CHAPTER 4

Dialectic and the Stoic sage

Most of the leading Stoic philosophers, from Zeno onward, divided their philosophy into three parts, logic, ethics and physics.[1] The logical part was commonly divided into two 'sciences', rhetoric and dialectic (D.L. VII.41). Matters that modern logicians would recognize as their field were included in the study of dialectic, but this subject also covered epistemology, grammar, and even, in some treatments, literary style. In the fully developed Stoic system, dialectic was the general science of rational discourse and of language, while rhetoric dealt with the organization and construction of arguments for political, forensic, and panegyric speeches (D.L. VII.42–3).

Modern logicians have largely confined their attention to that part of Stoic dialectic which corresponds to the more formal aspects of contemporary logic.[2] This is perfectly legitimate, provided that the artificiality of the restriction is acknowledged: the Stoics' treatment of modality and their analysis of propositions and methods of inference have a permanent philosophical interest, which does not apply to some of their other work in dialectic. But for the understanding of Stoicism, throughout its history, it is worthwhile to ask how they conceived of dialectic in general, where they stood in relation to other ancient philosophers, what ‖ value they attributed to it, and why, in particular, they held that 'only the wise man is a dialectician'. My purpose in this chapter is to offer some of the answers to these questions.[3]

[1] D.L.VII.39. This division of philosophy and the use of the term 'logic' probably go back to the Academy under Xenocrates, cf. Frede 1974, pp. 24–5.

[2] So Frede 1974, Mates 1961 and Kneale 1962.

[3] Several recent studies have touched on these topics in emphasising the close relationship between aspects of Stoic logic and the Stoic system as a whole: Watson 1966; Kahn 1969; Lloyd 1971; Long 1971b and 1986a, pp. 121–47.

THE STOIC CONCEPTION OF DIALECTIC

At the beginning of his commentary on Aristotle's *Topics*, Alexander of Aphrodisias notes the value of realising that the term *dialectic* does not have the same meaning for all philosophers: 'the Stoics define dialectic as *science of speaking well*, and make speaking well consist in speaking things that are true and fitting'. He then observes that the Stoics 'give this meaning to dialectic because they regard it as a property peculiar to the philosopher of the most perfect philosophy; and for this reason, in their view, only the wise man is a dialectician' (p. 1, 8 Wallies = *SVF* II.124). Alexander was writing at about the end of the second century AD when Stoicism was in decline. Five centuries earlier, at the origin of the Stoa, it was all the more pertinent to distinguish different senses of dialectic. The period of 300 BC was a time of great variety, vitality and rivalry in Greek philosophy. At Athens, Academics, Peripatetics, Cynics, Megarians and the newly founded schools of Zeno and Epicurus were competing for followers, and they differed from one another in their conceptions of dialectic and in their attitudes toward it. But all would have agreed that dialectic, however practised and defined, undertook the posing and solving of logical paradoxes and also the provision of relatively formal techniques of argument between a questioner and a respondent on a variety of subjects. Cynics and Epicureans condemned such activities as worthless for the advancement of human well-being. They could not completely ignore them, and they were in a minority.[4]

The Stoic conception of dialectic was not developed in isolation from its treatment by other philosophers. But before considering its historical background, we must return to Alexander of Aphrodisias and statements by Stoics themselves about this subject. When we compare his definition of dialectic in Stoicism with other sources, it may seem that he has either confused dialectic with rhetoric or given a statement that applies to both of these together, ‖ that is, to 'logical science' in general. The Stoic definition of dialectic which is most widely attested is 'the science of things true and false and neither true nor false'. It was equally standard for them to define rhetoric as 'the science of speaking well', which Alexander

[4] On Epicurus' method in dealing with certain Megarian sophisms, cf. Sedley 1973, pp. 71–7.

ascribes to dialectic. But before castigating Alexander too severely, it is important to take account of a passage in the introductory section of Diogenes Laertius' account of Stoic logic: '[According to the Stoics] rhetoric is the science of speaking well on arguments which are set out in narrative form; dialectic is the science of discoursing correctly on arguments in question-and-answer form; hence they also define it as the science of things true and false and neither true nor false' (D.L. VII.42).

This text suggests that 'the science of speaking well' is a truncated definition of rhetoric which might, with further explanation, fit dialectic as well; it also implies that method and style are what principally differentiate rhetorical from dialectical argument. These points are confirmed by a manual illustration attributed to Zeno: when asked how dialectic differed from rhetoric, he clenched his fist and then opened it out. The clenched fist illustrated the 'compactness' and 'brevity' of dialectic, while the open hand with the fingers spread out was intended to simulate the 'breadth' of rhetoric. (Sextus Empiricus, *M* II.7 = *SVF* I.75). For the Stoics in general, rhetoric like dialectic is peculiar to the wise man. Neither subject is merely a skill or technique.[5] As 'sciences' both parts of Stoic logic demand, at least in theory, that infallible ability to distinguish truth from falsehood which is characteristic of the Stoic sage.

It is reasonable to suppose that Zeno and Cleanthes, as well as later Stoics, held this view. As the ideal reference of all human excellences, the wise man in Stoicism fulfils many of the functions of Platonic Forms. In rejecting these incorporeal entities, Zeno offered the wise man as the goal and standard of a perfectly rational life. But we may doubt whether the account of dialectic as 'the science of things true and false' has a Stoic history before Chrysippus or, at least, before Cleanthes. There are several reasons for regarding this conception of dialectic as a later development in Stoicism.

Diogenes Laertius gives it as an *alternative* definition to 'the science of discoursing correctly on arguments in ‖ question-and-answer form.' This account of dialectic is almost certainly the older of the two. Far from being distinctively Stoic, it describes

[5] Sextus Empiricus (as cited above) notes this as the difference between Xenocrates' account of rhetoric and the Stoic definition that uses the same words as Xenocrates.

dialectic in a manner that fits the general conception of the term in the early Hellenistic period. Argument by question and answer was the most characteristic philosophical connotation of dialectic, deriving from the ordinary meaning of the word 'converse' (*dialegesthai*), and from Socratic and sophistic methods of argument. The practice of this activity, however 'correctly', is not *prima facie* equivalent to 'the science of things true ...', which makes such large claims for itself.

