

Book 5: Chapter 1

Introductory.

When a Trio of Biliteral Propositions of Relation is such that

- (1) all their six Terms are Species of the same Genus,
- (2) every two of them contain between them a Pair of codivisional Classes
- (3) the three Propositions are so related that, if the first two were true, the third would be true,

the Trio is called a ‘Syllogism’; the Genus, of which each of the six Terms is a Species, is called its ‘Universe of Discourse’, or, more briefly, its ‘Univ.’; the first two Propositions are called its ‘Premisses’, and the third its ‘Conclusion’; also the Pair of codivisional Terms in the Premisses are called its ‘Eliminands’, and the other two its ‘Retinends’.

The Conclusion of a Syllogism is said to be ‘consegue from its Premisses: hence it is usual to prefix to it the w “Therefore” (or the Symbol \therefore).

[Note that the ‘Eliminands’ are so called because they are eliminated, and do not appear in the Conclusion; and that the ‘Retinends’ are so called because they are retained, and do appear in the Conclusion.

Note also that the question, whether the Conclusion is or is not consequent from the Premisses, is not affected by the actual truth or falsity of any of the Trio, but depends entirely on their relationship to each other.

As a specimen-Sylligism, let us take the Trio

“No x-Things are m-Things;
No y-Things are m’-Things.
No x-Things are y-Things.”

which we may write thus:—

“No x are m;
No y are m’.
No x are y”.

Here the first and second contain the Pair of codivisional Classes m and m’; the first and third contain the Pair x and x; and the second and third contain the Pair y and y.

Also the three Propositions are (as we shall see hereafter) so related that, if the first two were true, the third would also be true.

Hence the Trio is a Syllogism; the two Propositions, “No x are m” and “No y are m’ ”, are its Premisses; the Propo- sition “No x are y” is its Conclusion; the Terms m and m’ are its Eliminands; and the Terms x and y are its Retinends.

Hence we may write it thus:–

“No x are m;
No y are m’.
.‘. No x are y”.

As a second specimen, let us take the Trio

“All cats understand French;
Some chickens are cats.
Some chickens understand French”.

These, put into normal form, are

“All cats are creatures understanding French;_Some chickens are cats._Some chickens are creatures understanding French”.

Here all the six Terms are Species of the Genus “creatures.”

Also the first and second Propositions contain the Pair of codivisional Classes “cats” and “cats”; the first and third contain the Pair “creatures understanding French” and “creatures understanding French”; and the second and third contain the Pair “chickens” and “chickens”.

Also the three Propositions are (as we shall see at p. 64) so related that, if the first two were true, the third would be true. (The first two are, as it happens, not strictly true in our planet. But there is nothing to hinder them from being true in some other planer, say Mars or Jupiter—in which case the third would also be true in that planet, and its inhabitants would probably engage chickens as nursery-governesses. They would thus secure a singular contingent privilege, unknown in England, namely, that they would be able, at any time when provisions ran short, to utilise the nursery-governess for the nursery-dinner!)

Hence the Trio is a Syllogism; the Genus “creature” is its ‘Univ.’; the two Propositions, “All cats understand French” and “Some chickens are cats”, are its Premisses, the Proposition “Some chickens understand French” is its Conclusion; the Terms “cats” and “cats” are its Elimi- nands; and the Terms, “creatures understanding French” and “chickens”, are its Retinends.

Hence we may write it thus:—

“All cats understand French;
Some chickens are cats;
.∴ Some chickens understand French”]