

SEXTUS EMPIRICUS

Against the Logicians

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by a negative.³⁹ (90) Yes, they say, but they are in contradiction if we add this – that the negative is placed at the *front* of one of them;⁴⁰ for then it governs the whole proposition, while in the case of “It is day and it is not light,” since it is a part of the whole, it does not govern to the extent of making the whole negative. Well then, we will say, there should have been an addition to the conception of things that are in contradiction: that they are in contradiction not merely when one goes beyond the other by a negative, but when the negative is placed at the front of the proposition.

Platonic difficulties concerning the negative (91–92) (91) Someone else will also employ Plato’s argument, which he uses in *On the Soul*,⁴¹ and will teach that it is not possible for the proposition, by participation in the negative, to be more than what does not have the negative. For just as nothing becomes cold by participation in hot, so nothing becomes large by participation in small (it becomes small); and just as something becomes large by participation in the larger, so too something becomes small by participation in the small. Hence, too, nine does not become larger in virtue of the addition of the unit. For one is less than nine; (92) by gaining this in addition, then, nine will not become more than nine, but rather less. Since, then, the negative “not” is something smaller than the proposition, it will not make the proposition larger, given that just as something becomes larger by participation in some largeness, so too it is made smaller by participation in something smaller.

Distinctions among types of propositions (93–98) In this way, then, Plato’s argument will be borrowed by some for this topic. (93) But as for ourselves, let us add to the preceding points and say the following: if what is true is a proposition, it is definitely either a simple proposition or a non-simple one or one that is both simple and non-simple. For almost the first and most crucial difference among propositions that the dialecticians⁴² bring forward is the one in terms of which some of them

³⁹ Following Von Arnim and LS, I adopt the supplement *hōn* (instead of Mutschmann’s *tōi*), and alter the mss. *pleonazein* to *pleonazei*.

⁴⁰ The canonical placing of the negation in Stoic logic was at the beginning of the sentence; see sect. 2 of S. Bobzien, “Logic,” in B. Inwood, ed., *The Cambridge Companion to the Stoics* (Cambridge University Press, 2003). (This word order is quite acceptable in Greek, whereas “Not it is day” is not feasible English.)

⁴¹ I.e., the *Phaedo*; see 100c–103d.

⁴² Some have seen this term, here and over the next several pages (as well as in a few other authors), as the name of a specific school, centered around Philo and Diodorus (cf. 112–118). The fullest

are simple and some non-simple. And the simple ones are those that are constituted neither from a single proposition taken twice, nor from different propositions by means of one or more conjunctions – such as “It is day,” “It is night,” “Socrates is having a discussion,” and everything of a similar form. (94) For just as we call the warp⁴³ simple, although it is constituted from threads, since it is not woven out of warps (which are like it in kind), so propositions are called simple, since they are constituted not from propositions but from certain other things. For example, “It is day” is simple in so far as it consists neither of the same proposition taken twice nor of different ones, but is a combination of certain other things, namely “day” and “[it] is.”⁴⁴ Furthermore, there is no conjunction in it either. (95) Non-simple propositions are those that are, for example, double – those that are constituted from a proposition taken twice or from different propositions by means of a conjunction or conjunctions – such as “If it is day, it is day,” “If it is day, it is light,” “If it is night, it is dark,” “It is day *and* it is light,” “Either it is day or it is night.”

(96) Of the simple ones some are definite, some indefinite, and some intermediate. Definite ones are those that are expressed in terms of a demonstrative reference, such as “This person is walking,” “This person is sitting” (for I am “demonstrating” some particular human being). (97) Indefinite ones, according to them, are those in which some indefinite term governs, such as “someone is sitting.” And intermediate ones are those that are of this sort: “A human being is sitting” or “Socrates is walking.” “Someone is walking” is indefinite, since it has not marked off any of the particular people walking; for it can be uttered in the case of each of them. But “This person is walking” is definite, since it has marked off the person being demonstrated. “Socrates is sitting” is intermediate, since it is neither indefinite (for it has marked off the specific case) nor definite (for it is not expressed with a demonstrative reference), but seems to be intermediate between the two of them, the indefinite and the definite. (98) And they say that the indefinite – “Someone is walking” or “Someone is sitting” – becomes true, when the definite – “This person

treatment is T. Ebert, *Dialektiker und frühe Stoiker bei Sextus Empiricus* (Vandenhoeck & Ruprecht, 1991). But the matter is controversial – for some doubts, see Jonathan Barnes, “A Big, Big D?” *Classical Review* 43 (1993), 304–306 – and “dialecticians” may simply be equivalent to “logicians,” with no particular group intended by the term itself.

⁴³ I.e., the lengthwise threads in a loom. ⁴⁴ Cf. n. 33.

is sitting” or “This person is walking” – is found to be true. For if no particular person is sitting, the indefinite “Someone is sitting” cannot be true.

Difficulties surrounding simple propositions (99–107) (99) These are the kinds of things (to cover just the main points) that the dialecticians say on the subject of simple propositions. But the bringers of impasse ask first whether the definite can be true. For if this is done away with, neither can the indefinite be true, and if the indefinite is also done away with, the one that is intermediate between these will not subsist either. But these are, as it were, the elements of simple propositions; therefore if they are rejected, simple propositions will be gone as well, and it will not be possible to say that the true belongs in simple propositions. (100) Now, they say that this definite proposition – “This person is sitting” or “This person is walking” – is true whenever the predicate, such as “sitting” or “walking,” is an attribute of the thing that falls under the demonstrative reference. But when some particular human being is demonstrated in the saying of “This person is walking,” it is either (say) Socrates who falls under the demonstrative reference or some part of Socrates. But it is neither Socrates who falls under the demonstrative reference nor some part of Socrates, as we will establish; therefore the definite proposition cannot be true. (101) Socrates does not fall under the demonstrative reference, in so far as, while he is constituted of soul and body, the whole does not fall under the demonstrative reference whether the soul is demonstrated or the body.⁴⁵ Yet a part of Socrates does not fall under the demonstrative reference either. For if they say that the predicate (“walking” or “sitting”) is an attribute of the thing that falls under the demonstrative reference, but the predicate (such as “walking” or “sitting”) is *never* an attribute of the part being demonstrated (which is very small), then, necessarily, neither will the part be a thing that falls under the demonstrative reference. (102) But if it is neither this nor Socrates, and there is nothing besides these, the definite proposition, expressed in terms of a demonstrative reference, is gone, along with the fact that it virtually becomes indefinite itself. For if the part of Socrates being demonstrated admits of being this one, but

⁴⁵ The text at the end of this sentence (after “while he is constituted of soul and body”) is corrupt. I translate Mutschmann’s conjecture *eith’hē psuchē deiknutaí eite to sōma, ouchi kai to holon hupo tēn deixin píptei*. But this does not yield a remotely plausible argument, nor does any other conjecture based on the words in the mss. Perhaps there is a larger portion of text missing.

admits of being *not* this one but another one, the whole necessarily becomes indefinite. If there is not the definite proposition, then, nor will there be the indefinite one. And for this reason neither will the intermediate one subsist.

(103) In addition to this, when they say that the proposition “It is day” is true in the present, while “It is night” is false, and “It is not day” is false, while “It is not night” is true, one will be curious as to how a negative which is one and the same, in coming together with true things makes them false, and in coming together with false things makes them true. For this is like Silenus in the riddle of Aesop: when he saw the same person in the winter season blowing with his mouth both so that his hands would not be cold and so that he would not be burnt, said that he could not stand to live with a beast of such a kind as to have complete opposites coming out of it. (104) In this way the same negative⁴⁶ making real things unreal and unreal things real also partakes of a magical nature. For either they want it to be real, or not to be real, or to be neither real nor not real, or to be real and not real at the same time. And if it is real, how, in coming together with a real thing, does it make the whole unreal and not, rather, real? For a real thing added to a real thing secures its reality even more. (105) But if is unreal, then when it comes together with what is not real, for what reason does it make it real and not, rather, unreal? For an unreal thing added to an unreal thing produces not reality but unreality. Or how, being unreal, does it change the real into unreality, but does not make it in one respect real and in another respect unreal? For just as white and black, when put together, do not make black or white, but something that is in one respect white and in another respect black, so too an unreal thing coming together with a real thing will make the whole in one respect real and in another respect unreal. (106) Besides, what makes something unreal *does* something, and what does is and is real.⁴⁷ Therefore the negative, if it is not real, will also not make anything unreal. It remains, then, to say that it is neither real nor not real. But if it is like that, then again, how, if it is neither real nor not real, does it create unreality on coming together with what is real, and reality when coming together with what is not real? (107) For just as what is neither hot nor cold, on coming together with what is hot, cannot make it cold, nor on coming together with what is cold make

⁴⁶ Following Heintz’s alteration of the mss. *autē hē apophasis* to *hē autē apophasis*.

⁴⁷ Mutschmann posits a lacuna at this point. This is unnecessary; the argument as it stands is readily intelligible.

it hot, so it is unreasonable that what is neither real nor not real should create unreality on coming together with what is real, or reality when coming together with what is unreal. And it will be possible to create the same impasses even if they say that the negative is in a certain respect real and in a certain respect unreal.

Descriptions of and difficulties surrounding non-simple propositions (108–129) (108) Now that we have a feel (up to a point) for the dialecticians' laying down of the law with respect to simple propositions, let us move on to that of the non-simple ones.⁴⁸ Now, non-simple propositions are the ones mentioned above, which are constituted from a differentiated proposition⁴⁹ or from different propositions and in which a conjunction or conjunctions prevail. (109) Out of these let us take for the present the so-called conditional.⁵⁰ This, then, is constituted from a differentiated proposition or from different propositions by means of the conjunction "if [*ei*]" or "if indeed [*eiper*]." For instance, from a differentiated proposition and the conjunction "if," a proposition like this is constituted: "If it is day, it is day"; (110) and from different propositions and the conjunction "if indeed," we get one of this character: "If indeed it is day, it is light." Of the propositions in the conditional, the one in the position after the conjunction "if" or "if indeed" is called both "leader" and "first," and the other one "finisher" and "second," even if the whole conditional is expressed the other way round, like this: "It is light, if indeed it is day." For in this case, too, "It is light" is called "finisher" although it was expressed first, and "It is day" is called "leader" although it is spoken second, because of being in the position after the conjunction "if indeed." (111) In concise terms, then, the composition of the conditional is like this, and a proposition of this kind seems to promise that the second one

⁴⁸ I retain the mss. reading *epi tēn tōn ouch'haplōn*; Mutschmann alters to *tēn epi* . . .

⁴⁹ With Mutschmann I retain the mss. *diaphoroumenou*, on which the manuscripts agree here and twice in 109; cf. 281, 294, 466. Elsewhere the Stoics are reported as calling this type of proposition "duplicated," *diphoroumenou* (see *SVF* vol. 2, texts 261, 263), which clearly makes much more sense (and cf. "taken twice" in 95 above); but Mutschmann suspects that the mistake is Sextus' own (see his app. crit.), and this may well be right. The topic also comes up at *PH* 2.112; again the verb is "differentiated," but in this case the single letter (alpha) that distinguishes the two Greek verbs is erased in one manuscript.

⁵⁰ Literally, "connected (proposition)." But as the sequel makes clear (cf. Diogenes Laertius 7.71), this refers to what we call conditionals; Sextus' sarcastic "so-called" is perhaps meant to suggest that the term is not entirely lucid (since other kinds of propositions besides conditionals might be called "connected").

within it follows from the first one within it, and that if the leader is so, the finisher will be so. Hence, if such a promise is kept, and the finisher follows from the leader, the conditional becomes true; but if it is not kept, it is false. (112) And so, starting from this, let us look at whether any conditional can be found that is true and that keeps the promise just mentioned.

