

degree of logical sophistication about what is required for one thing to follow from another had been achieved. The authorities whose views are reported by Philodemus wrote to answer the charges of certain unnamed opponents, usually and probably rightly supposed to be Stoics. These opponents draw on the resources of a logical theory, as we can see from the prominent part that is played in their arguments by an appeal to the *conditional* (*συνημμένον*). Similarity cannot, they maintain, supply the basis of true conditionals of the kind required for the Epicureans' inferences to the non-evident.

But instead of dismissing this challenge, as Epicurus' notoriously contemptuous attitude towards logic might have led us to expect, the Epicureans accept it and attempt to show that similarity can give rise to true conditionals of the required strictness. What is more, they treat inference by analogy as one of two species of argument embraced by the method of similarity they defend. The other is made up of what we should call inductive arguments or, if we construe induction more broadly, an especially prominent special case of inductive argument, viz. arguments from the observed behaviour of items of certain type to the conclusion that unobserved items of the same type behave, have behaved, or will behave in the same way. Though the Epicureans do not put it in quite this way, their defence of the method of similarity can be viewed as a quixotic attempt to show, in the face of determined opposition, that similarity yields deductively valid arguments.

STUDY I

Aristotle on Sign-inference and Related Forms of Argument

THOUGH Aristotle was the first to make sign-inference the object of theoretical reflection, what he left us is less a theory proper than a sketch of one. Its fullest statement is found in *Prior Analytics* 2. 27, the last in a sequence of five chapters whose aim is to establish that:

not only are dialectical and demonstrative syllogisms [*συλλογισμοί*] effected by means of the figures [of the categorical syllogism] but also rhetorical syllogisms and, quite generally, any attempt to produce conviction [*πίστις*] of whatever kind. (2. 23, 68^b9–14)¹

This account of sign-inference, then, is part of an effort to understand existing practices of argument in the light of the theory of the categorical syllogism, Aristotle's—and history's first—formal logic. It is presented again in two passages of the *Rhetoric*. As is made plain by its presence there and references to rhetoric in the above passage from *Prior Analytics* 2. 23 and to the enthymeme, the rhetorical counterpart of the syllogism, at 2. 27, 70^a9–11, Aristotle had rhetorical argument principally in mind. But it is equally clear that he did not intend to confine the use of signs to rhetoric. *Prior Analytics* 2. 27 concludes with a discussion of sign-inference in another discipline, physiognomics, whose aim is to infer traits of character from perceptible physical features (70^b7 ff.).

Nor should we expect otherwise. Talk of 'signs' and the notion of evidence to which it gives expression were no less a part of

¹ 'Of whatever kind' (*καθ' ὅποιαν οὖν μέθοδον*) is taken by some interpreters to refer to the application of the categorical syllogistic to every discipline, by others to refer to its application to every type, method, or means of argumentation. Cf. M. F. Burnyeat, 'Enthymeme: Aristotle on the Logic of Persuasion', in D. J. Furley and A. Nehamas (eds.), *Aristotle's Rhetoric: Philosophical Essays* (Princeton: Princeton University Press, 1994), 3–55 at 31–2. The translation given here is indebted to Burnyeat, *ibid.*, and W. D. Ross (ed.), *Aristotle's Prior and Posterior Analytics* (Oxford: Oxford University Press, 1949), 481.

ordinary language and thought in antiquity than they are in our own day. Signs were used in all the areas we touched on in the Introduction above, and appeals to signs are a notable feature of Aristotle's method of argument in just about every field he takes up.² It is also important to remember that, on Aristotle's view, rhetoric is not in the usual way a specialized discipline, but an art that brings system and method to ordinary, everyday practices of argument that are employed by everyone and in almost every sphere of life (*Rhet.* 1. 1, 1354^a1-11). If argument by signs is especially prominent among the means of argument used by rhetoric, and rhetoric especially prominent among the areas in which argument by signs figures, this reflects the low or common character that Aristotle assigned to inference from signs. This is also why Aristotle tackles sign-inference in conjunction with argument by likelihood and argument by paradigm, the latter of which he treats as the rhetorical counterpart of induction, in both the *Prior Analytics* and the *Rhetoric*. They too are especially suitable to rhetoric precisely because of their inferiority relative to other, superior forms of argument, whose higher standards have no place there.

In this study I shall follow Aristotle both by paying particular attention to rhetoric and by investigating sign-inference in close connection with the other forms of argument that he considers especially characteristic of rhetoric. Too scrupulous an adherence to the boundaries Aristotle draws around sign-inference in his more theoretical moments, boundaries that neither he nor others always observe, would cut us off from much material relevant to our broader subject, the use of evidence. Aristotle's most notable achievement in this field was to have recognized explicitly for the first time that an argument that is invalid may nevertheless be reputable, i.e. furnish grounds for a conclusion by which rational human beings may legitimately be swayed. But Aristotle's path-breaking investigations in this area not only set him apart from his contemporaries and successors; there are also reasons to think his insights were isolated within his own work as well. For the receptive attitude towards invalid argument by signs, which accepts that they can afford reputable grounds for a conclusion, is clearly displayed only in the passages of the *Prior Analytics* mentioned above and in the pas-

² Cf. H. Bonitz, *Index Aristotelicus*, vol. v of *Aristotelis Opera*, ed. I. Bekker (Berlin: Reimer, 1870; repr. Darmstadt: Wissenschaftliche Buchgesellschaft, 1960), s.vv. σημείον, τεκμήριον, 677^b9 ff., 750^b6 ff.

sages of the *Rhetoric* that rely on them. Elsewhere we seem to find a different and less receptive attitude. I shall explore the possibility that this difference in attitude is due to a change in view related to broader developments in Aristotle's thinking about argument, paying particular attention to the influence of two factors: the sympathetic attention Aristotle brought to argument of the kind that is most prominent in rhetoric and the application of formal logic to the issue.

Unlike Aristotle's views about non-deductive but reputable inference, his contrast between signs and demonstrations inaugurated a discussion that was taken up and carried on in post-Aristotelian philosophy and recurs in one form or another there. It requires no discussion in Aristotle's investigation of rhetorical argument, where explanation of the kind demonstration aims to provide is not at issue, but receives attention, if only in passing, in the *Posterior Analytics*, which is concerned with scientific explanation. The issues raised by this contrast will occupy a large share of our attention later, but I shall touch on it only in the last section of this study.

1. Rhetoric

Aristotle's *Rhetoric* begins with the bold declaration that 'rhetoric is the counterpart of dialectic' (1. 1, 1354^a1 ff.). And Aristotle goes on to use its affinity with dialectic both to defend rhetoric against the charges brought by its enemies and to distinguish his own conception of the discipline from that of its other defenders. The most prominent of the complaints lodged against it in Plato's *Gorgias*, and repeated many times thereafter by other authors, is that rhetoric cannot be an art because it lacks an object (458 E ff.). Aristotle's answer is that, properly speaking, rhetoric, like dialectic, is not the science of a subject-matter, but a faculty for the discovery of arguments (*Rhet.* 1. 2, 1355^b26-35; 1356^a32-4; 1. 4, 1359^b12-16; 1358^a22-6). Thus, though rhetoric and dialectic lack an object on a level with the subject-matters which distinguish and define the ordinary run of arts and sciences, they are arts none the less, because they dispose of a system or method oriented towards objects of a different and rather special kind. Rhetoric is the faculty of discerning the potentially persuasive about each subject, dialectic that of arguing from reputable premisses about any subject proposed

(*Rhet.* 1. 2, 1355^b26; *Top.* 1. 1, 100^a1 ff.; *SE* 2, 165^b3-4). Their concerns are in some sense formal as opposed to substantive. In what sense is harder to say. As we proceed, it will emerge that there is more than one way to constitute a formal discipline of argument.

This broadly formal character is responsible for rhetoric's most alarming trait: the power, which it shares only with dialectic, of arguing with equal facility on either side of any question (1. 1, 1355^a29-35). The two disciplines' argumentative and persuasive powers are not confined to a single object or tied to one set of conclusions, as is the more limited power to persuade and instruct about a single subject that belongs to the master of each of the ordinary arts and sciences (1358^b28-32; cf. Plato, *Grg.* 453 D ff.). Aristotle does not pretend that this suspicion is groundless, but he maintains that there is a difference in the field of rhetoric corresponding to that between sophistic and dialectic, albeit one not marked in the same way by a terminological distinction, and he insists that dialectic and sophistic on the one hand, and their rhetorical counterparts on the other, differ from each other not as faculties (*ἐν τῇ δυνάμει*), but in purpose (*ἐν τῇ προαίρεσει*) (1. 1, 1355^b17-21; cf. *Metaph.* Γ 2, 1004^b22-5; *SE* 1, 165^a31).³

It is essential to understand this remark in the light of the distinction Aristotle has just drawn in the immediately preceding passage of the *Rhetoric*, where he observes that it falls to rhetoric to discern the persuasive and the apparently persuasive, just as it belongs to dialectic to discern the syllogism and the apparent syllogism (1. 1, 1355^b15-16).⁴ His meaning is that it is possible to distinguish between the good and the bad in argument at a level lower than the moral purpose of the practitioner and the conclusions for which he or she argues: that is, practitioners will differ not only in the ends to which they apply their skills, but also in their choice of means. The dialectical and sophistical faculties and their counterparts in rhetoric are inseparable, not because there is no difference between sophistical and dialectical argument or between good and bad argument in rhetoric, but rather because to possess the understanding of argument that belongs to the dialectician one must at the same time share the sophist's grasp of trickery and deception, so too *mutatis mutandis* in the field of rhetoric. This impression is strengthened further by the distinction Aristotle draws between the

real and the apparent enthymeme corresponding to that between the real and apparent syllogism (*Rhet.* 1. 2, 1356^b4; 2. 22, 1397^a3-4; 2. 24, 1400^b34-7, 1402^a7). And if I may postpone for the moment the daunting question of what a topos is, his decision to organize his discussion of rhetorical argument around separate lists of topoi of the genuine and of the apparent enthymeme in *Rhetoric* 2. 23 and 24 respectively, just as he treats topoi of the genuine and the apparent syllogism in the *Topics* and *Sophistical Refutations*, points in this direction as well.

The fact that rhetoric is concerned in the first instance with genuine enthymemes is crucial to Aristotle's vindication of the rhetorical art. Although it is not the function of rhetoric to bring to light and secure the acceptance of correct conclusions, it makes an indispensable contribution to this end with its power to discover the persuasive on opposite sides of every question. For, Aristotle maintains, even though rhetoric is, like dialectic, a faculty of opposites, matters themselves are not like this: the true and the better are more readily argued and persuasive by nature (1. 1, 1355^a36-8; cf. 20-2). We may compare his account of the value of rhetoric with the distinction he draws between the *function* of dialectic, which is to supply us with arguments for any proposed thesis, and its *uses*, among which is the assistance it affords us in our enquiries about the first principles of the sciences.⁵ It helps us to see what can be said on either side of a question, but it does not lay down rules that dictate our choice of the truth (cf. *Top.* 8. 14, 163^b9-16). If rhetoric is to do the same in its own sphere, it must use arguments of genuine merit. Rhetoric's affinity with dialectic therefore requires that there be two parts to its ability to argue on both sides of the question. First, like the dialectician, the worthy orator knows how to argue by deceptive means for conclusions he knows to be false or on the side of a question he knows to be wrong; though he will not do this, the ability to do it is essential if he is to combat less principled opponents (*Rhet.* 1. 1, 1355^a29-33; cf. *SE* 16, 175^a17-19; *Top.* 1. 18, 108^a26-37).⁶ But second, where the question is unclear, where there is much to be said on either side, the ability to argue on

³ πρὸς πόσα τε καὶ τίνα χρήσιμος ἡ πραγματεία . . . (*Top.* 1. 2, 101^a25 ff.; cf. 8. 14, 163^b9-16; *SE* 16, 175^a5-16). χρήσιμος δὲ ἡ ῥητορική . . . (*Rhet.* 1. 1, 1355^a20).

⁶ Perhaps Aristotle should have been more cautious here. The distinction does not decide the issue whether a reputable orator will always use only the most reputable forms of argument any more than the distinction between lying and telling the truth resolves the question whether a good human being will ever lie.

³ On this use of *πρὸς πόσα* see Bonitz, *Index Aristotelicus*, 634^a5-12.

⁴ Cf. *SE* 1, 165^a25; 9, 170^a36-8, 48-11; 11, 172^b5-8.

both sides of the question by reputable means can serve the cause of truth by bringing out the considerations that count in favour of opposed conclusions.

Rhetoric is not simply dialectic applied in rhetorical circumstances, however. The nature of the issues that it falls to rhetoric to discuss influences the character of its arguments even before the constraints imposed by the kind of audiences which it addresses and the occasions on which it is used are taken into account. These issues are, as Aristotle puts it, matters that permit of being otherwise and are not the object of an art or specialized expertise (1. 2, 1357^a1-7, 13-15, ^b25; 1. 4, 1359^a30 ff.; cf. *EN* 2. 2, 1104^a7-8). Instead, there is an ineliminable roughness and inexactitude to them, which imposes correspondingly greater demands upon the faculty of deliberation. They differ from issues concerning individual moral agents by requiring a collective decision by a jury, assembly, or similar body, but are otherwise very much like them (cf. *Rhet.* 2. 21, 1394^a23-7). Thus, much that Aristotle says elsewhere about practical reasoning can be said with equal justice of the arguments that orators must use and their auditors must evaluate. Indeed, Aristotle appeals in a famous passage to the example of rhetoric to explain these features of practical reason (*EN* 1. 3, 1094^b12-27; cf. 2. 2, 1104^a1 ff.).

This is an important part of the reason why rhetoric comes by an indirect route to have, in a certain way, a subject-matter—not by being the science or art of it, but rather by finding a use in relation to it. Though in principle of universal scope, rhetoric finds its place in relation to the broadly political issues falling under the three genres of oratory: deliberative, epideictic, and forensic (1. 3, 1358^a36 ff.). It is a hybrid discipline, an offshoot, as Aristotle notes, of both dialectic and politics (*Rhet.* 1. 2, 1356^a25-6).⁷ And this also accounts for its tendency to instability: the way it threatens to lose its distinctively rhetorical character and become a part of politics (*Rhet.* 1. 2, 1358^a23-6; 1. 4, 1359^b12-16).

For these reasons, Aristotle insists that mastery of the enthymeme requires, over and above the mastery of the syllogism furnished by dialectic, an understanding of what the matters with which enthymemes are concerned are like (*ποία*) and how this affects the

⁷ But cf. J. Cooper, 'Ethical-political Theory in Aristotle's Rhetoric', in Furley and Nehamas (eds.), *Aristotle's Rhetoric*, 193-210 at 200, who notes how surprising it is that rhetoric's relation to politics is mentioned only in connection with the *pistis* of ethos here.

character of enthymematic argument (1. 1, 1355^a10-14).⁸ The kinds of issues about which orators argue typically resist resolution by means of conclusive argument, and the fact that it is often possible only to offer considerations which, though of a certain weight, are not decisive requires a corresponding loosening or relaxation of the standards by which argument is to be judged in rhetoric (cf. 1. 1, 1355^a10-14; 1. 2, 1357^a13-15, ^b26).⁹ It is this loosening or relaxation that is signalled by the terminology of the enthymeme and the paradigm, the rhetorical counterparts of the syllogism and the induction respectively. This is not to deny that it will often be advisable to present arguments in abridged form, so that good judgement in this area will be an essential part of the orator's equipment as a master of the enthymeme as well (cf. 1. 2, 1357^a16; 2. 22, 1395^b24-6). But, though I shall argue the point needs to be qualified, I take as read the case that the omission of premisses is not a defining characteristic of enthymemes, but a frequent feature of

⁸ οὗτος καὶ ἐνθymηματικὸς ἂν εἴη μάλιστα, προσλαβὼν περὶ ποῖα τε ἐστὶ τὸ ἐνθymημα καὶ τίνας ἔχει διαφορὰς πρὸς τοὺς λογικoὺς συλλογισμοὺς. Note that Aristotle says περὶ ποῖα, not τίνα. I render ποῖα as 'what they are like' to emphasize that Aristotle is talking about the character of the matters with which the orator is concerned and its effects on the character of his arguments here and not the substantive factual knowledge that he elsewhere insists the orator will also need to have (cf. 1. 4, 1359^b19-32). The word λογικός, as so often, signals a contrast between a way of proceeding by λόγος—words, statements, argument, or reasoning—considered, in one way or another and to one degree or another, apart or in abstraction from their content or subject-matter, and a way of proceeding which takes features of the subject-matter at issue into account. Here the effect is to oppose the rigour of the syllogisms employed in dialectic to the less rigorous character of the enthymeme. The former owe their greater stringency to dialectic's nature as a pure art of argument, unconcerned with the special features of concrete subject-matters. The reduced-stringency characteristic of enthymemes, on the other hand, is made necessary by the nature of the matters with which they deal. In the *Rhetoric* Aristotle often mentions the special features of these matters and their effect on the character of rhetorical argument (1. 2, 1357^a13, ^b25-7; 4, 1359^a30-9; 2. 21, 1394^a24-7). Elsewhere, when Aristotle speaks of handling a subject λογικῶς, where this comes close to διαλεκτικῶς, he means to call attention to a style of enquiry that can—in a different way—be less rigorous than one that comes fully and properly to grips with the subject. The range of uses to which Aristotle puts λογικός is documented and discussed in illuminating detail by T. Waitz (ed.), *Aristotelis Organon Graece* (Leipzig: Hahn, 1844-6), ii. 353 ff. (ad *An. post.* 82^b35), and A. Schwegler, *Die Metaphysik des Aristoteles* (Tübingen: Fues, 1847), iv. 48-51 (ad *Metaph.* Z 4, 1029^b13).

⁹ I borrow with gratitude talk of 'relaxation' from Burnyeat, 'Enthymeme'. The Aristotelian inspiration is furnished by a number of passages in which Aristotle speaks of arguing or demonstrating in more 'exact' and more 'relaxed' ways (*Rhet.* 2. 22, 1395^b33-^b1; *De gen. et corr.* 333^a24; *Metaph.* E 1, 1025^b13). On the broader significance of Aristotle's talk of relaxed and exact modes of argument see Lloyd, 'The Theories and Practices of Demonstration in Aristotle'.

their presentation.¹⁰ Arguments that do not qualify as syllogisms in dialectic, even with all their premisses fully stated, will qualify as enthymemes or rhetorical syllogisms, so too in the case of inductions and paradigms. Another way of putting the point is to say that dialectic's concern with valid argument is replaced in rhetoric by a concern with *reputable* (ἐνδοξος) argument. Although Aristotle does not use the term in this way in the *Rhetoric*, as we shall see, he does in the *Prior Analytics*.

The emphasis Aristotle places on rhetoric's affinity with dialectic in his opening remarks also serves to distinguish his approach to the art from that of his contemporaries and predecessors in the study of rhetoric. The rhetoric he defends is not theirs, which, he complains, concerns itself almost entirely with appeals to the emotions and issues concerning the style and arrangement of speeches at the expense of argument (I. 1, 1354^a11 ff., ^b16 ff.). So harsh is Aristotle's criticism that it comes as something of a surprise to find *Rhetoric* I. 2 treating appeals to emotion together with the presentation of the speaker's character and argument as the three varieties of artistic proof or persuasion (πίστις) which it is the business of the art of rhetoric to study (1355^b35 ff.). This real or apparent discrepancy has been the object of a considerable amount of attention.¹¹ But however it is to be viewed, there can be no doubt that Aristotle meant to assign the central place in rhetoric to argument. My principal aim in what follows will be to enquire how Aristotle's account of good and bad argument, and of good and bad kinds of argument, in rhetoric differs from the account proper to dialectic.

2. Stages in Aristotle's Thinking about Argument

This task is made more difficult, but also in some ways more interesting, by the fact that different parts of the *Rhetoric* rely on

¹⁰ Thus Ross, *Analytics*, 500: 'In modern logic books the enthymeme is usually described as a syllogism with one premiss or the conclusion omitted . . . but this forms no part of [Aristotle's] definition, being a purely superficial characteristic.' For the argument in full and a history of the controversy cf. Burnyeat, 'Enthymeme'. A. Kantelhardt also deserves a place among the many figures discussed by Burnyeat for a brief but elegant statement of the essential insight, *De Aristotelis rhetoricis* (Göttingen: Dieterich, 1911), 10; photographically reproduced in R. Stark (ed.), *Rhetorika: Schriften zur aristotelischen und hellenistischen Rhetorik* (Hildesheim: Olms, 1968).

¹¹ I shall touch on it in appendix B to this study.

different stages in Aristotle's developing understanding of the syllogism, i.e. the object of study determined by the definition 'a *logos* in which, certain things being laid down, something different from them follows of necessity by their being so' (*Top.* I. 1, 100^a25-7; *An. pr.* I. 1, 24^b18-20). That every syllogism is, or is composed of parts that are, in one or the other of the valid moods of the three figures, i.e. that every syllogism is a *categorical* syllogism, is no part of the meaning specified by the definition. Rather, it is a conclusion for which Aristotle had to argue, and which he took himself to have established in the *Prior Analytics* (cf. I. 23, 41^b1-3; I. 28, 44^b7-8; 2. 23, 68^b9-13).¹² Indeed, we have excellent reasons for believing that the definition of the syllogism, and Aristotle's interest in the object it determines, antedated the categorical theory of the syllogism. The *Topics*, where the definition makes its first appearance, and its companion piece, the *Sophistical Refutations*, which closes with Aristotle's famous claim to have been the first to study the syllogism systematically, present the results of an enquiry pursued without the benefit of the categorical theory of the syllogism.¹³ Their unfamiliarity with the categorical syllogism is in fact one of the principal grounds for the long-established view that the *Topics* and *Sophistical Refutations* are among the earliest of Aristotle's treatises.

