CHAPTER 1

DOCTRINES OF CATEGORIES AND PREDICABLES IN ARISTOTLE
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In this Chapter, we shall discuss Aristotle's doctrine of categories and of predicables. Aristotle's doctrine of categories reveals a logical as well as a real distinction, i.e. a distinction in the nature of reality about which we think and also in our modes of thinking about it. In 'Categories' Aristotle states that among the expressions what we said of objects, some are simple and others are composite. He says that 'man', 'runs', 'wins' etc. stand in the category of simple expressions and the composite expressions are those like 'the man runs', 'the man wins' etc.

Aristotle makes an important distinction among things in themselves and subsequently divides them in four fundamental classes. The key terms for this distinction are the two—'being predicable of or said of a subject' and 'being present in a subject'. By 'being present in a subject' he does not mean one present in a whole as its part but one which is incapable of existence apart from the said subject. Accordingly, of things themselves 1) some are predicable of a subject and are never present in a subject. Thus man is predicable of a subject i.e. individual man, but never present in any subject. (ii) Some things are present in a subject but are never predicable of a

5. 2 (1a 17)
subject. For, a certain point of grammatical knowledge is present in the mind, but is not predicable of any subject. (iii) Some are both predicable of a subject and present in a subject. Thus while knowledge is present in the human mind, it is also predicable of grammar. (iv) Finally, there is a class of things which can be neither predicable of a subject, nor present in a subject, for example, the individual man or individual horse. Generally, it can be said that the things which are individual and numerically one can never be predicated of a subject. But some individual things are present in a subject, viz. a piece of grammatical knowledge is present in a mind.

J.L. Ackrill comments that Aristotle's fourfold classification of things depends on two phrases — 'being said of some thing as subject' and 'being in something as subject'. He holds that the second phrase serves to distinguish qualities, quantities and the elements of other dependent categories from substances which is said to possess independent existence. The former one distinguishes species and genera from individuals. According to some commentators of Aristotle 'being said of' and 'being in' happen to introduce two different notions, the former being linguistic or grammatical and the latter metaphysical or ontological. Hence the word 'subject' in 'being said of a subject' signifies grammatical subject and in 'being in a subject', the substrate or metaphysical subject. But Ackrill holds that it is, in fact, evident that Aristotle's fourfold classification is classification of things, not of names. For

5. 'Notes on the categories', p. 103.
him, being said of a subject is no more a linguistic property than being in a subject. If virtue is said of generosity as subject, the sentence 'generosity is virtue' expresses a truth in which 'generosity' is the grammatical subject. But the sentence is not about names 'virtue' and 'generosity'. It is absurd to call generosity a grammatical subject. Again if A is present in B as subject then B is a substance. But this does not amount to saying that 'subject' in 'being in a subject' means a substance or substrate. According to Ackrill, 'subject' means neither grammatical subject nor substance, but is a mere label for what has anything 'said of' it or 'present in' it.7

According to Aristotle whenever one thing is predicated of another as of a subject, all that which is predicatable of the predicate will be predicatable of the subject also. For example, man is predicated of the individual man and animal of man, so animal will be predicated of the individual man also, for the individual man is both a man and an animal. So, for him, the relation of 'being predicatable of' is transitive.

Aristotle holds that every simple expression signifies either a substance or a quality or a quantity, relation, place, time, position, state, action or affection. The terms 'man' or 'the horse' fall under the category of substance, the attributes 'white', 'grammatical' under that of quality; 'two cubits long', 'three cubits long' under the category of quantity; 'double', 'large' etc. under that of relation. The examples of the category of place are such terms 'in the market place', 'in the school' etc.; of time 'yesterday', 'last year'; of position

'lying', 'sitting' etc. : examples of state are 'shod', 'armed' etc. ; of action 'cutting' 'burning' etc. and the examples of category of affection are such terms 'as 'to be lanced', 'to be cauterized' etc. According to H.W.B. Joseph the word 'category' means predicate and the categories may be described as the list of predicates.

In Chapter 5 of 'categorïæ', Aristotle draws an important distinction between a primary and a secondary substance by saying that substance in the truest, primary and in most literal sense of the word is that which is neither predicatable of a subject nor present in a subject, for instance, the individual man or horse. Secondary substances are those to which as species, the primary substances belong and also the genera of those species. For instance, the individual man belongs to the species man and animal is the genus of the species. So both man and animal are to be regarded as secondary substances.