Furthermore, the detailed summary of Stoic logic in Diogenes Laertius has nothing whatsoever to say about how 'to discourse correctly on arguments in question-and-answer form'.[6] But its subject matter is entirely appropriate to 'the science of things true ...', or, to use Chrysippus' language, 'signs and things signified' (D.L. VII.62).[7] First we are given an account of sense-impressions, the formation of concepts, and the criterion of truth – epistemology; next a discussion of dialectic under the headings of voice, elements of speech, types of style, genus, species, division and amphiboly – broadly, the sign function of language; next, we have language as meaningful ('things signified'): *lekta* (what are said or meant), propositions, and arguments, including a brief section on logical paradoxes. At the end of this section Diogenes Laertius writes:

> Such then is the logic of the Stoics, which chiefly establishes their point that the wise man is the only dialectician.[8] For all things are brought to light through the study in rational utterances, both the subject-matter of physics and again of ethics (as for logic that goes without saying), and (?without logic the wise man?) would not be able to speak about correctness of names, how the laws have made arrangements for actions.[9] Of the two forms of inquiry which fall under the virtue (of dialectic), one considers what each thing that exists is, and the other what it is called. (VII.83)

[6] VII.49–82. This section begins with a quotation from Diocles Magnes (first century BC) which probably extends beyond chapter 49, but cf. Sandbach 1971a, p. 33.

[7] So too Diogenes' opening remarks about the contents of dialectic, VII.43–4.

[8] I follow von Arnim's text for this line (*SVF* II.39.39) and not H. S. Long in the Oxford edition with a reading: 'the wise man is always a dialectician'.

[9] The text of this sentence is very difficult and almost certainly corrupt. My question marks frame words that are absent from the Greek, but I conjecture with von Arnim (*SVF* II.130) that a subject (the wise man?) is needed for the infinitives *echein eipein*. The subsequent reference to 'considering what each thing is called' seems to imply that the wise man is an expert in the correct use of names. For a different translation, cf. Hicks in the Loeb edition, who takes 'virtue' in a general sense and not as a reference to the virtue of dialectic.

A scope and a significance are here attributed to dialectic which go far beyond argument by question and answer and which do suit the 'science of things that are true ...' Diogenes Laertius speaks about a doctrine and a methodology that are not the common property of dialectic in other philosophers' usage and which may fairly be credited to Chrysippus. ‖

For it is noteworthy that Chrysippus' name figures more frequently than any other in Diogenes Laertius VII.50–82 and no Stoic prior to him is mentioned at all. This may seem to be labouring the obvious, since it is regularly acknowledged that Stoic logic was primarily the creation of Chrysippus. But this point is generally related to his achievements in elaborating logical theory. I am now suggesting that he may have been the first Stoic to develop dialectic beyond argument by question and answer into a science that made epistemology, language and logic together an integral part of Stoic philosophy as a whole.

Here a few words are needed about his Stoic predecessors. The material has recently been examined by Michael Frede and I shall limit myself to points that bear on the history of dialectic in the early Stoa.[10] I agree with Frede that we have little reason to think that Zeno's strictly logical interests went much beyond the kind of puzzles, such as the Liar and the Hooded Man, which he would have encountered with the Megarians.[11] Plutarch tells us that Zeno 'used to solve sophisms and recommended his pupils to take up dialectic for its capacity to do this' (*Stoic. rep.* 1034f = *SVF* 1.50). He is said to have paid two hundred drachmas, twice the price demanded, for seven forms of the puzzle known as 'the Reaper' (D.L. VII.25), and he clearly thought that an ability to handle the stock paradoxes was a necessary part of the training of any would-be philosopher. 'Knowing how to discourse correctly on arguments in question-and-answer form' suits Zeno's attested attitude to dialectic very well. He wrote a book of 'solutions' and two books of 'refutations'; his so-called *Technē* was probably a treatment of rhetoric, and some aspects of dialectic in Chrysippus' sense were

[10] Cf. Frede 1974, pp. 12–26. See also Rist (1978a) and Schofield (1983).

[11] Cf. the Megarian style of Zeno's argument against the proposition, 'do not pronounce judgement until you have heard both sides', Plutarch, *Stoic. rep.* 1034c. It is probable, as Frede argues (1974, pp. 23–6), that Zeno's logic was also influenced by the Academy, though the most likely date for his arrival in Athens (*c.* 311 BC) rules out the report of D.L. VII.2 (accepted by Frede, p. 23 n. 8) of lengthy study under Xenocrates.

doubtless treated in Zeno's other works, particularly *On logos* and *On signs* (D.L. VII.4, 39–40). The basic theory of *katalēpsis*, 'grasping' valid perceptual data, was Zeno's own invention; but we have no evidence that he presented his epistemology as the primary part of dialectic corresponding to the arrangement of Diogenes Laertius.

If dialectic for Zeno was largely restricted to knowing how to acquit oneself creditably in debates about logical puzzles, Aristo's attitude towards logic becomes more intelligible, as Frede observes.[12] This pupil of Zeno wrote three books *Against the dialecticians*, in which he must have advanced the position, ‖ repeatedly attributed to him, that logic is completely without value, or even positively harmful.[13] Aristo's general tendency was to emphasise the Cynic elements of Stoicism, and this suits his dismissal of logic. It is more difficult, however, to understand his contempt for dialectic if this had already been adumbrated as 'the science of things true . . .' Given his Cynic inclinations, he may readily be supposed to have thought the solution of sophisms to be useless for the good life, and although Zeno saw some point in this activity, we should not overestimate the value that he himself placed on it.[14]

Of Zeno's other pupils only Sphaerus and Cleanthes are known to have written logical works. But the little that can be said about these is quite significant. Sphaerus books included two *On the art of dialectic* and also works *On predicates* and *On ambiguities*. (D.L. VII.178). Cleanthes also wrote on the first two subjects and *On sophisms* and *Forms of argument* (D.L. VII.175). He made dialectic a sixth part of philosophy and his claim that 'not everything past and true is necessary' (SVF I.489) was a contribution to the debate about the Master argument initiated by that most famous of dialecticians, Diodorus Cronus.[15] While Frede is probably right to think that Cleanthes 'had little interest in arguments as such' (1974, p. 15), it may also be correct to see him as the Stoic who prepared the ground for the very large place that dialectic was to take in the philosophy of Chrysippus. It must have fallen to Cleanthes to de-

[12] Cf. Frede 1974, p. 13. I doubt whether we can learn much about Zeno's logic from Epictetus, *Discourses* IV.8.12 (*SVF* I.51) but cf. Graeser 1975, pp. 11ff.