Much the larger part of the *Rhetoric* looks to the *Topics* and *Sophistical Refutation* for its understanding of argument, while the categorical syllogistic is applied to the enthymeme in two short, self-contained passages, which appear to be later insertions, and chapter 27 of the second book of the *Prior Analytics*, to which they refer (*Rhet.* I. 2, 1357^a22-58^a2; 2. 25, 1402^b13-1403^a16). This

¹² Cf. J. Barnes, 'Proof and the Syllogism', in E. Berti (ed.), *Aristotle on Science: The Posterior Analytics* (Padua: Antenore, 1981), 17-59 at 23-5, 44-6; F. Solmsen, *Die Entwicklung der aristotelischen Logik und Rhetorik* (Neue philologische Untersuchungen, 4; Berlin: Weidmann, 1929), 38 ff., esp. 41-2, 151; Kantelhardt, *De Aristotelis rhetoricis*, 49-50, 52-5; Burnyeat, 'Enthymeme', 9-10, 14-15; J. Brunschwig (ed.), *Aristote: Topiques I-IV* (Paris: Les Belles Lettres, 1967), pp. xxx ff.

¹³ That Aristotle's claim to have been the first to study syllogizing refers to the project pursued in the *Topics* and *Sophistical Refutations* and not to the *Prior Analytics* was, I believe, first clearly stated and argued by C. Thurot, *Études sur Aristote: Politique, Dialectique, Rhétorique* (Paris: Durand, 1860), 195-7. For recent statements of the point see: J. Brunschwig, 'L'Organon: Tradition grecque', in R. Goulet (ed.), *Dictionnaire des philosophes antiques*, I (Paris: CNRS, 1989), 485-502 at 486-7; L.-A. Dorion (trans.), *Aristote: Les Réfutations sophistiques* (Paris: Vrin, 1995), 418 n. 479. Cf. Solmsen, *Entwicklung*, 41-2.

discovery is most closely associated with Friedrich Solmsen.¹⁴ It is only one element in his account of the development of Aristotle's conception of rhetoric, which is itself part of a still more comprehensive theory of the development of Aristotle's logic. Though the whole of Solmsen's theory deserves the most serious attention, it is important to note that the parts of his argument do not all stand or fall together. Some of the developments he claims to find are more conjectural than others. I shall touch briefly on the most important of these later.¹⁵ But the identification of *Topics*- and *Analytics*-oriented sections of the *Rhetoric* is among the least speculative. Although a formal logical theory need not affect a philosopher's unreflective style of argument, it is bound to leave its mark on his self-conscious treatments of the subject of argument once he has it, and be conspicuous by its absence before then.

¹⁴ *Entwicklung*, 13 ff.; though there were some hints in earlier scholars, notably in Kantelhardt, *De Aristotelis rhetoricis*, 56, 59. Cf. Burnyeat, 'Enthymeme', 31 ff. with n. 76. Though it does not refer to the *Analytics*, *Rhet.* 1. 4, 1359^b9 ff., seems to deserve a place among the later *Analytics*-oriented passages of the *Rhetoric*. Here we are told that 'what we said earlier is true, viz. that rhetoric is composed of the analytical science [*ἀναλυτική ἐπιστήμη*]—i.e. presumably the formal logic expounded in the *Prior Analytics*] and that concerned with characters [*ἥθη*]' This is a very odd thing to say for a number of reasons, however. It refers to 1. 2, 1356^b25–6, where Aristotle says that rhetoric is composed of *dialectic* and the study of character (cf. n. 7 above). *διαλεκτική* is found as a variant instead of *ἀναλυτική* at 1359^b10 in some manuscripts, but editors have for good reasons regarded *διαλεκτική* as a late attempt at correction and preferred *ἀναλυτική*. Cf. R. Kassel, *Der Text der aristotelischen Rhetorik: Prolegomena zu einer kritischen Ausgabe* (Berlin: De Gruyter, 1971), 79–80. Solmsen, *ibid.* 225 n. 2, believes that this passage is a late addition by Aristotle himself, showing that he now believes *διαλεκτική* can be replaced by *ἀναλυτική*. Cf. also G. Striker, 'Aristotle on the Uses of Logic', in G. Gentzler (ed.), *Method in Ancient Philosophy* (Oxford: Oxford University Press, 1998), 206–26 at 221 n. 18. But the abrupt replacement of *διαλεκτική* by *ἀναλυτική* here is not the only peculiarity of 1359^b9 ff. The immediate sequel proceeds as if we had been talking about *διαλεκτική* all along (1359^b11–16). What is more, this is the only passage anywhere in Aristotle that speaks of *ἀναλυτική*, let alone *ἀναλυτική ἐπιστήμη*. This reflects the fact that Aristotle seems not to have viewed formal logic as a substantive scientific discipline, but rather, as his successors were to insist, as an *organon*. On talk of *ἐπιστήμη ἀποδεικτική* at *An. pr.* 1. 1, 24^a2, see J. Brunschwig, 'L'objet et la structure des Seconds Analytiques d'après Aristote', in Berti (ed.), *Aristotle on Science*, 61–90, according to whom Aristotle here means not the study of demonstration, but the knowledge it produces. In view of these considerations, I wonder if there is not more to be said for Thurot's spirited defence of *διαλεκτική*, *Études*, 248–54. 1. 3, 1359^b6, may also be a stray *Analytics*-oriented passage (cf. n. 25 below).

¹⁵ In appendix B to this study.

3. The *Analytics*-oriented Account of Rhetorical Argument

(a) *Aristotle's exposition*

In the *Prior Analytics* and in the first of the *Analytics*-oriented passages in the *Rhetoric* (1. 2) Aristotle informs us that enthymemes are from likelihoods and signs (70^a9–11; 1357^a32–3). He returns to the subject in *Rhetoric* 2. 25, to ask whether and how each of these forms of argument is open to objection. A likelihood is, he says, 'something which comes to be for the most part' (*Rhet.* 1. 2, 1357^a34), or with the subjective element on which depends its ability to support rhetorically effective arguments in view, as 'something people know comes to be or not for the most part' (*An. pr.* 2. 27, 70^a4–5; cf. *Rhet.* 2. 25, 1402^b15). An enthymeme from likelihoods is an argument bringing a particular case under an acknowledged general rule permitting exceptions (1357^a34–^b1). On the other hand, a sign is, according to *Prior Analytics* 2. 27, a premiss that is or is such as to be reputable (*ἔνδοξος*) (70^a7).¹⁶ Later in the same chapter likelihoods are also called reputable and the necessary character of the token is represented as a special case of the reputable: it is the *most* reputable of the sign-inferences (70^a4; ^b4–5). These lines furnish the textual authority for the use of 'reputable' in relation to argument that I have already freely employed.

According to the pre-theoretical conception of the sign that furnishes Aristotle with his point of departure, a sign is 'something such that, when it exists, another thing exists, or, when it has happened, the other has happened before or after' (70^a7–9).¹⁷ In a sign argument, then, the sign—a particular fact or alleged fact—is put forward as a ground for the conclusion of which the orator wishes to convince his audience. When the argument based on it is reconstructed as a categorical syllogism, the sign is most often the

¹⁶ 'That tends or is such as to be [*βούλεται εἶναι*] necessary or reputable'. Cf. Bonitz, *Index Aristotelicus*, s.v. *βούλεσθαι*, 140^b41: 'saepe per *βούλεται εἶναι* significatur quo quid per naturam suam tendit, sive id assequitur quo tendit, sive non plene et perfecte assequitur'.

¹⁷ The translation is that of Ross, *Analytics*, 498. The suggestion that this characterization be viewed as a pre-theoretical starting-point in this way is due to M. F. Burnyeat, 'The Origins of Non-deductive Inference', in J. Barnes *et al.* (eds.), *Science and Speculation* (Cambridge: Cambridge University Press, 1982), 193–238 at 197.

minor premiss predicating an attribute of a particular (as we shall see, the third-figure sign-inference requires a somewhat different treatment). So, for example, that this man has a fever is a sign that he is ill.

But although Aristotle plainly intends the division between likelihoods and signs to be exhaustive of the forms of rhetorical argument apart from paradigm (1357^a31-2), it is less clear that it is exclusive: may not one enthymeme satisfy both descriptions?¹⁸ This question is worth pursuing a little further because its answer may help us understand Aristotle's analysis of rhetorical argument. For his principal aim is not to distinguish and define kinds of argument in purely formal terms, but to characterize formally kinds of argument already distinguished in the then current practice and—possibly—theory, such as it was, of rhetorical argument. And here the omission of premisses, which is a characteristic of the *presentation* of enthymemes, may throw light on the differences between types of arguments that Aristotle is trying to bring out by means of his distinction between enthymemes from signs and those from likelihoods, but which cannot be completely captured by analysis from the point of view of the categorical syllogistic.

It would be a mistake to picture the orator trimming premisses from full-blown categorical syllogisms that he has first framed before his mind's eye in order to present them in the form suitable to the rhetorical occasion. It is important to remember that Aristotle conceived the categorical syllogistic as, among other things, a way of bringing out and making explicit the often unstated premisses because of which the conclusion of a syllogism follows of necessity. This is the special task of analysis, from which the *Analytics* take their name. The analysis of arguments with the aid of the categorical syllogistic uncovers assumptions on which they depend that often go unnoticed and unsaid (cf. *An. pr.* 1. 32, 47^a13-18). And, I should like to suggest, whether an argument is to count as an enthymeme from likelihoods or signs depends in part on what, in the circumstances, can go unsaid. Very roughly, the two forms of enthymeme are distinguished by the element of the argument that, if you will, bears the greater weight in the context of argument. And this in turn will influence which premiss of the argument—

¹⁸ The question is posed by J. Sprute, *Die Enthymemtheorie der aristotelischen Rhetorik* (Göttingen: Vandenhoeck and Ruprecht, 1982), 89-90.

when analysed as a categorical syllogism—is expressed, and which usually omitted.

In an enthymeme from likelihoods the crucial element on which the argument turns is the generalization under which the particular item in question is being brought. This must in all cases be stated, while the minor premiss, which states that the subject term of the major premiss belongs to the item under discussion, can and often will go without saying. And it is the generalization stated in the major premiss that is also the potential object of controversy. An orator who needs to oppose an argument from likelihood will try to show that his opponent's conclusion is not likely because it is based on a generalization that is false or in some way not appropriate to the case at hand—we shall have more to say about how this is to be done later. By contrast, he will treat the syllogistic structure of this argument and the truth of its minor premiss as unproblematic. This is what it is to treat an argument as an argument from likelihood, and to evaluate its merits and faults as such.

In the case of an argument from signs, on the other hand, the element on which the argument is seen to hinge will be the new piece of evidence to which the orator wishes to direct his auditors' attention and which counts as evidence against a background of uncontroversial assumptions. If we concentrate for the moment on the relatively simple case of the valid first-figure sign-inference, it is clear that the sign functions as a ground in this way in virtue of what we should call a covering generalization (cf. *An. pr.* 1. 32, 47^a16-18). And it is this covering generalization, e.g. that the feverish are ill, formulated in the major premiss, that is typically treated as part of the background of uncontentious assumptions in virtue of which the sign is able to serve as evidence for the conclusion at issue. For this reason, it can and typically will be omitted in the presentation of the sign-inference.

Note that I am not saying that a sign enthymeme must be presented with the major premiss omitted or that it ceases to be a sign enthymeme when this premiss is stated as well. Rather, I mean to be calling attention to the characteristics of arguments from signs and likelihoods that explain why they frequently omit premisses and why they omit the premisses they do. When an orator argues from signs he makes a fuss, as it were, about the sign, the minor premiss of his syllogism, and expects that if his opponent is going to make a fuss, it will be about the same premiss. The major premiss, whether

expressed or not, on the other hand, he treats as uncontentious. As Aristotle notes when he considers objections to sign-arguments, an opponent's only hope against a first-figure sign-argument is to show that the premiss serving as a sign is false (*Rhet.* 2. 25, 1403^a13-16). In other words, Aristotle does not envisage someone objecting to the argument that an item is *G* because it is *F* that being *F* is not a sign of being *G* after all, but only that the item is not *F* in the first place. Of course, when the second- and third-figure sign-inferences are brought into the picture, their invalidity, which is revealed by their defective syllogistic structure, can be made the basis of an objection (1403^a2-5). Apparently the truth of the major premiss remains outside contention, however.

It seems, then, that whether an enthymeme should count as an argument from signs or likelihoods is not determined solely by facts about its premisses and structure that are independent of the way in which they are regarded by participants in a debate or the audience for an oration. On the contrary, it depends very much on the attitude of the participants. Indeed, it might be better to speak of an orator presenting or treating an argument as an enthymeme from signs or an enthymeme from likelihoods. Nothing prevents an opposing speaker from objecting, for example, that the covering generalization on which his opponent's argument from signs relies is subject to exceptions; but this would be to treat an argument put forward as an argument from signs as an argument from likelihood.

Let us now broaden the scope of our enquiry to include the second- and third-figure sign-inferences. Aristotle counts only arguments with affirmative and, if the subject term of the conclusion is not singular, universal conclusions as from signs, perhaps because of the pre-theoretical characterization of the sign which is his point of departure.¹⁹ In any case, these restrictions ensure that of the three forms of sign-inference—one in each of the figures—only the first-figure sign-inference is valid.²⁰ Aristotle's offers the following as an example:

¹⁹ How well does this reflect the theory or practice of contemporary rhetoric? Cf. [Arist.] *Rhet. ad Alex.* 1430^b34-5, whose author appears to have a different view.

²⁰ A categorical syllogism in one of the three Aristotelian figures is an argument with two premisses in each of which two terms, a predicate and a subject, are related in one of four ways. These are: *a*=belongs to all; *e*=belongs to none; *i*=belongs to some; *o*=does not belong to some. For example, *AaB* means 'A belongs to all B'. Within the three figures, the major term is the predicate of the conclusion and the major premiss the premiss in which it is introduced. The minor term is the subject of the conclusion and the minor premiss the premiss in which it is introduced. The

- P*₁ All those with fever are ill.
*P*₂ This man has fever. (the sign)
 C Therefore he is ill.

Recall that the mark of the second-figure syllogism is that its middle term is predicated of both the major and minor terms and that it can validly yield only negative conclusions.²¹ Aristotle offers the following as an example:

- P*₁ All those with fever breathe roughly.
*P*₂ This man breathes roughly. (the sign)
 C Therefore he has a fever.

In the third figure major and minor terms are predicated of the middle term, and only particular conclusions can be validly inferred,²² but the third-figure sign-inference invalidly deduces a universal conclusion. One of Aristotle's examples is:

- P*₁ Pittacus is wise.
*P*₂ Pittacus is good.
 C Therefore the wise are good.

To mark the difference, Aristotle calls the minor premiss of the valid first-figure sign-argument a 'token' (τεκμήριον).²³ Second- and

middle term occurs in both premisses but not in the conclusion. Thus the first mood in the first figure, *Barbara*, is represented as follows:

$$\begin{array}{cc} AaB & BaC \\ \hline AaC \end{array}$$

AaB is the major premiss, *BaC* the minor premiss, *AaC* the conclusion. *A* is the major term, *B* the middle, *C* the minor.

²¹ Retaining *A* for the major term, *B* for the middle term, and *C* for the minor term, the first mood of the second figure, *Cesare*, is represented in this way:

$$\begin{array}{cc} BeA & BaC \\ \hline AeC \end{array}$$

²² The first mood of the third figure, *Darapti*, with major, middle, and minor terms as before:

$$\begin{array}{cc} AaB & CaB \\ \hline AiC \end{array}$$

²³ Aristotle offers an etymological justification for his choice of terms, but Greek usage, including his own, offers little support for the distinction. Cf. L. Radermacher, *Artium Scriptores: Reste der voraristotelischen Rhetorik* (Sitzungsberichte der philosophisch-historischen Klasse der Österreichischen Akad. der Wiss. 227/3;

third-figure signs lack a name of their own (*Rhet.* 1. 2, 1357^b4-5), but when he needs to contrast them with tokens, Aristotle calls them simply signs (^b21-2; 1. 3, 1359^a7-8; 2. 25, 1402^b14).

How great an inferiority does Aristotle mean to attribute to the anonymous signs? The arguments to which they give rise are clearly not syllogisms, but are they enthymemes, legitimate albeit non-conclusive means of persuasion, as I have so far assumed without argument? Or is the status of an enthymeme to be withheld from them and reserved for enthymemes from tokens and likelihoods alone? The evidence regarding this point is conflicting. The latter is suggested by *Rhetoric* 2. 24, where the enthymeme from signs is treated as one of the *topoi* of merely apparent enthymeme (1401^b9 ff.). The examples given there, though not analysed as categorical syllogisms, correspond to the second- and third-figure signs discussed in *Rhetoric* 1. 2 and *Prior Analytics* 2. 27. 'Lovers benefit their cities because Harmodius and Aristogeiton killed the tyrant Hipparchus', i.e. this pair (*a*) are lovers and (*b*) benefited their city (third figure). 'Dionysius is a thief, for he is wicked', i.e. thieves are wicked and Dionysius is wicked, therefore he is a thief (second figure). But here the fact that they are not valid (are ἀσυλλόγιστον) appears to be made a ground, as it did not seem to be in the *Analytically*-oriented passage, for their exclusion from the ranks of the genuine enthymeme (1401^b9; cf. 1357^b9; cf. also 2. 22, 1397^a4). The same attitude is on display in the *Sophistical Refutations*, where argument from signs is presented as an instance of the fallacy of affirming the consequent and said to be especially common in rhetoric (5, 167^b8-11).

It has been argued on the strength of this evidence that Aristotle meant to withhold the standing of a genuine enthymeme from the second- and third-figure sign-inferences, reserving it for the valid first-figure sign-inference alone.²⁴ But nothing in the official accounts of the sign in *Rhetoric* 1. 2 or *Prior Analytics* 2. 27 has prepared us for the exclusion of any of the forms of argument they analyse, and Aristotle includes the syllogistically invalid sign in the ranks of the enthymeme along with the token in *Rhetoric* 2. 25

1951), 214-15, the passages collected in which show small differences in the connotation of the two terms, and their use for purposes of elegant variation, rather than a substantive difference in meaning.

²⁴ Notably by Sprute, *Enthymentheorie*, 88 ff.

(1402^b13).²⁵ What is more, in *Prior Analytics* 2. 27, as we have already noted, he maintains that the sign is a premiss that is, or is of a nature to be, necessary or reputable (ἐνδοξος) (70^a6-7).²⁶ The token is necessary; the remaining signs, it would then seem, must be reputable.

This apparent discrepancy has elicited different reactions. Solmsen made it part of his developmental account of Aristotle's rhetorical theory.²⁷ But the fact that expressions of a favourable attitude towards signs are confined to the later *Analytically*-oriented sections while an apparently less sympathetic attitude is adopted in the earlier *Topics*-oriented sections does not require that Aristotle changed his mind. There is another way to reconcile the different things Aristotle has to say about signs that is more promising than imputing to him either a consistently hostile or a consistently favourable attitude towards sign-inference. It has been rightly observed that the adversarial character of rhetoric makes it natural for him to mention what can be said against as well as in favour of each variety of argument.²⁸ All the same, I shall argue that it is not an accident that Aristotle's favourable remarks about signs are found in late *Analytically*-oriented, and his unfavourable remarks in early *Topics*-oriented, sections of the *Rhetoric*, but the result of a change in the direction of greater sympathy towards argument from signs, albeit a change of a rather complicated and elusive kind.

(b) *The reputable character of invalid argument from signs*

But any account of how Aristotle came to adopt a more favourable attitude towards invalid argument by signs must explain how he could at any time have regarded it as a reputable means of persua-

²⁵ He also does so at 1. 3, 1359^a6. There are good reasons for suspecting this passage, however. Cf. Burnyeat, 'Enthymeme', 35 n. 90.

²⁶ In line with his view that within the broader class of sign-arguments only those from tokens qualify as enthymemes, Sprute argues that the reference at 70^a7 to the sign as a reputable premiss ought to be deleted as an interpolation (*Enthymentheorie*, 90 n. 114). The textual grounds for this step are slight; earlier, as Sprute himself notes, in effect the opposite conclusion, that it is the word 'necessary' which has been mistakenly interpolated, was reached by H. Maier, *Die Syllogistik des Aristoteles* (Tübingen: Laupp, 1896-1900), ii/1. 481 with n. 2. For the argument against cf. Burnyeat, 'Enthymeme', 33 with n. 83.

²⁷ Cf. *Entwicklung*, 22-3.

²⁸ S. Raphael, 'Rhetoric, Dialectic and Syllogistic Argument: Aristotle's Position in "Rhetoric" I-II', *Phronesis*, 19 (1974), 153-67.

sion. I shall take up this question first, before returning to consider whether this view was the result of a change.

Although they are not characterized as reputable in the *Rhetoric*, second- and third-figure signs are, to all appearances, treated as sources of genuine enthymemes in the *Analytically*-oriented passages and contrasted with tokens, which are once more distinguished by their necessary character. Aristotle leaves us in no doubt what this means. 'I call necessary the signs from which a syllogism arises, and the token is a sign of this kind' (1357^b5-6). And he goes on to oppose this necessity to the invalid, or non-syllogistic (*ἀσυλλόγιστον*), character of the second- and third-figure signs (1357^a27-32; ^b5, 14, 22; cf. 1403^a11). 'Necessary', then, means capable (when taken together with an appropriate major premiss) of necessitating the conclusion to which they are related in the corresponding enthymeme, i.e. the *necessitas consequentiae* referred to in the definition of the syllogism. This means that whether a premiss is to count as a sign or a token depends not on its intrinsic character, but rather on the relations obtaining between it, the second premiss, and the conclusion of the argument constituted by all three. Being pale, for example, could on different occasions be a (second-figure) sign of pregnancy, ill health, or being afraid while serving as a token of whichever condition of the blood vessels—if there is just one—it is that makes one go pale.

