LOGICAL ANALYSIS AND HISTORY OF PHILOSOPHY

PHILOSOPHIEGESCHICHTE UND LOGISCHE ANALYSE



Guest Editors/Gastherausgeber Christof Rapp / Pieter Sjoerd Hasper

Editors/Herausgeber
Uwe Meixner Albert Newen



Meixner/Newen (eds.)

Logical Analysis and History of Philosophy

Philosophiegeschichte und logische Analyse

Uwe Meixner · Albert Newen (eds.)

Logical Analysis and History of Philosophy

Philosophiegeschichte und logische Analyse

Special Issue

Fallacious Arguments in Ancient Philosophy

Guest Editors / Gastherausgeber Christof Rapp · Pieter Sjoerd Hasper

mentis

Münster

Bibliografische Information Der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.dnb.de abrufbar.

Gedruckt auf umweltfreundlichem, chlorfrei gebleichtem und alterungsbeständigem Papier (

ISO 9706

© 2013 mentis Verlag GmbH Eisenbahnstraße 11, 48143 Münster, Germany www.mentis.de

Alle Rechte vorbehalten. Dieses Werk sowie einzelne Teile desselben sind urheberrechtlich geschützt. Jede Verwertung in anderen als den gesetzlich zulässigen Fällen ist ohne vorherige Zustimmung des Verlages nicht zulässig.

Printed in Germany Umschlaggestaltung: Anna Braungart, Tübingen Satz: Rhema – Tim Doherty, Münster [ChH] (www.rhema-verlag.de) Druck: AZ Druck und Datentechnik GmbH, Kempten ISBN 978-3-89785-164-1 ISSN 1617-3473

LOGICAL ANALYSIS AND HISTORY OF PHILOSOPHY

PHILOSOPHIEGESCHICHTE UND LOGISCHE ANALYSE

Editors - Herausgeber

Uwe Meixner, *Universität Augsburg* Albert Newen, *Ruhr-Universität Bochum Editorial Assistants:* Robert Schütze, Tobias Koch, *Ruhr-Universität Bochum*

Review Editor

Markus Schrenk. Universität zu Köln

Editorial Board - Wissenschaftlicher Beirat

Australia	Great Britain
Paul Thom The Australian National University	Peter Simons University of Leeds
Austria	France
Edgar Morscher Universität Salzburg	Jonathan Barnes Université Paris-Sorbonne
Edmund Runggaldier Universität Innsbruck	Switzerland
Germany	Kevin Mulligan Université de Genève
·	Alexandrine Schniewind Univ. de Lausanne
Andreas Kemmerling Universität Heidelberg	
Wolfgang Künne Universität Hamburg	U.S.A.
Franz von Kutschera Universität Regensburg	Karl Ameriks University of Notre Dame
Wolfgang Lenzen Universität Osnabrück	Kit Fine New York University
Ulrich Nortmann Universität des Saarlandes	Paul Guyer Univ. of Pennsylvania, Philadelphia
Dominik Perler HU Berlin	Christopher Peacocke Columbia University
Christof Rapp Universität München (LMU)	Nicholas Rescher University of Pittsburgh
Oliver Scholz Universität Münster	Mark Sainsbury The Univ. of Texas at Austin
Rainer Stuhlmann-Laeisz Universität Bonn	Barry Smith State University of New York
Michael Wolff Universität Bielefeld	Gisela Striker Harvard University

Call for papers

The journal is published annually. The deadline for papers and reviews is annually announced. The languages of publication are English and German. Further information can be obtained by e-mail or found on our website. – Die Zeitschrift erscheint jährlich. Die Abgabefrist für Beiträge und Rezensionen wird jeweils bekannt gegeben. Die Veröffentlichungssprachen sind Deutsch und Englisch. Nähere Details können per E-Mail angefordert oder auf unseren Internet-Seiten eingesehen werden.

http://www.rub.de/philosophy/pla

Articles and correspondence regarding editorial matters should be sent to:

Bitte senden Sie Ihre Beiträge und sonstige Korrespondenz an:

Prof. Dr. Uwe Meixner (uwe.meixner@phil.uni-augsburg.de), Institut für Philosophie, Universität Augsburg, Universitätsstr. 10, 86159 Augsburg, Germany

Prof. Dr. Albert Newen (albert.newen@rub.de), Institut für Philosophie II, Ruhr-Universität Bochum, Universitätsstr. 150, 44780 Bochum, Germany

Reviews should be sent to: / Rezensionen an:

Dr. Markus Schrenk (markus.schrenk@uni-koeln.de), Philosophisches Seminar, Universität zu Köln, Albertus-Magnus-Platz 1, 50923 Köln, Germany

Orders - Bestellungen

Individual copies – Einzelbezug: EUR 58,– / Subscription – Abo: EUR 48,– mentis Verlag, Eisenbahnstraße 11, 48143 Münster, Germany; www.mentis.de

Preface

We are glad to present the 15th annual volume of the journal "Logical Analysis and History of Philosophy". It has a thematic focus on "Fallacious Arguments in the History of Ancient Philosophy" and includes a translation of Aristotle's *Sophistical Refutations*. The articles of the thematic focus were selected (on the basis of a peer-review process) by the Guest Editors Christof Rapp and Pieter Sjoerd Hasper. In addition to these articles, we accepted general submissions. They enrich the volume, discussing topics like supposition, Spinoza's substance monism, James' theory of the will to believe, Frege's logic, and a comparison of the *Principia Mathematica* with the *Tractatus logico-philosophicus*.

We would like to thank Robert Schütze, who, as editorial assistant, has helped to shape the present volume, and our publisher, mentis, for the constant and fruitful cooperation.

Information concerning the contents of past volumes (abstracts of all published papers) and plans for future volumes (call for papers, etc.) can be found on our website:

www.rub.de/philosophy/pla

There we also offer – without charge – complete electronic versions of all reviews published in LAHP.

Uwe Meixner, Albert Newen

WOLFGANG KIENZLER: The Logical Square and the Table of Oppositions. Five Puzzles about the Traditional Square of Opposition Solved by Taking up a Hint from Frege	400
ADRIAN FREY: Die Verteidigung des Logizismus: Carnaps Versuch von 1930	417
List of Contributors - Liste der Autoren	439

Table of Contents

Inhaltsverzeichnis

CHRISTOF RAPP & PIETER SJOERD HASPER: Introduction 11 Aristotle's Sophistical Refutations. A Translation. (by PIETER SJOERD HASPER) 13 ERMELINDA VALENTINA DI LASCIO: The Theoretical Rationale Behind Aristotle's Classification of the Linguistic Fallacies in the Sophistical Refutations 55 LUCA CASTAGNOLI: Aristotle on Begging the Question. Between Dialectic, Logic and Epistemology 90 CHRISTOF RAPP: Fallacious Arguments in Aristotle's Rhetoric II.24 122 SUSANNE BOBZIEN: How to Give Someone Horns: Paradoxes of Presupposition in Antiquity 159 COLIN GUTHRIE KING: False ἔνδοξα and fallacious argumentation 185 CARRIE SWANSON: Aristotle's Expansion of the Taxonomy of Fallacy in De Sophisticis Elenchis 8 200 PAOLO FAIT: The "False Validating Premiss" in Aristotle's Doctrine of Fallacies. An Interpretation of Sophistical Refutations 8 238 ROBERT BOLTON: Dialectic, Peirastic and Scientific Method in Aristotle's Sophistical Refutations 267 PIETER SJOERD HASPER: Between Science and Dialectic. Aristotle's Account of Good and Bad Peirastic Arguments in the Sophistical Refutations 286 LOUIS-ANDRÉ DORION: Aristotle and the Socratic elenchos 323 History of Philosophy in General – Philosophiegeschichte im Allgemeinen
HASPER)
Aristotle's Classification of the Linguistic Fallacies in the Sophistical Refutations
Dialectic, Logic and Epistemology 90 Christof Rapp: Fallacious Arguments in Aristotle's Rhetoric II.24 122 Susanne Bobzien: How to Give Someone Horns: Paradoxes of Presupposition in Antiquity 159 Colin Guthrie King: False ἔνδοξα and fallacious argumentation 185 Carrie Swanson: Aristotle's Expansion of the Taxonomy of Fallacy in De Sophisticis Elenchis 8 200 Paolo Fait: The "False Validating Premiss" in Aristotle's Doctrine of Fallacies. An Interpretation of Sophistical Refutations 8 238 Robert Bolton: Dialectic, Peirastic and Scientific Method in Aristotle's Sophistical Refutations 267 Pieter Sjoerd Hasper: Between Science and Dialectic. Aristotle's Account of Good and Bad Peirastic Arguments in the Sophistical Refutations 286 Louis-André Dorion: Aristotle and the Socratic elenchos 323 History of Philosophy in General -
SUSANNE BOBZIEN: How to Give Someone Horns: Paradoxes of Presupposition in Antiquity
Presupposition in Antiquity 159 COLIN GUTHRIE KING: False ἔνδοξα and fallacious argumentation 185 CARRIE SWANSON: Aristotle's Expansion of the Taxonomy of Fallacy in De Sophisticis Elenchis 8 200 PAOLO FAIT: The "False Validating Premiss" in Aristotle's Doctrine of Fallacies. An Interpretation of Sophistical Refutations 8 238 ROBERT BOLTON: Dialectic, Peirastic and Scientific Method in Aristotle's Sophistical Refutations 267 PIETER SJOERD HASPER: Between Science and Dialectic. Aristotle's Account of Good and Bad Peirastic Arguments in the Sophistical Refutations 286 LOUIS-ANDRÉ DORION: Aristotle and the Socratic elenchos 323 History of Philosophy in General -
CARRIE SWANSON: Aristotle's Expansion of the Taxonomy of Fallacy in De Sophisticis Elenchis 8
in De Sophisticis Elenchis 8
of Fallacies. An Interpretation of Sophistical Refutations 8
Aristotle's Sophistical Refutations
Account of Good and Bad Peirastic Arguments in the Sophistical Refutations
LOUIS-ANDRÉ DORION: Aristotle and the Socratic <i>elenchos</i>
History of Philosophy in General –
i miosophicgesemente ini ringementen
RAINA KIRCHHOFF: Zum Begriff der einfachen Supposition im 13. Jhdt
YAKIR LEVIN: Spinoza's Substance Monism
JONATHAN ADLER (†): The Reasoning and Lapses of James' <i>The Will</i> to Believe

Introduction

Pieter Sjoerd Hasper, Christof Rapp – Ludwig-Maximilians-Universität München

Three years ago, the conference "Lost in Logical Space" on Aristotle's *Sophistical Refutations* took place in Berlin (under the generous auspices of the Excellence Cluster TOPOI). It brought together, for the first time, with only a few exceptions, everyone working on the main topics Aristotle deals with in that work. Appreciating the quality of many of the contributions, we decided to assemble the most important ones in a collection of articles and to look for a few useful additions. We are very pleased that *History of Philosophy and Logical Analysis* was willing to accept this collection in their series.

Indeed, a volume dedicated to Aristotle's *Sophistical Refutations* could not have found a more appropriate series to appear in, since the analysis of arguments in which something goes wrong without it being immediately clear what, stands at the beginning of philosophical analysis in general and the development of logic in particular. Not that Aristotle was the first ever to engage in such analysis – of course there was Plato before him, but also some Sophists and philosophers responding to the arguments of Parmenides and Zeno introduced useful analyses and distinctions. But in Aristotle we see the onset of systematic theorizing about argumentation, including an account of the ways in which arguments, despite of being incorrect, may appear to be correct and of the relations between different types of argumentation (in science, in discussions with various purposes, in everyday life), but also of the connections with more general philosophical issues, like the meaning of words and the ontological status of universals.

It is, however, primarily because of its account of argumentation, whether flawless or with defects, that Aristotle's *Sophistical Refutations*, together with the *Topics*, has caught the attention of those working in the field of argumentation theory. In this respect pioneering work was done by Hamblin in his book *Fallacies* (1970), in which he highlighted the dialectical context, with its strict discussion rules, of Aristotle's theories. Hamblin himself, followed by others, went on to develop formal dialectical systems, but also those who were less formally inclined were inspired through him by Aristotle to study argumentation in dialectical contexts, for example in Informal Logic (e.g. Woods and Walton) and in the pragma-dialectical approach (initiated by Van Eemeren and Grootendorst).

In the light of these developments in argumentation theory, it can hardly be an accident that since the 1990s the interest among ancient philosophers for Aristotle's argumentation theory, and for the *Sophistical Refutations* in particular, has grown steadily. The conference "Lost in Logical Space" was the first exclusively dedicated to it, but real milestones were here the two new translations with commentary by Louis-André Dorion (1995) and Paolo Fait (2007, with many preceding publications). It is striking that there are thus good new translations, containing many new insights and interpretations, available in French and Italian

(as well, one should add, in some other languages, like Swedish, Japanese and Dutch), but not in English (not to mention German). That is why we decided to include in this volume a new translation into English, so as to make at least some of the progress achieved generally accessible.

The articles contribute, each in its own way, to further progress in our understanding of Aristotle's account of argumentation and of fallacies in particular. First there are a number of articles dedicated to various aspects of fallacy theory, mainly Aristotle's, but also that of the Stoics. Valentina di Lascio proposes a new account of Aristotle's claim that there are six, no more and no less, linguistic fallacies. Luca Castagnoli provides an in depth study of Aristotle's way of dealing with fallacy of begging the question, not only in the *Sophistical Refutations*, but also in the *Topics* and the *Prior Analytics*. Christof Rapp compares Aristotle's discussion of fallacious enthymemes in the *Rhetoric* with the better-known theory of the *Sophistical Refutations*. Susanne Bobzien discusses what the Stoics had to say about the one fallacy which is so conspicuously absent on Aristotle's list of thirteen, the fallacy involving a hidden presupposition.

Then we have three articles studying more general aspects of Aristotle's account of incorrect arguments. Colin King tries to answer the question what distinguishes, according to Aristotle, eristic arguments from correct dialectical arguments. Carrie Swanson provides a line by line commentary on the pivotal chapter 8 of the *Sophistical Refutations*, where Aristotle, having listed his thirteen fallacies, suddenly introduces a new type of incorrect argument and at least claims that his list of fallacies is complete; she also suggests how Aristotle's discussion there may be connected with chapters 9 and 11, but also chapter 10. Paolo Fait attempts to elucidate Aristotle's puzzling idea, also stated in chapter 8, that if someone commits a fallacy, he must somehow have tacitly accepted a fallacy-justifying principle.

In the final three articles there is one bone of contention, namely how to make sense of what Aristotle's says about a subtype of dialectical arguments, peirastic arguments (which are used to put someone who claims to have scientific knowledge to the test, and are discussed in chapter 11 of the *Sophistical Refutations*). Rob Bolton provides an invigorated restatement of the line of interpretation he has advanced since 1990. Pieter Sjoerd Hasper offers an alternative account of the ingredients of peirastic arguments and of how peirastic arguments are to be distinguished from fallacious arguments and other incorrect arguments, on the one hand, and from scientific arguments, on the other. Louis-André Dorion, finally, disagrees strongly with Bolton's thesis that in his account of peirastic argument Aristotle codified the practice of Socrates' refutations of people's claims to knowledge.