All the dialecticians in common say that a conditional is sound when its finisher follows from its leader. But on the question of when it follows, and how, they disagree with one another and lay out competing criteria of following. (113) Philo, for example, said that the conditional is true when it does not begin with a true proposition and finish with a false one, so that a conditional, according to him, is true in three ways and false in one way. For when it begins with a true one and finishes with a true one, it is true, as in “If it is day, it is light.” And when it begins with a false one and finishes with a false one, it is again true – for example, “If the earth flies, the earth has wings.” (114) In the same way, too, the conditional that begins with a false one and finishes with a true one is true, such as “If the earth flies, the earth is.” But it is false only when it begins with a true one and finishes with a false one, as does “If it is day, it is night.” For when it is day, “It is day” is true, while “It is night,” which was the finisher, is false. (115) Diodorus, on the other hand, says that a conditional is true which neither was nor is *able to* begin with a true one and finish with a false one – which conflicts with Philo’s position. For a conditional such as “If it is day, I am having a discussion,” when it is day at present, and I am having a discussion, is true according to Philo, since it begins with the true “It is day” and finishes with the true “I am having a discussion,” but false according to Diodorus. For it *is able to* begin with the true “It is day” and finish with the false “I am having a discussion” (when I have become quiet), and it *was* able to begin with a true one and finish with the false “I am having a discussion.” (116) For before I began having a discussion, it began with the true “It is day” and finished with the false “I am having a discussion.” Again, one of this character – “If it is night, I am having a discussion” – when it is day and I am silent, is in the same way true according to Philo (for it begins with a false one and finishes with a false one), but false according to Diodorus. For it *is able to* begin with a true one and finish with a false one, when night has come, and when, further, I am not having a discussion but am quiet. (117) But in addition, “If it is night, it is day,” when it is day, is true according to Philo for this reason:

that it begins with the false “It is night” and finishes with the true “It is day”; whereas according to Diodorus it is false for this reason: that it is *able*, when night takes over, to begin with the true “It is night” and finish with the false “It is day.”

(118) Since there is this kind of opposition, then – to speak by way of example – among the criteria for the conditional proposition, it may be that the distinguishing of the sound conditional is intractable. In order for us to learn this, the dispute among the dialecticians about its soundness needs first of all to be decided on. And to the extent that that is not decided on, it⁵¹ too is bound to remain in suspension of judgment. (119) And this makes sense. For either we will pay attention to all the dialecticians’ criteria or to one of them. But it is not possible to pay attention to all of them. For they conflict, as I have shown in the case of the two spoken of before, and things that are in conflict cannot be equally trustworthy. But if we pay attention to one of them, we will pay attention to it either all by itself and without judgment, or with reasoning that shows that this kind of criterion is sound. (120) And if we assent to some criterion without judgment and all by itself, why will we assent to this one rather than that one? And this amounts to assenting to none of them, because of the conflict. But if it is with reasoning that shows that the criterion of the conditional accepted by us is sound, this reasoning either is inconclusive and non-terminating or conclusive and terminating.⁵² (121) But if it is inconclusive and non-terminating, it is untrustworthy and bad for preferring some criterion of the conditional. But if it is conclusive, it is surely conclusive for this reason, that the consequence follows from the premises, so that it is itself certified through a certain following. (122) But the following that was sought from the beginning in the case of the conditional should have been certified by reasoning. This, therefore, amounts to falling into the reciprocal mode. For in order for us to learn about the conditional, which needs to be certified as a result of its following, we have to resort to some reasoning, and in order for this reasoning to be sound, its following, from which it is judged that it is sound, has to have been previously confirmed. (123) If, then – at least on the basis of this kind of impasse – we do not

⁵¹ I.e., the sound conditional (the gender of the Greek pronoun makes this clear).

⁵² “Conclusive” (*sunaktikos*) and “terminating” (*perainōn*) appear to be equivalent terms, as are their opposites. “Terminating” and “non-terminating” recur at 428ff., but nowhere else in the book; and the passage parallel to 428ff. in *PH* (2.146ff.) uses “conclusive and inconclusive” throughout.

have the sound conditional, nor will we have conclusive reasoning. But if we do not have this, nor will we have demonstration; for demonstration *is* conclusive reasoning. But if demonstration is not real, dogmatic philosophy is done away with.

(124) From these one can make a transition to conjunctions and to disjunctions, and in general to the remaining forms of non-simple propositions. For the conjunction should be constituted either from simple or from non-simple or from mixed ones, but all of these are put into impasse when the simple ones have been put into a prior impasse. (125) And indeed, when they say that a conjunction that has all its components true is sound, such as “It is day and it is light,” and that one that has a single false proposition in it is false, they are again laying down the law for themselves. For if a proposition that is a composite out of all true ones is true, it would be consistent that one that is a composite of all false ones should right away be false, and that one that consists of false and true ones simultaneously should be no more true than false. (126) For if it is possible for them to lay down the law on whatever they want and to arrange matters for themselves as they choose, then it must be allowed that the conjunction that has a single component false is called by them false – but it will also be possible for others to make opposing arrangements, and to say that the conjunction made out of a majority of true components but one false one is true. (127) But if one should pay attention to the nature of things, it is presumably consistent to say that the conjunction that has something false in it and something true is no more true than false. For just as what is a mixture of white and black is no more white than black (for the white was white and the black was black), so what is solely true turns out to be true, what is solely false is false, and what is a composite of both should be called no more true than false. (128) But, they say, just as in life we do not say that the piece of clothing that is sound in most parts, but torn in a small part, is sound (on the basis of its sound parts, which is most of them), but torn (on the basis of its small torn part), so too the conjunction, even if it has only one false component and a majority of true ones, will as a whole be called false on the basis of that one. (129) For in life we have to allow people to use words loosely; after all, they are not seeking what is true in reference to nature, but what is true in reference to opinion. I mean, we talk of digging a well and of weaving a cloak and of building a house – which

is not legitimate. For if there is a well, it is not being dug but has been dug, and if there is a cloak, it is not being woven but has been woven. So that in life and in common usage loose talk has its place; but when we are investigating things in reference to their nature, then we need to maintain precision.

v. Difficulties in supposing that the locus of the true is the utterance (130–136)

(130) From these points it has been sufficiently shown that the argument⁵³ is intractable, and creates a lot of trouble, for those who let the true and false reside in some incorporeal sayable. That it is also not readily manageable for those who place them in the utterance is easy to discover. (131) For every utterance, if it is, is either coming into being or in silence. But it is not the case either that one that is coming into being is (given the fact that it does not subsist) or that one that is in silence is (given that it is not yet coming into being); therefore it is not the case that there is utterance. The one that is coming into being is not, as is shown from similar cases. For a house that is coming into being is not a house, and the same applies to a ship, or anything else of this kind – and so to utterance as well. And that the one that is in silence does not subsist either is a matter of agreement. If, then, utterance is either coming into being or in silence, but it is not the case, at either of these times, that it is, there cannot be utterance.

(132) Besides, if the true is in utterance, it is either in the shortest utterance or in a long one. But it is not in the shortest one; for the shortest thing is partless, but the true is not partless. Nor is it in a long one; for that is non-subsistent given the fact that, when the first part of it is being expressed, the second part is not yet, and when the second part is being expressed, the first part is no longer. Therefore the true is not in utterance. (133) In addition, if it is in utterance, it is either in one that signifies or in one that does not signify. But it could not be in one that does not signify anything, like “blah-blah” and “gobbledegook”; for how is it possible to apprehend as true an object that does not signify? (134) It remains to say, therefore, that it is in one that signifies. Which is again impossible;

⁵³ I take “the argument” here to refer to the course of the discussion in general, rather than to some particular argument; two distinct groups are mentioned, and it is the same “argument” that is said to create trouble for both of them.

for no utterance is capable of signifying *as utterance*, since in that case all the Greeks and foreigners who apprehended an utterance must also have apprehended what is signified by it. So that as far as this point is concerned, too, the true is not to be placed in utterance. (135) And some utterances are simple, others composite – simple ones such as “Dion,” composite ones like “Dion is walking.” If, then, the true is in utterance, it is either in simple or in composite utterance. But it is not in simple and non-composite utterance; for what is true has to be a proposition, and no proposition is non-composite. (136) But it could not be in composite utterance given the fact that no composite speech, such as “Dion is,” subsists. For when we are saying “Dion,” we are not yet saying “is,” and when we are expressing the latter we are no longer saying the former. So that the true is not in utterance either.

vi. Difficulties in supposing that the locus of the true is the movement of thought (137–139)

(137) Nor, however, is it in the movement of thought, as some have suspected. For if what is true is in the movement of thought, none of the external things will be true; for the movement of thought is in us and not external. But it is absurd to say that none of the external things is true; therefore it is also absurd to allow what is true to be in the movement of thought.

(138) And since the movements of thought are private to each person, nothing will be true in common. But if nothing is true in common, everything will be indistinct and in disagreement. For what this person has that is true (that is, the movement of his thought) another person does not have, and conversely, what that person has, this person has not apprehended.⁵⁴ But it is absurd to say that there is nothing agreed upon as true; (139) therefore it is also absurd and not sound to maintain that what is true exists in the movement of thought. And it follows that those who allow what is true to be in the movement of thought accept that *all* of them are true – the movement of Epicurus’ thought, for example, and that of Zeno and of Democritus and of all the others; for all of them have the attribute of being movements of thought. But it is impossible for all of them to be true, just as it is impossible for all of them to be false. Therefore the movement of thought is not true either.

⁵⁴ I translate the mss. *ou kateilēphen*; Bekker, followed by Mutschmann, alters to *ouk eilēphen*.

3. *Transition to B and C (140)*

(140) Well then, having created so many impasses about the criterion and about what is true, let us inquire after this into the approaches that are constructed, using the criterion, for the apprehension of what is true but does not impinge on us all by itself – that is, sign and demonstration. And taking them in order let us speak first of sign; for it is by participating in this that demonstration becomes capable of uncovering the conclusion.

B. The sign (141–299)

1. *Introductory remarks (141–144)*

Whether there is any sign

(141) Since there is, at the highest level, a dual distinction among things, in terms of which some things are clear, others unclear (clear things being the ones that impinge on the senses and thought all by themselves, and unclear things being those that are not grasped by themselves), our discussion of the criterion, directed toward the impasse over plain things, proceeded according to a sound method (142) (for if the criterion is shown to be infirm, it also becomes impossible to state confidently about apparent things that they are in their nature such as they appear). Now, since the side of the distinction involving unclear things is still left, we think it is fine to use a concise approach for the rejection of this as well, one that does away with both sign and demonstration. For when these in turn are done away with, the apprehension of what is true by means of them also becomes infirm. But perhaps it is appropriate, before dealing with the particulars, to go over some brief points about the nature of the sign.

(143) “Sign,” then, is said in two ways, general and specific. In general it is what seems to reveal something; thus, we regularly call a sign what produces a renewal⁵⁵ of the object that was observed together with it. Specifically, it is what is indicative of an object that is unclear, which

⁵⁵ I.e., a reminder; cf. 152–153 for this terminology of “renewing”. The idea seems to be that one’s *memory* of previous associations between objects of types A and B is “renewed” or reactivated, as a result of which one’s *current* observation of an object of type A leads to an expectation of an object of type B.

is the kind that it is our task at present to examine. (144) But if one is paying attention to its nature distinctly, one must again first grasp, as we said above, that clear objects are those that come to our knowledge by themselves – such as, at present, its being day and my having a discussion – while unclear ones are those that are not like this.

2. Matters of taxonomy and methodology (145–161)

a. Distinctions among ways of being unclear (145–150)

How many different kinds of unclear things there are

(145) Some unclear things are unclear pure and simple, others are unclear by nature, and some are unclear for the moment. Of these, the ones called “unclear for the moment” are those that, while having a plain nature, are at times unclear to us because of certain external circumstances, as the city of Athens is to us now; for it is by nature plain and clear, but is unclear because of the distance in between. (146) Unclear by nature are those that are hidden away for all time and cannot fall within our plain experience, such as intelligible⁵⁶ pores and the unlimited void that is deemed by certain physicists to be outside the cosmos. (147) And the ones said to be unclear pure and simple are those that are of a nature never to fall within human apprehension, such as whether there is an even or an odd number of stars and that there is such-and-such number of grains of sand in Libya. (148) Since, then, there are four different kinds of object – first that of plain things, second that of things unclear pure and simple, third that of things unclear by nature, and fourth that of things unclear for the moment – we do not say that every kind needs a sign, but that some of them do. (149) For of course neither the things that are unclear pure and simple allow of any sign, nor do the plain things – the plain things because they strike us by themselves and do not need anything else for their disclosure, and the things that are unclear pure and simple because they escape all apprehension quite generally and do not allow of apprehension through a sign. (150) But those that are unclear by nature and those that are unclear for the moment do have need of the observation that comes from a sign – the ones that are unclear for the moment because in certain circumstances they are removed from our plain experience, and

⁵⁶ I.e., not perceptible (accessible *only* to the intellect).

the ones that are unclear by nature because they are non-apparent all the time.

b. Distinction between indicative and recollective sign, and declaration that the skeptic's critique is limited to the indicative sign (151–158)
(151) So, since there are two different kinds of objects that need a sign, the sign, too, proves to be of two kinds. One kind is the recollective, which appears useful especially in the case of things that are unclear for the moment; the other kind is the indicative, which, it is maintained, deserves to be employed in the case of things that are unclear by nature. (152) Now, the recollective sign, when it has been observed through plain experience together with the thing signified, leads us, immediately it impinges on us when the other thing is unclear, to a recollection of the thing that has been observed together with it but is not now striking us plainly, as in the case of smoke and fire. For having often observed these things connected with one another, immediately we see one of them (that is, the smoke) we renew the rest (that is, the unseen fire). (153) The same account also applies in the case of the scar that comes after a wound and the trauma to the heart that precedes death. For on seeing the scar we renew the wound that preceded it, and on looking at the trauma to the heart we predict that death is to come. The peculiar character of the recollective sign is like this; (154) but the indicative sign differs from this. For it does *not* admit of being observed together with the thing signified (for the object that is unclear by nature is from the beginning not within our awareness, and for this reason cannot be observed together with any of the apparent things), but it is said to signify that of which it is indicative simply by means of its own nature and constitution, all but giving voice. (155) For example, the soul is one of the objects that is unclear by nature. For it is not of a nature ever to fall within our plain experience. And being of this kind, it is revealed indicatively by means of the motions of the body; for we reason that a certain power, clothed by the body, endows it with such motions.