Difficulties arise, however, when we turn to the passage that introduces the discussion that we have been examining, where Aristotle contrasts the sign and its necessary character with the likelihood and its for-the-most-part character. This passage is concerned to explain the distinctive characteristics of rhetorical argument as consequences of its purpose, the conditions in which it is employed, and its subject-matter—issues on which Aristotle has already touched (cf. 1357^a1 ff.).²⁹ It marks the beginning of the first *Analytically*-oriented insertion, and introduces the discussion of signs and likelihoods (1357^a22-33):

Since there are few necessities from which rhetorical syllogisms arise [this is justified by reference to the subject-matter of rhetoric already described] and it is necessary to argue to conclusions that are for the most part and possible from starting-points of the same kind, and to necessary conclusions from necessary starting-points (and this is clear to us from the *Analytically*),

²⁹ If, as it seems, 1357^a22 is the beginning of a later *Analytically*-oriented insertion, the transition is a nicely managed one.

it is clear that some of the starting-points from which enthymemes are propounded will be necessary and some will be for the most part. But enthymemes are from likelihoods and signs, so that it is necessary for each of them to be the same as each.

The problem is that, while the necessary character of the token that is opposed to the invalidity of the anonymous sign enthymemes characterizes the relation between the premisses and conclusion of the argument, it appears that the for-the-most-part character of the likelihood belongs to a proposition in its own right, namely the proposition that serves as the major premiss of an enthymeme from likelihood. How, then, are we to understand the necessity of the token as it figures in both these contrasts?

In the *Prior Analytics* Aristotle maintains that syllogisms establishing *necessitas consequentis*, the unqualified or absolute necessity of the conclusion, must proceed from premisses which are also necessary in the same way (1. 8, 29^b29 ff.). Elsewhere he seems to commit himself to an analogue of the same principle applying to syllogisms with premisses qualified as for the most part true (*An. post.* 1. 30, 87^b22 ff.; cf. 2. 12, 96^a8-19, *An. pr.* 1. 27, 43^b33). The undeniably striking verbal similarities have led some to conclude that Aristotle is bringing together these two points here in the *Rhetoric*.³⁰ But as we have just seen, this is not how the necessity of the token is explained in the immediately following passage. And even if an occasional major premiss of a first-figure sign-syllogism were an apodeictic necessity, apart from leaving others which are not out of account, this is perfectly irrelevant to the use to which such a premiss is put in rhetorical argument, and no purpose would be served by calling attention to this fact here.

The solution, I believe, is to see that, at least in the limited case of the enthymeme from likelihood, where a for-the-most-part generalization is applied to a particular instance, Aristotle seems to have supposed that the effect of the for-the-most-part major premiss is to give rise to a for-the-most-part relation of consequence. The idea would have been that most of the enthymemes formed by applying a true for-the-most-part generalization to the individuals falling under its middle term will yield a true conclusion. Suppose, for example, that *Bs* are for the most part *A*. *A* will then belong to most of the individuals to which *B* belongs. Let *C*₁ . . . *C*_{*n*} be

³⁰ Cf. Sprute, *Enthymemtheorie*, 91-2 with n. 123, for references to proponents of this view and criticism.

the individuals that make up *B*.³¹ Applied to each of $C_1 \dots C_n$, the argument schema '*Bs* are for the most part *A*, *C_x* is *B*, therefore *C_x* is *A*' will yield an argument with a true conclusion more often than not. If the premisses represent the best state of our knowledge, then a particular instance of this argument form will furnish us with a reputable ground for taking its conclusion to be true.

What is more, the way for this conception of the enthymeme from likelihoods seems to have been prepared by the account of the enthymeme we find a few pages earlier in the *Rhetoric*, before the first *Analytically*-oriented passage (1356^b15-17):

... when, certain things being [so], something different comes about besides them by their being [so], either universally or for the most part, this is called a syllogism there [i.e. in the *Topics* and in dialectic] and an enthymeme here [i.e. in rhetoric and the *Rhetoric*].³²

Though this is not the only way of construing Aristotle's loosely formulated Greek, the most conspicuous departure from the definition of the syllogism in the *Topics* and *Prior Analytics* appears to be the replacement of the requirement that the conclusion follow of necessity by the requirement that it follow universally or for the most part, that is, it seems that 'universally or for the most part' is best understood here as a qualification applying to the relation between premisses and conclusion rather than to either the premisses or the conclusion.³³ Aristotle's point would then be that an argument can fail to be a syllogism but still qualify as an enthymeme, though its conclusion would still somehow have to follow for the most part. Understood in this way, the account of the enthymeme in this *Topics*-oriented and presumably earlier section of the *Rhetoric* prefigures and handily accommodates the enthymeme from likelihoods introduced in the later *Analytically*-oriented section, where it is conceived along the lines I have just suggested.

³¹ Or a suitable finite initial sequence of the members of *B*, if *B* has infinitely many members.

³² τὸ δὲ τῶν ἑτερον τι [διὰ ταῦτα] συμβαίνειν παρὰ ταῦτα τῷ ταῦτα εἶναι ἢ καθόλου ἢ ὡς ἐπὶ τὸ πολὺ. I follow Kassel in viewing διὰ ταῦτα as an interpolated gloss and have left it untranslated.

³³ So M. Wörner, *Das Ethische in der Rhetorik des Aristoteles* (Munich: Karl Alber, 1990), 352-3, and J. Barnes, 'Rhetoric and Poetics', in id. (ed.), *The Cambridge Companion to Aristotle* (Cambridge: Cambridge University Press, 1995), 295-85 at 271. A fuller discussion of the interpretative possibilities and the controversy concerning this passage can be found in Burnyeat, 'Enthymeme', 19-20 with n. 49, who also inclines to this view.

To be sure, this is not how Aristotle conceives syllogisms from for-the-most-part premisses outside the *Rhetoric*. As we noted above, he prefers to treat them along the same lines as demonstrative syllogisms from apodeictic premisses, i.e. as deductively valid syllogisms that necessitate their conclusions, which are, in addition, qualified by something like a modal operator transmitted to them from the premisses. But there are special features of the enthymeme and the rhetorical conditions in which it is used that may have recommended a different approach. Unlike the syllogisms with which Aristotle is concerned in the *Analytically*, an enthymeme from likelihood typically applies the for-the-most-part generalization expressed in its major premiss to a singular minor term and therefore draws a conclusion about a particular. This of course reflects rhetoric's concern with issues requiring decisions about particulars, e.g. whether this man is guilty of this crime, or this policy or plan of action should be put into effect, and the like. And it means that the conclusion of such an enthymeme cannot be qualified as for the most part, but as likely.

There is also a notorious problem with the view of syllogisms from for-the-most-part premisses that Aristotle appears to favour elsewhere, whether the character they transmit to their conclusions is belonging for the most part, as in the premisses, or being likely. Although the conclusion of a demonstrative syllogism with necessary premisses or, sometimes, a single necessary premiss will be necessary as well, the conclusions of an argument with the same syllogistic form from likelihoods will not be unqualifiedly likely in an analogous way. A conclusion validly deduced from true premisses according to the principle in question can be contradicted by a conclusion deduced from premisses no less true by arguments the principle is bound to regard as no less valid.³⁴ For the minor term can be the subject of different middle terms to which mutually exclusive characteristics belong for the most part. One may, for example, belong to a nation most of whose citizens are religious believers and to a profession most of whose members are unbelievers. But it cannot be likely without qualification both that one is a religious believer and that one is not.³⁵

³⁴ For a discussion of this well-known problem in an Aristotelian context cf. Burnyeat, 'Enthymeme', 25-6.

³⁵ Now it must be conceded that these difficulties are less acute in the context of the *Posterior Analytics*. If the for-the-most-part premisses admitted there satisfy

Whatever other difficulties it may present, the solution that I have suggested Aristotle does adopt in his account of the enthymeme from likelihoods avoids, within its limited sphere, the problems that confront the alternative account. At the same time, it explains how such an argument can furnish reputable grounds for taking its conclusion to be true. Of course it does not tell us how to judge between the conflicting claims of enthymemes from likelihood to opposed conclusions in the actual practice of rhetorical argumentation. It may, however, be a point in its favour that it does not treat this as a problem to be solved by a theory of argument in advance of the particular circumstances of an argument and the relations that arise between the different likelihoods brought to bear in them. This is a point to which we shall return.

For the present, we may also note that this account of enthymematic argument from likelihoods shows how it was possible for Aristotle to contrast the necessary character of the token with both the argument from likelihoods and sign-arguments in the second and third figures because a relation between premisses and conclusion is ultimately at issue in both comparisons. The necessity of the first-figure sign-inference, the enthymeme from tokens, is the necessity with which the conclusion follows the premisses of a valid syllogism. The enthymeme from likelihoods, on the other hand, can be viewed here as a curious hybrid: an argument in which the relation between the premisses and the conclusion is affected by the character of the premisses.

But the answer to the question how enthymemes from likelihood can be reputable that is suggested by 1357^a22-33 makes it that much harder to understand Aristotle's grounds for including the anonymous signs in the ranks of the genuine enthymeme. The passage appears to conclude by equating the for-the-most-part with

other conditions imposed on demonstrative premisses, they will predicate attributes *per se* of their subjects. In other words, they will state facts about the nature of their subjects by attributing essential characteristics to them. If it belongs to the nature of *B* to be *A*, even though *A* belongs to *B* in actual fact only for the most part, then *A* may fail to belong to some individuals to which *B* belongs—let us designate them the *Cs*. Tempting as it may be to think that the failure of *A* to belong to the *Cs* must be due to a more specific nature of theirs which prevents them from being *A*, this is not how Aristotle thinks of exceptions to this kind of for-the-most-part generalization; indeed, the term *C* that I have contrived will have no standing in an Aristotelian demonstration. But this solution is not available in rhetoric, where arguments, and the descriptions under which items are considered, will rarely satisfy the conditions that Aristotle imposes on demonstrative reasoning.

the likelihood and the necessary with the sign. Aristotle maintains that 'each is the same as each'. But even if this can be understood loosely enough to avoid an outright inconsistency, there is a deeper problem.³⁶ For in the train of thought that leads Aristotle to this conclusion, he appeals, as we have seen, to the fact that rhetoric is concerned with matters that permit of being otherwise to explain and justify the predominance of for-the-most-part arguments in rhetoric in a way which leaves the impression that the corresponding distinction he then draws between likelihoods and (necessary) signs exhausts the forms of legitimate rhetorical argument. It is hard to see where the invalid second- and third-figure signs are supposed to fit. So we are brought back to our original question about the source of the second- and third-figure signs' reputable character, which can be neither the necessity of the token nor the for-the-most-part character of the likelihood.

To this question Aristotle gives no direct answer, either here or elsewhere, and the rhetorical tradition, on which he exerted a significant influence, betrays some confusion on this point as well.³⁷

³⁶ Cf. Burnyeat, 'Enthymeme', 37, who compares the present passage with 1356^b10, where 'each is the same as each', said of the enthymeme and the syllogism on the one hand and the paradigm and the induction on the other, is not a statement of identity.

³⁷ Distinctions between signs and tokens obviously indebted to Aristotle's are widespread. In a manner reminiscent of Aristotle, Quintilian calls tokens necessary and irrefutable signs (5. 9. 3), but he is also willing to call likelihoods non-necessary signs (5. 9. 8). This tendency to conflate signs and likelihoods is carried still further in a later rhetorical treatise, the anonymous Seguerianus, whose author, reporting the views of the rhetorician Neocles (1st or 2nd cent. AD), contrasts tokens with signs, but takes the token to be an irrefutable likelihood and remarks that 'sign' is an expression typically used in place of 'likelihood', which he has earlier defined with reference to the for-the-most-part (*Rhet. Graec.* i. 379. 12-17 Spengel-Hammer). Eventually a distinction between tokens and signs based on a contrast between a relation between sign and signified which holds always and one which holds only for the most part or less often is attributed to Aristotle (*Rhet. Graec.* v. 407-8 Walz). How widespread this conception of Aristotle's views may have been is hard to say (the text is a scholium of Planudes on Hermogenes' *Inventio*). But in a passage to which we shall turn again in Study III, Galen distinguishes two ways of contrasting signs with tokens, with the usage of rhetoricians in view (*In Hipp. prog.*, CMG v/9/2. 373. 1-14). The first, and to his way of thinking more correct, holds that tokens are necessary and always followed by that for which they are evidence, while signs are followed by that for which they are evidence only for the most part. It seems clear from the vocabulary Galen uses that he has an Aristotelian logic in mind. For he takes the necessity of the token to consist in the fact that one of the terms of which the premiss (*πρότασις*) is composed follows the other always, whereas in the case of the sign it follows only for the most part, presumably with the major premiss of a syllogism in Barbara in view. Elsewhere Galen describes the token as a syllogistic

Aristotle's silence on this point can and has been taken as evidence that he did not after all intend to count invalid sign-inferences as reputable enthymemes.³⁸ Those of us who believe that he did will see this as evidence of the lateness and incompleteness of his *Analytically*-based reflections on rhetorical argument. We can only speculate about the legitimate uses Aristotle may have envisaged for the invalid second- and third-figure sign-syllogisms; that they can be put to illegitimate use is clear enough. To conclude that a man is an adulterer on the basis of his taste for late-night walks would be reckless and unfair (cf. *SE* 5, 167^b8). But suppose that there are other signs of this kind, i.e. that this person has other features belonging to adulterers, e.g. a new interest in his personal appearance (cf. 167^b10–11; *Rhet.* 2. 24, 1401^b24): he will then belong to many such classes. The accumulation of signs, none of which is of much weight by itself, may in the end constitute a powerful though, as we should say, circumstantial case, and there is evidence that the rhetorical tradition took signs to be valuable in just this way (cf. [Cicero,] *Rhet. ad Heren.* 2. 11; Cicero, *Part. orat.* 39–40; Quintilian 5. 9. 9–10).³⁹

Aristotle says nothing as explicit himself, but the resources of the categorical syllogistic, though not necessary, would have allowed him to explain how, by collecting signs in this way, an orator can make his case a stronger one in something like the following way. The fault of the second-figure sign is, in terms drawn from the categorical syllogistic, that its major premiss does not convert. The

sign, but says too little to make clear precisely how he intends the contrast between tokens and signs (*In Hipp. de acut. morb. vict.*, CMG v/9/1. 118. 1). The absence of any clear indications how signs might have made their conclusions reputable seems, then, to have made it all too easy to assimilate sign-arguments to for-the-most-part-arguments. Other references to a distinction between signs and tokens are collected by L. Spengel (ed.), *Aristotelis ars rhetorica* (Leipzig: Teubner, 1847), ii. 63 ff.

³⁸ Sprute, *Enthymemtheorie*, 99 with n. 166, cites 1357^a22–33 in support of his exclusion of the second- and third-figure sign-syllogisms from the ranks of the genuine enthymeme.

³⁹ Aristotle appears to say something similar himself when he notes that someone's accidentally and unintentionally beneficial acts can be cited in support of the conclusion that he has a good character: 'for when many similar actions of this kind are put forward in argument, it seems to be a sign of virtue and worthy purpose' (1. 9, 1367^b24–6). But since Aristotle is clearly thinking of a situation in which an orator cites acts which, to be sure, could have been the outcome of a virtuous person's good intentions, but were, as the orator well knows, unintentional, this passage does not tell us how he might have regarded an argument from an accumulation of signs that are not known to be immaterial in this way.

fact that the middle term, e.g. night-wandering, which belongs to the major term, adulterers, belongs to the accused party as well is taken as a ground for the conclusion that the accused is an adulterer, when that conclusion would follow of necessity only if the major term converts with the middle, so that the major term, adulterer, belongs to the whole of the middle term, night wanderer, making possible a valid first-figure syllogism in Barbara. But the effect of accumulating signs, of discovering that more and more of the terms that are predicated of the major term belong to the minor term as well, is to come closer and closer to a conjunctive middle term that is convertible with the major term, belonging not only to all but also to only the items to which the major term belongs. What is more, at some point in this progress the major term, though not convertible *in toto* with the conjunctive middle term formed in this way, will belong to it for the most part; that is, it will be a rare item that is subject to all these terms but not to the major.

Why, then, treat the second-figure signs separately rather than under the head of likelihoods and tokens? This would be to ignore the distinctive characteristics of *rhetorical* and kindred forms of argument which it is Aristotle's aim to capture. Typically neither the orator who aims to strengthen his case in this way nor his auditors will be in a position to determine the point at which the terms convert, so that he can predicate his major term always or for the most part of the conjunctive middle term to which his argument points. The analysis of second-figure signs just proposed shows how the successive presentation of such signs can make a case gradually stronger. And we should remember that sign-arguments will typically be put forward in the context of other arguments, which they may strengthen and be strengthened by in ways that are hard to specify.

How the third-figure sign can be the source of reputable argument is in some ways the hardest question of all. The premisses establish, if true, only that at least one item to which the minor term belongs is subject to the major term as well. If Socrates is wise and good, then we can safely say only that some of the wise are good. But the conclusion in support of which the sign is cited is that (all) the wise are good. Because neither Aristotle nor, so far as I am able to tell, the later rhetorical tradition says anything directly about the matter, any view about how third-figure signs give rise to reputable rhetorical argument must be still more speculative than the account

of second-figure signs that has already been proposed. The clue that has the best chance of yielding results, I suggest, is afforded by the apparently inductive character of third-figure signs. We may be in a better position to see how Aristotle might have understood them if we can first see whether they had a part of their own to play in rhetorical argument different from that of the paradigm, the official counterpart of the induction in rhetoric. A closer look at Aristotle's account of argument by paradigm will also serve our broader aim of discovering how methods of argument that have their origin in dialectic were adapted to satisfy the requirements for reputable argument in rhetoric.

(c) Comparison with induction

Though so-called complete or perfect induction analysed by Aristotle in *Prior Analytics* 2. 23 is not representative of the arguments he elsewhere treats as instances of induction (*ἐπαγωγή*), the distinctive features of paradigms can be grasped most readily if we begin by contrasting them with complete induction as Aristotle himself does.⁴⁰ The aim of such an induction, according to *Prior Analytics* 2. 23, is to establish that a major term *A* holds of a middle term *B* by showing that it belongs to the minor terms *C*₁ . . . *C*_{*n*} which exhaust *B*, i.e. are, taken *in toto*, convertible with *B*. To forestall misunderstanding, it should be noted that Aristotle clearly does not envisage taking each of the potentially infinite individual particulars falling under *B* into account; rather, the *C*s are the finite set of the species of *B*.

Paradigms, which are discussed in the next chapter, *Prior Analytics* 2. 24, do not at first seem very much like inductions, for while the characteristic direction of induction is from the particular or the more particular to the general, argument by paradigm is from particular to particular (cf. *Top.* 1. 12, 105^a13–14; *An. post.* 1. 1, 71^a8–9; *An. pr.* 1. 24, 69^a14–15; *Rhet.* 1. 2, 1357^b28). But Aristotle is able to treat paradigm as a form of induction because it combines two steps, the first of which is inductive in character.⁴¹ The aim of an argument from paradigms is to show that a major term belongs to a particular through a middle term. In the example cited in the *Prior*

Analytics the conclusion to be proved is that a war between Athens and Thebes would be evil (69^a1 ff.). This is to be accomplished through the middle term 'war against neighbours'; that is, it is supposed to be shown that a war between Athens and Thebes would be evil because it would be a war against neighbours (minor premiss), and wars against neighbours are evil (major premiss). The inductive step is to cite one or more examples in support of the major premiss that war against neighbours is evil—for example, as Aristotle suggests, that the war between Thebes and Phocis was evil. The result is an argument from a particular example (or examples) to a particular conclusion via a general principle exemplified by the first and applied to the second.

Viewed exclusively from the perspective of syllogistic validity, arguments from paradigm are of negligible value. The power of such arguments to make their conclusions probable will depend on more than can be captured by Aristotle's syllogistic analysis. He emphasizes this point himself by distinguishing between the taking or grasping (*λαμβάνειν*) of the general principle expressed by the major premiss and the syllogizing or deducing of the conclusion in which it is applied to the particular instance in question (*Rhet.* 2. 25, 1402^b17–18; *An. pr.* 2. 24, 69^a15–16). But a well-chosen example, familiar to the audience, may help it to grasp more firmly and clearly a general principle of which it already has an inkling, and in this way to apply it more easily to the case at issue (*Rhet.* 1. 2, 1357^b29; *An. pr.* 2. 24, 69^a16). Note that past facts of the kind mentioned in the above example are only one species of paradigm. An orator may also manufacture examples for himself in the form of parables or fables (cf. *Rhet.* 2. 20, 1394^a9 ff.). An example may, then, enable an audience to draw a true conclusion for good reasons, even though it is a wholly inadequate ground for that conclusion when viewed apart from the broader understanding that it is intended to assist.

This conclusion receives further support from the account of the refutation of arguments by paradigm that Aristotle offers in the *Analytics*-oriented section of *Rhetoric* 2. 25. There he tells us that the refutation of arguments from paradigm is the same as that of arguments from likelihood (1403^a5). Unfortunately, the details of the comparison are obscured by a textual difficulty. We shall have to return to this problem later. For the moment, however, two things should be clear. The general principle exemplified by an example or examples and applied to a further particular instance claims nothing

⁴⁰ Ross, *Analytics*, 47–8; K. von Fritz, *Die ἐπαγωγή bei Aristoteles* (Sitzungsberichte der bayerischen Akademie der Wissenschaften, phil.-hist. Klasse, 3; 1964); Lloyd, *Polarity and Analogy*, 405–8.