We hope that this collection shows that the study of argumentation theory in Ancient Philosophy, and with Aristotle in particular, is in good shape. We are certain that at least some of the points made in the articles brought together here will withstand scrutiny and will advance our understanding of the beginnings of logical analysis.

Aristotle's Sophistical Refutations

A Translation¹

Pieter Sjoerd Hasper

1. Appearance and reality in argument and refutation

Now we must discuss sophistical refutations, that is, arguments that appear to be refutations, but are in fact fallacies rather than refutations. In accordance with the nature of things, however, we must start from the primary things.

That some arguments do constitute deductions, while others seem to, but in fact do not, is clear. For just as in other cases this comes about because of a certain similarity, so too with arguments. For also with regard to their condition some people are really in good shape, whereas others only appear to be because they have decked themselves out as tribesmen and have equipped themselves; and some people are beautiful because of their beauty, while others appear to be so because they have dressed up. It is like this also with lifeless things, for some of them are really made of gold or silver, whereas others are not, but appear so to the senses: things made of litharge or of tin, for example, appear to be made of silver, and yellow-coloured things of gold. In the same way, one argument constitutes a

164a20

a25

164b20

b25

It would have been impossible for me to translate the Sophistici Elenchi into English if I had not already translated the work into Dutch together with Erik Krabbe, and if I had not been able to go through my first draft with Andreas Anagnostopoulos, who not only improved its English, but whose queries also forced me to reconsider some of the interpretations underlying any translation. His contribution to this translation is so significant, that it can be truly said that I did it together with him. All mistakes, however, remain my responsibility. Thanks are due to Chris Noble for checking the translation with an innocent eye.

The Greek text translated is that edited by W. D. Ross, *Aristotelis Topica et Sophistici Elenchi*. Oxford: Clarendon 1958. However, there are many passages where I have deviated from Ross' text, very often siding with all or most manuscripts; there are, however, also a few places where I think a reading with less support in the manuscripts is to be preferred. (There are still further places where Ross' preference for a minority reading can be called into question, but they require a fuller consideration than I have had time for. A new edition of the *Sophistici Elenchi* is really called for.) A list of deviations is added at the end of the translation.

Aristotle gives many examples of arguments there is something wrong with, and not all of them are easily translated into English. In such cases, I have supplied an alternative in English that at least fits the main point of the example, while describing the actual example in a footnote. In a few instances even the main point cannot be captured in an English alternative; in those cases there is some Greek in the translation, which is explained in a footnote.

Also in translation the point of most of the many examples will be clear, but there remain cases that seem rather impenetrable. It will not be possible to explain them in footnotes, but as far as the examples for the fallacies of combination and division are concerned, they are discussed in my "Logic and Linguistics. Aristotle's Account of the Fallacies of Combination and Division in the *Sophistical Refutations*", *Apeiron 42* (2009), 105–152.

a5

a10

a15

a20

a25

a30

a35

165b1

real deduction or a real refutation, while another does not, even though it appears to due to our lack of experience. For those without experience are like people remaining at a distance and judging from far away.

For a deduction is an argument based on certain granted points, such that it states, by way of necessity, something different from the points laid down, while a refutation is a deduction together with the contradictory of its conclusion. But some arguments do not achieve this, even though they seem to on various grounds – of which one type of argumentation is very fertile and popular, the one based on words. For since it is impossible to have a discussion while adducing the things themselves, and we use words as symbols instead of the things, we assume that what follows for words, also follows for the things (just as with stones for those who do calculations). It is not the same, however, since the words are limited, just like the number of sentences, whereas the things themselves are unlimited in number. It is then inevitable that the same sentence or a single word signify several things. Just as in calculation, those who are not versed in moving stones around are tricked by the experts, so too those without experience of the possibilities of words are deceived by means of fallacies, both when themselves participating in a discussion and when listening to others.

On this particular ground, then, and on grounds to be mentioned later, there are arguments that seem to be deductions or refutations but are not. Now there are people who value the appearance of being knowledgeable more than the reality without the appearance (for sophistry is an apparent, not a real way of being knowledgeable; and the sophist tries to make money from appearing knowledgeable). Hence, they clearly must make themselves seem to do what a knowledgeable person would do, rather than do it without appearing to. To put it point by point, it is the task of someone with knowledge to avoid making false statements himself on any topic he knows about, and to be able to unmask anyone else who makes false statements. The former consists in being able to concede an argument and the latter in securing concession of an argument. Those who want to be sophists must then sort out the domain of arguments just mentioned, since it is worth the effort; such an ability will make one appear knowledgeable and that is after all their preference.

It is thus clear that there is such a domain of arguments and that those whom we call sophists aspire to such an ability. How many kinds of sophistical arguments there are, how many elements make up this ability, and how many parts this inquiry has – we must now discuss these and other things that contribute to this expertise.

2. Four kinds of argument

In discussions there are four domains of argument: didactic, dialectical, critically examinative and eristic. Those arguments are didactic that deduce on the basis of the principles appropriate to the discipline in question and not on the basis of the views of the answerer (for the student should rely on them). Those arguments are dialectical that, on the basis of acceptable views, constitute a deduction of

b10

b15

b20

a contradictory. Those arguments are critically examinative that are based on views of the answerer or on things that must be known by anyone who purports to have scientific knowledge (in which way has been specified elsewhere). And those arguments are eristic that, based on points that appear acceptable without being so, constitute a deduction or appear to constitute a deduction.

Demonstrative arguments have been discussed in the *Analytics*, dialectical and critically examinative arguments elsewhere. Now we must discuss competitive and eristic arguments.

3. Goals of the eristics

First we must determine how many goals those who compete and battle it out in discussions have. These are five in number: refutation, falsity, unacceptability, solecism, and, fifth, making the interlocutor babble (that is, forcing him to say the same thing many times); or each of these not in reality, but in appearance. For their preference is, foremost, to be seen to refute, second, to expose someone who states a falsehood, third, to lead someone to an unacceptable statement, fourth, to make him commit a solecism (that is, to make the answerer express himself ungrammatically), and finally, that he say the same thing several times.

4. Apparent refutations dependent on the expression

There are two modes of refuting: some refutations are dependent on the expression, whereas others are independent of the expression. The ways of bringing about the appearance of refutation dependent on the expression are six in number; they are: homonymy, amphiboly, combination, division, intonation and form of expression. There is a proof of this through induction (whenever one considers another argument) as well as through deduction, namely that this is the number of ways in which one can indicate with the same words and statements what is not the same.

Arguments like the following depend on homonymy: "Those who are deaf understand the words coming from his mouth, for intelligent deaf people understand what he is saying." However, "understanding" is homonymous, being both understanding by using intelligence and being able to hear spoken sounds.² Another example: "Bad things are good, for what must be is good, and bad things must be." However, "must" is equivocal: it means "is inevitable", which often also applies to bad things (for some things that are bad are inevitable), but we also say of good things that they "must be". Further: "The same man sits and stands, and is ill and healthy, for he who stood up stands, and he who recovered is

b25

b30

b35

² In the Greek text the relevant ambiguity is in the verb *manthanein*, which means both "to learn" and "to understand": "Those who have knowledge learn, for those who know how to read and write understand what is being dictated. For 'learning/understanding' is homonymous, being both comprehending by using knowledge and acquiring knowledge."

a10

a15

a20

a25

a30

a35

healthy; but the sitting man stood up and the ill one recovered." However, "the ill one does (or suffers) this or that" does not signify one thing, but sometimes that he who is now ill, does or undergoes something, and sometimes that he who was first ill, does or undergoes something. Meanwhile it is the ill one who recovered, and while he was ill; however, he is not healthy while he is ill; it is not the present ill one, but the previously ill one, who is healthy.

The following examples depend on amphiboly: "What had the man killed?" And "Given that there is a man the boy knows: does he know him?" For in that sentence it is possible to signify both the one knowing and the one known as knowing. And "What you claim to be, that you claim to be, right? But you claim a stone to be, so you claim to be a stone." And "Can there be speaking of the silent?" For "speaking of the silent" is equivocal as well, between the silent speaking and speaking about the silent.

There are three modes of arguing that depend on homonymy or amphiboly. One mode applies if the statement or word has more than one literal meaning, as in the case of "lie" and "ear"; 6 another if we are accustomed to speak in this way; and yet another if the words combined signify several things, while each separately signifies univocally, for example, in the case of "knowing letters". For each of the two words, "knowing" and "letters", presumably signifies a single thing, but the two together signify several things, either the letters themselves having knowledge or someone's having knowledge of letters.

Amphiboly and homonymy, then, depend on these modes. The following examples, on the other hand, depend on combination: "being able to walk while sitting" and "being able to write while not writing." For if someone states a sentence with the words separated, they do not signify the same as if he states it with the words combined, namely, that walking while sitting is possible. The same holds, if someone combines the words "writing while not writing", for then it signifies that this person has the capacity for writing while not writing. But if he does not combine them, it signifies that this person, when he is not writing, has the capacity for writing. And that one is now learning letters, if in fact one was learning what one knows. Further, that one is able to carry many things, while able to carry only one.

The following ones depend on division: "Five is two and three, that is, even and odd" and "The greater is just as great", since it is just as much and something in addition. For apparently the same sentence does not always signify the same

³ In the Greek text the example is ambiguous between "wanting me to catch the enemies" and "wanting the enemies to catch me".

⁴ In the Greek text the question is ambiguous between "Does one know that which one knows?" and "Does that which one knows know?"

⁵ The Greek text is ambiguous between "Is it possible to speak of silent things?" and "Is it possible to speak while silent?" (or "Is it possible for silent things to speak?"), for in the infinitive construction with *legein* (speak, say) the accusative *sigônta* (silent things or "being silent") can be understood either as subject or as object. Aristotle indicates the two readings as follows: "between the one speaking being silent and the things spoken of being silent".

⁶ In the Greek text the examples, aetos and kuön, are multiply ambiguous, between, among other things, "eagle" and "gable", and between "dog", "shark" and "dog-star" respectively.

thing with the words divided as with the words combined, for example, "You become a slave being free" and "The divine Achilles left the hundred fifty men."

It is not easy to set up in unwritten discussions an argument that depends on intonation, but in writings and poetry things are better. For example, some correct even Homer in view of critics who accuse him of making the absurd statement "The content will always be satisfied". They solve this with intonation, pronouncing "content" with stress on the second syllable. And of the passage about the dream of Agamemnon they say that it was not Zeus himself who said "We grant him attainment of what he prays for", but that he told the dream to grant him that. Such examples then depend on intonation.

Arguments dependent on the form of expression occur when what is not the same is expressed in the same way, for example, what is masculine as feminine or what is feminine as masculine, or what is neuter as one of those two; or again, a quality as a quantity, or a quantity as a quality, or a thing doing something as a thing undergoing something, or a thing disposed thus as a thing doing something, and the other cases as distinguished previously. For because of the expression, it is possible to signify what is not a case of doing as a case of doing. "Flourishing", ¹⁰ for example, as far as the form of expression is concerned, is said in the same way as "cutting" and "building". Still, the former indicates a quality and a kind of condition, the latter a kind of doing. And in the other cases things are in the same way.

Refutations dependent on the expression are based on these types of argumentation. Of fallacies independent of the expression there are seven kinds: one dependent on what is accidental, the second something being said without qualification or instead not without qualification, but in a certain respect or somewhere or at some time or in relation to something, the third dependent on ignorance of refutation, the fourth dependent on the consequence, the fifth dependent on securing the point at issue, the sixth positing as the ground what is not the ground, and the seventh turning several questions into a single one.

5. Apparent refutations independent of the expression

Fallacies depending on what is accidental occur when something (anything) is deemed to belong equally to the object and to its accident. For since the same object has many accidents, it is not necessary that all the same things belong to all the predicates and to that of which these are predicated. For example, "If Coriscus is not the same as a human being, he is not the same as himself, for he

166b1

b5

b10

b15

b20

b25

b30

Without accents the Greek (*Iliad* 23.328) is ambiguous between "that does not rot because of the rain" and "where it rots because of the rain".

⁸ Literally: "pronouncing *ou* with high pitch", so that, instead of "not" (*ou*, without distinct intonation), it means "where" (*hou*, with rising and then sinking intonation).

⁹ In Greek *didomen* is ambiguous between "we grant" (*didomen* with rising intonation on the first syllable) and "to grant" (the infinitive form *didomen* with rising intonation on the second syllable).

¹⁰ The Greek text has *hugiainein* (being healthy), also an infinitive in the active voice.

b35

167a1

a5

a10

a15

a20

a25

a30

a35

is a human being." Or "If he is not the same as Socrates, and Socrates is a human being, then", so they say, "there is agreement that he is not the same as a human being", because the one they claim he is not the same as is accidentally a human being. ¹¹

Fallacies depending on something being said without qualification or instead in a certain respect and not in the proper sense occur when what is said for some part is taken as having been said without qualification, for example, "If what is not is an object of opinion, then what is not is." For "to be something" and "to be" without qualification are not the same. Or, again, that what is, is not something that is, if it is not some one of the things that are, for example, if it is not a human being. For "to not be something" and "to not be" without qualification are not the same, but they appear to be the same because they are so close in expression: "to be something" differs little from "to be", and "to not be something" from "to not be". And the same holds for what depends on something being in a certain respect and without qualification, for example, if an Indian, who is completely black, is white in his teeth, he is therefore white and not white. Or that the opposites will belong at the same time if both features hold in a certain respect.

Now in some cases such a thing is easy for everybody to judge, for example, if, having secured that an Ethiopian is black, someone should ask whether he is white in his teeth, and then, if he is white in this respect, should presume, having finished questioning, to have deduced that he is black and not black. In some cases, however, it often goes unnoticed, namely those in which, when something is said in a certain respect, the unqualified statement would seem to follow as well, and also those in which it is not easy to see which of the two is to be conceded in the proper sense. Such a thing occurs when the opposites belong equally. For it seems that either both or neither is to be conceded without qualification, for example, "If something is half white and half black, is it then white or black?"

Those depending on not having defined what a deduction or what a refutation is rather come about due to an omission from the definition. For a refutation involves a contradiction concerning one and the same thing – not a word, but an object, and not a synonymous one, but the same word – on the basis of what is conceded, by way of necessity, without the point at issue being included, in the same respect, in relation to the same thing, in the same way, and at the same time. (The same holds for making a false statement about something.) Some people, omitting one of the things mentioned, appear to give a refutation, for example, the argument that the same thing is the double and not the double. For two is the double of one, but not the double of three. Or if the same thing is the double and not the double in length, but not double in width. Or if it is the double and not the double of the same thing, in the same respect and in the same way, but not at the same time; because of that it is an apparent refutation. One might, however, also force this case into the class of those dependent on the expression.

¹¹ In the Greek text these examples are phrased in terms of being different from/other than something.

Those depending on securing the point at issue come about in the same way and in as many ways it is possible to ask for the point at issue. They appear to refute because people are not able to discern what is the same and what is different.

