CHAPTER II.

Of the Copula.

Section 186. There are two kinds of copula, one for affirmative and one for negative statements.

Section 187. Materially the copula is expressed by some part of the verb 'to be,' with or without the negative, or else is wrapped up in some inflexional form of a verb.

Section 188. The material form of the copula is an accident of language, and a matter of indifference to logic. 'The kettle boils' is as logical a form of expression as 'The kettle is boiling.' For it must be remembered that the word 'is' here is a mere sign of agreement between the two terms, and conveys no notion of actual existence. We may use it indeed with equal propriety to express non-existence, as when we say 'An idol is nothing.'

Section 189. When the verb 'to be' expresses existence in fact it is known in grammar as 'the substantive verb.' In this use it is predicate as well as copula, as when we say 'God is,' which may be analysed, if we please, into 'God is existent.'

Section 190. We have laid down above that there are two kinds of copula, affirmative and negative: but some logicians have maintained that the copula is always affirmative.

Section 191. What then, it may be asked, on this view, is the meaning of negative propositions! To which the answer is, that a negative proposition asserts an agreement between the subject and a negative term. When, for instance, we say 'The whale is not a fish,' this would be interpreted to mean 'The whale is a not-fish.'

Section 192. Undoubtedly any negative proposition may be exhibited in an affirmative form, since, by the law of excluded middle, given a pair of contradictory terms, wherever the one can be asserted, the other can be denied, and vice versâ. We shall find later on that this principle gives rise to one of the forms of immediate inference. The only question then can be, which is the more natural and legitimate form of expression. It seems simpler to suppose that we assert the agreement of 'whale' with 'not-fish' by implication only, and that what we directly do is to predicate a disagreement between 'whale' and the positive attributes connoted by 'fish.' For since 'not-fish' must apply to every conceivable object of thought except those which fall

under the positive term 'fish,' to say that a whale is a 'not-fish,' is to say that we have still to search for 'whale' throughout the whole universe of being, minus a limited portion; which is only a more clumsy way of saying that it is not to be found in that portion.

Section 193. Again, the term 'not-fish' must be understood either in its intension or in its extension. If it be understood in its intension, what it connotes is simply the absence of the positive qualities which constitute a fish, a meaning which is equally conveyed by the negative form of proposition. We gain nothing in simplicity by thus confounding assertion with denial. If, on the other hand, it is to be taken in extension, this involves the awkwardness of supposing that the predicative power of a term resides in its extensive capacity.

Section 194. We therefore recognise predication as being of two kinds--affirmation and negation--corresponding to which there are two forms of copula.

Section 195. On the other hand, other logicians have maintained that there are many kinds of copula, since the copula must vary according to the various degrees of probability with which we can assert or deny a predicate of a subject. This view is technically known as the doctrine of

The Modality of the Copula.

Section 196. It may plausibly be maintained that the division of propositions into affirmative and negative is not an exhaustive one, since the result of an act of judgement is not always to lead the mind to a clear assertion or a clear denial, but to leave it in more or less doubt as to whether the predicate applies to the subject or not. Instead of saying simply A is B, or A is not B, we may be led to one of the following forms of proposition--

A is possibly B. A is probably B. A is certainly B.

The adverbial expression which thus appears to qualify the copula is known as 'the mode.'

Section 197. When we say 'The accused may be guilty' we have a proposition of very different force from 'The accused is guilty,' and yet the

terms appear to be the same. Wherein then does the difference lie? 'In the copula' would seem to be the obvious reply. We seem therefore driven to admit that there are as many different kinds of copula as there are different degrees of assurance with which a statement may be made.

Section 198. But there is another way in which modal propositions may be regarded. Instead of the mode being attached to the copula, it may be considered as itself constituting the predicate, so that the above propositions would be analysed thus--

That A is B, is possible. That A is B, is probable. That A is B, is certain.

Section 199. The subject here is itself a proposition of which we predicate various degrees of probability. In this way the division of propositions into affirmative and negative is rendered exhaustive. For wherever before we had a doubtful assertion, we have now an assertion of doubtfulness.

Section 200. If degrees of probability can thus be eliminated from the copula, much more so can expressions of time, which may always be regarded as forming part of the predicate. 'The sun will rise to-morrow' may be analysed into 'The sun is going to rise to-morrow.' In either case the tense belongs equally to the predicate. It is often an awkward task so to analyse propositions relative to past or future time as to bring out the copula under the form 'is' or 'is not': but fortunately there is no necessity for so doing, since, as has been said before (Section 188), the material form of the copula is a matter of indifference to logic. Indeed in affirmative propositions the mere juxtaposition of the subject and predicate is often sufficient to indicate their agreement, e.g. 'Most haste, worst speed,' chalepha tha kala. It is because all propositions are not affirmative that we require a copula at all. Moreover the awkwardness of expression just alluded to is a mere accident of language. In Latin we may say with equal propriety 'Sol orietur cras' or 'Sol est oriturus cras'; while past time may also be expressed in the analytic form in the case of deponent verbs, as 'Caesar est in Galliam profectus'--'Caesar is gone into Gaul.'

Section 201. The copula then may always be regarded as pure, that is, as indicating mere agreement or disagreement between the two terms of the proposition.