(156) Well then, while there are two signs – the one that is recollective and is thought to be useful mainly in the case of things that are unclear for the moment, and the indicative, which is adopted in the case of things that are unclear by nature – we intend to conduct the entire investigation and create all the impasse not about the recollective sign (for this is generally trusted by everyone in ordinary life to be useful), but about the indicative

sign. For this has been invented by the dogmatic philosophers and rationalist doctors,⁵⁷ as being able to provide them the most necessary service. (157) Hence we are not in conflict with the common preconceptions of humanity, nor are we throwing life into confusion, saying that nothing is a sign, as some people falsely accuse us of doing. For if we were doing away with every sign, perhaps we would be in conflict with life and with all humanity. But in fact we ourselves judge this way, assuming fire from smoke, a previous wound from a scar, death from previous trauma to the heart, and oil from a previous headband.⁵⁸ (158) Since, then, we do in fact posit the recollective sign, which is used in ordinary life, but do away with the one falsely believed in by the dogmatists, in addition to our not being in conflict with ordinary life we actually even speak on its side, seeing that we are refuting – by means of signs through an inquiry into nature! – the dogmatists who have risen up against the common preconception and say that they know things that are unclear by nature.

c. Reminder as to the skeptical procedure (159–161)

(159) Enough has been said, then – to give the main points – about the sign that falls under our investigation. But we need at present to bear in mind the skeptical procedure. This is to lay out the arguments against the reality of the sign not with confidence or assent (for doing that would be equivalent to maintaining, like the dogmatists, that there is a sign), but so as to bring the investigation into equal strength,⁵⁹ and to show that it is just as believable that there is no sign as that there is one, and conversely that the reality of a sign is just as unbelievable as the unreality of any sign. For in that way equilibrium and suspension of judgment is produced in our thinking. (160) And of course, for this reason even the person who seems to be contradicting us, when we say that nothing is an indicative sign, is a help, and this very person anticipates us in constructing the position that ought to be constructed skeptically. For if the arguments compiled against

⁵⁷ On the major approaches to medicine in later antiquity see Galen, *On the Sects for Beginners*, translated in Galen, *Three Treatises on the Nature of Science* tr. R. Walzer and M. Frede (Hackett Publishing, 1985). “Rationalist” does not name a single school (hence the term is neither capitalized nor cited in the Index of Names). Rather, it covers anyone who believes, as against the Empiricists, that theorizing about the underlying workings of the body is possible and useful (cf. 327); thus Galen freely alternates between the terms “rationalist” and “dogmatist”.

⁵⁸ Both worn by athletes.

⁵⁹ On the important skeptical concept of “equal strength” (*isostheneia*) see especially *PH* 1.8ff. In the present work cf. 298, 363, 1.443.

the sign by the bringers of impasse are extremely powerful and virtually impossible to oppose, while those of the dogmatists postulating its reality do not fall short of these, we should immediately suspend judgment about its reality and not adhere unfairly to either side. (161) However, now that the skeptical procedure has been presented, let us move next to setting out the topic that lies before us.

3. *Difficulties concerning the sign (161–299)*

a. Identification of the sign's relative status, and difficulties surrounding this (161–175)

Of the things that there are, say the skeptics, some are in virtue of a difference, while others are in a certain state in relation to something. In virtue of a difference are any that are conceived in virtue of their own subsistence and absolutely, such as white, black, sweet, bitter, and everything like these; for we focus on them alone and individually, and without conceiving anything else as well. (162) In relation to something are those things that are conceived in virtue of their state in relation to another thing and are no longer grasped absolutely – that is, on their own – such as whiter and blacker and sweeter and bitterer and everything that is of the same kind. For what is whiter or blacker is not conceived in virtue of its own individuality, in the same way as what is white or black or bitter. Rather, in order to conceive this, we need to focus at the same time on the thing than which it is whiter or than which it is blacker. And the same account applies in the case of the sweeter and the bitterer.

(163) Since, then, there are two different kinds of objects, one that of the things in virtue of a difference, the second that of the things in a certain state in relation to something, the indicative sign too is necessarily among either the things in virtue of a difference or the things in relation to something; for there is no third kind between these two. But it could not be among the things in virtue of a difference, as is agreed right away even by those of the other opinion. It will, then, be among the things in relation to something. (164) For just as the thing signified, being conceived in virtue of its state in relation to the sign, is among the things in relation to something, <. . .>⁶⁰ for it is a sign *of something*, namely the thing

⁶⁰ Here some words have dropped out; the sense must be “so too the sign is among the things in relation to something.”

signified. At any rate, if (let us suppose) we do away with one of them, the remaining one will also be done away with at the same time, which is the kind of thing also apparent in the case of the right and the left. For if there is no right, neither will there be a left, on account of the fact that each of these is a thing in relation to something, and if there is no left, the conception of right is also canceled along with it. (165) Well now, things in relation to something are apprehended together with one another. For it is not possible, as I said, to recognize something whiter without the thing than which it is whiter being encountered along with it, nor something blacker without the thing than which it is blacker being conceived along with it. So, since the sign is among the things in relation to something, as we explained, together with the sign there is apprehended the thing of which it is a sign. But what is apprehended together with it is not a sign of it. For the supposition that it is possible for what is apprehended together with something to be a sign of that thing is completely unhinged. For if both are grasped on a single occasion, neither is this one capable of uncovering that one, nor is that one capable of revealing this one, but each one, since it strikes us by itself, lacks this kind of power.

(166) Again, one might put together an argument of this kind. If the sign is apprehensible, it is apprehended either before the thing signified or together with it or after it. But it is not apprehended before it or together with it or after it, as we will establish; therefore the sign is not apprehensible. (167) Now, to say that the sign is apprehended after the thing signified is right away plainly absurd. For how can the sign still be capable of uncovering, when the thing it is capable of uncovering, the thing signified, is apprehended before it? Besides, if they say this, the dogmatists will be accepting something that conflicts with the dogma they usually propound. For they say that the thing signified is unclear and not apprehended by itself. But if it is *after* the apprehension of this that the sign is apprehended, this thing, which has been discovered *before* the presence of what reveals it, will not be unclear. So that the sign is not apprehended after the thing signified. (168) Yet nor is it apprehended together with it, for the reason mentioned a little earlier. For things that are apprehended together with one another do not need to be revealed by one another, but strike us by themselves, at the same time, and for this reason neither could the sign be said to be a sign, nor could the thing signified be said any more to be signified. (169) It remains to say, then, that the sign is apprehended before the thing signified. But this again spirals

into the same refutations. For the dogmatists ought first to show that the sign is not among the things in relation to something, or that things in relation to something are not apprehended together with one another, and *then* extract from us the possibility of the sign being apprehended before the thing signified. (170) But the starting-points are unchanged: it is not possible to testify in favor of the sign's being apprehended beforehand, since it is from the class of things in relation to something and ought to be apprehended together with the thing of which it is the sign. But if, in order for the sign to be apprehended, it has to be apprehended either before the things signified or together with it or after it, and it has been shown that none of these is possible, it has to be said that the sign is inapprehensible.

(171) Some people also call the dogmatists into question by means of another argument with the same force, which goes like this. If there is any sign that is indicative of something, either it is an apparent sign of an apparent thing, or a non-apparent sign of a non-apparent thing, or an apparent sign of a non-apparent thing, or a non-apparent sign of an apparent thing. But it is neither an apparent sign of an apparent thing, nor a non-apparent sign of a non-apparent thing, nor an apparent sign of a non-apparent thing, or the reverse; therefore there is no sign. (172) Such is the argument, and its layout is clear. And it will become even clearer when we have indicated the opposition that the dogmatists bring to bear on it. For they say that they only go along with two of these combinations, and that they disagree with us about the remaining two. (173) For they say that while it is true that the apparent is a sign of the apparent and that the apparent is a sign of the non-apparent, it is false that the non-apparent is capable of showing the apparent or that the non-apparent is capable of showing the non-apparent. For example, an apparent thing as the sign of an apparent thing is the shadow as the sign of the body; for, being a sign, it is itself an apparent thing, and the body, being a thing signified, is also plain. And an apparent thing is capable of showing a non-apparent thing – for instance, blushing is capable of showing shame; for it is plain and discovered by itself, whereas shame is hidden. (174) But the people who say this are completely silly. For if it is agreed that the sign is in relation to something and that things in relation to something are necessarily apprehended together with one another, it is not possible that, of the things that are equally encountered together with one another, one is the sign and the other the thing signified. Rather, because of the plain

simultaneous encountering of them both, it is absolutely in every way impossible that either one of them can be either a sign or a thing signified, one of them having nothing to uncover, the other not needing anything to uncover it. (175) And the same things should be said about the remaining combination – the one where they maintain that the apparent is a sign of the non-apparent. For if this is so, the sign has to be apprehended before the thing signified and the thing signified apprehended after the sign, which is impossible because of their being from the class of things in relation to something and needing to be apprehended together with one another.

b. Difficulties stemming from disagreements about whether the sign is perceptible or intelligible (176–182)

(176) Now, of the objects that are apprehended by a human being, some seem to be apprehended through sense-perception and others through thought: through sense-perception, such as white, black, sweet, or bitter; through thought, such as fine, shameful, lawful, unlawful, pious, or impious. The sign too, then, if it is apprehensible, is among either perceptible or intelligible objects, so that if it is not from one of these two classes, it will not be real at all to begin with. (177) And this, of course, is an indication of its not being graspable – I mean the fact that up to now its nature is torn apart, some people supposing that it is perceptible, some intelligible. Epicurus and the leaders of his school said that the sign was perceptible, the Stoics that it was intelligible. And this disagreement remains undecided virtually for all time, and since it remains undecided, there is every necessity for the sign to be kept in suspension of judgment, since it has to be either perceptible or intelligible. (178) And the strangest thing of all is that it fails in its promise, seeing that it promises to be capable of uncovering something else, but it is itself now found, conversely, to need something else that will uncover it. For if everything that is a matter of disagreement is unclear, and the unclear is graspable by means of a sign, undoubtedly the sign too, being a matter of disagreement, will need some sign for its manifestation (since it is unclear).

