α20 ὑγρο

mutaharririkin | 4α7 om. Ar. (in lac.)

ἀκολουθέω in συνακολου-

θέω 7α3 tabi’a = ἀκολουθεῖ (thus in the MSS; corr. by Ross
to οὐ συνακολοθεῦ) 8α2* tabi’a

ἀκονυν = τὰ ἀκονυ 9β10 al-ặṭrāfu | 11α24 an-nihayātu

ἀλλήλα 6β6 ὑπ σqumun

ἀλλήλης 8α16 mina ʂ-sīhātī =

ἀλληθέστερος comp. 8β11, 9β14, 9β23 asḥāhu

ἀλληθινός = ἀληθινότερος 5α12 askāqū

ἀλλά 4α14, 5α1, 7α14, 7β13, 7β18, 8α4, 8β8, 10α26, 11β6, 11β9, 11β16 lākīn | 5β14, 8α14, 8α17, 11β23 illā anna | 5α9, 10β18 bal | 5α25 innamā | 5β18 fa-qad | 5β22 n.t. | 4α11 om. Ar. (in lac.)

= ei γάρ καὶ/ἀλλά 11α14 ἠδὰ/illé anna | 11β20 (11β21) fa-inna...

wa-in/f-

ἀλλήλων 5β25, 8β3, 8β17, 10α2, 12α2 ba’ḍun/ba’ḍ’un | 10β28 ((11α1α) ἀσάμαν | 4α10 om. Ar. (in lac.)

ἀλλώιός 10β4 (10β5) ἰστιθάλατυν

ἀλλός 6α17, 6β18, 9β27 sā’ir w. gen. | 4β13, 5α1, 8α5 ḥārū | 6β3, 8α20 ὑγρο w. gen. | 6α22 ḥārū ὑγροῦ = ἄλλο 10β3, 10β5 ἱα’q’un

= ὡτ’ ἄλλοι 6β6 ὑγροῦ = ἄλλα 11β17 ἀṣyā’u ὑγρο ὑγροῦ = τὰ ἄλλα 4β14, 6β12, 8β2, 10α4, 11β19 sā’ir ἀ-ṣyā’i | 6α26 sā’irum mā sīwā ἀlīka | 7α6 sā’irum mā fihā

ἄλλοτε = ἄλλοτ’ ἄλλο 10β3 ἱα’q’un ba’ḍa’ q’aw’in | 10β5 ἱα’q’un ilā ἱα’q’in

ἄλλοτιος 9β5 in hend. muğtanabun ὑγρο ma’lūfin

ἄλλος 7β18 ὑḏan | 10α23 lá ma’nā lāhū = ἄλλος τα 5α28 ὑ-

... ma’a ὁδίκα = καὶ ἄλλος/καὶ 9β17–18 -/a- ... ma’a ὁδίκα

ἄλλος 7α10 ὑγρο munqāsin (see Part I, Chapter 3.3)

Ἄμα 5α25, {5β3}, 6α8, 9β22 ma’a = ἄμα ... τα 5α12 wa- = ἄμα καὶ

6β3 ma’a

Ἀμαθής = ἀμαθήστατος = ἀμαθήστατος = -ov 11α21

gayatu l-gahli

Ἀμφης 8α3 lá guz’ā lāhū

Ἀμφὲταβλητος 4α8 om. Ar. (in lac.)
GREEK WORD INDEX AND GREEK-ARABIC GLOSSARY

ἀμΨο;ΥκρονρΨpΡΥtwoία

ἁμΨo;Υκρονacuteς

ἁμΨo;Υκρονγέπως

ἁμΨo;ΥκροντoΨo;Υκρος

ἁμΨo;ΥκρονγίατάρΨo;Υκρος

ἁνΨtΡetatwoαμῶς

ἄμΨpΡΥtwoω

ἄνΨtΡetatwoρωπΨo;Υκρος

ἄνευ

ἀνήνυτΨo;ΥκροςτoΨo;Υκρονν

ἀντίΨtΡetatwoεσις

ἀντίκειμαι

ἀντιμεταλλάττω

ἀναΨkΡΥώρησις

ἄναγκη

ἀνάγκη

ἀνάγω

ἀναιρέω

ἀναΨpΡΥtwoέρω

ἀναΨkΡΥώρησις

ἄνευ

ἄναγκη

ἄναγκη

ἀναγκαῖΨo;Υκρος

ἀναγκαῖΨo;Υκρος

ἀναγκαὶΨo;Υκρος

ἀναγκαὶΨo;Υκρος

ἀναγκαὶΨo;Υκρος

αναγκαῖΨo;Υκρος

αναγκαῖΨo;Υκρος

αναγκαῖΨo;Υκρος

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αναγκαῖΨo;Υκρος

αναγκαῖΨo;Υκρος

αναγκαῖΨo;Υκρος

αναγκαῖΨo;Υκρος
GREEK WORD INDEX AND GREEK-ARABIC GLOSSARY 415

ἀπας 7α10 kullu w. gen. ■ ἀπας 7α12 (7α11) γαμα' u. gen. ■ 4β16, 6α4, 6β7, 7α21 γαμα' u al-aśya'i | 11α5 kullu šay in | 9β21 al-'ulumu kulluha | 11β1 al-aśya'u kulluha ἀπας 9β16 zalalu ἀπας 5α4 allādi lā yatafattaru ἀπας 11α17 lā yuḥsā ḵatratan ■ (tō) ἀπας 6β1 mà lā tanāhā | 9β4 mà lā niḥyata laḥū | 11β3 al-ḥurūg' 'anī t-tanāhī ἀπας 9α7 ḍa'uda ἀπλός 4β20, 5α9, 8β13, 9β7, 10α9, 11α4, 11α5 'alā l-iṭlāqi | 11α3 mutlaqan ἀπό w. gen. 5β26, 6α15, 6α16, 6α28, 6β2, 9β9 min | 5α3, 5β4, 5β10 'an | 6β22 sem. amplif. ya'ḥudu min ἀποδίδωμι 4β17 waf'ā 'un bī | 5α8 (5α7) wāṣafa | 5α10 wafsun | {6α17} i'taqada ἀποφόρο 6α6 mawd'i 'u ṭašakkukin | 6β24 ṭašakkaka fī | 7β10 ṭaḥayyara fī | 6α13 ʿāla baḥtahū fī | in ἀποφορον 9β2 irtabaka fī ἀπορία 10α20 (10α19) ṣakkun | 8α21 mawd'i 'u ṭašakkukin | 8β13 in hend. ṣakkun waiver ἀποροτος 9β26, 11β1 bu'dun ἀποροτος 5α13 salbun ἀπτωos ■ ἀπτωomai med. 9β15 massa | w. gen. 6β12 šara'a fī ἀπτωθέο 5β21 in hend. qaḍafa bī 'an ... wa-aqsā ἀφο 4β16 idan | 10β27 ḥaliqun an | {6α17} ma'a (i.e., Ar. (mis-) read as 'āmu) | 8α22, 9α6 n.t. ■ ʿet μη ἀφο 4β10, 6α10 allāhumma illā an | 5β28, 11β9 illā an ἁφο 10α16 yā layta ší'ī ἁφο 7β12 ša'īlun ἁφοθυμος 4β4, 4β8, 5α26, 5α27, 6α21, 6α25, 6β2, 6β14, 8β26, 9α5 'adadun ἀριστως 5α20 afḍalu | {5β8} afḍalu l-umūrî | 11α12 om. Ar. (in lac.) ■ το ἀριστον 11α6 al-afḍalu | 5β1 afḍalu l-umūrî | 5β26, 5β27 mà huwa fi ʿayati l-afḍalati | 11α2, 11β9 al-asmaru l-afḍalu ■ τα ἀριστο 6α2 afḍalu l-umūrî | 6α4 afḍalul l-umūrî ἀριστην 10β8 ḍakarun ἀριστος 5α6 kamlun ἀρχη 4α15, 4α16, 4β9, 4β15, 4β19, 5α5, 5α6, 5α19, 6α16, 6β12, 6β14, 6β16, 6β17, 6β19, 6β21, 6β22, 6β23, 7α4, 7α6, 7α13, 7α19, 7β9, 7β12, 9α11, 9α13, 9α25, 9β6, 9β8 (9β7), 11β7, 11β27 mabda'un | 9β9 awwalu | 11β24 awwalu l-amri ■ title*, 449 om. Ar. (in lac.) ἀρχίτας 6α19 Arḫūtas ἀρχο ■ ἀρχοι med. 10α24 bada'a ἀριθμεία 9β12 'ażżun | 5β14 in hend. ḍu'fun wa-kalālu ἀρτόο → ἀρτον ἀρτολογία 9β27, 10α5 šīna'atu n-nuğūmi ἀρτολόγος 5α22 munağgmentun ἄρτον in ἀρτολογία 9β27, 10α5 naqmuν ἄρινδετος 5β18 là muhtamilun li-l-ırtibātı ἄρτακτος ■ το ἄρτακτον 11β4 al-ḥurūg' 'anī n-niżāmî ■ ἄρτακτότερος comp. 444 om. Ar. (in lac.) ἄρτος ■ ἄρτον 9α3 šahsun ■ τά ἄρτος 11β23 al-āgā'ī llatī lā tatağa zza'u ἄρτος 5α17, 5β14 šāni'ūn | 7β23 qabīhun ἄρττα 6α11 ba'du w. gen. | 6β3 n.t. αὐ → πάλιν αὐ 7α20* aydan αὐτόματος ■ τό αὐτόματω 10β27 min dātīhā ■ αὐτόματως 7α18 min dātīhī
αὐτῶς (a) (self) 6a13, 7b22, 9a8, 9a17, 9b10, 9b14, 9b16\², 10b24
nafsu w. attached pron. | 4b4² sem. amplif. nafsuhā faḍlan 'an gayrihi
| 5b17 kullu w. attached pron. | 6a6 amru w. gen. | 7a22 mà huwa
aydān αὐτῶς in αὐτομάτως
7a18, 10b27 dātuñ | {9a22} transl.
as if it were a pers. pron. w. ref. to légéin = 10b7 n.t. as such,
but its emphasis is rendered by the assertive qad yakunū add.
for the implied copula = 10b4, 11a17 n.t. (b) (pers. pron.) 4a17, 4b4², 4b21, 5a19, 6a8, 6a10, 8a2, 8a13, 8b4, 9a4, 9b16\⁴ transl. by the attached pron. | 5a27, 8a16
transl. by the subst. to which it ref. | 11a8 dālikā in ka-dālikā | 9a13, 9a25 n.t. | 4a7, 4a9 om. Ar. (in lac.) (c) (same) αὐτό 4a23
hiya = το αὐτός 5a18 wāḥidun bi-'aynihi = το αὐτό 8b24 aš-say’u
bi-'aynihi | 9a4 aš-say’u wāḥidun
bi-'aynihi = τοτε. 10b20 ḥālun
wāḥidatun = κατα. τοτε 10b20
‘alā ḥālīn wāḥidatin | 4a6 om. Ar. (in lac.)
αὐτόν 4a23, 4b22 nafsu w. attached pron. | 11b5 n.t. = – ēkuṭuñ
άφωμεν 6a12 ḥaḍāfa = 5a11 raf’ā
'an = ἀφαιροῦμαι pass. 6a13
sem. metathesis; pass. / act. transformation žāla
άφανες 5a17 sem. metathesis;
eg./affirm. transformation mā
yāḥfā
άφοριζο 9a25 laḥḥāsa = 4a2 om. Ar. (in lac.) = ἀφοριζόμενος 10a19
mahdūdun
άφορισμός 7b6 (7b7) ḥadda | 10a23
talhiṣun
ἄχρι 10a5 lā
ἀϕισιος 7a17 al-‘adimu li-n-nafsi
| 9a15, 11a17 lā nafsah laḥū | {10b21} nafsun
βελτίων βελτίων 11a18 āgwadū
το βελτίων 8a24 al-‘afdalu | 7b11, 8a14, 11a9, 11b15, 11b27 al-amru
l-‘afdalu
βία 10b14 om. Ar. (in lac.)
βλέπω βλέπειν 9b13 an-nażaru
βουλομαι 6a2 șa‘a
γάρ 4a18, 5a10, 5a17, 5a22, 5a27,
5b24, 6a1, 6a3, 6a19, 6a21, 6a25,
6b7, 6b17, 6b27, 7a17, 7b11,
7b17, 8a2, 9a1, 9a4, 9b4, 9b21,
10a28, 10b18, 10b24, 11a22,
11b15, 11b27 fa-inna | 4a21, 4b4,
4b15, 5a12, 5b3, 5b8, 5b15, 5b21,
6b19, 7a9, 8a16, 8b10, 8b17,
8b21, 9a15, 9a27, 10a16, 10b19,
11a8, 11a16 wa-dālika anna |
6b21 min qibali anna | 11a11
li-anna | 4a3 om. Ar. (in lac.) =
και γάρ δή 10a7 fa-inna = 4a γάρ
καὶ/ἔλλα 11a13–14 idā/illā anna |
11b20 fa-inna ... wa-in/fa-
γέ 5b14 the repetition of the whole
clause to which τοῦτο refers may
express the emphasis of the particle
| 5a22 n.t., though its force may
be reflected in the first person verb
(änas) selected to transl. οἰχεῖος | 6a23, 7b15, 8a13, 8a14, 9b2, 10a9,
11a14, 11b12, 11b18 n.t. | 4a4
om. Ar. (in lac.) = άμος γέ πος
4b12 ‘alā wağhin min al-wuğūhi =
{10a17} Ar. read ētē for ēl γέ
γένεας 8a12 ḥuḍūṭun | 6b15, 10b17
tawalludun | 7b5 (7b4) tawallada |
10b4 kawnun
γεννάω 6a25 walada | 7b5 wallada
γένος 4b8, 8b20, 9a5, 9a15 ǧunsun =
γένος in ṣumaynîn 9a18 ǧunsun
γη 5b17, 7b2, 10b4, 11b14 arḍūn | 10a28 arḍūn in ardīyyun | 6b26
om. Ar. (in lac.)
γίνομαι 7a18, 8a17 ḥaḍāta | 7b1
ḥuḍūṭun | 10b5 (10b4) ʿaraḍa | 8a26 ṣugida | 5b7 transl. by the
implied copula of an Ar. nominal
sentence annahā (hiya) ‘ālā ħālin —
γεγονός 8b7 kāna mawgūdān
γνωστός 9a19 yu’lamu pass.
γνωστός in ἀγνωστός 9a19, 9a22
ma’lūmūn
γραμματικός — ἢ γραμματική 7a2
kitābatun
γραμμή 8b26 ḥaṭṭūn

dé w.o. preceding μέν (a) abs. 4a13\2, 4b2, 4b13, 4b20, 5a2, 5a23, 5b3, 5b10, 5b19, 5b26, 6a12, 6b5, 6b9, 6b13, 6b14, 6b15, 6b16, 6b18, 6b20, 6b23 (6b24), 7a1, 7a3, 7a10, 7a19\2, 7b14, 7b19, 7b22, 7b23, 8a8, 8a19\2, 8a21, 8a27, 8b6, 8b11, 8b20, 8b24, 8b27\1, 9a4, 9a18\1, 9a20, 9a21, 9a25, 9a26, 9b6\1,
9b13, 9b16, 9b22\1, 9b25, 10b7, 10b11, 10b20, 11a13, 11a17, 11a18, 11a19, 11a20, 11b5, 11b12, 11b16 wa- | 4b18, 5a28, 6a2, 9a10, 10a13, 10a24, 11a1 fa- | 4a23, 5a21, 5b12, 6b4, 7a19\1, 10a22 (10a23b), 11a24 wa-(fa)-jammā
... fa- | 4a12, 6a23, 8a11 (8a10), 8a19\1, 9a7, 9b6\1, 10a19, 11b17 illā anna | 4b22, 8a12 lākin | 10a15 ḥattā | 9a7 fa-inna (?) | 11a20 n.t.
| 4a5, 4a9, 8b27\2, 9a17 om. Ar.
(in lac.) (b) in compounds dé in
οὐδὲ 5b12, 6b5, 6b6, 9b24, 11a15, 11b7 (11b8) wa- in wa-lā ■ dé in
μηδὲ 5a8, 8b7\12 wa- in wa-lā (c) in combinations δ’ οὐν 4a13, 4b9 wa- | 4a17, 4b11, 5b7 fa- | 9a23 (9a24) fa-qad w. perf. ■ ἐτὸ δὲ 5a8, 7a4, 8b4 wa- ■ μᾶλλον δὲ 8a25, 9b22\2, 11a16 (11a15) bal ■ τάχα
dē 6a16 paraphr. aw | 11b10 n.t.
(c) see also καί/dé — καί ■ μὲν/dé — μὲν
dé 7b20, 10b19 (10b20) waḡaba | 4a2 om. Ar. (in lac.) ■ déon 6b26
in hend. ṣāqīqun wa-awlā bi- in
ahṣaq qu-awlā bi-
deīxvumī 9b27 bayyana

déxoumasi 11a15 qabila | 6a1 qabūlūn
■ déxoumai in ἀδεκτός 5b18 qabila
déω ■ déxoumai deponent 5a14, 5b27, 9a20 ἰητὰ γα lā ■ — déi
dí (a) abs. 5a6 fa- | 7b2 qad w. impf.
| 10b25* tūmma | 4b5, 5b9, 6a1, 6b4, 6b9, 8a22, 10a4, 10b16, 11b23 n.t. | 4a3, 4a4, 4a6, 10b14
om. Ar. (in lac.) (b) δῆ δια τρ. by a half clause: ὀδην δῆ 7b9 wa-hiya
llatī minhā | ὅν δῆ 8a6 wa-hiya
llatī (c) in combinations καί δῆ
to 10a25 fa-inna qad nağidu — καί
γερ δῆ 10a8 fa-inna
δῆλος ■ δῆλον 4b21, 10a13 min al-
bayyini
δῆλω 6a28 dālla ’ālā
Δημουργώς 11b22 dzymwqyts
día (a) w. gen. 4b16, 5b6, 8b14 bi- | 4a23 fi | {9b8} n.t. — introducing
the subject of a pass. verb 4a22
sem. metathesis; pass. Gr. verb
transl. by an act. Ar. verb ■ δῖα
in diá πλεῖστον 9a7 transl. by
the accus. of the adv. aktara (b)
w. accus. 7b21, 9a8, 9a9\1, 9b11, 9b12, 10b19 min qibali w. gen.
| 5b14 li- | 7b15 n.t. ■ in diá ti
5b11, 7b7 li- in li-mā ■ in diá
9b15 li- in li-dālikα
διαφέρεις 9a2, 9a6, 9a20 qismatūn
diaφέρετος 5a8 mutagazzi’un ■ τὸ
diaφέρετον 5a11 at-taqsimū
diaφέρω 9a24 mayyaza ■ diaφορύμα
med. & pass. 9a18 luhhiṣa pass.
diaφέρων 4b16 baqʿun
diaνών 5b9 fahmuṇ | 8b12 fikrun
diaφορά 6a20 sāra laḥū
diaφορά 8b19 iḥtalaʿa
diaφορά 6a5, 8b16, 8b17, 9a17
iḥtilafun | 11a1 muḥtaliṣun | 8b10
faslun ■ 5b2 diaφορά in the MSS
corr. to metaφορά in the editions
 diaφυνέματι 5b13 balaga lā
dia ■ διο καί 9b15 wa-li-dālikα
| 11b7 wa-min qibali dālikα | 4a6, 10a10 om. Ar. (in lac.)
dióti 11a14 anna
diostopouš 11a4 gihatání dual
diósco 5a24 talaba
dókeo 10b22 ra` = dóxei impers.
| 4a22 qad yurā fihi | 5b3 qad yurā | 7b19 qad yuzannu bi` = dóxeienv
| āν 6b12, 8a21 qad yuzannu | 9a26 qad yuzannu bi` | 11b18
| an yuzanna bi` | 7a10 an yaqūlū | dóxeiν 8a25 qad yuzannu | 10a25
| qad yuzannu bi` | tò dòkouν 8b4
| mā yuzannu bihi | 10b17 interpr.
mā yadhulu 8-sakkatu fihi
duθs 6a25, 6b1, 11b3 utnūwatun
dûnaiω 11b8 qadara | 9b11
| qadara `ala | 9b8 amkana w. pers. pron. and an | 8b14 tahayya`a
| lahū an = μή dûnaiwθ 5b28
| sem. metathesis, neg. / affirm. transformation `agzun `an
| dûnaiμθs 6b25 aθbahu b-l-quwā
| dûnaiωs 7a12, 8a19, 10b23 quw-| in dûnaiμθs 6b25
| quwwatun = dûnaiμici 4b14, 5a1
| bi-quwwatun | 8a10 bi-l-quwwat
| éaν 7b22 lahū an = in xāν (και
| éaν 8b14 in = éaν/éaν 8b19–20
| kāna/kānu
| éwtoθ 8b23 dàtun = σύμφωνον
| éwtoθ 8a4 morph.; transl. by the reflexive sense of form VIII of the Ar. verb ittafaqa = αυτον
| éγγυς w. gen. 8a27 qaribun min
| éγω = μεις 4a22 nahnu | 9a8, 9b6
| transl. by the attached pron.
| éθέλω 11b1 n.t.
ei (a) abs. 4a17, 4a18, 4b2, 4b6, 4b11, 5a5, 5a28, 5b7, 5b14, 5b20, 5b26, 7b11, 7b12, 8a20, 8a21, 8b17, 9a6, 9a18, 10a13, 11a1 in
| 9a23 law | 10a5 ida | 10a16`
| Ar. read eινe, not eιν` | 11a20`
| Ar. misread it as η | 11a22` n.t.
| 10a11` om. Ar. (in lac.) = ei in indirect questions (whether) 6a13 hal | in indirect discourse (that)

7a11 an w. subj. = 8a2 ei in the MSS cor. to ti in the editions
(b) in combinations ei μη 5b1
| illā an = ei μη άγο 4b10, 6a10
| allāhumma illā an | 5b28, 11b19
| illā an | 8a21–22 in lam = ei γαρ
| και/διλα | 11a13–14 ida/illā anna | 11b20 fa-inna... wa-in/fa. = τιλήν
| ei 7a22–23, 11b21 illā an = δοθερ
| áν ei {4b15} `alā mā huwa `alayhi
| eiδος 4b8, 8b20, 10a4, 10b23 naw`un
| 8a18, 9a5 suratun | 11a21 n.t.
| eiδον (perf. εδον) = tò eиδενa 9b22
| al-ma`rifatu | 9a24 in hend. al-
| ma`rifatu... innahu` yu`lamu
| eικη 7a14 bātilan
| εικότως 7b10 bi-l-wāgib
eιμι (a) copula 4b18, 5b2, 5b6, 7b16, 7b21, 8a15`, 8b18, 9a10, 10a15
| (10a14) kāna | 8a23 sāra | 4a22,
| 6a8, 8b23, 10a7 transl. by the pron. of separation (damir al-
| faṣl) hiya | 5b12, 5b18, 7a19, 8a7, 8a25, 9a18, 9a20, 11b2 transl.
| by the copula expressed by the Ar. nominal sentence = η (emended
| from η in the MSS) 8a6` aw =
| in xīνουνον εινων | 7b17` sem.
| concentr. ḥāfa (b) neg. copula ειμι w. neg. 4b23, 5a4, 5b8 laysa (c)
| existential uses 4a13 kāna | 4b10
| kāna wuγuduhū | 4b16 wuγudūn | 6a4 yuγadu | 4b6, 9a19 (9a18) in
| hend. kāna hāhūnā | 9b16 waqa`a
| 9b23 fihi | 9a15 synt.; expressed by the indep. nominal sentence with the prep. phrase preceding the indep. subject anna fi` =
| áν ειν` w. foll. inf. 6a12 lahū an
| w. foll. subj. = 8b27 om. Ar. (in lac.) (d) part. ον 8a10`2, 8a11`2, 8b7 maγudun = tò ον 8b5, 8b9
| al-maγudū = tò 6ντα 6b17,
| 12a1 al-maγudātu | 6a11, 8a9
| al-ασyα`u l-maγudatu | 11a26
| hiya | 11a25 n.t. (e) inf. tò εινo
| 11a18 in hend. takawwunun
wa-wuḡūdun | 8b2 innahū
mawḡūdun | 8a15 ἐν-al-qawlu bi-
annahū mawḡūdun — τὸ τί ἦν
eivou 8b22 ἐν huwa š-šayʿu
ἐμι 5a20 σάρα
ἐπεκ 5b23 ἐν | 11b9, 11b10 ἐν | 10b19 law | 7b13, 11b16 n.t. | 10b9 om. Ar. (in lac.) — ἐπεκ ὁδε-
ζει 6a9 sem. metathesis; conditional / affirm. transformation
hiya bi-sāhwatin
ἐπον — ἐπεκ 4b20, 8b12, 9b23 al-
qawlu | ὑ82 ἐν yuqāla — ὁς ἐπεκ 7a16, 7a18 ὑματαλαν | 11b4 bi-
gumlāti
ἐῖς w. accus. (a) abs. 5a9, 5a19, 6b12, 6b13, 6b14, 7b8, 8a3, 8a9, 8a11, 8a14, 9a3, 10a24, 11b9, 11b26 ἐν | 5b25, 1.2 min ... ἐν | 9b16 'an (after bahtūn) and bi-
(after ταστίγαν) | 4a12 ἀλα (after τα-
 départementa) (b) sem. amplif. ἐμ
sulūkun | 11a2 qūṣida bīhi | 8b8 ἐν yadḥulu ἐν
ἐῖς, μία, ἐν 4b7, 5a7, 5a17 ὑάθιδων —
τὸ ἐν 5a26, 5a28, 6a24, 6b2, 11b3
al-위원 κο
ἐῖτα ἐντα 6b14 fa-
ἐῖτε/ἐῖτε 4b12—13 ἐνμά/aw | 9b11—
12 ἐνμά/wa-ἀπα | 5a17—18
in/wa-in
ἐῖτ w. gen. 6b14, 11b11 min | 7a9 ἐν | 11b24 μυνδω | 8b27 om. Ar.
ἐκατσοντα 5a18, 5b4, 7a11, 7a17, 8b22, 9a10 (9a11), 9a15, 9b18, 10a2 κολλου ὑάθιδων ἐμ | 8b26
κολλου ὑάθιδων | 11a4 ὑάθιδων
ἵνα θεῖν | 7a20* trans. by
the attached pron. | 10a4 n.t. | 10a11 1.2 om. Ar. (in lac.)
ἐκατέρων ὑ — ἐκατέρως 4a12 κολλου
ὕάθιδων μινμα/alnum-ἀθαν | in
ἐκατάθεωθαν 11a25 ὑάθιαν ὑάθαν
ὐάθαν
eκαθεῖντα 5a4, 7a10 ἀπαλικα | 5a26 ἡδᾶ
ἐν | 6b19 sem. amplif. σα/ρυνά ἐμ
حاد ἡδῆι | 6b13 sem. amplif.
حاد l-qawlu l-ἀθαν | 11a14
transl. by the emphasis expressed
by the foll. qad yazharu
ἐξαγος 10b10 nabātun ἐλαιος 10b12 ayylun
ἐλάχης in toulάκης 7a16
ἀσγαρ u ἐν ασγαρ ἐν ὑ-μαιρι
ἐμύσης 7a6 μυσκαλαν | in gloss
7a8 om. Ar.
ἐμποιει ἐφ 8b3 ἐφτατα ἐ
ἐμπορονθεθα 11a10 min muqaddami
w. gen.
ἐκαθαίνω 4b12 awδαha | 11a14
zahara — ἐκαθαίνοικ med. 8b14
zahara li-
ἐκαθυγρος 5b2, 7a17, 11a16 ὑδ ναις
5b6, 11a17 ὑα θεῖν
ἐν ὑ. dat. (a) 4a17, 4b20, 5a12, 6a4, 6b16, 6b18, 6b19*, 6b21, 6b27, 7a1, 7a8, 7a13, 7a17, 7a21, 7a22, 7b4, 7b15*, 8a12, 8b4, 8b15, 8b24, 9a3, 9a13, 9a16, 9a27, 9b3, 9b5, 9b19, 10a6, 10a12, 10a27*, 10b4, 10b7, 10b10, 10b25, 11a5, 11a19, 11b3, 11b12*, 11b13, 11b17, 11b25, 12a1
ἱ | 4a18, 4b9, 4b10, 5b6, 8a23, 9a1 ὑαδουὴ ἐμ | 7b9 (7b10), 10b20 (10b21 1.2) min | 6b11 ἐνδα | 10a14 ἀλα ἡλι w. gen. 7a12
γαρα ἀλα | 7a21, 8b18, 11b21 n.t.
| 4a6, 11a11 om. Ar. (in lac.) — in
ἐν μεθες 9a2 morph.; transl. by the
nipsba ending-zeńyun in ƺu-yaun
— 10a17 Ar. read μηδὲν for μηδ’ ἐν
| 10a18 Ar. read οὐδὲν for οὐδ’ ἐν
(b) in compound adj., expressing
the possession of a quality (LSJ
E.I.2) 5b2, 7a17 ὑδ | 5b6 ὑα
ἐν — ἐνο
ἐναντιος 11b7 μυταδάνδυ —
tοὐναντιον 6b18* μυταδάνδυ
ἐναντια 11b11, 11b12 ἐσαυ’ μυταδάδαταν — (τὰ) ἐναντια
8a23, 8b5 αλ-μυταδάδατα
ἐνδέχομαι ■ ἐνδέχεται impers. 9α21
yumkinu an | 11α6 ιшаямала |
11β1ο kάνα bίhί an ■ ἐνδέχομε-
νος 7β20 mumkinun
ἐνεκά 10α1, 10α28, 10β23 li- in la-hū |
10β18, 11α1 min qibali w. gen. |
| 10α22, 11β26 min āglī w. gen. |
■ (7α21) Ar. read ἐν ἔξαστὼν for |
| ἐνεκά του |
ἐνενετά 8β13 ahdāta li- |
ἐνέργεια 5α7, 5β23, 7β13, 8α11, 9α4 |
film | 10α11 om. Ar. (in lac.) |
ἐνογέω 10α12 fa’ala
ἐνθα 6β21 interpr. fr ἡδιhι s-sabili |
ἐνιοι 6β16 ba’dun | 10β10 ba’du w. |
gen. ■ ἐνιοι (9α1*) min ■ ἐνια |
9α18, 10α25 ašyā’u | 10β14 om. |
Ar. (in lac.) |
ἐνταῦθα 7β6 fi ἡδα l-mawdī’i |
11α9 n.t. |
ἐντυμος ■ ἐντυμότατος 5β22 fi ĝayati |
ς-sarafi |
ἐξεύω 5α9 rafa’a |
ἐξοικα 10β26 āhlaqu bi- |
ἐπει 4β22 min qibali anna | 5β5 fa-
imna | 7β15, 9β17, 11α3 wa-dālik |
anna |
ἐπειδη 5α15 min qibali anna |
ἐπείπερ 4β19 min qibali anna |
ἐπείσοδιωτάς 4α14 madhūlun |
ἐπί (a) w. gen. 9α21, 11α8 fi |
| 11α2 (11α3) ‘αλά ■ ‘ἐφ’ ὀν |
11α6 fi-mā (b) w. accus. 7β22, |
9β10 ilā | 8α20 fi ■ ‘ἐφ’ ὀν | |
11β9 aydān ■ ἐπί πλέον 8β16 |
am’anna |
ἐπίσητεω 5β11 paraphr. fihi mawdī’u |
ταλαβīn wa-baḥtim |
ἐπιθεωροῦ ■ ἐπιθεωρούμαι pass. |
11β13 n.t. |
ἐπιμελέωμαι 11β1 taqayyala |
ἐπιπεδος ■ ἐπιπεδον 6α26 saṭḥun |
ἐπιποθεω 8α8 iqṭaadā |
ἐπιποθησθος 10β13 satrun |
ἐπισταμαι 9α4 waqafa ‘αlā ■ τo |
ἐπιστοοὐθα 8β16, 9α10 al-
ma’rifatu | 9α26 ʿulima |
ἐπιστήμη 6β20 ʿilmun | 8β20, 8β25 |
ma’rifatu |
ἐπω ■ ἐπόμενα 9α14 lawḥīqu |
ἐρυφ {5β17} ḏabarə |
ἐρχομαι 6α23 balaga |
ἐρο  ■ ἐροῖται 6β11 (6β11) waṣafa |
■ τα εἰρήμενα 6β15 transl. by |
the subst. to which it refers ■ τον |
eἰρήμενοιν (?) {10α4*} allati qulnn |
ἐρφιδος 10β14 om. Ar. (in lac.) |
ἐσθλος ■ ἐσθλά 8α27 al-ḥayrātu |
‘Εσταῖος {6β10} annahū yatadalawal |
ἐχατος 9α14 bi-ḥaratin |
ἐτερος 4β6, 7β23, 10β19, 11β7 |
(11β6) ābaru | 5α18, 7β21 ĝayru |
w. gen. | 6α15 sem. metathesis; |
affirm. / neg. transformation laysa |
ḥādā ■ ἐτεφα 7α23 ašyā’u | 6β4, |
10β6 ašyā’u uḥaruu | 5β6, 8β17, |
10α7, 10β25 ĝayru w. gen. | 10β15 |
om. Ar. (in lac.) |
ἐτήςος 7β3 as-sanati, foll. in the gen. |
after a subst. |
ἐτι 7β22, 9β25, 10β7, 10β20 |
(10β24a) aydān | 6β5 in context, |
faḍlān ‘an an yaṣra’u fihi | 10β11 |
sem. amplif. acc. to sense: mimmā |
yaḥrī aydān ḥādā l-magrā | 5α8, |
7α4, 8β4 n.t., but included in |
w- transl. ēti ḏe | 8β6 n.t., but |
included in the foll. elative abda’u |
transl. πλέον πορφόδοξον | 9β20 |
om. Ar. (in lac.) ■ ēti ḏī 6β9 |
ma’a dālīka ■ ēti in oukêtī 9β11 |
ḥina’īḏīn |
ἐυ ■ το ἐπ 11α15 al-amru l-afdālu ■ |
in Εὐρυτος {6α20} salisun |
ἐυθὺς 6α17 duḥ’atan |
ἐυλογος ■ εὐλόγος 6β21 wāgilbān ■ |
ἐυλογῶτερος comp. 4β8 al-awlā | |
| 4α13 sem.; etym. al-aawlī ḏ l-qiyās |
Εὐρυτίδης 8α26 ʿwrībydys |
Εὐρυτος {6α20} sem.; etym. salisum |
l-ḥaryi |
ἐυσήμος 4α19 bayyinun |
ἐφάπτω ■ ἐφάπτομαι med. 6α27 |
adraka
ἐφεξῆς ـ τὰ ἐφεξῆς 6a17 σα’iru l-
asýa’i llati tattašilu bi-hā
ἐφες 5a14, 5a28, 6a9 tašawwun-
qun
ἐφετικός 5b11 dú tašawwūqin
ἐφοδός 10a28 madhabun
ἐχό (a) (to have) 4b2, 5b4, 8a19,
9a16, 9b11 li- w. attached pron.
or subst. | 10b22 šara li- w. gen.
| 5a24 kāna fi w. attached pron. | 6a5 kāna bayna w. attached pron.
| 11a3 māla ilā | 8a21, 10b26,
11b18 fi w. gen. | 4b9 transl. by the
pron. attached to the subst. being
possessed tābi’atūha | 4a5 om. Ar.
(in lac.) ـ ἐχό λόγον 10b24 sem.
concentr. munqāsun (b) (to be in a
state) 5b19 al-ḥālu fihi | 12a2 ḥālu
w. gen. ـ ἐχέω oútòs 10a25 ḡārā
hādā l-maqrā | 7a1 sem. concentr.
ka-dālika

