

CHAPTER VI.

Of the Heads of Predicables.

Section 313. A predicate is something which is stated of a subject.

Section 314. A predicable is something which can be stated of a subject.

Section 315. The Heads of Predicables are a classification of the various things which can be stated of a subject, viewed in their relation to it.

Section 316. The treatment of this topic, therefore, as it involves the relation of a predicate to a subject, manifestly falls under the second part of logic, which deals with the proposition. It is sometimes treated under the first part of logic, as though the heads of predicables were a classification of universal notions, i.e. common terms, in relation to one another, without reference to their place in the proposition.

Section 317. The heads of predicables are commonly reckoned as five, namely,

- (1) Genus.
- (2) Species.
- (3) Difference.
- (4) Property.
- (5) Accident.

Section 318. We will first define these terms in the sense in which they are now used, and afterwards examine the principle on which the classification is founded and the sense in which they were originally intended.

- (1) A Genus is a larger class containing under it smaller classes. Animal is a genus in relation to man and brute.
- (2) A Species is a smaller class contained under a larger one. Man is a species in relation to animal.
- (3) Difference is the attribute, or attributes, which distinguish

one species from others contained under the same genus. Rationality is the attribute which distinguishes the species, man, from the species, brute.

N.B. The genus and the difference together make up the Definition of a class-name, or common term.

(4) A Property is an attribute which is not contained in the definition of a term, but which flows from it.

A Generic Property is one which flows from the genus.

A Specific Property is one which flows from the difference.

It is a generic property of man that he is mortal, which is a consequence of his animality. It is a specific property of man that he is progressive, which is a consequence of his rationality.

(5) An Accident is an attribute, which is neither contained in the definition, nor flows from it.

Section 319. Accidents are either Separable or Inseparable.

A Separable Accident is one which belongs only to some members of a class.

An Inseparable Accident is one which belongs to all the members of a class.

Blackness is a separable accident of man, an inseparable accident of coals.

Section 320. The attributes which belong to anything may be distinguished broadly under the two heads of essential and non-essential, or accidental. By the essential attributes of anything are meant those which are contained in, or which flow from, the definition. Now it may be questioned whether there can, in the nature of things, be such a thing as an inseparable accident. For if an attribute were found to belong invariably to all the members of a class, we should suspect that there was some causal connection between it and the attributes which constitute the definition, that is, we should suspect the attribute in question to be essential and not accidental. Nevertheless the term 'inseparable accident' may be retained as a cloak for our ignorance, whenever it is found that an attribute does, as a matter of fact, belong to all the members of a class, without there being any apparent reason why it should do so. It has been observed that animals

which have horns chew the cud. As no one can adduce any reason why animals that have horns should chew the cud any more than animals which have not, we may call the fact of chewing the cud an inseparable accident of horned animals.

Section 321. The distinction between separable and inseparable accidents is sometimes extended from classes to individuals.

An inseparable accident of an individual is one which belongs to him at all times. A separable accident of an individual is one which belongs to him at one time and not at another.

Section 322. It is an inseparable accident of an individual that he was born at a certain place and on a certain date. It is a separable accident of an individual that he resides at a certain place and is of a certain age.

Section 323. There are some remarks which it may be well to make about the above five terms before we pass on to investigate the principle upon which the division is based.

Section 324. In the first place, it must of course be borne in mind that genus and species are relative terms. No class in itself can be either a genus or a species; it only becomes so in reference to some other class, as standing to it in the relation of containing or contained.

Section 325. Again, the distinction between genus and difference on the one hand and property on the other is wholly relative to an assumed definition. When we say 'Man is an animal,' 'Man is rational,' 'Man is progressive,' there is nothing in the nature of these statements themselves to tell us that the predicate is genus, difference, or property respectively. It is only by a tacit reference to the accepted definition of man that this becomes evident to us. Similarly, we cannot know beforehand that the fact of a triangle having three sides is its difference, and the fact of its having three angles a property. It is only when we assume the definition of a triangle as a three-sided figure that the fact of its having three angles sinks into a property. Had we chosen to define it, in accordance with its etymological meaning, as a figure with three angles, its three-sidedness would then have been a mere property, instead of being the difference; for these two attributes are so connected together that, whichever is postulated, the other will necessarily follow.

Section 326. Lastly, it must be noticed that we have not really defined the term 'accident,' not having stated what it is, but only what it is not. It has in fact been reserved as a residual head to cover any

attribute which is neither a difference nor a property.

Section 327. If the five heads of predicables above given were offered to us as an exhaustive classification of the possible relations in which the predicate can stand to the subject in a proposition, the first thing that would strike us is that they do not cover the case in which the predicate is a singular term. In such a proposition as 'This man is John,' we have neither a predication of genus or species nor of attribute: but merely the identification of one term with another, as applying to the same object. Such criticism as this, however, would be entirely erroneous, since no singular term was regarded as a predicate. A predicable was another name for a universal, the common term being called a predicable in one relation and a universal in another—a predicable, extensively, in so far as it was applicable to several different things, a universal, intensively, in so far as the attributes indicated were implied in several other notions, as the attributes indicated by 'animal' are implied in 'horse,' 'sheep,' 'goat,' &c.