[13] D.L. VI.103; VII.160, 163; Sextus Empiricus, *M.* VII.12, etc.

[14] Cf. Stobaeus II.22.12 Wachsmuth (*SVF* I.49): 'Zeno used to liken the arts of the dialecticians to the right measures which do not measure wheat or anything else worthwhile but chaff and dung.'

[15] For the evidence, bibliography and discussion, cf. Döring 1972, pp. 39–44, 132–8.

fend Zeno's doctrines against attacks from the sceptical Academy of Arcesilaus;[16] and the importance of systematising Stoic philosophy and making it competent to withstand sceptical criticism must have stimulated a greater interest in logic among some of Zeno's successors. I don't wish to overemphasise this point, but it seems to me insufficient to account for Chrysippus' conception of dialectic purely on the grounds of his personal interests.[17] Of course these must have played a major part. But if we need a Stoic who prompted the development of dialectic as a systematic science before Chrysippus, the most likely candidate is Cleanthes.

We may now return to the wise man and to Chrysippus' conception of dialectic, first recalling the relevant remarks in Diogenes Laertius. As a dialectician, the wise man knows how to investigate what each thing is and what it is called. These two ‖ functions of dialectic are hardly original to the Stoics. They associate the dialectician of Plato's *Cratylus* with his namesake from the *Republic*: in the *Cratylus* Socrates argues that only the dialectician – the man who knows how to ask and answer questions – is competent to evaluate the work of the 'legislator', the giver of names (390b–e). The influence of this dialogue is perhaps evident from Diogenes' reference to correctness of names and the laws' (*nomoi*) arrangements for actions, and more generally from the Stoics' methods of etymology.[18] But the reminiscence of the *Republic* is still more striking where (to cite just one passage) dialectic is the only 'method of inquiry which systematically attempts in every case to grasp the nature of each thing as it is in itself' (533b, trans. Cornford). Both Plato and Chrysippus (to whom we may surely attribute Diogenes' statement) assert that dialectic is the science that investigates *ti esti hekaston*, 'what each thing is'.

I do not believe that these verbal similarities are accidental or insignificant, which is not to say that Chrysippus set out to reveal

[16] This is a valid inference from the chronology: when Cleanthes succeeded Zeno as Head of the Stoa in about 261 BC Arcesilaus was already Head of the Academy and Chrysippus hardly more than twenty years old. Cleanthes may have had little competence in logic (cf. Frede 1974, pp. 26–7), but not much credence should be rested on the ancient biographical tradition, cf. Hirzel 1882, vol. II.1, pp. 85–8. D.L. VII.182 reports that Chrysippus diverted a dialectician's attack from Cleanthes to himself.

[17] The same point is made by Gould, 1970, p. 9 and by Frede 1974, pp. 26–7.

[18] Cf. Steinthal 1890 vol. I, especially pp. 334, 344. Stoic principles of etymology and the grammatical part of their dialectic fall outside the scope of this article; for two recent discussions that raise points about their general philosophical position, cf. Lloyd 1971 and my remarks in Long 1986a, pp. 131–9.

his allegiance to Plato explicitly. He certainly did not harness dialectic to the ideal metaphysics of Plato's Forms nor, as I shall argue later, did he assign an important heuristic function to discussion by question and answer. But he agreed with Plato that dialectic is the science indispensable to all philosophical inquiry, and this is important. It gives to logic or dialectic, whatever this connotes in practice, an independent scientific or epistemological status that it did not possess for Aristotle. This is indicated in Stoic sources by two points: first, the rejection of the Peripatetic term *organon* as the designation of logic and the substitution of 'nor contingent portion but part' (of philosophy) (*SVF* II.49); second, the use of the term 'dialectic' with 'knowledge of demonstrative procedures' given as its goal (*SVF* II.49.31). Both these points are totally incompatible with Aristotle's official description of dialectic, which is sharply distinguished from *apodeixis*, 'demonstration' or 'deductive proof'.[19] (See further below.)

Both the general principles of Stoic philosophy, which Chrysippus inherited, and the destructive criticism of the sceptical Academy can help to explain parts of his conception of dialectic. Further evidence on the *values* of dialectic needs to be considered here. We have seen that dialectic is a human excellence or virtue (*aretē*) and it belongs, as we should expect, to those virtues that ‖ are *necessary* to the good life. Diogenes Laertius, who states this (VII.46), continues with a list of the specific virtues of dialectic, and these help to illuminate its general functions in Stoicism. First he mentions *aproptōsia*, which means literally 'not falling forward' and is defined as 'knowledge of when one should give assent and not' (give assent); next *aneikaiotēs*, 'unhastiness', defined as 'strong-mindedness against the probable (or plausible), so as not to give in to it'; third, *anelenxia*, 'irrefutability', the definition of which is 'strength in argument, so as not to be driven by it to the contradictory'; and fourth, *amataiotēs*, 'lack of emptyheadedness', defined as 'a disposition which refers impressions (*phantasiai*) to the correct *logos*'.