It is evident that if some thing is said of a subject, both its name and its definition are necessarily predicatable of the subject. For instance, 'man' is predicatable of the individual man. Now in this case the name of the man is applied to the individual, for we use the term 'man' in describing the individual. The definition of man will also be predicatable of the individual man, since the individual man is both man and animal.

8. 5, 15.
On the other hand, Aristotle maintains with regard to things which are present in a subject, in most cases neither the name nor the definition is predicated of the subject. In some cases, though the names of such things are predicated of the subject, their definition is never predicated of the subject. For instance, the colour white is present in a body and a body is called white. But the definition of white will not ever be predicated of the body.

Aristotle claims that only primary substance is capable of independent existence and that the existence of the things of the other categories is dependent. Thus he says:

"Every things except primary substances is either predicatable of a primary substance or present in a primary substance. This becomes evident by reference to particular instances which occur. 'Animal' is predicated of the species 'man', therefore of the individual man, for if there were no individual man of whom it could be predicated, it could not be predicated of the species man at all. Again, colour is present in body, therefore in individual bodies, for if there were no individual body in which it was present, it could not be present in body at all. Thus everything except primary substances is either predicable of primary substances, or present in them, and if these last did not exist, it would be impossible for anything to exist."  

So, for Aristotle, primary substances are basic and the existence of secondary substances presupposes the existence of primary substances. Thus the difference between the primary and the secondary substance is that the primary substance is the ultimate one that can be predicated of nothing else.

9. 'Categories', Chap. 5, 2a 35 - 2b 5.
When Aristotle says 'called a substance most strictly, primarily', does he mean 'substance' is used in two different senses? But if we tend to interpret him thus it would upset his whole scheme of categorial classification. Ackrill holds that Aristotle is certainly aware that the distinction between primary and secondary substance is not like that between two categories or that between two genera in a category, but he fails to explain clearly the nature of this distinction.

Ackrill further points out that when Aristotle states that when something is said of a subject both its name and its definition are necessarily predicated of the subject, the relation of 'said of' holds, not between words but between things. To say that A is said of B is not to say that 'A' and the definition of A is predicatable of B. The latter is a fact about language which follows from the fact about a relation between two things.

Aristotle holds that it is a characteristic common to every substance not to be present in a subject. For a primary substance is neither said of a subject nor present in a subject. Secondary substances also are not present in any subject. For man is predicated of the individual man, but is not present in any subject; since manhood is not present in the individual man. Moreover, it has been said above that when a thing is present in a subject, though the name may be applied to that in which it is present, the definition can never be applied. But the definition of the secondary substance as well as the name are predicated of the subject.

10. Ibid p. 113.
Ackrill says that the phrase 'being in', as used by Aristotle, can be taken to mean that A is in B if and only if (a) one could usually say in ordinary language either A is in B or that A belongs to B, (b) A is not part of B and (c) A is inseparable from B. So when Aristotle holds that the secondary substance is not in primary substance he does not mean that a secondary substance can exist separately from the primary substance or that a given secondary substance can exist separately from any given individual, as the species man can exist independently even if individual man does not exist. Rather he seems to mean that in ordinary speech we can never say man is in Calias. Ackrill points out that if this is the implication, the same thing can be said of genus and species of other categories too, for no genus and species in any category can naturally be described as in any subordinate genus, species or individual. So the distinguishing mark of secondary substance should be that they are not in any other species, genera of individual, not that they are not in subordinate species or genera or individual. For example, virtue is not in generosity but it is in soul, while animal is not in man and not in any thing else either.

Aristotle urges that the substances in all propositions of which they form the predicate they are predicated univocally. Since all such propositions have as their subject either the individual or the species. For a primary substance there is no predicate since it is said of no subject. In 'Analytics'

ll. Ibid p. 104
he speaks of sentences in which individual names appear in predicate places and say that this is only accidental predication. As for secondary substances, the species is predicated of the individual, the genus both of the species and of the individual. Moreover, the definition of the species and that of the genus are applicable to the primary substance, and that of the genus to the species. For all that is predicated of the predicate will be also predicated of the subject.

According to Aristotle, all substances seem to signify that which is individual. It is undoubtedly true in the case of primary substances, since the thing is a unit. But as regards secondary substances this is not really true, though it appears from our form of speech, when we speak of man or animal, that we are also here indicating the individual. Rather a secondary substance signifies a class with a certain qualification, for it is not one and single as a primary substance. The words 'man', 'animal' are said of many things, yet they do not signify simply a certain quality, as 'white' does. For Aristotle, 'white' indicates mere quality, but species and genus determine the quality with reference to a substance. They indicate substances with a certain qualification.