⁴¹ Cf. Ross, *Analytics*, 488; Sprute, *Enthymemtheorie*, 83.

more for itself than the for-the-most-part character enjoyed by the likelihood, in this way reflecting the nature of the issues about which orators must argue that Aristotle has been at pains to accommodate in his account of the enthymeme (cf. *Rhet.* 1. 2, 1357^a13, 1357^b26). And, although a full defence will have to await a closer examination of the text, the comparison between the refutation of arguments from likelihood and that of arguments by paradigm shows that Aristotle does not envisage a special form of objection to arguments of the latter kind simply on the ground of its inductive weakness.

A paradigm that succeeds in being treated as such establishes a presumption in favour of the principle it illustrates. It is not to be dismissed because it rests on a tiny handful of instances, perhaps only one. The potential point of contention is not the first step from the paradigm to the principle it exemplifies; as we shall see, the burden is on the opponent to discover more evidence to the contrary or to find a special feature of the case in question that recommends treating it as an exception to the rule, just as in the case of a presumed likelihood. On the other hand, it is precisely the step from particular to universal that is potentially contentious in third-figure sign-argument. It is, of course, invalid, and its invalidity is a legitimate ground for objection (1403^a2-5). If the third-figure sign has a place of its own, it may be where this step needs more emphasis, whether because it is more contentious or because the general principle rather than its application is the focus of attention. In circumstances of these kinds, the orator must appeal to 'signs' rather than 'paradigms'.

4. The Developmental Perspective

Let us now return to the question we put aside earlier, viz. whether the receptive attitude towards non-conclusive argument by signs that is attested in the *Prior Analytics* and late *Analytics*-oriented sections of the *Rhetoric* represents a change from an earlier less receptive attitude and, if so, what that earlier attitude was and how Aristotle came to alter it. Such a change, if it did take place, is made harder to track by a number of factors. First of all, it did not occur against the background of a framework that itself remained constant, as it would have if Aristotle had decided, say, that the topos of signs belongs among the topoi of the gen-

uine enthymeme instead of, or perhaps as well as, among those of the apparent enthymeme. There are no topoi in the categorical syllogistic or the *Analytics*-inspired treatment of rhetorical argument. What became of the topoi after the introduction of the categorical syllogistic is a question shrouded in mystery, very probably because Aristotle never worked through the issue himself.⁴²

What is more, whatever Aristotle may have intended by including a topos of signs among the topoi of the apparent enthymeme, he can never have meant to dismiss all the arguments that turn out to belong to the extension of the concept 'sign' as that concept is specified in the *Prior Analytics* and the *Analytics*-inspired passages of the *Rhetoric*. Some of the topoi of the genuine enthymeme in *Rhetoric* 2. 23 give rise to arguments that appear to belong to this extension.⁴³ An especially clear instance is furnished by the topos that recommends maintaining that the reason for which something might be done is the reason why it has been done (2. 23, 1399^b19-30). Thus, in the *Ajax* of Theodectes, Aristotle observes, it is argued that Diomedes chose Odysseus to accompany him not in order to honour him, but rather to shine by comparison with an inferior companion (cf. *Iliad* 10. 218-54). The reasoning depends on an invalid second-figure syllogism: inferior persons likely to make others shine by comparison are chosen; Odysseus was chosen by Diomedes; therefore he is an inferior person.⁴⁴

To be sure, one could perhaps argue that Aristotle did not see this, or that these arguments had other features that made them superior to 'mere' signs in his view. But this will not take us very far, as Aristotle cannot *ever* have meant to reject as valueless everything that he was willing to designate explicitly as an argument from signs. This is shown not only by the appeals to signs—many of which are clearly not meant to be valid arguments—that Aristotle makes everywhere in his work, but also by the presence of such appeals in *Topics*-oriented sections of the *Rhetoric* itself, where

⁴² Cf. Solmsen, *Entwicklung*, 26, 61-6. Such evidence as we have suggests that, after the elaboration of the categorical syllogistic, Aristotle and his successors viewed arguments formed in accordance with the topoi as syllogisms on the basis of a hypothesis.

⁴³ I am grateful to John Cooper for this point and the following examples.

⁴⁴ Notice its resemblance to the argument from symptoms, where Aristotle does speak of signs, discussed in n. 39 above (1. 9, 1367^b24-6).

considerations designated as signs are put forward by Aristotle in support of various of his own views about the rhetorical art instead of being studied as one of its products (1. 3, 1358^b29; 2. 3, 1380^a15; 3. 2, 1404^b33).⁴⁵ Of course, it is one thing to use such arguments and another thing to accommodate them in a theory that explains how deductively invalid arguments can furnish reputable albeit inconclusive grounds for a conclusion. There seems, then, to be a tension between some of Aristotle's practices of argument, including practices of theoretical enquiry, and the attitude towards non-deductive argument by signs evinced by a theory of argument that attends to them only in connection with a topos of merely apparent enthymemes.

(a) *Dialectic: the topoi*

It remains, then, to consider whether a better understanding of the nature of the topoi, and the system they compose, has any light to throw on the problem. As has often been remarked, though Aristotle refers to and expounds an enormous number of topoi in the *Topics*, *Sophistical Refutations*, and *Rhetoric*, apart from a brief *obiter dictum* in the last of these, he has nothing to say about what a topos is. And what he says there, viz. that he calls a topos that into which many enthymemes fall, does not take us very far (2. 26, 1403^a18–19). Commentators have naturally turned for illumination to the *Topics*, which, true to its name, consists in large part of catalogues of topoi organized under the heads of the so-called predicables—accident, genus, property, and definition—the four ways in which a predicate can belong to a subject distinguished by Aristotle.⁴⁶

The topoi we find in the *Topics* are, broadly speaking, heuristic devices by means of which a dialectician is able to find premisses for

⁴⁵ A survey of the use of the term in the *Rhetoric* does not tell us very much. It is used most frequently in the discussion of the emotions, where Aristotle explains in response to what kinds of objects each of the emotions arises and often notes that we react with this emotion not only to these objects but also to signs of them. So, for example, we react with anger when we are slighted but also to signs of being slighted (2. 2, 1379^b16–19, 36; cf. 1381^a7, 1382^a30, 1383^b31–4, 1385^b7, 1386^b2). The closest we come to rhetorical argument by sign is, as already noted, in 1. 9, where Aristotle frequently mentions signs of character, thus implicitly referring to arguments in which orators invite audiences to infer conclusions about character from signs (cf. n. 39 above).

⁴⁶ Cf. J. Brunschwig, 'Sur le système des "prédicables" dans les *Topiques* d'Aristote', in *Energie: Études aristotéliennes offertes à Mgr. Antonio Jannone* (Paris: Vrin, 1986), 145–57.

an argument to the conclusion he is charged to advocate.⁴⁷ Another feature, belonging to most though not all of them, has attracted the most attention. These topoi are organized around something like a law of which relations of implication between the proposition in contention and other propositions are instances. In other words, they contain something like an argument formula or schema, and serve the dialectician by directing his attention to arguments that instantiate it. Setting out from the desired conclusion, the dialectician is able to discover the corresponding premiss that together with that conclusion instantiates the law. Thus if the question concerns whether a term *A* is predicated of a term *B*, propositions to which attention is directed in this way either imply that *A* belongs to *B*, so that they can be used to infer it, or are implied by it, so that their contradictories can be used to refute it, or are equivalent to it, so that they can be used either to refute or establish it. For example, to simplify somewhat, one topos recommends that we consider whether the opposite of *A*, namely *C*, is predicated of the opposite of *B*, namely *D*; if *C* belongs to *D*, infer that *A* belongs to *B*; if it does not, infer that *A* does not belong to *B*.⁴⁸ In order to illustrate the notion of a topos when it is introduced in the *Rhetoric*, Aristotle offers the topos of the more and the less. According to it, we are entitled to infer that the more likely of a pair of appropriately related propositions obtains if the less likely does or that the less likely does not obtain if the more likely does not (1. 2, 1358^a12 ff.). Thus, if a man beats his father, he should have no trouble beating his neighbours, while if the gods do not know everything, human beings certainly will not (cf. 2. 23, 1397^b12 ff.).

But to contain such a formula or schema is not part of what it is to be a topos—at least at the outset. To be sure, much of the *Topics* and *Sophistical Refutations* could reasonably be viewed as evidence that Aristotle was moving in the direction of a more regimented conception that would restrict the topoi to devices with the broadly formal character in question. Elsewhere, however, he speaks of topoi not only in relation to argument, but also in connection with the other two methods of persuasion studied by the

⁴⁷ Cf. Brunschwig (ed.), *Topiques*, p. xxxix.

⁴⁸ Cf. *Top.* 3. 6, 119^a38 ff., simplified along lines suggested by Theophrastus or Alexander; cf. A. Graeser (ed.), *Die logischen Fragmente des Theophrast* (De Gruyter: Berlin, 1973), fr. 39. Note that though topoi of this kind lend themselves to formulation with variable letters in this way, Aristotle did not use them before the *Prior Analytics*.

art of rhetoric, the presentation of the speaker's character and the stirring of an audience's emotions (*Rhet.* 2. 22, 1396^b33–1397^a1; 3. 19, 1419^b27).⁴⁹ What all these items have in common, and what does seem to belong to the original essence of a topos, is that each is a way of handling a problem or, if you will, an angle of approach to a task. Roughly speaking, a topos is something reflection upon which can put an orator or a dialectician in mind of a measure that will contribute to his end.⁵⁰ And as we shall see, not even all the topoi of argument do this in a way corresponding to the standard account.

It is these items which, when properly organized, make up or constitute an art. And the basic idea of a component of an artistic method or system is behind the surprisingly large number of expressions that Aristotle uses. Each of them succeeds in referring to such components—and perhaps acquires a corresponding sense—by focusing on a different aspect of theirs. A closer look at the terminology and how Aristotle uses it will throw light on the nature of an Aristotelian topos and allow us to pose a question about the relation between the topoi and the arguments whose topoi they are that is important for our enquiry.

The idea behind the use of 'topos' at issue seems to be that of a place whence an orator takes the idea for an argument, emotional appeal, or the like.⁵¹ Aristotle's use of *τρόπος* for ways of arguing requires no special explanation (cf. e.g. *SE* 4, 165^b23, 166^a23, 169^a18, 172^b5). It is a little more surprising to find *στοιχείον* (element) used interchangeably with *τρόπος* in the *Topics* and *Sophistical Refutations* and given by Aristotle as an alternative for *τρόπος* in the passage of the *Rhetoric* where he offers a brief explanation for the notion of a topos (2. 26, 1403^a18–19; cf. 2. 22, 1396^b22).⁵² We are more accustomed to the meaning 'fundamental constituent, not further divisible into more elementary constituents', the meaning

⁴⁹ Cf. Sprute, *Enthymentheorie*, 168.

⁵⁰ Cf. *ibid.* 170–1.

⁵¹ On the basis of *Top.* 8. 14, 163^b29, Solmsen suggested that this technical sense was taken over from the art of memory (*Entwicklung*, 171 ff.). Cf. P. Slomkowski, *Aristotle's Topics* (Leiden: Brill, 1997), 47 n. 22, who accepts Solmsen's proposal but not the details of his interpretation of the passage. Evidence of this usage at the right time is thin on the ground, and it may have originated within the discipline of rhetoric itself. Cf. Sprute, *Enthymentheorie*, 147–50, who cites Demosthenes 25. 76 (150).

⁵² On this use of *στοιχείον* cf. Waitz, *Aristotelis Organon*, ii. 362.

exemplified by the letters of the alphabet and discussed by Aristotle in *Metaphysics* Δ (1014^a26 ff.). But this is a derived meaning.⁵³

The basic meaning of the verb *στοιχέω* is to put in a row or column. This idea is already brought into connection with the order into which the procedures of an art must be put in the *Prometheus Vincit*, where Prometheus declares that he has ordered (*ἐστοιχίσα*) the techniques (*τρόποι*) of divination, one of the arts he has bestowed on suffering humanity (484).⁵⁴ W. Burkert found traces of an early use of *στοιχείον* in pre-Euclidean geometry meaning something like presupposition or point of departure of use in a proof, without any reference to its simplicity or elemental character, and he argued that only later was it restricted to genuinely elementary propositions, presuppositions *par excellence*, the meaning familiar to us.⁵⁵ On his view, the row or column in question was the logical sequence of propositions in a proof; the *στοιχείον* completes the row, making of it a proof.⁵⁶ Whether our use of *στοιχείον* originated in this way in geometry and spread from there or was more broadly dispersed from the start is less important for our purposes than the kind of explanation for its meaning suggested by its early history. When, in the discussion of contentious argument in the *Sophistical Refutations*, Aristotle speaks of the elements of anger—the anger which makes one's opponent less effective in argument—he means ideas or devices for making people angry rather than fundamental constituents of anger (174^a21). So too the elements of making one's arguments lengthy with a view to confusing an opponent, the elements of making one's opponent say paradoxical things, and the elements of enthymemes mentioned in the *Rhetoric* (*SE* 12, 172^b31; 15, 174^a18; *Rhet.* 2. 22, 1396^b21–2).

Even more surprising than this use of *στοιχείον*, however, is the use of *εἶδος* in a few passages of the *Rhetoric* to mean a kind of point of departure for the discovery of enthymemes (1. 2, 1358^a27, 31–3; 1400^b15; 1403^b13–15). Readers of Aristotle are more familiar with the sense of 'form' or 'species' or, more broadly 'kind', in which last sense it is also found in the *Rhetoric*, sometimes in uncomfortably close proximity to the novel sense at issue. There are, however, parallels in Isocrates—mostly using the synonym *ἰδέα*—that make it

⁵³ Cf. W. Burkert, 'Στοιχείον: Eine semasiologische Studie', *Philologus*, 103 (1959), 167–97.

⁵⁴ Cf. *ibid.* 184.

⁵⁵ Cf. *ibid.* 189 ff.

⁵⁶ Cf. *ibid.* 192 ff., 194 ff.

possible to see how the term was able to acquire this sense.⁵⁷ As we know, the term *εἶδος* seems first to have meant external form or visible characteristic, then feature or characteristic of the kind that is shared by many individuals. This was the point of departure for the developments that can be observed in Plato and also those reflected in Isocrates. In the usage of the latter, *εἶδη* are, in the first instance, features or characteristics of speeches or their parts—parts not only in the sense of sections, but also in the sense of style argumentation and the like. Such features can be at any level of generality. They can, for example, be kinds of speech: accusation, defence, recommendation of clients, and so on.⁵⁸ At a lower level they can be different varieties of argumentation, e.g. use of witnesses, use of enthymemes, and so on, or different manners or styles to which the orator turns again and again in the composition of speeches.⁵⁹ At a still lower level they can be particular stylistic devices or particular turns or devices of argument, which, following Aristotle, we should call *topoi*.⁶⁰

The crucial step is to regard these features as objects of the rhetorical art, studied by it, imparted to its students, and consulted by its practitioners in the production of speeches. This can be observed in a number of passages where Isocrates reflects on the art

⁵⁷ Cf. H. Wersdörfer, *Die Philosophie des Isokrates im Spiegel ihrer Terminologie: Untersuchungen zur frühattischen Rhetorik und Stiltheorie* (Kl.-Philol. Stud. 13; Leipzig, 1940), 43–54, 85–7, to whom I owe the following account. Although he prefers *ἰδέα*, Isocrates does sometimes use *εἶδος*, e.g., 13. 16 (cf. Wersdörfer, *Isokrates*, 87). Kantelhardt, *De Aristotelis rhetoricis*, 15–20, usefully collects a large number of passages from Aristotle and others which appear to exhibit affinities of one kind or another with the use in question, but without explaining how these different uses might be related.

⁵⁸ Cf. Wersdörfer, *Isokrates*, 44.

⁵⁹ In Isocrates 'enthymeme' does not yet have the technical sense of rhetorical syllogism that Aristotle will give it. Isocrates uses it, like *διάνοια*, to contrast the thought or content of a speech with its style, expression, or wording. Cf. Burnyeat, 'Enthymeme', 10–12, who suggests that 'consideration' best captures the meaning of the term in Isocrates and other pre-Aristotelian authors. Wersdörfer, *Isokrates*, 110, also identifies a sense of the word that comes into effect when the choice of artistic means in the production of speeches is at issue, viz. thoughts given a rhetorically effective turn ('rhetorisch wirksam zugespitzte Gedanken'). It is in this sense that the enthymeme qualifies as one of the *ἰδέαι*.

⁶⁰ Cf. Wersdörfer, *Isokrates*, 49–50. There are a few uses of *ἰδέα* and *εἶδος* in the *Poetics* that may betray an affinity with some of the senses identified by Wersdörfer. Thus in chapter 19, after directing his reader's attention to the *Rhetoric* for matters relating to thought (*διάνοια*), Aristotle remarks that it is necessary to work from the same *ἰδέαι* (sc. as in the *Rhetoric*) in order to argue, to inspire emotions, and the like (1456^b2 ff., cf. 1450^b34). These appear to be *topoi*, in the broadest least regimented sense. Cf. J. Vahlen, *Beiträge zu Aristoteles' Poetik* (Leipzig: Teubner, 1914), 280–1.

he promises to impart to his students: it consists of *ἰδέαι* from or by means of which speeches are composed and from which the orator must select with a view to his goal (10. 11; 13. 16; 15. 183; *Ep.* 6. 8). In these passages we come very close to Aristotle's use of *εἶδος* to mean something like point of departure for the discovery of enthymemes.⁶¹ All that is required to explain the difference in emphasis in Aristotle is the central importance he assigns to argument in rhetoric.

There is one peculiarity in Aristotle's use of the term in the *Rhetoric*, however. In one early programmatic passage he reserves the term *τόπος* for points of departure for the discovery of arguments—as I have dubbed them—that are common, in the sense that they are not confined to any one discipline, but are able to give rise to arguments concerning any and every subject; and he tells us that those points of departure that are not common in this way, but consist of propositions belonging to certain subject-matters and give rise to arguments by furnishing themselves as premisses, are called *εἶδη* (1. 2, 1358^a2–33).⁶²

Elsewhere, however, Aristotle uses these terms and expressions almost interchangeably. This is especially true of the *Sophistical Refutations*, where the terms *τρόποι*, *τόποι*, and *στοιχεῖα* mingle very freely. Aristotle has no difficulty beginning a discussion with one, which he then carries on or concludes with one or more of the others. They can be interchanged so freely because they emphasize aspects of what are as a rule the same items. Features or characteristics of arguments are studied and codified for the sake of invention; once grasped, they are used to produce arguments to which they belong as features or characteristics. The term *τόπος* may emphasize the side of artistic invention, while the term *εἶδος* emphasizes the features or characteristics of the product and the kinds of argument

⁶¹ Cf. *Rhetoric* 2. 22, 1396^b28–1397^a1, where Aristotle speaks of the *τόποι* of the *εἶδη*. Here it seems the *εἶδη* are still conceived as certain features or characteristics of arguments while the *topoi* about them are the angles or points of view they afford for the discovery of those arguments.

⁶² The fact that Aristotle seems to adhere to this distinction between *εἶδη* and *τόποι* in only one other passage (3. 1, 1403^b13–14), while ignoring it elsewhere (2. 22, 1396^b21, 28–1397^a1; 23, 1400^b15), is less important than has sometimes been supposed, e.g. by Kantelhardt, *De Aristotelis rhetoricis*, 20, 22. It is best viewed as a stipulation rather than a contribution to descriptive lexicography. It would not be the first time that Aristotle had legislated a terminological distinction that was not supported by his own earlier and, one suspects, later usage. I shall touch on some other consequences of this distinction in appendix B.

characterized by them.⁶³ One such interchange is of special interest to us. In the first chapter of the *Sophistical Refutations* Aristotle notes that it is possible for something to appear to be a syllogism or a refutation without really being one (165^a17–19). Such arguments form a genus which the sophist, the man who would seem wise without really being wise, must study. Aristotle then proposes to explain how many εἶδη of sophistical argument there are (165^a34–7). 'Forms' or 'kinds' recommend themselves here as the most natural rendering. Aristotle returns to the forms of sophistical argument in chapters 4 ff., where, he tells us, there are two ways (τρόποι) of refutation, (a) by expression and (b) apart from expression (165^b23–4). After treating fallacies of the first type, Aristotle turns to fallacies of the second type in the following words: 'refutations due to expression are from these topoi, but of the fallacies apart from expression there are seven εἶδη (4, 166^b20–2). Here also 'forms' or 'kinds' appears to be the correct translation.

The same kind of interchange can be observed in the *Rhetoric* as well. In the passage that has already come to our attention because of the explanation it offers for the terms 'topos' and 'element', Aristotle goes on to impose restrictions on what is to count as a topos of enthymemes and a corresponding εἶδος (2. 26, 1403^a17–33). Though certain enthymemes are composed with certain ends in view—Aristotle mentions amplification and depreciation, and the refutation of an opponent—not every consideration that enters into the invention of an enthymeme is a topos, nor is every corresponding description under which a finished enthymeme falls a proper kind of enthymeme. But genuine topoi do yield corresponding kinds of argument, or so the easy transition from talk of τρόποι to talk of εἶδη suggests.⁶⁴

The question to which the preceding discussion has been leading is this: to what extent does Aristotle suppose, and is he justified in supposing, that there is a correspondence between features or characteristics—in the *Sophistical Refutations*, defects—of arguments, the devices for inventing or manufacturing arguments, and types or kinds of arguments in a reasonably robust sense? For it is not hard to see that Aristotle's system is prone to a great deal of

⁶³ Cf. e.g., 166^a22–3, 33; ^b1, 10, 20, 22–3, 28, 37; 167^a21, 36; ^b1, 21, 37.