This catalogue of dialectical virtues may fairly confidently be attributed to Chrysippus. All four terms are neologisms of the kind that he liked to make, and the definition of *aneikaiotēs* uses a bogus etymological link between *eikēi* (the adverb from which *(an)eikaiotēs*

[19] On the general background to Aristotelian dialectic, cf. Solmsen 1968b and Owen's paper, 'The Platonism of Aristotle' in Owen 1986, pp. 213–16.

is formed) meaning 'at random' and *eikos*, 'probability', which is equally characteristic of Chrysippus. The four terms are all privative nouns that denote a disposition *not* to behave in a certain way, and what links them is the Stoic concept of knowledge, which Diogenes Laertius next proceeds to define: 'secure grasp or disposition in acceptance of impressions which is unchangeable by argument.' Dialectic is then asserted by Diogenes to be a necessary condition of knowledge: without it 'the wise man will not be infallible in argument', and it enables him to do three kinds of things – distinguish true and false, discriminate what is persuasive and what is ambiguous, argue methodically by question and answer.

The main points of this passage are confirmed and amplified by a papyrus from Herculaneum, which discusses dialectic in relation to the wise man (*SVF* II.131).[20] *Aproptōsia*, and *aneikaiotēs* recur, *anelenxia* is also expressed through its adjectival form *anele(n)ktos*, and much else is said about the sage: he is not subject to persuasion, he does not change, he does not err in respect of any sense organ, he does not deceive and is not deceived; as before, the wise man's dialectical qualities are expressed by negative predicates, or largely so. But what they denote are meant to be read as positive values, instances of the fact that 'the wise do all things well' (*SVF* II.41.25). As in Diogenes Laertius, the focus of the wise man's ‖ dialectical virtues is on his 'assenting correctly,' and all the nouns or adjectives that describe him pick out particular types of situation, most notably philosophical arguments, in which precipitate assent would be the mark of folly. The main emphasis in both texts is upon dialectic in the limited, argumentative sense. We seem to be closer to the science of discoursing correctly by question and answer (Zeno's probable conception of dialectic) than to the larger, epistemological activity which I attributed to Chrysippus – dialectic as knowing how to investigate what each thing is and what it is called. Yet both our passages seem to point most clearly to Chrysippus.

This problem, I would suggest, is more apparent than real. Chrysippus did not abandon dialectic's traditional associations

[20] Cf. von Arnim 1890. It should be emphasised that he established his readings on the basis of the Naples and Oxford apographs without inspection of the papyrus itself (cf. p. 473). That is not an adequate basis for an authoritative edition of any of the Herculaneum material, and it is virtually certain that new work on the papyrus would reveal some errors in his text, which should be regarded for the present as provisional. His attribution of the papyrus to Chrysippus is highly probable.

with formal debate and philosophical polemic. As the Stoa's chief protagonist against the Academic Sceptics, he could not afford to do so. But he combined what we may call the defensive function of dialectic, as a weapon against rival philosophers, with its positive role as a systematic science of epistemology, language and logic. Another way of putting the point would be to regard Chrysippean dialectic as incorporating both the Platonic and the Aristotelian conceptions of this term: it is Aristotelian in the sense that it provides its practitioner with the training necessary to cope with arguments for and against a given thesis; but it is Platonic in the sense that its overall purpose is the discovery and demonstration of truths.

In fact both passages just discussed include hints of a wider conception for dialectic than preservation of the wise man from unguarded assent in argument. Diogenes Laertius observes a connexion between dialectic and ethics when he says that 'precipitancy in assertions extends to actual events, so that those whose impressions are not trained tend to disorderliness and randomness' (VII.48). We may interpret him to mean that persons who give their assent injudiciously, whether to a sense-impression or to a statement, will be unable to live in a consistent, purposeful manner. The Stoic goal of 'living in agreement with nature' presupposes the ability to make correct judgements about facts and values. So the wise man needs to possess a disposition to grasp the truth in every situation if his moral conduct is to be infallible. The papyrus text – as supplemented by von Arnim – includes these interesting remarks, which follow its insistence that assent should always be ‖ linked to *katalēpsis*, 'grasping': 'for in the first place philosophy, whether it is (practising) correctness of *logos*, (or) knowledge, is the (same as business) concerning *logos*; (for) by being (within) the parts of the *logos* and their (arrangement) we shall use it with experience; and by *logos* I mean that which belongs by (nature to all) rational beings'.[21] Here too the writer (*SVF* II.27–32, 41) is stepping beyond the narrower confines of dialectic into other wellknown Stoic territory. He appears to be saying that thorough acquaintance with logic, 'the parts of the *logos*', is necessary for

[21] I have bracketed those words of which the Greek equivalents are missing or seriously defective in the text as reported by von Arnim. But this does not imply that I have serious doubts about the validity of his restorations or the sense of the passage.

the cultivation of human beings' rational powers, their specifically human nature.

There are other texts that indicate Chrysippus' view that dialectic has both a defensive and a creative function. Plutarch devotes the tenth chapter of his treatise *On the contradictions of the Stoics* to statements by Chrysippus about dialectic. The inconsistency that Plutarch seeks to detect has a bearing on the two functions of dialectic which I have suggested.

The main point at issue, for Plutarch, is Chrysippus' attitude towards 'arguing the opposite sides of a question'. Chrysippus recognised the value of this activity for sceptics whose aim is to promote suspension of judgement (*epochē*) in their audience (1036a). But he was at pains to qualify this approval in his advice to Stoic teachers, 'those seeking to produce knowledge according to which we shall live consistently'. Their task is not to argue with equal cogency on both sides but to 'give their pupils basic instruction and to fortify them from beginning to end'. They may, however, in appropriate circumstances, mention 'the opposing arguments' as well, their justification being to 'destroy their plausibility'. Here then Chrysippus regards arguing the opposite sides of a question purely as an educational tool that must be used with caution (*eulabeia*). Much the same general position is stated in other quotations by Plutarch: opposing arguments must be handled in such a way that the inexperienced are not taken in by a plausible refutation – 'for those who follow everyday experience in grasping perceptible things ... (i.e., accepting the cognitive value of certain sensations) easily abandon these if they are carried away by the questions of the Megarians and a greater number of other more powerful questions' (1036e). This caveat is put still more positively in a passage from Chrysippus' work *On the use ‖ of the logos*: '[The faculty of reason] must be used for the discovery of truths and for their organisation, not for the opposite ends, though this is what many people do' (1037b trans. Cherniss, *Moralia* Loeb. ed. XIII.2). In these texts we witness the two aspects of Chrysippus' dialectic, its defensive function, where arguing both sides of a question may have limited value, and its creative role in the discovery of truths.

