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—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.

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—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'.

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.

8 . 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.

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.

9 . 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.

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.

Again, it if 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.

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 large,[4] both have to hold of it, and if true that they will hold tomorrow, they will have to hold tomorrow;[5] and if 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.

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 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

[4] Read λευκὸν καὶ μέγα.
[5] Read εἰ δὲ ὑπάρξει . . . , ὑπάρξειν . . .

be the case cannot not happen; and of what happens it was always true to say that it would be the case.

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.

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.

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.

10 · 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 affirmation will contain either a name and a verb or an indefinite name and a verb. Without a verb there will be no affirmation or negation. 'Is', 'will be', 'was', 'becomes', and the like are verbs according to what we laid down, since they additionally signify time.

to a first affirmation and negation are: 'a man is', 'a man is not'; then, 'a not-man is', 'a not-man is not'; and again, 'every man is', 'every man is not', 'every not-man is', 'every not-man is not'. For times other than the present the same account holds.

But when 'is' is predicated additionally as a third thing, there are two ways of expressing opposition. (I mean, for example, a man is just; here I say that the 'is' is a third component—whether name or verb—in the affirmation.) Because of this there will here be *four* cases (two of which will be related, as to order of sequence, to the affirmation and negation in the way the privations are, while two will not). I mean that 'is' will be added either to 'just' or to 'not-just', and so, too, will the negation. Thus there will be four cases. What is meant should be clear from the following diagram:

(*a*) 'a man is just'   (*b*) 'a man is not just'
                          This is the negation of (*a*).

(*d*) 'a man is not not-just'   (*c*) 'a man is not-just'
   This is the negation of (*c*).

'Is' and 'is not' are here added to 'just' and to 'not-just'.

This then is how these are arranged (as is said in the *Analytics*).[6] Similarly, too, if the affirmation is about the name taken universally, e.g.:

(*a*) 'every man is just'   (*b*) 'not every man is just'
(*d*) 'not every man is not-just'   (*c*) 'every man is not-just'

Here, however, it is not in the same way possible for diagonal statements to be true together, though it is possible sometimes.

These, then, are two pairs of opposites. There are others if something is added to 'not-man' as a sort of subject, thus:

(*a*) 'a not-man is just'   (*b*) 'a not-man is not just'
(*d*) 'a not-man is not not-just'   (*c*) 'a not-man is not-just'

There will not be any more oppositions than these. These last are a group on their own separate from the others, in that they use 'not-man' as a name.

In cases where 'is' does not fit (e.g. with 'recovers' or 'walks') the verbs have the same effect when so placed as if 'is' were joined on, e.g.:

(*a*) 'every man recovers'   (*b*) 'every man does not recover'
(*d*) 'every not-man does not recover'   (*c*) 'every not-man recovers'

Here one must not say 'not every man' but must add the 'not', the negation, to 'man'. For 'every' does not signify a universal, but that it is taken universally. This is clear from the following.

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[6] See *Prior Analytics* I 46.