(179) Nor yet can they say that it is possible to establish and make trustworthy the object of disagreement itself by a demonstration. For, first, when they have demonstrated it, let them *then* take it as trustworthy; but in so far as it is a mere promise on their part and not a demonstration, the matter of suspension of judgment stands. (180) Then again, demonstration

is a thing that is in dispute, and since it is a matter of disagreement it itself has need of something to render it trustworthy; but to want to show what is under investigation by means of what is under investigation is completely absurd. Besides, speaking generically, demonstration *is* a sign; for it is capable of revealing the conclusion. (181) In order for the sign to be confirmed, then, demonstration has to be trustworthy, but in order for demonstration to become trustworthy, the sign has to be confirmed first, so that each of them is waiting for the trust given to it by the other one, and so is just as untrustworthy as the other. (182) In addition to this, what is used in the role of demonstration for the confirmation of the sign is either perceptible or intelligible. And if it is perceptible, again the question that was there from the beginning remains, given that perceptible things are in general a matter of disagreement. But if it is intelligible, it is equally untrustworthy – for it cannot be grasped apart from perceptible things.

c. Difficulties in supposing that the sign is perceptible (183–243)

i. *Difficulties stemming from disagreements about the nature of perceptibles* (183–187)

(183) However, let it be agreed and granted, as an added bonus, that the sign is either perceptible or intelligible. Even so, it is impossible for its subsistence to be trustworthy. We should speak about each one in turn, starting with its being perceptible. In order for this to be accepted, then, the reality of perceptible things must be previously agreed to and accepted by all the physicists, so that the inquiry into the sign can go forward from this accepted point. (184) But it is not agreed to, but

As long as water flows and tall trees flourish⁶¹

the physicists will never stop fighting about it, since Democritus says that no perceptible thing exists, but our apprehensions of them are empty effects on our senses, and nothing sweet is really in external things, or bitter or hot or cold or white or black, or any other of the things that appear to everyone; for these are names for effects on us. (185) But Epicurus said that all perceptible things exist such as they appear and strike us in sense-perception, since sense-perception never lies (but we are of the *opinion* that it lies). The Stoics and Peripatetics take a middle road, and say that

⁶¹ From an epigram on Midas (see Plato, *Phaedrus* 264C–D); Sextus also uses this line at *PH* 2.37 and *M* 1.28.

some perceptible things exist as true, while others are not real – sense-perception lies about them. (186) But now the main point: if we want the sign to be perceptible, first of all the subsistence of perceptible things has to be agreed and firmly established, so that the sign too may be granted to be solidly apprehensible. Otherwise, if it turns out that *that* has been a matter of dispute for all time, we have to agree that the sign too is involved in the same discord. (187) For just as the color white cannot be securely apprehended if the subsistence of perceptible things is not agreed to, in view of the fact that it is itself among perceptible things, so neither will the sign, if it is in the class of perceptible things, be said to be solid while the battle about perceptible things goes on. But let us say there is agreement about perceptible things and that there is no dispute at all about them. I ask, how can the people with the other opinion teach us that the sign is in fact perceptible? For every perceptible thing is of a nature to impinge on everyone in the same condition, and to be grasped equally. The color white, for example, is not apprehended in one way by Greeks and in another way by foreigners, or differently by craftsmen and by ordinary people, but in the same way by everyone who has unimpaired senses.

ii. Difficulties surrounding the fact that signs do not affect everyone equally (188–191)

(188) Again, bitter and sweet do not taste one way to this person and another way to that person; they taste similar to everyone who is similarly disposed. But the sign, as sign, does *not* seem to affect all who are similarly disposed in the same way, but for some people it is not a sign of anything at all, even though it strikes them plainly, while for others it is a sign – not, however, of the same thing, but of a different thing. For in medicine (for example) the same apparent things are signs of one thing to this person (say, Erasistratus), or another thing to that person (such as Herophilus), and of another thing to that person (say, Asclepiades). It should not be said, then, that the sign is perceptible; for if what is perceptible affects everyone similarly, but the sign does not affect everyone similarly, the sign cannot be perceptible. (189) Again, if the sign is perceptible, then just as fire, which is perceptible, burns everyone who can be burnt, and snow, which is perceptible, chills everyone who can be chilled, so too the sign, if it is among perceptible things, ought to lead everyone to the same signified thing. But it does *not* lead them to the same

signified thing; therefore it is not perceptible. (190) In addition to this, if the sign is perceptible, unclear things are either apprehensible by us or inapprehensible. If, then, they are inapprehensible by us, the sign is gone. For given that there are two kinds of objects, plain ones and unclear ones, if neither what is plain has a sign because of being discovered by itself, nor do unclear things because of being inapprehensible, there is no sign. (191) But if they are apprehensible, then again, since the sign is perceptible and what is perceptible affects everyone equally, unclear things ought to be apprehensible by everyone. But some people, such as the Empiricist doctors and the skeptical philosophers, say that they are not apprehended, while others say that they are apprehended, but not in the same way. Therefore the sign is not perceptible.

iii. Dogmatic counter-arguments and responses to them (192–202)

(192) Yes, they say, but just as fire, which is a perceptible thing, displays different powers depending on differences in the underlying matter, and when it is next to wax melts it, when next to clay hardens it, and when next to wood burns it – in the same way it is likely that the sign, too, since it is perceptible, is capable of revealing different objects depending on differences in the people apprehending it. (193) And it is not surprising that this is also observed to happen in the case of recollective signs. For the lifting of a torch signifies the approach of enemies to some people, but shows the arrival of friends to others, and the sound of a bell is to some people a sign of the selling of prepared food, to others of the need to sprinkle the roads.⁶² The indicative sign too, then, since it has a perceptible nature, will be capable of revealing a variety of things. (194) But here too, one might expect those who use the inference from fire to show that what happens to occur in the case of fire occurs in the case of the sign. For it is accepted that fire has the powers mentioned before, and there is no one who differs about the fact that wax is melted by it, clay is hardened, and wood is burned. (195) But if we accept that the equivalent occurs in the case of the indicative sign, we will put ourselves into a position of extreme absurdity, saying that each of the things indicated by it is real, so that, for example, excess and acridness in the humors and physical constitution are causes of a disease. (196) Which is absurd; for it is not

⁶² Apparently for the purpose of settling the dust. See Suetonius, *Caligula* 43 (although Suetonius implies that this was a grossly extravagant activity performed on a single occasion).

possible for causes that are so conflicting and destructive of one another to be real simultaneously. So, let the dogmatic philosophers either agree to this, even though it is impossible, or that the sign, which is perceptible, is indicative of nothing considered in itself, (197) but that we, who are in different conditions, are not affected in the same way by it. But they could not stand to agree to this – quite apart from the fact that these powers of fire are not agreed upon but are a matter of impasse. (198) For if fire had a nature such as to burn, it ought to burn everything, and not burn some things but others not at all; and if it had a nature such as to melt, it ought to dissolve everything, as opposed to some things but not others. (199) But in fact, it seems to do these things not as a result of its own nature, but as a result of the forms of matter that are exposed to it.⁶³ For example, it burns wood not because it is itself such as to burn, but because wood is in a suitable condition for burning when it gets the help of fire; and it melts wax not because it has a melting power, but because wax possesses a tendency to melt when it gets the help of fire.

We will teach about this more precisely when we inquire into the reality of such things.⁶⁴ (200) For now, against those who make an inference from the recollective sign and bring in the torch and also the sound of the bell, we should say that it is not surprising if signs of this kind are capable of showing multiple things. For they are determined, as they say, by the people who lay down the conventions, and it is up to us whether we want them to reveal one thing or to be capable of showing multiple things. (201) But the indicative sign is thought to be by its nature suggestive of the thing signified, and so necessarily has to be indicative of one object, and this must undoubtedly be of a single form – since if it is common to many things, it will not be a sign. For it is impossible for one thing to be firmly grasped by means of something when there are many things being shown by it. For example, becoming poor after being wealthy is equally a result of squandering one's resources, getting into trouble at sea, and giving to friends; but if it is equally a result of many things, it can no longer be revelatory of any one of them in particular. For if of this one, *why* of this one rather than of that one; and if of that one, why of that one rather than of this one? (202) Yet nor can it be revelatory of all of them; for they cannot all be real at once. Therefore the indicative sign differs from the

⁶³ I delete *tōn kaiomenōn*, present in all mss.; I suspect this is a gloss. (Bekker, followed by Mutschmann, substitutes *tōn hupokeimenōn*, but this is very awkward.)

⁶⁴ See *M* 9.237ff.

recollective sign, and one cannot infer from the latter to the former, in so far as one of them has to be revelatory of one thing alone, while the other can be capable of displaying many things and of signifying as *we* decide.

iv. Three further miscellaneous difficulties (203–207)

(203) Besides, every perceptible thing, considered as a perceptible thing, is unteachable. For one is not taught to see the color white, and one does not learn to taste sweet, or to grasp hot, or anything else of this kind; rather, knowledge of all these things comes to us from nature and without being taught. But the sign, considered as a sign, is taught, they say, with a lot of effort – like the one in navigation which is indicative of winds and storms or fine weather. (204) The same applies to the ones used by the people who busy themselves with the heavens, such as Aratus and Alexander the Aetolian, and likewise with those used by the Empiricist doctors, such as flushing and bulging of the vessels and thirst and other things, which the person who has not been taught does not grasp as signs. (205) Therefore the sign is not perceptible; for if what is perceptible is unteachable, but the sign, considered as a sign, is teachable, the sign cannot be perceptible. (206) And what is perceptible, in so far as it is perceptible, is conceived in virtue of a difference⁶⁵ – such as white, black, sweet, bitter, and everything of that kind. But the sign, in so far as it is sign, is one of the things in relation to something; for it is considered in terms of its state in relation to the thing signified. The sign, therefore, is not among perceptible things. (207) What is more, every perceptible thing, as the name makes clear, is grasped by sense-perception; but the sign, considered as a sign, is not grasped by sense-perception but by thought. At any rate, we say that a sign is true or false, but the true and false are not perceptible; for each of them is a proposition, and the proposition does not belong to perceptible but to intelligible things. It has to be said, therefore, that the sign is not among perceptible things.

v. Difficulties in supposing that like indicates like or unlike indicates unlike (208–214)

(208) The issue can be attacked in this way, too: if the indicative sign is perceptible, the perceptible ought, as a precondition, to be indicative of something – which is not so. For if the perceptible indicates something,

⁶⁵ Cf. 161–162.

either what is like in kind will be indicative of what is like in kind, or what is unlike in kind of what is unlike in kind. But neither is the like in kind indicative of the like in kind, nor is the unlike in kind of the unlike in kind; therefore the perceptible is not indicative of anything. (209) For example, let us suppose that we have never encountered the color white, nor the color black, and we see white for the first time. From our apprehension of this we would not have the power to apprehend the color black. (210) For while it is perhaps possible to have a conception of the fact that black is another color, and not like white, to produce an apprehension of the color black from the presence of white is impossible. And the same argument applies in the case of sound, and generally in the case of the other perceptible things. A perceptible thing that is like in kind, then, cannot be indicative of what is like in kind – that is, the visible of the visible or the audible of the audible or the tastable of the tastable. (211) Yet neither can the unlike in kind be indicative of the unlike in kind, such as the visible of the audible or the audible of the tastable or smellable. For if one smells something fragrant, one does not proceed to an apprehension of the color white, nor, if one apprehends a sound, is one's sense of taste sweetened.

(212) In fact, it is superfluous to ask whether the like in kind can be a sign of the like in kind and the unlike in kind of the unlike in kind, when anyone with any intelligence would give up on something more immediate than this – I mean, the fact that the perceptible cannot even be indicative of itself. (213) For, as we have shown many times, of those who have inquired into the perceptible, some say that it is not grasped by sense-perception as it is by nature; for it is neither white nor black, neither hot, nor cold, nor sweet, nor bitter, nor does it have any other such quality, but it seems to exist as such when our sense experiences empty effects and tells lies. But some have thought that some perceptible things do truly exist and others not at all; and others have testified in favor of the equal reality of all of them. (214) So, since there is so much undecided disagreement⁶⁶ about the subsistence of perceptible things, how is it possible to say that the perceptible is capable of displaying itself, when it is not yet known which of the positions that are in such discord is the true one? But this point, anyway, has to prevail – that if neither the perceptible thing that is

⁶⁶ Following Heintz, I alter *staseōs* to *diastaseōs*.

like in kind is indicative of the perceptible thing that is like in kind, nor is the unlike in kind indicative of the unlike in kind, nor is it itself indicative of itself, it is impossible, therefore, to say that the sign is perceptible.

vi. *Aenesidemus' argument against signs being apparent things* (215–238)

Initial statement and explanation (215–216) (215) Aenesidemus, in the fourth book of his *Pyrrhonist Discourses*, puts forward an argument to the same purpose and with virtually the same force, as follows: if apparent things appear alike to all who are similarly disposed, and signs are apparent things, signs appear alike to all who are similarly disposed. But signs do not appear alike to all who are similarly disposed; yet apparent things do appear alike to all who are similarly disposed; therefore signs are not apparent things. (216) Now, Aenesidemus seems to be calling perceptible things “apparent things,” and he is putting forward an argument in which a second indemonstrable overlaps with a third – its pattern is like this: “If the first and the second, then the third; not the third, but the first; therefore not the second.”⁶⁷

Initial validation of premises as true and conclusion as following from them (217–222) (217) That it is in fact this way we will show a little later;⁶⁸ for now we will demonstrate more simply that its premises are sound and that the consequence follows from them. To begin with, then, the conditional is true; for the finisher⁶⁹ follows from the conjunction – that is, from “apparent things appear alike to all who are similarly disposed, and signs are apparent things” there follows the fact that signs appear alike to all who are similarly disposed. (218) For if everyone who has unimpaired eyes apprehends the color white similarly, not differently, and if everyone who has a sense of taste in a natural state apprehends the sweet sweetly, then necessarily everyone who is in a similar condition ought to apprehend the sign in a similar way as well, if it belongs among perceptible things like the white and sweet. (219) So that the conditional is sound. And the second premise – “signs do not appear alike to all who are similarly disposed” – is also true. In the case of people with a fever, at any rate, flushing and prominence of the vessels and wet skin and higher temperature and racing

⁶⁷ For the classification of arguments presupposed here, cf. 223–227.