Plutarch's effort to detect inconsistency is based largely on one, apparently youthful, activity of Chrysippus. Under the influence of Arcesilaus, with whom he studied as a young man, Chrysippus published arguments for and against Everyday experience (1036c,

1037a).[22] These were an investigation into the pros and cons of the conventional position that some sense experience provides demonstrably valid evidence about the world. Plutarch would have us believe that Chrysippus' arguments against the senses were far more effective than his defence of them and that his support for a position contrary to his own beliefs was grossly inconsistent with his published views about the use of contrary theses. There can be little doubt that Plutarch is here drawing upon a hostile biographical tradition, to which he himself gives the lie when he concludes his discussion with the words: 'you do yourself confess that from ambition you are showing off by using the faculty of reason in ways unprofitable and harmful' (1037c, trans. Cherniss). Possibly Chrysippus' arguments for and against Everyday experience were an exercise set him by Arcesilaus (cf. D.L. VII.184). We certainly have no ground for thinking that his views on the value of arguing both sides of a question were inconsistent during his maturity as a philosopher.

Apart from its biographical interest, Plutarch's evidence shows that Chrysippus envisaged for dialectic the two complementary functions I have indicated. Arguing both sides of a question was the dialectical method of the contemporary Academy. Stoicism needed defence against this form of attack, and the dialectical virtues which we have studied refer to the ideal armoury of the Stoic sage who knows how to acquit himself excellently in disputation. Without his irrefutability and the like, as Diogenes Laertius says, 'he will not show himself sharp and acute and generally skilful in arguments' (VII.48). The titles of Chrysippus' logical works prove that he wrote at enormous length on techniques of argument and ‖ the handling of sophisms; in this respect he may be regarded as one of the heirs of Aristotle's *Topics*.

This brings us back to the whole question of what dialectic connotes for Chrysippus and the relation of this to Plato and to Aristotle. I have already drawn attention to points of contact and difference with both earlier philosophers and it is time to try to state these more precisely. Chrysippus agreed with Plato and Aristotle that philosophical argument, formally conducted, is the only proper procedure for the demonstration of truth. Like Plato he

[22] It is these works that are included by Diogenes Laertius, along with their addressees Metrodorus and Gorgippides, in his catalogue of Chrysippus' writings, VII.198.

called the expert in this a dialectician, which meant, for both philosophers, not merely a skilled logician but also, most important, someone who has knowledge of reality. In his conception of reality, however, and in his theory of knowledge Chrysippus differed sharply from Plato. In place of an investigation by question and answer which has as its goal to establish relationships between Forms, supra-sensible realities, Chrysippus was interested in demonstrating the conditions that make it proper to assent to sense-impressions and propositions concerning empirical nature.

For Aristotle the scope of dialectic, argument by question and answer, is limited to subjects on which the majority of people have 'opinions'. Such matters, in Aristotle's view, not admitting of necessary truths, are appropriate for debate, which is not the case with the premises of the demonstrative syllogism that are 'true and primary' (*Top.* 100a25–b23). We do not, on Aristotle's view, demonstrate truths by engaging in dialectical discussion. But this activity has value, both for clarifying the subjects it is competent to handle, and above all, for training the intellect.

Chrysippus' attitude toward dialectic in this sense seems not to have been very different from Aristotle's.[23] He too regarded training in handling contrary theses as a useful educational device provided it is not confused with the discovery of truths or treated as an end in itself. He certainly thought the wise man should be excellent at questioning and responding in formal debates, but nothing suggests that he shared Plato's views about the cognitive value of such encounters. They form a part of dialectic, as Chrysippus conceived of this, but not its positive role for the demonstration of truths. Though using the term 'dialectic' much more broadly than Aristotle, Chrysippus agreed that in logic we should distinguish ‖ between demonstrative science and knowledge of how to conduct oneself in argument by question and answer.

DIALECTIC AND THE DISCOVERY OF TRUTH

Up to this point I have dwelt largely on statements by Stoics or Stoic sources on the nature and value of dialectic. These have helped to explain why the sage is a dialectician but not, perhaps, why he is the only dialectician. What about Chrysippus himself?

[23] Cf. Moraux 1968, p. 304, and more generally Bréhier 1951, pp. 62–5.

He made no claims to be a Stoic sage yet it was popularly said of him, 'if the gods had dialectic it would be the dialectic of Chrysippus' (D.L. VII.180). The apparent paradox is partly resolved by pointing out that in statements of the form 'only the sage is a such and such', the predicate is evaluative as well as descriptive. It refers to what we might call supreme or perfect competence but with the fundamental proviso that no one who falls short of perfect competence can even qualify for the description. The Stoics admitted no degrees of virtue or vice, so banning the use of the comparatives better or worse, and they also regarded dialectic, itself a virtue, with the same complete lack of compromise. Either a man is wise and therefore a dialectician, or he is not wise and not a dialectician.

It may be said that this treatment of the term, 'dialectician', is merely one of the innumerable examples of the Stoics' practice in confining all knowledge, skill and virtue to the wise man and that it is of no particular philosophical interest. I think this conclusion would be premature. The fact that 'dialectician', in Stoic usage, falls into the category of predicates peculiar to the wise man tells us something about the Stoic view of dialectic. Moreover, as we have seen, Stoic statements about dialectic lay great emphasis upon the wise man's unique competence.