Zeўs 5b16 Z’ws
ζήτεω (a) transl. by baḥaṭa: 5b19,
8b11, 8b13, 9b3, 10a17, 10b23
(10b24a) baḥaṭa ’an | 8b1 baḥaṭa
| 8b15 in hend. al-baḥtu wa-t-
taftis ـ τὸ ζήτειν 8a22 al-baḥtu
’an ـ in ἀζήτητος 6a3 baḥtun |
in επίζητειν 5b11 in hend. ἡταβά
wa-baḥaṭa (b) transl. by other
verbs 9b21 ἡταβά | 5a22, 7b19
iqtaḍa | 7b6 ἱθὴ γα δα ἱ | 9b23
iltamasā
ζήτητος 6b22 (6b21) baḥtun
ζῶ 10b15 om. Ar. (in lac.)
ζῶθ 4b3, 5b3, 10a16, 10a17 ḡāyatun
ζῶν 5b5, 7b4, 8a5, 8b27,
9a14, 10a5, 10a13, 10a17, 10b7,
10b18 (10b17), 11a8 ḡayawānun

นโยบาย (a) disjunctive 4b812, 4b18, 5a5,
6a5, 6a15, 8a512, 8a13, 9b2, 9b7,
10a8, 10a17, 10a19, 11b6 aw | 10b1, 10b2, 10b10, 10b28 (11a1a)
wa- | 9b1 wa-la-alla | {7b8} in
(transl. the variant ei in the MSS) | {10a4*} n.t. | 6b26, 10b14 om.
Ar. (in lac.) ـ ἦτοι/ἡ 8b25–26
immā/wa-immā ـ πότερον/ἡ
→ πότερος (b) comparative 5a11,
9a22 min ـ τοῦνακτίον ἡ 6b18
mutādaddānī (transl. by the Ar.
dual)
ἡ 10b26* fa- ـ 10b4* wa-ka-dālika
(emednation for ἡ in all sources) | 11b7* aw (emendation for ἡ in all
sources)
ἡδη 5a14 n.t.
ἡλιος 7b5 šamsun
ἡμετ ـ ἐγώ
ἡμεροβίος ـ τὸ ἡμεροβίον 10b15
om. Ar. (in lac.)
ἡμέτερος 9b7 la-nā | 9b12 transl. by
the attached pron. w. postpositive
pers. pron. and nafsun: ...nā
nahnu anfusunā
Ἡγόλαλκειτος 7a15 ʿr’qylts
Ἡρεμέω 8a1, 10a15 sakana ـ τὸ
Ἡρεμεύν 7b16 as-sukūn
Ἡρεμία 5a24, 7b10 sukūnun
ἥτοι (ἥ τοι) ـ ἦ
ἥττων in ἥττον adv. 8a16 ʿalā dūnī
w. gen.
θάλασσα 5b17 baḥrun ـ θάλαττα
10b1 ma’u l-bahri
θεῖος 4b15 ilaḥiyyun ـ τὰ θεῖα
6b9 (al-asya’u) l-ilāhiyyatu ـ
θεῖότερος comp. 5a10 asbahu
bi-lilahi ـ θεῖότατος superl.
6a1 al-aḥaqqu l-āṣya’i bi-annahū
ilāhu
θεός 4b15, 7b23, 11b812 allāhu
θεός 10a3 (10a2) wad’un
θεωρέο 8b11 waqafa ʿalā | 9b9 (9b8)
adraka ـ τὰ θεωρούμενα 8b22
al-asya’u llati tuʿlamu
θεωρία 9b15, 12a1 nazarun fi | 4a3
om. Ar. (in lac.)
θῆλυς 10b9 om. Ar. (in lac.)
θυγγά̑νο 9b15 misāsun
θηέ̑ς 10b10 sa’run
The text in the image is excessively long and contains many references to Greek and Arabic words, making it difficult to read. It appears to be discussing grammatical and lexical points, possibly in the context of a linguistic analysis or translation study. The text is not formatted in a clear manner and lacks clear breaks or sections, making it challenging to extract meaningful parts. It is likely part of a larger work on linguistic analysis or grammar. Due to the length and complexity, the text is not directly translatable into a coherent English document without additional context or formatting. It seems to be a detailed discussion on specific linguistic rules or identities, possibly within a specific linguistic framework or for a specialized audience familiar with the terminology.
καὶ δὲ 10a25 fa-inna qad nägidu - καὶ μᾶλλον 10b21 bal - ἄλλως τε/καὶ δὴ 10a23*–25 first half of the construction not recognized as such in the transl.; καὶ δὴ is transl. by fa-inna qad nägidu - ei γὰρ καὶ/ἄλλα {11a13*–14} ἰδὰ/ἰλλὰ anna | 11b20 fa-inna ... wa-in/fa- - ἄλλως τε/καὶ → ἄλλως • ἄμα ... τε καὶ → ἄμα • διὸ καὶ → διὸ • τε/καὶ → τε καίτερ 5b6, 7a18 wa-in | 5b12 ἥδα ἀλὰ anna | 9a17 ‘ἀλὰ anna καίτου 10a9, 11b2 ἥδα ἀλὰ anna κακός • τὸ κακόν 11a20 (11a19) ar-rad˚ı’ • comp. → χεῖρων κάλλιστος → καλός καλλίων → καλός καλός • καλλίων comp. 5b27 afdalu • κάλλιστος superl. 7a15 ἁγάλλου κακός in καλός ἐτυχεν 11a25 ἀλὰ μὰ yanbaği κᾶν (καὶ ἐν) 10a14 n.t. • (καὶ ἐν) 8b14 wa-in | 11a18* n.t. καρδία 11a11 om. Ar. (in lac.) καρπός 7b4 tamarun κατά (a) w. gen. 8b2, 8b23 fi (b) w. accus. • transl. by fi: 4b7, 4b8 (bis), 4b22, 5b22, 5b23, 6b14, 7a4, 7a16, 8a16, 10a4 fi | κατά in καθ’ ἐκαστον 8b22, 8b26, 9a15, 9b18 fi in fi kulli wadhidin | 11b4 n.t. | 4a6, 10a11 om. Ar. (in lac.) • transl. by ‘αλὰ: 8a19, 10a14, 10b20, 11a4 ‘αλὰ | κατά in καθάπερ 4a19 ‘αλὰ | 8a13 ‘αλὰ ἥσαβε w. gen. | 8b23 ‘αλὰ ταρίqi w. gen. • transl. by bi-: 5b1, 9a2, 9a7, 9a21 bi- | κατά in καθ’ ἐκαστὰ 8b23 bi- in bi-δάθια | 4b12, 6a9 bi-ταρίqi w. gen. | 4b13 bi-ταρικιν min | 7a6 γαρ bi-hasilbi • 5a4 min • distributive use of the prep. transl. by li- in the sense of “to have”: τὸ καθ’ ἐκαστὸν (sc. κακὸν) 5a18 li-kulli wadhidin minhā muharrikun • in the sense of “concerning.” (LSJ B.IV.2) 5a21 n.t. (c) in expr.: κατά συμβεβηρός 5b24 ‘αραδιν • τὰ κατὰ 9b25 sem. concentr. amru w. gen. (d) in compounds: emphatic sense of κατά in κατακολουθεῖον (LSJ E.5) 11b16 lazima κατακολουθεῖον 11b16 in hend. lazima wa-tabi’a κατάλοιπος 9b27 baqiya καταπαύο • καταπαύομαι 6a23 ’αταλα καταρθίμειον in προοπταρθίμειον 8b7 fi ‘idadi w. gen. xεν 5b17 n.t. xενός • xενόν 6b1 ἅλα’使用权 xέρας 10b11 qarnun κίνδυνος in κίνδυνος ἐστὶ {7b17} ἥφα κινέω 5a5*, 7b21 ἅραρκα • κινούμαι med. 10a12 tahraraka • τὸ κινεῖσθαι 10a9 al-ḥaraku • κινεῖσθαι {4b23} ἥρακατυ • κινοῦν act. part. 5a17, 7b16*, 7b162, 7b20, 10a1 muharrikun • κινούμενος med./pass. part. 5a5 taharrukun • τὰ κινούμενα 5b2 al-aṣyā’u l-muṭaharri-katu xήνιος 4b4, 4b20, 4b22, 5a5, 5a25, 5b3, 6a13, 7b12, 7b14, 10a20, 10b12 ἅρακατυ xηνητός 5b12, 9a12 μuṭaharrikun • in ἁρνητός 4b22 μuṭaharri-kun κολιὰ 11a11 om. Ar. (in lac.) κοινὸς 9a27 ἀμμιγγαν • κοινή 8b25 ἀμμιγγαν κοινονία 4a10 om. Ar. (in lac.) κόμιος 6b8 ’alamun | 11a13 zinatun | 7a15 al-unmuru κράτις 11a12 om. Ar. (in lac.) κρείττον 4b6 asadu faḍlan | 5a1, 5a9, 5b8 afdalu κυκλικός 5a3, 5a15, 5b7, 5b11, 5b23, 5b24 dawriyyun
τὰ μεριστά μὴ εἶναι πΨo;Υkron ιΨo;Υkron ὑμαι μνείαν τὰν Ψo;Υkron ητά εἰ μεταδίωκω | 11a25-27 /- wa- ... λά (for οὗ; see note)/wa-ayḍαν ἁνέ οὐν/δέ ἃb11-15 fa-amma ... /-wa/ /-fa-amma ... fa- | 4b16-17 wa- ... λά (for οὗ; see note)/wa-ayḍαν ἁνέ οὐν/δέ ἃb7-7 /-wa/- /-μεριστΨo;Υkron acuteς /-μερισμΨo;Υkron acuteς μερίς /-wa-/wa-/wa-

μεγίς 5a10 (59) martabatun μεγισμός 8a9 qismatun μεγιστός • τὸ μεγιστόν 5a11 at-taḡazzu’u • τὸ μεγιστό 8a6 ἀ-ασγ' u' ἡ-α-ασγ' ιγγ' ιγγ' μέγος 5b20 1,2, 5b21 1,2, 7a11 ἄ-ιζ' un | μέγος in τὸ ὁμέρες 8a3 ἄ-ιζ' in mā λά ἄ-ιζ' α-α 'αι ιτά 10a4 1 n.t. • ἐν μέγει 9a2 9a3 ιγγ' ιγγ' μέγος 11a11 om. Ar. (in lac.) • τὸ μέγον 5b12, 11a24 al-wasatun | 11a12 om. Ar. (in lac.) μετα w. gen. 5b1 ma’a • w. accus. 5a13, 6b19, 7a3 ba’da | μεταβικόν 9b1o taraqqa μετάβασις 7b8, 8a15 nuqlatun μεταβολή 5b26 inquīlān | 7a23 taqayyuren | 10b3, 10b5, 11b14 taqūr | 4a5 om. Ar. (in lac.) μεταδίδουμι 11a7 afāda μεταδίδωμι 9a11 baḥa’t an μεταφορά 5b2 Ar. read • διαφορά in its source μέχρι 5a5, 6a18, 6a23, 6b10, 6b15, 7b7, 9a14, 9b8 iila • 9b2 intahā ilā μή 4a14, 5a18, 5b1, 8b15, 9b11 lá | μή in μήδε 5a8, 8b7 1,2 lá in wa-lá | 4b2, 8a17, 8b14, 10a13, 11a1, 11b20 lam | 8a8, 6a18, 7b20, 8b7, 10a25, 10b24 layṣa | 7b17, 8a10 ἄγγυ ὑ. gen. | 10b9 om. Ar. (in lac.) • μή εἶναι 5a4 layṣa • ei μή ὁ-α 4b10, 6a10 allāhumma ills an | 5b28 1, 11b19 ills an | 8a21 in lam • μή δύνασθαι 5b28 2 sem. metathesis; neg. / affirm. transformation ‘αζγ’un ‘αν μήδε 5a8, 8b7 1,2 wa-lá | 10a17 Ar. read μηδέν for μηδέ ἐν μηδείς 6a5 lá ... αςλάν | 7a13 lá ... ἄ-ιζ' un | 10a22 ἄ-ιζ' un μηδείς • μηδείς μήτε/μητέ/μίτε 8a17-18 1,2 lá/wa-lá/wa-lá μηχανάμαθι 4a21 sem. metathesis; pass. / act. transformation iḥtarā’a μία • ἐις μιχρός 6a5 yāsīrun • comp. • ἦττων μιμεομαι 7a5 taqayyala | 8a1 iqtadā bi- μίμης/μης 5a25 taqayyulun μνεία • ποιούμαι μνειάν 6b5 ἄ-ιζ' ακara μνός • μνόν adv. 6a8, 6b11, 11a20 faqat | 4a18, 6b16, 6b17, 7a7 innamā ... faqat | 5b11 dūna γανρηθ | 5b22 n.t. μορφή 7a23, 8a9, 10b22 (10b23a), 11b22 sūratun | in μορφούμαι 8a13 sūratun | in ἄ-ιομοιία 11b4 sūratun | 7a12 šaklun | 4a22 šabahun μοσθόο in ἄ-ιομος 6b24 (6b23) šakkala • μοσθόμαι pass. 8a13 qabūlūš-sūratī • μεμορφομένος 6b26 om. Ar. (in lac.) μουσική 7a2 müsīqā νοητός 6b8, 9a12 ma’qūlun | 4a6 om. Ar. (in lac.) • τὸ νοητά 4a19, 9b4 al-α-ασγ' u' l-ma’qūlata | 4a11 om. Ar. (in lac.) νομίζω 4a9 om. Ar. (in lac.) νοῦς 7b23, 9b14 ’aqlun νῦν 10a20 (10a19) in context ἀδα | 5b21, 6a23 in context nāguidu (wağada)

Ξενοκράτης 6b7 ks’nwqr’tys
τοισ την γην 10a27 al-umurū
l-ardiyyatu | τα κατα τας φορας
9b25 amru ἥρακατηθα (b3) transl. by a nominal clause introduced by
an or anna: το περιθειναι 7a2o
an ναγμα a | το (sc. καινεσθα)
5a18 an τακυνα tataharakā |
το τον άνινυντον 5a16 ἀνανα λα
tafturu | 1a022 το παντα (sc. 
ειναι) και (το) μηδεν (sc. ειναι)
10a22 ἀνανα τακυνυ wa-annaθū
laya | το μη εξειν 10b24 ἀνανα
laya | το (sc. ειναι) 11a10 ἀνανα
gu ilat | το πει την του μεσον
χωρον 11a24 n.t. | τα της φυσεος
4a11 om. Ar. (in lac.) (b4) transl. by a subst. add. acc. to sense in
text: το βιβλιν1, βιβλι2, βιβλι21
αλγαθαιμ | το 8b15 mawdiun | το
5a4 al-qawlu bi-annaθū
οδε demonstr. pron. 6a22.1,2 ἡδα |
8b8 ἡδα l-amru | 6a21 ἡδα l-
μυσαρου ialyhi | 8a17 ἡδα s-
σαιυ l-μυσαρου ialyhi | 10b12 ba 
δυ w. gen. | 6a5 paraphr. μα an 
qaluhai
οδος 9b4 ταρικου
οδεν 7b9 hia ἱλατ lati minαι
οικειος 9a11 μωλαimun | 10a10
in hend. μωλαιμun wa-
haisun | 5a22* anisa ilα | οικειοτεοσ
comp. 9a12 alyaqu | οικειοτοτοσ
superl. 6b28 awla wa-aθaqqu bis –
οιμωια 10a8 zanna
οιος (a) as relative to a demonstr.
(LSJ II.1) 11b22 μα (b) able to
do (LSJ III.2) οιος te w. inf. 4b2* 
amkana | οιον τε 8b5, 9a27, 11b5
amkana an | 11a8 amkana (c)
adv. (LSJ V) οιον 4a14, 5a6, 5b21,
5b24, 6a2, 6b20, 6b25, 7a9, 7b5,
8b8, 9b15, 11b6 ka-anana | 4a21,
8b26, 10a15 (10a16) bi-manizlati
w. gen. or μα | 6b1, 6b2, 11b14
milα | 9b20 mitαλου | 9a12, 11a9
mitαλου χαλικα | 11a20 n.t. | 4a10
om. Ar. (in lac.)
οιοιϕαγος 11a10 μαιun
ολιγος 11a16 qalilun | 10b6, 11a19
yasarun | 7a2* σαδδουn | {4b9}
kafirun | 10b15 om. Ar. (in lac.)
ολος 7a11, 8a6, 8a23, 11a22, 11b11
bi-asrih | το ολον subst. 10b28,
11b5 al-kullu | το ολον adv.
11a18 bi-l-γμαlθi | 4a8 om. Ar.
(in lac.) | ολος 4a20, 8a19, 8b24,
10b3, 10b10, 11b5 bi-l-γμαlθi
"ουμος 5b15 Umirūs
ομιμα 10b13 'aynun
ομογενης 9a17 min γινιν wāhidin
ομιος 8b1, 8b3 μυτασβιhun
in ομιος 7a4 mitulun | {6a4}
ma'an wa-hiya llati (Ar. misread
ομια as ιμια a) | ομιος 5a26,
6b8, 8a3, 9b3 (9b4) 'ala mitilin
wāhidin | 7a4, 7a16 'ala hādā l-
mitilā | 11a8 n.t.
ομοιοτης 5b1 lakahun | 8a20
μυακαλατun
ομοιωιος 4b13 τασβιhun
ομις in ομογενης 9a17 wāhidun in
min γινιν wāhidin
ομωνυμως 10a13, 10a15 samiyyun
ομως 5b6, 8b14 iλa anna
ον eimui
οτου 11a8 ηαυτυ
οτως 8a4 'ala anna
ορατος 9a23 mubsurun
οργανον 7a5 alatun
οργηω | οργομαι med. 11a6
taσwawqa ila | 6a10 taσwawwuqun
| οργομαι, as implied in έκαστον
(sc. τον οργοτον) 5b4 istahā |
to οργομενα 8a1 (αλ-
σαιυ) l-
mutasawwiqatu
οργοτος 5a2 mutasawwaqun ilayhi
ορειξ 5a2o, 5a24, 5b4, 5b10, 6a9,
11a14 sahawatun | 6a12 σawqun
οριςَ | οριθμαι pass. 6b27, 6b28
tahdidun | οριθμενος 7a17,
10b21 (10b22) mahdudun | 4a6
om. Ar. (in lac.)
οριστωs in οριστον 8a18 ηaddun in
jurūgun 'ani l-haddi
οὐδαμοῦ 11b27 ἡρακάτου
οὐοῦς 9b20, 11a2, 11b25 ἅδδυν | in ὁμοιότης 11a20 ἅδδυν in ἄρνεν ἀν ἀ-ἵδδη
ος, ἦ, ὁ (a) demonstr. pron. 7b2
dὰλικα | in τὸ (β) δὰλικα in δι-δάλικα (b) relative pron. 5a17, 5b10, 5b16, 8α6 ἀλλαδὶ | 7b21 α-sha' u λαδὶ | ὁ in ὁδὲν 7b9 ἀλλαδὶ
= 9a21, 9b23, 8α6, 11b24 μὰ | τι in χαθάτηκε 4a19 μὰ = 4b16, 5α3, 5b4, 7b4, 11b3 pron. attached to a prep. τι ὑς 8b14 bi-l-fكريki (transl. by the noun to which it refers) = 9α1* n.t.
οοοος 9α2 qαdrυn | 9b27 μὰ = 0000 adv. 6α27 bi-καδρι μὰ ἐφ' ὡοον 11b10 αδαν = δῶα 11α13 κυλλου μὰ = δῶοι 9b24, 11b8 ἀλλαδίνα | δοοὶ λέγουν 5α26-2- morph.; transl. by the act. part. al-κα'λύνα = 6b25 om. Ar. (in lac.)
ὁης 4b5 huwa党的领导 | 6a19 wa-
huwa μὰ | {7α5} fa-inna
ὁττς ὅ ὅ τι
ὁττν 9b10, 10a12 ἄδα
ὁ τι 8b1, 8b2 li-μὰ = ὅ τι μάλιστα 8α4 ἐfix χαθάτηκε μὰ χυμκίνυ an
yάκηλ 'alayhι
ὁτι 8b9, 10a13, 11a5 αanna | 6a28 inna after qάλα | 9b23 qαwlwn | 11α12 om. Ar. (in lac.)
οῦ (οῦς, υ') 5a24, 5b13, 6b10, 7b18, 8b1, 8b2, 9b15, 9b23, 10a6, 11a2, 11a5 λα | 4b2, 5b20, 7b17, 8a1, 8α3, 8α6, 8b5, 8b16, 9a27, 9b2, 10a8, 10a9, 10a23, 10b6, 11b5 ήλας | 5a22, 7b13 λαμ | 8α2* ὕμψομυν (transl. the MS reading οὐοῦν) | 11α20* understood as οὐ, ἢδα, in Ar. | 5b22 n.t. | 4α7, 10b15 om. Ar. (in lac.) οῦ w. εἰου 4b23, 5b8 ήλας = in οὐδὲ 6b5, 6b6, 9b24, 11a15, 11b7 (11b8) λα in wa-λα = in οὐντες 9b11 lam = in double neg., οῦ/οὐδὲ 8a16–17 lam
οὐδαμοῦ 11a9 ἐfi mawḍi'in mina l-
mawḍi'i in w. neg.
οὐδὲ 6b5, 6b6, 8b1, 9b24, 11a15, 11b7 (11b8) wa-λα | 4b4 ήλας | 11b10 λα ... aslan | 10a18 Ar. read οὐδὲν for οὐδέν = οὐδὲ in οὐδαμοῦ 5a21 ήλας = in double neg. οῦ/οὐδέ 8a16–17 lam
οὐδΕις/οὐδΕίς 6b6 ἀδάδυν w. neg. | 10b18 ήλας ίαυ'αν | 4a23 ήλας q'αμυν (see note to the Ar. transl.) | 6a11 ήλας μάνι'αν | 5b12 sem., etym. ήλας ... wa-
λα ὑδιδυν | 6b5 lam ... aslan | 4α11 om. Ar. (in lac.) οὐδέν 8a15, 8b2 λας
οὐδαμοῦ 5α20 ήλας ... bi-wαγหι
μια οὐντεμ ι
οὐδεῖς — οὐδεῖς
οὐκέτι 9b11 lam ... ἰνα'διν
οῦν 5α25, 7a6, 10a5, 10a16 fa- | 6a15, 11α25 n.t. = in ὅ οῦν — ὅ
δε = in μὲν οῦν — μὲν
οὐθάνως = τά οὐθάνια 10α18,
11b19 al-ἀγραμυ s-σαμανιαυτυ | 10α27 al-ἀμμυρ s-σαμανιαυτυ
οὐθανος 5b20, 6a7, 6a14, 6b3, 6b4, 7a11, 8α6, 9b24, 10a14, 10a18
samα'τα | 10a10 om. Ar. (in lac.)
οὐσια 4a13, 4b6, 5a8, 6a7, 7a10, 8a13, 8a23, 8b21, 9a5, 10a3, 10a14, 11α22, 11b11, 11b26
γαθαρυν | 10α11 om. Ar. (in lac.)
οὐτε/οὐτέ 4a19–20 λας/ωα-
λa | 11b15 έλα/ωα-
οὐτος demonstr. pron. 4b21, 5b20, 6a15-2, 6a19, 6b7, 6b17, 8a21, 8b19, 9a1, 9a6, 9a13, 9b1, 9b17 (9b16), 10b7, 10b18, 10b24, 10b27, 11a1, 11b23, 11b27 ἢδα | in οὐτος 4b17 ἢδα | in τουουτος 4b18 ἢδα | 4b20 sem. ampl.
ἵδα l-αμρυ | 6a2, 6a14, 7b5 sem.
ampl. ἢδα l-μανα | 4b11 sem.
ampl. ἢδα l-γαθαρυν | 5a6 sem.
ampl. ἢδα l-μαθαυ'ι | 5a13, 5b14, 6a3, 9a25, 10b25, 11b5,
11b20 δάλικα | in οὖντος 4a17
dálika = 4b7 fih, 9b27 'alayhim, 11b21 aktaruhā: transl. by the attached pron. = 6b13, 6b14, 6b26 transl. by the subst. to which it refers = 5b10 sem.amplif. mā anā qā'iluhū ... a'nī = 7b15, 10b23 n.t.
oūtō, -ς 7a2, 8a14 ka-dálikā | 4a17
kāna l-amru ka-dálika | 4b17 'alā ḥāḍa l-waḡhi | 5a10 'alā ḥāḍa n-
nahwi | 9a4, 11a14 ḡarā ḥāḍa l-maḡrā | 10a26 ḥāḍa ḏīn ḡarā ḥāḍa
l-maḡrā
δόχευο
10b15 om. Ar. (in lac.)
πάλν = πάλν αὖ 7a20 ἄγαν
παντοίος ιβί in hend. ἄμαρ
gayruhū | 4a5 om. Ar. (in lac.)
παρά w. gen. 5b27 min = w. accus.
9a6 ἅριγῑn 'an | 10b14 om. Ar.
(in lac.)
παράδειγμα 7b2 dalīlun
παράδοχον = τὸ παράδοχον
8b6 in hend. bāḏī'ū š-šanā'atī
παράδοχοτερος comp. 8b4
abda'u
παραώρφης 10b13 istiqālūn
παραλεύω 6a27 amṣaka 'an | 11a9 qaṣara
παρώμοιος 10b6 ἀναρ
πάξ 7a7, 8b21, 11b20 kullu w. gen.
| 10a9 bi-asrīhi | 4a13, 11b4 n.t.
= τὸ πᾶν 4a14, 4a21, 8a23, 8b8, 10a16 al-kullu | πᾶν in τὸ σύμπαν
10a3 al-kullu = πᾶντα 4b15, 5a7, 11a3 gamī'ū l-āṣyā'ī | 8b1', 8b2, 10a22, 11b9 al-āṣyā'ū kulluḥā
| 5a18, 8b1² kulluḥā | 6a1 al-umūru kulluḥā
πάσχω = τὸ πάσχειν 5b6, 7b22 al-
infi'ālu
πάνω = πάνωμαι med. 6a8 sukūnun
| 6a18 in hend. inqatāa wa-nāhalla
| in ἐπανοτος 5a4 tafattara
πείδω = πείδωμαι, πέποιθα in
πιστός 10b27 wāṭīqa bi-
πειράω = πειρόμαι med. 4b7, 6b9
rāma (or rāma an yūbāyinya? see
note) = 6b12, 6a24, 11b24 iltamasa
πλήθος 52a1 καθρατυν | 11a19
涞adun
πλὴν conj. 6b6, 7a2* μᾶ ἡλά | 6a27
illā anna | (8a3) fa-inna • πλὴν εἰ
7a22, 11b21 illā an
πόθεν 10a24 min ayyī l-umūri layta
ší’ī
ποιέω 5a7, 9b19, 10b25, 11a24
(11a23) ḡa’ala | 11b2 waḍa’a | 6a25 qāla bi- • in ποιήτος 9a3
ʿamila | (6a2o) sem. amplif. fi’lūhū
an yāq’ālā mā yaḥ’alūhū • tō
ποιέν 7b21 al-fīlū • ποιούμαι
med. 7b3 ḡa’ala • ποιούμαι
meyeen 6b5 sem. concentr. dakara
ποιήτος 9a3 (al-āṣyā’u llatī) tu’malu
ποιύλα (7b1) Ar. transl. ποιύλος
instead
ποιύλος (7b1*) in hend. kāṭirun
muḥtālifun
ποίς interr. 4a18, 10a25 ayyu w. foll.
gen. | 5a15 ayyu šay’īn | 6b23 ayyu
l-āṣyā’ī | 4a2 om. Ar. (in lac.)
ποίς 8a18 kayfa
πόλις 8a5 madinatu
πολλάκις 8b9 ἀλα ἀνήα’in šattā
πολύς 11a14 (11a15), 11a19 kāṭirun
• πολύο dat. of manner, w. comp. 8a25, 11a16 kāṭirun • πολύλα
11b13 āṣyā’u kāṭiratun | in
πολλάκις 8b9 šattā | 11b16 n.t.
• ʿī ʿ̑ poļo1 6a23 al-kāṭiru mina
n-nāsī • comp. → πλείων, πλέον •
superl. → πλεῖότως
πολυγος • πολυγονυτερος comp. 4a3 om. Ar. (in lac.)
πομψάξει (7a22) bayna l-ḥayawānī
wa-n-nabātī
ποοχγος 9a24 ἀλα kam
πόος 7b7 ayya | 9a23 n.t. • πόος
9b2 ayyu mawdī’īn
ποος 8a18 kam | 5a8 dū miqdarīn
ποτε indef. encl. 5a24 fi waqtīn mina
l-awqātī | 6a20 marratān | 6b23,
8a9, 8a22 n.t.
πότερος • ποτερον/ἡ adv. 4b7–
8, 5b13, 5b19–20, 6a7–9, 6b24
hal/aw | 8a10–11 a/aw | 4a9–11
om. Ar. (in lac.)
πον encl. 7b6 n.t.
προγματεία 9b18 ʿilmun
πραγμάτος • tō πραγμάτα 9a3 al-āṣyā’u
llatī tu’alū
πρό in πρότερος 4b6, 7b14 taqadd-
dunun | 10a7 bu’dun • comp. →
πρότερος • superl. πρώτος →
πρότερος
προαφέω • προαφούμαι med.
11b10 šā’a
προβίανυ 8b14 nāgāh
προδοχοίμα 6a18 balāgā
πρόσες 10b9 om. Ar. (in lac.)
πρός w. accus. 7a21, 9b13, 10a4,
10b3, 10b5 īlā | 6a6, 9a25, 10a20
fi | 10a2 ma’a | 12a2 ‘inda | 5b4
sem. amplif. dā’in ilā | 9b18,
10b28 n.t. | 4a10 om. Ar. (in lac.)
• πρός in προσκαταφημέω 8b7
adḥala
προσκαταφημέω 8b7 sem., etym.
adḥala fi ʿidādī w. gen.
πρότερος (a) comp. 4a15, 11b19
mutaqaddimun | 4b6, 7b14
aṣaddu taqadduman | 5a2
aḑdamu | 10b25 mā huwa
aḑdamu | 9b21 qabla | 10a7
aṣaddu bu’dan • πρότερον adv.
5b19 qablā ʿāddika (b) πρώτος
superl. 4b5, 4b10, 9a25, 9b10
awwalu | 5b9 aḑdamu | 7b9
ibtada’a bi- | 6a6 n.t. • πρώτων
7b17 al-awwalu • tō πρώτων
4b11, 5b8, 5b14, 5b27, 6a1
al-awwalu • tā πρῶτα 6b11, 9a12,
10a1, 10a6, 11b13 al-awā’īlu | 4a3,
4a5 om. Ar. (in lac.)
προχώρησις 10b1 (10b2) maddun
ilā
πρώτος → πρότερος
Πυθαγόρεος 11a27 Fūṭāqūras in
the gen., as the second element of a
gen. construction (iḍāfa)
πῦr 6b25 om. Ar. (in lac.)
πῶγων 10b10 liḥyatu

