CHAPTER XXI.

Of the Reduction of the Partly Conjunctive Syllogism.

Section 744. Such syllogisms as those just treated of, if syllogisms they are to be called, have a major and a middle term visible to the eye, but appear to be destitute of a minor. The missing minor term is however supposed to be latent in the transition from the conjunctive to the simple form of proposition. When we say 'A is B,' we are taken to mean, 'As a matter of fact, A is B' or 'The actual state of the case is that A is B.' The insertion therefore of some such expression as 'The case in hand,' or 'This case,' is, on this view, all that is wanted to complete the form of the syllogism. When reduced in this manner to the simple type of argument, it will be found that the constructive conjunctive conforms to the first figure and the destructive conjunctive to the second.

    Constructive Mood.   Barbara.

  If A is B, C is D. \   / All cases of A being B are cases of
            \ = /   C being D.
  A is B.   / \ This is a case of A being B.
  .'. C is D.   /   \ .'. This is a case of C being D.

  Destructive Mood.   Camestres.

  If A is B, C is D. \   / All cases of A being B are cases of
            \ = /   C being D.
  C is not D.   / \ This is not a case of C being D.
  .'. A is not B.   /   \ .'. This is not a case of A being B.

Section 745. It is apparent from the position of the middle term that the constructive conjunctive must fall into the first figure and the destructive conjunctive into the second. There is no reason, however, why they should be confined to the two moods, Barbara and Carnestres. If the inference is universal, whether as general or singular, the mood is Barbara or Carnestres; if it is particular, the mood is Darii or Baroko.

  Barbara.   Camestres.
  If A is B, C is always D. \   If A is B, C is always D.   \
  A is always B.   \   C is never D.   \
  .'. C is always D.   \ .'. A is never B.   \
                | |
  If A is B, C is always D. /   If A is B, C is always D.   /

A is in this case B.   /   C is not in this case D.   /
.'. C is in this case D. /   .'. A is not in this case B. /

Darii.   Baroko.

If A is B, C is always D.   If A is B, C is never D.
A is sometimes B.   C is sometimes not D.
.'. C is sometimes D.   .'. A is sometimes not B.

Section 746. The remaining moods of the first and second figure are obtained by taking a negative proposition as the consequent in the major premiss.

Celarent.   Ferio.
If A is B, C is never D.   If A is B, C is never D.
A is always B.   A is sometimes B.
.'. C is never D.   .'. C is sometimes not D.

Cesare.   Festino.
If A is B, C is never D.   If A is B, C is never D.
C is always D.   C is sometimes D.
.'. A is never B.   .'. A is sometimes not B.

Section 747. As the partly conjunctive syllogism is thus reducible to the simple form, it follows that violations of its laws must correspond with violations of the laws of simple syllogism. By our throwing the illicit moods into the simple form it will become apparent what fallacies are involved in them.

Denial of Anteceded.

If A is B, C is D. \   / All cases of A being B are cases of C
          \ = /   being D.
A is not B.   / \ This is not a case of A being B.
.'. C is not D.   /   \.'. This is not a case of C being D.

Here we see that the denial of the antecedent amounts to illicit process of the major term.

Section 7481 Affirmation of Consequent.

If A is B, C is D. \   / All Cases of A being B are cases of C
          | = | being D.
C is D.   /   \ This is a case of C being D.

Here we see that the affirmation of the consequent amounts to

undistributed middle.

Section 749. If we confine ourselves to the special rules of the four figures, we see that denial of the antecedent involves a negative minor in the first figure, and affirmation of the consequent two affirmative premisses in the second. Or, if the consequent in the major premiss were itself negative, the affirmation of it would amount to the fallacy of two negative premisses. Thus--

```
  If A is B, C is not D. \     / No cases of A being B are cases of C
                | = |      being D.
  C is not D.       /     \ This is not a case of C being D.
```

Section 750. The positive side of the canon of the conjunctive syllogism--'To affirm the antecedent is to affirm the consequent,' corresponds with the Dictum de Omni. For whereas something (viz. C being D) is affirmed in the major of all conceivable cases of A being B, the same is affirmed in the conclusion of something which is included therein, namely, 'this case,' or 'some cases,' or even 'all actual cases.'

Section 751. The negative side--'to deny the consequent is to deny the antecedent'--corresponds with the Dictum de Diverse (Section 643). For whereas in the major all conceivable cases of A being B are included in C being D, in the minor 'this case,' or 'some cases,' or even 'all actual cases' of C being D, are excluded from the same notion.

Section 752. The special characteristic of the partly conjunctive syllogism lies in the transition from hypothesis to fact. We might lay down as the appropriate axiom of this form of argument, that 'What is true in the abstract is true--in the concrete,' or 'What is true in theory is also true in fact,' a proposition which is apt to be neglected or denied. But this does not vitally distinguish it from the ordinary syllogism. For though in the latter we think rather of the transition from a general truth to a particular application of it, yet at bottom a general truth is nothing but a hypothesis resting upon a slender basis of observed fact. The proposition 'A is B' may be expressed in the form 'If A is, B is.' To say that 'All men are mortal' may be interpreted to mean that 'If we find in any subject the attributes of humanity, the attributes of mortality are sure to accompany them.'