He instantiates what dialectic is, the science of things true and false, and he is distinguished from other people, including would-be dialecticians, by his possession of truth (*alētheia*).[24] According to strict Stoic usage, truth is knowledge, a disposition of the wise man's *logos*, and it differs from 'the true' in various ways. Above all, truth is something compound or complex whereas the true is ‖ uniform and simple. Dialectic, whether treating of assent to sense-impressions or to methods of inference, deals with the conditions that make particular propositions true or false. But a person can learn to formulate true propositions without grasping a complete structure of logical relationships, an ordered system of true propositions, which constitutes dialectic as such and therefore truth as a whole. The distinction between truth and the true helps to show the systematic character of the wise man's knowledge. He represents an ideal of language and rationality at one with reality, of truth discovered.

[24] For evidence and discussion, see Long 1971b, pp. 98–102, and 1978b.

Chrysippus, it may be recalled, said that 'the faculty of reason must be used for the discovery of truths and for their organisation', and 'the discovery of truth' occurs in Diogenes Laertius' introductory remarks on logic (VII.42). He speaks of a (sub-)division of logic concerned with 'canons and criteria' which has discovery of truth as its function, and says that it formulates rules about the differences of *phantasiai* (impressions presented to the sense organs or the mind). He also refers to a further part of logic, to do with 'definition', saying that 'they use this in the same way for recognition of truth; for things are grasped through general concepts' (*ennoiai*).[25]

In a treatise attacking Epicureans and Academics, Epictetus charges the latter, as sceptics, with trying to case off or blind their own sense-perceptions (*aisthēseis*). He asserts that a human being has natural endowments 'for recognising the truth' (Diogenes Laertius' phrase) but fails to 'go on and take the pains to add to these (sc. measures and standards) and to work out additional principles to supply the deficiencies, but does exactly the opposite, endeavouring to take away and destroy whatever faculty he does possess for discovering the truth' (*Discourses* II.20.21, trans. Oldfather). Omitting for the present Epictetus' professed attitude to dialectic, I would suggest that this passage gives us a moral statement on the Stoic attitude toward discovering truth. Human beings are innately equipped to achieve this by reason of their own intellect and sensory faculties, but these require training in (we may interpret) the subject-matter and methodology of dialectic; hence what Epictetus calls elsewhere 'the necessity of logic' (*Discourses* II.25).

The orthodox Stoic doctrine, which he implies, takes us back to Diogenes Laertius on the discovery of truth. His 'canons and ‖ criteria' and 'definition' refer to the two primary aspects of the Stoic theory of knowledge. 'Distinguishing between *phantasiai*', the scope of 'canons and criteria', is the province of the human faculty to 'assent correctly' and to grasp (*katalambanein*) the valid content of a sense-impression or a sentence;[26] and we have noted those dialectical virtues that signify the wise man's capacity to do

[25] In the last sentence of VII.41 D.L. says: 'but some omit what has to do with definition'. That these did not include Chrysippus seems clear both from our general accounts of Stoic logic and from Chrysippus' list of writings.

[26] On the meaning of the terms and the Stoic doctrine they help to express, cf. Rist, 1969, pp. 133–41; Sandbach 1971b, pp. 9–21; Graeser 1975, pp. 39–55.

this. But assenting and grasping are activities of the *logos*, a human being's rational governing principle, and a fundamental fact about the *logos* is its being 'a collection of general concepts and preconceptions' (*SVF* II.841).[27] Similarly according to Diogenes' analysis of the cognitive value of 'definition', 'things are grasped through general concepts'. If we are to *know* what each thing is, we need to bring the particular percept or proposition under a valid general concept the basis of which, in Stoicism, is also sense-experience and its organisation by the intellect. As Gerard Watson has written, 'the new piece of information must fit into the so far established picture, and *katalēpsis* cannot be separated from *logos*, the particular act from the general disposition. For truth, then, there must be coherence.'[28]

This last point is clearly hinted at in the dialectical virtue of *amataiotēs* – 'a disposition which refers *phantasiai* to the correct *logos*'. But how are we to interpret *orthos logos* here? Hicks in the Loeb edition says 'right reason'. That is implied, no doubt, but it leaves the definite article untranslated. 'Right reason' describes the *logos* of the wise man (and god) and it is his *logos* that pronounces judgment on the *phantasia*. But what intellectual process does this involve? Is it not more accurate and more informative to interpret *ton orthon logon* here as '*the* correct argument'?[29] An example, which might do justice to various items of our evidence, would be this: the wise man wakes up at 9:00 a.m. in a relatively dark room and his initial impression (*phantasia*) on waking is that it is still night. But before assenting to this impression he takes stock of his surroundings and realises that it is light. His experience of the world has taught him the truth that 'if it is night, it is not light'; he therefore withholds assent from his initial impression and infers that it is not night and therefore that it is day. This example seeks to bring together particular *phantasiai*, general concepts, Stoic methods of inference, and the sense of *orthos logos* in Diogenes. To possess an *orthos logos* implies the ability to reason correctly, ‖ and while we need not suppose that the Stoics were so humourless that they thought the wise man would subject all his

[27] A quotation by Galen from Chrysippus.

[28] Cf. Watson 1966, p. 37. The importance of general concepts (*ennoiai*) in the Stoic theory of knowledge is very well argued by Watson.

[29] This also suits the other occurrences of *logos* in D.L. VII.46–7, three of which Hicks rightly translates by 'argument'.

experience to formal methods of inference, they should not be taken to regard reference to *orthos logos* as recourse to a mysterious intuition. The wise man has 'right reason' because he has an infallible disposition to reason correctly. We should not perhaps forget Chrysippus' dialectical dog which infers the correct one of three possible roads for pursuit of its quarry by smelling only at the two roads that it did not take and then, without smelling at the third, rushes off along it (Sext. Emp. *PH* 1.69)!