σοφός 7a14 λαζίμα | as-emended-from the MS reading οὖν ἀποκολυθεῖ 8a2* yath'a- wugūdāhā
συνάπτω intrans. w. dat. 4b2, 4b19 ittasala bi- | w. πρός 10a19 qurina bi- ... fi
συναντάω 7b20 šahida bi-
συναφή 4a14, 4a20 ittišālun | 4a9 om. Ar. (in lac.)
συνδέω • συνδέομαι med. in
συνέπτω • συνέπτωσα 5b18 irtabāta
συνεργήσις 5a3 muttasilūn
συνοράω • συνορά 8b24 (8b25a)
al-wuqūfū ālā
συνθέω 5a21 kuratun
σχεδόν 6a26, 8a24 kāda an | 8b20 ahlāqu bi- | 7a1 n.t. ut vid.
σχήμα 4a22, 9b26 šaklun
σώμα 6a26 gismun
τάξις 7a12, 7a23, 11b18 nižāmūn | in ἀττακτῶν 11b4 nižāmūn | 6b28 tartībūn |
τάττω • τό τεταγμένον 7b7 al-
τάχισις 6b17, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
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τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
τάχα 4b16, 5b19, 6a2, 6b20, 6b24,
te (continued) ὀὖν τε — ὀἷς — ἤμα
... τε καὶ — ἤμα — ἄλλως τε καὶ — ἄλλως
tέλεος 6a19, 8b27 καμιλύν —
tὸ τέλεον 7a9 al-kalamū —
tελεώτερος comp. 6b20 akmalū —
tελεώτατος superl. 8a7 fi ἑγατὶ l-kamāli
tελευτάω 10a25 intahā
tέλος 9a1 ἑγατυν | 9b7 in hend.
giene ὑγατιν γυγασδυ λαहā
tέχνη 7a4, 8a12, 8a20 σιν’atun
tίθημι 4b21 ἰ’ala w. two accus. |
11a3 wa’dā’α | 4b5 ἵ’taqada ἵθη anna | {6a17} κānā | 4a7 om. Ar.
(in lac.) — in περιτίθημι 4a23
wa’dā’α
Τίμωται (title) 6b27 al-kitāb l-
mansūbib ilā Ῥynchronize
τιμι ἐν ἐντιμότατα 5b22 sařafun | in
τιμώτερος 7b14 faḍīn
τίμος — τὸ τίμον 11a23 aš-ṣarīfu —
tιμώτερος comp. 7b14 ašaddu
faḍīn | 10b26, 11a10 (11a11)
ašafū — τιμώτατος superl.
6b28 ašafū | 11a12 om. Ar. (in lac.)
τίς, τι (a) indef. pron., encl. (see also
ἄττα) 4b6, 4b14, 5a1, 6a18, 6a20,
6b10, 8a19, 8b17, 9a20, 10a16,
10a19, 11a2, 11b24 (11b25) mā |
5a9, 5b18, 5b27, 6a22, 8a6, 8b15,
8b23, 8b24, 9a27, 10a22, 10b19,
10b27, 11a1, 11b15, 11b26 ša’y’un
| 6a16, 6b24, 7b10, 7b22, 10b24
insānun — τινές 4a19, 4b5, 7b2,
9a19, 10a8 ba’du n-nāsī — trans.
in context: 11b16 imāmūn | 6a3
mawdū’īn — morph.; transl. by the
indef. nunciation of the noun: 4a13
iṭtisālūn (4a14) | 6b9 bi-saḥwatin
wa-taḥawwūqin | 7b19 sabāban | 8a20 muḥsakālatun | 8b9 ḥikmatun
| {9a15} ḡīsan (mistaken parsing
of the syntax) | 9b7 mabādī’u
| 10a27 bi-ḏurarātūn | 10b11
mawdī’u | 11a23 (11a24) qalīlan
‘ażīzan — synt.; transl. by the act.
part. of the verb whose subject it
is: 5b1 qā’ilun | 5b19 bāḥiṭun |
6a6 nāzīrūn | 9a23 qā’ilun | 11b21
mu’taqiḍun — transl. by partitive
min: 6a5 mīn w. foll. gen. of the
noun that introduces the encl. |
{5a9} n.t., but apparently present
in the sem. amplif. (aḏāl) min
dašīka in the Ar. transl. (see the
note) | in the indef. expr. 6a23,
9b8 mawdī’u mina l-mawdī’ī
in the expr. ἐνακτον instead — 4b7, 5b11,
5b15, 6a17, {7b12}, 8a8, 8b18,
10b21, 10b28, 11a16, 11a19, 11b2
n.t. | 4a4, 4a10, 10b16 om. Ar.
(in lac.) (b) interr. pron. τίς, τι
(b1) abs. 4a17, 9a26, 10a2 mā |
5a25, 8a22 li-mā | in ἐν δυῖ τι
5b11, 7b8 mā in li-mā | 4b11
ayyu w. gen. | 9b19 ayyu šay’in
| 5a15, 9b3, 12a1 ayyu l-ašā’ā | 8a2* in (in the MSS, emended
emended to ἐν τι ἐν τί τι ἐν τί τι)
τοῖα in τοῖοτος 9b14 šibhu w. gen.
| 7a14 min
toioðde 8a8 ἡδὰ llaðī anā ἡdkirūhū
| 11a3 ἡδὰ
toioðtós 5a2, 8a27 ἡδὰ | 4b18 ἀγα
ẖádā l-maḏrā | 5b23, 6a1 ka-
dašīka | 1b17 mīṭla dašīka | 7a14
min dašīka | 9b14 ašbūhu ἡδίθη
mina l-umūrī | 11b21 n.t. | 10b16
om. Ar. (in lac.)
toitoñ 5b25, 10b11 mawdī’u | 6b1
makānūn
τοσοῦτος 6α27 βι-καιδρι μα ... ωα- ...

dalika

tουλάχιστον — ἐλάχιστος

τρόπος 9α20, 9α23 (9α24) γίθατον
9α12 ωάγεν tμ | 10α8 fαννμ

—— τρόπον τινά 5α16, 7β19-20,

β96 ʿαλά ωάγην κινα l-νυχύι | 10α19 ʿαλά γίθατον κα

tοφή 1οβ17 γιδά un

τυγχάνω 11β14 ιτίταφαν | 6α22 m

σαʾνιθί an yakūna — χαλός ἐτυθεν
11α25 ʿαλά κανβαγί
tό abs. 9α19, 9α22, 9α23 m

τα ωιτικι | 5β28 m qηβαλι | 8α13 bi- |

{10α25} n.t.

ὑγρότης 1οβ12 βαλλω

ὑλή 8α9 mαδδατον | in ὑλικός 7α7

mαδδατον | in gloss 7α8 om. Ar. | 11α21 n.t.

ὑλικός 7α7 μυσάρικυν l-μαδ-

dατι

ὑπακούω 11α15 ατά

ὑπάρξω 6α11, 8α16 κανα | 5β3

υωγύδων | 8α17 κανα mαωγ-

dαν

ὑπεναντίος 5α16 μυταδάδδων

ὑπή w. gen. 6α13 ἕ | 10α22 ἅθτα

γυλάμαι | 4α2 om. Ar. (in lac.)

ὑπερήπατος 6α3 tαθάττα | 8β9 sem. 

amplif. 

tagαώαζα κυλα θαδίσιν

ὑπερέχω 11β6 فاءλα ʿαλα

ὑπεροχή 4β14 fαδλων ʿαλα

ὑπό w. gen. 1οα20 ʿαν | 5β24

λαζιμαὐου ʿαν | w. accus. 4α16,

8β18 ῥα | 9α13 sem. amplif. 

dαβίλατον tαθτα

ὑποβαίνω 10α3 tηθατα

ὑποβάλλω 8β12 awqαʾa

ὑπόκειμαι — υποκείμενος 9α9

mαυω ʿun

ὑπολομηβάνω 9β24 ʾiτακαδα ʿι

ὑποτίθημι — υποτιθεμα med. 6β23

wαδαʾ | 11β22 ʾiτακαδα

ὑπερέχω 4α15 mυταʾαβήρυν

ὑψηλός — υπηλότερος 5α12 ʿαλα

φαίνω — φαινείται pass. imper. 4α21

huwa μιν(μα ...) | 7α1, 11β12 qαδ

ναγιδυ

φανερός — φανερόν 4β22, 5α20,

8β10 (8β9) βαγγυιν

φάρυγξ 11α10 ḥαγγαταν

φημι 4α19, 5α26, 5α28, 5β16, 6α20,

6β27, 7α15, 8α7, 9α19 qαλα | 4α4

om. Ar. (in lac.)

φειδτός — τα φειδτα 4α16 al-

ασηαυ l-καβιλατου l-θαςαιδι

φθειρω [6α14] κανα βωταν

—— φθειρομαι med. 6α8 κανα

βωταν | in φθειρότς 4α16

φασαδων

φθορά 1οβ4 φασαδων

φορά 5α16, 9β25, 10α8 ἱαρακατων | 1οακυλοφορία 5β28 ἱαρακατων

φονέώ — φονών 6α19 al-ʿaqīlu —

το φονείν 9β5 l-μα qυλι

φυσικός 5α24, 10α8 ταβί ιγγυν

φύςις 4α17, 4β2, 4β9, 4β20, 4β23,

5α2, 7α18, 8α22, 8β8, 9α13,

9β20, 10α2, 10α6, 10α10, 10β22,

11α5, 11α21, 11β6 (11β5),

11β25 ταβί atun | 7α5 ταβί | 4α3, 4α11, 1οβ14 om. Ar. (in lac.)

—— της φύςως 4β3 ατ-

ταβί ιγγυν

φυτόν 7α22, 7β4, 8β27, 9α14, 10α5,

10α13, 10β21 nαβατων

φύω — πέψφυκε abs. 9β24 mи saʾniθi

an

φῶς 8β15,1,2 daω un

φωτεινός — το φωτεινότατα 9β13

al-ασγαʾu llati fi ʿγατι ʿ-διγιʾi

χαλεπός 4β17, 9β16 saʾbun | 7α19

saʾuba — χαλεπώτερον comp. 9α26

άςʾabu

χάμος — χάριν adv. accus. w. gen.

5α17 lι | 1οβ19, 11β15 mи agli

w. gen. | 11α13 tαηαγηaʾa βi-

χειρον — το χειρον 8α24 al-ά}else

7β8 κα huwa āhasso

χέω — χεχμιμένος 7α14 mατυρον

χοω — χοομαι med. 8β6 istaʾmala
Greek Word Index and Greek-Arabic Glossary

\( \chi\omicron\varepsilon\iota\omicron \) (or \( \chi\omicron\omicron\epsilon\omicron\omega\)) in ἀδελϕός εις 420
in hend. ihtiyāġun ilayhi wa-
ntifā un bihī

\( \chi\omicron\epsilon\omicron\omicron \) ➔ \( \chi\omicron\epsilon\omicron\iota\omicron \)

\( \chi\omicron\nu\iota\omicron \) imper. 6b23, 10a24 yanbağī an
χονός 6b3 zamānūn

\( \chi\omicron\omega\omicron\alpha \) 5b22 makānūn | 11a24
mawdī’un

\( \chi\omicron\omicron\iota\zeta\omicron\omicron\omega \) ➔ \( \chi\omicron\omicron\iota\omicron\iota\omicron\iota\omicron\iota\omicron\omicron \)
pass. 10a15
sem. metathesis; pass./act. trans-
formation fāraqa ➔ χεωνομένος
4a12 munfasīlūn ‘an

\( \chi\omicron\omicron\iota\varsigma \) 8a27 ‘alā l-infirādī

\( \psi\upsilon\omicron\varsigma \) 6a20 ḥīṣṣatun

\( \psi\upsilon\omicron\iota \) 5b1, 5b3, 5b9, 6b2 nasfūn ➔

\( \psi\upsilon\omicron\iota \) in ἀψυχός 5b2, 5b6, 7a17
nasfūn ➔ \( \psi\upsilon\omicron\iota \) in ἀψυχός 7a17
nasfūn

\( \omega\omicron\iota \) {10a17} Ar. read tōde for ωδί

\( \omega\omicron\iota \) (a) adv. (LSJ A.II) 5b6 ‘alā ḥalīn
| 7a15*, 10a8 ‘alā mā | 8a10 ‘alā
anna | 7b11, 11b13 ‘alā tāriqī
w. gen. | 7b12 tāriqī w. gen. |
8a18 ka-anna | 11a7 (11a8) ka-
in ka-dālika | 4a4, 10b14 om.
Ar. (in lac.) (b) conj.; w. subst.
clauses, “that” (LSJ B.I.1) 4b21,

Translation of Greek Morphology, Syntax, and Semantics

\( \alpha \) - (alpha privative) in ἀκίνητος 4b22, in ἀδεκτος 5b18, in ἀόρι-
stoς 6a24, 11b2 (11b3), in ἀμορ-
φος 6b24, in ἀγνωστος 9a19,
9a22 ḡayru w. gen. | in ἀψυχός
7a17 ḏāimin li-| in ἀπωννοτος
5a4, in ἀνήνυτος 5a16, in ἀπο-
νδετος 5b18, in ἀζήτητος 6a3, in
ἀμερός 8a3 ὥω verb or part. | in ἀνωτία 11a20, in ἀπειρον 11b3,
in ἀγατον 11b4, in ἀμορφία
11b4 ḏūrūgūn ‘an ➔ sem. metath-
esis; neg./affirm. transformation

\( \dot{\alpha} \) - (acute privative) in ἀκινήτος 8a23, 7b20, 8b5, 8b12, 9b14,
10b27 anna ➔ 6a21, 8a26 inna
(after qāla) ➔ w. inf. (LSJ B.II.3)
ৎς ἤτειν 7a16, 7a18 māṭālan | 11b4 bi-l-ḡumlāti | 4b20 min
l-qawli ➔ 8a1 sem. amplif.
qawlu lāḥa qīla fīhī inna (c) w.
part., expressing reason or motive
(LSJ C.I) 5b13, 6b26, 7b16
min qibālī, min qibālī anna | 7a8,
7b14, 9a7 id | 8a3 Ḩattā | 4a7 om.
Ar. (in lac.)
ৎς ēv 8a5 bi-mānẓilat w. gen. | 9a7
where ēv is not transl. and ৎς is
merged with the foll. circumst.
part. as id

ὀσούτως 11a13 ka-dālika | 10b20
‘alā miṭālīn wāḥidīn | 6b5 in
context lam yādūr dālika

฿ςτεϕ 4a16, 5b3 ➔ | 9a16 ka-
mā | 10b7 ka-anna | 11a23
mitlā | 6b10, 10b22 ‘alā mā
| 7a14, 9b12 bi-mānẓilat w.
gen. | 5b18 min tāriqī anna | 6a14 aḥlāqu bi-
| 4a11, 6b25,
10b14 om. Ar. (in lac.) ➔ ฿ςτεϕ
₿v ēi {4b15} ‘alā mā ḥuwa
‘alayhi

฿ςτε 4b3, 8a25 Ḩattā | 5a4 fa-
(yāġību) | 5a19 fa-(yāḵūn)
-tivos suffix indicating relation or ability in *εφετυχος* 5b11 δυ w. gen. | δυναμικος 6b25 ασβανυ bi- | ὑλικος 7a7 μυσαρκυν li-

-τος suffix indicating descent in *θειος* (in *θειοτερος*) 5a10 σαβινυ bi-

-τες suffix of verbal adj. 4b7, 4b12, 7b13, 8a20, 10a17, 11t2-3 qad yanbgi an | 4b21, 9a11, 9b3, 9b19, 11b24 yanbgi an | 9a24 bağiya an | 5a11 *transl. by the subj.* in an yurfa’a an | 5a10 n.t.

-τος suffix of verbal adj. in ουνυδετος 5b18 μυθαμυλυν li- | θουατος 4a16 qablyn li- | ωζητις 6a waqa’a fi | πιτος 1b27 yaqibun | morph.; *transl. by the reflexive and pass. meaning of the verbal Form II pass.* (tu’ila) and verbal Form V act. and pass. (tafa’ala, tufu’ila)

δωντς 5a11 taqsimun (pass. sense of the masdar) | ωντς 5a2 μυτανσαωανην ilal | ἄπαυτος 5a4 lá yatafataru | δωντς 5a8 μυταγαζζιν | μειυτος 5a11 taqazzu’un

-ως adj. suffix 7b18 δυ

-υς adv. suffix in *ομοιος* 5a26, 6b8, 7a4, ὄσυντος 10b20, ούτος 5a10, πολλαχος 8b9 ἀλα

accurative, adverbial, in τρόπον 10a19 ἀλα

accurative, of respect, in τα μεν/τα δε/τα δε 9a8-9 fi in fi/wa-fi/wa-fi active participle; morphology of, in λεγον 5a13 man

comparatives, morphology of, 4b6, 4b18, 5a12, etc., *transl. by the a’al pattern

dative, *transl. by bi:* δυναμει 4b14 bi-quwwatim | το νο

9b14 bi-l’aqili | ὑναγηκη 10a26 bi-daruratin | μορφαις και ειδεσιν και δυναμειν 10b22-23 (10b23a) bi-ς-ςυωραι wa-l-

anwai wa-l-quwaw萨transl. by fi: τοις ἄφοεσιν 10b8 fi l-δυκυταιρι

| ἐνιος 10b10 fi ba’dıhα | ωζωις 5b5 fi l-χαυανη transl. by li-: τοις ειδεσιν 8a18 li-ς-ςυωραι | ωζωλοις 8b3 ba’duha li-ς-ςην

| τη διανοισ 8b12 li-ς-ςκρι | ἦγιν 9b6 lanα | τοις ωζωις 10a17 li-

l-χαυανη | τοντος 10b7 l-

χαυαν | transl. by ἀla: τοντος 9b27 ἀλαυημ transl. by min: τον ουτωμαιτω 10b27 (10b27a) min δατηα | τη περιγορος 10b27 (10b28a) min ἀρακατι w. gen. transl. by hawla: γαυη (5b17) hawla l-αρδι transl. by nasaba ilα: ἐμψυχοις 5b6 tunsabul ilα anna lahα ανφους future tense, in νυνηος 5a5 ἁκυνυ (μυναρηκαν)

genitive absolute 4b18, 8b18 id | 5a24 lamman | 8a17 law

genitive after a comparative adj. 5b15, 5b27 min

genitive of belonging, transl. by fi: ὅν 9b23 fi-μα | της γης 11b14 allati ta’ridu fi l-αρδι transl. by li-: τον ἐνεκα του 11b26 li-μα huwa min αγλη σαιηθ | της ... ὄμης 11b26 (11b27) l-li-καρακατι

genitive of comparison and ruling, transl. by li-: τα ἄδια δον θουατον (sc. προτερον) 4a16 tetaddumnu l-aşiyai al-azaliyyati li-l-aşiyai l-qabili l-li-fasadi

genitive, partitive, transl. by min: των μειυστον 8a6 mina l-aşiyai l-guziyyati | των μεν αούηθηνων ... των δ’ ἄλλων 11b18-19 mina l-aşiyai l-mahsusati ... min sa’iri l-aşiyai

genitive of possession used as a predicate (with eui implied) to denote duty or nature, transl. by ḥaqq w. gen.: ἔπιοτη-μης (sc. ἐπιτ) 8b25 ḥaqq l-

ma’rifi
participle, aorist, indicating antecedent action, transl. by τομμα preceding the main verb: προελθόντα ποιοκόθαι ταβλύγι ίλα ... τομμα τανξαίτ’
participle, circumstantial, transl. by ιδ: ποιον δα’αλα | όζ ... ἀπέχοντος 9α7 id kunnā nab’udu ■ transl. by idα: ζητούντων 8β15 idα am’annā fi l-baḥtī | ὑποδειγνοντι 10α3 idα ἁναττύ | λεγόμενα 11α4 idα qilat ■ transl. by idα an: ἐχοντα 6α5 illα an yακुνα ■ transl by bi: λαμβάνοντες 9β9 bi-an na’ḥud & transl. by ἄντα: ἐντιν 5α20 ἄντα ἱσατ | συνάγοντος 7α21 (7α20)

μνημιονεύω 12β3
νικόλος 12β2
ό, ἢ, τό - τής 12β5 - τῇ 12β1,
12β2 - τό 12α4 - τά 12α3,
12β3 - τόν 12α3 fi mà | 12β1,
12β2
οιον 12β4
ολίγος 12β4
ολος 12β5
ολως 12α5
οὑδέ 12α5
οὔτος 12α4
ποιούμαι 12α5
προγιματεία 12β5
προδιασφορία 12β4 qάμα bi-ḥuγαgi
Αρισττάλις
τις 12β4
φυσικός - φυσικά 12α3, 12β3 ατ-ταβήταu

Index of Words in the Scholium

ἀγνιέω 12α5
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eἴμι 12β3, 12β4
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Νικόλος 12β2
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οιον 12β4
ολίγος 12β4
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ολως 12α5
οὑδέ 12α5
οὔτος 12α4
ποιούμαι 12α5
προγιματεία 12β5
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Αρισττάλις
τις 12β4
φυσικός - φυσικά 12α3, 12β3 ατ-ταβήταu
2. Arabic Word Index and Arabic-Greek Glossary

The Arabic word index and glossary is arranged according to the Arabic roots, except for certain compound but common words, such as allaḍī and lammā, which are listed alphabetically for the sake of simplicity and easy location, as in GALex. Within each root, the discrete entries follow the order of the verbal stems, identified through the corresponding Roman numeral in parentheses, each of which is followed immediately by its maṣdar and participles. At the end of the verbal stems follow derivative nominal forms in order of their length and complexity, as in WKAS and again as in GALex. Substantives enclosed within parentheses indicate that the word in question occurs in the text of Theophrastus in the plural (given right after the parentheses) but not in the singular.

The index and glossary includes all the words and particles that occur in the Arabic translation of the text of Theophrastus except for the article, which is listed only selectively to illustrate its various uses in the translation, and the attached pronouns, which are not listed at all.

The principles that guided the compilation of this glossary are those employed in GALex, the introduction to which is again recommended to readers for their orientation. The abbreviations and signs in this glossary are the same as those used there (though the layout is necessarily divergent) and in the preceding Greek-Arabic glossary, to which the reader is referred.

The compilation of GALex being a long-term project, the completion of which still lies in the inscrutable future, it is hoped that the Arabic-Greek glossary of Theophrastus presented here, containing as it does, despite its brevity, a representative sample of terms from the entire alphabet and especially the particles and other service words, will provide a blueprint for the complete GALex and a preview of its contents and potential use.
`a

a/aw 8a10*–11 ὁπτέον/ʹη

(GALex I,2 §1.1)

ty

ατά (III) 11a15 ὑπαχοῦω (GALex I,29)

gl

ἀγλυν = μιν ἀγλύ ἱδ’il 10a22, 11b26 ἤνεκα τοῦ (GALex I,51 §1.2) | 10b19 τοῦ χάριν | 11b15 τίνος χάριν (GALex I,52 §1.3)

bd

ἀχαδὺν ὃς in οὐθείς

(cf. GALex I,59 §1.1) = ἀχαδά w. ἀ: sem. amplif.; add. acc. to sense in lammā ἀχαδα ἐφ’ l’kalami ἐφ’ t-tawalludi 6b14 κατά τὴν γένεσιν (cf. GALex I,80) = ἀχαδα w. min 6b22 sem. amplif. for ἁπά

μα’χαδυν 6b18² sem. amplif.; add. acc. to sense (GALex I,90)

hr

μυτα’αχίρυν (V) act. part. 4a15 ὁπτεος (GALex I,93 §1.1)

ἀχαρὺ (a) abs. 4b6, 6b4, 7b23, 10b6, 10b19, 11b6 (11b7) ὁπτεος (GALex I,100 §1.3.1) | 4b13, 5a1, 8a5 ὄλλος (GALex I,97 §1.1) (b) sem. amplif.; modifying a subst. add. acc. to sense: ἀσγ’α υχαρ.utf 6b4, 10b6 ἄτεοα = ἀλ-καυλο l-ἀχαρυ 9b13 ἑκάτεινος (c) in hend.