⁶⁸ 234ff. ⁶⁹ I.e., the consequent of the conditional; cf. 110.

pulses and the remaining signs do not strike those who are similarly disposed (in terms of their senses and the rest of their constitution) as signs of the same thing, nor do they appear alike to everyone, (220) but to Herophilus (for example) they appear straightforwardly as signs of good blood, to Erasistratus as signs of a transfer from the veins to the arteries, and to Asclepiades as signs of intelligible⁷⁰ bodies obstructing intelligible pores. The second premise, then, is also sound. (221) But so is the third, too – that apparent things appear alike to all who are similarly disposed. For the color white, for instance, does not strike the person with jaundice, and the person who has bloodshot eyes, and the person whose disposition is in line with nature, in the same way (for they are differently disposed, and for this reason it appears yellow to one, reddish to the next, and white to the next). But to people in the same condition – that is, healthy people – it only appears white. (222) The premises, then, are true, and from them will be drawn the consequence “Therefore the sign is not an apparent thing.”

Taxonomy of indemonstrable arguments and identification of Aenesidemus’ argument within this taxonomy (222–238) So, now that we have gone over it, the argument has right away been shown to be true; (223) that it is indemonstrable and deductive will become clear when we have analyzed it. For, to go back a little, arguments are spoken of as “indemonstrable” in two ways, covering both arguments that have not been demonstrated and those that have no need of demonstration (given that in their case it is immediately clear that they reach a conclusion).⁷¹ And we have often mentioned⁷² that the arguments laid out by Chrysippus at the beginning of his first *Introduction to Deductions* qualify for this label in the second sense. (224) Now, taking this as accepted, one must realize that the first indemonstrable argument is the one made out of a conditional and its leader,⁷³ having as its conclusion the finisher in that conditional. That

⁷⁰ Cf. n. 56.

⁷¹ In the first of these usages (not the important one here) “undemonstrated” might be a better translation for the Greek *anapodeiktos*; many Greek adjectives ending in – *tos* are ambiguous between English words ending “-able” and ending “-ed.”

⁷² Possibly a reference to lost works, or perhaps a result of Sextus’ incomplete adaptation of his source. *PH* 2.156 provides a loose parallel, but says nothing about Chrysippus or about two senses of “indemonstrable.”

⁷³ I.e., the antecedent of the conditional; cf. 110.

is, when an argument has two premises, of which one is a conditional and the other is the leader in the conditional, and has as consequence the finisher in the same conditional, then an argument of this kind is called a first indemonstrable – for example: “If it is day, it is light; but it *is* day; therefore it is light.” For this has a conditional as one of its premises (“If it is day, it is light”), the leader in the conditional as the other premise (“But it *is* day”), and, third, “Therefore it is light” as the consequence, which is the finisher of the conditional.

(225) The second indemonstrable is the one made out of a conditional and the contradictory of the finisher in that conditional, having as its conclusion the contradictory of the leader. That is, when an argument, again consisting of two premises, of which one is a conditional and the other is the contradictory of the finisher in the conditional, has as its consequence the contradictory of the leader, then an argument of this kind is a second indemonstrable – such as “If it is day, it is light; but it *not* light; therefore it is not day.” For “If it is day, it is light” (which is one premise of the argument) is a conditional, and “But it is *not* light” (which is the other premise of the argument) is the contradictory of the finisher in the conditional; and the consequence, “Therefore it is not day,” is the contradictory of the leader.

(226) The third indemonstrable argument is the one made out of a negative conjunction and one of the items in the conjunction, having as its conclusion the contradictory of the remaining item in the conjunction – such as “It is not both day and night; it is day; therefore it is not night.” For “It is not both day and night” is the negation of the conjunction “It is both day and night,” “It is day” is one of the items in the conjunction, and “Therefore it is not night” is the contradictory of the remaining item in the conjunction.

(227) Well then, this is what the arguments are like; and the modes and, as it were, patterns in which they are put forward are as follows: for the first indemonstrable “If the first, the second; but the first; therefore the second”; for the second one “If the first, the second; but not the second; therefore not the first”; for the third one “Not both the first and the second; but the first; therefore not the second.”

(228) One also has to realize that some indemonstrables are simple, others non-simple. Simple ones are those that make immediately clear that they reach a conclusion – that is, that the consequence is drawn from

their premises. The ones just laid out are like this; for, in the case of the first, if we allow that “If it is day, it is light” is true – I mean, that its being light follows from its being day – and we suppose that the first part, its being day, which is the leader in the conditional, is true, its also being light, which was the conclusion of the argument, will necessarily follow. (229) Non-simple ones are those that are connected together out of simple ones, and need to be analyzed into the latter in order for us to recognize that they too reach a conclusion. And of these non-simple ones some consist of parts that are like in kind, others of parts that are unlike in kind. Examples of the former would be those connected together out of two first indemonstrables or two seconds, (230) and of the latter those consisting of a first < . . . >,⁷⁴ or a second and a third, and in general ones like these. For example, an argument such as this consists of parts that are like in kind: “<If it is day, then> if it is day, it is light; but it *is* day; therefore it is light.” For it is connected together out of two first indemonstrables, as we will know after analyzing it. (231) For one should realize that there is a dialectical rule handed down for the analysis of deductions, as follows: “When we have the premises that are capable of reaching a certain conclusion, we in effect have that conclusion in them, even if it is not stated explicitly.” (232) Since, then, we have two premises, the conditional “If it is day, <then if it is day, it is light>,” which begins with the simple proposition “It is day” and finishes with the non-simple conditional “If it is day, it is light,” and also its leader “It is day,” from these we will conclude, by the first indemonstrable, the finisher of the first conditional, namely “Therefore if it is day, it is light.” (233) In effect, then, we have this being concluded in the argument, but it is left out in terms of the explicit wording; and if we line <it>⁷⁵ up with the minor premise of the argument as laid out – “It is day” – we will have “It is light” concluded by the first indemonstrable – which was the consequence of the argument as laid out. So that there are two first indemonstrables, one like this: “<If it is day, then> if it is day, it is light; <but it *is* day; therefore if it is day, it is light>,” and the other like this: “If it is day, it is light; but it *is* day; therefore it is light.”⁷⁶

⁷⁴ Presumably the words “and a second” or “and a third” have been lost.

⁷⁵ Following Kochalsky, I add *ho* before *taxantes*; this is the simplest way of correcting the syntax. I also insert a stop after *kata de tēn ekphoran paraleleimenon*, which clearly belongs with what precedes rather than with what follows.

⁷⁶ The text from 230–233 is severely defective; the copyists clearly had no idea what Sextus was talking about. Mutschmann despairs of restoring the correct text. But in fact there is no serious

(234) Such is the character, then, of the arguments that are connected together out of parts that are like in kind. There remain the ones made out of parts that are unlike in kind, such as the one that Aenesidemus put forward about the sign, which goes like this: if apparent things appear alike to all who are similarly disposed, and signs are apparent things, signs appear alike to all who are similarly disposed. But signs do *not* appear alike to all who are similarly disposed; yet apparent things do appear alike to all who are similarly disposed; therefore signs are not apparent things. (235) For an argument like this consists of a second and a third indemonstrable, as we can learn from its analysis, which will become even clearer after we have made our explanation at the level of its mode, which is like this: “If the first and the second, the third; not the third, but the first; therefore not the second.” (236) For since we have a conditional in which a conjunction of the first and second leads, and the third finishes, and we have the contradictory of the finisher, “Not the third,” we will reach as a conclusion the contradictory of the leader, “Therefore not the first and the second,” by the second indemonstrable. Now, this itself is in effect present in the argument, since we have the premises that are capable of concluding to it, but it is missing in terms of explicit statement. And when we have lined this up with the remaining premise – the first – we will have the conclusion “Therefore not the second,” reached by the third indemonstrable. So that there are two indemonstrables, one like this: “If the first and the second, the third; but not the third; therefore not the first and the second,” which is the second indemonstrable, and the other the third, which is like this: “Not the first and the second; but the first; therefore not the second.”

(237) Such is the analysis, then, in the case of the mode, and it is analogous in the case of the argument as well. For the third component,⁷⁷ “It is not the case that apparent things appear alike to all who are similarly disposed and signs are apparent things,” is left out. And it, along with the fact that apparent things do appear alike to all who are similarly disposed,

difficulty. In 232 Sextus himself explains very clearly the construction of the major premise of the compound argument, cites its minor premise, and draws attention to the needed but unstated interim conclusion. These clues are sufficient to restore the argument as shown – as already seen by Kochalsky, whose additions I follow throughout these sections.

⁷⁷ As Heintz noticed, this must refer to the third line in the argument if fully spelled out – i.e., the unstated interim conclusion – not to “the third” in the schematic representation of the argument discussed in the previous paragraph.

leads to the <conclusion of the argument>⁷⁸ as laid out by the third indemonstrable. So that there is a second indemonstrable like this: “If apparent things appear alike to all who are similarly disposed and signs are apparent things, signs appear alike to all who are similarly disposed; but signs do *not* appear alike to all who are similarly disposed; therefore signs are not apparent things,”⁷⁹ (238) and a third indemonstrable like this: “It is not the case that apparent things appear alike to all who are similarly disposed and signs are apparent things; but signs do appear alike to all who are similarly disposed; therefore signs are not apparent things.”

vii. *Simplified versions of Aenesidemus’ argument (239–243)*

(239) An argument of the following kind can be put forward with the same conclusive force: if apparent things appear equally to everyone and apparent things are signs of unclear things, unclear things appear equally to everyone; but unclear things do *not* appear equally to everyone, yet apparent things do appear equally to everyone; therefore apparent things are not signs of unclear things. (240) The analysis of this argument is similar – a second indemonstrable overlaps with a third – and the attractiveness of the premises is obvious. For that apparent things appear equally to those who have unimpaired senses is evident; for white does not appear differently to different people, nor does black appear differently to different people, nor does sweet appear differently, but they affect everyone similarly. (241) Well then, if these things appear equally to everyone and have the power of indicating unclear things, then unclear things, too, necessarily strike everyone equally, seeing that the causes are the same and the underlying matter is similar. But this is *not* so; for not everyone recognizes unclear things in the same way, even though they encounter perceptible things equally, but some do not even come to a conception of them, while others do, but are seduced into a variety of shifting and conflicting assertions. It

⁷⁸ Mutschmann, following Kochalsky, posits a lacuna here. Clearly the general sense is as given above. This sense might just be understood by the words in the transmitted text, but the wording is much less awkward if we supplement with *logou sumperasma*. (Kochalsky also includes an explicit statement of the conclusion, but this seems unnecessary.)

⁷⁹ The conclusion should rather be “Therefore it is not the case that apparent things appear alike to all who are similarly disposed and signs are apparent things.” Kochalsky supplements the text with the first conjunct. However, as Heintz points out, the words *ara ouk* (“therefore . . . not”) in the transmitted text would also have to be deleted to yield the correct sense. Heintz therefore inclines to regard this as an oversight on Sextus’ part; with some hesitation I follow him in leaving the text unchanged.

follows, therefore, that we should say signs are not perceptible, in order for this absurdity not to follow.