The wise man's possession of right reason relates him to the active principle of the universe which *is* right reason and identical with god. Consideration of this relationship can illuminate both the practical application of Stoic dialectic and the overriding imperative to live consistently in accordance with nature. This goal becomes more intelligible and practicable if it is seen to depend upon the systematic ability to grasp facts and to reason correctly. Life according to nature entails for the Stoic an attunement between his own attitudes and actions and the rational course of events. But how is someone to know whether he has achieved, or is progressing toward achieving, such a relationship? The answer is surely that the more he succeeds in grasping what is true the closer he comes to attunement with right reason in its cosmic sense.[30] For right reason (*orthos logos*) is logically equivalent to truth (*alētheia*).[31] What truth means in this connection depends upon whether we are referring to the sage or to the *orthos logos* that is god. In the sage truth refers to his rational disposition, his systematic knowledge and ability to state all that is true. In reference to god truth seems principally to denote destiny, the causal nexus that determines all things. But this is an activity of *logos*; that is to say, it is both expressible and intelligible. The sage's systematic knowledge of particular truths is the human counterpart to the divine nexus of causes.[32]

[30] This goes some way toward resolving the question I raise in chapter 6 of this volume, p. 150, where I suggest that the Stoics gave no satisfactory answer to the question how someone might know whether his reason accorded consistently with Nature.

[31] *Alētheia*, as 'knowledge', is a disposition of the 'governing principle' (*hēgemonikon*) or *logos* such that the *logos* is upright or correct (*orthos*); cf. *SVF* II.132 with other descriptions of the wise man. For *orthos logos* and *alētheia* as cosmic principles cf. *SVF* II.913 and III.4; Marcus Aurelius IX.2.

[32] I am not of course denying knowledge and consciousness to the Stoic deity; Cleanthes and Chrysippus are said to have claimed 'the same virtue and truth belong to man and god', *SVF* III.250.

The moral implications of the link between cosmic and human *logos* have been well understood by modern students of Stoicism. No one today would readily accept the view that logic in the mature Stoic system ranks below physics and ethics in importance.[33] But it is tempting to go further and to suggest that the study of dialectic itself, for Chrysippus at any rate, is an integral ‖ part of moral conduct. In analysing the structure of language and its function to express true propositions, the Stoics were taking as their subject-matter fundamental aspects of the human *logos*, the rationality of human nature. Language and logic are not capacities of the human *logos* which can or should be isolated from its more obviously moral dispositions. The character of the wise man is sufficient proof of this point, and it can be confirmed by a wide range of Stoic texts. Chrysippus, as we have seen, was well aware that *logos* can be misused in dialectical activities. But when applied to the genuine discovery of truth, exercise of the *logos* must be an activity that accords with human nature; and this allows the most technical details of Stoic logic, and even the solution of sophisms, to be regarded as actions that contribute to the understanding of human nature and of the rationality of the universe. Thus dialectic may be regarded as a method of self-discovery.

That Chrysippus held such a view is implied by the catalogue of his writings preserved in part by Diogenes Laertius (VII.189–202). This appears to have been arranged under the three headings, logic, ethics and physics, and only the first of these is complete. The ethical catalogue breaks off in the middle of a title, and physics is missing altogether. Now the titles of the works arranged under logic give no indication of the broad significance for dialectic that I have sought to establish for Chrysippus. They cover in enormous detail a range of topics – types of proposition, aspects of grammar and style, methods of argument and solutions to sophisms – which correspond to the summary of Stoic logic in Diogenes Laertius, with one major omission. Not one of Chrysippus' logical titles refers explicitly to epistemology, the first subject treated in Diogenes.

Then we turn to ethics (VII.199–202). Like the logical titles the ethical books are arranged by sections. The first of these is headed 'the classification of ethical concepts' and the books listed in its

[33] As is implied by Zeller 1892–1909, vol. III.1, pp. 60–1, and Pohlenz 1959, p. 33.

first series are mainly *Of definitions*, e.g., *Of definitions of the good man, to Metrodorus*, two books. But the most interesting item is the second main section, 'concerning the common *logos* and the arts and virtues deriving from it' (VII.201). Its first series includes one of Chrysippus' books from which I have already quoted, *On the use of the logos*, and all but one of the remaining titles concern topics that appear in Diogenes Laertius' treatment ‖ of Stoic logic: *On how we speak each thing and conceive of it, On general concepts, On supposition, Demonstrations that the wise man will not hold opinions* (i.e., that his sole cognitive state is knowledge), *On grasping (katalēpsis) and knowledge and ignorance* – four books, and *On logos*.

If we find it strange that these titles should appear under ethics, we have a further surprise in the second series of this section: I report this in full: *On the fact that the ancients admitted dialectic along with demonstrations, to Zeno* – two books; *On dialectic, to Aristocreon* – four books; *On objections brought against the dialecticians* – three books; and finally, *On rhetoric, to Dioscurides* – four books.[34]

The source of the catalogue is not known, and we cannot be certain that Chrysippus arranged his works in this way.[35] But there can be no serious doubt that the arrangement has Stoic authority. It proves that some Stoics, if not Chrysippus himself, found it appropriate to classify under ethics some of his works that dealt quite explicitly with dialectic, rhetoric and epistemology. If this appears to breach the recognised sphere of Stoic logic we should remember that 'no part [sc. of Stoic philosophy] is separate from another part', according to some, 'but they are mixed together' (D.L. VII.40). Of great interest too is the heading for this section of ethics, which I quoted above. What is meant by 'the common *logos*' from which arts and virtues are derived? Hicks translates *koinos logos* by 'common view', which I fail to understand. I cannot see how 'common view' could be a source for arts and virtues, but if we take *koinos logos* in a familiar Stoic sense the heading becomes intelligible and highly significant. The phrase should mean the community of reason which unites human beings and god. This is indeed the basis of virtue in Stoic theory and such a heading is

[34] Notice also that logical subjects and etymologies predominate in the later series of the first ethical section, VII.200.