ἀχαρυ ἄγαρυ 6a22, 11b17 ἄλλος | 7b1 παντοτοιος = ἀσγ’α υχαρ utf ἄγαρυ ἄγαρυ 11b17 ἄλλα (d) in correlative constructions: ἀχαδυμα/ἀ-ἀχαρυ 8a10 ὁ μεν/ὁ δε (GALex I,65 §3.7) = κυλι wάχιδιν μινμα/α-ἀχαρυ 4a12 ἑκάτετος (GALex I,64 §3.4) = κυλι wάχιδιν μινμα/α-ἀχαρυ 5a18 ἑκάστος (e) morph.; transl. the sense of the comp. in hend. with an elative subst.: συλκυ σαβιν ὡρα ἢ ἀρκα βα τ’α ταδικι 4b17–18 σαβεστέρος ἢ πιστικωτέρος αχαρατυμ = βι-αχαρατυ 9a14 ἑκαστος (GALex I,96 §3)

d

id 11b9, 11b10 ἐπεο (GALex I,149 §3.2) | 7a8, 7b14, 9a7 ὡς (GALex I,150 §4.5) = synt. 5a6 (5a7) transl. the circumst. sense of the part. ιουν (GALex I,150 §5.1) | 9a7 transl. simultaneously the circumst. sense of the part. and ὡς in ὡς ἀπεχοντες = synt.; transl. the Gr. gen. absolute 4b18 οιους | 8b18 οιντον (GALex I,152 §5.2)

1²

id 9a10, 10a12 ὅταν | 10a5, 11a13 ει = synt.; transl. the gen. absolute 8b15 ἐτοιντον (GALex I,165 §3.1) = synt.; transl. the circumst. sense of the part. 4a9 ἐχοινς | 6a6 (6a7) ἀναφερον | 6a13 ἀφαιρεθεια | 10a3 ὑποβιντοντι | 10a15 χωριζόμενος | 11a4² λεγόμενα (GALex I,166 §3.2)

2²

id 8b16 ἀφα (GALex I,181 §3.1)

dy

τα’αδδα (V) 10b12 ὁπβοιμαι (GALex I,189)

rhwts 6a19 Ἀρχύτας

rd

ἀρδιν 5b17, 7b2, 10b4, 11b14 γη (GALex I,196 §1)

aρδιγγυν 10a28 περι τ’ην γην (GALex I,202)

erlyts 7a15b Ἡγακλειτος
aśl, azaliyyun 4a16, 9b24b ādīdoç
(GALex I,208 §1.1)
'sr
asrun • bi-asrihī 7a11, 8a6, 8a23,
1a22, 1b11 ǒloç | 1a39 פופ | 1a3 sem., etym. sūn in to
sūmān (GALex I,216–218)
'sl
aşlun • w. neg. lā ... aşlan 1b10 dé in
ǒūdē | 6a5 dé ēīz in ẓādeīç •
w. neg. lam ...aşlan 6b5 dé mīān
in ǒūdēmān (GALex I,231–
233)
Aflātun 6b11, 11a27 Πλάτων
'kr • ukuratun → kry (cf. Dozy I,30b)
'I
al- (article; selectiv references)
• transl. to w. inf.: al-wafā’u
4b17 to ṣūpūdūnu • transl.
to w. adj.: al-afdalu 11a6
to ẓāṣuṣōn | al-gayyidu
11a19 to ṣāṣāṣābun | as-ṣāṣīfū
11a23 to ṭāmūn • transl.
to w. part.: an-nizāmū 11a7
to ṣeṣṣeṣuṃu • transl. to w.
adv.: ad-dawāmu 11a7 to
ḍēi
'I
illā (in lā), illā an 5b1 ēī ẓī | 5b28,
1b19 ēī ẓī ẓāra (GALex I,250
§1) | 7a22–23, 11b21 ẓālīn
eī (GALex I,253 §3) | 8a17*
̲āllā (GALex I,255 §4) •
morph.; transl. the concessive
sense of the circumst. part.
6a5 ę̄χοντα (GALex I,258
§9) • in combinations lā/illā
→ lā, allāhumma illā an →
allāhumma
illā anna 6a27 ẓālīn (GALex I,264
§1) | 5b14, 8a14a, 11a14, 11b23
̲āllā (GALex I,264 §2) | 4a12,
6a23, 8a10 (8a11), 8a19, 9a7,
9b6, 10a19, 11b17 dé w.o.
preceding wēn (GALex I,266 §3)
| 5b6, 8b14 ẓīmoç (cf. GALex
I,267 §3.1.1) • /illā anna 8a12
(8a11–12), 8a15b, 10a6 ẓūn/dé
'Idy
allādi (a) transl. Gr. relative pron.
and adv. (GALex I,277–279
§A): 5a17, 5b10, 5b16, [6a4*],
7b21, 8a6 ẓoc • huwa llaḍī
gb5 ẓūnøu • allādīna 9b24b,
11b8 ẓūnø | 9b25 sem. amplif.
add. w. ref. to ẓūnø at 9b24b
• allāti minḥā 7b9 ẓ in ẓīeṣ
• hāḏīhi ṣalltā anā ḍākīrūhā
8a8 sem. amplif. for τοῦτο
• allāti qila fīhi inna 8a1 sem.
amplif. ẓoc • at-ṭariqū llaḍī bihi
9a10 paraphr. ẓoc • in expr.
as-sabab allāḍī laḥū ṣa23 ẓōz
| 10a1, 10a28, 10b23b ẓūn
ēneka • al-āṣyā’u ṣalltā yanbaqī
an nabḥāṭa ‘anāb 9b2 paraprph.
τίνον (b) introduces a relative
clause that transl. adj. and
other attributes in attributive
position (b1) transl. adj.
(GALex I,281 §5): allātī hiya
afdalu 5a20 ẓāṣuṣō • allāḍī lā
yatafattaru 5a3 ẓāṣuṣoṣoṣo (b2)
transl. part. (GALex I,281 §6):
allāḍī baqiya 5a1 ẓōṭoṇ (b3)
transl. prep. phrases (GALex
I,281 §7): allātī tālī al-wasaṭa
5b12 tā ṣepī tō ẓūnøn (b4)
transl. subst. in attributive gen.
(GALex I,281 §9): allātī ta’ridu
(fil l-arḍū) 11b14 ẓīz (γῆς) (c)
introduces a relative clause that
transl. the article in its subst.
making function (GALex I,281
§10): allāḍī 8b15, 8b24b1 tō •
allātī 9a15, {10a4} tō • allāḍīna
6a24, 9b21, 11a22 ẓī (d) sem.
amplif.; introduces a relative
clause that modifies the generic
subst. add. in Ar. to express the
subst. implied by the Gr. article
(GALex I,282 §11): al-amrū
llaḍī yahṣūṣahū 4b21 tō ẓīuṇ
`Idy: allādi (continued)
al-āgsāmu llati fi gāyatī š-
šarafī 5b22 tā ʾnīmiạngtāta ʿ-
sāʾ iru l-āsyaʾi llati tattašīl-
biḥā 6a17 tā ʾeqṣīṣ ʿal-
āsyaʾu llati tuʾlamu 8b22 tā
θeωρούμενα ʿal-asyaʾu llati
tušʾalu 9a3 tā ʾnī中科tā ʿal-asyaʾu llati
mulu 9b1 tā ʾnī中科tā ʿal-
āsyaʾu llati ti gāyatī ʾd-
diyāʾi 9b13 tā
φωτεινότατα ʿal-umūru llati
hiya āghallu qadrān 10a7 tā
xviiṭtātāta ʿal-ʾguzʾ u llaḍi lā
yataqazzaʾu 11b23 tā ʿtāmūn
(e) sem. amplif.; introduces
a relative clause add. acc. to
sense (GALex I,283 §12): 10b3,
10b11, 10b26

`If
maʾlūfūn (I) pass. part. ʿgāru
maʾlūfūn in hend. w. muqtan-
būn 9b5 ʿulkūṭīsī (GALex
I,284)

`Ih
ilāhiyyun 4b15b ʿθiχōs (GALex
I,309 §1.1.1) ʿal-āsyaʾu l-
ilāhiyyatu 6b9 tā ʿθeἰδα (GALex
I,311 §1.3.2)
allāhu 4b15a, 7b23, 11b8 ʿθeἰχος
(GALex I,313 §1) sem., etym.
asbahu bi-llāhi 5a10 ʿθeἰθcτoς
sem., etym. aḥāqqu l-āsyaʾi
bi-annahū llāhu 6a1 ētθeιτcτoς
allāhumma illā an 4b10, 6a10 ēl
mī ʿāχw (GALex I,251 §1.1b;
I,319 §1.1)

`Iy
ilā (a) abs. (GALex I,319 §1–
4): 5a9, 5a20 (5a19), 6b14,
7b8, 8a3, 8a9, 8a11, 8a14b,
9a3, 10a24, 11b9, 11b27 ʾείξ|
5a4b (5a5), 6a18, 6a23, 6b10,
7b7, 9a14, 9b8 mēχwī | 7a21,
9b13, 10a4, 10b3, 10b5 ʾποῖς |
7b22–23, 9b10 ʾπό | 10a5

āχw (b) sem. amplif.: dāʿīn
ilā 5b4b ʾποῖς min ... ilā
b25b12 ʾείξ ilā ... an yantahiya
9b2 ʾμχwī (c) with verbs and
verbal nouns: → anisa, →
balagā, → ḡtaqā, → daʿā, →
radda, → ṭsawwaqā, → ʿsrā, →
uṣṭarrun, → ḡdāfā, →
aqrabū, → ḡṣaḍa, → maddun,
→ māla, → nasaba, → intahā

`mm
imāmun 11b16 ʾtīs (cf. GALex
I,339 §1)

`m`
ammā ʿwa- (fa-)ammā ... fa-
4a23, 5a21a, 5b12, 6b4, 7a19,
10a23b–23a, 11a24, {11a27}
dē w.o. preceding mv (GALex
I,344–5 §2, 3.1) -/wa- (fa-)
ammā ... fa- 8b8–9, 11b23–
24 mēv/dē ammā ... fa-/wa-
(fa-ammā ... fa- 6a25, 7b6–9
mēv/dē (GALex I,341 §1.1.1)
- fa-ammā ... fa-/wa-ammā ... fa-
5a4b (5a6)–13 mēv ḡtī/mēv/dē
(GALex I,342 §1.1.2) (fa-
ammā ... fa-/fa-ammā ... fa-
6b11–15, 9b8–11 mēv ʿōn/dē
immā ʿimmā/aw 4b12b–13
ētī/ētī (GALex I,356 §3)
- immā/ω-immā 8b25b–
26 ḡtī/Ḥ (GALex I,352 §2)
| 9b11–12 ētī/ētī (GALex
I,353 §3) | 11b18–19 mēv/dē
(GALex I,354 §5.2)

`mr
amrun, pl. umūrun (a) transl.
pron. and pron. adj. (GALex
I,373 §25): 6a6 ʾαὐτός (cf.
6a13 where ʾαὐτός is doubly
determined by amr and nafs)
al-umūru kullūḥā 6a2 (6a1)
πάντα min ayyi l-umūrī
10a24 ποδέν (b) transl. Gr.
prep. (GALex I,375 §27):
10b17 πετī w. accus. (c) sem.
amplif.; stands for the subst.
implied by a pron. (GALex I,376 §32.1): hādā l-amru 4b20, 11b23 ōūtɔς | 8b8 ḍde (d) stands for a noun implied by predicate adj. (GALex I,378 §33): ōxeiɔn 10a10 amrun mulāʾimun ḥāṣsun (e) sem. amplif.; stands for the subst. implied by the article in its subst. making function (GALex I,378 §34): al-amru l-ladī yahuṣṣūhā 4b21 tō ḍafada l-umūri b51, {b58} tō ʾāḏiṣṭɔn - ʾāḏiḏlu l-umūri 6a4 tā ʾāḏiṣṭa - ʾaṣrafu l-umūri 6b28 tā ṭumūṭata - ʾaṣgaru l-umūrī 7a16 tūlāḏiṣṭon - amru w. gen. 7b3, 7b102 tō/tā ʿēbī | 9b25 tā kātā - al-amru l-ʾaḏalul-atūwa − amr w. ref. to ṭaḏlul-umūrī 9a4, 11a4, 11b5, 11b27 tō bēlṭıon | 11a2, 11b9 tā ʾāḏiṣṭon | 11a15 tā ʾēb - al-ʾaḏassu mina l-umūrī 8a24 tō ʾeṣiṣ - al-umūrī l-kulliyatu 9a1 tā ʾaḏabūl - al-umūrī l-ʾuṣiḏiyatu 9a2 tō ṭe mēhe - baʾdu l-umūrī/wa-baʾduḥā/wa-baʾduḥā 9a8–9 tā in ṭa ṭēv/tā ṭe - ʾaṣbāhu ḥāḍiḥi mina l-umūrī 9b14 tōn ṭoʾ usīn (f) sem. amplif.; add. as the implied object of a transitive verb (GALex I,380 §35): bi-μiṣasī l-amri 9b15 ṭiynīšt (g) sem. amplif.; add. as to help in the transl. of adv. (GALex I,388 §43.1): kāna l-amru ka-ḏalika 4a17 ōūtɔς (h) partitive use (GALex I,390 §45a): amru s-samāʾi 6b4 ōūʿaḥī - amru l-maḥāʾdiʾi 6b23, 7b10 (7b9) ʾāḏci - amruḥā (sc. al-maḥāʾdiʾi) 7b10 w. ref. to ʾāḏci at 7b9 - ʾumūrī ʾ-ṭabʾi ati 9b20 ṭiš ʾφύςεως - amru n-naḥātī ... amru l-ʾanfusī {10b21,2} ʾφύςεως ... ʾφύςεως (i) individuating use of amr (GALex I,392 §46): al-amru l-aḏalul 7b11 bēlṭıon - mabdaʾu l-amri 9a11 ʾāḏçi - awwalu l-amri 11b24 ʾāḏçi (j) sem. amplif.; 7b18, 8a14a, 8a19, 9a26, 9b17, 10a12, 10a23b, 10a28 al-amru add. to refer to the general subject under discussion - sem. amplif.; add. acc. to sense 5a17, 7a4, 11a8 (k) in paraphr. and interpr. uses (GALex I,393 §1): wa-ka-ḏalika yaḏrī l-amru 7a2 ʾaḏi - al-umūrī 7a15a interpr. κόμος

'myrws 5b16 ʾΩμηρος

an (a) introduces a nominal clause which transl. Gr. inf. (GALex I,408 8A): an yakūna 4a13, 4b9–10, 5b18, 7b16, 7b20 (7b21) ēvı̄a | 6a11 ὑπάρξειν | 4a14, 4b17, 7a11, 8a17, 9a21, 9b6 sem. amplif.; add. for implied ēvı̄a - an Ṽuṇḍa 4b12a ὑπάρξειν - ἀλλὰ τακύνα tataharraku 5a18 tō ṭi (scil. καὶ ὑπάρξει τὰ υπάρξει) - an nاغما 7a20 τὸ περὶ ἑνὶν - an nakūna nabhaṭu 8a27 (8b1) ἐστεῖν - an ūṇaṭa 8b14 προβαίνειν - an nulahhisa 9a25 ἀφοίρει - an yuqāla 8b12 ἐστεῖν - an nudrika 9b8 (9b9) ἔστεῖν - an yuqāṭu 9b27 (10a1) ἐστεῖν - an yaraṭnā 11b11 ἐναφεύγεται (b) paraphr. an yakūna 8a15a ἐν ἑνι - an nakūna ἐν ἑνι ὑπάρξει 4b13 ὑπάρξει σc. ἡμᾶς ἐστι (c) add. as required by Ar. synt.
\'n: an (continued)
\$a1, \$a11, \$b1, \$b9, \$b19, 614, 6a16b, 6b20, 6b10, 6b20, 6b24, 7a10b, 7b7, 7b17, 7b18, 8b11, 8b21, 9a14, 9b9, 9b13, 10a5, 10b25, 11b17
(d) in various phrases: illā an → illā, allāhumma illā an → 'lh, ḥalīquin an → ḥlq, min ša'ānihī an → šn, lahū an → li- for its use foll. verbs see the verbs themselves

anna (a) transl. Gr. conj. (GALex I,416 §A): 4b21, 4b23, 7b20, 8b5, 8b12, 9b14, 10b27 ōζ | 8b9, 10a13, 11a5 ʿtī | 11a6 add. w. ref. to ʿtī at 11a5 | 11a14 ʿtītī (b) introduces nominal clause transl. subst. (GALex I,420 §7.1): 4b5, 5a16b, 5b6 (c) introduces nominal clause transl. inf. (GALex I,421 §8): 5a4a, 5b3a, 8a15b², 8a21, 8a25, 10a25, 10b24b, 11b18 sem. amplif.; introduces nominal clause transl. the implied eīva 5a8, 6a1, 8b4, 10a22, 11a10 (d) add. as required by Ar. synt. 6a22, 6a16b*, 6b10, 6b12, 6b13, 6b18, 7b19, 7b20, 8a26, 9a4, 9a26, 9b24b (e) in various phrases: illā an → illā, hattā anna → ḥattā, wa-dālika anna → dālika, min ūrīqī anna → ūrīqīn, min qibali anna → qibalūn, (hādā) ʿalā anna → ʿalā, ka-anna → ka, li-anna → li-

in (a) abs. (GALex I,438 §1): 4a17, 4a18, 4b2, 4b6, 4b11², 5a5, 5a28b, 5b7, 5b14, 5b20, 5b26b, {7b8}, 7b11, 7b12, 8a20, 8a21, 8b17, 9a6, 9a18, 10a13, 11a18, 11b20 eī | 5b23 eīteq | 8b14 eīv in xāw sem. amplif. 4b11¹ eī (implied from what foll.)

in/wa-in 5a17–18 eīte/eīte (GALex I,447 §4.1) sem. amplif.; add. acc. to sense 8a14a
(b) wa-in 5b6, 7a18 nūteq (GALex I,462 §1.3) 8b14 xān (GALex I,461 §1.1.3) | 8a2* eī the MS reading, emended to tī in the edition (c) w. neg. eī miḥā → illā

in là → illā

inna (a) transl. conj. (GALex I,466 §A): 6a21, 8a26 ōζ n (al-qawlu) llaḏī qīla fīhi inna 8a1 sem. amplif. ōζ n after qāla 6a28 ʿtī (b) add. as required by Ar. synt., after qāla 5b16, 6a14, 6b16, 7a6, 7b7, 7a10b, 7b11, 7b12*, 8a7, 8b2, 9a23, 9a24, 9a26, 9b6, 11b8 add. as required by Ar. synt. 4b17, 5a22, 5a28a, 5b1, 6b11, 8b25a, 10a18, 11a18b, 11a27, 11b5

fa-inna 4a18, 5a10, 5a17, 5a22b, 5a27a, 5b23 (5b24), 6a1, 6a3, 6a19, 6a21, 6a25, 6b7, 6b17, 6b27, 7a17, 7b11, 7b17, 8a2, 9a1, 9a4, 9b4, 9b21, 10a28, 10b18, 10b24b, 11a22, 11b20, 11b15, 11b27 γῶ (GALex I,484 §1.1) | 10a7 xai γῶ δῆ | 5b5 epei | 7a5b-peq | 8a3) πλήν | 9a16* δέ | 7b4, 9b25 sem. amplif.; add. acc. to sense fa-inna qad nāfidu 10a25 xai δη

innamā (a) rendering the emphasis expressed by inverted Greek word order (GALex I,494 §8.3): 4a21b, 6b21, 7a8, 9a1 (9a1–2), 10b27a (b) highlights the emphasized word in the Greek sentence (GALex I,501 §11): 8b21 ḫaww | 8b23 xatā (c) innamā ... faqat 4a18, 6b15–16 (6b16), 6b17, 7a7
μόνον (adv.) (GALex I,503 §12.1b) • innamà ... wa-là
5a25a òu ... āllā. (d) sem.
amplif.; add. acc. to a perceived emphasis or restriction in the Gr.
5a18, 5b6, 5b7, 5b14, 5b26b, 5b28, 6a1, 6a18, 6a23,
6b16, 8a13, 8a23, 10a22, 10b18, 10a12

'n'
anā pers. pron. • periphr.; mā anā
cqvilūhū ... a'nī 5b10 ōuτος |
6a5 ōde • sem. amplif. ḥādihi
llāti anā dākirūhā 8a8 tūade
(cf. GALex I,513 §6)

'ns'
anīsa (I) w. īlā 5a2zb* ōižēiōs (cf.
GALex I,523–524)
nāsun • al-kāti.ru mina n-nāsi
6a23 oī pōlloi (GALex I,536
§14.4) • bar ĩ du n-nāsi 4a19,
4b5, 7b2, 9a19, 10a8 tinēz
(GALex I,535 §13.1a) | 6b15 oī
insānūn 6a16b, 6b24, 7b10, 7b22,
10b24a tīs (GALex I,546 §5)

'w'
aw 4b18, 6a5, 6a15b, 8a512, 8a6*
(ň in the MSS, emended to
ň in the edition), 8a13, 9b2,
9b7, 10a8, 10a19, 11b6, 11b7
(ň in the MSS, emended to ň
in the edition) Ŀ ī disjunctive
(GALex I,591 §1) | 4b11b xāi
(GALex I,594 §3) | 6a16a
paraphr. tǎxā dē • {5a5} Ŀ
comparative •—/aw 8b19–
20 te/te (GALex I,593 §2)
•
a/aw → a • immā/aw → immā
•/hal/aw → hal

'w'rybydys 8a26 Ėwηπίδης

'w'l
(ālatun) pl. ālātun 7a5b ŏrγανον
(GALex I,614 §1.1)
awvalu pl. awā'īlu, uwalu 4b5,
4b10, 9a25, 9b10 prōτος
(GALex I,630 §2) | 9b9,
11b24 ŭργή (GALex I,624
§1.1) • al-awxalu 4b11a, 5b7
(5b8), 5b14, 5b27, 6a1, 6b11,
{7b17} Ŀ τo prōτoν • al-awā'īlu
9a12, 10a1, 10a6, 11b13 tā
prōτa
(ayyilun) pl. ayā'īlu 10b12 Ėlāfōς
(GALex I,655 §1.1)

'y'y'
ayyu w. gen. 4a18, 5a151, 6b23,
10a25 ποίος (GALex I,688
§3.1) | 4b11b, 5a152, 9b3,
9b19, 12a1 tīc, tī (interr.)
(GALex I,681 §1.1) • ayyu
mawdīn 9b2 πόος (cf.
GALex I,692 §4) • min aygi
l-umūrī 10a24 πόθεν (GALex
I,695 §6.2.1)

iyyā w. attached pron. 10b2 sem.
amplif.; transl. an accus. object
implied in Greek (GALex I,701
§1)

'y'd'
aydān (a) transl. xāi: 5a4b*,
5a23, 5a27a, 5b10, 6a1, 6a4,
6a12, 6b16, 7a4, 7b23, 8a8,
8a21, 8b19, 9a16*, 9b16,
11b7, 11b13 xāi (GALex
I,704 §1) • wa-ma'a ālīka
aydan 9a63 sem.amplif. xāi
• sem. amplif.; add. acc. to
sense 4b17, 10a17, 12a1 (b)
transl. ētī: 7b22, 9b25, 10b7,
10b24a (10b20) ētī (GALex
I,715 §3) • mimmā yāgrī
aydan ālāh l-māgrā 10b11
sem. amplif. ētī (c) in other
uses: 7a20 πάλιν αǜ (GALex
I,720 §4.4) | 7b18 ālālōς |
11b10 ēφ' ósōn | 7a22 mā
huwa aydan 7a22 ēπτος (self) •
in combinations: wa-/aydān
→ wa-, wa-/wa-aydān →
wa-

'y'n'
ayna 7b7 πόος
bi- (a) transl. Gr. prep. and particles (GALex II,2 §8A):
4b16, 5b6, 8b14 όδα | 5b1, 8b23, 9a2, 9a7, 9a21 3459x1 3459x1 xatá
w. accus. • bi-tariqi(n) 4b12b, 4b13 xatá w. accus. • bi-
manzilati (má) 6a24, 8a12, 8b3, 9a3, 10a12, 10b8, 10b11, 11a22 xatápe • bi-má
{11b1} γε epexegetic (emended to te in the edition) (b) morph.;
transl. the morph. of Gr. pron. adj. (GALex II,21.1 §19.4a):
bi-’aynihí 5a18, 8b24b, 9a4 ó outό (c) transl. the dat.
(GALex II,21 §21): bi- 8a13 τό • bi-quwwatin 4b14a, 5a1, 8a10 δυνάμει • bi-sahwatin
wa-tašawwúqin 6a9 έψεως και ορέξει • bi-l-γwahari wa-bi-
l-’adadi wa-bi-š-sūrati wa-bi-l-gínsi wa-l-muqáyasati
wa- ... bi-l-qismati 9a5-6 οῦόρια και ἁρμηνεύναι και εἶδει και γενεί και ἀναλόγως και
... διώξεις • bihi 9a22 οὐτό • bi-l-’aqli 9b14* τό νό • bi-
ḍarurátin 10a26 ἀνάγκη • bi-š-
ṣuwarí wa-l-anwáí wa-l-qawá 10b23a (10b22-23) μορφώς και εἶδεον και δυνάμεον
(d) transl. the adv. use of the accus. (GALex II,25 §22): bi-
manzilati má 4a21b οἶον • bi-qadrí má 6a27 οόν • bi-
l-’umlatí 11a18b τό ὄνον (e) morph.; transl. the adv. suffix
-ως (GALex II,27 §24): bi-l-
’umlatí 4a20, 8a19, 8b24a, 10b3, 10b10, 11b5 (δ)ως • bi-(wāqhin mina l-wuqáhi)
5a21 (οὐόρια)ως • bi-l-wāqibi 7b10 εἴκοσις (f) synt.; transl.
the circumstantiality implied by a circumst. part. (GALex
II,28 §25): bi-taharrukihi

5a5 xýnouμέονον • bi-annáhú
radda 6b13 ἀνάπττον • bi-an
na’íruda 9b9 λαμβάνοντες • iδά zálata ... bi-zawárihá 6a13
ἀϕωμεθειόται • bi-mísáí l-
amri 9b15 μύγνητα (g) helps
transl. primitive adv. (GALex
II,30 §27): bi-γayri w. gen.
8b16 άνευ (h) helps transl.
ός and derivatives (GALex
II,31 §28): bi-l-’umlatí 11b4
ός εἴτειν • at-tariqí llaí bihi
9a10 sem. amplif. πως (i) synt.;
in act./pass. transformation,
it introduces the subject of
the pass. verb: yubayyání bi-
šináí atí n-núqúmí 9b27 (j)
ἀστολογεῖαι δείχνουν (j) sem.
amplif.; add. acc. to sense 9a7-12,
9a24, 11a5, 11b2 (k) in expr.
bi-áharatin → ‘hr bi-asríhi → sw, ahhàqu bi- → hqq, ήλιqùn
bi- → ήlq, aśba bi- → swb,
awlá bi- → wly (l) w. verbs:
when introducing the object
of laysá → lys • see also the
verbs ibtada’a, ḥáṣa, šáhida,
ṣaadáqa, źaná, iqtadá, qafá,
qaraná, qasáda, qálá, kána,
tahayá’á, wátiqa, ittaṣála

báht
baḥṭá (I) (GALex II,62 §§1-2)
• abs. 8b1 ẓetéó • w. ’an
5b19, 8b11, 8b13, 10b24a
(10b23) ẓetéó | 9b3, 10a17
ẓetéó in ẓetétov | 11b24
séctetoíma | 9a11 metadoiów | 6a7 sem. amplif.; added to
express the implied verb of the
indirect question introduced by
πότεον
baḥṭun masdar (GALex II,66
§§1-8) • abs. 7b6 sçéψis
| 6a3 sem., etym.; transl.
ẓetéó in ẓeténtoc | in hend.
al-báḥṭú wa-t-tafíšá 8b15
ẓetéó • w. ’an 6b21,12 (6b22)
GREEK WORD INDEX

mubṣarun (IV) pass. part. 9a23¹ ήσατος | 9a23² ήσατος in ήσος

butlānun (I) masdar kāna
butlānun 6a8, 6a14 ήθειο, ήθειομαί
bāṭīlun act. part. 10a22 μήτην | 10b8 μάταιος bāṭīlān 7a14b εἰκῆ
abtāla (IV) 9b21 άναιψω | 9b22 sem. amplif.; add. w. ref. to άναιψω at 9b21

b'd
ba'uda (I) 9a7 άπέχω
bu'dun, pl. ab'ādun masdar 9b26, 11b1 άπόστασις | 9a7 cogannte accus. for ba'uda transl. άπέχω | 10a7 πρό in πρότερος
b'a'ada (III) b'ā'ada kaṭīrān 11b27 μακρός
dab'a (I) 10a24 άφοχοι (GALex II,70 §1)
ibtada'a (VIII) w. bi- 7b9 πρότος (GALex II,106 §4.1)
mabda'un, pl. mabda'di'u 4a15, 4a16, 4b9, 4b15b, 4b19, 5a5, 5a6, 5a19, 6a15b [6a16], 6a16a, 6a17, 6b12, 6b14, 6b16, 6b17, 6b19, 6b21, 6b22, 6b23, 7a4, 7a6b¹, 7a13, 7a19, 7b9, 7b12, 9a11, 9a13, 9a25, 9b6¹, 9b7 (9b8), 11b7, 11b27 άφοχη | 9b7 | w. ref. to άφοχη | 7a7 τάς w. ref. to άφοχη | 6b26 αιτεί w. ref. to άφοχη | 7a6b² sem. amplif.; add. to complement πάσος w. ref. to άφοχη (GALex II,114 §1) | 9b3 αίτια

b'd
abda' (a) abs. 7a6b, 7a7² oí | 6b16, 10b10 ένιοι | 6a11 έπτα | 10b12 οίδε | 10a6, 10b11 sem. amplif.; add. acc. to sense (b) in expr. ba'dun n-nāsī 4a19, 4b5, 7b2, 9a19, 10a8 τινές | 6b15 oí ba'dun/ba'dun 5b25b, 8b3, 8b17, 10a2, 12a2 άλλήλων ba'dun w. gen./wa-ba'du w. gen./(wa-ba'du w. gen.) 4a15, 6a28–6b2, 9a8–9, 10a26 τά μέν/τά δέ/(τά δέ)

bg'y
inbāgā (VII) yanbāgā an 4b7, 4b12a, 4b21, 7b13, 8a3, 8a19 (8a20), 9a11, 9b2–3 (9b3), 9b19, 10a17, 11a2, 11b24¹,² morph. -τέον | 6b23, 10a24

bhr
bahrun 5b17 άναξον | mā'i l-bahrī 10b1 άναξον (GALex II,70 §1)
bgý: inbagá (continued)
χοή | 1oa25 sem. amplif.; add.
w. ref. to χοή at 1oa24 ■ ‘alā mā yanbağí 11a25 ṣallāz ʾetuyeh

bqy
baqiya (I) 5b18 λουπόν | 9b27
κατάλοιπον ■ baqiya an 9a24
-τέον in πειράτεον

baqāʿun maṣdar 4b16 ḏiṣmīnō

bl¹
bal 5a9, 10b18 ἄλλα | 8a24, 9b22, 11a15 μᾶλλον δέ | 10b21 καὶ μᾶλλον ■ layṣa
bi-wáḥidin bal akṭarū min
wáḥidin 5a16 (5a15) sem.
amplif. & metathesis; affirm. / neg. transformation ἀπλίνον

bl²
ballun (I) maṣdar 10b2 ύγροτής

blg
balāga (I) w. ʾilā 6a18 προέχομαι | 5b14-12 (5b13) διυξένομαι | 6b17, 7b7, 9a14 sem. amplif. μέχοι | 10a5 sem. amplif. ἔχοι ■ balāga w. bi- 6a23 ἔχομαι
bālīgūn act. part. 9a18 ἵκανος
ablāgū 5a14 ἀπλίνον

byḍ
abydaṭu 8b3 λευκός

byn
bayānun (I) maṣdar, w. ‘an 4b12b sem. amplif.; added as maʿāl muṭlaq to the preceding nūdīha at 4b12a
bayyana (II) 9b27 δείκνυμι ■
yarūmūn ʾan Ḩubayyina 6b9-10* πειρόμαι
bayna 4a13 sem. amplif.; implied by the foll. συναφήν (4a14) ittiṣālūn ■ bayna l-hayawānī wa-n-nabātī (7a22) mistranslation of συμφόλιμα ■ w. verbs → ḫāna
bayyinun 4a19-20 ἐνακόμιος | 4b21, 10a13 δῆλος | 4b23, 5a20, 8b9 (8b10) φανερός

tb'
tabiʿa (I) 8a2* ἀκολουθεῖόν | 11b16 κατακολουθεῖόν ■ in hend. tabiʿa wa-lažima 7a3
συνακολουθεῖόν

tht
tahta 4a16, 8b18 ύπο ■ in phrase
dāḥīlun tahta 9a13 ύπο

tdy
tadyyun 10b8 μαστός

ṭmm
ṭuṃma 10b25 δῆ ■ morph.; expresses the priority in time of aorist part.: προελθόντα πανευθαί 6a18 ῥαβλη ῥαμμα τανκατανόντα 6a23 ἀβληγῶνa ῥαμμα γυ’ατηλίνa

ṭmr
(אמן) pl. ʾimen 7b4 Καρπός

ṭny
ʿuṭnūwatun 6a25, 6b1, 11b3 δυάς

ḡbr
ḡbara (I) (5b17) ἐφύσμα

ḡrf
guṭtarifatun (VIII) act. part., in hend. w. ʾaṭaʿ ub̲un 10b1 ἀνάρρῳ

ḡrm
(ʾgirmun) pl. ʾaʿqrūmu ■ al-ʾaqrūmu s-samāwiyyatu 10a18, 11b19 sem. amplif. τά οὐράνια

ḡry
gara (I) (a) w. prep.: gara ʾalā 7a12 ἐν ■ in expr. as-sababu llaḍī ῥα μα ῥα γαρα ʾalā ma γαρα 9a28 τίνος ἐνεκα ■ gara bi-ḥasabīhi 7a6b κατά (b) w. maγρα: in γαρα ἡδα l-maγρα 4b19 τοῦτος | 9a4, 11a14 ῥουτος | 10a25-26 ἐχειν ῥουτος ■ ῥιμμά γαραῖ ῆδαν ῥαδα l-maγρα 10b11 sem. amplif. ἔτι (c) w. amrun:
in wa-ka-dālīka yağrī l-amru
7a2 kai • sem. amplif.; add.
acc. to sense 7a4 tağı rī l-umūru
| 11a8 yağrī l-amru (d) sem. amplif.: 10a26 add. w. ref. to
| 11a25 tağı rī l-umūru (e) sem. amplif.; add. w. ref. to
eघा (f)
| 11b15 add. acc. to sense (c)
in expr.: ga’ala naẓarāhū fi
6a6 (6a7) ʾanwāfīr w. prōz •
| 11a13 ʾanwāfīr w. prōz •
sīrūhū an yağ ala mà yağ aluhū
6a19–20 pōiūw • 11a13 add.
w. reference to ʾgu’ilā at 11a10
| 11a13 add. acc. to sense (c)
in expr.: ga’ala naẓarāhū fi
6a6 (6a7) ʾanwāfīr w. prōz •
| 11a13 ʾanwāfīr w. prōz •