Section 328. It would be less irrelevant to point out how the classification breaks down in relation to the singular term as subject. When, for instance, we say 'Socrates is an animal,' 'Socrates is a man,' there is nothing in the proposition to show us whether the predicate is a genus or a species: for we have not here the relation of class to class, which gives us genus or species according to their relative extension, but the relation of a class to an individual.

Section 329. Again, when we say

(1) Some animals are men,

(2) Some men are black,

what is there to tell us that the predicate is to be regarded in the one case as a species and in the other as an accident of the subject? Nothing plainly but the assumption of a definition already known.

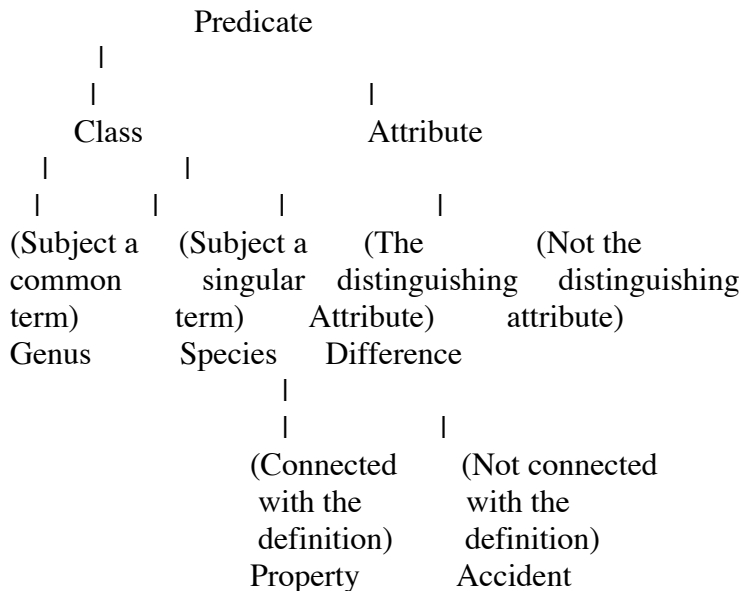
Section 330. But if this assumption be granted, the classification seems to admit of a more or less complete defense by logic.

For, given any subject, we can predicate of it either a class or an attribute.

When the predicate is a class, the term predicated is called a Genus, if the subject itself be a class, or a Species, if it be an individual.

When, on the other hand, the predicate is an attribute, the attribute predicated may be either the very attribute which distinguishes the subject from other members of the same class, in which case it is called the Difference, or it may be some attribute connected with the definition, i.e. Property, or not connected with it, i.e. Accident.

Section 331. These results may be exhibited in the following scheme--



Section 332. The distinction which underlies this division between predicating a class and predicating an attribute (in quid or in quale) is a perfectly intelligible one, corresponding as it does to the grammatical distinction between the predicate being a noun substantive or a noun adjective. Nevertheless it is a somewhat arbitrary one, since, even when the predicate is a class-name, what we are concerned to convey to the mind, is the fact that the subject possesses the attributes which are connoted by that class-name. We have not here the difference between extensive and intensive predication, since, as we have already seen (Section 264), that is not a difference between one proposition and another, but a distinction in our mode of interpreting any and every proposition. Whatever proposition we like to take may be read either in extension or in intension, according as we fix our minds on the fact of inclusion in a class or the fact of the possession of attributes.

Section 333. It will be seen that the term 'species,' as it appears in the scheme, has a wholly different meaning from the current acceptation in which it was defined above. Species, in its now accepted meaning, signifies the relation of a smaller class to a larger one: as it was

originally intended in the heads of predicables it signifies a class in reference to individuals.

Section 334. Another point which requires to be noticed with regard to this five-fold list of heads of predicables, if its object be to classify the relations of a predicate to a subject, is that it takes no account of those forms of predication in which class and attribute are combined. Under which of the five heads would the predicates in the following propositions fall?

(1) Man is a rational animal.

(2) Man is a featherless biped.

In the one case we have a combination of genus and difference; in the other we have a genus combined with an accident.

Section 335. The list of heads of predicables which we have been discussing is not derived from Aristotle, but from the 'Introduction' of Porphyry, a Greek commentator who lived more than six centuries later.

Aristotle's Heads of Predicables.

Section 336. Aristotle himself, by adopting a different basis of division, has allowed room in his classification for the mixed forms of predication above alluded to. His list contains only four heads, namely,

Genus ([Greek: génos])

Definition ([Greek: òrismós])

Proprium ([Greek: îdion])

Accident ([Greek: sumbekós])

Section 337. Genus here is not distinguished from difference. Whether we say 'Man is an animal' or 'Man is rational,' we are equally understood to be predicating a genus.

