

DE INTERPRETATIONE

CHAPTER 1

16^a1. First we must settle what a name is and what a verb is, and then what a negation, an affirmation, a statement and a sentence are.

16^a3. Now spoken sounds are symbols of affections in the soul, and written marks symbols of spoken sounds. And just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of—affections of the soul—are the same for all; and what these affections are likenesses of—actual things—are also the same. These matters have been discussed in the work on the soul and do not belong to the present subject.

16^a9. Just as some thoughts in the soul are neither true nor false while some are necessarily one or the other, so also with spoken sounds. For falsity and truth have to do with combination and separation. Thus names and verbs by themselves—for instance ‘man’ or ‘white’ when nothing further is added—are like the thoughts that are without combination and separation; for so far they are neither true nor false. A sign of this is that even ‘goat-stag’ signifies something but not, as yet, anything true or false—unless ‘is’ or ‘is not’ is added (either simply or with reference to time).

CHAPTER 2

16^a19. A *name* is a spoken sound significant by convention, without time, none of whose parts is significant in separation.

16^a21. For in 'Whitfield' the 'field' does not signify anything in its own right, as it does in the phrase 'white field'. Not that it is the same with complex names as with simple ones: in the latter the part is in no way significant, in the former it has some force but is not significant of anything in separation, for example the 'boat' in 'pirate-boat'.

16^a26. I say 'by convention' because no name is a name naturally but only when it has become a symbol. Even inarticulate noises (of beasts, for instance) do indeed reveal something, yet none of them is a name.

16^a29. 'Not man' is not a name, nor is there any correct name for it. It is neither a phrase nor a negation. Let us call it an indefinite name.

16^a32. 'Philo's', 'to-Philo', and the like are not names but inflexions of names. The same account holds for them as for names except that an inflexion when combined with 'is', 'was', or 'will be' is not true or false whereas a name always is. Take, for example, 'Philo's is' or 'Philo's is not'; so far there is nothing either true or false.

CHAPTER 3

16^b6. A *verb* is what additionally signifies time, no part of it being significant separately; and it is a sign of things said of something else.

16^b8. It additionally signifies time: 'recovery' is a name, but 'recovers' is a verb, because it additionally signifies something's holding *now*. And it is always a sign of what holds, that is, holds of a subject.

16^b11. 'Does not recover' and 'does not ail' I do not call verbs. For though they additionally signify time and always hold of something, yet there is a difference—for

which there is no name. Let us call them indefinite verbs, because they hold indifferently of anything whether existent or non-existent.

16^b16. Similarly, 'recovered' and 'will-recover' are not verbs but inflexions of verbs. They differ from the verb in that it additionally signifies the present time, they the time outside the present.

16^b19. When uttered just by itself a verb is a name and signifies something—the speaker arrests his thought and the hearer pauses—but it does not yet signify whether it is or not. For not even¹ 'to be' or 'not to be' is a sign of the actual thing (nor if you say simply 'that which is'); for by itself it is nothing, but it additionally signifies some combination, which cannot be thought of without the components.

CHAPTER 4

16^b26. A *sentence* is a significant spoken sound some part of which is significant in separation—as an expression, not as an affirmation.

16^b28. I mean that 'animal', for instance, signifies something, but not that it is or is not (though it will be an affirmation or negation if something is added); the single syllables of 'animal', on the other hand, signify nothing. Nor is the 'ice' in 'mice' significant; here it is simply a spoken sound. In double words, as we said, a part does signify, but not in its own right.

16^b33. Every sentence is significant (not as a tool but, as we said, by convention), but not every sentence is a statement-making sentence, but only those in which there is truth or falsity.. There is not truth or falsity in all sen-

¹ Read οὐδὲ γάρ.

tences: a prayer is a sentence but is neither true nor false. The present investigation deals with the statement-making sentence; the others we can dismiss, since consideration of them belongs rather to the study of rhetoric or poetry.

CHAPTER 5

17^a8. The first single statement-making sentence is the affirmation, next is the negation. The others are single in virtue of a connective.

17^a9. Every statement-making sentence must contain a verb or an inflexion of a verb. For even the definition of man is not yet a statement-making sentence—unless ‘is’ or ‘will be’ or ‘was’ or something of this sort is added. (To explain why ‘two-footed land animal’ is one thing and not many belongs to a different inquiry; certainly it will not be one simply through being said all together.)

17^a15. A single statement-making sentence is either one that reveals a single thing or one that is single in virtue of a connective. There are more than one if more things than one are revealed or if connectives are lacking.

17^a17. (Let us call a name or a verb simply an expression, since by saying it one cannot reveal anything by one’s utterance in such a way as to be making a statement, whether one is answering a question or speaking spontaneously.)

17^a20. Of these the one is a simple statement, affirming or denying something of something, the other is compounded of simple statements and is a kind of composite sentence.