⁶⁴ Nothing prevents Aristotle from calling magnification one of the forms (εἶδη) common to all logoi (=speeches or kinds of speech) elsewhere, where forms of the enthymeme are not at issue (1. 9, 1368^a26 ff.).

overlap, and this of at least two kinds. On the one hand, it is possible to ask whether certain features or characteristics of arguments come to the same thing or whether some turn out to be versions or variants of one another. The same is true of corresponding devices for the invention of arguments with these features.⁶⁵ In one passage of the *Topics* Aristotle remarks that one topos effectively amounts to another (2. 2, 110^a10–13). But features or characteristics and the corresponding devices for inventing arguments can be genuinely distinct without yielding mutually exclusive kinds of argument. Everything depends, of course, on the kind of features in question.⁶⁶ This will be even more true of topoi, devices for the discovery of argument, to the extent that they furnish angles or points of view for the invention of arguments that are not closely tied to particular features or characteristics of argument. The sophistical topos, as Aristotle calls it, of leading an opponent to a position against which one is well supplied with arguments furnishes an especially good instance (*SE* 12, 172^b25). For this topos is a stratagem that can be put into effect by means of arguments of any and every kind, exhibiting the widest diversity of features.

Yet, as the evidence we have just been considering appears to show, Aristotle did want to divide arguments—at least roughly—into kinds with reference to the topos in which they originate. It seems that there was a certain amount of 'give' in the system, so to speak. On the one hand, the ideal of system and method that is part of the ancient conception of an art will have pushed in one direction, towards restrictions on what is to count as a τρόπος or εἶδος of argument. Perhaps one version of this ideal would be best realized by a highly regimented system in which topoi correspond one by one to proper species of argument on whose essential distinguishing characteristics they are based. On the other hand, Aristotle's view of how an art develops or emerges over time as the result of deepening insight into, and gradual systematization of, measures

⁶⁵ Aristotle shows some interest in questions of this kind in the *Sophistical Refutations*, where he considers several proposals—mostly in order to reject them—for assimilating different fallacies or bringing them under a common head. Cf. Dorion, *Les Réfutations sophistiques*, 85–9.

⁶⁶ In this connection it is interesting to note Aristotle remarking, in the discussion of fallacious argument in the *Sophistical Refutations*, that nothing hinders one argument from suffering from more than one defect (24, 179^b17 ff.). But in fact he does not go on to make the point I have just made. Instead he appears to think that fallacious arguments arise by and owe their fallacious character to a single central defect, which it is the task of solution (λύσις) to expose (cf. 20, 177^b31).

found to be effective by experience leaves much room for departures from this and other ideals on grounds of proven worth and practical effectiveness.⁶⁷

A glance at *Rhetoric* 2. 23, the chapter officially dedicated to topoi of the genuine enthymeme, is instructive in this regard. There we find signs of an impulse towards at least that imperfect level of regimentation characteristic of the *Topics* as well as traces of the opposite tendency. The expectations created by the standard analysis of the topos are fulfilled by the first few topoi catalogued. We have already touched on the first, from opposites (1397^a7-19), and the fourth, from the more and the less. The second, from inflections, licenses us to infer, for example, that just actions are good from the premiss that acting justly is acting well, and vice versa (1397^a20-3). The third, from relations to each other as Aristotle calls it, is based on the principle that if an agent acts in a certain way, e.g. justly, then the patient is affected in the same way, and conversely (1397^a23-^b11).

But the hope that the other topoi Aristotle will go on to describe are either based on or yield a classification of arguments, however crude and imperfectly systematic, distinguished with reference to laws of something like this kind, is quickly dashed. Some resemble substantive moral principles, thus possibly overlapping with the premisses and opinions proper to one field, to which Aristotle had earlier in the *Rhetoric* opposed the topoi common to all. Thus the fifth topos, from considerations of time, declares that what the beneficiaries of a good deed would have agreed to bestow on their benefactor as a fair recompense should not be withheld, once the benefit has been conferred, simply because the benefactor failed to extract a promise before acting (1397^b27-1398^a3).⁶⁸

⁶⁷ In the *Topics* Aristotle warns against excessive and misleading systematization. After dividing the method into four parts corresponding to the four predicables, accident, proprium, genus, and definition, he notes that the issues treated under the first three all ultimately have to do with the last, for being an accident and a proprium are necessary conditions for being a definition, as is specifying the genus of the item defined (1. 6, 102^b27-35). (Matters are a little more complicated than this: cf. Brunschwig, 'Le système des "prédicables"'.) All the same, he maintains, it would be a mistake to seek for a single unified method, as, even if such a thing could be discovered, it would be altogether unclear and of no use to the business in hand (102^b35 ff.). This remark prepares the way for an overlap of a different kind: explanations of the topoi recur in the versions that apply to each of the four predicables.

⁶⁸ The topos that instructs us to consider inducements to and discouragements from an action is an example of an overlap with the εἰδη of a different kind

Many of them seem to be angles of approach or points of view which are not tied very closely to even broadly formal features of argument. And not a few of these are more rhetorical than those in the *Topics* in that they turn on features of rhetorical debate that have no place in dialectic. Thus the topos of turning against one's opponent what is said against oneself is illustrated by an example in which a defendant asks his accuser whether he would have committed the offence of which he—the defendant—is accused (1398^a2 ff.). Upon receiving the answer 'no', the defendant is to respond that in that case he himself would hardly have done so. As Aristotle notes, this will only work if the accuser's reputation is suspect. There is what we might call a topos of hypocrisy, which urges the speaker to contrast an opponent's avowed principles with his (probable) hidden motives (1399^a27 ff.), and what we might call a topos of consistency, which urges the speaker to contrast an opponent's earlier and later actions with a view to suggesting their inconsistency or in order to contrast them unfavourably with his own actions (1399^b13 ff.).

What we have looks rather like the results of a survey whose findings have not been integrated into a common framework, are ordered according to no discernible principle, and are described in ways that seem to reflect the terms in which they were conceived by their users or by auditors like Aristotle as they began to make out a topos common to many arguments. They are much more loosely formulated than the topoi of the *Topics*, and Aristotle relies to a much greater extent on illustrative examples. He tells us several times that the topos he is describing is the principal component of the art of a particular rhetorician.⁶⁹ He frequently cites examples from Isocrates in connection with topoi that appear to be generalizations of the examples; he draws in the same way on the speeches of Lysias, though without mentioning him by name, and also mines the tragedians for arguments.⁷⁰

It is an interesting question how much of the disorder and lack

(1399^b30 ff.). For Aristotle's explanation differs hardly at all from the discussion of motives for action in the account of forensic oratory in book 1 (1372^a6 ff., 1372^b35). And neither appears to differ very much from the topos urging the orator to collect the good and bad consequences attendant upon actions so as to be able to advocate or oppose, accuse or defend, and praise or blame (1399^a9-17).

⁶⁹ Callippus 1390^a16; Callippus and Pamphilus 1400^a4; Theodorus 1400^b16; Co-rax 1402^a17 (in whose case the topos is of an apparent enthymeme).

⁷⁰ Cf. Kassel's Index Auctorum s.nn. Isocrates, Lysias, and the tragedians.

of system evident here reflects the incomplete state of Aristotle's researches, how much is due to the topical method itself, and how much to its application to the field of rhetoric. The *Topics* is to a certain extent better organized, but it too falls far short of yielding an exhaustive and exclusive system of kinds of argument. This failure need not be a problem by itself. From the point of view of a system of formal logic of the kind that Aristotle will go on to develop and expound in the *Prior Analytics*, these redundancies cannot fail to appear defective. But it is not necessarily a disadvantage for a method of invention, whose purpose is the discovery of arguments, if it allows arguments which from other points of view may count as the same to be discovered by different means.

But even so, we do seem to be faced with a problem when the topoi in question are themselves found on opposite sides of the divide separating topoi of real from those of apparent syllogisms or enthymemes. The most acute form of the problem arises when a topos specified in essentially the same terms is found on both sides. There is one apparently clear case in the *Topics*: a topos that recommends inferring that a predicate belongs to a subject without qualification from the fact that it belongs in a certain respect, somewhere, or at some time (2. 11, 115^b11 ff.), which resembles the fallacious topos of argument *secundum quid* discussed in the *Sophistical Refutations* (4, 166^b22-3; 5, 166^b37 ff.; 6, 168^b10 ff.; 25, 180^a23 ff.).⁷¹ One may also wonder how great a difference there is between the apparently legitimate topos of names and the fallacious topos of homonyms in the *Rhetoric* (2. 23, 1400^b16; 24, 1401^a12). More common are cases in which arguments simultaneously satisfy descriptions corresponding to topoi on both sides of the divide and could be produced by either. We have already noted a few cases in which arguments satisfying descriptions corresponding to topoi of the genuine enthymeme in *Rhetoric* 2. 23 also satisfy the description that corresponds to the fallacious topos of signs. And it is telling to find Aristotle noting that it is possible to argue fallaciously in accordance with one of the topoi of genuine enthymemes, using the same term, 'paralogism', that he applies in connection with the topoi of apparent enthymemes (2. 23, 1397^a29; cf. 2. 24, 1401^a33, ^b8).⁷²

⁷¹ Alexander of Aphrodisias seems to have noticed this, as we can tell from his use of an example drawn from the *Sophistical Refutations* (Top. 214. 12 ff. Wallies); the reference is to SE 5, 167^a7 ff.

⁷² He also describes one apparently legitimate topos as false (2. 23, 1400^b2).

Presumably there is a certain amount of give here as well. Producing arguments that are uniformly valid seems not to have been a necessary condition, in Aristotle's view, for inclusion in the ranks of topoi of genuine syllogisms. The point of the topoi seems to be more to set in train a process that results in the discovery of a valid syllogism than to provide a test or standard of validity itself. This seems to be the best way to understand the objections that are scattered liberally throughout the exposition of the topoi in the *Topics*.⁷³ For though Aristotle sometimes seems to raise an objection in order to correct the topos, so that the arguments to which it gives rise will now no longer be vulnerable to this objection, this is by no means always the case. Often enough it seems that the validity of the arguments in contention is to be decided by the two participants in the course of debate; it is not a question which the topoi answer themselves.

But even if originating in a legitimate topos is not sufficient to guarantee that a syllogism is valid, to the extent that topoi of genuine and apparent arguments are supposed to yield a corresponding classification, however rough, of arguments, it remains difficult to see how the pieces of Aristotle's system are to fit together. How, for example, is the practice of raising objections in the *Topics* related to the enquiry pursued in the *Sophistical Refutations* (1, 165^a17-18) into the causes because of which arguments are fallacious? Apart from the exception already mentioned, the topos of *secundum quid*, the topoi of fallacious argument appear to classify arguments along lines different from the topoi of the *Topics*. Are we to imagine that objectionable instances of the latter suffer from faults that can be analysed from the point of view of the former, while the unobjectionable ones do not? One example from the *Rhetoric* appears to satisfy this expectation nicely. It is the topos of relations to each other in accordance with which Aristotle says it is possible to argue fallaciously. As we saw, it depends on the principle that the action that corresponds to an instance of being acted upon that is, for example, just must itself be just, and vice versa. But Aristotle indicates that there are cases where, though it might be just for one person to undergo a certain punishment, it might not be just for certain persons to inflict it (1397^a23-^b11). And something very much like

⁷³ I discuss this issue at greater length in 'The Development of Aristotle's Logic: Part of an Account in Outline', *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 11 (1995), 177-205.

this point is discussed in connection with the fallacious topos of division and combination in *Rhetoric* 2. 24 (1401^a24-^b3). Though it is just that the slayer of a spouse should die and that a son should avenge the murder of his father, put the two together and it becomes clear that it was not just for Orestes to slay Clytaemnestra. In this case, the two systems do complement each other. We can see how the topos of relations can give rise to a great many good arguments and some bad ones as well, whose defects are captured by a topos of the merely apparent enthymeme. This degree of co-ordination is exceptional, however, and Aristotle nowhere explicitly attends to our question.

Whatever other lessons we may wish to draw, then, it seems that the presence of a topos of signs among the topoi of apparent enthymemes does not by itself exclude the possibility that Aristotle early recognized a legitimate use for non-deductive arguments that he would later classify as second- and third-figure sign-inferences. The relation between topoi and the arguments whose topoi they are is loose enough for topoi of genuine syllogisms and genuine enthymemes to give rise to arguments that are neither, and perhaps for topoi of apparent syllogisms and apparent enthymemes to give rise to genuine syllogisms or enthymemes.⁷⁴ Yet to judge by the evidence that we have been examining, Aristotle never directly confronts the question whether deductively invalid argument by signs can be a legitimate or reputable means of persuasion in his *Topics*-oriented discussions.

Nor, apparently, does he confront it indirectly. The topoi of *Rhetoric* 2. 23 are, as we have seen, more rhetorical than those of the *Topics* in one sense; are they also more rhetorical in the sense that they reflect a more relaxed and tolerant attitude towards deductively invalid argument? Many of them are capable of giving rise to invalid arguments, as Aristotle acknowledges. Perhaps they tend to this rather more than the topoi of the *Topics*. But precisely the looseness of the relation between topoi and arguments on which we have dwelt means that this does not decide the issue. What is more, Aristotle makes a number of remarks in neighbouring chapters which strongly suggest that to fail to be a syllogism is thereby to fail to

⁷⁴ As it happens, an argument can be an instance of a fallacy, e.g. affirming the consequent, and be valid all the same. Cf. G. Massey, 'The Fallacy behind Fallacies', in P. E. French, T. E. Uehling, H. K. Wettstein (eds.), *The Foundations of Analytic Philosophy* (Midwest Studies in Philosophy, 6; Minneapolis: University of Minnesota Press, 1981), 489-500.

be an enthymeme as well (2. 22, 1397^a3-4; 24, 1400^b34-7, 1401^b9). Unless we suppose that he thinks that to unmask an argument as a merely apparent enthymeme is not at the same time to put paid to all of its legitimate persuasive powers, this is not very encouraging. It remains the case that, outside *Analytically*-oriented passages, we do not find a discussion of invalid sign-arguments from the perspective of an orator whose object is legitimate or reputable persuasion by means of them.

(b) *A developmental proposal*

I suggest that attention to the different places occupied by signs in the two accounts will furnish the clue we need. In the *Analytically*-inspired treatment signs occupy a place of central importance: enthymemes are from likelihoods and signs; and once signs narrowly so called are distinguished from tokens, they are put beside tokens, likelihoods, and paradigms as one of the four sources of enthymemes (*An. pr.* 2. 27, 70^a9-11; *Rhet.* 1. 2, 1357^a32-33; 2. 25, 1402^b12-14). By contrast, discussion of signs is confined to a rather obscure corner of the earlier *Topics*-inspired system.⁷⁵ Unless we suppose that a discussion of the legitimate use of signs has gone missing, they receive explicit attention only as a source of apparent enthymemes. At the very least, this is a striking change in emphasis.

For reasons that we have just been considering, we need not and should not postulate anything as dramatic—or as easy to characterize—as a volte-face, a change from the simple rejection of a form of argument as a legitimate means of persuasion to its wholehearted acceptance. And, as we have noted, the fact that whatever change may have taken place had to do so against the shifting background of a change in framework complicates the question enormously. Did Aristotle's change of attitude merely happen to coincide with deeper systematic changes, so that one attitude revealed itself in the context of the earlier system and the other in that of the later system? Or was the change in attitude somehow more closely connected with these systematic developments? We shall, for example, want to ask whether one system accommodated or lent itself better to a proper appreciation of invalid argument by signs. At the same time, we must be wary of *post hoc* explanations here. It is tempting to see in the *Analytically*-oriented account of the enthymeme the realization

⁷⁵ 'Das σημείον . . . begegnet in der Rhetorik noch einmal an völliger andersartiger Stelle des Systems' (Solmsen, *Entwicklung*, 22).

of its superior potential in this regard. But Aristotle could have continued to view invalid argument from signs with suspicion after the introduction of the categorical syllogistic (as not a few commentators have supposed that he did). And the fact that we have an *Analytically*-based system that has been made to accommodate such arguments does not by itself mean that the *Topics*-oriented system could not have been made to do the same.

Nevertheless, it will help us to understand why Aristotle's attitude changed and what kind of change it underwent if we first consider how features of the *Topics*-oriented system and the pre-suppositions they reflect may have made it harder to accommodate the insights about the legitimate use of sign-inferences that are explicit in the *Analytically*-oriented account. For, I shall argue, a crucial part of the reason why Aristotle's views needed to change, i.e. why he was at first less receptive to argument from signs than he later became, was an uncritical, or insufficiently critical, application to rhetoric of the topical system worked out in the *Topics* and *Sophistical Refutations* with dialectic in view. This is of course compatible with different decisions about how to distribute responsibility between the system itself and various external factors which may have made it seem less than urgent to change or modify it. I shall touch on the complementary question whether the discovery of the categorical syllogistic and its application to rhetoric played a part other than that of a witness to the change in Aristotle's attitudes later.

The rules of dialectic restrict it to the use of syllogisms, i.e. arguments that necessitate their conclusions in the way specified by the definition of the syllogism (and, in an ancillary role, inductions).⁷⁶ Sophistry and eristic depart from dialectic most conspicuously by violating this rule. In order to achieve apparent victory in argument and to give the appearance of wisdom without its reality, they employ arguments that appear to be syllogisms without really being syllogisms. The *Sophistical Refutations* is in the first instance a guide to the invention of arguments by which to deceive (cf. 165^a28-37). The *topoi* catalogued in it prescribe how to induce mental slips and errors of reasoning and exploit them in order to produce the illusion that a conclusion has been validly deduced. Thus chapter 7 goes into a certain amount of psychological detail about the kind of mistakes people commonly make that are the basis of the deception

⁷⁶ On the ancillary role of induction in Aristotle's conception of dialectic see Brunschwig, *Topiques*, p. xxxii n. 2.

(ἀπαρή) that sophistical argument aims to produce (169^a22, 37, ^b2, 11; cf. 5, 167^b1, 8-12). The persuasive power of the arguments to which they give rise depends on this illusion and cannot survive without it.

The treatment of *topoi* of the apparent enthymeme in *Rhetoric* 2. 24 adheres closely to this model. The *topos* of signs follows on the heels of a *topos* which requires the speaker to use exaggerated and emotionally coloured language to induce the audience to reason invalidly (παράλογίζεσθαι) either that the accused is guilty, when the speaker is bringing an accusation, or that he is innocent, when the speaker is the accused (1401^b3-9). The discussion of signs, which includes the examples we have already noted, begins with the remark that this too is invalid (ἀσυλλόγιστον). Under the head of the consequent, discussed in the immediate sequel, we find a number of other examples that could easily have been treated under the head of signs, as one of them is in the *Sophistical Refutations* (1401^b20 ff.; cf. SE 5, 167^b1 ff.). The fact that beggars sing and dance in temples, for example, can be cited in support of the conclusion that they are happy because this is the kind of thing happy people do (1401^b25-9). But as Aristotle notes, the way in which beggars and the happy do this is different, so that this *topos* comes under the head of omission or *ellipsis*. Plainly Aristotle is thinking of an orator who, though in full command of the facts that would set matters straight, chooses to manipulate the available evidence to his own deceptive ends by omission and selective presentation (cf. 1401^b2, 29, 34; 1402^a15).

We search in vain, however, for an acknowledgement that a sign-argument can be put forward in good faith, in circumstances that do not permit better arguments, and to auditors who do not mistake it for a valid syllogism, but take themselves to have been presented with considerations of a certain weight none the less. Like sophistry, rhetoric relaxes the requirements on the arguments it uses, but with this all-important difference. Yet, as we have noted, precisely the possibility of non-conclusive but reputable argument by signs that is unremarked in *Topics*-oriented parts of the *Rhetoric* is prominently advertised by the elevation of sign-arguments to the standing of genuine enthymemes in the *Analytically*-inspired passages. It seems, then, that Aristotle applied—at least at the level of systematic reflection—a conception of defective argument developed with dialectical debate in view to the field of rhetorical argument without taking its special characteristics sufficiently into account, while an

improved account that better accommodates those characteristics is first offered in later *Analytically*-oriented passages.

(c) *Two approaches to argument from likelihood*

This suggestion receives additional support from the treatment of apparent enthymemes based on likelihood in *Rhetoric* 2. 24, which I promised to consider earlier. The case is in some respects different from that of signs. Aristotle makes it plain in this chapter that he also envisaged a legitimate use for likelihoods (1402^a16, 22–4). And unlike a possible legitimate use for sign-arguments, argument from likelihoods is discussed outside *Analytically*-oriented passages (*Rhet.* 2. 19, 1392^b14–^a8). None the less, I shall argue, the application of the topical framework, which was developed with dialectic and sophistic in view, to rhetoric seems to have interfered with the proper appreciation of argument from likelihood as well.

According to *Rhetoric* 2. 24, the apparent enthymeme from likelihoods is to be understood along the same lines as the fallacy of *secundum quid* discussed in the *Sophistical Refutations*, where it is characterized more fully as turning on a confusion of 'what is said without qualification or simpliciter [*ἀπλῶς*] with that which is said not without qualification, but in a certain way or place or time or relation' (*Rhet.* 2. 24, 1402^a2–29; *SE* 4, 166^b22–3; 5, 166^b37–167^a20; 6, 168^b1 ff.; 25, 180^a23 ff.). Aristotle's examples—that the unknown is known because it can be known that it is unknown, or that what is not is, because it is not a being—make it plain that he is thinking of a technique for producing apparent contradictions.⁷⁷ Typically one thesis is taken as obvious, while the other is demonstrated, or apparently demonstrated, by means of the technique in question (*SE* 5, 167^a7–14; cf. 166^b34–6; 6, 168^b14–16). The contradiction is produced either by omitting the qualifications with which one predication obtains and opposing it in this unqualified form to a predication that does obtain without qualification, as in both of the above examples, or performing the same operation on a pair of predications both of which obtain with a qualification and opposing the two unqualified predications obtained in this way to each other (cf. 167^a7 ff.; 180^a28–9, ^b8 ff.).