**Arabic Word Index and Arabic-Greek Glossary**

**Gz’**
tağazza’a (V) • al-ʾguz’u laʾdī īlā yatağazza’u 11b23 ṭūʾ āmūn
tağazzu’u maṣdar • at-tağazzu’u
5a11 ṭūʾ āmūn
muṭaḡazzī’u maṣdar • act. part. 5a8
mīrātūs
guz’u’n, pl. aḡzā’u’n 5b20, 5b21, 7a11 mīrūs • mà īlā
| guz’u laḥū 8a3 ṭūʾ āmūs •
al-ʾguz’u laʾdī īlā yataḡazza’u 11b23 ṭūʾ āmūn
guz’iyyūn 8a6 mīrātūs • 9a2 īn
mīrātūs

**Gzr**
gazrun (I) maṣdar, w. ‘ān 10b1
(10b2) ānāʾīwāsīs

**Gsm**
(gismun) pl. aḡsāmu’n 6a26 sūmū •
| sem. amplif.; transl. the article
tā ās the implied sūmū: al-
aḡṣāmu’n 5b11 īlā xunūlika •
| 5b12 ṭūʾ īlā mūsūn • 5b22
| īlā īntūmatūta • al-aḡṣāmu’n
5b20 sem. amplif.; added after
the pron. ṭūmatī referring to
sūmūa

**Gl’**
ga’ala (I) (a) abs. 5a6 (5a7),
10b25, 11a23 pōiūw • 9b19
pōiūw in pōiūw • 7b2 (7b3)
pōiūw • 4b21 tīthūm īn
w. two accus. • 6b7
pērītūthūm • ʾgu’ilā pass. 11a10
transl. the implied copula, to
Ēmīrūsūn īlā yawīnūa
sc. ēyān (b) sem. amplif.: in

**Gfl’**
gf’afun (I) maṣdar, w. ‘ān (see
Dozy) 10b2 ānāʾīwāsīs

**Gl’**
āḡallu 5a28 bīdīsū (comp. of
mēγās) • 9b19 mēγīsūs • 7a15a
kūlīsūs • morph.; in āḡallu
qadr 10a7 transl. the super.
suffix -wūtūs in kūfītūtsūs

**Gm’**
gama’a (I) 7a20 pērītīthūm

**Gml’**
gumlatun • bi-l-gumlatī 4a20,
8a19, 8b24a, 10b3, 10b10, 11b5
ōlōw • 11a18b īlā yōłūn • 11b4
w. ēyīnū

**Gb’**
muqṭanabun (VIII) pass. part. •
in hend. w. āḡrū mā’lūfīn 9b5
kūlīsūs •

**Gns’**
ginsun 4b8, 8b20, 9a5, 9a15 ēyīnū
• min ginsun wāḥīdīn 9a18
ōlōw

**Ghl’**
gahlun maṣdar • āḡayū l-gahlī
11a21 āmādēstūtsūs/-īn

**Gwd’**
āḡayūdun • al-āḡayūdūn 11a19 tō
āḡādūn
āḡwādūn 11a18b bēlītūn
guwz

tağawaza (VI) • in tağawaza kulla ḥaddin 8b9 ύπερβαίνω in ύπερβαίνος

ġwhr

gawharun, pl. gawāhiru 4a13, 4b6, 5a8, 7a10a, 8a23, 8b21, 9a5, 10a3, 10a14, 11a22, 11b11, 11b26 ύποία | 4b11b1,2,3 sem. amplif.; add. w. ref. to ύποία at 4b6

ḥtt

ḥattā (a) transl. Gr. conj. or particles: 4b3, 8a25 ὤστε | 10a15 δὲ • ḥattā anna 10b12 καί (even) • paraphr. ḥattā yu’lama 10a22 ύπερ (“with regard to the subject”) (b) morph.; transl. the circumst. part.: ḥattā narudda 7a20 (7a21) συνάγωνται • ḥatta sārat 5a19 ὑπόνοια • ḥattā turaddu 8a3 (8a3–4) in hend. ύπερ ὑπόνοια

ḥgg

ḥuğgṭun 9b21, 9b22 λόγος | 9b23b, 9b24a sem. amplif.; add. w. ref. to λόγος at 9b22

ḥdd

ḥadda (I) 6a25 (6a24), 6b1 (6a28) ὄρισθαι in ὄρισθαι | 7b7 (7b6) ὄρισθαι in ὄρισθαι māhdūdun pass. part. 7a17, 10b22 (10b21) ὄρισθαι • 10a19 ὄρισθαι • 8a20 māhdūdun 6a25 (6a24), 6b1 (6a28), 7a19, 8a12, 11b3 (11b2) ὄρισθαι taḥḍidun (II) māsdar 6b27, 6b28 ὄρισθαι haddun, pl. ḥudūdun 9b20*, 11a2, 11b25 ὄριος | 11a20 ὄριος in ὄριοισθαι | 8a18 ὄριος in ὄριοιστον | 7a20 λόγος • tağawaza kulla ḥaddin 8b9 sem. amplif. ύπερβαίνος

ḥdt

ḥadaṭa (I) 7a18, 8a17 γίνομαι | ḥudūṭṭun māsdar 7b1 γίνομαι | 8a12 γένος aḥḍāṭa (IV) 4b3 ποιεῖν in ἔμποιεῖν • w. ἔπι- ἐν 8b13 ἐνεργάζομαι

ḥdf

ḥaḍaf (I) 6a12 ἄφαρέω

ḥrk

ḥarraka (II) 7b21 κύνεψα | 5a5 sem. amplif.; add. acc. to sense | 5a1 sem. amplif. and sem. metathesis, pass. / act. transformation for κυνείσθαι at 4b23 muḥarrakun act. part. 5a5* κύνεψα | 5a17b, 7b16*, 7b16c, 7b20, 10a1 κυνεύν • 5a1812 sem. amplif.; add. w. ref. to κυνεύν at 5a17 taḥarraka (V) 10a12 κυνοῦμαι | 5a18 sem. amplif. for κυνεῖσθαι taḥarrukun māsdar 5a5* κυνοῦμε- νος mutaḥarrakun act. part. 5b2 κυνοῦμενος | 5b12, 9a12 κυνητός | 4b22, 10a20 κυνητός • κυνητός in ἄκυνητος

ḥarakatun (a) 4b4a, 4b20, 4b22, 5a5, 5a25a, 5b3a, 6a13, 7b12, 7b14, 10a20, 10b12 κύνης • 5a3, 5a18, 5b7, 5b23 sem. amplif. for the implied κύνης • al-ḥarakatu 4b23, 10a9 τὸ κυνεῖσθαι (b) 5b25a, 6a7, 10a14, 10a16, 10b28a περιφορά | 10a15 sem. amplif.; add. w. ref. to περιφορά at 10a14 • 5a16, 9b25, 10a18 φορά • 5b28 φορά in κυκλοφορία (c) 11b27 ὀρμή

ḥss

maḥṣūsun (I) pass. part. • al-aṣyā’u l-maḥṣūsatu 4a20, 4b19, 6b8, 7b15, 9b3, 11b18 τὰ ἰώθητα ἀνθρώπους
(ḥāṣṣatun) pl. al-ḥawāssu 5b5, 9b9  
ai ʿaiṣthīrīs

ḥsb
ḥasiba (I) in-fī-mā ʿaḥsibu 6a12  
| ʿīwāz

ḥasabun ʿalā ḥasabi w. gen. 8a13  
| tātā ʿsemp. amplif.; in ʿgarā  
| bi-ḥasabihī 7a6b tātā

ḥṣṣ
(ḥiṣṣatun) pl. ʿhiṣṣun 6a20 ʾṣṣfūṣ

ḥṣy
ʾaḥṣā (IV) ʿlá ʿyūḥṣā 11a17  
| ʿāṭīfūṣ

ḥṭṭ
inḥatta (VII) 10a3 ʿūpoṣʾānū

ḥqq
istāḥqqqa (X) 7b18 ʿsemp.; etym.;  
| transl. ʿʿiṣūs in ʿʿiṣīṣītūṣ  
| ḥaqquṇ 6b16 ʿʿiṣīṣīa ʿmorph.;  
| transl. the gen. of possession  
| used as predicate to denote duty  
| or task: ḥaqqu l-maʿrīfati 8b25  
| ʿeṣṭīṭīmūs (sc. ʿōṭī)

aḥqqu bī- 6a1 morph.; transl. the  
| superl. suffix in ʿtīṭītūn ʿin  
| hend. aḥqqu wa-ʾawāl bī- 6b26  
| ʿdēnū ʿ6b28 ʿʿiṣīṭītātūṣ

ḥkm
ḥikmatun 8b9 ʿooφīā

ḥll
inḥalla (VII) ʿin hend. inqatāʿa  
| wa-nḥalla 6a18 ʿwānūma

ḥml
iḥtāmala (VIII) 11a6 ʿʿɗeχomāi  
| muḥtāmilun act.part. 5b18  
| ṭoṣ (denoting possibility) in ʿasūnīdētūṣ

ḥngr
ḥanǧaratan 11a10 ʿfūγīẏצ

ḥwğ
iḥtāğa (VIII) w. ʿilā 5a14, 5b27,  
| 9a20 ʿdhōmāi (ʿdhō ṣeponent)  
| | 7b6 ʿdhīṭēwō 4a20–21 ʿsemp.;  
| etym.; transl. ʿχōdēs (or  
| ʿχōwā) in ʿʿiṣīṣīwως ʿmorph.;  
| in hend. yuḥtāğa ʿiḥayiḥ ḥaṭgān  
| ḥaṭratan 9b18 ʿaḥṣaχāwōn

ḥāḥṭatun 9b18 as mafʿūl muṭlaq to  
iḥtāğa ʿilā

ḥwl
istiḥḥālatun (X) maṣdar 10b5  
(10b4) ʿalūwīūsīs

ḥālun (a) in phrases w. ʿalā: ʿalā  
ḥālin 10a14 ēv ʿ5b6 ʿōz |  
| {8b14} ʿadd. in Ar. ʿalā ʿalā  
| kullī ḥālin {5b15} corrupt text? (b)  
| in other expr.: ḥālun wāḥidatun  
| 10b20 ʿtawtā ʿal-ḥālu ʿfiḥi  
| ṭb19 ʿwqw ᵇν denom. a state  
| ḥāluḥū 12a2 ʿwqw ᵇν denom. a state

ḥawla {5b17} ʿmorph.; transl. the  
| dat. in ʿγαίη

ḥyy
ḥayātun 4b3, 5b3b, 10a16, 10a17  
| ʿζοή

ḥayāwānun, pl. ḥayāwānātun 5b5,  
| 7a22, 7b4, 8a5, 8b27, 9a14,  
| 10a5, 10a13, 10a17, 10b7,  
| 10b17 (10b18), 11a8 ʿζqōv  
| ʿin phrase bayna l-ḥayāwānī wa- 
| n-nabātī {7a22} mistranslation  
| of ṭψμφόλυς

ḥyṭ
ḥayṭu 11a8 ʿōpōu

ḥyr
tahayyara (V) w. fi 7b10 ʿʿαρφέwō  
| | 5a23 ʿʿαρφέwō in ʿʿαρφον  
| ḥayratun ʿin mawdīʿu ḥayratin  
| 10b24 ʿʿαρφία in ʿʿαρφον  
| ʿin hend. ʿṣakkun wa-ḥayratun  
| 8b13 ʿʿαρφία

ḥyn
ḥīnaʿīdīn 9b11 ʿėṭī in ʿοὐχέτι

ḥrg
ḥurūgūn (I) maṣdar w. ʿan 8a18,  
| 11a20, 11b3, 11b41,2 ʿsemp.;  
| etym.; transl the privative  
| ʿαρφία in ʿʿαρφίς, ʿʿαρφίτια,  
| ʿʿαρφον, ʿʿαρφτόν, ʿʿαρφφία  
| ḥārīgūn act. part. w. ʿan 9b5  
| ʿʿαρφέwō 9a6 ʿʿαρφό w. accus.  
| ʿaḥrağa (IV) 8a11 ʿʿαγwō
hr’
iḥṭara’(VIII) 4a21b μηχανόμαι

ḥss
ahlḥassu 7b8, 8a24 χειρον

ḥṣṣ
ḥaṣṣa(I) 4b21 ιδιον
ḥāṣṣun act. part. 8b22, 9a16 ιδιος
—at hend. μυλα’imun ḥaṣṣun
10a10 οτικειος
ḥaṣṣatun ḥaṣṣatan 9b19, 10a10 μύλοστα
ḥaṣṣiyyan 8b21, 8b26, 9a20 ιδιος
—at hend. μυλα’ι οτικειος
ahlḥassu w. gen. and bi- 10b17
(10b16) μύλοστα

ḥṭṭ
(ḥṭṭun) pl. ḥṭūṭun 8b26 γορμή

ḥṭṛ
ḥṭarun 4b5 χύνιος in χυμώτατον

ḥṭw
tahṭṭā(V) 6a3 υπερβαίνω in υπερβαίτον

ḥfy
ḥṣfiya(I) 5a17 sem. metathesis; neg. / affirm. transformation ον φαίνομαι in ἀφανῆς

ḥlf
iłṭalafa(VIII) 8b19 διαφέω
iłṭilāfuna muṣdar 5b2*, 6a5 1.2
8b16, 8b17, 9a17 διαφορά
duṣṭalafun act. part. 11a1a
diafora—at hend. καθίρυν
muṣṭalafun 7b1* transl. Gr. variant πουκάλος instead of πουκάλα

ḥlq
ḥaliqun an 8a3 ιδος | 10b27 ἀρα
ahlḥaliqu bi- 4b16, 5b19, 6a2, 6b20,
6b24, 8a15a, 8b11, 9a21, 9b6,
9b13 ίσχυρα | 4b13 ιδος | 8b20
σχεδόν | 6a14 άποτεθ | 10b26
ἔσοικα

ḥlw
ḥalā’un(I) muṣdar 6b1 κενὸν
ḥilwun min 8b5, 11b5 ἀνευ
μα ḥalā 6b6, 7a2* πλην—at sem.
amplif.; σα’iru s-subuli μα ḥalā
ḥāḏihi s-sabili 6b19 ἐκεῖνοι
(sc. αι μέθοδοι)

ḥwf
ḥafa(I) 7b17 χύνδυνος έστι

ḥyr
ḥayrun 8b1 ἀγαθός
(ḥayratun) pl. ᾧ-ḥayrātu 8a26
(8a27) ἐσθλά

ḥhl
daḥala(I)—in phrase μα yadhulu
fi 8b8 εἰς—in phrase μα
yadhulu σ-σακκου fihi 10b17
paraphr. το δοξοῦν in 11b3
sem. amplif.; add. acc. to
sense
daḥilun act. part.—in phrase
daḥilun taḥta 9a13 υπό
madḥilun pass. part. 4a14*
ἐπεισῳδώδης
adḥala(IV) in adḥala fi ἰδαί w.
gen. 8b7 πρός in προσωκατο-θμέω

ḥrk
adraka(IV) 6a27 ἐφάπτομαι |
9b8 (9b9) θεωρέω
idrakun muṣdar 4b14b λομβάνω

ḥwr
da’a(I) w. ἦλα 10a26 sem. amplif.;
add. acc. to sense
da’in act. part.—sem. amplif. da’in
衆 5b4b πρός

ḥf
duṣ’atun—duṣ’atun 6a17 εὖθύς

ḥll
dalla(I) w. ἀλα 6a28 δηλῶ | 7b12
sem. amplif.; add. acc. to sense
dalilun ἀλα 7b2 παράδειγμα

ḥwr
(dawrun) pl. adwārun(I) muṣdar
7a13 περίοδος
dawriyyun 5a3, 5a16, 5b7, 5b11,
5b23, 5b25a (5b24) κυκλοφόρος |
5b28 χύκλος in κυκλοφορία

ḥwl
tadāwala(VI) 6b10 Ἑστιοῖς
dwm
dawâmûn (I) maṣdar—ad-
dawâmûmu 11a7 τὸ ἀεὶ
dâ’imun act. part. — dâ’imân 7b16, 10b20 ἀεὶ
dwn
dûnun — in phrase ‘alâ dûnî w.
gen. 8a16 ὑπτον
dûna — in expr. dûna gâyrihi 5b11 μὸνον adv.
dymwqûys 11b22 Δημόκριτος

dâlîka (a) transl. various Gr.
pronouns: 5b14, 6a3, 9a25, 10b25, 11b5, 11b20 οὗτος | 7a14a οὗτος in τοιοῦτος | in
da-âlîka 4a17 οὗτος in οὗτος
— in ka-âlîka 11a8 αὐτός — 5a4a, 7a10b ἐκεῖνος — 7b2 ὑπν rel.
pron. | in li-âlîka 9b15 ὁ
in ὑπ in âlîka/哈登 9b6–7,
9b7 ὅ ὁ in ὁ μὲν/ὁ ὁ | 4a16
tὰς (b) in expr.: wa-âlîka
anna 4a21, 4b4a, 4b15b, 5a12a, 5b3a, 5b8, 5b15, 5b21, 6b19, 7a9a, 8a16, 8b10, 8b17, 8b21, 9a15, 9a27, 10a16, 10b19, 11a8, 11a16 γάρ | 7b15, 9b17, 11a3 ἐπεὶ — ma’a âlîka 5a28b ἄλλος τε | 6b9 ἐτι δὴ — wa—
... ma’a âlîka 9b18 (9b17–18) καὶ ἄλλος ... καὶ ... — wa-
ma’a âlîka aydan 9a62 sem.
amplif. καὶ — wa-min qibali
da-âlîka 11b7 ἄλλος — ka— (c) sem. amplif.: add.
to refer to a stated antecedent
6a27, 7a1, 7a3, 7b11, 7b18, 8a10, 9a7, 9a18, 9a26, 9b9, 9b11, 9b20, 9b22, 10a4, 10a19, 10a27, 10b17, 11b10 — add. to refer to a prospective statement
7b20, 11a6 — add. in the transl.
of Gr. comp. adj. after min
5a21b, 7b19 — add. to express
the subject of the verb {5b1}, 5b28 — add. acc. to sense 4b12b, 4b17, 5a9, 5a22b, 5b5, 5b13, 5b18, 5b19, 8a19 (d) sem.
amplif.; add. in the expanded transl. of various terms and expressions: mitâlî âlîka
9a12, 11a9 οἶον — mitâlî âlîka
11b17 τοιοῦτος — as-sâhabu
llaði lâhû šara âlîka ka-âlîka
5a17b οὗ ἀργέν ὑπ 10a1 τὸ τίνος
ἐνεκά — sā’îru mā siwā âlîka
6a27 (6a26) τὰ ἄλλα ἀν
nakûna fi âlîka muðtarrîn
4b13 ἐνάρεξ, sc. ἡμῶν — lam
yâdkur âlîka 6b5 in context
ὡςουτος

dkr
ḍâkara (I) 5a8 (5a9), 9a27
(10a1), 11b14 λέγω | 6b5 sem.
concentr. μνεῖαν ποιοῦμαι —
paraphr. lam yâdkur âlîka
6b5 in context ὡςουτος — sem.
amplif.; add. acc. to sense 6b15, 9b25, 10a4
ḍâkirun act. part. — ἡδηί hi llati
anâ ḏâkiruḥâ 8a8 sem. amplif.
tοὐάδε
(ḍâkarun) pl. ḏûkurâ̱tân 10b8
ἀροῦν

dhb
(mâdhabun) pl. mâdâḥîbu 10a28
ἐφοδος

dw
ḍû morph.; in compound words,
it transl. suffixes and prefixed
prep.: in ḏû taṣawwûqûn 5b11
-ικός (suffix indicating relation
or ability) in ἐφετίκος — in
ḍû muṭqûn 7b18 -ώδης in
λογώδες — in ḏû miqdârin 5a8
-ός (masc. personal suffix) in
ποοός — in ḏû nafsin 5b2, 7a17,
11a16 ἐν — ἐμπνέος
ḍâṭun 8b23 ἔωτος — in min
ḍâṭihâ 7a18 transl. αὐτός (self)
in αὐτοματῶς | 10b27b αὐτός
(self) in αὐτόματον
ra’ā (I) 10b22 δοξέω • pass.  
(yurā) 4a22, 5b3a δοξέω  
(impers. δοκεῖ) • 11b1  
sem. amplif.; add. acc. to  
sense

rubba-mā 4b18 sem. amplif.;  
added to reflect τέχνη in 4b16  
(see note to the Ar. transl.)

irtibāṭun (VIII) maṣdar 5b18  
sem., etym.; συνδέω  
in ἀσύνδετος

irtabaka (VIII) w. fi 9b2 ἀποφέω  
in ἀποφον

tartibun (II) maṣdar 6b28 τάξις  
martabatun 5a9 (5a10) μείγς |  
5a12 λογος (see note to the Ar. transl.)

radda (I) w. ilā 7b22 ἡγού επί | 8a3  
(8a4) ἡγού εἰς | 6b11 ἡγοῦ εἰς |  
7a20 (7a21) συνάγω πρὸς |  
6b13.1,2 ἀνάπτω εἰς

radi’un • ar-radi’u 11a19 (11a20)  
tο λοκόν

rafa’a (I) 5a9 ἐξεισίω • w. ἀν 5a11  
ἀφωνεῖν ἐν ἀφωνετέος  
irtafa’a (VIII) 11b11 ἀναφωνεῖσα

tarqqa’ (V) 9b10 μεταβαίνω |  
6b14 sem. amplif.; add. acc. to  
sense

rāma (I) 6b9 πειρομαί | 4b7  
πειρῶ in πειρατέον

rāmānun 6b3 χρόνος

zālā (I) 6a13 sem. metathesis;  
pass. / act. transformation  
ἀφαἰρεῖται pass.  
zawalun maṣdar 6a13 sem.  
amplif.; added to refer to  
ἀφαίρεσις in ἀφαίρεθεῖσα

zā’idun (I) act. part. 4b10  
περιττός

zinatun 11a13 κόμος

sā’irun (a) abs., w. gen. 6a17.1,  
6b18, 9b27, 11b19 ἄλλος (b)  
w. a foll. subst. add. to express  
the implied Gr. referent: sā’iru  
l-aṣyā’i 4b14a, 6b12, 8a2, 10a4,  
11b19 τὰ ἄλλα | ἄλλα  
| sā’iru s-subuli 6b22 ἃ λοιπαί  
| sā’iru l-ὐλομῖν 7a1 ἃ λοιπαί  
| sā’iru l-ἀγάσιμι 5b12 τά (pl.  
neuter article as subst. maker)  
(c) sem. amplif.; interpr.: sā’iru  
μὰ σιώδα δάλικα 6a27 (6a26) τά  
ἄλλα  
| sā’iru mā fhā ἃ ἄλλα  
| sā’iru s-subuli mā ἧλα  
| ἦλθη s-sabili 6b19 ἡπείναι (sc.  
ἀ μέθοδοι) • in hend. w. allatī  
tattaṣsilu ἴη πλήθος  
| sā’iru ἄλλα  
| sā’iru ἄλλα  
| sā’iru ἄλλα  
| sā’iru ἄλλα  
| sā’iru ἄλλα  
| sā’iru ἄλλα  
| sā’iru ἄλλα

sa’ala (I) w. ἀν 10a28, 10b3,  
10b4, 10b6 sem. metathesis;  
direct / indirect question  
transformation: add. to express  
the interrogation indicated by  
τίνς at 10a28

sā’ilun act. part.; sem. metathesis  
as above

sababun (a) abs. 4b21, 4b23 (5a1),  
5a22, 7b19, 8b11, 9b11 αἰτία |  
5b7, 9a1 (9a2), 9b8 αἴτιον (b)  
sem. amplif.: 5b8.1 add. for the  
implied αἴτιον at 5b7 | {5b8²},  
{5b9} add. for αἴτιον at 5b7,
(mis)understood as ἀίτια

(sm)w
samā'un 5b20, 6a7, 6a8, 6a14, 6b3, 6b4, 7a11, 8a6, 9b24b, 10a14, 10a18 οὐράνιος
samawiyyun 10a18, 10a27, 11b19 οὐράνιος

(sny)
samiyyun 10a13, 10a15 ομόνυμος

(snh/w/y)
sanatun in gen., as second element in an ἰδάσα construction as-sanati 7b3 ἐτύμως

(shl)
sahlun 4b17, 9b2, 10a23a οὔριος

(swd)
aswadu 8b4 μέλας

(swy)
siwan sā'iru mà siwā dālīka 6a27 (6a26) sem. amplif. το ἄλλα

(š'n)
sa'nun in expr. min ṣa'nihi an 9b24a πέφυκε (GALex I,415 §7) in expr. min ṣa'nihi an yakūna 6a21 τυγχάνω

(šbh)
tasbihun (II) ṭασδαρ 4b13 ομοίως
mutasbihun (VI) act. part. 8b1, 8b3 ομοίος (šibhun) pl. asbahun w. gen. 9b14 τοῖς in τοιοῦτος šabahun, pl. asbahun 4a22 μορφή | 5b1 ὁμοιότης šabihun bi- 5a10 morph.; transl. the -ιος suffix indicating descent in θείος in θεότερος asbahu bi- 5a10 morph.; transl. the comp. suffix -τερος in θεότερος | 6b25 transl. the suffix -ικός in δυναμικός

(štt)
(šāb) un 8b9 sem. etym.; transl. πολλά in πολλαχώς min ἀγάθην σάττα ἰβι
\(\text{šhs}\)  
(šahšun) pl. ašhšun 9a3 ṣtμυν

\(\text{šdd}\)  
asšaddu 4b6, 7b14, 10a7 morph.; transl. the comp. suffix -τερος in πρότερος

\(\text{šdd}\)  
- šāddun 7a2* ὁλιγος

\(\text{šr}\)  
šara’a (I) w. fi 6b12 ἀστομα w. gen. ■ fašlan ‘an an yašra’ū fihi 6b5 sem. amplif. ἐτι

\(\text{šrf}\)  
šarafun 5b22 sem., etym.; transl. τιμη in πρηκτοντερς

\(\text{šrk}\)  
mušārikun (III) act. part.; in mušārikun li-l-mādati 7a7 morph.; transl. -υκως in ὑλικως

\(\text{šb}\)  
taša‘ubun (V) mašdar; in hend. w. maštorifatun 10b1 ἀνάφοροια

\(\text{šr}\)  
sa’run 10b10 ὑγίη

\(\text{šb}\)  
sa’run ■ in expr. layta ši’ri {6a16b} ἀξιωσειν ἄν | 10a24 morph.; transl. the interr. sense in ποθεν ■ in expr. yā laita ši’ri 10a16 ἄρα

\(\text{škk}\)  
šakkun (I) mašdar 10a19 (10a20) ἄποικια | 10a20 sem. amplif. w. ref. to ἀπο-ικια in the same line ■ in hend. šakkun wa-ḥayratun 8b13 ἄποικια ■ interpr. mà yadhulu š-šakku fihi 10b17 το δοξουν
taškaka (V) 6a6, 6b24 ἄποιεω

taškukun mašdar 8a21 ἄποικια

\(\text{škl}\)  
ušākkalun (II) pass. part. 7a6b ἐμμορφος ■ gayru ušākkalin 6b24 ἐμμορφος ■ 7a7 sem.