(242) It is also possible to capture what has previously been said in short order, and to offer arguments as follows. If apparent things appear equally to everyone, and signs do not appear to everyone, signs are not apparent things. But the first; therefore the second.⁸⁰ (243) And again: if apparent things, in so far as they are apparent things, do not have need of teaching, but signs, in so far as they are signs, do have need of teaching, signs are not apparent things. But the first; therefore the second.

d. Difficulties in supposing that the sign is intelligible (244–274)

i. *Exposition of a Stoic view entailing that the sign is intelligible* (244–256) Against those who maintain that the sign is perceptible, let these impasses be enough; (244) but let us look into the position opposed to theirs, I mean that of those who have assumed it to be intelligible. But perhaps we will need to preface this with brief remarks about the view that appeals to them, in virtue of which they take the sign to be a proposition, and for this reason intelligible. In sketching it, then, they say that (245) a sign is a leading proposition in a sound conditional, capable of uncovering the finisher. And they say that there are many other ways of judging a sound conditional, but that just one out of all of them (and that one not agreed on) is real, namely the one to be explained. Every conditional either begins with a true proposition and finishes with a true one, or begins with a false one and finishes with a false one, or begins with a true one and finishes with a false one, or begins with a false one and finishes with a true one. (246) “If there are gods, the universe is administered by the providence of the gods” begins with a true one and finishes with a true one; “If the earth flies, the earth has wings” begins with a false one and finishes with a false one; “If the earth flies, the earth is” begins with a false one and finishes with a true one; “If this person is moving, this person is walking” begins with a true one and finishes with a false one, when he is not walking but is moving. (247) So, since there are four combinations of the conditional – when it begins with true and finishes with true, when it begins with false and finishes with false, when it begins with false and finishes with true, or conversely when it begins with true and finishes with false – they say that

⁸⁰ Here Sextus switches, after the first premise, to representing the argument by its “mode” (cf. 227, 235–236). The Stoics originated this device of abbreviation; see Diogenes Laertius 7.77.

in the first three modes it is true (for if it begins with true and finishes with true it is true, and if it begins with false and finishes with false it is again true; similarly if it begins with false and finishes with true), and that it is false in only one mode, when it begins with true and finishes with false.

(248) And since this is so, they say, one should search for the sign not in this bad conditional but in the sound one; for it was called a proposition that was the leader in a sound conditional. But since there is not one sound conditional, but three – namely, the one that begins with true and finishes with true, the one that begins with false and finishes with false, and the one that begins with false and finishes with true – one must inquire whether the sign is to be sought in all sound conditionals, or in some, or in one. (249) If, then, the sign has to be true and capable of displaying what is true, it will not belong in the one that begins with false and finishes with false, nor in the one that begins with false and finishes with true. So it remains for it to be only in the one that begins with true and finishes with true, seeing that it is itself real and the thing signified ought to be real alongside it.

(250) So when it is said that the sign is a leading proposition in a sound conditional, we need to understand it as a leader in only the conditional that begins with true and ends with true. Yet not *any* proposition that leads in a sound conditional beginning with true and finishing with true is a sign. (251) For example, a conditional such as “If it is day, it is light” begins with the true “It is day” and finishes with the true “It is light,” but it does not have within it any leading proposition that is a sign of the finisher. For “It is day” is not capable of uncovering “It is light”; rather, just as the first one struck us all by itself, so “It is light” was grasped by means of its own manifest character. (252) Therefore the sign has to be not just a leader in a sound conditional – that is, the one that begins with true and finishes with true – but it also has to have a nature that is capable of uncovering the finisher, as is the case in conditionals like these: “If she has milk in her breasts, she has conceived” and “If this person has thrown up bronchial matter, he has a wound in his lungs.” (253) For this is a sound conditional, beginning with the true “This person has thrown up bronchial matter,” and finishing with the true “He has a wound in his lungs,” together with the fact that the first is capable of uncovering the second. For by paying attention to the former we create an apprehension of the latter.

(254) In addition, they say, the sign has to be a present sign of a present thing. Some people are misled into holding that a present thing can be a sign of a past thing, as in the case of “If this person has a scar, he has had a wound.” For if⁸¹ he has a scar it is a present thing – for it appears – but his having had a wound is a past thing, for there is no longer a wound. And they also hold that a present thing can be a sign of a future thing, such as what is contained in a conditional such as “If this person has been wounded in the heart, he will die”; for they say that the wound to the heart is already there, but the death is to come. (255) But the people who say such things fail to understand that while past things and future things are different, the sign and the thing signified are, even in these cases, a present thing in relation to a present thing. For in the first case, “If this person has a scar, he has had a wound,” the wound has occurred already and is gone, but this person’s *having had* a wound, which is a proposition, is present, being said about something that has occurred. And in the case of “If this person has been wounded in the heart, he will die,” while the death is to come, the proposition that he will die, being said about a thing that is to come, is present, in so far as it is true even now. (256) So that the sign is a proposition, and it leads in a sound conditional that begins with true and finishes with true, and it is capable of uncovering the finisher, and in every case it is a present sign of a present thing.

ii. *Difficulties stemming from disagreement about whether the sign is perceptible or intelligible* (257)

(257) Now that these things have been pointed out, following their very own technicalities, it is appropriate, first, to say this to them. If the sign is perceptible according to some people and intelligible according to others, and the disagreement about this is undecided up to now, it has to be said that the sign is at this point unclear. And if it is unclear it needs things to uncover it, and must not be itself capable of uncovering other things.

iii. *Difficulties over the reality of sayables* (258–261)

(258) In addition, if the sign has its subsistence, according to them, in a sayable, and if it is a matter of investigation whether there are sayables, it

⁸¹ I retain the mss. *ei*; Mutschmann, following Kochalsky, alters to *to*.

is absurd to take the species as secure before the genus has been agreed on. And we see that there are some who have done away with the reality of sayables – and not only people of other opinions, such as the Epicureans, but even Stoics like Basilides,⁸² whose view was that there is nothing incorporeal.⁸³ The sign, then, is to be kept in suspension of judgment. (259) But, they say, when we have demonstrated the reality of sayables we will have the nature of the sign secure as well. Then someone will say “When you have demonstrated it, *then* take it that the reality of the sign is also reliable; but while you remain with a bare promise, it is also necessary that we remain in suspension of judgment.” (260) Then again, how is it possible to demonstrate the reality of propositions? One will have to do this either through a sign or through a demonstration. But it is not possible to do this either through any sign or through a demonstration. For since these are themselves sayables, they are under investigation like the other sayables, (261) and are so far from being able to establish something securely that, on the contrary, they themselves need something to establish them. And the Stoics have failed to notice that they fall into the reciprocal mode. For in order for sayables to be agreed upon, there have to be demonstration and sign; but in order for demonstration and sign to subsist beforehand, it is necessary that the nature of sayables be previously guaranteed. So since they point toward one another and are waiting for trustworthiness from one another, they are equally untrustworthy.

iv. Difficulties in supposing that sayables are either bodily or incorporeal (262–268)

(262) But let it be the case that sayables do occur in reality (even though the conflict about them is not coming to an end); let us allow this as an added bonus, for the sake of the investigation moving forward. Then, if there are these things, they will say that they are either bodies or incorporeal. And they cannot say that they are bodies; but if they are incorporeal,

⁸² A Stoic of this name is attested as a teacher of the emperor Marcus Aurelius; if this is who Sextus is talking about, he would be by far the latest named figure referred to in Sextus’ works. But there is also a Stoic of this name attested in the second century BCE, and there is no way to tell which of them Sextus intends.

⁸³ It was in fact the *standard* Stoic view that there is nothing incorporeal; sayables, like other incorporeals, are described not as *being* but as merely subsisting (cf. n. 30). Presumably Sextus is speaking loosely, and his point is that certain Stoics do not recognize incorporeals in their ontology at all.

either they do something, according to them, or they do nothing. And they cannot maintain that they do anything; (263) for the incorporeal, according to them, is not of a nature to do anything or to be affected. But if they do nothing, they will not even indicate and make clear the thing of which they are signs; for indicating something and making it clear is doing something. (264) But it is absurd for the sign not to indicate anything or make it clear. Therefore the sign is not intelligible, nor is it a proposition. Besides, as we have often pointed out in many places, some things signify, others are signified. Utterances signify, and sayables, among which are propositions, are signified. But if all propositions are signified, and other things signify, the sign cannot be a proposition. (265) Again, let it be granted that sayables have an incorporeal nature. But since they say that the sign leads in a sound conditional, the sound conditional will need to be judged on and examined beforehand, to see whether it is as Philo sees it, or as Diodorus sees it, or judged in terms of connectedness⁸⁴ or in some other way. For since there are lots of differences about this, it is not possible to grasp the sign securely while the disagreement turns out to be undecided.

(266) Moreover, in addition to what has been said, even if we concede that the sound criterion is agreed upon, and that it is of the kind they want – no dispute about it – one is no less forced to agree that what contains the sign is undecided. For they claim that the signified is either clear or unclear. (267) And if it is clear it will not be a thing signified, nor will it be *signified by* something, but will strike us all by itself. But if it is unclear, it will undoubtedly be unknown whether this thing is true or false, since when it is known which of these it is, it will become clear. (268) The conditional that contains the sign and the thing signified, then, is necessarily undecided, since it finishes with something unclear. For that it begins with something true is known, but it finishes with something unknown. But to make a judgment on it we must first of all know what it finishes with. If it finishes with something true, we will regard it as true, given that it begins with something true and finishes with something true;

⁸⁴ I.e., connectedness of subject-matter between the components of the conditional. On this approach to conditionals (probably due to Chrysippus), cf. *PH* 2.111 and Diogenes Laertius 7.73; also S. Bobzien in K. Algra, J. Barnes, J. Mansfeld, and M. Schofield, eds., *The Cambridge History of Hellenistic Philosophy* (Cambridge University Press, 1999), 106–108. It is not elsewhere mentioned in *Against the Logicians* (though cf. 430 for a related use of the term). On the approaches of Philo and Diodorus see 113–117 above.

but if it finishes with something false, then conversely we will say that it is false, given that it begins with something true and finishes with something false. We should not, therefore, say that the sign is a proposition, nor a leader in a sound conditional.

v. Difficulties stemming from the accessibility of sign-inference to non-philosophers and non-humans (269–271)

(269) To these points it should be added that the proponents of this opinion are in conflict with plain experience. For if the sign is a proposition and leads in a sound conditional, then those who have no conception whatever of a proposition, and have not gone into the technicalities of the dialecticians, should have no part in the use of signs. (270) But this is *not* so. For often illiterate helmsmen and farmers with no experience of dialectical principles are expert judges of signs – the former on the sea, judging winds and calms, storms and still seas, and the latter on the farm, judging good and bad crops, droughts and heavy rains. In fact, why are we talking about human beings, when some of them have even attributed some concept of the sign to non-rational animals? (271) For the dog, when it tracks an animal by its footprints, is actually using signs; but it does not for that reason take in an appearance of the proposition “If this is a footprint, an animal is here.” And the horse leaps forward and rushes on to the course at the impact of a spur or the wielding of a whip; but it does not make a dialectical judgment upon a conditional of the form “If a whip has been wielded, I had better run.” Therefore the sign is not a proposition that is the leader in a sound conditional.

vi. Miscellaneous difficulties drawing on previous ideas (272–274)

(272) These will suffice as specific arguments against those who maintain that the sign is intelligible; but it will also be possible, in a more general way, to raise against them the ones that were used against those who say that it is perceptible. For if the sign is a proposition that is the leader in a sound conditional, and in every conditional the finisher follows from the leader, and the “followings” are of objects that are present, then necessarily the sign and the thing signified, being present on a single occasion, will coexist with one another, and neither one will become revelatory of the other, but they will both get to be known all by themselves. (273) Besides, the sign

is capable of uncovering the thing signified, and the thing signified is uncovered by the sign. And these are not absolutes, but things in relation to something; for the thing being uncovered is conceived in relation to the thing uncovering it, and the thing that uncovers is conceived in relation to the thing being uncovered. But if both of them, being things in relation to something, are present at the same time, they both subsist together with one another. But if they subsist together, each one is apprehended all by itself – neither one by means of the other. (274) And the following should be said: that whatever the sign may be like, either it itself has a nature suitable for indicating and revealing what is unclear, or we are capable of remembering the things that have been exposed together with it. But it does not have a nature indicative of unclear things, since in that case it ought to indicate unclear things to everyone equally. Therefore the way we go with regard to the subsistence of objects parallels how we are doing in terms of our memory.

e. Dogmatic counter-arguments (275–284)

(275) But if the sign is neither perceptible, as we have shown, nor intelligible, as we have established, and there is no third option besides these, it has to be said that there is no sign. Now, as far as each of these attacks is concerned, the dogmatists have been muzzled. But in constructing the opposite case they say that a human being does not differ from non-rational animals in uttered discourse⁸⁵ (for crows and parrots and jays also utter articulate sounds), but in discourse within the mind, (276) and not in the merely simple appearance (for those animals have appearances), but in the one that involves transitions and combinations. Because of this, since he has a conception of following, he immediately grasps the concept of a sign as well, because of following; for the sign, of course, is of the form “If this, this.” Therefore from the nature and constitution of the human being it follows that the sign is real.