The refutation depending on the consequence is due to thinking that the implication converts. For whenever, if this is so, that must be so, people also think that if the latter is so, then the former must be so as well. This is also the source of the deceptions in judgements based on perception. For people often take bile for honey, because the yellow colour follows upon honey. Or since the soil's being drenched follows upon it having rained, we take it that if the soil is drenched, it has rained. But that is not necessary. And in rhetoric, sign-proofs are based on the consequences. For, wanting to show that someone is an adulterer, they seize on the consequence: that he is nicely dressed or that he is seen roaming around at night. However, these things apply to many people while the accusation does not. Similarly with deductive arguments, for example, the argument of Melissus that the universe is unlimited, having secured that the universe has not come to be (for nothing can come to be from what is not) and that what comes to be comes to be from a beginning; now, if the universe has not come to be, it does not have a beginning either, so that it is unlimited. However, this does not necessarily follow. For it is not the case that if everything that comes to be has a beginning, then also everything that has a beginning has come to be, just as it is not true that if someone who has a fever is hot, then also someone who is hot must have a fever.

The one depending on positing as the ground what is not the ground occurs when one secures in addition what is not the ground, as if the refutation comes about due to that. Such a thing occurs in deductions of an impossibility, for in them it is necessary to discard one of the premises. So if something should be counted among the questions necessary for the resulting impossibility, the refutation will often seem to come about due to that, for example, that soul and life are not the same. For if coming to be is the contrary of passing away, then also a form of coming to be will be the contrary of a form of passing away. But death is a form of passing away and contrary to life, so that life is a coming to be and to live is to come to be. That, however, is impossible. Therefore soul and life are not the same. Surely this has not been deduced, for the impossibility follows even if one does not say that life is the same as soul, but only that life is the contrary of death, which is a form of passing away, and that coming to be is the contrary of passing away. Such arguments are not non-deductive without qualification, but they are non-deductive with respect to what had been assigned to the questioner. And this sort of thing often goes unnoticed no less by the questioners themselves.

Arguments depending on the consequence and those depending on what is not the ground are then of such a nature. Those depending on making two questions one occur when it goes unnoticed that there are several questions and, assuming that there is a single one, one gives a single answer. In some cases it is easy to see that there are several questions and that one should not give an answer. For example, "Is it the earth which is sea, or the sky?" But in other cases it is less easy; supposing that it is one question, people either concur by failing to answer what is being asked, or appear to be refuted. For example, "Are this one here

167b1

b10

b5

b15

b20

b25

b30

b35

168a1

a15

a20

a25

a30

a35

a40

b5

168b1

and that one there both a man?" Hence, when someone hits this one and that one, he will hit a man, rather than men. Or further, concerning things of which some are good and others are not, "Are all of them good or not good?" For whichever claims one makes, it may in one way seem to bring about an apparent refutation or something incorrect. For to say that one of the things that are not good is good, or that one of the good things is not good, is incorrect. Sometimes, however, because some additional points have been secured, a genuine refutation may come about, for example, if someone were to concede that one thing and many things are called pale, naked or blind in the same way. For if a blind thing is what does not have sight, but is of such a nature as to have it, then several blind things too will be things that do not have sight, but are of such a nature. Then in case one thing has sight and another does not, the two of them will be either seeing or blind, which is impossible.

6. Tracing back to ignorance of refutation

Thus apparent deductions and refutations are either to be classified in this way or to be traced back to ignorance of refutation, making this the principle. For it is possible to reduce all the modes mentioned to the definition of refutation, and first, if arguments are non-deductive. For the conclusion must follow from the points laid down in such a way that one states it out of necessity, and does not merely appear to. Next, it is also possible by reference to the parts of the definition. For among those due to the expression, some depend on equivocation, such as homonymy, amphiboly and similarity in form of expression (for customarily one signifies everything as something individual), whereas combination, division and intonation are due to there being a statement which is not the same or a word which is different. However, this too was required, just as that the object should be the same, if there is to be a refutation or deduction. For example, in case it concerns "cloak", one should not give a deduction about "mantle", but about "cloak". For the former is also true, but it has not been deduced; rather, in response to those wondering what it is based on, a further question is missing: that "cloak" means the same thing.

Those dependent on what is accidental become clear once deduction has been defined. For the same definition must also apply to refutation, except for the addition of a contradiction. For a refutation is a deduction of contradiction. If there is then no deduction of what is accidental, a refutation does not come about. For it is not the case that if, these things being the case, it is necessary that this thing is the case, and this thing is something white, then something white is necessarily the case because of the deduction. Nor is it the case that if a triangle has angles equal to two right angles, and it is accidentally a figure (or primary or a principle), then a figure (or something primary or a principle) is necessarily so. For the demonstration applies to it not as a figure (nor as something primary), but as a triangle. In other cases it is the same. Therefore, if a refutation is a kind of deduction, there will not be a refutation in virtue of what is accidental.

Nevertheless, both specialists and experts generally are refuted on the basis of this by non-experts, for they produce deductions according to what is accidental against those with knowledge. And those who are not able to distinguish, either concede when questioned, or, without having conceded, think they have.

Fallacies dependent on something being said either in a certain respect or without qualification come about because the affirmation and the negation are not of the same thing. For "in this respect not white" is the negation of "in this respect white", while "without qualification not white" is the negation of "without qualification white". Thus, if, when one concedes that it is in a certain respect white, the other takes this as if said without qualification, he does not produce a b15

Fallacies that were previously called dependent on the definition of refutation are the clearest cases of all. That is also why they were called thus. For the appearance comes about due to an omission from the definiens. And those classifying fallacies in this way must posit an omission from the definiens as common to all these cases.

refutation, yet appears to because of ignorance of what a refutation is.

Also those dependent on securing the point at issue and on positing what is not the ground as the ground, are clear through the definition. For it is required that the conclusion follow "because of these things being so", which is, as we saw, not the case with things that are not grounds, and further, "without the point at issue being included", which does not hold for fallacies dependent on asking for the point at issue.

Fallacies dependent on the consequence constitute a subclass of what is accidental, for a consequence is something accidental. But *consequence* differs from *accident* in that it is possible to secure something accidental of only a single thing, for example, that the same thing is something yellow and honey, or something white and a swan, whereas what depends on the consequence always involves several things. For things that are the same as one and the same thing we also hold to be the same as each other. This is why the refutation depending on the consequence comes about. However, that is not fully correct, for example, in case something is accidental, for both snow and a swan are the same as something white.

And further, as in Melissus' argument, one assumes that it is the same to have come to be and to have a beginning, or to become equal and to take on the same magnitude. For since what has come to be has a beginning, one also holds that what has a beginning has come to be, assuming that these two things, what has come to be and what is limited, are the same by having a beginning. It is similar in the case of things becoming equal: if things that take on one and the same magnitude become equal, one holds that things becoming equal take on one magnitude. Thus one assumes the consequence. Since, then, the refutation due to what is accidental depends on ignorance of refutation, it is clear that the one depending on the consequence does so as well. But that must also be investigated in another way.

Fallacies due to making several questions one depend on us not completely working out the definition of *proposition*. For a proposition is one thing said of one thing. For the same definiens applies to a single thing alone and to the object

b10

b20

b25

b30

b35

b40 169a1

a15

a20

a25

a30

a35

without qualification, for example, to human being and to a single human being. The same holds in the other cases. If, then, one proposition is what claims one thing of one thing, such a question will be a proposition without qualification. And since a deduction is based on propositions, and a refutation is a deduction, a refutation too will be based on propositions. So if a proposition is one thing said of one thing, it is clear that this too depends on ignorance of refutation. For what is not a proposition appears to be a proposition. So, if someone has given an answer as if to a single question, a refutation will come about. But if he has not given one, but appears to, there will be an apparent refutation.

Hence all the types of fallacious argumentation fall under ignorance of refutation, those dependent on the expression because the contradiction, which was proper to the refutation, is apparent, and the other ones due to the definition of deduction.

7. Deception with fallacies

The deception in refutations depending on homonymy and amphiboly comes about through not being able to draw distinctions in the case of what is said in many ways. For with some terms, it is not easy to draw distinctions, for example, with "one", "being" and "the same". In refutations depending on combination and division, on the other hand, the deception comes about because one thinks it makes no difference whether a sentence is combined in its words or divided, as in most cases. The same holds for refutations depending on intonation. For a sentence seems not to signify anything different with relaxed intonation and with tightened intonation - either not at all or not in many cases. In those depending on the form of expression, the deception is due to the similarity in expression. For it is difficult to distinguish which things are said in the same way and which are said differently. For someone who can do that is practically on the verge of knowing the truth. However, what especially lures us into assenting is that we assume that everything predicated of something is an individual and understand it as one thing. (For individuality and being seem most of all to go together with substance and what is one thing.) That is also why this mode of refuting is counted among those dependent on the expression, first because the deception occurs more often for those investigating with others than for those doing so by themselves (for the investigation with others is through sentences, whereas that by oneself is just as much through the object itself). Next, even by oneself, one ends up being deceived when one conducts the investigation at the level of a sentence. Further, the deception is based on similarity, and the similarity on the expression.

In those depending on what is accidental, the deception comes about because one cannot distinguish between what is the same and what is different, what is one and what is many, or which predicates have all the same accidents as the object does. The same holds for refutations depending on the consequence, for a consequence is a certain part of what is accidental. Further, in many cases it appears, and is held to be the case, that if one thing cannot be separated from another, then the second cannot be separated from the first either.

a40 169b1

b5

In those depending on an omission from the definiens and on being said in a certain respect or instead without qualification, the deception depends on a small difference. For we agree universally, assuming that the qualification (or the respect), the way or the moment do not signify anything additional.

The same holds for those securing the point at issue and for those that are not the ground, and for those that make the several questions like a single one. For in all those cases the deception is due to a small difference. For we fail to go through the definitions of *proposition* and *deduction* carefully for the reason mentioned.

8. Incorrect deductions

Since we know the grounds on which apparent deductions come about, we also know on how many grounds sophistical deductions and refutations may come about. By a sophistical refutation or deduction I mean not only what appears to be a deduction or refutation without being one, but also what is one, but merely appears appropriate to the object. These are arguments that fail to refute in accordance with the object and to unmask ignorant people – precisely what the task of critical examination was. Critical examination is, however, a part of dialectic; and that is able to deduce something incorrect due to the ignorance of the one who concedes the argument. But sophistical refutations, even if they deduce a contradictory, do not make clear whether someone is ignorant, for people trip up even someone who has knowledge with these arguments.

That we know them through the same system is clear. For on those grounds on which it appears to the audience that a deduction has come about, as if they had been asked, it may seem so to the answerer as well, so that there will be incorrect deductions in these ways, either in all of them or in some. For what one thinks one has conceded without having been questioned, one would also grant if questioned (except that in at least some cases the incorrectness comes to light at the same time, namely when one in addition asks for what is missing, for example, in arguments dependent on the expression or on a solecism). So if fallacious arguments for the contradictory point depend on an apparent refutation, it is clear that deductions of something incorrect will depend on just as many grounds as an apparent refutation.

Now, apparent refutations depend on the parts of a genuine refutation, since for each part that is omitted there would appear to be a refutation, for example, one is due to what does not follow on the basis of the argument (the one inferring an impossibility); the one which makes two questions one is due to the proposition; also the one due to what is accidental (instead of the thing in itself), and a part of this, the one due to the consequence; further, for the conclusion not following at the level of the object, but at the level of the sentence; next, (instead of the contradiction holding universally, in the same respect, in relation to the same thing and in the same way) due to it holding to a certain extent, or also due to each of those qualifications; further, due to securing the point at issue, despite the clause "the point at issue not being included". Thus we should know on how

b15

b10

b25

b20

b30

b35

b40 170a1

a10

a20

a25

a30

a35

a40

b5

170b1

many grounds fallacies come about, for they could not depend on more; they will all depend on those mentioned.

A sophistical refutation is not a refutation without qualification, but rather relative to a person, and similarly for deduction. For unless the one depending on homonymy secures that one thing is signified, and the one depending on similarity of expression that only something individual is signified, and the other ones likewise, they will neither be refutations nor deductions, neither without qualification nor relative to the person questioned. However, if they do secure it, they will be relative to the person, and not without qualification. For they have secured not what signifies one thing, but what appears to, and done so from a certain person.

9. The non-specialised nature of dialectic

Without knowledge about everything there is one should not try to establish on how many grounds those who are refuted are refuted. That, however, does not belong to any expertise, for the branches of knowledge are nearly unlimited in number, so that clearly demonstrations are as well. And these are also correct refutations, since for everything that can be demonstrated, it is also possible to refute the proponent of the contradictory of the truth. For example, if someone has claimed that the diagonal of a square is commensurable with its sides, one can refute him through a demonstration that it is incommensurable. Hence there should be experts in all domains, for some refutations will be dependent on geometrical principles and conclusions based on them, others on medical principles, and still others on principles of other branches of knowledge.

On the other hand, the incorrect refutations will equally belong to unlimitedly many branches. For there is an incorrect deduction in accordance with each expertise, a geometrical one in accordance with geometry and a medical one in accordance with medicine (by "in accordance with an expertise" I mean "in accordance with its principles").

It is clear, then, that we must determine the types of argumentation, not for all refutations, but only for those dependent on dialectic. For these types are common to every expertise and ability. And whether a refutation according to each branch of knowledge merely appears to be one, but is not, and, if it is one, on what it is based, falls to the expert to consider, whereas for one based on common things and not under any expertise, this falls to dialecticians. For if we know the grounds on which the acceptable deductions on any topic whatsoever are based, we know the grounds on which the relevant refutations are based. For a refutation is a deduction of the contradictory, so that a refutation consists in either one or two deductions of a contradictory.

Therefore we know on how many grounds all such refutations depend. But if we know this, we also know the solutions, for the objections against these refutations are the solutions. However, we also know on how many grounds apparent ones come about – not apparent to anybody, but to certain people (for the number is indeterminate if one investigates on how many grounds there appear to be

refutations to just any chance person). Hence it is clear that it falls to the dialectician to be able to determine on how many grounds a refutation comes about on the basis of common things, whether it is a genuine refutation or an apparent one, and whether it is dialectical, apparently dialectical or critically examinative.

10. The distinction between arguments related to the word and those related to the thought cannot be maintained

The distinction that some postulate between arguments does not exist: that there are arguments related to the word and arguments related to the thought. It is absurd to suppose that some arguments are related to the word, while others are related to the thought, without these being the same arguments. For what else is not being related to the thought than when a word is not used for what the one questioned took himself to be asked about when he conceded? And that is the very same thing as being related to the word. Being related to the thought, on the other hand, is when one uses a word for what the one questioned was thinking of when he conceded. So, if someone were to think that a word that signifies several things, signifies one thing - the questioner just as the one questioned ("being" or "one", for example, surely signify many things, but the questioner asked questions thinking, like the answerer, that each of them is a single thing and the argument here is that everything is one) -, he will have argued in relation to the word or in relation to the thought of the one questioned. But if someone thinks that it signifies many things, clearly he will not have argued in relation to the thought. (For "being related to the word" and "being related to the thought" concern, in the first instance, those arguments that signify several things, but subsequently concern any argument whatsoever.) For "being related to the thought" does not depend on the argument, but rather on the answerer's being related in a certain way to what is conceded. Subsequently they can all be related to the word, since according to this classification "being related to the word" boils down to "not being related to the thought"; for if not all arguments can be related to the word, there will also be some that are neither related to the word nor related to the thought. But they make claims about all arguments and divide them up, saying that every argument is either related to the word or related to the thought, and there are no others. However, among the deductions depending on something's being said in several ways, only some depend on the word. (For it has even been claimed, absurdly, that "depending on the word" applies to all the ones dependent on the expression.) But then some are fallacies, not because the answerer is related in a certain way to them, but because the argument itself features such a question that signifies several things.