[35] For bibliography on the catalogue, cf. Gigante 1976, vol. II, p. 541 n. 233. Bréhier's claim (1951, p. 22) that logical works have 'surreptitiously' contaminated the ethical catalogue raises more questions than it resolves.

fully appropriate to most of the titles of all three series in this section. But above all, it helps to explain the presence of dialectic in the treatment of ethics. As the science that handles language and logic, dialectic is concerned with *koinos logos* and therefore with ethics and with physics too. On the basis of independent evidence we have thus arrived at a conclusion already stated in Diogenes Laertius: the interdependence of dialectic, the wise man, and proficiency in physics and ethics. ‖

THE SAGE AND DIALECTIC IN EPICTETUS

Up to the time of Chrysippus, Stoics differed in their conception and evaluation of dialectic and they continued to do so thereafter. It is likely that many of them, including Panaetius and Posidonius, accepted his view of the wise man as dialectician even if few Stoics apart from Chrysippus' immediate successors extended the study of logic and grammar. Historians generally associate the later Stoa with a decline of interest in logic, and up to a point this is correct. But it is important to distinguish professional Stoic teachers, with different views, from eclectic practitioners of Stoicism such as Seneca and Musonius Rufus. Seneca's attitude toward logic was dismissive, recalling the Cynic approaches of Aristo (*Ep.* 45.5, 49.5, 82.19, etc.). But logic continued to form an important part of the Stoic curriculum during the imperial period, so much so that it was often regarded as mere pedantry and irrelevant to practice of the good life, thus explaining, if not justifying, a standpoint like Seneca's. Between these two extremes it was clearly possible to adopt a series of intermediate positions, and we have an interesting example of this in Epictetus. His statements about the value of logic are particularly relevant to our main theme since no Stoic was more insistent on the practical purpose of philosophy.[36]

Epictetus claimed no expertise as a logician and his discourses, as recorded by Arrian, make only passing reference to the more formal elements of Stoic dialectic. But his terminology and his methods of argument suggest quite considerable familiarity with logical textbooks by Chrysippus or other Stoics. Several of his discourses (I.7; I.17; II.12; II.25) are specifically concerned with the value of logic, and the subject recurs in many others. When all of

[36] For a well-balanced account cf. Bonhöffer 1894, pp. 122–7.

these passages are put together, they show that Epictetus' general conception of the role of dialectic was broadly in line with the position of Chrysippus. Many of his remarks on this subject are related to the two extreme positions that he rejected. Epictetus constantly attacks pretentious display of logical techniques which are unrelated to practical conduct. 'The books of the Stoics are full of quibbles. What then is the thing lacking? The man to make use of them, the man to bear witness to the arguments by what he does' (1.29.56). It is not the mark of a man making true progress ‖ to want to know 'what Chrysippus means in his books on the *Liar*' (11.17.34) or to pride himself on posing the Master argument (11.17–18.18).[37] A man might analyse syllogisms in the manner of Chrysippus and still be wretched (11.23.44). Taken in isolation such statements as these (and there are many more of the same kind) seem to treat logic as a trivial activity which has no function for the serious-minded. But Epictetus' purpose is different. In these statements he is not rejecting logic as such but misapplications of it and erroneous views about its intrinsic value. He is rejecting the idea that would-be Stoics who get first-class marks on Chrysippean logic have achieved anything worthwhile if this is unrelated to the structure and plan of their life as a whole; and with this Chrysippus would have agreed.

Epictetus' positive attitude to logic is quite consistent with his negative posture. 'Logic is necessary': not as an end in itself but as the 'measuring instrument' of our *logos*, our rational faculty (1.17). The faculty of reason is our innate instrument of judgement, and it is through logic alone that we can come to understand and refine this power. We should read and try to interpret Chrysippus, not for its own sake, but in order to 'follow nature' and to enlarge our understanding of ourselves. It is the interpretation, not the interpreter, which has value.

In discussing Chrysippus I suggested that he might have regarded dialectic as a means of self-discovery, but I could not prove this from any surviving quotation. In Epictetus this is stated explicitly: he compares Chrysippus' achievement in logic to that of a diviner who predicts the future from inspecting entrails (1.17.18–29). Chrysippus is someone whose analysis of *logos* has yielded true indications of human nature.

[37] Epictetus is however our principal source for the Master argument, 11.19.1–5.

In this treatise Epictetus moves rapidly from an assessment of logic to psychological and ethical conclusions, and this is characteristic of his methodology. But there is one discourse that deals at some length with the theme, *On the use of equivocal premisses, hypothetical arguments and similar subjects* (1.7). Epictetus' purpose here is to show that dialectic in the more restricted sense – knowing how to argue by question and answer – is a field in which the wise man will be proficient. It is not enough to have knowledge of particular facts. 'One must learn how one thing follows as a consequence upon other things ... if a man is to acquit ‖ himself intelligently in argument ... and is not to be deceived by quibblers as though they were conducting a proof' (1.7, 10–12).

Having established the wise man's need of dialectical competence, Epictetus turns to particular problems that arise in formal debates. If the premises of an argument are equivocal, how is someone to deal with an inference that is valid but false? Or if an argument is built on hypothetical premises, under what conditions should someone give his assent to the hypothesis and how far does his acceptance of it commit him to granting all its consequences? Epictetus raises these questions, and argues that a training in formal argument to deal with them is presupposed by the Stoic conception of the wise man (1.7, 25–9). He then infers the need for ordinary persons to work at the perfection of their own reason. It is no excuse to claim that an error in reasoning is not equivalent to parricide. Reckless assent to a sense-impression and inability to follow an argument are errors in themselves and signify an untrained reasoning faculty (1.7, 30–3). We are reminded once again of Diogenes Laertius' dialectical virtues. The wise man is infallible in all respects. His dialectical prowess is both a faculty to reason correctly in debate and a means of conducting himself without error in all the occasions of life.

This discourse by Epictetus – the seventh of Arrian's first book – is the nearest thing we possess to a Stoic equivalent of Aristotle's *Topics*. It shows us that formal argument by question and answer was still being practised in the first century AD and it also recalls Zeno's interest in the ability to cope with sophisms. The Stoic sage was always a dialectician, but it is remarkable that his dialectical prowess and significance under Chrysippus have remained so prominent in Epictetus.