(277) And demonstration is agreed to belong to the genus sign. For it is capable of showing the conclusion, and the conjunction of its premises will be a sign of the conclusion being so. For example, in a case such as “If there is motion, there is void; but there is motion; therefore there is

⁸⁵ *Logos*, elsewhere translated both “speech” and “reason” (among other things); here the context demands a word that will straddle both concepts.

void,” the conjunction “<There is motion, and>⁸⁶ if there is motion, there is void,” being a conjunction of the premises, is also immediately a sign of the conclusion “There is void.” (278) Well then, they say, the arguments produced against the sign by the bringers of impasse are either demonstrative or non-demonstrative. And if they are non-demonstrative, they are untrustworthy – given that they would hardly have been trusted even if they turned out to be demonstrative. And if they are demonstrative, it is clear that there is some sign; for demonstration is, generically speaking, a sign. (279) And if nothing is a sign of anything, either the sounds uttered against the sign signify something or they signify nothing. And if they signify nothing, they will not do away with the reality of the sign, either; for how could sounds signifying nothing be trusted concerning there being no sign? But if they do signify, the skeptics emerge as empty-headed, since they toss out the sign in their words but accept it in fact. (280) Then again, if there is no rule peculiar to a skill, skill will not differ from lack of skill. But if there is a rule peculiar to a skill, it is either apparent or unclear. But it could not be apparent; for apparent things appear equally to everyone, without teaching. But if it is unclear, it will be observed through a sign. But if there is something observed through a sign, there will also be a sign.

(281) Some people also put forward an argument like this: “If there is any sign, there is a sign; if there is not a sign, there is a sign. But either there is no sign or there is one; therefore there is one.” Such is the argument, and they say that its first premise is sound. For it is a differentiated proposition,⁸⁷ and there being a sign follows from there being a sign, in so far as if the first is so, the second will also be so, since it is no different from the first. As for “If there is not a sign, there is a sign,” it too is sound; for when one says that there is no sign, it follows that one is saying that there is some sign. For if there is no sign, there will be some sign of the very fact that there is no sign. And reasonably so; for the person who says that there is no sign maintains this either by mere assertion or by demonstration. And if he maintains it by assertion, he will face the opposite assertion; (282) but if he demonstrates that what he says is true,

⁸⁶ With Heintz, I retain the mss. *sumpeplegmenon* (Mutschmann, following Bekker, alters to *sumēmmenon*, “conditional”) and add <estī kinēsis kai>. For the procedure of combining the premises of an argument into a conjunction (as part of an assessment of the argument’s validity), cf. 415–417, 421, *PH* 2.137. (However, the procedure described in those passages is Stoic, whereas this argument for the existence of void is Epicurean in origin – cf. 329.)

⁸⁷ Cf. 108–109 and n. 49.

then through the argument that shows that there is no sign he will *signify* that there is no sign – but in doing this he will agree that there *is* some sign. The first two premises are true, then, they say. And the third one is also true; for it is a disjunction of contradictories (that there is a sign and that there is not)⁸⁸ – since if every disjunction is true when it has one of its components true, and it is also⁸⁹ observed that one of a pair of contradictories is true, it has to be said that a proposition constructed like this is straightforwardly true. So that on the basis of the premises, which are agreed upon, the consequence “Therefore there is a sign” is also drawn.

(283) It will also be possible, they say, to proceed this way: in the argument there are two conditionals and one disjunction; and of these the conditionals promise that their finishers follow from their leaders, while the disjunction has one of its components true, since if both of them are true or both false, the whole proposition will be false.⁹⁰ (284) Such being the force of the premises, then supposing one of the components of the disjunction true, let us see how the consequence is drawn. And first let us take it that “there is some sign” is true. Then, since this is the leader in the first conditional, it will have the finisher in that conditional following from it.⁹¹ But it finished with there being a sign, which is the same as the consequence. The consequence will be drawn, therefore, supposing there being some sign to be the component in the disjunction that is true. And now, conversely, let us take it that the other component, there not being a sign, is true. Then since this is the leader in the second conditional, it will have the finisher in the second conditional following from it. But what followed from it was there being some sign, which is also the consequence. By this means, too, therefore, the consequence is drawn.

f. Responses to dogmatic counter-arguments (285–297)

(285) This is what the dogmatists say. But (to proceed in order) against the first point, where they conclude that there is a sign from the constitution of the human being, it should be said that they want to teach about what is less under examination by means of what is more under examination.

⁸⁸ Mutschmann posits a lacuna at this point. But the sense seems acceptable with the text as it stands.

⁸⁹ I retain the mss. *kai*, rather than following Mutschmann’s alteration to *aei*.

⁹⁰ This differs, then, from disjunction as understood in modern logic, where the disjunction is true if both disjuncts are true.

⁹¹ Following Kochalsky I delete *to* before *akolouthon*.

For that there is a sign, even if it is denied by some, such as the skeptics, is still common ground among all the dogmatists; (286) but that the human being is constituted with forethought is disputed by no small number of them. And it is very forced to want to use what is more a matter of disagreement to teach about things that are not in that state.⁹² And in fact, Heraclitus says in so many words that “The human being is not rational; only what encompasses us is endowed with mind.” And Empedocles, even more paradoxically, maintained that everything is rational – not just animals but even plants, writing in so many words

You know that all things have insight and a share of understanding.

(287) Along with this, there is a persuasive argument for the non-rational animals being not without insight. For if uttered discourse belongs to them, discourse within the mind must necessarily belong to them too; for without this kind the uttered kind is non-subsistent. (288) But even if we allow that the human being differs from other animals in discourse, and appearance that involves transitions, and a conception of following, we will *not* agree that he is this way when it comes to unclear things and things that are matters of undecided disagreement. Rather, when it comes to apparent things, he has an awareness of following based on watching, in virtue of which he remembers which things were observed with which, which before which, and which after which, and so from his encounters with earlier things renews⁹³ the rest.

(289) But if it is agreed, they say, that demonstration is, generically speaking, a sign, then if they are not demonstrations, the arguments produced against the sign are untrustworthy, but if they are demonstrations, there is some sign. But since we said before that we do not stand in the way of the recollective sign but the indicative sign, we can concede that the arguments produced against the sign signify something – just not indicatively, but recollectively; for we are affected by them and retrieve in our memories the things that can be said against the indicative sign. (290) And the same things can be said about the next suggestion – the one where they ask whether the sounds uttered against the sign signify something or signify nothing. For if we were doing away with every sign, it would necessarily have to be the case either that the sounds uttered in our case against the sign signified nothing, or that if they did signify, it would be

⁹² I.e., things that are not so much a matter of disagreement.

⁹³ Cf. 143, 152–153.

granted that there is some sign. But in fact, since we make a distinction and do away with one but posit the other, the reality of an indicative sign is not conceded even if we take account of the fact that the sounds uttered against the indicative sign signify something. (291) It was also said that if there is a rule peculiar to a skill, this will have to be not clear, but unclear and grasped through a sign. But they do not recognize that whereas there is no rule for the skill that reflects on unclear things⁹⁴ – as we will explain later⁹⁵ – there is a rule peculiar to the one that is involved with apparent things. For it brings about the construction of rules on the basis of things often watched or examined; and the things often watched and examined are peculiar to the people who have most often been watching – they are not common to everyone.

(292) The argument they put forward at the end, in the following mode – “If the first, the first; if not the first, the first; either the first or not the first; therefore the first” – is perhaps bad because of the redundancy in the premises as well, but it undoubtedly seems to bother even them. (293) To proceed in order, we should speak about the first point – that is, the redundancy. If the disjunction in the argument is true, it ought to have one component true, as they themselves said before. But if it has one component true it exposes one of the conditionals as redundant. (294) For if the component “There is a sign” is taken as true, then in order to get to the conclusion of this argument, the differentiated conditional “If there is a sign, there is a sign” becomes necessary, but the other one, “If there is no sign, there is a sign,” becomes redundant. And if the component that there is no sign is taken as true, then the differentiated proposition is redundant for this argument’s construction, while “If there is no sign, there is a sign” becomes necessary. The argument is bad, then, on account of redundancy.

(295) But to avoid going with our opponents into the fine details, it is possible to put forward another argument of this kind. If the person who says that there is no sign is turned around into saying that there is some sign, the person who says that there is a sign is also turned around into saying that there is no sign. But the person who said skeptically that there was no sign was turned around, according to them, into saying that there is a sign; therefore the person who says dogmatically that there is

⁹⁴ Reading *adēlōn* with Kayser, instead of the mss. *allōn*.

⁹⁵ It is not clear what this forward reference is pointing to.

a sign will be turned around into saying that there is no sign, as we will establish. (296) For, to begin with, the person who says that there is a sign has to confirm his assertion by a sign. But if there being a sign is not agreed upon, how can this person use the sign for confirmation of there being a sign? But if he is not able to demonstrate by a sign that there is a sign, he is turned around into agreeing that there is no sign. But let us agree, as an added bonus, that there is this one sign, namely the one capable of revealing that there is a sign; what help is this to them, when they have no way of speaking of any sign of their own doctrines? (297) So that this is useless to them – I mean, its being agreed in general that there is some sign; maybe it is necessary to append to “There is some sign,” which is indefinite, “*This* is a sign,” which is expressed in definite terms. But it is not possible for them to do this. For every sign, just as much as the thing signified, is a matter of opinion and undecided disagreement. For just as “Someone is sailing through rocks” is false, since it is not possible to append to it the definite and true statement “This person is sailing through rocks,” so too, since we are unable to append to the indefinite “There is some sign” any definite and true statement “This is a sign,” “There is some sign” therefore becomes false and its contradictory, “There is no sign,” true.

g. Conclusion: statement of skeptical outcome; transition to C (298–299)

(298) However, let us suppose both that the arguments produced by them are powerful and that those of the skeptics have remained impossible to oppose. What is left, given the circumstance of equal strength on either side, except to suspend judgment and make no determination about the matter under examination, saying neither that there is a sign or that there is not, but offering the safe comment that there no more is than there is not?⁹⁶

(299) But since demonstration seems to be, generically speaking, a sign, and to uncover the conclusion, which is unclear, through agreed-upon premises, I dare say it is appropriate to append an investigation of it to the inquiry into the sign.

⁹⁶ An example of the special skeptical usage of “no more” described by Sextus at *PH* 1.188–191; rather than asserting that each of the alternatives holds to an equal degree (as the words in their natural meaning might suggest), the phrase expresses suspension of judgment as between the two (cf. 328).

C. Demonstration (300–481)

1. *The conception of demonstration (300–315)***On demonstration**⁹⁷

(300) The purpose of investigating demonstration at present has been pointed out earlier, when we were inquiring into the criterion and the sign.⁹⁸ But for the survey not to be unmethodical, and for the suspension of judgment and the rebuttal of the dogmatists to go ahead more safely, we should point out the conception of demonstration. (301) Demonstration, then, is generically speaking an argument; for it is obviously not a perceptible object, but a certain motion and assent of thought – and these are rational. And an argument is (simplifying somewhat) what is constituted out of premises and consequence. (302) We call “premises” not any posits that we help ourselves to, but ones that the person we are debating with allows and accepts. And a consequence is what is established by means of these premises. For example, this composite whole is an argument: “If it is day, it is light; but it *is* day; therefore it is light”; its premises are “If it is day, it is light” and “But it *is* day,” and the consequence is “Therefore it is light.” (303) Of arguments some are conclusive while others are not. And the conclusive ones are those in which, when the premises have been agreed to be so, the consequence appears to follow in virtue of this agreement, as was so in the case of the one set out just before. For since it consists of the conditional “If it is day, it is light,” which promises that if its first component is true its second component will also be true, (304) and also of “It is day,” which is the leader in the conditional, I am saying that if the conditional is allowed to be true, so that its finisher follows from its leader, and if it is also allowed that its first component, “It is day,” is so, then necessarily, because of these things being so, its second component – that is, “It is light” – will be arrived at, and this is the consequence.