It is completely absurd to discuss refutations without first discussing deductions. For a refutation is a deduction, so that one must also discuss deductions before incorrect refutations, for such a refutation is an apparent deduction of a contradictory, which is why the ground will be found either in the deduction or in the contradiction (for a contradiction must be attached to it), and sometimes in both, if it is an apparent refutation. The argument of "speaking of the silent"

b10

b15

b20

b25

b30

b35

b40 171a1

a15

a20

a25

a30

a35

171b1

has it in the contradiction, not in the deduction, while the one of "he is able to give what he does not have" has it in both, and the one that the poetry of Homer is a motion because it is a cycle, ¹² has it in the deduction. An argument that has it in neither is a genuine deduction.

But then – this is where the argument left off – are the arguments in mathematics related to the thought or not? And if someone thinks that "triangle" signifies many things and conceded not on the supposition that this is the figure of which it was concluded that it has angles equal to two right ones, has the questioner then argued in relation to the thought of that person or not?

Further, if a word signifies many things, and the answerer does not notice it or even thinks it does not, how has the questioner then not argued in relation to the thought? Or how else should he ask questions except by providing a distinction? Suppose then that someone asks whether there can be speaking of the silent or not, or in one sense, but not in another. Then, if someone should not concede this in any sense, while the other one could still argue for it, will the questioner then not have argued in relation to the thought? And still, this argument seems to be among those dependent on the word. There is therefore not some kind of argument related to the thought. There are, however, arguments related to the word; but they fail to include not only all refutations, but even all apparent refutations. For there are also apparent refutations not dependent on the expression, for example, those dependent on what is accidental, as well as other ones.

If someone were to demand that one draw a distinction, saying, "by 'speaking of the silent' I mean sometimes this and sometimes that", then, in the first place, precisely this is absurd: to demand that; for sometimes what is asked does not seem to have many senses, and it is impossible to draw a distinction which one does not think there is. Moreover, what else will teaching be? For one will make clear how things are to somebody who neither has investigated the matter, nor knows, nor assumes, that it can be said in another sense. What prevents one, then, from undergoing this also in arguments without double meaning? "In four, are the ones equal to the twos? But some twos are present in one way, others in another way." And "Is there, of contraries, a single branch of knowledge or not? But some contraries are knowable, whereas others are unknowable." Hence the one demanding this seems not to know that teaching is different from arguing dialectically and that the teacher should not ask questions, but rather himself make things clear, whereas the dialectician should ask questions.

11. Eristic and dialectic in relation to expertise

Further, to demand that something be affirmed or denied is not the job of someone who demonstrates, but rather of someone engaged in critical examination. For critical examination is a kind of dialectic and considers not the person with knowledge, but the ignorant person who pretends to have knowledge.

¹² In the Greek text the argument is that "the poetry of Homer is a figure, because it is a kuklos (cycle/circle)".

Someone who considers common things in accordance with the object is a dialectician, whereas someone who does so in appearance is a sophist. One kind of eristic and sophistical deduction consists of arguments that are apparently deductive concerning things about which dialectic is critically examinative, even if the conclusion is true (for it is deceptive about the ground). There are also deductions that, though they are not fallacies in accordance with the systematic study of each of the objects, still seem to be in accordance with the expertise. For false proofs are not eristic (for the fallacies are in accordance with what falls under the expertise), not even if something is a false proof of a truth, such as that of Hippocrates or the squaring of the circle by way of lunules. But the way Bryson tried to square the circle is sophistical – even if the circle is squared – for the very reason that it is not in accordance with the object. Hence an apparent deduction about these things is an eristic argument, and a deduction that appears to be in accordance with the object is an eristic argument, even if it does constitute a deduction; for it appears to be in accordance with the object and is thus deceptive and dishonest.

Just as dishonesty in sports has a certain character and is a kind of foul play, eristic is foul play in disputes. In the former case those who strive to win at all costs resort to anything, while in the latter the eristics do the same. People who are like that for the sake of victory alone, are deemed eristic and polemical, while those who are so for the sake of their reputation, with a view to making money, are deemed sophists. For, as we already said, sophistry is a kind of ability to make money out of the appearance of being knowledgeable; hence they aim for an apparent demonstration. Though eristics and sophists employ the same arguments, they do not do so with the same goal; and one and the same argument is both sophistical and eristic, but not in the same respect: it is eristic in so far as it involves the appearance of victory, sophistical in so far as it involves the appearance of being knowledgeable. For sophistry is also an apparent, and not a real, way of being knowledgeable.

In a way, an eristic argument stands to a dialectical one as someone giving a false proof stands to a geometer. For it argues fallaciously on the basis of the same points as dialectic, just as the one giving a false proof tricks the geometer with a fallacy on the basis of the same points. Someone giving a false proof, however, is not eristic, because he does so on the basis of principles and conclusions falling under the expertise. On the one hand, that an argument falling under dialectic, but concerned with other things, will be eristic, is clear. For example, the one squaring the circle by way of lunules is not eristic, while that of Bryson is. The former cannot be transposed except to geometry, because it is based on principles proper to this. The latter, on the other hand, can be transposed so as to be used against many: all those who do not know what is possible and what is impossible in each domain; for the argument will apply. Or the way in which Antiphon tried to square the circle. Or if someone were to deny that it would be better to go for a walk after dinner because of Zeno's argument, it would not be a medical argument, for it is common.

Now if an eristic argument stood in all respects to a dialectical one as a false proof stands to a geometer, it would not have been eristic about those things. As

b10

b15

b20

b25

b30

b35

172a1

a20

a25

a30

a35

172b1

b5

things are, however, a dialectical argument does not concern some determinate domain and is not demonstrative of anything, not even in the way a universal argument is. For neither does everything belong in a single domain, nor, if it did, could all the things there are fall under the same principles. Hence, no expertise that is demonstrative concerning a certain nature is interrogative, for it is not permitted to concede arbitrarily one or the other of a pair. For a deduction does not come about from both of them. Dialectic, on the other hand, is interrogative, whereas if it had been demonstrative, it would not have been interrogative – if not about everything, then at least about the primary things and the appropriate principles. For if someone had not conceded, dialectic would no longer have had a basis on which to argue further against an objection.

The same expertise is also used in critical examination, for the expertise of critical examination too is not like geometry; rather someone can possess it even without having knowledge. For it is possible for even someone who does not have knowledge of the object to critically examine someone who does not have knowledge – so long as the latter concedes – not on the basis of things he knows or on the basis of proper things, but on the basis of the consequences that are such that nothing prevents knowing them without knowing the expertise, though it is necessary that someone who does not know them is ignorant.

It is thus clear that critical examination is not a branch of knowledge with a determinate domain. That is why it is also about everything, since all branches of expertise also make use of certain common things. That is why everyone, even non-experts, in some way uses dialectic and critical examination, for everyone tries to a certain extent to test those who have pretensions to knowledge. These things are the common things. For they themselves know these things no less, even if they seem to say things that are way off the mark. Thus everybody uses refutations, for everybody practices non-expertly what the dialectician does expertly; and he who sets up a critical examination by using deductions in an expertise-involving way is a dialectician.

Since there are many of these things and they apply to all things, and they are not such as to constitute a certain nature and a domain, but are instead like denials, while other things are not of this sort, but proper, it is possible to critically examine on the basis of them about every subject and this can constitute a certain expertise, though one that is not like the demonstrative branches of expertise. For precisely this reason the eristic person is not in all respects like the one giving a false proof. For an eristic argument will not be fallacious on the basis of the principles of a certain determinate domain, but will concern every domain.

These, then, are the modes of sophistical refutation. That it is the job of the dialectician to have an account of them and to be able to set them up is not difficult to see. For the systematic research of propositions comprises this account as a whole.

12. False and unacceptable statements

And we have already discussed the apparent refutations. As for exposing someone who states something incorrect and leading an argument to something unacceptable (for that was the second preference of the sophist), first, this results especially from inquiring in a certain way and through questioning. For asking questions without having specified anything laid down as a target is conducive to these aims, for those talking without purpose make mistakes more often, and they talk without purpose when they do not know what is assigned to the questioner. Both asking many questions, even if what one is arguing against is specified, and demanding that the other state his views, create a good opportunity for leading someone to something unacceptable or incorrect, as well as for leading him, if he affirms or denies one of these points when questioned, to statements one has many chances to attack. Nowadays, however, people are less able to argue unfairly in these ways; for people demand to know what this has to do with the point at issue. A principle for obtaining an incorrect or unacceptable statement is to not ask about any thesis straightaway, but to claim to ask questions because one desires to learn. For the investigation creates room for attack.

A suitable type of argumentation for exposing someone stating something incorrect is the sophistical one of leading him to the sorts of statements one is well-supplied to argue against. However, it is possible to do this both well and not well, as has been stated earlier.

Again, with respect to saying unacceptable things, one should check from what group the interlocutor comes and subsequently ask questions about something said by them that is unacceptable to the many. For there is some such claim for each group. The principle in those cases is to have collected in one's propositions theses of every group. In these cases too, the appropriate solution is brought about by showing that the unacceptable statement does not follow because of the argument. But a competitive person always strives for this as well.

Further, one should argue from the wishes and professed views of the other. For people do not want and say the same things; rather they make the most respectable statements, but want what appears to be advantageous. For example, they claim that one should die well rather than live in pleasure, or be poor in a just way rather than be wealthy in a disgraceful way; but they want the opposites. One should, then, lead someone who speaks in accordance with his wishes to his professed views, and someone who speaks in accordance with the latter to his concealed ones. For either way he cannot avoid making unacceptable statements, for he will make statements that are opposed either to his professed or to his hidden views.

A most popular type of argumentation for making someone say unacceptable things – in the way both Callicles in the *Gorgias* says, and the ancients all thought – results due to what is by nature and by convention. For nature and convention they held to be contrary, and justice to be good by convention, but not good by nature. So, against someone speaking in accordance with nature one should, they held, respond in accordance with convention, and against someone speaking in accordance with convention one should lead him to nature, as speaking in either

b10

b15

b20

b25

b30

b35

173a1

a5

a25

a30

a35

a40

173b1

way amounts to things that are unacceptable. 13 What is in accordance with nature was the truth for them, whereas what is in accordance with convention seemed so to the many.

It is thus clear that those people too, just as the ones today, either attempted to refute the answerer or make him state unacceptable things.

With some questions the answer is unacceptable either way, for example, whether one should obey the wise or rather one's father, whether one should do what is profitable or what is just, or whether it is preferable to suffer injustice or to do harm. One should lead the argument to views on which the many and the knowledgeable are opposed: if someone talks like the intellectuals, to a view that the many oppose, while if he talks like the many, to a view which the intellectuals oppose. For the latter claim that someone who is happy, is necessarily just, whereas it is unacceptable to the many that a king is not happy. Leading the argument to such unacceptable statements is the same as leading it to the opposition between what is by nature and by convention, for convention is the view of the many, whereas the knowledgeable speak in accordance with nature, that is, in accordance with truth.

13. Making someone babble

And we should try to elicit unacceptable statements on the basis of these strategies. As for making someone babble, we have already stated what we mean by "babbling". All arguments like the following aim to bring that about. If it makes no difference whether one uses the word or the formula, then "double" and "double of half" are the same thing. Therefore, if there is something double of half, it will also be the double of half of half. And if "double of half" has again been substituted for "double", it will have been said three times: "the double of half of half of half". And is appetite for something pleasurable? But that is desire for something pleasurable. Therefore appetite is desire for something pleasurable for something pleasurable.

All such arguments depend either on things relative to something which are said relative to something not only with respect to their kinds, but also themselves, and which are rendered as relative to one and the same thing (for example, desire is desire for something and appetite is appetite for something, and what is double is double of something, namely double of half); or on things such that, while the things whose conditions or affections or something like it they are are in no way relative to something at all, their substance is additionally indicated in their formula, as they are predicated of these things. ¹⁴ For example, *odd* is a number

Alternatively, adopting a different word order (see the list of deviations from Ross): "as in either way it amounts to saying unacceptable things."

Alternatively on might transpose (see the list of deviations from Ross) and translate: "on things such that, while they are in no way relative to something at all, their substance is additionally indicated in their formula, as they are predicated of the things whose conditions or affections or something like it they are."

b10

having something in the middle. But there is an odd number. Therefore there is a number having something in the middle number. And if *snub* is concavity of nose, and there is a snub nose, it is therefore a concave nose nose.

Sometimes those who are not making people babble appear to do so because they do not inquire in addition whether "double" said by itself signifies something or not, and, if it does signify something, whether the same thing or something different, and instead state the conclusion straightaway. But because the word is the same, it appears to signify the same thing as well.

14. Solecisms

What kind of thing a solecism is has already been said. It is possible to bring this about, to appear to without bringing it about, and to bring it about without seeming to, just as Protagoras used to say for the case that ho mênis, just as ho pêlêx, is masculine. ¹⁵ For according to him someone saying "mênin oulomenên" commits a solecism, though to others he does not appear to, while someone saying "oulomenon" appears to, but does not commit a solecism. ¹⁶ So it is clear that someone might also be able to bring this about on the basis of some expertise. That is why many arguments, though they do not deduce a solecism, appear to deduce one, just as with refutations.

Almost all apparent solecisms are based on a term for something individual, namely when the case form is such as might indicate neither something masculine nor feminine, but something neuter. Thus "he" signifies something masculine and "she" something feminine, while "it", though it usually signifies something neuter, often signifies either of those as well. ¹⁷ For example, "What is it?" "Calliope", "Wood", "Coriscus". ¹⁸

Now, all case forms of a masculine word are different, as are those of a feminine word, while of a neuter word some differ, while others do not. If something is conceded concerning "it", it is often argued as if something had been said concerning "him", ¹⁹ and likewise concerning some other case form instead of a different one. The fallacy comes about because a term for an individual is common to several case forms, for "it" signifies sometimes "he" and sometimes "him". It must signify these things in turn, "he" in combination with "goes" and "him" in combination with "going", as in "Coriscus_{he} goes" and "seeing

b25

b20

b30

33

¹⁵ In Greek *mênis* (wrath) and *pêlêx* (helmet) are feminine nouns, thus having the definite article $h\hat{e}$, rather than the masculine *ho*. Protagoras, however, claimed that they are masculine.

^{16 &}quot;Sing of the destroying wrath (mênin oulomenên)" is part of the first sentence of Homer's Iliad. Oulomenên (destroying) is the form of the feminine accusative singular, while oulomenon is its masculine counterpart.

¹⁷ The Greek text has houtos, hautê and touto, the demonstrative pronouns (nominative singular) masculine, feminine and neuter respectively.

¹⁸ In Greek, "Kalliope" is a woman's name, "Koriskos" a man's name and "xulon" (wood) a neuter word.