\(\text{šms}\)  
samsun 7b5 ἡμιος

\(\text{šn}\)  
san’un 5a17*, 5b14 ἀστομος

\(\text{šnh}\)  
šanā’atun ■ in hend. min ἄση- šanā’ati mà huwa abda’u 8b6 το παράδοξον

\(\text{šhd}\)  
šahida (I) w. bi- 7b20 συναιδον

\(\text{šhw}\)  
sahwatun, pl. sahawētun (I) mašdar 5a201, 5a24a, 5b4b, 5b10, 6a9, 11a14 ἄφεςις | 5a202 sem. amplif. for ἄφεςις in the same line

ištahā (VIII) 5b4b ὁρέγωμαι as implied in ἐκοστων (sc. των ὁρεκτων)

\(\text{šwb}\)  
saba (I) {7b11}, {7b13} ἀνάπτω

\(\text{šwr}\)  
mušārun (IV) pass. part. ■ in expr. ἡδα (š-šay’u) al-mušāru ilayhi 6a21, 8a17 ὀδε

\(\text{šwq}\)  
sawqun (I) mašdar 6a12 ὁφεῖςις
tašawwqat (V) w. ilā 11a6 ὁρέγωμαι | 5a15 sem. amplif. for ἐφείμαι in ἐφείςις 5a14
tašawwqun mašdar 5a14, 5a2b12, 6a9 ἐφείςις | 5b11, 5b12 transl. ἐφείςις in ἐφε-τικως | 6a10 το ὁφεῖς-οθαι
mutašawwiqun act. part. 5a15 sem. amplif. for ἐφείμαι in ἐφείςις at 5a14 ■ (al-ašy’a) l-mutašawwiqatu 8a1 τα ὁφεῖςον
mutašawwaqun pass. part., w. ilā 5a2 ὁφεκτός
šy’: ša’a (continued)
mutādāddatun 11b11, 11b12
ēvenṭiṣtaḥ asyā’u katārātun
(4b9) ālīqya | 11b13 polīla
| 8b24b plēıonanu asyā’u
yāśirātun 11a19 ālīqya (d)
sem. amplif.; add. acc. to
sense 6a1, 6b13, 8a20, 9a232, 9a24, 9a26, 9b2, 11b172 (e)
individuating use of šay’un,
helping to transl. abstract Gr.
subj. (cf. GALex I,392, amrun
46) asyā’u dārūriyyatun 10b19
ānāqqa’u
šy’
ši’at w. gen. 6b6 oj. peqi | 11b27 oj
šb
šihṭatun 8a16 ālīthiṣe in ālīthēzēx
ašāḥyu 8b11, 9b14, 9b23a
ālīthēsteṭerōz
šdq
šaddaqa (II) w. bi- 7b18 īṣṭiṣ in
ālīṣṭiṣtorōz
taṣdiqun maṣdar, w. bi- 9b17
piṭiṣin in aqrabu illa t-taṣdiqi
4b18 sem., etym.; transl. piṭiṣ in
piṭiṭoṭerōz
aṣdaqyu 5a12 ālīthīnīṭerōz
šb’
ša’uṣba (I) 7a19 ḥaṭellōn
ša’bun 4b18 (4b17), 9b16
ḥaṭellōz
aṣ’abu 9a26 ḥaṭellōṭerōz
šgr
aṣguru 7a16 ēlāĉiṣtorōz in
touḥiṣtorōz
šn
šinā’atun, pl. šinā’atun 7a4, 8a12,
8a202, ētcheṣin in šinā’atu n-
nuġümī 9b27, 10a5 lōgōṣ in
āṣṭorōliya
šnf
šinfun, pl. aṣnafaqun (11a1a)
(10b28) ālālḥīlōn | 7a7, 7b4,
8b27 sem. amplif.; add. acc. to
sense
šwb
šawābun {8a26} καθόλου
šwr
šūratun, pl. šuwarun 6b131,
10b28b idēṣa | 8a18, 9a5 εἶδος
| 7b1 (7a23), 8a9, 10b23a
(10b22), 11b22 mοφή (b)
sem.; etym.; 8a13 transl. mοφή
in mοφοῦμαι | 11b4 mοφή
in ομοφοῖα (c) interpr.: 6b132
add. as the subst. referred to by
táττος | 6b15 add. as the subst.
referred to by τόν έιδημένων
šyr
šāra (I) (a) abs. 5a20 ēmī | 8a22
(8a23) ēmī | 5b11, 5b21, 7b8,
8a9 add. for the unexpressed
copula ēmī (b) in phrase šāra
lahū 6a20 nūṣṭāṭīmī | 10b22
ēw (c) synt., as auxiliary verb:
šāra yaṭlubu 5a24a dūwōeṣ
šāra yaqūlu 5a25b fēmī - śīnā
naqūlu 8b2 lēgoμeņ - śāra
lā yaqα’u 9b15 oj. 조사 (d)
interpr.; sem. amplif.: as-sababu
llaḍī laḥū šāra dālīka kα- Śalīka
5a17 oj. ḥaμān | 10a1 tō tīνος
ένεκα - as-sababu llaḍī laḥū
šāra l-amrū yāgrī ʿālā mā yāgrī
ʿalayhī 10a28 tīνος ʿenekā (e)
11b8 sem. amplif. add. acc. to
sense
šdd
taḍāddun (VI) maṣdar 11b2
ānīṭeṭeṣaṣ
mutaḍāddun act. part. 11b7
ēvenṭiṣ | 5a16 ūpēvenṭiṣ | 6b18* tōvānṭivōn - al-
mutaḍāddatun 8a23, 8b5 (tā)
ēvenṭiṣ | 7a9b ānīṭeṭeμeṇa -
asyā’u mutaḍāddatun 11b11,
11b12 ēvenṭiṣ
šrr
muḍṭarrun (VIII) pass. part., w.
ilā 4b13 ānāγγεἰ
daṛurātun 10a26 ἀνάγγει - in
hend. waγαβά daṛurātan 8b19
ἀνάγκη | in hend. ὑπῆργου ἰλαγή ἠγάθαν ψάραυρατον 

daμariγγυν 11b16 ἀνάγκη | ασφαλες δαμαργγατατον 10b19 ἀνάγκαι

δ’f

δο’θον | in hend. δοθον ὁθυν δαμαργγος | in hend. δοθον ψαλαλην 5b14 ἀσφαλες

δὴν

μυθαίν (II) act. part. 11b6 ἀσφαλες

δω

δαι’αν 8b15,2 φῶς | διαλει’αν 9b13 φῶς in φωτεινότατα

δυφ

αδάσα (IV) w. ἱλα 11b8 ἀνάπτω

τ’β

ταβ’αν 7α5α φῶς | ταβατ’αν pl. ταβατ’αν 4a17, 4b2,1, 4b4b, 4b9, 4b20, 5α2, 7α17 (7a18), 8α22, 8b8, 9a13, 9b20, 10α2, 10α6, 10b22, 11a5, 11a21, 11b5 (11b6), 11b25 φῶς | 9b21* sem. amplif.; add. w. ref. to 9b20 
tαβραργγυν 5α24α, 10α8 ψυγικός | 4b3, 5α1 τῆς φυσικῆς | 10α8 sem. amplif.; add. w. ref. to φυσικος at 10a8

τ’φ

(ταράφων) pl. τατράφων 8b10 ἀξιον

τρ’

ταρίκων (a) abs. 9b4 ὄδος | w. gen. 7b12 ὄς (b) w. prep. bi-’, ἀλα, min (b1) bi-ταρίκα w. gen., bi-ταρικαν 4b12b, 4b13, 6a9 κατα w. accus. | at-ταρίκων ἰλαδι ἱλίῳ 9a10 sem. metathesis; interr. / affirm. transformation τος (b2) ἀλα ταρικ w. gen. 7b11, 11b13 ὄς | 8b23 κατα | 10α26 morph.; transl. the adv. suffix -ος in συμπτωματικὸς (b3) min ταρικαν 5b18 ὀσπερ | 9a19, 9a22, 9a2 το

τ’θ

ταλαβ (I) 5α24β δώξω | 9b21 ζητεω | 5α2a sem. amplif. for δώξω at 5α24 
tαλαβον μασδαρ 9b2 ζητεω in ζητεω implied in μεχρὶ πόσου (sc. ζητηθεων) | in hend. ταλαβον wa-βαθτον (in paraphr. fihi mawdi’ω ταλαβον wa-βαθτον) 5b11 ζητεω in ἐπιζητεω 

ματλαβων pass. part. 9b15 sem. amplif.; add. acc. to sense

τ’λιν

ιτλαν (IV) μασδαρ | in expr. ἀλα l-ιτλακα 4b20, 5α9, 8b13, 9b7, 10α9, 11a4, 11a5 ἀσφαλες 

μυτλαν κατα | pass. part. μυτλακαν 11a3 ἀσφαλες

τ’μ’ων

ταμμ’ων | 6b27 Τιμαίος

ζαννα (I) abs. 6b12, 8a21, 8α25 δοξεω | 10α8 οἰομαι | w. bi- 
7b19, 8b4, 9α26, 10α25, 11b18 δοξεω

ζηρ

ζαρα (I) 11a14 ἐμφαινω | w. li-8b14 ἐμφαινομαι

’γζ

’ασγζων (I) μασδαρ 9b12 ὀσπερνεω | w. ἀν 7b16 ὀσπερνατος | 5b28 sem.metathesis; neg. / affirm. transformation μὴ δύνασθαι | in hend. δοθον ὁθυν δαμαργγος | in hend. δοθον ὁθυν 5b13 ὀσπερνατος

’αγζων act. part. 7b8 ὀσπερνατος

’δδ

’αδαδων, pl. α’δαδων 4b4α, 4b8, 5α2α6, 5α27b, 6a21, 6a22, 6a25, 6b2, 6b14, 8b26, 9α5 ὀφθαλμος | 11a19 πλῆθος | sem. amplif. | 5α27a add. for
dd: adadun (continued)
όρθωμος at 5a26 | 6b14 add.
as the referent of the pron.
tοῦτον
'idadun • in expr. fi 'idâdi w.
gen. 8b7 καταριθμέω in
προσκαταριθμέω
'dl
mu′ādilun (III) act. part. 8a24
ἰσομοίωσις in ἴσομοιώσιν
'dm
'adamun (I) mašdar 7b12
στέρησις
'adīmun • sem., etym.; transl.
private alpha in 'adimu-
n-nafṣi 7α17 ἄψυχος
'rd
'araḍa (I) 6b17, 11b11 συμβαίνω
| 10b4 (10b3) γίνομαι | 9b13,
10b3, 11b14 sem. amplif.; add.
acc. to sense
'araḍun, pl. a′raḍun 6a9, 8b23
συμβεβηκός | 5b24 κατά
συμβεβηκός • 'araḍun
lazima 10b18 σύμπτωμα
• in hend. al-ittifāqu wa-l-
'araḍu 10a26 σύμπτωμα in
συμπτωματικός
'rf
ma′rifatun (I) mašdar, w. bi-
8b21.2, 8b20, 8b25 ἐπιστήμη
| 8b27 sem. amplif.; add. as
the referent of the article ἡ
(ἐπιστήμη) • al-ma′rifatu
8b16, 9a10 ἐπίστασθαι
| 9b22 το εἰδέναι • in hend.
w. innahū yu′lamu 9a24 το
eidēnai
'zz
′azīzun • in hend. w. qalilun 11a24
(11a23) ὁπάνιος
'tl
′attāla (II) 6a23 καταπαύομαι
ta′tilun mašdar 7b12 ἄγγια
'zm
′azīmun 10b11 μέγεθος
a′zam w. gen. 7b2, 10b16
μέγιστος | 7b19 (7b18) μείζω
| 4b5 morph.; transl. the superl.
-ώτατος in ἵνωτατον
'qd
i′taqada (VIII) 11b21 λαμβάνω
| 11b22 ὑποτίθεμαι | | 6a16b
(6a17) ἀποδίδομι • i′taqada
fih anna (to regard s.th. as)
4b5 τίθημι w. two accus. |
9b24b ὑπολομβάνω
mu′taqidun act. part. (following
its own verb) 11b21 τις
'ql
′aqlun (I) mašdar 7b23, 9b14
νοῦς
′aqlun act. part. 6a19 φυσικὸν
ma′qīlun pass. part. 4a19, 9a12
νοητός | 9b5 φυσικὸν • al-
ασφαλέστερα ὁ· ma′qīlun 6b8, 9b4
νοητὰ
'I1
la′alla • wa-la′alla 9b1 ἡ
'I2
′iillatun 11b8 καίτια
'lm
′alimun (I) • ulimun pass. 9a26 τὸ
ἐπίστασθαι | 9a19 γνωστὸς
| 9a22 sem. amplif.; add. for
γνωστὸς at 9a19 • in hend.
al-ma ral I s. wa-innahū
γυμνή 9a24 το εἰδέναι • al-
ασφαλέστερα ὁ· ma′qīlun 6b22 τὰ
θεωροῦμενα • paraphr. ἡ ἁττά
γυμνή 10a22 ὑπέρ (“with
regard to the subject”) )
(′ilmun) pl. ′ulimun mašdar 6b19
(6b20) ἐπιστήμη | 7a1 sem.
amplif.; add. w. ref. to ἐπιστήμη
at 6b20 | 9b18 πραγματεία
| 9b20.2, τὰς add. w. ref. to
πραγματείας at 9a18 | 9b21
sem. amplif.; add. w. ref. to
πραγματείας at 9b18
ma′lūmun pass. part. • in ἅγγιο
ma′lūmun 9a19, 9a22 γνωστὸς
in ἄγγιος
tal′imun (II) mašdar • at-
ta‘alimu *pl.* 4a18, 9a16, 11b20 *τὰ μεθηματικά
| 9a17 *τὰ μαθηματικά | 7a3 *ά μαθηματικά (<sc. ἐπιστήμων> ■ ta‘alimiyyun 6b9 μαθηματικά
‘alamun 6b8 κόσμος

′lw
‘ālā (a) transl. Gr. prep.: 8a19, 10a14, 10b20, 11a4 κατά
| 4a19 κατά in καθύστερον | 7a3 (11a2) ἐπί (b) morph.; transl. the adv. morph. of Gr. words (b1) transl. the morph. of primitive adv.: ‘ālā l-infradī 8a27 χώρις ■ in phrase ‘ālā waqihin mina l-wuqūhī 4a12, 6b7 ὑπός | 4b12α ποσ ὑπός in ὑπός γέ πος (b2) transl. the adv. accus. suffix: ‘ālā waqihin mina l-wuqūhī, ‘ālā ġihatīn mā 5a16, 7b19–20, 9b6, 10a19 τόπον τινά ■ ‘ālā dunīn 8a16 ἑπτῶν (b3) transl. the adv. suffix -ως: ‘ālā l-ỉл-Q 4b20, 5a9, 8b13, 9b7, 10a9, 11a4, 11a5 ἀπλός ■ ‘ālā miṯālin waḥidīn 5a26, 6b8, 8a3, 9b4 (9b3) ὑπός | 10b20 ὑπός ■ ‘ālā ἡδά l-miṯālī 7a4, 7a16 ὑπός ■ ‘ālā anbā‘in sattā 8b9 πολλαχός ■ ‘ālā wuqūhīn kaṯirātin 9a10 πλεονασχός ■ ‘ālā kam 9a24 ποσαχός ■ ‘ālā mā yanbağī 11a25 χώρις ἐνυχύς ■ in hend. w. nahuw: ‘ālā ἡδά n-nahwī 5a10 ωτός 5a10 ■ in hend. w. waqih: ‘ālā ἡδά l-waqqhi 4b17 ωτός (c) in combinations w. anna, ḥasab, ḥāl, ṭarīq, mā (c1) ‘ālā anna 8a4 ὑπός | 8a10 ὑπός | 9a17 καθεφ | 8a11 sem. amplif.; add. acc. to sense to repeat the preceding ως ■ in phrase ἡδά ‘ālā anna 5b12 καθεφ | 10a9, 11b2 καϊτοι

(c2) ‘ālā ḥasabī w. gen. 8a13 κατά w. accus. (c3) ‘ālā ἡλιν 10a14 ἐν | 5b6 ὑς | 8b14 add. in Ar. ■ ‘ālā kūlli ἡλιν (5b15) corruption? (c4) ‘ālā ταρικī w. gen. 7b11, 11b13 ὑς | 8b23 κατά | 10a26 morph.; transl. the adv. suffix -ως in συμπτωματικός (c5) ‘ālα mā 4b15a, 6b11 (6b10), 10b22 ὑπερ ἐν 5a15b, 10a8 ὑς | 9a19, 10a23 καθάπερ ■ ‘ālα mā huwa ‘alayhi 4b15a ὑπερ ἐν έ (d) other uses: paraphr. (hiya) ‘ālα nizāmīn 11b21 ἐν τούτων τὸ τεταγμένον ■ sem. amplif.; add. acc. to sense 8a16, 9a11, 10a12 (e) w. verbs: → ἑρά, → dala, → τα‘አwana, → ἑαἶα, → qada, → κάνα, → ὑπάqafa
‘ālα 5a12 ὑπήλιοτερος

′mm
‘āmmiyyun 9a27 χώρις ■ ‘āmmiyyan 8b25b χώρι

′ml
’amila (I) 9a3 ψεύδο in ψηφιτά ista’malā (X) 8b6 χρόνοι ■ ista’malā n-nażara 7a16 λαμβάνω

′n
‘an (a) transl. Gr. prep. 5a3, 5a4b, 5b10 ὑπό | 5b21 transl. ὑπό in ὑπερωιμένα | 7a9b ἐκ ■ 10a20 ὑπό ■ lazīma ‘an 5b24 ὑπό (b) morph.: 11a25 transl. suffix -θεν in ἐκατέρωθεν (c) w. verbs and verbal nouns: → βαβατ, → βαβάνον, → ἕαζρυν, → ἐγαὺν, → ἱραγ, → ράφα, → σάλα, → ἀγγζ, → μναφσλ, → ἑαδλαν, → ἀμπακα

′nd
‘inda 6b10 περὶ | 6b11 ἐν | 12a2 πρός | 9b13, 11a25 sem. amplif.; add. acc. to sense
'ny
a'na (I) • a'ni, first person sing.;
sem. amplif.; demonstrative
use of the verb to introduce the
referent of a previous pron. or
term: 5b11 w. ref. to mà (5b10)
ůtuṣ | 7a16, 8a22, 8b12 w.
ref. to hādā | 7a21 w. ref. to
gāmi'u | 7b20 w. ref. to ḍālika
| 8a8 w. ref. to ḍāhidī l-aṣyā'u
| 9b14 w. ref. to hādā l-qawlu
l-āḥar | 9b19 w. ref. to hādā
l-amru at 9b17 | 10b24b w.
ref. to preceding hādā | 11a5
w. ref. to the repeated term 'alā
l-ḥālaq
ma'na • sem. amplif.; add. to
complement demonstr. pron.
hādā l-ma'na 6a2, 6a14, 7b5
toṭo, toṭā • in expr. lā
ma'na laḥū {1a23a} ḍālūq
| • sem. amplif.; added acc. to
sense 9a26

'wn
a'ānā (IV) 10a6 suveṛqēw
та'awana (VI) w. ālā 4a12
suveṛqēw ēīṣ
ma'ūnata 10a6 sem. amplif.; add.
as maf'ūl muṭlaq after a'āna

'yn
'aynun 10b13 ḍīmā • bi-'aynihi in
wāḥidun bi-'aynihi 5a18, 9a4
āwto in 8atūṭo • in as-'ay'ū
bi-'aynihi 8b24b āwto in ḍ to
āwto

gdw
(gīdā'un) pl. agḍiyatun 10b17
τορφη
ğrzd
garīziyyun 6a10 ʿumīraṭūṣ
ğnym
ğanā'un • in 'azimū l-ğanā'i 9b17
sem. amplif. ʿeγας
ğyy
ğayatun (a) abs. 9a1 ṭēloṣ •
in hend. ġayatun yuqṣadu

lahā 9b7 ṭēloṣ (b) ġayatu
w. gen.: morph.; transl.
the superl.: ġayatu š-šarāfī
5b22 ʾeṭimāṣṭa • ġayatu
l-fādilāt 5b26b, 5b27 ʿōmuṣūn • ġayatu
l-gāhli
11a21 ʾiymāṣṭaṭa, -on
(c) ʾa ṣāyihi 9a4 ± to ʿiṣmūṭa
• ġayati mā yumkini an yakūna
ʿalayhi 8a4* ± ti ʿiṣmūṭa
• ġayati l-kamāl 8a*7
telewōṣṭu • al-āṣyā'u llatin
fī ġayati ḍ-ḏiyā'i 9b13 tā
wāṭeṇāṣṭa

ġyr
(taġīrūn) pl. taġīrū (II) masdar
10b3, 10b5, 11b14 ṣeṭābōlī
taġāyyara (V) 7b13 ʾeṭiṣṭaṭa-
lātto
taġāyyun ṣeṭād 7a23
ṣeṭābōlī
gayru (a) w. foll. gen. 5a18, 5b6,
7b21, 8b17, 10a7, 10b25
eṭeṣōṣ | 6b3, 8a20 ʿalāṣ |
6b6 ʿiṣ ʿalūlī | 7b17, 8a10 ṣi
• in ġayru ma'lūfīn 9b5 ʿalāṣ
in ʿalāṣțuṣ • in hend. āḥar |
ḡayru 6a22, 11b17 ʿalāṣ | 7b1 ṣeṭaṭuṣ (b) w. prep.
bi-ġayri w. gen. 8b16 ʿanēv •
dūna ġayrihi 5b11 ʿāmov adv.
(c) morph.; transl. the alpha
privative: ġayru mutahārrikin
4b22, 10a20 ʿiṣīṣīṣ • ġayru
qābilin 5b18 ʾeṭekāṭa • ġayru
maḥdūdīn 6a25 (6a24), 6b1
(6a28), 7a19, 8a12, 11b3
(11b2) ʿôṣīṣīṣ • ġayru
muṣakālin 6b24 ʿāmovīṣ •
ġayru muṇqāṣin 7a19 ʿalāṣ
• ġayru ma'lūmin 9a19, 9a22
ʾeṇnuṣīṣ • ġayru muṣāṣarīn
9a23 ʾoṣīṣīṣ (d) sem. amplif.;
faḍlan 'an ġayrihi 4b4a ʿawtāṣ, self (in ʿawtāṣ ʿawtāṣ, see note to
the Arabic transf.)
f
fa- (a) abs. 4b6, 4b18, 5a28b, 6a2, 10a13, 10a24, 11a1b δέ w.o. preceding μέν | δ’ οὖν w.o. preceding μέν 4a17, 4b12a (4b11), 5b7, 9a10 | 5a25b, 7a6b, 10a5 οὖν | 5a4α, 5a19 ώστε | 5a6 δή | 6b14 εἴτε | 7b5 κατ’ | 10b26 ἥ | 11b21 (11b20) ἄλλο (b) synt.: expresses the temporal shift from a perf. tense to a present tense in the Gr. part.: nahtari’uḥū fa-naḍa’uḥū 4a21b–23 μεμιχανημένα δέ’ ἡμῶν foll. by περιττέντων — synt.; introduces a part. clause subordinated to the main clause: qadi sta’ma’la qawmun ... fa-adḥalā 8b6 χροίμενοι ... προσβατιμήσων (c) add. as required by the Ar. synt. 4a17, 4a19, 4b2, 4b7, 4b17, 4b21, 4b22, 5a5, 5a17, 5b1, 5b3b, 5b8, 5b14, 5b21, 5b27, 6a7, 6a9, 7b11, 7b13, 8a15a, 8a19, 8b14, 8b17, 8b19, 8b25a, 9a20, 9b27, 10a7, 10a13, 11a2, 11a9, 11a17a, 11a18b, 11b5, 11b19, 11b20* (d) see also fa- in fa-inna — inna, fa-qad — qad, fa- before and after ammā — fa-ammā ... fa- 
frt
fatara (I) 5a16 ἄνω in ἄνηντος taftattara (V) 5a4a sem., etym. πανό (med. παύμι) in ἄπαντος 
fts
taftīšun (II) maṣḍar — in hend. al-baḥtuh wa-t-taftīšu 8b15 ξητέω 
frd
infiṛādun (VII) maṣḍar — in expr. ‘alā l-infiṛādi 8a27 χορίς 
frs
farasun 6a22 ἢππος 
frq
färaqa (III) 10a15 sem. metathesis; pass. / act. transformation χωρίζομαι 
fsḥ
infasaḥa (VII) 5a4b λύομαι med. 
fsd
fasādun (I) maṣḍar — in al-aṣya’u l-qābilatu li-l-fasādī 4a16–17 sem.; etym.; transl. ψθορά in τὰ ψθορά 
fsl
(fašun) pl. fuṣūlun (I) maṣḍar 8b10 διαφορά munfasilun (VII) act. part.; w. ‘an 4a12 χειμοιμένος 
fdl
faḍala (I) w. ‘alā 11b6 ύπερέχω faḍlun maṣḍar 4b6 ὀγκόδος as the positive degree of the comp. ξείττων — faḍlun ‘alā 4b14a ύπεροχή w. gen. — in asaddu faḍlun 7b14 τιμή in τιμώτερος — faḍlun ‘an 4b2a sem. amplif. αὐτός, self (in οὐδὲ αὐτός, see note to the Arabic transl.) — in faḍlun ‘an αν yašra’ū fihi 6b5 sem. amplif.; paraphr. έτι 
fuḍlun 8a22 περιεργία faḍlalatun 5b26b, 5b27 τὸ καλὸν as the positive degree of the superl. τὸ ὀριστὸν 
afḍalū 5a20, 5b1, {5b8}, 6a2, 6a4, 11a2, 11a6, 11b9 ἄμοιτος | 7b11, 8a14b, 8a24, 11a9, 11b15, 11b27 βέλτιον | 5a1, 5a9, 5b9 (5b8) ξείττων | 5b27 καλλίων | 11a15 εὖ 
fl
fa’ala (I) 10a12 ἐνέχεια 9a3 πράττω in πρακτά 
fi’lun maṣḍar 5a7, 5b23, 7b13, 8a11, 9a4 ἐνέγχεια | 7b21 ποιέω — in fi’lūhū an yaḡ’ala má yaḡ’alūhū 6a19–20 sem. amplif. ποιέω infi’ālun (VII) maṣḍar 5b6, 7b22 πάσχειν
fqı̂ṭ
faqat 6a28, 6b11, 11a20 μόνον
adv. | innamā ... faqat 4a18,
6b15–6 (6b16), 6b17, 7a7
μόνον adv. (GALex I,503
§12.1b)

fktr
fīkrun 8b12 διάνοια | 8b14 transl.
the pron. referring to διάνοια at
8b12

fnn
fannun 10a8 τρόπος

fhm
fahima (I) 8a19 (8a20) λαμβάνω
fahmun maṣdar 5b9 διάνοια

Fūtāqūras 11b27 Πνευματικοί in
Πνευματικοί

fy
(f) transl. Gr. prep. 4a17, 4a18,
4b20, 5a12, 6a4, 6b16, 6b182,
6b19*, 6b21, 6b27, 7a1, 7a3 (w.
ref. to 7a1), 7a8, 7a13, 7a17,
7a21, 7b4, 7b15*, 8a12, 8b4,
8b15, 8b24b, 9a3, 9a13, 9a16,
9a27, 9b3, 9b5, 9b19, 10a6,
10a12, 10a27, 10b4, 10b7,
10b102, 10b25, 11a5, 11a19,
11b3, 11b12, 11b13, 11b171,2,
11b251,2, 12a1 εν | 4b3 εν in
ἔμπνευο | 6b21 εν in ἔνδοια | 
sem. amplif. wuğūdūhū fı̂jı̂a18,
4b9, 4b10, 5b6, 8a23, 9a1 εν
(cf. Ross 65 ad loc.) | fı̂hādā
l-mawdiʼi 7b6 εν in ἐνταῦθα | 
4b7–8, 4b22, 5b22, 5b23, 6b14,
7a4, 7a16, 8a16, 8b2, 8b22,
8b261, 9a15, 9b18, 9b19 (w. ref.
to 9b18), 10a4 ἐκκατά w. accus.
| 8b23 κατά w. gen. | 5a142,
6b412, 6b8, 6b17, 7b1, 7b2
(w. ref. to 7b1), 11a22, 11a24
περι | 8a201, 9a211, 11a6, 11a8
ἐπὶ | 6a6, 9a25, 10a28 πρός
| fı̂(anfusihā) 4a23 διὰ in
diʼ αὐτὸν | 6a13 ὑπὲρ | mā
yadḥulu fı̂ 8b8 sem. amplif.
ieç (b) transl. the verbs ēxw
(denoting a state) and ēstīn | 
w. gen. 8a21, 10b26, 11b18 ἔστω
| in hend. al-ḥlālu fı̂ 5b19 ēxw
| w. gen. 9b23b2 ἔστιν (there is)
| w. yakūnū 9b24a sem. amplif.;
add. w. ref. to ēstīn at 9b23 (c)
morph.; transl. the gen., dat.,
and accus., and the morph. of
adj. and adv. (c1) transl. the
gen.: fı̂ 1-kullī 4a21 τοῦ παντὸς
| fı̂ l-ʻulāmī (kullīhā) 9b21
ἀπάντων | fı̂-mā 9b23b4 ὅν
| allati taʻridū fı̂ l-ardi 11b14
τῇ γῇ | (c2) transl. the dat.: fı̂ 
l-ḥayawānī (5b5) τοῖς ζωῆς | 
fiha 6a10 αὐτὸ | fi d-dukūrati
10b8 τοῖς ἀφοεῖν | fi baʻdhā
10b111 ἐνίος | fı̂ l-ḥarakati
10b12 ἐνίοτε (c3) transl.
the accus. | of specification
(synecdoche) fı̂ tabʼīhā 7a5a∗
tῇ γῇ | of respect 9a8–9 τὰ
μεν/τὰ δέ/τὰ δέ (c4) transl. the
morph. of adj.: in ēgat with
foll. gen. transl. superl.: fı̂ ēgat
σ-σαραὶ 5b22 ἔντυμοτάτος
| fı̂ ēgati l-fadilatī 5b26b,
5b27 ἔντυμοτάτος | ēgati d-
δίγα i 9b13 πωτεινότατος | (c5)
transl. the morph. of adv.: fı̂ 
waqṭin mina l-awqātī 5a24β
ποτε indef. encl. correlative
adv. | fı̂ mawādī ʼatīratin
10a24 πλεονάξας | fı̂ mawādī in
mina l-mawādī w. neg. 11a9
οὐδεμιοῦ (d) sem. amplif. (d1)
add. after Ar. verbs or nouns
meaning “to say”: after qawlun
4b7, 5b16, 9a23 λέγω, φήμι
| after kalāmūn 5a23 λόγος
| lā yaqūlūnā wa-lā fihi (i.e.,
Allāh) 11b8 οὐδὲ τὸν θεὸν
(sc. λέγουν) | (al-qawlu)
ladī qila fihi inna 8a1 ὅς (d2)
add. acc. to sense 4a22, 5a13a,
5a14, 5a22b, {5a27b}, 5b12,
6a14, 6b181, 8a7, 8a8, 8a19,
qd
qd (a) transl. Gr. particles: wa-qad w. impf. 7b2 δή = fa-inna qad naqidu 10a25 καὶ δή = fa-qad w. perf. 9a24 (9a23) δ’ oyn | 5b18 ἄλλα (b) w. impf. (possible) qad yuhtāgu 5b27 δειν ἄν = qad yatahayyaru 7b10 ἄν ἄπορήσειν = qad yuzannu 6b12, 8a21, 9a26 δοξεῖν ἄν | 8a25, 10a25 δοξεῖν (c) w. impf. (assertive, emphatic; see note 21 to the Arabic translation); in alphabetical order of the Ar. verbs: qad yata’adda 10b12 ἡλελοβημένος (sc. ἐστίν) (where the assertion in the use of qad comes from the preceding καί) = qad yubtulina 9b21 ἄναμφοτένοιν = qad yanzanī an 4b7, 4b12a, 7b13, 8a19 (8a20), 10a17, 11a2, 11b24 -τέον = qad yafqa 9b27 κατάλοιπον (sc. ἐστίν) = qad yahṭagū 1λ 7b6 ζητέει = qad yurā 4a22, 5b3a δοξεῖ = qad yaṣ’ubu 7a19 χαλεπόν (sc. ἐστίν) = qad yuzannu 7b19 δοξεῖ = qad yazharu (lahū) 8b14 ἐμφαίνεται | 11a14 ἐκείνο γ’ ἐμφαίνει (where qad transl. the emphasis expressed by ἐκείνο γ’) = qad ya’ridu 11b11 συμβιβάσαται = qad yasta’milūna n-nazara 7a15 λαμβάνουσι = κανάτ qad tu’innu 10a6 συνεργεῖ = qad yaqaṭadi 8a8 ἐπιτοθέω = qad yakūnū 9a10 ὅτος gen. abs. | 10b7 add. for the implied copula to render the emphasis expressed by αὕτος, which is otherwise not translated = qad yalamu 7a23 συμβιβαίνει = qad yumkiniu 9b8 δυνόμεθα

part. in οὖσαν = wa-min qibali ἀλλικά 11b7 διώ καί

fyd
afāda (IV) 11a7 μετὰδίδωμι

qbl
qabila (I) 10b28b λαμβάνω | 11a15 δέχομαι
qabūlun mašdar 6a1 δέχομαι = qabūlu ṣ-ṣūratī 8a13 morph.; transl. the pass. morph. of the verb μορφοῦμαι
qabilun act. part. in al-āšyā’u l-qabīlatu li-l-fāsādi 4a16 morph.; transl. -τος in τα qibarītā | 11a16 sem. amplif.; add. w. ref. to qabila at 11a15
qabla 9b21* πρότερος = qabla ἀλλικά 5b19 πρότερον
qibalun = min qibali w. gen. 7b21, 9a8, 9a9, 9b12, 10b19 διά | 10b18, 11a18 ἔννεα | 5b13, 7b16 ὡς | 5b28 τό w. infinitive = min qibali anna 9b11 διά | 4b22 ἥπει | 5a15 ἐπειδή | 4b19 ἥπειται | 5b13, 6b26 ὡς | 6b21 γὰρ | 11b11 (11b12) morph.: transl. the circumst.
qd: qad (continued)