(305) Well then, conclusive arguments have a character something like this, and the ones that are not like this are inconclusive. Of the conclusive ones some reach as a conclusion something clear, others something

⁹⁷ This title and the next (316) are preceded by numerals; for the sake of consistency I omit these. (The presentation of titles in this work, or at least in the surviving manuscripts, is in general haphazard.)

⁹⁸ The reference is not entirely clear, but probably 142 is meant. (Bury points to 1.27, but this mentioned neither sign nor demonstration.)

unclear – clear, as in the one that was laid out, as follows: “If it is day, it is light; but it *is* day; therefore it is light.” For “It is light” is apparent just as much as “It is day.” Or again, in one such as “If Dion is walking, Dion is moving; but Dion is walking; therefore Dion is moving”; for “Dion is moving,” which is the conclusion, is discovered by itself. (306) But an argument like this one, for example, reaches an unclear conclusion: “If sweat flows through the body’s surface, there are intelligible pores in the flesh; but the first; therefore the second”; for there being intelligible pores in the flesh is something unclear. Again, so does “That upon whose separation from the body human beings die is the soul; but upon the separation of blood from the body human beings die; therefore the soul is blood”; for that the substance of the soul lies in the blood is not plain.

(307) And of these arguments that reach as a conclusion something unclear, some lead us on from the premises to the conclusion in a way that is just progressive, others in a way that is both progressive and that involves uncovering. (308) The ones that lead us on in a way that is just progressive are those that seem to depend on belief and memory – one like this, for example: “If one of the gods said to you that this person will be rich, this person will be rich; but this god (let us suppose I am pointing to Zeus) said to you that this person will be rich; therefore this person will be rich.” For here we accept the conclusion, that this person will be rich, not through its being established by the force of the argument set out, but by our believing the assertion of the god. (309) But an example of an argument that leads us on from the premises to the conclusion in a way that is both progressive and involves uncovering is the one put forward on the subject of intelligible pores. For “If sweat flows through the body’s surface, there are intelligible pores in the flesh,” and the fact that sweat does flow through the body’s surface, teach us from their own nature to put together the fact that there are intelligible pores in the flesh, by way of a progression like this: “It is impossible for liquid to flow through a solid body not provided with pores; but sweat does flow through the body; the body cannot, then, be solid, but must be provided with pores.”

(310) Well then, since this is so, demonstration has to be first of all an argument; second, conclusive; third, also true; fourth, also having an unclear conclusion; and fifth, having this conclusion uncovered by means of the force of the premises. (311) At any rate, if it is day, an argument such as “If it is night, it is dark; but it *is* night; therefore it is dark” is conclusive (for if its premises are granted the consequence is also concluded

to be so), but it is of course not true (for it includes the false premise “It is night”); for this reason it is not demonstrative either. (312) Again, one like this: “If it is day, it is light; but it is day; therefore it is light,” in addition to being conclusive is also true, seeing that if its premises are granted its consequence is also granted, and it shows something true by true premises. But although this is so, it is again not a demonstration given that it has a conclusion, “It is light,” that is clear and not unclear. (313) By the same token, too, one of this form: “If one of the gods said to you that this person will be rich, this person will be rich; but this god said to you that this person will be rich; therefore this person will be rich,” does have a conclusion (the fact that this person will be rich) that is unclear, but it is not demonstrative because it is not uncovered by means of the force of the premises, but gets its acceptance by means of trust in the god. (314) When all these things come together, then – the argument’s being conclusive and true and capable of displaying something unclear, demonstration subsists. Hence they delineate it as follows: “A demonstration is an argument that by means of agreed-upon premises uncovers by way of conclusive reasoning a consequence that is unclear.” For example: “If there is motion, there is void; but there *is* motion; therefore there is void.” For there being void is unclear, and seems to be uncovered by means of true premises – “If there is motion, there is void” and “There is motion” – by way of conclusive reasoning.

(315) These, then, are the things that it was appropriate to start with concerning the conception of the matter being investigated; next in order we should point out what it is made of.

2. *Initial arguments to the effect that demonstration is unclear* (316–336)

What demonstration is made of⁹⁹

(316) As we have often said before, some objects are believed to be clear and others unclear. The clear ones are those that are grasped through no will of our own, by appearance and by means of an effect on us, such as (right now) “It is day” and “This is a human being” and everything like that, while the unclear ones are those that are not like this. (317) And of the unclear ones (as some people say who draw a distinction), some are by nature

⁹⁹ Literally, “What material (*hulēs*) demonstration comes from.”

unclear, while others are called unclear “homonymously with the genus.” And by nature unclear are those that have neither been apprehended before nor are being apprehended now nor will be apprehended later, but keep their unknown status for all time, such as the number of stars being even or odd. (318) In view of this, they are called by nature unclear not because *they* have an unclear nature considered in themselves – since then we will be saying something inconsistent (that is, at the same time both saying that we do not know them and agreeing on what nature they have) – but because they are unclear to *our* nature. (319) The ones called unclear “homonymously with the genus” are those that are hidden in terms of their own nature, but are held to become known through signs and demonstrations – for example, that there are indivisible elements moving around in an unlimited void. (320) However, if there is such a difference in the things, we say that demonstration is neither clear (for it does not become known all by itself and by means of a necessitated effect on us), nor by nature unclear (for the apprehension of it is not hopeless), but falls into the remaining side of the distinction among unclear things, which have their nature down in the depths and obscure to us, but seem to be apprehended by philosophical reasoning.¹⁰⁰

(321) But we do not say this firmly, since it would be laughable to be still investigating it if we have accepted its reality; rather, we say that it turns out to be like this in terms of its conception. For in this way, from a conception and prior notion¹⁰¹ of this kind, the argument about its reality will crop up. (322) That demonstration is, then, in terms of its conception, among the unclear things and cannot become known by means of itself is to be argued in the following way.

What is clear and plain is clear and plain in every way, and is agreed to by everyone and allows for no dissension; what is unclear, on the other hand, is a matter of disagreement and is of a nature to fall into dissension. (323) And reasonably so; for every statement is judged to be true or false according to its reference to the subject-matter about which it has been

¹⁰⁰ This classification differs from the one at the opening of the section on the sign (145–150). “Unclear by nature” in the present passage corresponds with “unclear pure and simple” in the earlier discussion; “unclear by nature” in the earlier passage corresponds with “unclear ‘homonymously with the genus’” here.

¹⁰¹ *Prolēpsis*, elsewhere translated “preconception.” Here and at 337ff. I use “prior notion” in places where *prolēpsis* is juxtaposed with one of the words regularly translated “conception,” simply to avoid the awkwardness of “conception and preconception”; “preconception” and “prior notion” should be understood as semantically equivalent.

produced. If it is found to be in agreement with the subject-matter about which it has been produced, it is thought to be true, and if in disagreement, false. For example, someone declares that it is day. Then after referring what is stated to the subject-matter, and recognizing the reality of this as testifying in favor of the statement, we say that what is stated is true. (324) For this reason, when the subject-matter about which the statement is produced is plain and clear, it is easy, after referring what is stated to it, to say in this way either that the statement is true (if it testifies in favor of the subject-matter) or false (if it testifies against it). But when the subject-matter is unclear and hidden away from us, then, since the reference of the statement to this can no longer be secure, it is left for thought to deal in persuasiveness and be drawn into assent by what is likely. But since different people make different judgments of likelihood and persuasiveness, disagreement arises, with neither the person who has missed the target knowing that he has missed it, nor the one who has hit it knowing he has hit it.

(325) This is why the skeptics very aptly compare those who are investigating unclear things with people shooting at some target in the dark. For just as it is likely that one of these people hits the target and another misses it, but who has hit it and who has missed it are unknown, so, as the truth is hidden away in pretty deep darkness, many arguments are launched at it, but which of them is in agreement with it and which in disagreement is not possible to know, since what is being investigated is removed from plain experience. (326) And Xenophanes said this first:

And as for what is clear, no man has seen it, nor will there be anyone
Who knows about the gods and what I say about all things;
For even if one should happen to say what has absolutely come to pass
Nonetheless one does not oneself know; but opinion has been
constructed in all cases.¹⁰²

(327) So that if what is clear is a matter of agreement, for the reason mentioned before, while what is unclear is a matter of disagreement, demonstration too, if it is a matter of disagreement, has to be unclear. And that it is in fact a matter of disagreement does not require many arguments from us – just a brief and readily available reminder – if indeed the dogmatic philosophers and the rationalist doctors posit it, while the

¹⁰² Cf. I.49, I.110.

Empiricists do away with it, and perhaps also Democritus (for he spoke strongly against it in his *Rules*), (328) and the skeptics have kept it in suspension of judgment, using the “no more” assertion. And again, there is enough disagreement among those who posit it, as we will show as the discussion moves forward. Demonstration, then, is something unclear.

(329) Moreover, if every demonstration that contains a doctrine in its premises is thereby a doctrine, and every doctrine is a matter of disagreement, then necessarily every demonstration is a matter of disagreement and is among the matters under investigation. For example, Epicurus is of the opinion that he has put forward a very strong demonstration of there being void, like this: “If there is motion, there is void; but there is motion; therefore there is void.” (330) But if the premises of this demonstration were agreed upon by everyone, it would necessarily have the consequence that follows from them accepted by everyone as well. (331) But in fact some have resisted this (I mean, the consequence’s being drawn from the premises) not on account of its not following from them, but on account of their being false and not agreed to. (332) For – not to rush over a lot of judgments about the conditional, but to say right away that a sound conditional is one that does not begin with a true proposition and finish with a false one – “If there is motion, there is void” will be true according to Epicurus, since it begins with the true “There is motion” and finishes with a true one. But it will be false according to the Peripatetics, since it begins with the true “There is motion” and finishes with the false “There is void.” (333) And according to Diodorus, since it begins with the false “There is motion” and finishes with the false “There is void,” it will itself be true, but he discredits the minor premise, “There is motion,” as false. (334) According to the skeptics, however, since it finishes with one that is unclear, it will be unclear – for according to them “There is void” belongs among the things that are unknown. It is apparent from this, then, that the premises of the demonstration are a matter of disagreement. But since they are a matter of disagreement they are unclear,¹⁰³ so that the demonstration using them is also entirely unclear.

(335) Then again, demonstration is among the things in relation to something; for it does not appear by itself but is observed alongside the thing being demonstrated. But whether there are things in relation to something is under investigation, and many a person says that there

¹⁰³ With Bury I read *onta* for the mss. *kai ta*, accepted by Mutschmann.

are not. But what involves dissension is unclear. In this way too, then, demonstration is unclear. (336) In addition to this, demonstration either consists of sound, as is said by the Epicureans, or of incorporeal sayables, as is said by the Stoics. But which of them it consists of is open to a lot of investigation; for whether sayables subsist is a matter of investigation, and there is a lot of argument about this, and whether sounds signify anything is a matter of impasse. But if it is a matter of investigation which of them demonstration is made of, and what is under investigation is unclear, undoubtedly demonstration is unclear.

Let this be laid down, then, as a sort of starting-point for the rebuttal to come; moving on, let us next look into whether *there is* demonstration.

3. *Difficulties concerning demonstration (337–481)*

a. Rebuttal of Epicurean argument based on the conception of demonstration (337–336a)

Whether there is demonstration

(337) Having described what demonstration is made of, we will follow this by trying to get a grip on the arguments that make it shaky, inquiring whether its reality follows from its conception and prior notion or not. Indeed some people, especially those of the Epicurean school, tend to resist us in a rather crude way, saying “Either you understand what demonstration is, or you do not. And if you understand it and have a conception of it, there is demonstration; but if you do not understand it, how can you investigate what you have not the slightest understanding of?” (331a) For in saying this they are virtually turned about by themselves, since it is agreed that, when anything is being investigated, a prior notion and conception has to come first. For how can anyone investigate if he has no conception of the object being investigated? For neither will he know that he has hit the target when he has hit it, nor that he has missed it when he has missed it. (332a) So that we give them this point. Actually, we are so far from saying that we do not have a conception of the entire object being investigated, that on the contrary we maintain that we have many conceptions and prior notions of it, and thanks to our being unable to discriminate these and to find the one with the most authority we come round to suspension of judgment and equilibrium. (333a) For if we had just one preconception of the object being investigated, then