¹⁹ In Greek, the neuter demonstrative *touto* (here translated with "it") can be nominative and accusative, while the masculine demonstrative *touton* (here "him") can only be accusative.

b40 174a1

a10

a15

a20

a25

a30

Coriscus_{him} going".²⁰ And the same applies to feminine words as well as to words that are called "thing words", but have the nominative form of a feminine or masculine word. For words that end in -on have the nominative form of a thing word, such as "xulon" and "schoinion";²¹ those not ending like this have the nominative form of a masculine or feminine word, and we apply some of them to things, for example, "askos", a masculine word, and "kline", a feminine word.²² That is precisely why also in such cases "goes" and "going" will yield a difference in the same way.²³

And a solecism is in a certain way like refutations that are said to depend on expressing what is not the same in the same way. For just as with the latter one ends up committing a solecism in the case of the things, with the former one does so in the case of the words. For *man* and *white* are both things and words.

It is thus clear that one should try to deduce a solecism on the basis of the case forms mentioned.

These are thus the kinds of competitive arguments, the sub-divisions of the kinds, and the modes that were mentioned. But it makes no small difference whether the interrogation is ordered in a certain way for the purpose of hiding one's target, as occurs in dialectical argumentation. Subsequent to what has been said, we need to discuss this first.

15. Strategies of questioning

One factor conducive to refutation is length, for it is difficult to hold many points in one's mind simultaneously. To achieve length one should use the principles mentioned earlier. Another factor is speed, for those lagging behind are worse at looking ahead. Further, there are anger and eagerness to win, for all those who are agitated are less capable of being on their guard. Principles for causing indignation are to make it clear that one is willing to act unfairly, and to behave completely shamelessly. A further factor is to order the questions so that they alternate, both if one has several arguments for the same point and if one has arguments that things are so as well as that they are not so. For the other ends up simultaneously keeping guard against several attacks or against contrary ones.

In general, all the aforementioned factors useful for concealment are also useful for competitive arguments, for concealment is for the sake of hiding, and hiding for the sake of deception.

Against those who reject whatever they think will contribute to the argument, one should ask questions in a negative form, as if one wants to get the contrary

In the Greek text, the examples are "esti Koriskos" ("There is Coriscus"), with the nominative, and "einai Koriskon" ("Coriscus to be there", that is, "that there is Coriscus"), with the accusative. Here and elsewhere I use subscripts to indicate the case form of the word in Greek; to that purpose I have adopted Aristotle's own vocabulary for indicating them, namely the relevant forms of the corresponding pronouns.

 $^{^{21}}$ All words ending with -on are neuter. The two words mentioned mean "wood" and "rope" respectively.

²² These mean "wineskin" and "bed" respectively.

²³ See note 20.

answer, or also ask questions in a neutral way; for if it is unclear what one wants to secure, they are less troublesome. And if, when proceeding by cases, someone concedes a particular case, one should not, in the induction, ask for the universal statement, but use it as if conceded, for sometimes people think even themselves to have conceded it, and it appears so to the audience because they remember the induction, assuming that the questions would not have been asked without purpose. And in those cases in which the universal is not signified with a word but rather through a similarity, one should use that to one's advantage, for a similarity often escapes notice. And in order to secure a proposition, one should inquire about it while comparing it with its contrary, for example, if one needs to secure that one should obey one's father in everything, one should ask "Should one obey or disobey one's parents in everything?" and "Should one agree that many times many is many or few?" For if it must be one or the other, it would seem more likely to be many. For if contraries are placed directly side by side, they appear smaller and greater, or worse and better, to people.

The appearance that someone has been refuted is forcefully and frequently brought about by the most sophistical trick of questioners: without having deduced anything they do not make the final point a question, but rather state it by way of conclusion, as if they had deduced it: "Therefore this and that are not the case."

It is also sophistical to demand, if something unacceptable is at issue, that the answerer say what appears to be the case (since at the beginning something generally accepted was assigned to the questioner), and to conduct the interrogation on such things in this way: "Does it seem to you that ...?" For if the question is among those on which the deduction is based, either a refutation or something unacceptable must come about: if he concedes, a refutation; if he neither concedes nor admits that it is generally held, something unacceptable; and if he does not concede, but agrees that it is generally held, something refutation-like.

Further, just as in rhetorical arguments, also in refuting arguments, one should check in the same way for inconsistencies, either with the things stated by the answerer himself or with people he agrees speak or act well, and further with people who have that reputation or with those resembling them, or with most people or with all.

And just as answerers, when they are being refuted, often come up with an equivocation just as they are about to be refuted, also questioners should on occasion use the following tactic against those who object: if taken in one way it follows, but taken in another way it does not, one should say that it has been secured in the former way, as Cleophon does in the *Mandroboulos*. And those who are still far away from completing their argument should also shorten what remains of the argumentation, while the answerer, if he sees this coming, should object beforehand and announce it. And sometimes one should also argue against points other than the one stated, ignoring the latter, if one does not know how to argue against what is at issue – just what Lycophron did when it was proposed that he eulogise the lyre. In response to those demanding to know what one will argue against (since one is generally held to be obliged to explain one's cause, though the defence is easier if there has been a statement of some things), one

a35

a40 174b1

b5

b10

b15

b20

b25

b30

b35

b40

а5

a10

a15

a20

a25

a30

should point out what universally occurs in refutations: a contradiction, that is, denying what one has affirmed or affirming what one has denied, and not that contraries do or do not fall under the same branch of knowledge. And one should not ask for the conclusion in the form of a proposition. And some things one should not ask about, but just use as if agreed upon.

16. The response of the answerer: introduction

What interrogations consist of, and how questions should be asked in competitive discussions, has been said. As for answering questions, we must next discuss how and what one should solve and for what purpose such exchanges are useful.

They are useful for philosophy for two reasons. First, because they mostly come about due to the expression, they make us better equipped to see in how many ways each thing is said and what sorts of things follow similarly and what differently, both at the level of things and of words. Second, they are useful for investigation conducted on one's own, for someone who is easily deceived by someone else and does not notice this, may also often suffer this by his own doing.

Third, and lastly, they are useful for one's reputation, in that one seems trained in everything and inexperienced in nothing. For, when someone participating in arguments takes issue with them, but is not able to distinguish their shortcomings, this gives rise to the suspicion that one seems to make trouble not for the sake of the truth, but through inexperience.

How answerers should respond to such arguments is clear, since we have correctly explained previously what fallacies are based on and have sufficiently distinguished the advantages gained through interrogation. However, looking at an argument, seeing its defect and solving this is not the same as being able to respond quickly when being questioned, for what we know, we often do not know when it is rearranged. Further, just as in other cases quickness and slowness are for the most part a result of practicing, so also in the case of arguments; hence when the case is clear to us, but we are unprepared, we often let the right moment pass.

Sometimes it happens as it does in geometrical constructions, for in that context, even after we have carried out an analysis, we are sometimes not able to bring about the synthesis again. So also in refutations, though we know how to connect up the point due to which the argument results, we are puzzled about how to dissolve the argument.

17. Tactics for the answerer

Now, first, just as we claim that sometimes one should choose to deduce in an acceptable way rather than in a true way, so too we should sometimes also solve an argument in an acceptable way, rather than in accordance with the truth. For

in general we should fight eristics not as if they have brought about a refutation, but as if they appear to. For we deny precisely that they bring about a deduction; hence we must correct things so that they do not seem to. For if a refutation is a non-homonymous contradiction based on certain points, it should not be necessary at all to draw distinctions in response to amphiboly and homonymy, since they do not bring about a deduction. Rather, we must not add distinctions for any other reason than that the conclusion appears refutation-like.

Indeed, it is not being refuted, but rather seeming to, that one must beware of, since asking ambiguous questions, that is, questions that depend on homonymy as well as all other such tricks, obscures the genuine refutation and makes it unclear who is refuted and who is not. For since it is allowed at the end, when the conclusion has been drawn, to claim that the questioner denies not precisely that which one had asserted, but homonymously, it is unclear whether one has been refuted, even if the questioner happens to have referred as much as possible to the same thing. For it is unclear whether he is now speaking truly. However, if he had drawn a distinction and then asked the homonymous or amphibolous question, the refutation would not have been unclear; and what the eristics seek, though less so nowadays than in the past, would have occurred, namely, that the one questioned answer either "yes" or "no". As things are, however, because the interrogators do not ask questions well, the one questioned must add something in his answer, correcting the defect of the proposition – since if a sufficient distinction is drawn, the answerer must say either "yes" or "no".

If someone should assume that an argument on the basis of homonymy is a refutation, it will in some way not be possible for the answerer to escape being refuted. For with visible things it is necessary to deny with respect to the word what one has affirmed or to affirm what one has denied. For the way some correct this is completely useless. For they claim, not that Coriscus is musical and unmusical, but that this Coriscus is musical and this Coriscus is unmusical. For that this Coriscus is unmusical (or musical), will be the same statement as that this Coriscus is unmusical (or musical) – which one affirms and denies at the same time. But surely they do not signify the same (for the word "Coriscus" there does not either), so that there is a difference. And it is absurd if one is to allow in the one case to use "Coriscus" without qualification, while in the other to add "a certain" or "this". For there is no better reason for doing so in one or the other case, since it does not make any difference to which of the two one adds it.

However, since it is unclear whether someone who has not spelled out the ambiguity has been refuted or not, while drawing distinctions has been allowed in discussions, it is clear that it is a mistake to concede a question without spelling out the ambiguity, but rather, unqualifiedly. Hence, even if he himself does not seem to have been refuted, at least his statement resembles one that has been refuted. However, it often happens that those who see the ambiguity hesitate to draw a distinction because of the frequency with which people put forward such propositions, in order not to seem to be troublesome on every point. Next, though they did not think an argument depending on this would come about, they were often confronted with something unacceptable. Hence, since drawing distinctions is allowed, one should not hesitate, as was said earlier.

a40

a35

175b1

b5

b10

b15

b20

b25

b30

b35

176a1

a5

a10

a15

a20

a25

a30

a35

a40

If someone had not made a pair of questions one, the fallacy depending on homonymy and amphiboly would not have come about either, and there would either have been a refutation or not. For what is the difference between asking whether Callias and Themistocles are musical and what one would ask if there were a single name for both, though they are distinct? For if it were to denote more than one thing, one would have asked several questions. So, if it is not correct to demand that a single answer without qualification be given in response to two questions, it is clear that one should not answer any homonymous question without qualification, not even if it is true in all cases, as some demand. For this is no different than if someone had asked about Coriscus and Callias whether they are at home or not at home, when either both of them are here or both of them are not. For in both cases the propositions are several. For if it is true to state something, the question is not thereby one. For it may even be true for someone who has been asked countless different questions all together to say either "yes" or "no", but one should nevertheless not answer with a single answer, for it destroys dialectical argumentation. But this is similar to what would happen if also the same word were used for different things. So if one should not give a single answer to two questions, it is clear that one should not say "yes" or "no" in the case of homonyms either. For someone saying that has not even answered the question, but has merely said something. However, among dialectical interlocutors it is somehow demanded because they do not notice what the result is.

As we said, given that some arguments that are not refutations seem to be refutations, in the same way some remarks that are not solutions seem to be solutions. And indeed, we claim that in competitive arguments and in response to equivocation one should sometimes present these rather than the correct ones.

Regarding what is generally accepted, one should answer by saying "okay", for in this way it is least likely that a refutation on a side-issue should come about. But when one is forced to say something unacceptable, in such cases most of all one should add that it is generally accepted, for in that way it will seem that neither a refutation nor something unacceptable comes about.

Since it is clear how the point at issue is asked for and people think that whenever something is close to it, it is in all cases to be discarded, and not to be agreed to in some, as it asks for the point at issue, one should also say the same thing when someone asks for such a thing as necessarily follows from the thesis, but is false or unacceptable. For things that follow necessarily from it seem to be part of the thesis itself.

Further, when a universal claim has been secured not by means of a word, but through a comparison, one should say that the other understands the statement neither as it was conceded, nor as it was put forward. For a refutation often comes about due to this as well.

If precluded from using these means, one should proceed to the objection that it has not been established correctly, answering by reference to the definition mentioned.

In the case of words being used in their proper sense, one must answer either without qualification or by drawing a distinction. However, things we grant while supplying something in thought (for example, whatever is asked unclearly and in a truncated way) – a refutation results due to that. For example, "Is what is of the Athenians a possession of the Athenians?" "Yes." "The same also applies in other cases. But is man of the animals?" "Yes." "Therefore man is a possession of the animals." For we say that man is of the animals because he is an animal, and that Lysander is of the Spartans because he is a Spartan. When what is put forward is unclear, obviously one should not agree without qualification.

When it is accepted that if one of two claims is the case, the other is necessarily the case, while the other is not necessarily the case if the former is the case, then one must, when asked, concede the weaker claim first, since it is more difficult to deduce from more points. And if he tries to argue that there is a contrary of the one but not of the other, one must, if his argument is correct, claim that there is a contrary in the other case, but that there is no word for it.

Since for some of their claims, the many would say that someone disagreeing with them says something false, but not for others, for example, claims on which opinions diverge (since for the many it is indeterminate whether the soul of animals is perishable or immortal) – so, in those matters where it is unclear in what way the proposition put forward is usually meant, whether like rules (for people call both true opinions and general claims "rules") or like "the diagonal is incommensurable", and, further, opinions diverge about its truth, one will be most able to surreptitiously use the words about these matters differently. For because it is unclear in which of the two ways the proposition is to be true, one will not seem to act sophistically, while because opinions diverge, one will not seem to say something false. For the shift will make the statement irrefutable.

Further, whatever questions one sees coming, one should object to them and announce them in advance. For in that way one can hinder the questioner most effectively.

18. Classification of solutions

Since a correct solution consists in exposing an incorrect deduction by saying what kind of question it is, due to which the incorrectness results, and a deduction is called incorrect in two ways (namely either if something incorrect has been deduced or if it is not a deduction, but seems to be a deduction), there will be the solution mentioned just now, as well as the correction of an apparent deduction, pointing out what question it is, due to which there appears to be a deduction. One thus succeeds in solving those arguments that have brought about a deduction by discarding something, and those that appear to do so by drawing distinctions. Again, since some of the arguments that have brought about a deduction have a true conclusion, and others a false one, it is possible to solve arguments that are incorrect with respect to their conclusion in two ways, namely both by discarding one of the questions asked and by showing that the conclusion does not hold. Arguments that are incorrect with respect to the propositions, on the other hand, can only be solved by discarding something, for the conclusion is correct. Hence those who want to solve an argument should first investigate

176b1

b5

b10

b15

b20

b25

b30

b35

b40 177a1 a5

a20

a25

a30

whether it has brought about a deduction or is non-deductive, next whether the conclusion is true or false, so as to solve it either by drawing a distinction or by discarding something, and discarding something either in the one way or in the other way, as was stated before.

It makes a huge difference whether one solves an argument while being questioned or not, for it is difficult to see an argument coming, while it is easy to examine it at leisure.

19. The solution to homonymy and amphiboly

signifying several things, while others have a conclusion that is said in several ways. For example, in the case of "speaking of the silent", the conclusion is equivocal, while in the case of "he who knows something, does not understand that thing" one of the questions is ambiguous. And what is equivocal is sometimes the case and sometimes not, but what is equivocal signifies, on the one hand, what is, and, on the other hand, what is not.