17^a23. The simple statement is a significant spoken sound about whether something does or does not hold (in one of the divisions of time).

CHAPTER 6

17^a25. An *affirmation* is a statement affirming something of something, a *negation* is a statement denying something of something.

17^a26. Now it is possible to state of what does hold that it does not hold, of what does not hold that it does hold, of what does hold that it does hold, and of what does not hold that it does not hold. Similarly for times outside the present. So it must be possible to deny whatever anyone has affirmed, and to affirm whatever anyone has denied. Thus it is clear that for every affirmation there is an opposite negation, and for every negation an opposite affirmation. Let us call an affirmation and a negation which are opposite a *contradiction*. I speak of statements as opposite when they affirm and deny the same thing of the same thing—not homonymously, together with all other such conditions that we add to counter the troublesome objections of sophists.

CHAPTER 7

17^a38. Now of actual things some are universal, others particular (I call universal that which is by its nature predicated of a number of things, and particular that which is not; man, for instance, is a universal, Callias a particular). So it must sometimes be of a universal that one states that something holds or does not, sometimes of a particular. Now if one states universally of a universal that something holds or does not, there will be contrary statements (examples of what I mean by 'stating universally of a universal' are 'every man is white' and 'no man is white'). But when one states something of a universal but not universally, the statements are not contrary (though what is being revealed may be contrary). Examples of

what I mean by 'stating of a universal not universally' are 'a man is white' and 'a man is not white'; man is a universal but it is not used universally in the statement (for 'every' does not signify the universal but that it is taken universally). It is not true to predicate a universal universally of a subject, for there cannot be an affirmation in which a universal is predicated universally of a subject, for instance 'every man is every animal'.

17^b16. I call an affirmation and a negation *contradictory* opposites when what one signifies universally the other signifies not universally,¹ e.g. 'every man is white' and 'not every man is white', 'no man is white' and 'some man is white'. But I call the universal affirmation and the universal negation contrary opposites, e.g. 'every man is just' and 'no man is just'. So these cannot be true together, but their opposites may both be true with respect to the same thing, e.g. 'not every man is white' and 'some man is white'.

17^b26. Of contradictory statements about a universal taken universally it is necessary for one or the other to be true or false; similarly if they are about particulars, e.g. 'Socrates is white' and 'Socrates is not white'. But if they are about a universal not taken universally it is not always the case that one is true and the other false. For it is true to say at the same time that a man is white and that a man is not white, or that a man is noble and a man is not noble (for if base, then not noble; and if something is becoming something, then it *is* not that thing). This might seem absurd at first sight, because 'a man is not white' looks as if it signifies also at the same time that no man is white; this, however, does not signify the same, nor does it necessarily hold at the same time.

¹ The text looks corrupt, but this is evidently the meaning.

17^b37. It is evident that a single affirmation has a single negation. For the negation must deny the same thing as the affirmation affirmed, and of the same thing, whether a particular or a universal (taken either universally or not universally). I mean, for example, ‘Socrates is white’ and ‘Socrates is not white’. But if something else is denied, or the same thing is denied of something else, that will not be the opposite statement, but a different one. The opposite of ‘every man is white’ is ‘not every man is white’; of ‘some man is white’, ‘no man is white’; of ‘a man is white’, ‘a man is not white’.

18^a8. We have explained, then: that a single affirmation has a single negation as its contradictory opposite, and which these are; that contrary statements are different, and which these are; and that not all contradictory pairs are true or false, why this is, and when they are true or false.

CHAPTER 8

18^a13. A single affirmation or negation is one which signifies one thing about one thing (whether about a universal taken universally or not), e.g. ‘every man is white’, ‘not every man is white’, ‘a man is white’, ‘a man is not white’, ‘no man is white’, ‘some man is white’—assuming that ‘white’ signifies one thing.

18^a18. But if one name is given to two things which do not make up one thing, there is not a single affirmation. Suppose, for example, that one gave the name ‘cloak’ to horse and man; ‘a cloak is white’ would not be a single affirmation. For to say this is no different from saying ‘a horse and a man is white’, and this is no different from saying ‘a horse is white and a man is white’. So if this last signifies more than one thing and is more than one affirmation, clearly the first also signifies either more than

one thing or nothing (because no man is a horse). Consequently it is not necessary, with these statements either, for one contradictory to be true and the other false.

CHAPTER 9

18^a28. With regard to what is and what has been it is necessary for the affirmation or the negation to be true or false. And with universals taken universally it is always necessary for one to be true and the other false, and with particulars too, as we have said; but with universals not spoken of universally it is not necessary. But with particulars that are going to be it is different.