Another distinguishing feature of substances is that there is nothing contrary to them. For example, there is nothing contrary to an individual man or individual horse. There is nothing contrary to man or to animal as well.

12. 43 a 34; Cp. 83al-23.
According to Aristotle, the things which fall under the category of substance admit of no variation of degrees. Each substance is what it is and is not called more or less so. For example, if a substance is a man, it will not be more or less man either than itself at another time or than another man.

Aristotle espouses the view that most distinctive feature of substance is that what is numerically one and the same is able to receive contraries. The things other than substances do not possess this mark. He tries to illustrate the point thus: a colour which is numerically one and the same will not be black and white. But an individual man, one and the same, becomes pale at one time, dark at another and hot and cold, bad and good at different occasions and so on.

Aristotle says that it may be objected that statements and belief too share this property of substances. For the same statement may be both true and false at different times. Suppose, for example, that the statement that some body is sitting is true, if some one is, in fact, seated. But while he gets up this statement turns to be false. Aristotle holds that, however, there is still a difference in the way contraries are received by a substance. Because, in the case of substances it is by themselves changing that they are able to receive contrary qualities. It is, thus, that that which was hot becomes cold for it has entered into a different state, so also in other cases. Statements and beliefs, on the other hand, themselves remain completely unchanged. The truth or falsity
of a statement depends on facts and it is by the alteration in the facts that the contrary comes to belong to them. Therefore, it is peculiar to substance that while remaining numerically one and the same, it is capable of admitting contrary qualities and the modification takes place through a change in the substance itself.

According to Moravcsik the theory of categories is partly a theory about language and partly a theory about reality. He says that Aristotle did not think that the structure of language reflects the structure of reality; but he believed that there are specific items of language and reality the correlation of which makes up the crucial link between the two.

We would now proceed to consider another momentous doctrine propounded by Aristotle, i.e. the doctrine of predica-bles. In 'Topics', Aristotle distinguishes between a protasis and a problema. These are both questions and the difference between them is merely one of form, i.e. the difference between 'Is animal the genus of man?' and 'Is animal the genus of man or not?' The former is a protasis and the latter a problema. Protasis is something proposed for consideration at the beginning of a dispute, while problema is rather something thrown out in the middle of the argument, i.e. a suggestion.

For Aristotle, every protasis and problema indicates either a genus or a peculiarity or an accident, for the

\[a\] Aristotelis Thēory of Categories', p. 145.
\[b\] 1.4 (101b 28 - 33)
ifferentia too should be ranked together with genus. Whatever is peculiar to anything, part of it indicates the things essence and part does not. So we may discriminate 'peculiar' into two parts. The part that signifies the essence is called 'definition', while the other part is called 'property'. Thus according to our present division the elements turn out to be four, i.e. either definition, or property, or genus, or accident. It has been assumed that the protasis or problema is concerned with general statements, e.g. 'Man is white'. In such propositions the predicate may stand in the aforesaid four different relations to the subject of which it is predicated.

H.W.B. Joseph says that Aristotle recognises four such relations and one of them he subdivides attaining five in all. In every judgement the predicate must be either the definition, the genus, the differentia, a property or an accident of the subject.

The distinctions are known as the 'Five Predicables'. According to Joseph 'Predicable' here means a predicable character, i.e. not an individual substance but what it is, for example, all kinds, qualities, states, relations etc. and they may belong to more than one individual subject, so they are universal. Therefore, all terms except proper names may be brought under one of these five predicables in relation to the

15. Topica, 1.4 (101b 15-20)
16. 'An Introduction to Logic', p. 66.
subject. Proper names may stand in the position of a predicate only improperly in Aristotle's view. They stand for individuals and an individual is not the character of anything. The distinction, therefore, does not afford a classification of things but of concepts considered in their relation to one another.

Let us now consider the different relations, as proposed by Aristotle, in which a predicate may stand to its subject. Firstly, a predicate may be the definition of the subject. The definition of anything is the statement of its essence, i.e. what makes it that and not something else. A definition is always a phrase of certain kind. It is expressed in the term of a phrase either in lieu of a term or in lieu of another phrase. 'A line is the limit of a superficies', 'a triangle is a three sided rectilinear figure' --- these are the propositions where the predicates stand to be the definitions of the subjects. The predicates state what it is that makes anything a triangle, a line, as distinguished from everything else.