- qad yāğibu 8b19 ἀνάγκη - qad yūتحدي 6a4 ἐναι - qad nağīdu 7a1, 11b12 φαίνεται | 11b16 sem. amplif.; add. w. ref. to φαίνεται at 11b2 - qad naqīfu ‘alā 9a4 ἐπιστάμεθα (d) w. impf. and wa- of ἥλιον: wa-qad yuḥraḥu 8a11 transl. the circumstantial sense of the part. in καὶ ὕψωμεν (e) w. perf. (e1) expresses completed action: qad ʿašra‘a 6b12 ἀπεσταθή - qad ʿarāda 6b17 συμβαίνει - qad sta‘mala ῥωμενον - qad qadafa 5b21 ἀπεικόνισα - qad ὑφήθα 9a18 διήγηται - qad ᾗν ἡγίσα 1b20 (10b19) ἔδει - sem. amplif. qad waqa‘a l-Ιτηλίου 8b17 διαφορά τις (sc. ἐστιν) (e2) expresses completed action in the apodosis of a conditional sentence qad σάβα 7b11 ἀνάγκη ἐν

qdr

qadara (I) w. an 11b8 δύναμι - w. ἀλά 9b11 δύναμι qadrun 10a7 κύριος in κυρίος-τος - bi-qadri w. gen. 6a27, 9a2 transl. the indef. quantity indicated in δοῦνος miqdārun, pl. maqādiru 9b26 μέγεθος | 5a8 sem., etym.; transl. the root meaning ποο- in ποος

qdm

muqaddamun (II) pass. part. - min muqaddami w. gen. 11a10 ἐμπροςθεν taqaddumun (V) maṣdar 4b6, 7b14 πρὸ in προτέτορος | 4a16 (4a15) sem. amplif. for προτέτορος mutaqaddimun act. part. 4a15, 11b19 προτέτορος

aqdamu 5a2, 10b25 προτέτορος | 5b9 προτέτορος

qdw/y

iqṭadā (VIII) w. bi- 8a1 μιμήμον - qdf

qaḍafa (I) w. bi- of obj. and ἀν, and in hend. w. aqṣā 5b21 ἀποθέω

qrb

qaribun w. min 8a27 ἔγγυς w. gen. aqrabu w. ilā 4b18 morph.; transl. the comp. suffix -τερος in πιστικότερος

qrn

maqrūnun (I) pass. part., w. bi- 10a19 συνέπτων intransitive qarnun 10b11 κέρας

qsm

taqṣīmum (II) maṣdar - at-taqṣīmūn 5a11 το διαρκεῖν qismatun 8a9 μερισμός | 9a2, 9a6, 9a20 διάφορος | 9a62 add. for διάφορος acc. to sense

qsd

qaṣada (I) - quṣida pass., w. bi- 11a2 εἰς | 11b15 sem. amplif.; add. acc. to sense w. τέλος - in hend. γαύταν γυματό τάλα ἑβ7 τέλος maqsūdun pass. part., w. ilā 9a1 sem. amplif.; add. acc. to sense

qsr

qaṣara (I) 11a9 παρολείπο

qsw/y

aqṣā (IV) - in hend. w. qaḍafa 5b21 ἀποθέω

qdy

iqṭadā (VIII) 5a22a, 7b19 ἐξητέω | 7b7 ἀποτέω | 8a8 ἐπιστάμεθα

qṭ'

inqaṭa‘a (VII) - in hend. inqaṭa‘a wa-nḥalla 6a18 παύομαι

qll

istiqālun (X) maṣdar (to be lifted, picked up) 10b13 παραμώρος qaliun - in hend. w. ʿażīzun 11a24 (11a23) στάντος
qwd
qāda (I) 11b9 ʾāγω

qwl
qāla (I) (a) abs. 4a19, 5a26b, 5a28a, 5b16, 6a19 [6a20], 6b27, 7a15b, 8a7, 9a19 ʾημί | 5b1, 6a21, 8a26, 8b2, 8b4b (8b25), 9b1, 10a24, 11a41, 11b24 ʾέγω | 7a10b ʾδόξεω • sem. ampl.; added acc. to sense 6a14, 6a28, 6b16, 7a6b, 7a71, 7b11, 7b12, 7b23, 8b26, 9a21, 9a23, 9a24, 9b6, 11b8 qūlā (I) 11b13 ʾέγω | 6a24 ʾπόεω qawlun maṣdar (a) abs. 5a6, 5a141, 8a27, 10b26 ὁμός | 7b23 ὑπεχθέν | 4b7 ὑπέγν | 4b20, 8b11, 9b23a ὑπείν | 9b23a2 ὡτι • sem. ampl.; add. as the subst. implied by the pron. 5a26a, 9b13 ἐξείνο | 9a22 ᾧτό • sem. ampl.; add. to refer to a preceding statement 7b22, 11a31, 11a5 • sem. ampl.; add. acc. to sense 5a141, 8a16, 8a261, 9a26 (b) qawlun w. bi- 9a211 (9a22) ὑπέγν | 5a25c sem. ampl. for ὑπέγν (5a26) • sem. ampl.; transl. the subst. implied by the neuter article to: ὑπερ- the qawlun bi-annahu mawqūdun 8a15b τὸ εἶναι • al-qawlun bi-annahu laysa qāra τὸ ἑαυτῷ qāʿilun act. part. (a) abs. 5b1, 9a23 add. after its own verb transl. the indef. pron. τις • synt.; add. acc. to sense after its own verb 9a26 • periphr. transl. of Gr. pron.: μᾶ ἀνὰ qāʿilūhū ... aʿnī ὑπεχθεῖος τὸ ἐκεῖν τὸ ἑαυτῷ qāʿilun w. bi-: al-qāʿilū bi- 6a3 (6a4) ὑπέγν • al-qāʿilūna bi- 5a26b1, sem. concentr. ὁδόι ὑπέγνουν | 5a27a sem. ampl.; add. as the subst. implied by the pron. ᾧτοι

qwm
qāʿimun (I) act. part. 4b21, 4b4b sem. ampl.; add. acc. to sense (see note to the Arabic transl.) qawumun 6a24, 8b6 ὦ qwy
quwwatun, pl. quwan 4b14a, 5a1, 7a12, 8a19, 10b23a δύναμις • bi-l-quwwati 8a10 ὑνυμέται • in ἄσβατο bi-l-quwā 6b25 sem. etym.; transl. δύναμις in ὑνυμέτας aqwā 5b15, 6b19 ὑιοφόρετος qys
qiyyās (III) maṣdar 8a19 ἀναλογία • iii al-awlā fi l-qīyāsi 4a13 sem.; etym.; transl. λόγος in εὐλογίως mунqāyасatun (III) maṣdar 4b12b, 9a6, 9a7, 9a212 ἀναλογία mунqāsun (VII) act. part. 10b25 (10b24–25) ἔχω λόγον (see Part I, Ch. 3.3 ) qyl
taqayyala (V) 7a5a μιμέω • 11b1 ἐπιμιμέων taqayyulun maṣdar 5a25c μιμώς k
ka- 4a16 ὅσπερ • ka- in ka-ḍālika 11a8 (11a7) ὅς ἐν ὑσ δ᾽ αὐτό • (9a1) sem. ampl.; add. acc. to sense ka-anna 4a14, 5a6, 5b21, 5b24, 6a2, 6b20, 6b25, 7a9b, 7b9, 8b8, 9b15, 11b6 ὁμός | 8a18 ὦς | 10b7 ὅσπερ | 9a18, 10a19 πῶς | 11a3 (11a4) τις indef. enclitic ka-ḍālika (a) abs. 4a17, 8a14a ὦτος • 7a1 ἐξείν ὦτο | 5b23, 6a11 τοιῶτος | 11a13 ὤσκωτος | 11b21 sem. ampl.; add. w. ref. to ὦ τὸ τεταγμένον
k: ka-dâlika (continued)
(b) in expr.: as-sababu llaḏî
laḥu šara dâlika ka-dâlika 5a17
ου χάριν | 10a1 τὸ τίνος ἐνεκα
- wa-ka-dâlika yaḏri l-amru
7a2 xai - wa-ka-dâlika 9b17
και (c) sem. amplif.; add. acc. to sense 7a7
ka-mā 6b27, 9a22, 10a27
καθαύγει | 5b5, 9a16 ὀστεῖο
ktb
kitâbun - al-kitâbu l-mansâbû
ila Ḥym’s 6b27 sem. amplif.,
interpr.: Τῆμαος
kitâbatun 7a2 γραμματική
kttr
kâṭiratun 5a21 πλῆθος = in là
γυής ṫâṭiratun 11a17α οπετορν
kâṭirun 11a15 (11a14), 11a19
πολλές | 4b11b*, 8b18, 10a27
(1028) πλείον | ἀσάγα
kâṭiratun 11b13 πολλά  Bản| 6b4, 8b24b πλείονα | 4b9
όληγα | - al-κâṭiru mina n-nâsi
6a23 ои πολλοί | fi mawâdi‘a
kâṭiratin 10a24 πλεονάκις |
‘ala wugâhîn kâṭiratîn 9a10
πλεονάχος | in hend. kâṭirun
muḥtâlifun 7b1* transl. variant
πονίλως instead of πονιλία
- kâṭiran adv. 8a25, 11a16
πολλώ | 9α8 πλεῖοστον adv. in
bá’ada kâṭiran 11b27 μακρός
aṭkûr 8a25, 11a16, 11b21 πλέον
- al-aṭkûru 78b τὸ πλέον
- in expr. aṭkûra má 9a7
διὰ πλεῖοστον | aṭkûru min
wâhidin 5a19 sem. amplif.
πλειον | laysa bi-wâhidin bal
aṭkûru min wâhidin 5a15 sem.
amplif. & metathesis; affirm. /
neg. transformation πλειο
kry
(ukâtratun) pl. ukûrûn 5a21a
σόφα | 5a24a sem. amplif.;
added w. ref. to σόφα at
5a21a (GALex 1,239 §1)
ks’nwqr’tys 6b7 Ξενοκράτης
kll
kalâlûn (I) maṣdar | in hend.
du’fun wa-kalâlûn 5b14
ἀσθένεια
kullûn (a) kûll w. gen. 5a18, 6a2
(6a1), 7a6 (7a7), 8b1, 8b2,
8b21, 10a22, 11b9, 11b20 πᾶς
7a10a, 9b21*, 11a5, 11b1
ἀπὲς | 5b17 αὐτὸς self | in
hend. w. γαί 4b15b πᾶς
- in phrase kullû mā 1a13
οόι | taγâwâza kûll ḥaddin
8b9 sem. amplif. ὑπερβάτος |
kullû má fihâ (7a20) ἐκαστος,
misreading ἐν ἐκαστὸν for
ἐνεκα τον at 7a21 | ‘ala kûll
鱾 δ (5b15) corruption (b) in
phrase kullû wâhidin 8b26
ἐκαστος | kullû wâhidin
mín 5b4b, 7a11, 7a17, 8b22,
9a11 (9a10), 9a15, 9b18, 10a2
ἐκαστος | kullû wâhidin
min(um)ά/al-âharû 5a18
ἐκαστος | 4a12 ἐκάστερος
(GALex 1,64 §3.4) (c) al-
kullû 4a14, 4a21a, 8a23, 8b8,
10a16 τὸ πάν | 10a3 τὸ πάν
in τὸ σύμπαν | 10b28a, 11b5
tὸ ὄλον | 11b26, 12a1 τὸ
σύμπαν
kullûyyûn 8b18, 9a1, 9a27
καθόλου | al-kullûyyûta 8b20
τὰ καθόλου | kullûyyan 8b25b
καθόλου
klm
takallama (V) 11a22 λέγω
kalûmûn 5a22a, 6a14 (6a15),
7b9, 8a8 λόγος | 5a22b sem.
amplif.; transl. demonstrative
ό w. ref. to λόγος at 5a22a |
sem. amplif.; add. acc. to sense
lammâ ἀḥâda fi l-kalâmî fi
6b14 κατά
km
kam 8a18 ποοῦν | ‘ālā kam 9a24
ποοχός
kmml

camālun (l) masdar 7a8 (79a) ṭēlēouā ﬁ ġāyati l-kamāli 8a7 ṭēleowātōtā
kāmilun act. part. 5a6 āḏītōs | 6a19, 8b27 ṭēlēouā
akmalu 6b20 ṭēleōwētōs

kwdd
kāda (l) w. an 6a26, 8a24 ṣāḥēdōn

kw
kāna (l) (a) abs. 4b9 (4b10), 4b18, 5b2, 5b6, 7b16, 7b20 (7b21), 8a14a (8a15), 8b18, 9a10, 10a14 (10a15) ēyū | 6a11, 8a16 ṻūāμ | 4b9 parapr. ēyū | [6a17] tībīmu ﬁ yakūnu
imperf. 8b7 mēlōw in mēlōv
(b) kāna/kāna introducing two correlative clauses 8b19–20 ēyū/ēyū (c) sem. amplif.; added to transl. the implied copula ēyū 4a17, 4a18, 4b10, 4b11b, 4b17, 5a3, 5a17, 5a20, 5b7, 5b9, 5b10, 5b20, 5b23, 5b26b, {6a1}, 6a2, 6a9, 6a10, 6b20, 7a8, 7a11, 7a13, 7b8, 7b14, 7b16, 7b17, 8a17, 8a20, 8a21, 8b1, 8b5, 8b11, 8b16, 8b17, 8b21, 9a6, 9a10, 9a11, 9b6, 9b7, 9b13, 9b14, 10a12, 10a13, 10a15, 10a22, 10b7, 10b19, 10b20, 10b27a, 11a1b, 11a21, 11b5, 11b7, 11b19, 11b20 (d) sem. amplif.; added to express the implied existential ēyū (there is) {5a28b1–2}, 5b4b, 6a28, 6b2, 10b25 (e) w. prep.: w. bi- 11b10 īḥdēxōma | w. bayna 6a5, 6a7 ēyū | w. āla 8a4 ēstī (implied) ﬁ 5a24a ēyū | 9b24a sem. amplif.; add. w. ref. to ēstīv at 9b23 | w. li- 4b2 ēyū | in mā kāna li- w. subj. (to be such that; see WKAS L.458b) 8a17 transl. the neg. optative in otdē gūvōrō (f) morph.; in kāna muʿādīlan

8a24 transl. the -eō suffix of denominative verb ēyūmuōnē
— in yakūnu (muḥarrīkān) 5a5 transl. the future tense in xūṣinā | in kāna mawgūdān 8b7 transl. the perf. tense of the part. ēyūnuq | in an yakūna munfasīḥān 5a4a helps transl. the optative in λόγον ēyū—w. impf. it transl. the Greek impf. qad kāna qāgību 10b20 (10b19) ēda (g) in expr.: kāna mawgūdān 8a17 Ṽūāμ | in hend. kāna hāḥūnā 4b6, 9a18 (9a19) ēyū—min ʿāna nīhān an yakūna 6a21 ṻūāμ | kāna / yakūnu foll. by buṭlān 6a8, 6a13–14 āṭīyāt(t)’ ēyū (h) add. as auxiliary verb required by the Ar. synt. 4b13, 5a1, 5a5, 5a18, 5a19, 5b14, 5b26b, 5b28, 7a18, 7a23, 8a2, 8a3, 8a14a, 8a27, 9a7, 9a10, 10a5, 11a13, 11b10, 11b11, 11b22 takawwunūn (V) masdar—
in hend. takawwunūn wa-wuḡūdūn 11a18a–18b tā ʿēnā makānūn, pl. amākānū 5b22 ṣūμa | 6b1 tōṭoṣ

kyf
kayfa 5b19, 5b21, 6b23, 8a8, 12a1 pōṣ | 8a18 pōṣ

l1
la- part. 10b20 Ar. synt.; introducing the apodosis after law

l2
li- prep. (a) transl. Gr. prep.: 5b14, 7b7 dīa—w. īlālika 9b15 dīa in dīo—transl. the prep. ēv- in compound adj. expressing the possession of a quality (LSJ E.L.2): lāhū nafsūn 5b6, 11a17 Ṽūāμ | 8a24 transl. the distributive use of the prep. āṭkā in the sense of "to have": li-kullī wāhīdin
P. li- (continued)

minhá muharikun 5a18 tö καθ’ ἐκαστὸν (scil. κινοῦν)
(b) expressing cause: as-sabab alladhi lahū 10a1, 10a28,
10b23 b ἔνεκα l ἑ ἱ ρ ω s ἰ n ὀ ṿ κ ± w. subj. 6a12 ἐ ὐ ἱ ὼ ϕ w. inf. | 6a16b, 10b2a ὑ τὰ ὀ τὶ w. opt. | 7b22 paraphr. ἵ ἄ ν τὸ s | 10a281 sem. amplif.; add. acc. to sense
(d) expressing possession: w. attached pron. 4b21, 5b4a,
8a19, 9a17* (9a16), 9b11 ἐ χω | 4b4b (4b2), 5b3b (5b4),
7b11 sem. amplif.; add. acc. to sense to mean ἐ χω | ὀ ṿ λ-
9b7 ἱ Ἰ μ ῖ τ ἐ ῵ ο s | in expr. ὀ ṿ λ-
ma’nā lahū (10a23a) ἵ ἄ ῳ ὀ s | sem. amplif.; add. acc. to sense 10b11 (e) morph.; transl. the
gen. case suffix: li-l-ḥarakati 4b22 τῆς κινόσως | li-γαμ'ī
l-_areas' i 5a7 πάντων | li-s-
samā' i 5b20 τὸ ὁ ὁ ὁ ὁ | ὀ ṿ λ-
la-hā (sc. li-s-
samā') 5b20,
5b21, 5b21, 5b21 sem. amplif. for τὸ ν ὁ ὁ ὁ | ὀ ṿ λ-
9b20 | ὀ ṿ λ-
li-γαωραϊ | 6a7 τῆς ὁ ὁ ὁ ὁ | ὀ ṿ λ-
l-λ-insānī
6a21 ὀ ὀ ὀ ὀ | li-l-
farasi
6a22 ἦ ὄ ὄ | li-say'in 6a22 τίνος | li-t-
tabati 10a10 τῆς
φυσῶς | li-mā huwa min ἀ 
γλι
say'in 11b26 τὸ ἐ 
ν ὀ 
κ ὀ τοῦ | ὀ ṿ λ-
li-
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šay’un 7a13 μηδείς — laysa...
wa-là — laysa (c) sem., etym.; transl. the alpha privative: là
tataftaru 5a4a ἀπώνως
tlà tafturu 5a1b6 ἀνήνυς
tlà muhtamilon li-l-i rtibāti
5b18 ἀσώνδετος — là yaqa’u
fihi baḥtun 6a3 ᾄτητος
tlà tanāhā 6b1 ἀπειφον
là ġuz’a lahū 8a3 ἀμεος
là nafsa lahū 9a15, 11a17 ἀνήνυς — mà là nihāyata lahū
9b4 ὑ ἀπειφον — là yuḥsā
11a17 ἀπειφος — al-ThanOrEqualTo
lladī là yataqaazza’u 11b2 ἀτομον (d) sem. metathesis;
affirm. / neg. transformation: là
taṣā’u illā 6a2 bouλόμενον
— là yakūnu illā 7b16 sem.
amplif. for the implied copula
εϊ — mà ma’nā lahū {10a23a}
ἀλλος

l’m
lakīn(na) 4a14, 5a1, 7a14a, 7b13,
7b18, 8a4, 8b8, 10a26, 11b6,
11b9, 11b16 ἀλλά | 4b22,
8a12 ὑ ἀνάδεσις, ὑ ἀντιστάσις, w.o.
preceding μὲν | 6a16b (6a15)
— ὑ ἀνάδεσις w. preceding
μὲν

l’m
mulā’imun (III) act. part. 9a11
— ὑ ἀνήνυς in hend. mulā’imun
ḥāṣṣun 10a10 ὑ ἀνήνυς

l’hq
lahiqa (I) 11b13 sem. amplif.; add.
acc. to sense
(lαhpqatun) pl. lawahiqu 9a14
ἐπόμενα

l’hm
lahmun 7a14b ὑ ὑ ὑ ὑ

l’hwy/iy
lihyatun 10b10 πῶγον

l’hs
lahḍaša (II) 9a18 διωγέω | 9a25
ἀφορίζω
talḥiṣun maṣdar 10a23b ᾄφορι-

ομός | 9a18 maf’ul muṭlaq to a
preceding lūḥiṣa

lzm
lazima (I) 7a23 συμβαίνω | 7a3
— συν- in συνακολουθέω |
10b18 συν- in σύμπτωμα |
11b16 κατά in κατακολουθέω
— in hend. tabī’a wa-lazima
7a3 συνακολουθέω | 11b16
κατακολουθέω — 5b24 sem.
amplif. of prep. ‘an transl.
ὑπό

l’l
la’alla — ‘ll

l’m
lam w. juss. 4b2, 8a17², 8a21,
8b14, 10a13, 11b11, 11b20
μῆ | 5a22b, 7b13 οὐ | 6b5
οὐ in οὐδεμίαν | 6b11 οὐ in
οὐκέτι | 8a17¹ (8a16–17) in
double negative, οὐ... οὖθε =
lam/wa-là 11b5 οὐτὲ/οὐτὲ =
paraphr. lam yadkur dālika 6b5
— in context ὡσαύτως

l’m
lammā — synt.; transl. the gen.
absolute lammmā kānat fīhā
5a24a ἔχοντων | lammmā kānat
9a10 ὄντος — morph.; transl.
the past tense in the aorist
part. lammmā waładū 6a25
γεννήσαντες — sem. amplif.;
add. acc. to sense lammmā aḥāda
—from 1-kalami 6b14

l’ms
iltamasu (VIII) 4b12a, 9a24,
11b24 περάω | 9b23b ζητέω
iltimāsun maṣdar 9b13 sem.
amplif.; add. acc. to sense

l’w
law 9a23 εἰ | 10b19 εἶπεο | 8a17
morph.; transl. the Gr. gen.
absolute

l’yt
layta šī’i {6a1b6} ᾄξιος εἴη εἶναι |
10a24 morph.; transl. the interv.
sense in τοῖς — yā laita šī’i
10a16 ὁ ὁ
lys
laysa (a) neg. of existential εἰςιν
(a1) expressed 4b23, 5b8 οὐχ ἐν εἰς| 5a4a μή εἰναι (a2) not expressed 5b20 οὔ (sc. ἐστὶ)
laysa say an 10a17 μηδὲν (sc. ἐστὶ) (Ar. read μηδὲν for μηδ' ἐν) | 10a18 οὐδὲν (sc. ἐστὶ) (Ar. read οὐδὲν for οὐδ' ἐν)
laysa say un 10a22 μηδὲν (scil. ἐστὶ) laysa/wa-l¯a 4a19–20 οὔτε (scil. ἐστὶ)/οὔτε φαίνεται (b) neg. particle 4b2, 7b17, 8a1, 8a3, 8a26, 8b5, 8b16, 9a27, 9b2, 10a8, 10a9, 10a23a, 10b6, 11b5 οὐ | 6a18, 7b20, 10a25, 10b24b μή | 4a23, 5b12, 6a11, 8a15b, 8b2, 10b18 οὐ in οὐδέεις | 5a20, 11a9 οὐ in οὐδαμοῦ, οὔθωμός | 4b4b οὐ in οὐδὲ laysa bi-/wa-l¯a/(wa-l¯a) 5a8, 8b7 μή/μηδ'//μηδὲ) laysa hάδα 6a15a sem. metathesis; affirm. / neg. transformation: ἐτέρος laysa bi-wahidin bal aktaru min wahidin 5a16 (5a15) sem. amplif. & metathesis; affirm. / neg. transformation: πείζων

lyq
alyaqu 9a22 (9a21) οἰκειότερον adv.

m'
m' indef. encl. 4b6, 4b14a, 5a1, 6a20², 8a19¹, 8b17, 9a20, 10a16, 10a19, 11a2, 11b25 (11b24) τίς, τι μuddatun mà 6a18, 6b10 sem. amplif. ти || 8a19² sem. amplif.; add. acc. to sense mà interr. 4a17, 7b7 (7b8), 9a26, 10a2 тί, тι in expr. mà huwa š-say'у 8b22 ти ην εἰναι mà pron. (a) transl. Gr. pron. (a1) transl. the neuter article 5a13b, 5b4a, 5b26b 1,2, 6b19³, 7a3, 7b1, 7b8, 8a3, 8b4, 8b7 (8b6), 8b18, 9a13, 9a14*, 9b4, 9b20*, 10b16, 11a15, 11a17a, 11a17b, 11a21, 11a25 (11a24), 11b14, 11b26 τό, τά | 6a27 (6a26), 7a6 τά in τά ἀλλα
in mà yustaḥa mà 5b4b sem. amplif.; transl. τά in the implied ἐκαστόν (sc. τῶν ὀρθεύων) sem. amplif.; add. acc. to sense 8a16 (a2) transl. relative pron. 9a21, 9b23b, 11a6 οὐν | 11b2 ô huwa mà 6a19 ὄπερ | 4a19 ἐ in καθάπερ in mà yumblrı an yakūna 'alayhi 8a4 ὅ τι (a3) transl. correlative pron.: 9b27 ὄος kullu mà 11a13 ὄος in bi-qadri mà 6a27 transl. the indef. subst. indicated by ὄος in adv. ὄον, and by τόος in τοούτοι = 11b22 ὄος (a4) transl. demonstr. pron.: periphr.; in expr. mà anà qā'iluhū (... a'ni) 5b10 οὔτος | 6a5 ὄδε | 5b19 sem. amplif.; add. acc. to sense (a5) other pron.: in mà huwa aydan {7a22} οὔτος in kullu mà fihā {7a20} ἐκαστός, misreading ἐν ἐκαστόν for ἐνεκά του in the Greek (7a21) (a6) sem. amplif.; in bi-manziłati mà 4a21b, 8b26 οὗν | 8a12, 9a3, 10a12 καθάπερ (GALex II,25 §22.1.2) | 9b13 (9b12) ὄοπερ (b) morph.; transl. the morph. of subst. used as adj.: mà yuhtāgu ilayhi wa-yuntafa'u bihi 4a20 ὄξυχρεως mà là yaqa'u fihı bahṭun 6a3 ὄξυτητον mà yastaḥiqqu an yuṣaddaqa bihi 7b18 ὄξιμποτον mà yahfā 5a17 sem. metathesis; affirm. / neg. transformation ὄξυνις mà là tanahā 6b1 sem.; etym. ὄπερ = aktaru mà 9a7 πέλειστον = mimmà
yurtabaku fihi 9b1–2 ἀποφον
- mā huwa aqdamu 10b25
πρότερος - mimmā yagibu
an yūtaqa bihi 10b27a πιστόν
(c) sem. amplif.; in other para-/periphr. uses: mimmā yagri
aydan hādā l-mağrā 10b11
ἐτί - mā yadhulu fī 8b8 εἰς
- 'alā mā yambāği 11a25 καλὸς
ἐτυχεν - in mā naḡiḍu dālika
{5b5}, {6a20'} add. acc. to sense
| 11a16 sem. amplif.; add. w. ref. to mā at 11a15 (d) Ar. synt.;
add. in construction mā ... min
... 8a4, 10b4, 11b1 - in min aš-
sāna'ati mā huwa abda'̲̲u 8b6
ἐτί πλέον τὸ παρώδον (e) in
other expr.: bi-mā - bi-, fi-mā
ahṣibu - ḥasiba, mā ḥalā -
ḥālā, 'alā mā - 'alā, ka-mā -
ka-, li-mā - li-

mtl
mitlun - mitla 6b1, 6b2, 11b14
οἶνον | 7a2 καθάπερ | 11a23
ὀσπερ | 8a22, 10a4 sem.
amplif.; add. acc. to sense -
mitla dālika 11b17 τοιοῦ-
tος
matlun - matlaln 4b4a (4b3)
καθάπερ | 7a16, 7a18 ὥς
eptēn
mitlun - w. gen. mitlalhum and
mitlal dālika 9a12, 9b20, 11a9
οἶνον - in phrase 'alā mitlān
wāḥidin 5a26, 6b8, 8a3 ὥμων
| 10b20 ὅσωντος - in phrase
'alā hādā l-mitlān 7a4, 7a16
ὁμώον

mdd
maddun (I) masdar, w. ilā 10b2
(10b1) προχώρησος
muddaton - muddaton mā 6b10
τι indef. encl. | 6a18 sem.
amplif.; add. acc. to sense
māddaton 8a9 ὕλη - in μυσαρι-
κυν l-l-māddati 7a7 morph.;
transl. ὕλη in ὅλικος

mdn
mādīnatin 8a5 πόλις

mrr
marratan - marratan 6a19 (6a20)
ποτε indef.