18^a34. For if every affirmation or negation is true or false it is necessary for everything either to be the case or not to be the case. For if one person says that something will be and another denies this same thing, it is clearly necessary for one of them to be saying what is true—if every affirmation is true or false; for both will not be the case together under such circumstances. For if it is true to say that it is white or is not white, it is necessary for it to be white or not white; and if it is white or is not white, then it was true to say or deny this. If it is not the case it is false, if it is false it is not the case. So it is necessary for the affirmation or the negation to be true. It follows that nothing either is or is happening, or will be or will not be, by chance or as chance has it, but everything of necessity and not as chance has it (since either he who says or he who denies is saying what is true). For otherwise, it might equally well happen or not happen, since what is as chance has it is no more thus than not thus, nor will it be.

18^b9. Again, if it is white now it was true to say earlier that it would be white; so that it was always true to say of anything that has happened that it would be so. But if it was always true to say that it was so, or would be so,

it could not not be so, or not be going to be so. But if something cannot not happen it is impossible for it not to happen; and if it is impossible for something not to happen it is necessary for it to happen. Everything that will be, therefore, happens necessarily. So nothing will come about as chance has it or by chance; for if by chance, not of necessity.

18^b17. Nor, however, can we say that neither is true—that it neither will be nor will not be so. For, firstly, though the affirmation is false the negation is not true, and though the negation is false the affirmation, on this view, is not true. Moreover, if it is true to say that something is white and large¹, both have to hold of it, and if true that they will hold tomorrow, they will have to hold tomorrow²; and if it neither will be nor will not be the case tomorrow, then there is no ‘as chance has it’. Take a sea-battle: it would *have* neither to happen nor not to happen.

18^b26. These and others like them are the absurdities that follow if it is necessary, for every affirmation and negation either about universals spoken of universally or about particulars, that one of the opposites be true and the other false, and that nothing of what happens is as chance has it, but everything is and happens of necessity. So there would be no need to deliberate or to take trouble (thinking that if we do this, this will happen, but if we do not, it will not). For there is nothing to prevent someone’s having said ten thousand years beforehand that this would be the case, and another’s having denied it; so that whichever of the two was true to say then, will be the case of necessity. Nor, of course, does it make any difference whether any people made the contradictory statements

¹ Read λευκὸν καὶ μέγα.

² Read εἰ δὲ ὑπάρξει . . . , ὑπάρξειν . . .

or not. For clearly this is how the actual things are even if someone did not affirm it and another deny it. For it is not because of the affirming or denying that it will be or will not be the case, nor is it a question of ten thousand years beforehand rather than any other time. Hence, if in the whole of time the state of things was such that one or the other was true, it was necessary for this to happen, and for the state of things always to be such that everything that happens happens of necessity. For what anyone has truly said would be the case cannot not happen; and of what happens it was always true to say that it would be the case.

19^a7. But what if this is impossible? For we see that what will be has an origin both in deliberation and in action, and that, in general, in things that are not always actual there is the possibility of being and of not being; here both possibilities are open, both being and not being, and, consequently, both coming to be and not coming to be. Many things are obviously like this. For example, it is possible for this cloak to be cut up, and yet it will not be cut up but will wear out first. But equally, its not being cut up is also possible, for it would not be the case that it wore out first unless its not being cut up were possible. So it is the same with all other events that are spoken of in terms of this kind of possibility. Clearly, therefore, not everything is or happens of necessity: some things happen as chance has it, and of the affirmation and the negation neither is true rather than the other; with other things it is one rather than the other and as a rule, but still it is possible for the other to happen instead.

19^a23. What is, necessarily is, when it is; and what is not, necessarily is not, when it is not. But not everything that is, necessarily is; and not everything that is not, necessarily

is not. For to say that everything that is, is of necessity, when it is, is not the same as saying unconditionally that it is of necessity. Similarly with what is not. And the same account holds for contradictories: everything necessarily is or is not, and will be or will not be; but one cannot divide and say that one or the other is necessary. I mean, for example: it is necessary for there to be or not to be a sea-battle tomorrow; but it is not necessary for a sea-battle to take place tomorrow, nor for one not to take place—though it is necessary for one to take place or not to take place. So, since statements are true according to how the actual things are, it is clear that wherever these are such as to allow of contraries as chance has it, the same necessarily holds for the contradictories also. This happens with things that are not always so or are not always not so. With these it is necessary for one or the other of the contradictories to be true or false—not, however, this one or that one, but as chance has it; or for one to be true *rather* than the other, yet not *already* true or false.

19^a39. Clearly, then, it is not necessary that of every affirmation and opposite negation one should be true and the other false. For what holds for things that are does not hold for things that are not but may possibly be or not be; with these it is as we have said.

CHAPTER 10

19^b5. Now an affirmation signifies something about something, this last being either a name or a 'non-name'; and what is affirmed must be one thing about one thing. (Names and 'non-names' have already been discussed. For I do not call 'not-man' a name but an indefinite name—for what it signifies is in a way one thing, but indefinite—just as I do not call 'does not recover' a verb.) So every