Now in those cases in which something being said in many ways appears at the end, a refutation does not come about, unless the questioner secures in addition the contradiction, for example, in the case of "sight of the blind", ²⁴ for without a contradiction there was no refutation. But in the cases in which it is in the questions, it is not necessary to deny the equivocal point beforehand. For the argument does not aim at this but is based on it.

So at the beginning one should answer to what is double in meaning, whether a word or a statement, in the following way, that it is so in one sense but not so in another, just as one should say of "speaking of the silent" that it is so in one sense, but not so in another, and that what must be ought to be done in some cases, but not in other cases (for "what must be" is said in many ways). But if it goes unnoticed, one should correct it at the end by adding something to the question: "Can there then be speaking of the silent?" "No, but it is possible that this one here speaks of the silent." And the same holds for arguments that have what is said in several ways in the propositions: "Do people then not understand what they know?" "Yes, but not those who know it in this way." For that it is not possible to understand what one knows, and that it is not possible for those who know it in this way, are not the same thing. And in general, even if the questioner deduces without qualification, one must contend that one denied what one had claimed not with respect to the object, but with respect to the word, so that it is not a refutation.

²⁴ The Greek text is ambiguous between "that the blind one sees" and "that one sees the blind one".

20. The solution to division and combination

It is also clear how the refutations depending on division and combination are to be solved, for if a sentence signifies different things with the words divided and with the words combined, the answerer should state the contrary reading as soon as the conclusion is being drawn. All arguments like the following depend on combination or division: "Was he hit with that with which you saw him being hit?", and "Did you see him being hit with that with which he was hit?"

It also has something of questions with amphiboly, but depends on combination. For what depends on division is not equivocal, for it is not the same statement that comes about when it is divided, since "object", just as "object", ²⁵ pronounced with the intonation, does not signify something different. In writing, however, there is the same word if it is written with the same letters and in the same way (even here they already add melodic signs), while in spoken form they are not the same. Hence what depends on division is not equivocal. It is also clear that not all refutations depend on what is equivocal, as some people claim.

So the answerer should draw a distinction, for that one saw someone being hit with one's eyes, that is, saying that "one saw someone being hit with one's eyes" is not one and the same thing. ²⁶ And the argument of Euthydemus: "Do you know about the warships that are now in Piraeus, even though you are in Sicily?" And again, "Is it possible for someone to be, being good, a cobbler who is bad? Then there would be a bad cobbler who is good, so that he will be a good bad cobbler." "Can one profitably know something of that, knowledge of which is profitable? But of what is bad one can profitably know something, namely that it is to be avoided. Therefore one can profitably know something of what is bad. However, something of what is bad is both bad and there to know, so that something of what is bad is bad to know. But knowledge of what is bad is profitable."27 "Is it true to claim now to have been born? Therefore you were born now." Or does it signify something different if a distinction has been drawn? For it is true to claim now that one was born, but not that one was born now. "Could you do what you are capable of in the way in which you are capable of it? But while not playing the guitar, you are capable of playing the guitar. Therefore you could play the guitar while not playing the guitar." However, he does not have the capacity for this, playing the guitar while not playing the guitar, but rather when he is not doing it, he has the capacity for doing it.

177b1

a35

55

b10

b15

b20

²⁵ In the Greek text the two examples are to oros, which with rising intonation on the first syllable means "mountain", and ho oros, which with rising intonation on the second syllable means "whey".

Alternatively: "for the fact that one saw someone being hit with one's eyes is not the same thing as saying that 'one saw someone being hit with one's eyes'."

In the Greek text the initial question is ambiguous between "What is learned about the things, knowledge of which is profitable, is profitable" and "The things, knowledge of which is profitable, are profitable things to learn." Aristotle is using the ambiguity of the question to allow for switching from the one construction to the other construction: "What is learned about what is bad is profitable. Therefore what is bad is a profitable thing to learn. However, what is bad is both bad and a thing to learn, so that what is bad is a bad thing to learn. But knowledge of bad things is profitable."

b35

178a1

a10

a15

Some also solve this in another way. For if the answerer conceded that he could do it in the way in which he is capable of doing it, it does not follow, they claim, that he plays the guitar while not playing the guitar, since he has not conceded that he will do it in every way in which he is capable of doing it; and that it is not the same to do something in *some* way in which one is capable and in *every* way in which one is capable. However, it is clear that they do not solve it correctly, for arguments depending on the same point have the same solution. This solution, however, will not apply to all arguments asked in every way; it is relative to the questioner, not to the argument.

21. The solution to the fallacy of intonation

There are no arguments, either written or spoken, that depend on intonation, except if some few might come about, for example, the following argument: "Did the drunkard come for her sake?" "Yes." "Does someone who does something for her sake, do that for her benefit?" "Yes." "But you said that he came for her sake. Therefore he came for her benefit." It is clear how this is to be solved, for the word does not signify the same thing with the stress on the first syllable as when it is pronounced with the stress on the second. 29

22. The solution to the fallacy of form of expression

It is also clear how we should respond to arguments dependent on things that are not the same being said in the same way, since we know the types of predication. For the answerer, on being asked, conceded that none of the things that signify what-it-is holds, while the other showed that some term that signifies a relation or a quantity, but due to the expression seems to signify what-it-is, holds, for example, in the following argument: "Is it possible to do and to have done the same thing at the same time?" "No." "But it is possible to *see* something and, at the same time, to have seen the same thing in the same respect." "Is a form of acting a form of undergoing?" "Are not 'is cut', 'is burnt' and 'is perceptually stimulated' said in a similar way and do they not all signify a form of undergoing?" On the other hand, "saying", "walking" and "seeing" are said in the same way as one another; but "seeing" is a form of being perceptually stimulated, so that it is also a form of undergoing, but at the same time a form of acting as well.

²⁸ In the Greek text the initial equivocation in to ou katalueis; is between "Is that where you dwell a house?" and "Is 'you do not dwell' a house?" The argument then runs as follows: "Is then that where you dwell/'you do not dwell' the negation of 'you dwell'?" "Yes." "But you said that that where you dwell/'you do not dwell' is a house. Therefore a house is a negation."

²⁹ In the Greek text Aristotle states that with a sharp intonation (i.e. with rising intonation oou, so that it means "where") it does not signify the same as pronounced with a low intonation (so that ou means "not").

Now if, in the first example, someone who has conceded that it is not possible to do and to have done the same thing at the same time were to say that this is possible for seeing and having seen something, he would still not be refuted, unless he were to say that seeing is not a form of acting, but rather of undergoing. For that question is needed in addition. The listener, however, assumes that he has conceded it when he conceded that "cutting" is a form of acting and "having cut" a form of having acted, and all the rest that is said similarly. For the listener adds the remaining case himself, assuming that it is said similarly. However, it is not said similarly, but appears to be because of the expression. The same happens as with homonymies, for in the case of homonyms someone ignorant about arguments thinks that has denied with respect to the object, not with respect to the word, what he has affirmed. However, in the argument the question whether he uses the homonym with a single thing in mind is still lacking; for if he has conceded in that way, there will be a refutation.

The following arguments too are similar to the ones above: "If what someone has he later does not have, he has lost it. For someone who has lost one die alone, will not have ten dice." Or is it that he has lost what he does not have, but first had, but not necessarily that he has lost just as much as or as many as he does not have? So after he asked with reference to what someone has, the questioner makes an inference with regard to how many (for ten is so many). So if he had asked at the beginning whether someone has lost as many as he does not have, but first had, no one would have conceded this, but only that he has then lost either that many or a part of them. Also, that one might give what one does not have, since one does not have one dice alone. Rather, one has not given what one did not have, but has given this one die in a way in which one did not have it. For "alone" signifies neither an individual, nor a quality nor a quantity, but rather how it is related to something, for example, that it is not together with something else, just as if the questioner had asked: "Can one give what one does not have?" and, upon this being denied, were to ask whether one could give something quickly without having it quickly, and then, this being affirmed, were to deduce that someone can give what he does not have. And it is clear that this has not been deduced, for "giving quickly" is not "giving this", but rather "giving in this way". And in the way in which one does not have something, one might give it; for example, what one has with pleasure, one could give with regret.

The following arguments are all similar: "Could someone hit with a hand he does not have?" or: "Could someone see with an eye he does not have?" For he does not have one alone. Some solve this by saying that he who has more than one, also has one alone, whether an eye or anything else. Others solve it in the way they also solve the one saying "What someone has, he received". For he gave one vote alone; "And this person here", they say, "has one vote alone from him, since he received it from him." Again, others solve the argument by rejecting the interrogation straightaway and saying that it is possible to have what one did not receive, for example, to have a sour wine while having received a good wine because the wine spoilt upon receipt.

As has already been stated before, however, they all provide a solution, not relative to the argument, but relative to the person. For if this had been a solution,

a20

a25

a30

a35

178b1

b5

b10

b25

b30

b35

179a1

a5

a10

a15

it would not have been possible to solve the argument while having conceded the opposite, just as in other cases. For example, if the solution is "in one respect it is so, but in another it is not", then a conclusion is reached if the other concedes that it is said without qualification. And if a conclusion is not reached, this could not be a solution. But in the previously mentioned cases we claim that a deduction has not come about, not even if everything is conceded.

Further, the following arguments are among these as well: "Has someone written what is written? But it is written now that you are sitting, a false statement. But it was true when it was written. Therefore a statement at once false and true was written." For a statement or belief being true or false signifies not an individual, but a quality (for the same account also applies in the case of beliefs). And "What someone who learns learns, is that what he learns? But someone learns what is slow fast." Now, one has said, not what he learns, but rather how he learns. And "What someone walks, does he traverse that on foot? But he walks the whole day." However, he has stated, not what he walks, but the time when he walks; and when one talks about "drinking a glass" one does not state what someone drinks, but from what. And "Is it either by being taught or by discovery that someone knows what he knows? But if of two things, he has discovered the one and been taught the other, he knows the two of them in neither way." Or is it that "what" applies to every thing, but not to all the things?

There is also the argument that there is a third man in addition to *man* itself and the particular men. For *man*, and every universal, does not signify an individual, but a quality or a thing in some way relative to something or something of that kind. The same holds in the case of "Coriscus" and "musical Coriscus": are they the same or different? For the one term signifies something individual, the other a quality, so that it is not possible to set it out.

Now it is not the setting out that produces the third man, but rather the agreeing that what is set out is what an individual is, for it will not be possible for what *man* is, just like what Callias is, to be something individual. And it will not make any difference if someone should claim that what is set out is not what some individual is, but what a quality is, for what is beside the many things will be one thing, for example, *man*.

It is thus clear that one should not concede that what is predicated in common of all the things is an individual, but rather that it signifies a quality or something relative to something or a quantity or something of that kind.

23. The solution to the language-dependent fallacies

In general, for arguments dependent on the expression, the solution will always be in accordance with the opposite of that on which the argument depends. For example, if the argument depends on combination the solution will be given by someone who has divided the words, while if the argument depends on division it will be given by someone who has combined them. Again, if it depends on a high intonation, a low intonation will be the solution, while if on a low one, a high one. If it depends on homonymy, one can solve it by using the opposite word,

for example, if someone ends up saying that something is alive, though he has denied that it is, he can solve it by making clear in what sense it is alive; and if he claimed that it is lifeless, but it has been deduced that it is alive, he can solve it by saying in what sense it is lifeless. The same holds for amphiboly. If the argument depends on a similarity in expression, the opposite will be the solution. "Could one give what one does not have?" No, not what one does not have, but in the way in which one does not have it, for example, one die alone. "Does someone know what he knows by being taught or by discovery?" But not the things he knows. And if someone traverses on foot what he walks, he still does not traverse the time when he walks on foot. And similarly also in the other cases.

24. The solution to the fallacy of accident

As to arguments that depend on what is accidental, there is one and the same solution for all of them. For since it is indeterminate in which cases one must ascribe something to the object itself whenever it belongs in the case of the accident (that is, in some cases it seems so, and people say so, while in other cases they deny that it is necessary), once the conclusion is being drawn, one should claim, against all these equally, that it is not necessary; one must, however, be able to provide a counter-example.

All the following arguments depend on what is accidental: "Do you know what I am about to ask you?", "Do you know the one approaching (or the masked one)?", "Is the statue your work?" or "Is your dog a father?" and "Does a few times a few make a small number?" For it is clear in all these cases that what is true of the accident need not also be true of the object itself. For it is only to things that are in substance indistinguishable and one, it seems, that all the same things belong. And for something good, being good is not the same as being about to be asked, just as for someone approaching (or masked), being someone approaching is not the same as being Coriscus. Hence it is not the case that if I know Coriscus, but do not know the one approaching, I know and do not know the same person. Likewise it is not the case that if this is mine and is a work, then it is my work, rather than my purchase or possession or anything else. In the other cases it is the same.

Some, however, solve this by rejecting the interrogation. For they claim that it is possible to know and not know the same thing, but not in the same respect. So if they do not know the one approaching, but do know Coriscus, they claim to know and not know the same person, but not in the same respect. However, first, as we already stated, the correction of arguments depending on the same point must be the same. There will not be such a correction, however, if someone assumes the same principle not for knowing something, but rather for being or for being in a certain state, for example, in "If he is a father, and he is yours ..."; for if that principle is true in some cases and it is possible to know and not know the same thing, still the principle mentioned has no part in these cases.

Now, nothing prevents the same argument having several defects, but not every exposure of a defect constitutes a solution. For it is possible to establish that some

a25

a20

a35

179b1

a30

b5

b10

b25

b30

b35

180a1

a10

a15

a20

argument has deduced a falsehood, without establishing what point this is due to, for example, in the case of Zeno's argument that it is impossible to move. Hence, even if someone were to try to infer that something is impossible by inferring an impossibility, he goes wrong, even if he has deduced it countless times. That is, however, not a solution. For a solution is, it was said, the exposure of an incorrect deduction stating the point which its incorrectness is due to. Thus, if he has not brought about a deduction or in addition tries to infer a falsehood or a truth, the clarification of that point constitutes the solution.

Perhaps nothing prevents this occurring in some cases; nevertheless, precisely in these cases this would not seem to be so. For one knows of Coriscus that he is Coriscus as well as of the one approaching that he is approaching. But it seems possible to know and not know the same thing, for example, to know that it is white but not grasp that it is musical. For in this way one knows and does not know the same thing but not in the same respect. However, one knows of the one approaching, that is, Coriscus, both that he is approaching and that he is Coriscus.

Those who provide a solution by claiming that every number is small, also go wrong in the same way as those we mentioned. For if, though no conclusion is drawn, they ignore this and claim that a true conclusion has been drawn (for every number is both large and small), they go wrong.

Some also solve these deductions through equivocation, for example, by saying that what is yours is a father or a son or a slave. However, it is clear that if the refutation is thought to be due to something being said in many ways, the word or the sentence must in its proper sense be of several things. But nobody says "this is that person's child" in its proper sense if it is about a master of a child; rather, the combination depends on what is accidental. "Is it yours?" "Yes." "But it is a child. Therefore it is your child" – since it is accidental that it is yours as well as that it is a child. However, it is not your child.