⁷⁷ In the *Sophistical Refutations* we find 'what is not is because it is the object of opinion' (5, 167^a1). In Greek the contradiction of the second example is sharper, because we are obliged to accept 'I do not know *x*' and 'I do know *x* (that it is not known)' when *x* is the unknown.

According to Aristotle, the same technique is applied in rhetoric when what is likely only in a certain way is taken for likely without qualification (*Rhet.* 2. 24, 1402^a7 ff.).⁷⁸ By means of it, one can argue, for example, that since unlikely events often do occur, the unlikely is likely after all. It is also on this topos, Aristotle maintains, that the infamous method of Corax and Tisias is based (1402^a17–23):⁷⁹

If the accused is not open to the charge—for example, if a weakling is tried for violent assault—the defence is that he was not likely to do such a thing. But if he is open to the charge—that is, he is a strong man—the defence is still that he was not likely to do such a thing, since he could be sure that people would think he was likely to do it. So too in other cases, for the accused must either be open to the charge or not, but while both seem likely, one is likely, the other not without qualification but in the way described.

Aristotle's solution, based on his treatment of the fallacy of *secundum quid* in the *Sophistical Refutations*, draws on one of the most characteristic and distinctive parts of his philosophical method, namely the distinction between the central, unqualified application of a term and a range of related applications qualified in one respect or another. Failure to keep apart qualified and unqualified, or differently qualified, uses of a term is responsible both for deep philosophical perplexities and, not always unrelated, confusions deliberately induced by sophistry.

It is less clear to what extent the same solution can be applied to the technique of argument by likelihood, however. It is a conspicuous feature of the dialectical fallacies discussed by Aristotle that the contradiction the sophist aims to produce dissolves once clarity about the equivocation between qualified and unqualified, or differently qualified, uses of a term has been exposed. One then sees that it is not the same thing that is asserted and denied by the allegedly contradictory pair of propositions (*SE* 6, 168^b11–12). To be sure, opposed arguments from likelihood can be reconciled by allowing, for example, that the suspect is likely to be guilty viewed in a certain way, as satisfying a certain description, and at the same time that he is likely to be innocent, regarded in another way, as satisfying another description. But what is required is a decision

⁷⁸ *παρὰ τὸ μὴ ἀπλῶς εἰκός, ἀλλὰ τι εἰκός.*

⁷⁹ Cf. Plato, *Phdr.* 267 A, 273 B–C. Material concerning Corax and Tisias is collected by Radermacher (ed.), *Artium Scriptores*, 28–35.

about whether, on balance, it is likely that the suspect is guilty or innocent.

I think that Aristotle did take himself to be offering a solution to this problem and, further, that it was at best a limited success. For he appears to have supposed not only that these arguments depend on a confusion of what is unqualifiedly likely with what is likely only with a certain qualification, but that one of the opposed likelihoods should prevail because, unlike the other, it really is likely without qualification. This seems to be the point he intends to make in connection with the first example he considers: the argument which appears to show that, because many unlikely events do occur, the unlikely will be likely. Aristotle replies (1402^a13-16): 'yet not without qualification, but just as the trick [*συκοφαντία*] is effected in eristic arguments by not adding the "according to what" or "in relation to what" or "how", here it is by the likelihood being not without qualification but in a certain respect likely.'

Now this case does seem to lend itself to a solution like that of the dialectical puzzles studied in the *Sophistical Refutations*. Once the equivocation on which it depends is exposed, it becomes clear that the conflict between the two likelihoods is only apparent, and there is no difficulty seeing which is relevant to the present question. A general, for example, could correctly judge that each of a series of engagements planned to begin simultaneously is likely to succeed, but, at the same time, regard it as unlikely that they will all succeed, and so plan accordingly. The fact that it is likely that some likely events will not occur does not imply that there are among these events some that are not likely. Notice, however, that it is not one and the same event that is likely and unlikely or two conflicting versions of one event which are each likely.

This solution already appears less satisfactory when applied to the style of argument made famous by Corax and Tisias (1402^a22-3). On those—surely more common—occasions on which the likely behaviour of the bigger man as such should prevail in argument, however, it is not clear that it owes its success in overriding or, so to speak, trumping the opposed likelihood to the fact that it is likely without qualification while the other is likely only with qualification. Certainly this likelihood could be trumped in its turn by others having to do with the temperament of either man, the

state of his health, or any number of other factors.⁸⁰ And there is no reason to believe that the likelihood that should prevail, and that yields the conclusion which is on balance likely on a given occasion, does so because it is likely without qualification. Indeed, there may be no such thing as an unqualified likelihood or an unqualifiedly likely conclusion. In any case, it seems that the relations between likelihoods in virtue of which they override and are overridden by one another do not turn on a difference between being qualified and unqualified.

Aristotle's account appears to overlook this because it focuses on a small number of examples that share a curious reflexive character with some of the examples of the fallacy of *secundum quid* discussed in the *Sophistical Refutations*. In all of them, the second, apparently contradictory, proposition is produced by somehow taking the first into account. It is the non-being of what is not and the being unknown of what is unknown which are made the basis of the arguments that the one *is* and the other *is known* respectively.⁸¹ It is the very likelihood that the stronger man attacked that is the basis for the argument that it is likely he did not and the fact that a number of events are (merely) likely that is the ground for the conclusion that it is likely that some of them will not occur. The way in which one likelihood is dependent or parasitic on the other may have made it easier to view it as somehow qualified by comparison with the other. It is also striking that, because of their reflexive character, all of these arguments are, if you will, *pure* fallacies. That is to say, what makes them disreputable arguments, so that anyone convinced by one of them has committed an error of reasoning, and anyone who puts them forward without having committed this error himself is guilty of deceit, is not sensitive to contingent and alterable facts concerning the evidence available in the circumstances of the argument. Within this limited sphere the model of the dialectical fallacy of *secundum quid* may throw some light on the misuse of likelihood. To see the likelihood that the stronger man did not attack in relation to the likelihood that he did, on which it depends entirely—assuming there are no other known

⁸⁰ Notice that in Plato's version of the infamous encounter between the weak man and the strong man, the first is also brave, the second also a coward (*Phdr.* 273 B-C).

⁸¹ Cf. also the arguments discussed in *SE* 25, e.g. the person who, having promised to break an oath, fulfils an oath while breaking an oath, or the person who obeys an order to disobey an order (180^a34 ff.).

factors—is to know which is the real and which the merely apparent likelihood (cf. 1402^a26–7).

But there is ample scope for sharp practice and deceit outside such pure cases by the deliberate suppression and selective presentation of applicable likelihoods. In such cases the deceit consists in a deliberate failure to make the best use of the evidence available; though it uses arguments that would in other circumstances, where less or different information is available, rightly be judged good or reputable arguments, but here, in these circumstances, count as bad arguments because better ones can be made. But, as we have seen, this is not well described as a matter of deliberately confusing what is likely only with a certain qualification with what is likely without qualification. Nor does Aristotle's account show an awareness of the way in which argument from likelihood on both sides of a question can, by bringing to light the likelihoods that bear on the issue and the relations between them, help a deliberative body discover the conclusion that is on balance likely.

But, I should like to suggest, the *Analytically*-oriented section of *Rhetoric* 2. 25 (1402^b12–1403^a16), which is devoted to the solution (λύσις) or refutation of rhetorical arguments, does a better job of accommodating these features of argument by likelihood and, therefore, does represent an advance over what we have found in the *Topics*-oriented account of 2. 24. This section begins abruptly after the *Topics*-oriented account of refutation that occupies the first half of the chapter, by observing that enthymemes arise from four sources: likelihood, paradigm, token, and sign.⁸² It presupposes

⁸² On the grounds for dividing the chapter into *Topics*- and *Analytically*-oriented sections in this way see Solmsen, *Entwicklung*, 27–31. Why not compare the *Analytically*-oriented account of refutation with the *Topics*-oriented account, which would seem to be the most natural way to contrast the two approaches to argument? Because the *Topics*-oriented account appears not to make contact with the same issues at all. It begins by noting that refutation (λύσις) is possible either by counter-syllogizing (ἀντισυλλογίζεσθαι) or by bringing an objection (ἔνστασις). There are, it continues, four ways of objecting, and it cites the *Topics*, presumably 8. 10, though the four kinds of objection there do not correspond to those mentioned here. The advice in the *Rhetoric* concerns ways of producing counter-examples to an opponent's contentions, but says nothing at all about how to challenge the cogency of his arguments, even though this is, according to the *Topics*, the only true λύσις (8. 10, 161^a1–2, 14). Thus it says nothing about the distinctive vulnerabilities of rhetorical argument and how to exploit them. What is more, it seems to be aware neither of the kinds of conclusions distinctive of rhetoric—for the opponent is pictured arguing for general principles—nor the fact, emphasized in the following *Analytically*-oriented section, that showing that the general principles that do figure in an opponent's argument are subject to exceptions is not sufficient (compare 1402^b2–3

the *Analytically*-oriented account of rhetorical argument at *Rhetoric* 1. 2, 1357^a22–1358^a2, and, like it, refers to *Prior Analytics* 2. 27 (1403^a5)—with the difference that paradigms are now treated as a kind of enthymeme rather than a species of argument co-ordinate with the enthymeme (cf. 1403^a5–6). As we have already noted, the aim of the *Analytically*-oriented discussion of refutation of *Rhetoric* 2. 25 is to determine whether and how each of the forms of rhetorical argument distinguished by the *Analytically*-oriented account is open to objection, and we have already had occasion to consider what it says about arguments from signs. Aristotle begins his discussion of argument from likelihood by noting that such arguments are always open to a certain form of objection, since what is true only for the most part is subject to exceptions, but he insists that this objection is deceptive, producing an apparent and not a genuine refutation (1402^b20–1403^a3).⁸³ It establishes only that the opposed argument is not necessary, which is not sufficient (ἰκανός), as it is essential to show that it is not likely (1402^b24–35); though judges are sometimes swayed by objections of this kind, he insists, they should not be (1402^b30–4). His account of how to bring an adequate objection is less than ideally perspicuous, however (1402^b35–1403^a1).⁸⁴

An objection shows an argument to be unlikely if it states what is more usually true [μᾶλλον ὥς ἐπὶ τὸ πολὺ]. This can be done either in respect of time or in respect of the matters at issue, though it will be most effective if in both ways, for if things are more often thus, this is more likely.

It is not easy to say what kind of procedure is envisaged here. One way of refuting an argument from likelihood is to show that the generalization on which it is based is not true for the most part. There are occasions for such an objection, but arguments from likelihood are vulnerable to another kind of objection as well. As we have already noted, two true for-the-most-part generalizations correctly applied to an instance falling under both of them can give rise to arguments to conflicting conclusions. Recall the example already mentioned which pits a likelihood based on a person's nationality

with 1402^b28). Has the *Analytically*-oriented section replaced part of its *Topics*-oriented predecessor? If so, no traces survive. The plan announced at the beginning of the chapter foresees neither the *Analytically*-oriented section nor anything not covered in the *Topics*-oriented section as we have it.

⁸³ It is a παραλογισμός (1402^b26).

⁸⁴ A lightly modified version of the Oxford translation of Rhys Roberts, revised by J. Barnes.

against one based on his profession. Such arguments need not all be on a level with each other. One likelihood may override or, as I put it earlier, trump the other. In this case, for example, the fact that most members of the profession to which the person in question belongs are unbelievers will, most likely, take precedence over the fact that most of his fellow citizens are believers, though the latter is no less true and could on another occasion be the basis of an argument that won, and deserved to win, acceptance. Of course, the same person may come under other generalizations in virtue of satisfying other descriptions which may turn the tables yet again.

Now it seems likely that Aristotle has in mind here the first kind of objection, which directly challenges the principle put forward as a likelihood by the opponent.⁸⁵ But that he grasped and distinguished both kinds of objection is shown, I believe, by his account of the refutation of enthymemes depending on paradigms, which, he maintains, is the same as that of likelihoods (1403^a5-6). As we have already noted, this is because an argument by paradigm claims nothing more for the general principle which it supports with an example or examples before applying it to a further particular instance than the for-the-most-part character enjoyed by the likelihood.

Unfortunately this does not emerge clearly from the text, where something appears to have gone wrong. The solution favoured by the most recent editor, R. Kassel, is a modified version of a suggestion proposed by Gomperz, whose point of departure was an account of the passage's meaning advanced by Vahlen.⁸⁶ According to it, Aristotle describes two ways to oppose an argument by example here. (1) One may grant that things are for the most part as the opponent maintains, but show by means of one example that they are not necessarily or always so. (2) Failing that, i.e. if one can produce no counter-example and must therefore concede that the opponent's generalization is true without exception, there remains only the objection that it does not apply in the present case. This emerges clearly from the text printed by Kassel (1403^a6-10).⁸⁷

⁸⁵ Cf. Maier, *Syllogistik*, II/1. 466 n. 1; Sprute, *Enthymentheorie*, 118-19.

⁸⁶ Cf. Kassel, *Der Text der aristotelischen Rhetorik*, 143-4; T. Gomperz, 'Beiträge zur Kritik und Erklärung griechischer Schriftsteller, III', *Sitzungsberichte Wien*, 83 (1876), 3-37 at 3-4, repr. in id., *Hellenika* (Leipzig: Veit, 1912), I. 236-74 at 236-8. J. Vahlen, 'Zur Kritik aristotelischer Schriften (Poetik und Rhetorik)', *Sitzungsberichte der Wiener Akademie*, 38 (1861), 59-148 at 142-3, repr. in id., *Gesammelte philologische Schriften* (Leipzig: Teubner, 1911), I. 13-105 at 99-100.

⁸⁷ *πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτῇ λύσει καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν (ἐν) τι*

Enthymemes depending on examples may be refuted in the same way as likelihoods. If we have a single negative instance, the argument is refuted as a necessity, *even though* the positive examples are more and more frequent. Otherwise, we must contend that the present case is dissimilar, or that the conditions are dissimilar, or that it is different in some way or other.⁸⁸

The problem is that, according to this view, Aristotle first recommends a type of objection that he has just dismissed as apparent rather than real when directed against an argument from likelihood. As we have seen, to succeed in bringing an objection of this kind is, so far, to have failed to produce a genuinely cogent objection.⁸⁹ Yet if we are to believe Vahlen *et al.*, Aristotle treats this as the best objection one can bring, and, rather than going on to describe a better objection as he did before, he proceeds to describe the objection which one is to fall back on in the event that one cannot even bring an objection of this first, but inadequate, kind. Having conceded that the opponent's generalization—*Bs* are *A*—which he is now trying to apply to a further instance, say *C*, holds without exception, one can only argue that *C* is not a *B* after all. But if one is in a position to show that an opponent's argument is perfectly irrelevant, because the item at issue does not fall under the generalization exemplified by one's paradigm, in at least some favourable cases, this would be a vastly more cogent objection than one based on a single exception to the proposition that *Bs* are (as a rule) *A*, and would seem to be better used as an objection of first rather than last resort. What is more, since the received text plainly goes on to describe an objection against an argument based on a principle that obtains only for the most part, Gomperz and Kassel are forced to delete part of it.⁹⁰

It seems far more likely, then, that the received text, at least as it is usually understood, contains not more but less than Aristotle wrote: a crucial part of the objection, corresponding to the genuine objection to the argument from likelihood already discussed,

οὐχ οὕτω, λέλνται ὅτι οὐκ ἀναγκαῖον, εἰ καὶ τὰ πλείω ἢ πλεονάκεις [ἄλλως· ἐάν δὲ καὶ τὰ πλείω καὶ τὰ πλεονάκεις] οὕτω, (ἐάν τε μὴ), μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὁμοῖον ἢ οὐχ ὁμοίως ἢ διαφορὰν γέ τινα ἔχει.

⁸⁸ A modified version of J. Barnes's revision of Rhys Roberts's Oxford translation.

⁸⁹ In dialectic, where more is claimed for the principles established by induction, a single counter-instance is a sufficient objection (*Top.* 8. 2, 157^a34-7; 8. 8, 160^b1-5).

⁹⁰ '[These words: ἄλλως . . . οὕτω] die vom Zusammenhang geforderte ausnahmslose Geltung der vom Gegner behaupteten Erfahrungsregel nicht ausdrücken können' (Kassel, *Der Text*, 144; cf. Gomperz, 'Beiträge', in *Hellenika*, I. 237).

has gone missing or been misunderstood.⁹¹ Taken in this way, the passage explains that the refutation of arguments from paradigm is like that of enthymemes from likelihood in that a single counter-instance establishes that it is not necessary, while it requires more and more frequent counter-instances to make a case that it is not likely. Only at this point does Aristotle go on to describe a further variety of objection, which we are to fall back on if we are unable to bring an objection of the second, but first adequate, type just mentioned: one should now attempt to show that the case at issue differs in some way or other.

His remarks here are, to be sure, little more than a hint. But since the concession that prepares the way for the last-mentioned objection grants only that the opponent's generalization does obtain for the most part, showing that the item in contention is somehow different need not involve showing that it does not, after all, fall under the subject term of the general principle illustrated by the paradigm. It can also be done by discovering a feature that shows that it is, or is likely to be, one of the exceptions. It is in this direction, I suggest, that Aristotle's injunction to 'contend that the present case is dissimilar, or that the conditions are dissimilar, or that it is different in some way or other' seems to point. One can, for example, grant that wars against neighbours are as a rule a bad idea, but argue that Athens should go to war with Thebes all the same because this war has another feature; for example, perhaps it would be a war against a power that is preparing aggression, which wars are as a rule better undertaken sooner rather than later. Unlike the alternative embodied in Kassel's text, this does do justice to the concessive structure of the argument.

If this is right, the *Analytically*-oriented account of objection in *Rhetoric* 2. 25 contains, as the *Topics*-oriented treatment of *topoi* of the apparent enthymeme in the preceding chapter did not, a clear recognition that it is possible to combat an opponent's argument from likelihood without impugning the likelihood on which it depends. It is puzzling why Aristotle mentions this kind of objection first in connection with argument by paradigm—assuming that the conjectural interpretation of 1402^b35–1403^a1 above is correct—but it is plainly no less applicable to argument from likelihood. The objection described in the discussion of objection to likelihood and

⁹¹ See appendix A to this study for suggestions about how the text is to be restored or understood to bring out the required meaning.

identified as the first legitimate objection in the account of enthymemes based on paradigm corresponds roughly to the picture of defective argument by likelihood in *Rhetoric* 2. 24 by unmasking a would-be likelihood as merely apparent, albeit in a very different way. But the second accepts the likelihood on which the opponent's argument depends and aims instead to show that, all the same, the argument should not prevail in the present case. In this way, it also does more justice to the deliberative character of rhetorical argument by showing how the conclusion that is on balance most reputable or is best supported by the evidence can emerge from debate in which opposed considerations are pitted against each other.

Note, however, that if the *Topics*-oriented treatment of likelihood in *Rhetoric* 2. 24 is, like the treatment of signs in the same chapter, a case of the topical framework somehow hindering or failing to accommodate a proper appreciation of rhetorical argument, the new approach to likelihood in the *Analytically*-oriented section of 2. 25 is not, like the new *Analytically*-oriented account of sign-argument, a case of relaxing or loosening the standards of reputable argument. For what we find is not the admission of a new class of reputable arguments by likelihood, previously excluded or not explicitly acknowledged, but an improved understanding of the conditions that determine the value of arguments that had been recognized as reputable enthymemes all along.

(d) *The impact of the categorical syllogism*

We have seen how the dialectical system expounded in the earlier and more extensive *Topics*-oriented sections of the *Rhetoric* failed to do justice to forms of argument prominent in rhetoric. And I have argued that we find, albeit only in the form of a sketch, a better approach in the later *Analytically*-oriented insertions, which combines a deeper understanding of argument by likelihood with a recognition of the legitimacy of deductively invalid but reputable argument by signs. On the basis of this, I suggested that Aristotle underwent a change of attitude the result of which was less a reclassification of argument types than a clearer recognition of the important legitimate uses of forms of argument that had previously received attention only as means of deception, and an improved understanding of how their value is to be assessed. But so far we have used orientation towards the *Prior Analytics* as a control, in order to ask whether passages we know to be later because of their reliance on

the categorical syllogistic are different in other ways as well. The question I wish to pursue now is whether, apart from serving as a witness to developments in Aristotle's views about rhetorical argument, the discovery of the categorical syllogistic and its application to the field of rhetoric entered more directly into them.

All the cautions stated before remain in effect. The categorical syllogistic was neither a necessary nor a sufficient condition for the changes for which I have argued. Although Aristotle was not in a position, before the invention of the categorical syllogistic, to give the kind of answer to the question when and in virtue of what an argument is valid that a formal logical theory makes possible, he had a conception of deductive validity, revealed in the definition of the syllogism. He was therefore able to relax the requirement for deductive validity or not, as he saw fit. As we have already noted, there are some hints that he did so in the definition of the enthymeme at *Rhetoric* 1. 2, 1356^b15-17. And he could have continued to insist on deductive validity after the development of the categorical syllogistic. None the less, I should like to suggest that there is a set of closely related characteristics of the topical method that set it apart from the categorical syllogistic that *may* have made the latter better suited to accommodate non-deductive inferences by signs and thus *may*, in co-operation with other factors, have pointed the way to a better understanding of their power to play a reputable part in argument. At all events, they helped determine the form that this accommodation took, and consideration of them will help us better understand the development that Aristotle's thinking underwent for this reason at least.