mr'
mar'i̲̲n 11a10 οἴσοφαγος

mss
māssa (III) 9b15 ἀπτομα
misāsun masdar 9b15 ὥγγάνω

msk
amsaka (IV) w. 'an 6a27 παρα-
λείπω

m'
ma' 5a25c, 5b3a, 6a8, 9b22 ᾧμα |
6b3 ᾧμα καὶ | 5b1 μετά | 5b17
tε | 10a2 πρὸς | {6a17} ἄφ'
| {v} - ma' a dalika 6b9 ἔτι δή
- wa-... ma' a dalika 5a28b
ἀλλως τε καὶ | 9b18 (9b17–
18) καὶ ἀλλως/καὶ - wa-ma'
da莉ya'n 9a62 sem. amplif.
καὶ
ma'an 6a4' ᾧμα

m'n
am'ana (IV) w. fī 8b16 (8b15) ἔτι
πλέον

mkn
amkana (IV) 11a8 οἶνον τε -
amkana w. an 8b5, 9a27, 11b5
οἶνον τε | 4b2 οἶος τε | 9b8
δύναμαι | 9a21 ἐνέχεται -
mā yumkinu an yakūna alyahi
8a4 ὁ τι
mumkinun act. part. 7b20
ἐνδεχόμενος

mlk
malakun 9a11 (τὸ) μέγιστον

mn
man relative pron. 5a13 ὁ

mn2
min prep. (a) transl. Gr. prep.:
5b26b, 6a15b12, 6a16a, 6a28,
6b212, 6b22, 9b9 ὁτὸ | 7b10
(7b9), 10b212 (10b20) ἐν |
6b14, 11b11 ἐκ | 5b27 πορό
| 5a4 κατά | 11b14 περὶ
mn²: min (continued)
(b) of source or provenance, transl. Gr. pron.: 7α14α τοῖος in τοιοῦτος • [91a, 92a] ἕνωα
(c) morph. (c1) transl. the Gr. gen. abs. 6b19* (6b20) τῶν (c2) morph.; transl. Gr. partitive gen.: mina l-aṣyāʾi l-ğuż’iyyati 8α6 τῶν μεριστῶν
— mā min ἡδή 913 τούτων τά • ašbāhū ἡδηί mina l-umūrī 9b14 τῶν τοιοῦτων • mina l-aṣyāʾi l-mahṣūsati...
— min sāʾirī l-aṣyāʾi 11b18–19 τῶν αἰσθητῶν... τῶν ἄλλων • 10b11, 10b17 sem. amplif.; add. acc. to sense (c3) transl. the Gr. dat.: min dātiḥā 10b27b τῶν αὐτοματῶ • min harakatī w. gen. 10b28a τή περιφορά (c4) transl. the adv. accus.: min āgli 10b19, 11b15 γάρν (c5) transl. the adv. suffix -ως; min dātiḥā 7α18 αὐτομάτως • min āḥāṭin šātta 9b1 πλεοναχός (c6) transl. the suffix -θεν: hiya llāti minhā 7b9 ὁδεν • min ayyī l-umūrī 10a24 πόθεν • min muqaddami w. gen. 11a10 ἐμπρόσθεν (c7) transl. the adj. morph.: mina 5-šiḥḥati 8α16 ἀληθής • min ġīnsin wāḥidīn 9α8 μογєνής (d) after comparatives 5a11, 9a22 ἕ | 5b15 τοῖos • sem. amplif.; add. in the transl. of comp. adj. 4b18, 5α9, 5α14, 5α16, 5α19, 5α21b, 5b91², 7b19, 8α24, 8α25, 8b4, 8b6, 9α26, 10b26, 11a11, 11a16, 11a17b (e) individuating use; introducing a subject of universal validity in a nominal sentence: mina l-bayyīnī 4b21, 10a13 ὅλον | 4b22 φανεφόν ὅς | 8b9 (8b10) φανεφόν ὅτι • wa-mimmā yahfā ... annunci 5a17 ὀφεινής • mimmā yutahāyyarū fihī 5a23 ἀποφόν • mimmā ἡ γας αἱ fihī bahṭūn 6a3 ἀζήτητον • mimmā yastahīqu an yuṣaddaqa bēhi 7b18 ἀζίμηστον • mina l-qabiḥī 7b23 ἀτοπόν • mina l-fuḍūlī 8α22 περιφεργία • mimmā yurtabakī fihī 9b1–2 ἀποφόν • mimmā yagību
an yūtaqa bēhi 10b27a πίστον
— sem. amplif.; mimmā yagīrī aydān ἡδά l-maγrā 10b11 ἔτι (f) partitive use (f1) restricting universal application: yaṣāʿu mina l-umūrī kūlliḥā 6α2 πάντα βουλόμενον • mina l-ιλθιλά 6a5 διαφορά • mimmā yagīnu in yuṭaqa bēhi 10b27a πιστον
— al-μουσακαλάτου minhā 7α7 add. w. ref. to ἐμμύροφους at 7α6 • al-αγησσου mina l-umūrī 8α24 το χειρον • kaṭirun mina l-umūrī 10α27 (10a28) το πλέον • shayʿun min γαγηρί 8a20 ἀλλός (g) indicating indefiniteness: ala/bi-waγhīn mina l-wuγhīn 4a12, 6b7, 9b6 πος | 4b12α ὡμὸς γέ πος | 5a16, 7b19–20 τότον τίνα • ὦδθεμωγ 5a21 • fī waqtiṭān mina l-awqatī 5a24b ποτε • mawdīʿun mina l-mawdīʿī 6α23², 9b8 τίνος • fī mawdīʿun mina l-mawdīʿī w. neg. 11a9 ὦνθιμο • paraphr.: serves to transl. the indef. sense of θανετά: mimmā yūḥstiγū ilayhi wa-yuntafaʿu bēhi 4α2α (4a21) ἐξέχθεω θανετά • indef., preceding a def. noun (Wright II, §48f, Rem. a); bi-ṭariqin mina t-
tašbihī āhara 4b13 transl. the indef. sense in xavʾ ʿāllamīn (h) in various expr. (h1) min āgli šayʾīn 10a22, 11b26 ʾenēkā ṣου | 10b19 ṣου ʿawīn | 11b15 tūnū ʿawīn (h2) min šaʾnīḥī ṣan 9b24a pēfīne = min šaʾnīḥī ṣan yakūna 6a21 tawāqūn (h3) kullu wāḥidin min 5b4b, 7a11, 7a17, 9a11 (9a10), 9a15, 9b18, 10a2 ʿekāstōz = kullu wāḥidin mīnhā ... al-āḥaru 5a18 ʿekāstōz = kullu wāḥidin mīnhū ... al-āḥaru 4a12 ʿekāteros (GALex I,64 §3.4) (i) sem. amplif.; add. exepestegically (li-t-tabyīn: Wright II,133 §48g): ʿālā l-ʾitlāqī min al-qawli 4b20 ʾūz ʾalālōz ʾeṣīnī = al-mahsusātu mīnhā (sc. al-ʾasyyāʾī) 6b8 aʾīṣḥātā = ġayrūhā mimmā huwa aqdamu 10b25 ʿetere ʿproṭere ʿ (j) sem. amplif.; add. acc. to the requirements of Ar. synt., in mà ... min construction: 8a4, 8b6, 10b4, 11b1 (k) sem. amplif.; added acc. to sense: 5a17 min amrihā; 6a25 min ḥādaynī; 8b15 ʿayʿun min; 9a23 ʿayʿun mina l-ʾasyyāʾī (l) w. verbs or verbal nouns: — ḥilwun, — qaribun, — imtanaʾa, — tanaqqulun (m) in phrases: min ʾṭarīqīqī anna → ʾṭarīqīqī = min qibālī, min qibālī an/na → qibalun

mūsīqā 7a22 mūṣiṣikā
mwh māʾun māʾu l-bāḥri 10b1 ṣmālattī
myz tamyüzun (II) masdar 9a24 ḍiyeelin (ḏiyeelin)
myl māla (I) w. ilā 11a3 ʿeḥw

nbt nabāṭun (I) (a) masdar 10b10 ʾiṣiṣnīs (b) nabāṭun, pl. nabāṭatun 7a22, 7b4, 8b27, 9a14, 10a5, 10a13, 10b21 ḍvṭūn = in phrase bayna l-ḥayawānī wa-n-nabāṭī {7a22} mistranslation of τομφόλυξ

ntr manṭūrūn (I) pass. part. 7a14b ʾeṣmiṣmīnūz

nģm munaqqīmūn (II) act. part. 5a22b ʾaṭṭriqalīgūz (naqqīmūn) pl. νuγμίμουν = in phrase śināʾtūna n-_NUM:PL ŋūmīmūn 9b27, 10a5 ʾaṭṭriqalīgūza

nħn nahnu 4a22 ʿiṣmaʾ = in hend. nahnu anfusunā 9b12 ʿiṣmaʾ = as expressed in the personal suffixes of verbs and the attached pron. annā, innā 5b21, 5b23 (5b24), 9b19 sem. amplif.; personalizing the impersonal expression in Gr. = 8b15 sem. amplif.; add. to refer to the implied subject of the circumst. clause

nḥw nahwun, pl. ʾanḥaʾun = morph.; in hend. w. ʾalā transl. the adv. suffix -ως: ʾalā Ḥādā n-naḥwi 5a10 ʾūtwos | ʾalā ʾanḥaʾ in sattā 8b9 ʾpolλακχός
nlz
manzilatun • bi-manzilati w.
  gen. or má 6a24, 8a12, 8b3, 9a3, 10a12, 10b8, 10b11,
  11a21 καθιερό (GALex II, 25 §22.1.2) | 4a21b, 8b26, 10a16
  (10a15) οἶον | 7a14b, 9b12
  δοστερ | 8a5 ὥς ἀν | 8a6 ὥς ἀν
  sem. amplif., add. acc. to sense

nbs
nasaba (I) • nusiba pass. part. w.
  ἰλ 5b6* morph.; transl the dat.
  case in ἐμψυχίος
mansübun pass. part. • al-kitābu
  l-mansübū ilā Ἰτή ὃς 6b27
  sem. amplif. Τίμιος
  (nisbatun) pl. nisabun 4a23, 7a12,
  8a14a λόγος

ntq
nutqun (I) • in ἓν λόγος in λογοθεία

nzt
nazara (I) 12a1 sem. amplif.; add.
  w. ref. to the preceding θεωρία
  • 10a6 sem. amplif.; add. acc. to
  sense
nazaru n-Za • 9b13 βλέπειν •
  w. fi 9b14 (9b15), 12a1 θεωρία
  • in expr. ιστα'mala n-nazara
  7a16 λομβάνον • in expr. γα'ala
  nazarahū 6a6 (6a7) ἄνωφερον •
  6b4 add. acc. to sense
názirun act. part., used w. its
  μαςδαρ 6a6 τις
  (názirun) pl. názā'īru 10b6 παρόμοιος

nzm
manzūmūn (I) pass. part. 7b7
  τεταγμένος
nizāmūn 7a12, 7a23, 11b18 τάξις
  | 11b4 τάξις in ἀτακτος | 8a5
  ἀπηρτισμένος • an-nizāmu
  11a7 το τεταγμένον • alā
  nizāmin 11b21 το τεταγμένον

nfs
nafsun, pl. anfusun (a) soul 5b1,
  5b3a, 5b9, 6b2 ψυχή | 5b2,
  5b7, 7a17, 11a16, 11a17b
  ψυχή in ἐμψυχίος | 7a17,
  9a15, 11a17a, 10b21) ψυχή
  in ἐμψυχίος | 5b4a sem. amplif.;
  add. w. ref. to ψυχή at 5b3a
  (b) self, w. attached pron.
  4a23, 4b22, 6a13, 9a8 αὐτός
  reflexive • 4b4a, 7b23 (7b22),
  9a8, 9a17, 9b10, 9b14, 9b16,
  10b24b αὐτός intensive •
  in hend. nahrnu anfusunā
  9b12 ἡμέτερος (c) synt.
  6b21 expresses the emphasis
  generated by inverted Gr. word
  order

nf
inta’a (VIII) c. bi- 4a20–21 sem.,
  etym.; transl. the component
  χρέος (or χρεία) in άξιόχρεως

nql
tanqqulun (V) maṣdar, w. min
  10b5 (10b6) μεθίστωμαι
  intiqālun (VIII) maṣdar 5b26a
  μεταβολή
tanqulun 7b8, 8a15a μετάβασις

nhw/y
tanahā (VI) • in mà là tanāhā 6b1
  sem., etym. πέρας in ἀπειρον
  tanāhin maṣdar • in al-ḥurūgū
  'ānī t-tanāhī 11b3 sem., etym.
  πέρας in ἀπειρον
  intahā (VIII) w. ilā 10a25
  τελευτάω | 9b2 μεχορ |
  9a14 add. acc. to sense to
  complement bi-āḥaratin
  niḥāyatun, pl. niḥāyātun 11a24
  ἀκρόν • in mà là niḥāyata láhū
  9b4 πέρας in ἀπειρον

nw
naw’/n, pl. anwā’/n 4b8, 8b20,
  10a4, 10b23a εἴδος

h’
hādā (a) transl. Gr. demonstr. and
  other pron. 4b11b, 4b20, 4b21,
  5a6, 5b20, 6a15b–c, 6a19, 6b7,
  6b17, 8a21, 8b19, 9a1, 9a6,
9a13, 9b1, 9b16 (9b17), 10b18, 10b27, 10b24b, 11a1b, 11b23, 11b27 определен | 5a26a, 9b13

екзистент | 10a8 ө demonstr.

pron. | 6a2212, 8b8, {10a17} өдө| 5a2, 8a27 топото | 8a8, 11a3 топодө | 10a20 (10a19) 
nuv – далика/хада 96–7, 9b7 ө/ө in ө мёл/ө өе ө хада 1-
мана 6a2, 6a14, 7b5 amplifier. тоото, тоота ө хада...
al-muṣāřu ilayhi 6a21 sem. amplifier. өдө ө хада ө ш-эйу'l-
muṣāřu ilayhi 8a17 sem. amplifier. тόдө ө лаяса хада 6a15a sem.
metathesis. affirm. / neg. transformation өтөрө ө сариру s-
subuli mа hala хадиhi s-sabili 6b19 sem. amplifier. өкейнү
(sc. өл мёлдоо) ө {11a20} misreading in Ar. of өвөн ө а
өв (b) transl. Gr. relative adv.: фи хадиhi s-sabili 6b21
өвөрө ө фи хада l-мавди'i 7b6 өвөнтуўа (c) in expr. denoting
similarity: ала хада l-митали 7a4, 7a16 орөөсө ө ала хада
l-waghi 4b17 өуто ө ала
хада н-нахви 5a10 өуто ө асбаху хадиhi мина l-умури
9b14 топото ө ягри хада l-
мағра 9a4, 11a14 өуто ө 4b19 (4b18) топото ө мимма
ягри айдан хада l-мағра
10b11 sem. amplifier. өті (d) sem.
amplifier.; added in the transl. of
comp. or superl. adv.: аwwalu хадиhi 4b5 прото ө аудаху
мин хадиhi 4b18 сөфестәрөө
ө аблагу мин хада l-кәвли 5a14
пәләйөө ө абдә'у мин хада
8b4, 8b6 тәрәәдөәтөрөө,
пәләпәвәнымдөөрөө (e) sem.
amplifier.; added to refer to an
understood antecedent 5a24a,
5b18, 6a23, 7a17, 7b22, 8a22,
9a15, 9a20, 9a26, 10a7, 11a3,
11b15, 11b19, 11b20 ө in
phrase хада өлана 5b12
қалическое | 10a9, 11b1 (11b2)
қалито (f) sem. amplifier.; add.
acc. to sense 6a25, 6b18, 7a10b,
8b11, 9b17, 10a23b ө used to
mark a subst. foll. by an article
in attributive position preceding
an adj. хадиhi ш-шахвату лләт
хиya әфдалу ш-шахвәти 5a20
өзәзө ө өўрәтї
хә'уля'и pl. 6a25 morph.; transl.
the pl. morph. of the part.

γεννήσαντες

хә'уля'и in hend. кана хә'уля'
4b6, 9a18 (9a19) ейи (there is)
ө {5a28b}, 8a20 sem. amplifier.;
add. to express the implied
or understood existential ейи
(there is)

hl

hal in indirect questions 6a13 еи |
6b23 (6b24) төтөрө ө hal/aw
4b7–8, 5b13, 5b19–20, 6a7–9
төтөрө/њ | {10a16}–17 еет/њ

hw

huwa (a) transl. Gr. pron. huwa
лаathi 4b5 ө опео ө хуwa ма
6a19 опео ө ма hуwa айдан
7a22 ۆтөө ө ма hуwa айдан
9b14 топото (b) sem. amplifier.;
add. as the implied subject of
the sentence 4b23, 5a4a, 5a5,
5a21, 5b6, 5b7, 5b8, {6a4}, 6a5,
7a8, 8a22, 8a25, 8a26, 8b14
(c) sem. amplifier.; copulative
pronoun (дамир ал-фасп) 4b7,
4b11b, 4b21, 4b22, 5a15, 6b16,
6b21, 6b28, 8a13, 8a20, 9a11,
9a26, 10a8, 10a9, 10a23a,
10b25, 10b27a, 11a15, 11a20,
11b26 (d) sem. amplifier.; transl.
the implied copula: ма hуwa
фи гайяти l-фаэлата 5b26,11 тө
 quoiсто sc. өв-ө хуwa афдалу
5b27 куулион ө ма hуwa
аджасу 7b8 тө шөпөө ө хуwa
а'заму 7b19 (7b18) өөзөө
hw: huwa (continued)
- huwa abda‘u 8b6 πλέων
  παράδοξον (e) in expr. ‘alpha
má huwa ‘alayhi 4b15a οίσπερ
äv ei ∴ má huwa 8-say‘u 8b22
tó ti ην ειναι

hw`
haw‘un 7b2, 11b17 ὁπο

hy
hiya - transl. Gr. εἰμί: 4a22, 6a7
(6a8) εἰμι | 10a7 ἄν εἰμι |
11a25 (11a26) ὑπάρχει - transl.
Gr. pron.: 4a23 αὐτός - sem.
amplif.; add. as the implied
subject of the sentence 6b23, 8b3, 8b21, 8b23 - sem. amplif.;
copulative pronoun (damir-al-
fasl) 4a18, 4a20, 4b11b, 4b18,
4b20, 5a2, 5a9, 5a20, 5b22,
6a9, 6b7, 7a7, 8a9, 8b27, 9a2,
9b3, 10a7, 10a16, 10a17, 10b18
→ wa-hiya

hy`
tahayya’a (V) w. li- 8b14 δύναμαι
- w. bi- 11a13 χαίνω adv.

w
wa- (a) transl. καί (a1) abs. 4a14,
4a15, 4a17, 4b4, 4b5, 4b62,
4b14a, 4b20, 5a2, 5a10, 5a15,
5a16 (5a15), 5a17+, 5a26b,
5a28b, 5b2, 5b91, 5b18, 5b20,
5b25, 6a3, 6a8, 6a9, 6a11,
6a14, 6a18, 6a25 (6a24b),
6a26, 6b11, 6b2, 6b3, 6b41 (6b3),
6b42, 6b8, 6b9, 6b10 (6b81),
6b2, 6b20, 6b23, 6b25, 6b28,
7a2, 7a11, 7a121, 7a131,
7a17, 7a23, 7b2, 7b7, 7b12,
7b18, 7b23, 8a5, 8a9, 8a20,
8a24, 8b2, 8b11, 8b22 (8b21),
9a12, 9a141, 9a24, 9a251,
9b3 (9b2), 9b5, 9b151, 9b19,
9b27 (9b261), 10a3, 10b3,
10a10, 10a12, 10a13, 10a15,
10a18, 10a22, 10a24, 10b1,1,
10b21, 10b3, 10b41 (10b3),
10b42, 10b51, 10b16, 10b171
(10b162), 10b172, 10b20,
10b26, 11a2, 11a4, 11a6, 11a7,
11a18a (11a17), 11a191, 11a25,
11a27, 11b3, 11b12, 11b20,
12a1 και | 8b14 και in κατ’ |
5b22 οἱ μονον ... ἄλλα καὶ |
| 4b5, 6a19 -πετ | 11a18b
καὶ in the MSS, corrected
to κατ’ in the edition (a2) in
combinations: - /wa 4b16, 7a6a
(7a5), 8b10–11, 10a9–10a101,
11a4, 11b17, 11b25 και/καὶ |
8a23, 10b6, 10b101 και/δέ
- wa/-wa- 5a7–8, 11b26–27
(b1b26) και/καὶ - /wa-/wa-
7a22 (7a21–22), 7b4, 9a51, 2, 3, 4-
61, 9b26, 10b23a (10b22–23),
11b4 (11b3–4) και/καὶ/καὶ
- wa-li-διάλικα 9b15 διο και
- wa-min qibali διάλικα 11b7
dio και - wa- ... ma’al διάλικα
9b18 (9b17–18) και ἄλλος |
και ... - wa- ... aydan 5a171
(5a16) και | 7a15b–16 και ...
dé (a3) sem. amplif.: wa-ka-
dialika yağri l-amru 7a2 και -
wa-κα-διάλικα 9b17 και - wa-
ma’al διάλικα aydan 9a62 και
(b) transl. δέ (b1) abs. 4b2,
4b61, 4b13, 4b20, 5a2, 5a23,
5b3a1, 5b10, 5b19, 5b26b,
6a12, 6b51, 6b9, 6b13, 6b14,
6b15, 6b16, 6b17 (6b18),
6b20, 6b21, 6b24 (6b23),
7a1, 7a31, 7a10b, 7a19, 7b14,
7b19, 7b22, 7b3, 8a8, 8a19,
8a21, 8a27, 8b6, 8b11, 8b20,
8b24b, 8b27, 9a4, 9a1b1, 2,
9a20, 9a21, 9a251, 9a26,
9b6, 9b13, 9b16, 9b22, 9b25,
10b7, 10b11, 10b24a (10b20),
11a13, 11a17a, 11a18b, 11a192,
11b5, 11b12, 11b161, δέ w.o.
preceding μέν | 5b12 δέ in
οὔτεν | 6b5, 6b6, 8b1, 9b24a,
11a15, 11b8 (11b7) δέ in οὔδε
| 5a8, 8b7 | 1,2 dé in ṣwetê | 41a3, 4b9 | δ' ofên | 5a8, 7a4, 8b4 | étê dé (b2) in combinations: wa-lâ 6b5, 6b6, 8b1, 9b24, 11a15, 11b8 (11b7) ofêd —/wa- 6b21, 7a11—13, 7b11—12, 8b2, 8b9, 8b13, 9a2, 9b6—7, 9b7, 10a26, 11a8 | (11a5—7) μên/dé —/wa-/wa- lam/wa- wa- | 4a20 te in in ôêtê | 8a18 | 1,2 te in miôte | 5a12 abi ma ... te kâi (c2) in combinations: —/wa- 8b17—18 te/te | 5a26, 8b21, 9b3—4, 9b20, 10a27 te/kâi —/wa-/wa- 8b22—21 te/te —/wa-/wa- 4a22, 10b13 (10b12—13) te kâi/kâi | 5a7—8 (5a6—7), 10a1—3 te/kâi/kâi —/wa-/wa- lâ 11b15 ôêtê/ôêtê (d) transl. ū: 10b1, 10b2, 10b10 2 ū —/wa- lâ’alla 9b1 ū —/wa-ka-dâlîka 10b4 ū (in the MSS, emended to ū in the edition) (e) circumst. wâw (hal), transl. various Gr. structures: wa-hiya latî minhâl 7b9 ôêtêm ôî —/wa-hiya latî 8a6 ôn ôî —/wa-qad tuhrâgu 8a11 kâ ôqûmêvôn (f) sem. amplif.; add. to join the two members of a hend.: yuhtâgu ilayhi wa-yuntâfu’u bihi 421a ā’ziyyêce —/qa’dêa wa-aqṣâ 5b21 âptauômêna —/inqata’a wa-nhalla 6a18 paqûma —/âhâqqu wa-aowlâ bi- 6b26 mâlôta dêvôn —/âowlâ wa-âhâqqu bi- 6b28 ʾîqêbêtaton —/yaṭba’u wa-yalzamu 7a3 suqâqulûñë —/mulâ’imûn wa-ḥâṣṣun 10a10 ʾîqêbêz — muqṭarifâtun wa-ṭaṣâ’ubun {10b1} ʾâqûfûqôn —/lazaîma wa-

| tabî’ā 11b16 ʾkatâqulûñëw (g) add. as required by the Ar. synt.: 5a3, 5a24b, 6a4, 6a13, 6b10, 6b18, 7a6b, 8a26, 8b16, 8b26, 8b27, 1a12, 9b20, 10b5, 11a9, 11a20 (h) in combinations: wa-dâlikha lanna — dâlikha, wa-in — in, wa-qad — qad, lâysa ... wa-lâ — lâysa, bâ’â qab-â → ba’âtun, immâ/wa-immâ — immâ

wîq

wâtiqa (I) w. bi- 10b27 peîðômu, peîlûdîa in peîtoz

wîgb

wâgâba (I) w. an 7b20, 10b20 (10b19) déi —/10b27a morph.; transl. the verbal adj. suffix -toz in peîtoz —/in hend. wâgâba dârûratân an 8b19 ʾûnîqêzî — fa-yağibun an 5a4a sem. amplif. for ôôtê

wâgibun act. part. —/wâgîban 6b21 ʾûlîqôqôz — bi-l-wâgîbi 7b10 ʾîqôtôz

awgâba (IV) 6a3 ā’zîwô

wîgd

wâgâda (I) (a) act.; in various paraphr. uses: någidu 5b21, 6a23 vôv | 5b23 ʾuqûmûa’ | 7a1, 11b12 qâîvêta | 11b16 sem. amplif.; add. w. ref. to qâîvêta at 11b12 —/ka-ma någidu dâlikâ 5b5 sem. amplif. for ʾûsîpêq | 10a27 sem. amplif. for ʾuqûmûa’ — fa-inna qad någidu 10a25 kâi ôî | 10a11 sem. amplif. add. for the implied copula | 5b23 ʾuqûmûa’ | 9a3 sem. amplif.; add. for the implied copula | 10a11 sem. amplif. add. acc. to sense wâqûdun maṣdar 8a13 ʾûwîda | 4b16 ʾêstîn | 8a2* ʾûwîn | 5b3a ʾûqûmêvôn | 12a1 sem. amplif.; add. for the implied copula | 9a2 sem. amplif.; add. as the supposed referent of the article
wgd: wuğûdun (continued)

ī in hend. takawuwunun
wa-wuğûdun 11a18a–18b to εἰναι in phrase wuğûdûhû
fi 4a18, 4b9, 4b10, 5b6, 8a23, 9a1 sem. amplif.; transl. the
concept of existence implied in the Gr. prep. εν
(cf. Ross 65 ad loc.)
mawğûdun pass. part. 8a101,8
8a102, 8a111,2, 8b71 ὥν = al-
mawğûdû 8b5, 8b9 to ὥν =
al-ışâ'î l-mawğûdatu 6a11,
8a9 tâ ὥντα = al-mawğûdatu
6b17, 12a1 tâ ὥντα = kâna
mawğûdun 8a17 ὑπάρχω
| 8b72 γε'νοις = innahu
mawğûdun 8b2 to εἰναι =
yakûnu mawğûdun 8b74
mêllôn sc. εἰναι = al-qawlu
bi-anannah mawğûdun 8a15b
sem. amplif. to εἰναι

wgh

ğihatun, pl. ğihatun 9a20, 9a24
(9a23), 10a19 τρόπος = min
ğihatîn sattâ 9b1 πλεοναχως =
ğihatâni 11a4 διστασιος
waghun, pl. wughûn 5a161,2,
7b201,2 (7b19), 9a11 (9a12)
τρόπος = in waghun mina l-
wughû 5a21 ὥμος in οὐθεμιως
= morph.; in hend. w. ἀλα
transl. the adv. suffix -ως: ἀλα
hâda l-wağhi 4b17 οὐτως |
'âla wughûhin ka'tiratin 9a10
πλεοναχος = in phrase bi-
wağhin mina l-wughû w. neg.
οὐθεμιως 5a20 = in phrase 'âla
wağhin mina l-wughû 5a12,
6b7 πως | 4b12a ὡμως γε πως
| 5a16a, 7b20 (7b19–20), 9b6
τρόπον τινα

wâhîdun (a) abs. 4b7–8, 5a7,
5a17b μια, ἐν | 5b12 ἐν in
οὐθεν | 4b11b sem. amplif.;
add. for the implied μια = al-
wâhidu 5a26b, 5a28a, 6a24,
6b2, 11b3 to ἐν | {7a21} to ἐν,
misreading to ἐν ἐκαστος for
to ἐνεάκ του in the Gr. (b) in
expr. denoting identity: min
ģîsin wâhidin 9a18 ὥμος
in ὦμογενεις = wâhidin bi-
'aynîhî 5a18, 9a4 ὀ αυτος
= ἦλυν wâhidatun 10b20
ταυτο = 'âla miṭālîn wâhidin
5a26, 6b8, 8a3 ὦμοιος |
10b20 ὦσοιτους (c) in expr.
denoting multiplicity: ak'taru
min wâhidin 5a19 πλειων =
laysa bi-wâhidin bal ak'taru
min wâhidin 5a16 (5a15)
πλειων (d) in transl. Gr.
ἐκαστος and ἐκαστος
denoting individuals: kullu
wâhidin min 5a18, 5b4b, 7a11,
7a17, 9a11 (9a10), 9a15, 9b18,
10a2 ἐκαστος = kullu wâhidin
8b26 ἐκαστος = wâhidun
wâhidin 11a4 ἐκαστος = kullu
wâhidin minhûma/al-âharu
4a12 ἐκαστος (GALex I,64
§3.4)

wst

wasatun 11a24 μεος = al-wasu'tu
5b12 το μεον | 11a25 sem.
amplif.; add. w. ref. to μεος at
11a24

wśf

wasafa (I) 5a7 (5a8) ὄποδιδωμι |
6b11 (6b10) εὐστητα
wasfün mas'dar 5a10 ὄποδιδωμι
in ὄποδοτευον | 4a23 sem.,
etym.; transl. περι-
τιθημ (see note to the Arabic
transl.)

wšl

ittašala (VIII) w. bi- 4b2, 4b19
συνάττο | 6a17 sem. amplif.;
add. acc. to sense
ittišalun mašdar 4a14 συναρι
ittišalun w. bi- 4a20 συναρι
muttašilun act. part. 5a3 συνεχις
wḏh
awdāḫa (IV) 4b12a Īmraʿīn en
awdāḥu 4b18 safūṭerōs in
safūṭerōs

wḏʿ
waḍʿa (I) 11a3 ṭīṭiḥu | 4a23
sem., etym.; transl. ṭīṭiḥu
in ṭeqqūṭiḥu (see note to
the Arabic transl.) | 6b23
wūqūṭiḥmu | 11b2 ṭōṣō
wuḍʿa pass. 9a9 ṭūqṣiḥma in
wūqṣiḥmu
waḍʿun maṣdar 10a2 (10a3)
θēōs
mawḏʿun pass. part. 9a9
wūqṣiḥmu
mawḏʿiʿun, pl. mawḏʿiʿu (a) abs.
5b25b1,2, 10b1 ṭōṣō | 11a24
χωρά (b) sem. amplif. (b1)
transl. indef. ti in context:
mawḏʿiʿun tuḥṭṭiṭa 6a3
wūqṣiḥmu
mawḏʿiʿun mina l-mawḏʿiʿi 6a3
wūqṣiḥmu
minā l-mawḏʿiʿi 6a3 1
2, 9b8
mawḏʿiʿun (b3) stands for a
subst. implied by the pron.
hāḏa l-mawḏʿiʿu 5a6 ṭōṣō
(c) parapr.; in various expr.:
fi mawḏʿiʿu mina l-mawḏʿiʿi
w. neg. 11a9 nūḑāmu
layṣa hāḏa mawḏʿiʿahū 6a1 5a
ēṭeōs | fi mawḏʿiʿa kaṭjaratin
10a24 plēounāzōs | mawḏʿiʿu
ḥayratin 10b24 ṭōpōs | fi
hāḏa l-mawḏʿiʿi 7b6 ēntawūthā
| fiḥi mawḏʿiʿu taḥabīn wa-
baḥṭin 5b11 ṭī ṭeṣʿṭeṭwō | mawḏʿiʿu taḥakkūkin 6a6 ūn
āṭōrīṣeṣeṣ | 8a21 ṭōpōṣa (d)
sem. amplif. 10b1, 10b2 add.
acc. to sense

wfy
waʿfʿa (I) maṣdar, w. bi- 4b17
āṭōdōṣiμi

wqt
waqṭun, pl. awqāṭun 7b3 ṭōṣa | in
phrase fī waqṭin mina l-awqāṭi
5a24b pote indef. encl.

wqʿ
waqaʿa (I) w. fi 9b16 ṭeṣṭiṣn (there
is) | 6a3 morph.; transl. the
verbal adj. suffix -tōṣ in
άζητητος | qad waqaʿa 8b17
sem. amplif.; expresses the
implied emphatic statement
of fact | waqaʿa abs. 9a24
sem. amplif.; add. acc. to
sense

awqaʿa (IV) 8b12 ṭūbāḥalāw

wqf
waqafa (I) w. ʿalā 8b10 (8b11)
θέωρομεν | 8b25 συνοράω | 9a4
ἐπίστομαι | 11a2 λαμβάνω in
λῃττέον | 9a7 sem.amplif.; add.
w. ref. to ἐπίστομαι | waqafa
abs. 6b10 sem. amplif.; add.
acc. to sense

wuqūṭun maṣdar, w. ʿalā 9a10
add. acc. to sense

wld
walada (I) 6a25 γεννᾶω
wallada (II) 7b5 γεννᾶω
tawallada (V) 7b4 (7b5) γένεσις
tawalladun maṣdar 6b15, 10b17
γένεσις

wły
walija (I) | yali 5b12 ἀτι (sc.
ἐἴναι)
awlā 5a10 μᾶλλον | al-awlā 4b8
ἐυλογότερον | al-awlā fī l-
qiyāṣi 4a13* morph. and etym.;
transl. the prefix adv. ἐν and the
comp. degree in ἐυλογότερον
| awlā bi- 5b9, 11b17 μᾶλλα
| in hend. ἀφακκω wa-awlā
wly: awlā (continued)
bi- 6b26 μάλιστα δέον
hend. awlā wa-aḥaqqu bi- 6b28 οἶκειότατον

y′
yā—yā layta šiʾri 10a16 ḍaʾa
ysr
yasīrun 645 μικρός | 10b6, 11a19² ὀλίγος | 11a19¹ (11a18) σπάνιος
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