There is also the argument that something of the bad things is good, for practical wisdom is knowledge of bad things. However, "this being of these" is not said in many ways, but is about possession. And if it is perhaps said in many ways (for we say that man is of the animals, but not as some possession; and if something is said to be relative to bad things, in the sense of being of something, it is of bad things for this reason; however, it is not of bad things), then it appears to depend on what is said in a certain respect and without qualification.

Though it is perhaps possible that something of bad things is good in an equivocal way, not in the case of the present argument, but rather if a slave should be something good of a bad person. But perhaps it is not even possible in this way, for it is not the case that if something is good and of this, it is then "something good of this" together. Neither is the statement that man is of the animals said in many ways, for it is not the case that if we sometimes signify something elliptically, this is said in many ways. For we also use half a line when we mean "Give me the *Iliad*", for example, "Sing, goddess, of the wrath ..."

25. The solution to the qualification fallacy (secundum quid)

Arguments that are based on this being said in the proper sense or instead in a certain respect, at a certain place, in a certain way or in relation to something, and not without qualification, one must solve by checking the conclusion against its contradictory, whether it can be qualified on one of these points. For contraries or opposites, as well as affirmation and denial, cannot without qualification belong to the same thing. However, nothing prevents both belonging in a certain respect, in relation to something or in a certain way, or one belonging in a certain respect and the other without qualification. Hence there is not yet a refutation if the one belongs without qualification and the other in a certain respect and one should assess this for the conclusion in relation to its contradictory.

All arguments like the following have that feature: "Is it possible that what is not is? But it is something that is not." Similarly, what is will not be, for it will not be one of the things that are. "Is it possible that the same person at the same time keeps and breaks his word?" "Is it possible that the same person at the same time obeys and does not obey the same person?" No, it is neither the case that being something and being are the same (for it is not the case that if what is not is something, then it also is without qualification), nor that if someone keeps his word on this point or in this way, he must also keep his word; rather, he who swore to break his word, keeps his word on this point alone by breaking it, but does not keep his word. Neither does the one who disobeys obey, but he obeys on a certain point. The argument about the same person speaking truly and falsely at the same time is similar, but because it is not easy to see in which of the two ways one may answer, the possibility that he speaks truly or falsely without qualification only appears to one with difficulty. But nothing prevents him being not truthful without qualification while being truthful in some respect or concerning something, that is, some statements being truthful, but he himself not being truthful.

The same also holds in the case of what is related to something, in a place or at a time. For all arguments like the following come about due to this: "Is health (or wealth) good? But it is not good for someone who is foolish and does not use it correctly. Therefore it is good and not good." "Is being healthy (or being in power in the city) good? But sometimes it is not better. Therefore the same thing is good and not good for the same person." Or does nothing prevent what is good without qualification being not good for a certain person, or perhaps good for him, but not good now or there? "Is what a practically wise person would not wish for bad? But he would not wish to lose the good. Therefore the good is bad." For it is not the same to say that the good is bad and that losing the good is bad. The argument about the thief is similar, for it is not the case that if the thief is bad, then also catching him is bad. Thus he does not wish for the bad, but for the good, for catching him is good. Also illness is bad, but not getting rid of illness.

"Is the just preferable to the unjust, and something happening justly to it happening unjustly? But dying unjustly is preferable." "Is it just that each has his own things? But judgements one passes in accordance with one's own belief, even

a30

a35

a25

180b1

b5

b15

b10

if it is false, are valid according to the law. Therefore the same thing is just and b25 unjust." And "On whom should one pass judgement, the one who says just things or the one who says unjust things? However, it is also just for someone treated unjustly to sufficiently state what he suffered; but these things were unjust." For it is not the case that if suffering something unjustly is preferable, "unjustly" is to be preferable to "justly". Rather, without qualification "justly" is preferable, b30 though nothing prevents "unjustly" in respect to this being preferable to "justly". And possessing one's own things is just, while possessing another's things is not just. However, nothing prevents this judgement being just, for example, when it is in accordance with the belief of the one passing judgement. For it is not the case that if something is just in respect to this or in this way, it is also just without qualification. Similarly as to things that are unjust, nothing prevents it being just b35 to state them, for it is not necessary that if it is just to state things, then these things are just, just as it is also not necessary that if stating things is useful, then these things are useful. The same holds of just things. Hence it is not the case that if the things stated are unjust, the one stating unjust things wins the case, for he states what is just to state, but is also unjust without qualification, that is, to suffer.

26. The solution to arguments based on ignorance of refutation (*ignoratio elenchi*)

To arguments that come about due to the definition of refutation, one should, as 181a1 sketched previously, respond by checking the conclusion against its contradictory, ensuring that it will be of the same thing, in the same respect, in relation to the same thing, in the same way and at the same time. Should this be asked in addition a5 at the beginning, one should not agree that it is impossible that the same thing be double and not double, but rather claim that it is possible, but not in such a way as, it was once agreed, would constitute a refutation. All the following arguments depend on such a point: "Does someone who knows of a thing that it is that thing know the object? And likewise someone who is ignorant? But someone a10 who knows, of Coriscus, that he is Coriscus, might not know that he is musical, in which case he knows, and is ignorant of, the same thing." "Is something four cubits long larger than something three cubits long? But something could become four cubits in length from being three cubits long. And what is larger is larger than what is smaller. Therefore it is larger as well as smaller than itself in the same respect."

27. The solution to asking for the point at issue (*petitio principii*)

As for arguments that depend on asking for and securing the point at issue, if this is clear, one should, when asked, not concede it (not even if it is acceptable) while stating the truth; but if it should go unnoticed, one should, because of

the defectiveness of such arguments, turn the charge of ignorance back on the questioner, saying that he has not given a dialectical argument (for a refutation should be without the point at issue) and, moreover, that it was conceded not on the supposition that the questioner would use it, but rather on the supposition that he would construct a deduction against it – the opposite of what occurs in refutations on a side-issue.

28. The solution to the fallacy of the consequent

Arguments that make a conclusion follow on the basis of the consequent are also to be exposed on the occasion of the argument itself. The implication of consequents is twofold; it is either as the universal is implied by something specific, for example, "animal" by "man" (for it is assumed that if this is accompanied by that, that is also accompanied by this), or it is in accordance with oppositions (for if this implies that, the opposite of this implies the opposite of that), on which also the argument of Melissus depends; for he assumes that if what has come into being has a beginning, what has not come into being does not have one, so that if the universe has not come into being, it is also infinite. But that is false, for the implication is the other way round.

29. The solution to the fallacy of the false ground (non causa)

And as for the arguments that deduce due to something being added, one should check whether the impossibility follows all the same when it is removed. And subsequently the answerer should expose this and say that he conceded it, not in so far as it seems so, but in so far as it is in the service of the argument, and that the questioner has not made use of it in the service of the argument.

30. The solution to the fallacy of many questions

In reply to arguments that make several questions one, one should draw a distinction right at the beginning. For a single question is one to which there is a single answer, so that one should affirm or deny neither several things of one thing, nor one thing of several things, but rather one thing of one thing. However, just as in the case of homonyms, sometimes something belongs to both things and sometimes to neither of them, so that, although the question is not simple, no harm is done to those who answer in a simple way, so it is also in these cases. So if several things belong to one thing or one thing to many, no inconsistency follows for someone who concedes in a simple way, even though he makes this mistake; it does, on the other hand, if something belongs to one thing and not to another thing, or several things are said of several things. And in one sense both

a20

a25

a30

a35

181b1

b15

b20

182a1

of them belong to both, but then again, in a sense they do not. Hence one should beware of this, for example, in the following arguments: "If the one thing is good and the other bad, it is true to say that these are good and bad, and again that they are neither good nor bad (for it is not the case that each of them is each of them), so that the same thing is both good and bad and neither good nor bad." And "If each thing is itself the same as itself and different from another, then, since these things are the same as themselves, not as others, but are also different from themselves, the same things are both different from and the same as themselves." Further, "If something good becomes bad and something bad good, they would become the two of them." "Of a pair of unequal things, each is equal to itself, so that they themselves are equal and unequal to themselves."

Now, these arguments also fall under other solutions, for "both" as well as "all" signify several things. It thus does not follow that one affirms and denies what is the same, except for the word. That, however as was said, is not a refutation; rather, it is clear that so long as several points do not become one question, and instead one thing is affirmed or denied of one thing, there will not be an impossibility.

31. The solution to arguments that make someone babble

As for arguments leading someone to say the same thing many times, it is clear that one should not concede that the predicates for things said relative to something, when separated, signify something by themselves, for example, "double" apart from "double of half", for the reason that it appears in the phrase. For "ten" also appears in "ten minus one" and "do" in "not do", and in general an affirmation in a denial, but it is still not the case that if someone says that this is not white, he says that it is white. Perhaps "double" does not signify anything at all, just as it does not in the case of "half". And if it then does signify something, still it does not signify the same thing when combined. Nor does "knowledge" in the context of some type (for example, if it is medical knowledge) signify what the common thing is – that was, rather, knowledge of the knowable.

In the case of predicates, however, by which this is denoted, one should say that what they denote separately is not the same as what they denote in a phrase. For "concave", when predicated commonly, denotes the same in the case of what is snub and in the case of what is bandy, but nothing prevents it signifying other things when added, in the one case to "nose", in the other to "leg". For in the former case it signifies "snub", in the latter "bandy", and it makes no difference whether we say "snub nose" or "concave nose".

Further, one should not concede an expression on one level, for that is incorrect. For "snub" is not "concave nose", but something, say a feature, *of* a nose. Hence it is not at all absurd if a snub nose is a nose having the concavity of a nose.

32. The solution to solecisms

As for solecisms, we stated previously due to what they appear to follow. How they are to be solved will be clear from the arguments themselves. For all arguments like the following aim to construct them: "Does what you truly claim to exist really exist? But you claim the King_{him} to exist, therefore the King_{him} exists." However, to say "King_{him}" is not to say "what" but rather "whom", nor "it" but "him". So one would not seem to speak Greek if one were to ask, "Does him, whom you truly claim to exist, exist?", just as one would not either if one were to ask, "Does he, of whom you truly claim that she exists, exist?" 32

However, saying "wood" for "he", or whatever words signify neither what is feminine nor what is masculine, does not yield a difference; that is why no solecism comes about: "If what you claim to exist, exists and you claim wood_{it} to exist, then wood_{it} exists." "Kinghe" and "he", on the other hand, have the nominative of a masculine word. But if someone should ask, "Is he she?", and next, "What now? Is he not Coriscus?", and then should say, "Therefore he is she", he has not deduced a solecism, not even if "Coriscus" signifies just the one she is, unless the answerer concedes this; rather, one must ask for this point in addition. But if it is not the case, and he does not concede it either, nothing has been deduced, neither in reality nor relative to the answerer.

So, in the same way, "Kinghim" in the earlier example is required to signify "he". But if that is neither the case nor conceded, the conclusion is not to be stated, though it appears so because the dissimilar case form of the word appears similar. "Is it correct to say that she is just what you claim her to be? You claim her to be Queenher. Therefore she is Queenher." However, that is not necessary if "she" is signified, not by "Queenher", but by "Queenher", while "her" is signified by "Queenher". "Nor is it the case that if he is what you claim him to be, and you claim him to be Cleonhim, he is therefore Cleonhim. For he is not Cleonhim. For it was said that he, not him, is what I claim him to be. Thus stated, the question would not even be Greek.

"Do you know it? But it is the Kinghe. Therefore you know the Kinghe." ³⁴ However, "it" in "Do you know it?" does not signify the same as in "It is the Kinghe" – in the former "it" signifies "him", in the latter "he". "Is he whose friend you are your friend? But you are my friend. Therefore my is your friend." However, one says "my" for "his" and "I" for "he", while it was conceded that "he", not "his", whose friend you are, is your friend, so that not my but I am your friend. ³⁵

a15

a10

a20

a25

30

a35

³⁰ In the Greek text the example is: "Is that what you state truly, also really the case? But you claim something to be a stone_{him}. Therefore something is a stone_{him}."

³¹ In Greek lithos (stone) is masculine and is referred to with masculine personal, relative and demonstrative pronouns.

³² Literally in the Greek text: "Is he, whom (feminine accusative form) you claim to be?"

³³ In the Greek text the example is not constructed with "Queen", but with aspis, the word for "shield", which is feminine.

³⁴ In the Greek text the example is constructed not with "King", but with *lithos*, "stone" (compare fn. 31).

³⁵ In the Greek text the example is: "Of what [neuter relative pronoun in the genitive, literally "whose"] you have knowledge, that you know? But you have knowledge of the stone [genitive of a masculine

b10

b15

b20

b25

b30

From what has been said, it is clear that such arguments do not deduce a solecism, but appear to, as well as on what basis they appear to and how one should respond to them.

33. Simple-minded and shrewd arguments

One should also understand that, among all arguments, with some of them it is easier, with some more difficult, to discern on what basis and at what point they deceive the listener through a fallacy, even though the latter are often the same as the former. (For one must call what comes about on the basis of the same point the same argument.) The same argument, however, may depend on the expression according to some, on what is accidental according to others, and on something else according to still others, because each argument is, when transposed, not equally clear.

So, just as with those dependent on homonymy – which seems to be the most simple-minded mode of fallacy -, some arguments are clear even to any chance person (for jokes too are almost all dependent on the expression, for example, "There are only twenty-three letters written in Greek", 36 "What is your goal? The one which was scored in the last minute", 37 "Which of these two cows has given birth before the other? Neither of them, but both will give birth before the farmer", 38 "Does the north wind make things brighter? Not at all, for it killed the beggar and the drunkard", 39 "Is he Elder? Of course not; he is called Young"; 40 most of the other jokes work in the same way); while others appear to go unnoticed even by the most experienced people. (A sign of these arguments is that these people often quarrel about words, for example, whether "being" and "one" signify the same thing in all cases or something different. For some hold that "being" and "one" signify the same thing, while others solve the argument of Zeno and Parmenides by claiming that "one" and "being" are said in many ways.) The same holds for arguments concerning what is accidental and concerning each of the others: some will be easier, others more difficult to understand; and determining to what kind they belong and whether they constitute a refutation or not, is not equally easy for all of them.

A shrewd argument is an argument that puts one at a loss most of all, for it bites the most. The perplexity is twofold: that of deductive arguments concerns which

noun, literally "the stone_{his}"]. Therefore you know of the stone_{his}." The diagnosis is: "However, one says 'of stone_{his}' for 'of what [whose]' and 'stone_{him}' for 'that', while it was conceded that you know 'that', not 'of that', so that you know, not of a stone_{his}, but a stone_{him}."

³⁶ In the Greek text the joke is: "The man carried the seat/the carriage down the stairs."

³⁷ In the Greek text the joke is: "To where are you on your way/do you bring down the sail? To the vard."

³⁸ In the Greek text the joke runs as follows: "Which of the two cows will give birth earlier/at the front? Neither of them, but both will give birth later/from behind."

³⁹ In the Greek text the initial question is: "Is the north wind clean/innocent?"

⁴⁰ In the Greek text there is a play on the meaning of the names Euarchos: "good ruler" and Apollônidês: "son of a destroyer".

question the answerer should discard, while that of eristic arguments concerns how one should phrase the proposition put forward.