The theory of the categorical syllogistic expounded in the *Prior Analytics* aims to give a precise formal account of valid argument—a task that had not been formulated, let alone attempted and accomplished, before. Every syllogistic mood has two premisses in each of which two terms, represented by variables, are related by one of four predicative relations, the logical constants of the system. The self-evident validity of the perfect moods is made the basis of rigorous proofs of the validity of the remaining moods, a process which Aristotle calls perfection. That the system of moods is adequate or complete is what Aristotle attempts to establish by means of the famous completeness proof of *Prior Analytics* 1. 23. There he argues that every syllogism, i.e. every argument satisfying the definition of the syllogism, is, or is composed of steps that are, in

one of the moods, so that the validity of every syllogism is in effect secured by the perfect syllogisms of the first figure via the reduction of the imperfect moods to the perfect. On the strength of this result, Aristotle claims that every syllogism can be analysed into one of the moods of the figures, and explains how to do this in order to confirm, from another point of view, the completeness he claims for his system (*An. pr.* 1. 32, 47^a2 ff.). Because the categorical syllogistic provides an exclusive, and within its limits exhaustive, *system* of types or forms of valid argument, it makes possible a new kind of answer to the question when and in virtue of what an argument is valid. It is valid if and because it is formally valid, and it is formally valid if analysis reveals that it belongs to one of the moods of the categorical syllogistic. This was an extraordinarily impressive achievement, never mind that the categorical conception of logical form ensures that the limits within which Aristotle's results obtain are, as we can see but he did not, excessively narrow.

The method on offer in the *Topics* presents a very different picture. It is a system of invention, whose object in the first instance is to collect and arrange points of departure for the discovery of arguments. This is no less true of the *Sophistical Refutations*; it too is organized as a method of invention, though in this case of fallacious arguments. Yet, as we have seen, Aristotle seems to have supposed that, by and large, arguments can be roughly organized into kinds of valid and invalid argument under heads provided by the *topoi*, and this is as close as he comes to answering the question which arguments are valid and why. By comparison with the answer offered by the categorical syllogistic, it is extremely rough around the edges. As Aristotle acknowledges, not every argument to which a *topos* of genuine syllogisms or enthymemes gives rise is itself a genuine syllogism or enthymeme; nor, though he may not have noticed this, is every argument that satisfies the description corresponding to a *topos* of apparent syllogisms invalid. Which arguments are and why is not a question the topical system can answer; before the categorical syllogistic there is a sense in which Aristotle may not have had the conception of a systematic answer to this question.

Nevertheless, the features with reference to which the topical system distinguishes kinds of argument, rough as they may be, are, in a broad sense whose boundaries are hard to draw, formal. Like the moods of the categorical syllogism, many of the *topoi* can be applied repeatedly to new content to yield arguments which

belong to the same kind in virtue of sharing the same form. Perhaps in the context of dialectic or would-be dialectic, where syllogisms are the only legitimate means of argument (apart from induction), there is a rough coincidence between the arguments produced in accordance with a *topos* of merely apparent syllogisms, the class of arguments characterized by the broadly formal defect described in that *topos*, and the intention to deceive by means of it. In this way an enquiry of the kind pursued in the *Sophistical Refutations*, into a method for the invention of deceptive arguments, can also serve the other purposes identified by Aristotle, which, though ultimately more important to him, are secondary from the point of view of the method's organization, i.e. to identify and expose the—usually deliberate—bad reasoning in the arguments of others and to help us guard against unintentional errors of reasoning in our own thinking (cf. *SE* 16, 175^a5 ff.).⁹² But when conditions change, as we have seen they do in rhetoric, a system of kinds of this type will no longer serve even as a rough guide to good and bad argument. As we have seen, arguments suffering from the defects catalogued in the *Sophistical Refutations*, and known to do so both by their authors and those to whom they are offered, may be reputable none the less. And when they fail to be, it will be for reasons other than these defects.

It may be that the new level of precision and clarity that the categorical syllogistic brought to questions about which arguments are valid and why also helped bring the issue of the relation between an argument's validity and its legitimate claim to influence rational judgement into sharper focus, making it harder to avoid the question whether the latter extends further than the former.⁹³ According to this suggestion, the roughness and imprecision of the topical framework would have made it easier to imagine that the diminished rigour and stringency characteristic of rhetorical argument could somehow be accommodated by making a few adjustments to the topical framework taken over from dialectic without abandoning its division of arguments into good and bad kinds on broadly formal lines—perhaps by means of an increased reliance on the for-the-most-part.

⁹² Knowledge of sophistical argument is an essential part of the dialectician's knowledge (*Rhet.* 1. 1, 1355^a29–33; *SE* 9, 170^a36–8, 171^a11; 11, 172^b5–8; 34, 183^b1). Knowledge of how fallacies arise enables us to confront and solve them (*SE* 16, 175^a17–19; cf. *Top.* 1. 18, 108^a26–37).

⁹³ Cf. Burnyeat, 'Enthymeme', 38–9.

But whether or not the categorical syllogistic contributed to a change in the direction of greater receptivity towards invalid argument from signs by making this kind of illusion harder to sustain, it had the advantage of being unburdened by the assumptions characteristic of the topical method of invention which led Aristotle to attend to formally defective argument almost exclusively in contexts that presuppose an intention to deceive and to study them there only as means to this end. And Aristotle exploited its narrower focus on the formal conditions of validity to disentangle the question of an argument's validity from the intentions with which arguments of its form are used in the sphere of dialectical and sophistical argument. He used the theory of the categorical syllogism to help characterize the types of argument distinctive of rhetoric: the paradigm, two types of sign, the token, and the likelihood. It seems that his purpose was now not only to draw attention to the formal defects of some of them, but by so doing, to prepare the way for a better understanding of the considerations not captured by syllogistic analysis on which depends their power to afford non-conclusive but reputable considerations for a conclusion. Everything said in *Topics*-oriented passages about how these defects can be made to serve deceptive ends remains true, but the connection between these means and these ends that is presupposed in every *Topics*-oriented discussion of signs is explicitly severed. The effect of this approach, I suggest, is to direct attention away from the form of the argument, construed generously, and towards the broader context constituted by the argumentative circumstances in which it is used. Common to the *Analytics*-oriented discussions of likelihoods and signs is the recognition that the value of evidence advanced in reputable argument is not determined solely by the form of the argument and the truth of the premisses. The power of invalid argument from signs to render a conclusion reputable depends on the other evidence that can be put forward in favour of the conclusion. The value of an argument from likelihood depends not only on the truth of its premisses, e.g. that *C* is a *B* and that *B*s are for the most part *A*, but also on other likelihoods that can be brought to bear on the case.

If the argument of this study is correct, while studying rhetorical argument on the basis of the loosely formal system of the *Topics* and *Sophistical Refutations*, Aristotle remained attached to the idea that there was a broadly formal answer to the question what makes

an argument a good one, but abandoned it when he had a rigorously formal logic to work with. In striking contrast to the *Topics*-oriented account of *Rhetoric* 2: 23–4, the *Analytically*-inspired system does not distinguish *kinds* of genuine and merely apparent enthymemes at all. Instead it describes only kinds of reputable or potentially reputable argument.⁹⁴ The task of sorting the reputable from the non- or disreputable members of these kinds no longer depends, even roughly, on a formal feature they share as members of a kind. But to the extent that this new approach better accommodates the special features of reputable argument of the type employed by rhetoric, it realizes an intention that Aristotle had had all along.

5. Sign vs. Demonstration in Aristotle

Although Aristotle developed the theory of the sign that is expounded in the *Prior Analytics* and the *Analytically*-inspired sections of the *Rhetoric* with rhetorical argument primarily in view, as we have already noted, argument from signs is not confined to rhetoric (cf. *An. pr.* 2. 23, 68^b9–14). Before leaving Aristotle behind, I want to touch on a feature of his conception of signs that emerges from this broader use that will be of considerable importance in the studies to follow.

Within the class of signs—broadly so called—Aristotle distinguishes between those that furnish conclusive evidence, which he calls ‘tokens’, and those which furnish only inconclusive evidence, for which he reserves the term ‘sign’ in a narrower sense. But as we have seen, the distinction between ‘sign’ and ‘token’ is not observed in Aristotle’s usage. It has already been put aside when he turns to physiognomics in *Prior Analytics* 2. 27. For it is plain that the signs with which physiognomics is concerned—and Aristotle speaks only of ‘signs’ here—are meant to furnish conclusive evidence and give rise to valid syllogisms in Barbara in the way characteristic of tokens (cf. 70^b32 ff.). This is not an accident, however. The characteristic shared by both varieties of sign is more important to the characterization of signs as they are used in physiognomics than any differences between them. Signs furnish evidence. With their

⁹⁴ Perhaps the formulation of the definition of the sign in *An. pr.* 2. 27—the sign is a premiss that tends or is such as to be (βούλεται εἶναι) necessary or reputable (ἐνδοξος)—leaves room for the influence of these circumstances. See n. 16 above.

aid, we resolve questions of fact, whether the solution is conclusive or—in the old-fashioned sense of the term—probable. And it is the evidential function of signs that allows him to oppose argument from signs to demonstrations.

Demonstration (ἀπόδειξις) is the most estimable form of syllogism because of its distinctive epistemic function: a demonstration is a syllogism by grasping which one has knowledge (a συλλογισμὸς ἐπιστημονικός) (*An. post.* 1. 2, 71^b18). Knowledge, in turn, Aristotle describes as the condition produced by the grasp of a demonstration in this way (*EN* 6. 3, 1139^b31–2). But by knowledge (ἐπιστήμη)—in this context at least—Aristotle has in mind something more than justified true belief. We know something without qualification, he explains, only when (1) we grasp the cause because of which it is as it is, and (2) it is not capable of being otherwise (*An. post.* 1. 2, 71^b9–16).

The effect of these restrictions is to place demonstration firmly on the theoretical or high side of the distinction I drew earlier. The second restricts the subject-matter of knowledge and its instrument, demonstration, to the necessary and unalterable nature of things, so that it has no application to contingent matters of fact. The first assigns to demonstration an explanatory task; if a demonstration is to produce knowledge satisfying this requirement, not only must it put the person who grasps it in a state of justified certitude, it must also give rise to understanding. This in turn requires that, beyond establishing its conclusion by means of a valid argument from true premisses, it must exhibit that conclusion as the consequence of appropriate first principles which are necessary and both self-explanatory and explanatory of the truth at issue. To this end, Aristotle requires that demonstration must be from premisses that are true, primary, immediate, better known than, prior to, and causes of the conclusion (1. 2, 71^b20–2; cf. *Top.* 1. 1, 100^a27–8). And it is principally by satisfying these restrictions on its premisses that a syllogism qualifies as a demonstration.

In the course of pursuing the implications of this account, Aristotle contrasts properly demonstrative syllogisms with those proceeding through signs on two occasions (1. 6, 75^a33–4; 2. 17, 99^a3). The context of the first is his claim that demonstrations must proceed from premisses (and reach conclusions) that are necessary and predicate attributes *per se* of their subjects (1. 6, 74^b5–12; cf. 1. 4,

73^a21-3).⁹⁵ Aristotle wants to connect this claim about the matter of demonstration, so to speak, with his requirement that it explain its conclusion by deducing it from the cause because of which it obtains. Very roughly, his point here is that demonstration can perform its explanatory function only if it is confined to necessary truths in the way he requires. On his view, one has knowledge in the richer sense that embraces the understanding of why a truth obtains when an attribute is grasped as belonging to the essential character of the subject or as a necessary consequence of that character (i.e. a *per se* accident, cf. 1. 7, 75^b1). This is not possible when one grasps merely that it follows validly, granted true but contingent premisses, but only if, in addition, one sees it as a consequence of necessities imposed by the nature of things. Thus, if one is to have knowledge of something, strictly speaking, one must grasp that it is so and why it could not be otherwise.

Notoriously, Aristotle relaxes this requirement by allowing demonstrations from premisses which state that an attribute which, though it belongs by nature, belongs for the most part only and not necessarily (cf. *An. pr.* 1. 13, 32^b5-22; *An. post.* 1. 30, 87^b19-27; 2. 12, 96^a8-19), but if the large issues raised by this variation in Aristotle's view are put to one side, it is clear that his point here is that arguments which rely at any stage on contingently true propositions—propositions which though true could be false—cannot produce knowledge of the right kind.⁹⁶ They may lead validly from true premisses to true conclusions, indeed they may even arrive at conclusions which are *necessarily* true, but the necessary truth of those conclusions will not be established by the argument; it will be established by the argument only if it proceeds from necessarily true premisses.

It is in support of this point that Aristotle refers to signs. We shall, he says, fail to grasp why the conclusion holds as a necessary truth (even when it is one) in arguments that rely on incidental

⁹⁵ Though Aristotle holds that these two features coincide, there are some difficulties about just how and why. Cf. J. Barnes (trans.), *Aristotle's Posterior Analytics*, 2nd edn. (Oxford: Oxford University Press, 1994), ad 74^b5-12, p. 126.

⁹⁶ On for-the-most-part premisses cf. Lloyd, 'Demonstration in Aristotle'; M. Mignucci, "'Ὅς ἐν τὸ πολὺ" et nécessaire dans la conception aristotélicienne de la science', in Berti (ed.), *Aristotle on Science*, 173-203; G. Striker, 'Notwendigkeit mit Lücken: Aristoteles über die Kontingenz der Naturvorgänge', *Neue Hefte für Philosophie*, 24-5 (1985), 146-64; L. Judson, 'Chance and "Always or for the Most Part" in Aristotle', in id. (ed.), *Aristotle's Physics: A Collection of Essays* (Oxford: Oxford University Press, 1991), 73-99.

truths just as we do with syllogisms through signs (75^a31-4).⁹⁷ Syllogisms through signs are offered as an instance of arguments that fail to qualify as demonstrations because, though valid, they rely on premisses which are only incidentally true. He does not mean that all such arguments are from signs nor even, though this is less obvious, that all arguments from signs are from contingently true premisses. Rather his point is that signs do not require necessarily true premisses to discharge their epistemic function of furnishing evidence from which a conclusion that resolves a question can be inferred.

Having necessarily true premisses is only a necessary condition for being a demonstration. This is clear from *Posterior Analytics* 1. 13, where Aristotle discusses an argument that fails to be demonstrative despite satisfying many of the requirements and standing in a very close relation to an argument that is a demonstration. Aristotle does not himself apply the term 'sign' to this argument, instead describing it as an argument from what is more familiar (*γνωριμώτερον*) rather than from the cause (78^a27-9, 112). But commentators have traditionally understood it as a sign-inference.⁹⁸

Suppose the conclusion to be demonstrated is that the planets do not twinkle. If all that is near (in the appropriate sense) does not twinkle, and the planets are near, a syllogism in Barbara can be constructed deducing the required conclusion about the planets from their nearness. Let us call this argument 'Syllogism I'. Supposing all other requirements are satisfied, Syllogism I is a demonstration because its premisses explain its conclusion. Its middle term (nearness) is the cause because of which the major term (not-twinkling) belongs to the subject term of the conclusion (the planets) (cf. 2. 2, 90^a6-7; 16, 98^b19 ff.). It explains *why*, at the same time it shows *that*, the planets do not twinkle, for it is *because* they possess the first attribute that they possess the second. But suppose that the major premiss converts, i.e. not only does the predicate, not-twinkling,

⁹⁷ 'Incidental' does not always mean contingent, but it does here (cf. 75^a20-2).

⁹⁸ Cf. Themistius, *In an. post.* 28. 16-29. 3 Wallies (cf. 6. 25; 17. 22-7; 37. 8-11); Philoponus, *In an. post.* 97. 20 ff. Wallies (cf. 170. 27 ff.); implicitly in the *Suda*, s.v. ἀπόδειξις, i. 294. 18 ff. Adler; by the Oxford translator, G. R. G. Mure, in W. D. Ross (ed.), *The Works of Aristotle* (Oxford: Oxford University Press, 1928), i. 75^a33 n. 3, and Ross, *Aristotle*, 5th edn. (London: Methuen, 1949), 41; Barnes (trans.), *Posterior Analytics*, 254. For more information about the commentators from a different point of view, see now D. Morrison, 'Philoponus and Simplicius on Tekmerioid Proof', in E. Kessler et al. (eds.), *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition* (Aldershot: Ashgate, 1997), 1-22.

belong to all to which the subject term, being-near, belongs, but conversely, being-near belongs to all to which not-twinkling belongs. Then another valid syllogism in Barbara can be constructed by taking the converted major premiss and conclusion of Syllogism I as premisses and its minor premiss as conclusion (Syllogism II). Less formally, that the planets are near can be deduced from the more familiar fact that they do not twinkle (taken together with the fact that being near belongs to all to which not-twinkling belongs).⁹⁹ The middle term of Syllogism II, not-twinkling, is not the cause but the consequence of being near, however. Thus, Syllogism II reverses the order proper to demonstration and infers cause from effect. The result is a syllogism that does not qualify as a demonstration, in the strictest sense, because it merely establishes without explaining its conclusion. Syllogism II falls short by failing to proceed from premisses that are prior to, more knowable than, and causes of the conclusion (1. 2, 71^b21–2). In Aristotelian terms, it is a syllogism of *the that* ($\tau\acute{o} \theta\tau\iota$), whereas a demonstration, in the strictest sense, is of *the because* as well ($\tau\acute{o} \delta\iota\omicron\tau\iota$) (78^a36–^b3; cf. 2. 8, 93^a36–7; 16, 98^b19 ff.).¹⁰⁰

The characteristic of signs that permits them to figure in a contrast with demonstrations, then, is that they furnish evidence in a syllogism to a conclusion that adds to our stock of knowledge *that*. To this end, a sign must be somehow clearer or more familiar than the conclusion of which it is a sign—this is what is meant by saying that it furnishes evidence for it—but it need not, and typically will not, explain the conclusion, though it may sometimes be explained by it.

Aristotle may have this point in mind when he adverts to signs

⁹⁹ The two syllogisms can be represented as follows:

C = planets; B = not-twinkling; A = being near

Syllogism I Syllogism II

BaA AaC AaB BaC

BaC AaC

¹⁰⁰ The grammatical parallel between 'syllogisms of the that' and 'syllogisms of the because' in Aristotle's account of demonstration is misleading. The *that* is the conclusion of a syllogism, but the *because* is not the conclusion of an Aristotelian demonstration. A demonstration is a syllogism of the *because* as a whole, because it exhibits its conclusion as a necessary consequence of the causes *because* of which it obtains. Cf. G. Patzig, 'Erkenntnisgründe, Realgründe und Erklärungen (zu *Anal. Post. A 13*)', in Berti (ed.), *Aristotle on Science*, 141–56 at 143–4; repr. in G. Patzig, *Gesammelte Schriften* (3 vols.; Göttingen: Wallstein, 1993–6), iii. 125–40.

for the second time in *Posterior Analytics* at 2. 17. His point of departure here is the question whether it is possible to demonstrate that an attribute belongs to its subject by means of more than one middle term. Before going on to consider a number of complicating considerations, he answers that, if one demonstrates not by a sign or incidentally—i.e. demonstrates in the strictest sense—then it is not possible, but if one does, it is possible (99^a1–3). Since the question concerns alternative demonstrations of the same attribute, the argument by signs here cannot be the simple inversion of *explanans* and *explanandum* envisaged in 1. 13. But imagine a demonstration showing that *A* belongs to *C* via the middle term *B*, which is the cause because of which *Cs* are *A*. *A* could be the cause of a further attribute *D*, coextensive with it, or *B* could be the common cause of *A* and the coextensive *D*. It would then be possible to infer that *A* belongs to *C* via the middle term *D* as well as via *B*. This new syllogism via *D*, though no less valid than the other, would not be a demonstration in the strictest sense because *D* is not the cause because of which *A* belongs to *C*. But though not the cause of *A*, *D* could well be a sign of it.

This can be illustrated by an example used by Aristotle at *Post. an.* 2. 8, 93^a36 ff.¹⁰¹ The interposition of the Earth (*B*) is the cause because of which the moon (*C*) is eclipsed (*A*). But it is also the case that, when the moon is in eclipse, it is unable to produce a shadow when it is full and there is nothing visible between us and it (*D*). That the moon is in eclipse can be inferred no better from the fact that it is undergoing interposition by the Earth (*B*) than from the fact that it casts no shadow (*D*). But whereas the latter, though well suited to serve as a sign of the eclipse by furnishing evidence for it, does not explain it, the former explains the eclipse, without being able to serve as a sign of it.¹⁰²

Aristotle's contrast between demonstrations and inferences through signs depends on a distinctive conception of the highest purposes to which inference can be put that sets his position apart from others. An Aristotelian demonstration explains by embodying

¹⁰¹ Cf. Ross (ed.), *Analytics*, 669.

¹⁰² The contrast that concerns us is stated clearly and without the complications imposed by the syllogistic framework of the *Posterior Analytics* in *On Divination by Dreams*. Aristotle begins his enquiry by asking whether the dreams for which predictive power is claimed are signs or causes of the events they predict (or merely coincide with them irregularly) (462^b26 ff.). Cf. P. J. van der Eijk (trans.), *Aristoteles: De insomniis, De divinatione per somnum* (Berlin: Akademie-Verlag, 1994), 264–8.

or exhibiting an explanation. Other views that we shall examine continue to connect demonstration with explanation but assign demonstration the task of deducing an explanation or part of one from evidence.

APPENDIX A

The Text of *Rhetoric*, 2. 25, 1403^a6-10

Below is the text as it appears in Kassel's edition of the *Rhetoric* and three proposals to restore or reinterpret the received text so that it yields the meaning which I argued it originally had. The restoration Solmsen proposes has the passage distinguish neatly between a first, inadequate form of objection like the merely apparent objection to an argument from likelihood based on an exception to the opponent's general principle, and two genuine forms of objection, one of which we are to fall back on if the first is not possible. Maier's understanding of the passage is the same, but he attempts to make it yield the desired meaning by ingenious if somewhat strained repunctuation. His solution has the disadvantage of only alluding to the second but first adequate objection in the sequence. By means of simpler and less strained repunctuation, Striker's solution, which was suggested to me in conversation, is able to read the passage so that it clearly mentions all three forms of objection, as in Solmsen's version, but without the need for a restoration. Other solutions may well be possible.