Section 338. There is no account taken of species, which, when predicated, resolves itself either into genus or accident. When predicated of an individual, it is regarded as a genus, e.g. 'Socrates is a man'; when

predicated of a class, it is regarded as an accident, e.g. 'Some animals are men.'

Section 339. Aristotle's classification may easily be seen to be exhaustive. For every predicate must either be coextensive with its subject or not, i.e. predicable of the same things. And if the two terms coincide in extension, the predicate must either coincide also in intension with the subject or not.

A predicate which coincides both in extension and intension with its subject is exactly what is meant by a definition. One which coincides in extension without coinciding in intension, that is, which applies to the same things without expressing the whole meaning, of the subject, is what is known as a *Proprium* or *Peculiar Property*.

If, on the other hand, the two terms are not co-extensive, the predicate must either partially coincide in intension with the subject or not. [Footnote: The case could not arise of a predicate which was entirely coincided in intension with a subject with which it was not co-extensive. For, if the extension of the predicate were greater than that of the subject, its intension would be less, and if less, greater, in accordance with the law of inverse variation of the two quantities (Section 166).] This is equivalent to saying that it must either state part of the definition of the subject or not. Now the definition is made up of genus and difference, either of which may form the predicate: but as the two are indistinguishable in relation to a single subject, they are lumped together for the present purpose under the one head, genus. When the predicate, not being co-extensive, is not even partially co-intensive with its subject, it is called an *Accident*.

Section 340. *Proprium*, it will be seen, differs from property. A *proprium* is an attribute which is possessed by all the members of a class, and by them alone, e.g. 'Men are the only religious animals.'

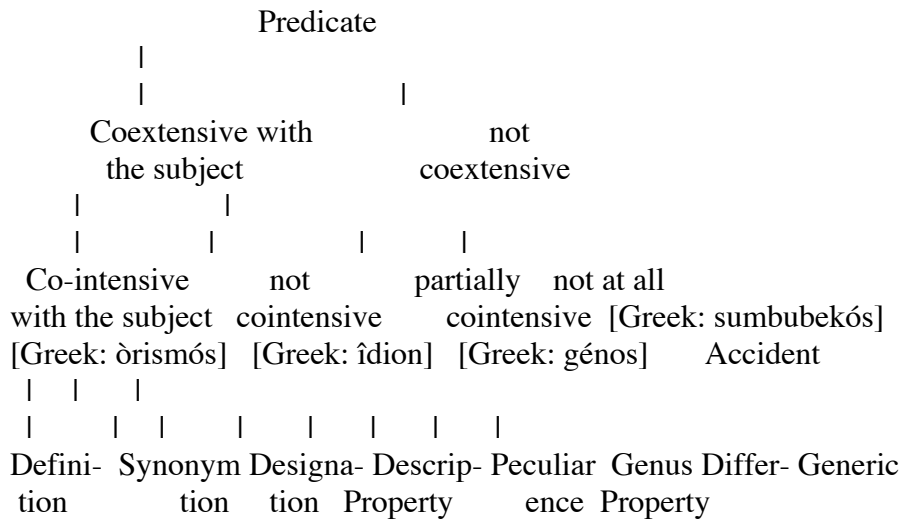
Section 341. Under the head of definition must be included all propositions in which the predicate is a mere synonym of the subject, e.g. 'Naso is Ovid,' 'A Hebrew is a Jew,' 'The skipper is the captain.' In such propositions the predicate coincides in extension with the subject, and may be considered to coincide in intension where the intension of both subject and predicate is at zero, as in the case of two proper names.

Section 342. Designations and descriptions will fall under the head of '*proprium*' or peculiar property, e.g. 'Lord Salisbury is the present prime minister of England,' 'Man is a mammal with hands and without

hair.' For here, while the terms are coincident in extension, they are far from being so in intension.

Section 343. The term 'genus' must be understood to include not only genus in the accepted sense, but difference and generic property as well.

Section 344. These results may be exhibited in the following scheme--



Section 345. Thus Aristotle's four heads of predicables may be split up, if we please, into nine--

1. Definition \
 - > [Greek: òrismós].
2. Synonym /
3. Designation \
 - |
4. Description > [Greek: îdion].
 - |
5. Peculiar Property/
6. Genus \
 - |
7. Difference > [Greek: génos].
 - |
8. Generic Property/
9. Accident--[Greek: sumbebekós].

Section 346. We now pass on to the two subjects of Definition and Division,

the discussion of which will complete our treatment of the second part of logic. Definition and division correspond respectively to the two kinds of quantity possessed by terms.

Definition is unfolding the quantity of a term in intension.

Division is unfolding the quantity of a term in extension.