For precisely this reason, among deductive arguments, the shrewder ones force one to investigate deeper. A deductive argument is shrewdest if it does away with what is as acceptable as possible on the basis of what is as generally held as possible. For although it is a single argument it will, when taken in contraposition, contain deductions that are all of equal strength. For it will always, on the basis of acceptable points, do away with an equally acceptable point. For just this reason, one will inevitably be at a loss. Such an argument, one that brings the conclusion in line with the questions, is therefore shrewdest, while the argument that depends on points that are all equal is second. For this will similarly put one at a loss as to which of the questions is to be discarded. That, however, is difficult, for even though one is to be discarded, it remains unclear which is.

Among the eristic arguments, the shrewdest is, first, that of which it is not immediately clear whether it has brought about a deduction or not, that is, whether the solution depends on something incorrect or on drawing a distinction; second among the rest is that of which it is clear that it depends on drawing a distinction or discarding something, but it is unclear what question it is that is to be discarded or in which a distinction is to be drawn, in solving the argument, and whether the distinction depends on the conclusion or on one of the questions.

Sometimes an argument that fails to deduce is simple-minded, if the propositions secured are exceedingly unacceptable or incorrect. Sometimes, however, such an argument does not deserve to be disdained. For when one of the questions of that sort, while being what the argument is about or what it is based upon, is missing, the deduction is simple-minded, neither having secured this in addition nor having brought about a deduction; however, when one of the external questions is missing, it is in no way contemptible; rather, the argument is reasonable, but the questioner has not asked questions correctly.

Just as it is possible to solve sometimes relative to the argument, sometimes relative to the questioner and the questioning, and sometimes relative to neither of these, it is similarly possible also to ask questions and deduce relative to the thesis, relative to the answerer and relative to the time (when the solution is requiring more time than at the present occasion is set for arguing for the solution).

34. Conclusion

On how many and what grounds fallacies come about among dialectical interlocutors, how we are to expose someone making incorrect statements, and how we are to lead him to unacceptable statements; next, from what kind of questions solecism results, how one should ask questions and what the order of questions should be; and further, to what end all these accounts are useful, and about answering, both in general and as to how one should solve arguments and solecisms – we have discussed all these things. It remains to remind ourselves of the initial purpose, briefly to say something about it, and to draw these remarks to a close.

b35

183a1

a5

a10

a15

a20

a25

a35

b10

b15

b20

b25

b30

b35

184a1

We had set out to discover a certain ability to deduce concerning an issue put forward and on the basis of the most acceptable propositions available. For that is the job of dialectic by itself as well as of critical examination. However, since, with the latter, because of its proximity to sophistry, one purports to be able to critically examine someone, not only dialectically, but also as if having knowledge – we have for this reason set before ourselves not only the stated task of the enterprise (being able to secure concession of an argument) but also how, when subjected to an argument, we should similarly defend the thesis on the basis of what is most acceptable. We have stated the ground for this, since it is also why Socrates asked questions, but did not give answers. For he admitted to having no knowledge.

In the foregoing clarity has been achieved as to how many kinds of issues in reference to which, and how many propositions on the basis of which, this is to take place, as well as from where we may draw them easily, and further how we should ask questions or order the whole interrogation, and about answers as well as solutions targeting deductions. Clarity has also been achieved regarding everything else that belongs to the same systematic discipline of arguments. In addition to this, we have also gone through the fallacies, just as we have already stated previously.

So it is clear that what we had set out to do has been brought to an adequate completion. However, we should call attention to what has been achieved with this inquiry. For among all discoveries, those that are the fruit of earlier efforts taken over from others, are in their turn developed by those who subsequently take them over. New discoveries, on the other hand, usually make a small advance at first, which, however, is of much greater use than the later expansion based on them. For surely, as they say, the beginning is of the greatest importance of all, and thereby also the most difficult. For this, being as miniscule in size as it is enormous in potential, is very difficult to discern. But once it has been discovered it is easy to add to it and expand it further. This is also what has happened in the case of rhetorical arguments, and presumably in the case of all other kinds of expertise as well. For those who discovered the principles made altogether incremental progress; but those now held in high esteem, having taken over from many predecessors, who have, as in a line of succession, each in turn made progress, expanded the field in this way: Teisias after the pioneers, Thrasymachus after Teisias, Theodorus after him, and many others contributed many elements. Thus it is no wonder that the expertise has a certain breadth.

However, as far as our inquiry is concerned, it is not the case that some work had been done before, while some had not; rather, there was nothing at all. For also those who earned their money with eristic arguments provided a kind of education resembling Gorgias' practice. For while the ones used to give rhetorical arguments to learn by heart, the others gave arguments based on questions, namely arguments which either side supposed their respective arguments would most often fall under. That is precisely why the instruction their students received from them was hasty and devoid of expertise. For they assumed that they could educate by providing not the expertise itself, but the results of the expertise, as if

someone were to claim to convey knowledge of how to keep feet from hurting, and next were not to teach shoemaking, and not even where one might acquire such things, but were to offer a rich array of shoes of all kinds. For he has helped with respect to what is needed, but did not convey an expertise.

Moreover, while there were numerous and venerable accounts about rhetorical arguments, we could at first say hardly anything else about deductive arguments, except that we were toiling away for a long time in intensive research.

If after inspection it appears to you, taking into account that it arose from such initial conditions, that our approach fares well in comparison with the other fields that have grown from a tradition, the remaining task for all of you or for the audience is to pardon the omissions in our treatment and to have much gratitude for its discoveries.

Deviations from Ross' edition

References to the manuscripts are based on the apparatus in Ross' edition (which does, however, contain mistakes) and on my own inspection of V (Vaticanus Barbarinus graecus 87, from the 10th century), D and (to some extent) c. For Boethius' translation, I have relied on B. G. Dod, ed., *Aristoteles Latinus* VI 1–3 *De sophisticis elenchis*. Leiden and Brussels: Brill and Desclée de Brouwer, 1975. For the letters standing for the manuscripts, see Ross' edition. When I abbreviate "codd.", I do not necessarily include Boethius. In listing the support for the readings I propose I have rarely considered the commentary of Michael of Ephesus (M^c) and always ignored the paraphrasis of Sophonias.

65a2 διὰ τῶν κειμένων: om. codd. praeter B, 65a8 ὡς: om. codd. praeter D, 66a30 μανθάνει: μανθάνειν A¹BuM°Λ, 66a30-31 μανθάνει: ἐμάνθανεν codd., cf. Λ, 67a7 δ: εἰ δ BCDcuΛ, 67a10 ὑπάρχει: ὑπάρξει BCDΛ, 67a22 ἄλλως: ἀλλὰ codd. praeter i, 68a2 μίαν: om. codd., 68a32 εἰ: ὅτι DΛ (an glossa?), 68b2 έστιν: om. codd. praeter u, 68b22 δὲ: τε ABcuDV, 69a33 ἐπίσταται: ἐπισπᾶται Poste, 69b18 ὁπόσα: ὅσα codd., 69b32 τοσαῦτα: ταῦτα codd., 70a7 παρὰ: παρά τε codd., 70a9 (τὸ): om., 70a22 οὐ μιᾶς: οὐδεμιᾶς codd. praeter u, 70b20 τινες ... οἴονται: τις ... οἴοιτο codd., 70b23 οἰόμενοι εἴναι εἰρήκασι: οἰόμενος εἴναι ήρωτησε codd., 70b24 (ἄρ'): om., 71a10 κύκλος: κύκλου codd., 71a19 εἴ τ': εἴτα B²C¹VM^c, 70a30-1 αν εἴεν om. ABu, cf. Λ, 71a34 τοῖς: τοῖς μὴ (erratum), 71a36 [δυάδες]: δυάδες codd., 71b11 ἐχάστου: έκάστων ACVΛ, 71b30 [εἴσιν]: εἴσιν codd., 71b30 οί²: om. ABC¹DcV, 71b33 (ἔνεκα): om., 71b36-7 τῷ διαλεκτικώ: τή διαλεκτική codd., 71b37 τω γεωμέτρη: τὸν γεωμέτρην ABDu, cf. V, 72a2 περί: περί μὲν ABCDVΛ, 72a36-7 ταὐτὰ: ταῦτα ADΛ, 72a37 κατὰ: καὶ κατὰ DVC 1 u Λ M c , 72a38 οἴα: οἴον codd., 72b13 [πρὸς]: πρὸς codd., 72b19 ἄγει: ἄγειν codd., 72b24 σχῆψις: σχέψις codd. praeter C², 73a12 δεῖ: δεῖν $Dc^1u\Lambda$, 73a14 συμβαίνει λέγειν: λέγειν εἴναι VCΛ (an εἴναι λέγειν AB, cf. c?), 73a23 $\langle \tau \alpha \rangle$: om., 73a25 τοῖς σοφοῖς: τοῖς ἐν λόγω ABDuV 2 Λ, 73a36 διπλάσιον 1 : om. ABDu, 73b6-7 ὧν εἰσιν ἕξεις ἢ πάθη ή τι τοιοῦτον forsan post b8 τούτοις transponendum est, 73b19 δ: δ codd., 73b20 ἄρρενά: ἄρρεν codd., 73b27 τόδε: τὸ τόδε codd. praeter C, 73b27 [καὶ]: καὶ codd., 73b35 'τοῦτο': τόδε ABDu, cf. M°, 74a34 ἐπάγοντα: ἐπαγαγόντα ABDcuΛ, 74a36 καὶ αὐτοὶ οἴονται: οἴονται καὶ αὐτοὶ codd., 74b36 ὅτι δ: ő τι correx. c¹u, 74b37 ἀπόφησι ... φησί: ἀποφῆσαι ... φῆσαι codd., 75a11 διαισθανόμενος: αἰσθανόμενος ABDVΛ, cf. DA 425a22, 75b4 ἀλλ' 〈ἢ⟩: ἀλλὰ codd., 75b15 ⟨ἕλεγχον⟩: om., 75b24 τί διαφέρει;: τι διαφέρει codd., 76a11 άπλῶς: ἄπαντα codd., 76a28 ἃν: ἂν codd., 76a30 τι: τε τι Λ, cf. ABCDV, 76b10 πότερον: πρότερον codd. praeter $A^2B^2C^2c^2$, 76b19-20 ἀποφάνσεις: ἀποφάσεις codd. praeter f, 76b20 ἀσύμμετρός έστι': ἀσύμμετρος', ἔτι codd., 76b34 παρ' ὄ τι: παρὰ τί codd., 77a22 τῷ: τὸ codd., 77a25 ἄρ' ἔστι: ἔστιν ἄρα Λ, cf. u, 77a38 κάκ: καὶ DuVΛ, 77b3 ⟨ώς⟩ καὶ τὸ "ὄρος": καὶ τὸ ὀρος codd., 77b3 [καὶ] "ὄρος": καὶ ὁ ὀρος $De\Lambda$, cf. V, 77b17 σπουδαία ἡ ἐπιστήμη: σπουδαίον τὸ μάθημα $ABDVe^2\Lambda M^c$, 77b19 ἡ: om.

184b1

codd., 77b33 ἐρωτωμένοις: ἐρωτωμένους codd., Λ, 78a12 'oὐ': om. codd., 78a16 ἄμα + δὲ ABDVΛ, 78a32 ὄσα δὲ ἔχει ἢ: ὄσον δὲ μὴ ἔχει ἢ codd., 78a34 [εἰ]: εἰ codd., 78b13 ψῆφον + ἔλαβε γὰρ παρὰ τούτου A^1Bc^2D (τούτω)V(ταὐτοῦ) Λ , 78b21 $\langle \dot{\eta} \rangle$: om. codd., 78b33 οὐδὲ τὸ: οὐδ' ὅταν codd. praeter u, 78b36 $\dot{\alpha}$: τὸ $ABDc^2M^c$, cf. Λ, 78b38 ποσὸν ἢ: om. codd., 78b39 πρός τι: πρὸς τί πως codd., 79a4 ἔστι: ἔσται codd. praeter cu, 79a5 ὤσπερ: ὅπερ codd., 79a17 ἄψυχον: ἔμψυχον codd., 79a19 [λέγειν]: λέγειν codd., 79b7 διαιροῦντες: ἀναιροῦντες codd. praeter D, 79b21 ἐπιχειρεῖ: ἐπιχειροίη ABDVΛM°, 79b21 ὡς δυνατόν: ώς ἀδύνατον συνάγων εἰς ἀδύνατον $ABc^2V\Lambda$, 79b22 [εἰ]: εἰ codd. 79b22 οὐ γάρ: ἀλλ' οὐκ ABDcuV, 79b24-25 \dagger εἰ καὶ ἀληθὲς ἢ ψεῦδος \dagger : ἢ καὶ ἀληθὲς ἢ ψεῦδος A^1BV , cf. $c^2\Lambda$, cf. Dc^1u , 79b32 (ὄν): om., 80a5-6 ἀλλ' οὐ σὸν τέχνον ὅτι συμβέβηχεν εἶναι χαὶ σὸν χαὶ τέχνον: ὅτι συμβέβηχεν εἶναι χαὶ σὸν χαὶ τέχνον ἀλλ' οὐ σὸν τέχνον codd., 80a39 γὰρ: δ' ABDV, 80b4 πότερον: ποτέρως ABDV Λ , 80b5 δύσχολον: δυσχόλως A^1DcuV , 80b11 βέλτιον: ἀγαθόν codd., 80b34 τωδὶ: τοδὶ codd., 80b38 νιχᾶται: νιχᾶ codd., 81a16 πυνθανομένφ: πυνθανόμενον Λ, 81a17 λέγοντι: λέγοντα codd., 81b17 δὲ: τε codd., 81b23 γινομένης: γινομένων codd., 81b28 ἀντί: ἄνευ codd., 81b28 τὸ: τὰ codd., 81b36 (τούτων): om., 82a18 κλίσιν: κλησιν codd. praeter DA, 82a26 δέδοται: δίδοται ABuDVA, 82a30 'ταύτην' ἀσπίδα: 'ἀσπίδα' 'ταύτην' codd., 82a39 'οὖ' λίθου λέγει: 'τούτου' 'λίθου' λέγεις codd., 82b17 ποῖ: ὅπου codd. (cf. LSJ), 82b20 κατωνομένον: καὶ τὸν ἀνωμένον cf. ABuV, cf. D, 82b23 τούτου: τούτων ABDVΛ, 82b28 ⟨τῶν⟩ παρὰ ... παρὰ: περὶ ... περί V, Λ?, cf. ABD, 83a12 ή: καὶ V, 83a17 περί δ: περί οῦ codd. praeter V, 83a17 δι' δ: δι' δ ABuΛ, 83a17 [καί]: καί codd. praeter V, 83a25 [η]: η codd., 83a26 τοῦ: τὸ codd. praeter V, 83a30 συλλογισμός: σολοιχισμός V, 83a33 συλλογισμούς: σολοιχισμούς V, 83b1 προχατασχευαστέον: προσχατασχευάζεται ABDcVΛM°, cf. u, 83b2 ώστ' οὐ ... δύνασθαι: ὡς οὐ ... δύναται codd., 83b10 καί²: ἢ codd., Λ, 84b2 λέγειν ἢ: ἄλλο λέγειν ἀλλ' ἢ ABDV, cf. c, 84b6 [ἢ]: ἢ codd.