Kassel:

πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτῇ λύσει καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν (ἐν) τι οὐχ οὕτω, λέλυται, ὅτι οὐκ ἀναγκαῖον, εἰ καὶ τὰ πλείω ἢ πλεονάκεις [ἄλλως· ἐάν δὲ καὶ τὰ πλείω καὶ τὰ πλεονάκεις] οὕτω, (ἐάν τε μή), μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὅμοιον ἢ οὐχ ὁμοίως ἢ διαφορὰν γέ τινα ἔχει.

Enthymemes depending on examples may be refuted in the same way as likelihoods. If we have a single negative instance, the argument is refuted as a necessity, *even though* the positive examples are more and more frequent. Otherwise, we must contend that the present case is dissimilar, or that the conditions are dissimilar, or that it is different in some way or other. (trans. Rhys Roberts, rev. J. Barnes, lightly modified)

Solmsen, *Entwicklung*, 29 n. 2:

πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτῇ λύσει καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν (ἐν) τι οὐχ οὕτω, λέλυται, ὅτι οὐκ ἀναγκαῖον, (ἰκανῶς δὲ λυθήσεται), εἰ καὶ τὰ πλείω

ἢ πλεονάκεις ἄλλως· ἐάν δὲ τὰ πλείω καὶ τὰ πλεονάκεις οὕτω, μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὅμοιον ἢ οὐχ ὁμοίως ἢ διαφορὰν γέ τινα ἔχει.

Enthymemes depending on examples may be refuted in the same way as likelihoods. If we have one thing that is not so, it is refuted as a necessity, but it will be refuted adequately if matters are more and more often the other way (i.e. not so). But if most things on most occasions are so, we must contend that the present case is dissimilar or that the conditions are dissimilar, or that it is different in some way or other.

Maier, *Syllogistik*, iia. 466 n. 1:

πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτῇ λύσει καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν τι, οὐχ οὕτω λέλυται, ὅτι [=because] οὐκ ἀναγκαῖον, εἰ καὶ τὰ πλείω ἢ πλεονάκεις ἄλλως· ἐάν δὲ τὰ πλείω καὶ τὰ πλεονάκεις οὕτω, μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὅμοιον ἢ οὐχ ὁμοίως ἢ διαφορὰν γέ τινα ἔχει.

Roughly: Enthymemes depending on examples may be refuted in the same way as likelihoods. If we have a single objection against the paradigm-based enthymeme, it is not refuted in this way, viz. because it is not necessary even though the positive examples are more and more frequent. But if the positive examples are more and more frequent we must contend that the present case is dissimilar, or that the conditions are dissimilar, or that it is different in some way or other.

Striker:

πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτῇ λύσει καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν (ἐν) τι οὐχ οὕτω, λέλυται, ὅτι οὐκ ἀναγκαῖον, ἐάν τε καὶ τὰ πλείω ἢ πλεονάκεις, ἄλλως· ἐάν δὲ τὰ πλείω καὶ τὰ πλεονάκεις οὕτω, μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὅμοιον ἢ οὐχ ὁμοίως ἢ διαφορὰν γέ τινα ἔχει.

Enthymemes depending on examples may be refuted in the same way as likelihoods. If we have one thing that is not so, it is refuted as a necessity, and if most things on more occasions are also not so, it is refuted in the other way. But if most things on most occasions are so, we must contend that the present case is dissimilar or that the conditions are dissimilar, or that it is different in some way or other.

APPENDIX B

Were There Other Developments in Aristotle's Rhetorical Theory?

As I noted earlier, the view that Aristotle's attitude towards invalid inference by signs changed is part of a more comprehensive developmental

theory originally proposed by Friedrich Solmsen. In this appendix I wish briefly to consider how closely it may be related to other parts of Solmsen's theory. But first I should explain that my account does not emphasize the same factors that Solmsen did in the explanation of Aristotle's change of attitude towards sign-inference and other forms of argument. As a result, it reaches somewhat different conclusions about the kind of change that took place. Solmsen notes only that Aristotle is led by his logic to reject the invalid forms in his *Topics*-oriented phase, but later moved by a concern with the practical needs of the orator, so that he embraces two very different conceptions of the enthymeme at different times.¹⁰³ And he views the change from the one to the other as part of a gradual transition from a stricter, Platonic conception of argument to a more receptive attitude towards rhetoric as actually practised, which allowed Aristotle to incorporate elements from rhetoric and sophistic in a new synthesis whose last phase occurred at a time when the new forms of argument it recognizes could be analysed from the point of view of categorical syllogistic.¹⁰⁴

But the practical needs of the orator to which Solmsen appeals could be of either or both of two kinds. An orator might persuade people more effectively by sacrificing standards of good argument. Though his motives for such a step might be unscrupulous, they need not be. He could still have the best interests of his auditors in mind, but judge that their intellectual deficiencies made it prudent to employ less rigorous arguments than he otherwise would have. But we can also imagine an orator or a rhetorical theorist who adopts more relaxed standards of argument because he believes that only in this way is rhetoric able to do justice to matters that do not lend themselves to resolution by means of conclusive argument, but require a decision based on the best and most reputable considerations available all the same. This would not be a matter of betraying or sacrificing intellectual standards, but of adapting them to suit the nature of the matters that rhetoric must tackle. Without denying that motives of the first kind figured in Aristotle's reflections—there are indications that they did (1355²⁴; 1357³⁻⁴)—I have emphasized factors of the second kind, while, I suspect, Solmsen had considerations of the first kind in mind.

With this difference of emphasis noted, I think that there is much to be said for some of the other developments Solmsen believed he had found and, *mutatis mutandis*, the big picture to which they belong, roughly an intellectual development from youthful idealism untempered by experience to a more mature understanding of the ways of the world. In the most important of these, and the one that would have involved the most dramatic change, an early austere or puritanical conception of rhetoric, from which appeals to the emotions had been excluded, yielded to a more relaxed view that found a place for such appeals as well as argument. The

¹⁰³ *Entwicklung*, 22–3.

¹⁰⁴ *Ibid.* 26–7, 226–9.

evidence for this development is furnished by apparently contrasting attitudes towards appeals to emotion displayed in the first two chapters of the *Rhetoric* that we have already noticed: 1. 1 appears to condemn such appeals, while 1. 2 treats them along with argument and the presentation of the speaker's character as one of the three *pisteis*, or ways of imparting conviction, that constitute the art of rhetoric. But as we also noted earlier, it is harder to make a case for changes of this kind than for a change in Aristotle's views about argument, because we lose the control provided by the categorical syllogistic. If these other developments took place at all, they did so before its discovery and application to the field of rhetorical argument. The treatment of emotion and character is integrated in the earlier account of argument, which is based on the distinction between sources of argument that are common to all disciplines, the *topoi*, and those consisting of premisses and opinions borrowed by rhetoric from more substantive disciplines, the *εἰδη*, for as we shall see, some of the premisses and opinions used to invent arguments do double duty as bases for the presentation of the speaker's character.

What is more, critics of this part of Solmsen's position have plausibly explained how Aristotle could, without contradiction, have said harsh things about appeals to the emotions in *Rhetoric* 1. 1 and accepted such appeals along with the presentation of a speaker's character and argument as legitimate means of persuasion in 1. 2. According to this approach, the point of the polemic of 1. 1 is to criticize contemporary rhetoricians for devoting themselves entirely to the means of rousing emotions and issues of style and arrangement at the expense of argument. But once argument has been restored to the place of central importance, it was now possible for Aristotle to find a place for appeals to the emotions and the presentation of the speaker's character as well.¹⁰⁵

But Solmsen's case depends not only on the contrasting attitudes displayed in the first two chapters of the *Rhetoric*, but also on apparent discrepancies in the terminology they use to express those attitudes. Aristotle's condemnation of his contemporaries for ignoring the enthymeme in favour of appeals to the emotions in *Rhetoric* 1. 1 is compatible with granting them a place, albeit a minor one, as appendages (*προσθήκαι*) in rhetoric (1354¹⁴). But it is harder to reconcile the way in which 1. 1 appears to confine the term *πίστις* to argument and to regard only *πίστεις*,

¹⁰⁵ Cf. Burnyeat, 'Enthymeme', 10 n. 26; Cooper, 'Ethical-political Theory', 194–5 with n. 3; Sprute, *Enthymemtheorie*, 37 ff., proposes to resolve the tension between the two chapters by viewing the first as Aristotle's sketch of an ideal rhetoric which could serve in a well-governed community, while in the second he goes on to take account of the less than ideal conditions in which rhetoric must actually be practised. Cf. J. Sprute, 'Aristotle and the Legitimacy of Rhetoric', in D. J. Furley and A. Nehamas (eds.), *Essays on Aristotle's Rhetoric*, 117–28. The tensions between the two chapters are strongly emphasized by Brunschwig, *Topiques*, pp. xcix ff.

so understood, as artistic (*ἐντεχνος*) with the recognition of *πίστεις* of argument, affect, and emotion in 1. 2, all three of which are now called artistic because they are products of the orator's rhetorical method and opposed to the inartificial *πίστεις*, e.g. witnesses, contracts, testimony extracted by torture, that the orator finds rather than makes (1. 1, 1354^a13-18, ^b16-22, 1355^a3-14; 2, 1355^b35 ff.).¹⁰⁶

To be sure, *Rhetoric* 1. 1, 1355^a3 ff., which begins with the remark that the artistic method (*ἡ ἐντεχνος μέθοδος*) is concerned with *πίστεις*, apparently pauses to observe that the enthymeme is only the chief or principal *πίστις* (7-8).¹⁰⁷ But this observation clearly interrupts Aristotle's train of thought, whose point is plainly to equate the *πίστεις* studied by the rhetorical art with the enthymeme, characterized here as a rhetorical syllogism. Solmsen took the intrusive remark to be a later addition by Aristotle himself; Kassel prefers to view it as the work of an alien hand.¹⁰⁸

Understood in this way as a clash in Aristotle's technical terminology, the problem was a cause for concern before the appearance of *Entwicklungsgeschichte*. F. Marx concluded that the remarks in the first chapter that presuppose *πίστεις* must be enthymemes could not be the work of Aristotle, but must instead be due to a peculiarly unintelligent editor.¹⁰⁹ Hints of a developmental explanation make their first appearance in enquiries whose primary focus is still on questions of composition. Thus A. Kantelhardt believed that both conceptions of the *πίστεις* are Aristotle's, but that they belong to two different versions of the *Rhetoric* clumsily joined by an unskilled editor, now playing a much-reduced but still pernicious part.¹¹⁰ It was Kantelhardt who first noticed that the *Rhetoric* draws on two conceptions of the syllogism, one characteristic of the *Topics*, the other characteristic of the *Prior Analytics*, and that these belong to different periods in Aristotle's career. But he does not seem to have noticed that reliance on the categorical syllogistic is confined to a pair of brief passages, and he had little to say about what might be behind the difference in outlook regarding argument or the non-argumentative *pisteis* that he

¹⁰⁶ Cf. Solmsen, *Entwicklung*, 209; cf. 25 n. 2, 221 n. 4.

¹⁰⁷ 'Since it is clear that the artistic method concerns *pisteis*, and a *pistis* is a demonstration of a kind . . . and rhetorical demonstration is an enthymeme [and this is to speak without qualification the chief *pistis* [κυριώτατον τῶν πίστειν], and the enthymeme is a syllogism of a kind . . .'
¹⁰⁸ *Entwicklung*, 221 n. 4.

¹⁰⁹ 'Aristoteles' *Rhetorik*, *Berichte über die Verhandlungen der kgl. sächsischen Gesellschaft der Wissenschaften zu Leipzig*, phil.-hist. Classe, 52 (1900), 241-328 at 289; photographically reproduced in Stark (ed.), *Rhetorika*.

¹¹⁰ Cf. Kantelhardt, *De Aristotelis rhetorica*, 38-40; K. Barwick defends a similar view, according to which our *Rhetoric* is the result of joining two versions, but believes Aristotle was responsible. Cf. 'Die Gliederung der rhetorischen Τέχνη und die horazische Epistula ad Pisonem', *Hermes*, 57 (1922), 1-62 at 16-17; 'Die "Rhetorik ad Alexandrum" und Anaximenes, Alkidamas, Isokrates, Aristoteles und die Theodekteia', *Philologus*, 110 (1966), 212-45 at 242-5.

detects, presumably because he was mainly concerned to enlist changes in Aristotle's views in support of his theory about the composition of the *Rhetoric*.

It must have seemed to Solmsen, then a student of Jaeger, that the *Rhetoric* cried out for study from a developmental perspective which would invert the relation that had hitherto prevailed between issues of intellectual development and questions about the composition of the work. But if we do decide to regard a change in attitude towards appeals to emotion of this kind as plausible, I suggest that it should be with a difference in emphasis analogous to the one that I proposed in connection with invalid argument by signs. For it is important to remember that, according to Aristotle, the effect of emotion is not only to interfere with or distort judgement; as we know from his ethical works, being properly affected can play an important part in making the right judgement or taking the right view of a situation.¹¹¹ Thus, if a rhetoric that makes a place for appeals to the emotions is more practically efficacious than one that does not, it need not be because it is less principled.

If Aristotle's attitude towards appeals to the emotions did change in this way, much of the case against Solmsen could be accepted by a defender of his theory. For accounts of how apparently discordant passages in the *Rhetoric* can be viewed as parts of a unified whole may perhaps also explain how, by viewing them in this way himself, Aristotle could have let these passages stand after the elaboration of his mature theory. For Aristotle's change in attitude would not have called for him to repudiate completely his earlier criticisms of other rhetorical theorists for their single-minded concentration on emotion at the expense of argument, though it would have required revisions that made it clear that, in their place, emotional appeals can be a legitimate part of rhetoric. If this is right, it is not necessary to view the remark about emotion in *Rhetoric* 1. 2, viz. that 'we say it is with emotion alone that contemporary rhetoricians have concerned themselves', either as perfectly consistent with all that has gone before in 1. 1 or the desperate effort of an editor to paper over a glaring contradiction.¹¹² It might instead be an indication how we are now to understand the criticisms of 1. 1. Of course, the discrepancy in the use of *pistis* and other discrepancies would have to have been eliminated if the *Rhetoric* had been reworked by Aristotle with a view to publication as his last word on the subject. But the *Rhetoric* does not satisfy this description any more than do the other works of Aristotle that have come down to us.¹¹³

¹¹¹ The kind of view I mean to reject is taken by Barwick when he speaks of Aristotle making concessions to vulgar rhetoric, 'Die "Rhetorik ad Alexandrum"', 23.

¹¹² So Kantelhardt, *De Aristotelis rhetorica*, 40 with n. 1.

¹¹³ What kind of book was able to tolerate so many discrepancies or even contradictions? Solmsen suggests that it may never have been Aristotle's intention to make of the *Rhetoric* a consistent intellectual whole; the practical usefulness of

None of this is to say that *Entwicklungsgeschichte* or Solmsen's version of it have all the answers. I have dwelt on the proposed change in Aristotle's attitude towards emotional appeals because, like the proposed change in attitude towards invalid inference by signs, it makes sense when viewed as the result of continued reflection on a set of problems which brought to light defects in earlier solutions and inspired new attempts to improve on them. This already sets these proposals apart from those contributions to *Entwicklungsgeschichte* in which the quasi-mechanical operation of an inner law of psychic development drives Aristotle's thought irresistibly forward by degrees from *Platonnähe* to *Platonferne*. And it has another important consequence. I have suggested that the two developments in question do lend support to each other by showing that Aristotle's thinking about rhetoric did evolve over time, by exhibiting certain suggestive similarities with each other, and by leaving traces in a work that was apparently updated from time to time without being completely reworked in the light of its author's latest discoveries. But they are independent of one another; each responds in its own way to separate problems, and could have taken place without the other.

I suspect that some of the characteristic faults of *Entwicklungsgeschichte* did prevent Solmsen from recognizing this as clearly as he should have. For along with a penchant for resorting to developmental explanations for features of the *Rhetoric* that can be explained as well or better in other ways, his theory exhibits a tendency to exaggerate the relation between developments in different areas. Thus Solmsen supposes not only that Aristotle held at different times the different views about non-argumentative means of persuasion described above and that there were *Topics*- and *Analytics*-oriented phases in his conception of rhetorical argument, but that there was a third intermediate phase in his thought about argument simultaneous with the second, more receptive, view of non-argumentative means of persuasion. At this stage a purely dialectical conception that draws only on the (common) *topoi* yields to the hybrid conception of rhetorical argument that draws on both the *topoi* and the premisses and opinions borrowed from substantive disciplines and designated *εἰδη*.

Solmsen's reason is the admittedly peculiar way in which the discussion of the three *pisteis* is structured. The *εἰδη* turn out to be widely acknowledged truths about the good and the bad, the noble and the ignoble, and the

the parts meant more to him than thoroughgoing scientific precision (*Entwicklung*, 225; cf. Sprute, *Enthymentheorie*, 146, 190). Barwick suggests that it was a lecture manuscript to which Aristotle made additions over time ('Die "Rhetorik ad Alexandrum"', 245). But it is not necessary to take as definite a view as Barwick about the type of book the *Rhetoric* was in order to view it as an unpublished manuscript that grew and was altered over time, not a definitive version meant for the public. And this clears the way for viewing some of the difficulties it presents as due to changes in Aristotle's views.

just and the unjust, which are the defining concerns of the three genres of oratory Aristotle distinguishes: deliberative, epideictic, and forensic (1. 3, 1358^b20 ff.). And the treatment of the three genres which occupies most of what is left of book 1 is roughly organized into sets of *εἰδη*, now called premisses and opinions (2. 1, 1377^b18; 2. 18, 1391^b23-6), belonging to each genre (deliberative: 1. 5-8; epideictic: 1. 9; forensic: 1. 10-14). Aristotle appends his treatments of the two non-argumentative *pisteis*, *ethos* and *pathos*, here.

Since received views about virtue and vice, the noble and the base exploited as premisses by orators charged to praise or blame are part of the knowledge on which they draw, in a different way, in the presentation of character as well, part of the second *pistis*, *ethos*, can also be brought within this frame: the same items serve as *topoi* of very different kinds of artistic effect (1. 9, 1366^a23-8; cf. 2. 1, 1378^a16). The third *pistis*, concerning emotion, cannot be made to fit quite so easily, and the chapters dedicated to it are sandwiched uncomfortably between a brief cross-reference to the discussion of virtues and vices (1378^a16) and the fuller discussion of different types of character from another point of view to which *Rhetoric* 2. 12-17 are devoted. The discussion of argument resumes in 2. 18, and only in 2. 23 does Aristotle take up the (common) *topoi*, fulfilling the plan implied by the distinction between the *topoi* and the *εἰδη* in *Rhetoric* 1. 2.

If the *pisteis* apart from argument are a later addition to the dialectically oriented rhetoric announced in *Rhetoric* 1. 1, so it seems are the opinions and premisses of the three oratorical genres with which they are connected and the hybrid conception of rhetoric to which the three genres belong.¹¹⁴ But though this may be right, the evidence—a number of not very deeply embedded cross- and back-references—will also support an alternative explanation, according to which the hybrid conception was Aristotle's original view and the new material concerning the non-argumentative *pisteis* was inserted in its present place in the *Rhetoric* because of the dual use of some of the opinions and premisses.¹¹⁵ My aim here, however, is not to attempt a complete reassessment of Solmsen's theory, but rather, by indicating where its strengths and weaknesses lie, to suggest that the development in Aristotle's conception of rhetorical argument which has been the principal object of our concern does fit well with other plausible developments in Aristotle's thinking about rhetoric, while at the same time reaffirming that it is ultimately independent of them. Whatever other merits or faults may belong to his theory, Solmsen deserves high praise for directing attention to the hard evidence

¹¹⁴ *Entwicklung*, 222-5.

¹¹⁵ Cf. Barwick, 'Die Gliederung', 16-18; 'Die "Rhetorik ad Alexandrum"', 239-42.

for change furnished by the appearance on the scene of Aristotle's formal logical theory and making it the point of departure for his further enquiries.¹¹⁶

¹¹⁶ Cf. O. Primavesi, *Die aristotelische Topik: Ein Interpretationsmodell und seine Erprobung am Beispiel von Topik B* (Munich: Beck, 1996), 60.

STUDY II

Rationalism, Empiricism, and Scepticism: Sextus Empiricus' Treatment of Sign-inference

THE most extensive and wide-ranging discussion of signs to have come down to us, and at the same time the discussion that gives the most prominence to signification, is found in Sextus Empiricus (*PH* 2. 97–133; *M.* 8. 141–299). This faithfully reflects the prominence accorded to signs in the framework Sextus adopts in order to classify and expound dogmatic positions in epistemology before subjecting them to sceptical scrutiny. Potential objects of knowledge are divided into two classes by this framework. The first comprises phenomena or evident matters (*φαινόμενα, πρόδηλα, ἐναργή*), i.e. truths that can be known immediately without being inferred from other truths, typically because they are accessible to direct perceptual observation, but perhaps in other ways as well. To the second belong non-evident matters (*ἄδηλα*), which lie beyond the reach of direct apprehension. Knowledge of these, when possible at all, must rest on grounds or evidence afforded by other truths. These in turn must be grasped immediately as evident truths or inferred from other truths themselves, with the result that everything we know is known either because grasped immediately as an evident truth or ultimately on the strength of truths apprehended in this way. According to Sextus, knowledge of evident matters is treated by the philosophers in their theories of the criterion, while the transition (*μετάβασις*) from the evident by means of which non-evident matters are apprehended is discussed under the head of signs and demonstrations (*σημεία, ἀποδείξεις*) (*M.* 7. 24–6; cf. 396; 8. 140, 319; *PH* 2. 96).

The question naturally arises whether Sextus is right to treat this division of epistemic labour as undisputed common ground