Secondly, the predicate may be a property of the subject. Property is a predicate which does not indicate the essence of the subject, but belongs to that thing alone and is predicated convertibly of it. Thus it is a property of man to be capable of learning the grammar, because if A is a man A is capable of learning the grammar and again if he is capable of learning the grammar, he is a man. Hence property is an attribute, common and peculiar to a subject. Anything which may
belong to something else is not called property in the absolute sense, but a temporary or relative property. For instance, 'being on the right hand side' is a temporary property and 'two footed' is a property of man relative to a horse and a dog.

Thirdly, the predicate may be the genus of the subject to which the species in question belongs and within which it is distinguished by its specific difference. The genus is that part of the essence of anything which is predicable also of other things of other kind. For example, a triangle is a rectilinear figure, so also is a square; a man is an animal, so also is an ox.

Fourthly, the predicate may be an accident, i.e. which is neither a definition, nor a property, nor a genus, yet belongs to the thing, though the connection is not a necessary one. An accident is an attribute of which it is equally true that it may and may not belong to a subject. In otherwords, an accident is something which may possibly either belong or not belong to anyone and the self same thing, as 'whiteness', for something may be at one time white and not white at another. An accident sometimes happen to be a temporary or a relative property of the subject. Thus the sitting posture is an accident, but will be a temporary property whenever a man is the only person sitting. Again, if he is not the only one sitting, it is still a property relative to those who are not sitting. But an accident can not be a property absolutely.
Joseph adds to this list, the fifth one, i.e. the differentia. According to him, the differentia is that part of the essence of anything which distinguishes it from other species. It is the differentia of a triangle that it is three-sided and as regards this point a triangle differs from other rectilinear figures. The genus and the differentia together constitute the essence of that which is defined, i.e. of the species.

Aristotle's theory of predicables is founded on an important distinction, that between convertible and non-convertible predicates. For him, every predicate of a subject must be either convertible with its subject or not. If the predicate is convertible with the subject it would be either its definition or property, for if it signifies the essence it is the definition, if not it is a property. On the other hand, if the predicate is not convertible with the subject, it either is or is not one of the term contained in the definition. If it is one of the terms it will be genus or differentia. If it is not one of those terms it would be an accident. So, according to Aristotle, the first two are convertible predicates while the last three are not.

Afterwords in 'Topica' (Book II) Aristotle states that names drawn from the elements 'definition' and 'property' and 'genus' must be convertible\footnote{18}. For example, if 'to be an animal that walks on two feet' is an attribute of S', then we can also say by conversion that ' S is an animal that walks on
two feet'. So also if the name is drawn from 'property', viz. 'to be capable of learning grammar is an attribute of S' then it is true to say by conversion 'S is capable of learning grammar'. Again, the same is the case if drawn from the genus, e.g. if 'to be an animal is an attribute of S' then 'S is an animal'. Because these attributes can either belong or not belong to the subject absolutely, but not in parts. On the other hand, in the case of accident it is possible for something to be true conditionally and not universally. The accident may belong to something in part, for example: 'whiteness' or 'justice' in relation to man. To say that whiteness or justice is an attribute of a man does not amount to say that he is white or just, since it may be argued that he is white or just in part only. So, for Aristotle, the conversion is not a necessary process in the case of accident.

Next Aristotle distinguishes between classes of predicates which must fall in either of aforesaid divisions. He lists ten classes of predicates. These are following: Essence, Quantity, Quality, Relation, Place, Time, Position, State, Activity, Passivity. The accident, genus, property and definition of anything will always belong to one of these categories, since all the propositions signify either something's essence or its quality, or quantity, or some of the other types of predicates. "It is clear, too, on the face of it that the man who signifies something's essence signifies sometimes a substance, sometimes a quality, sometimes some one of the other types of predicate. For when a man is set before him and he
says that what is set there is 'a man' or 'an animal' he states its essence and signifies a substance but when a white colour is set before him and he says that what is set there is 'white' or is 'a colour', he states its essence and signifies a quality. Likewise, also, if a magnitude of a cubit be set before him and he says that what is set there is a magnitude of a cubit, he will be describing its essence and signifying a quantity. Likewise also, in the other cases: for each of these kinds of predicate, if either, it be asserted of itself or its genus be asserted of it, signifies an essence: if, on the other hand, one kind of predicate is asserted of another kind, it does not signify an essence, but a quantity or a quality or one of the other kinds of predicate.  

According to W. Kneale, Aristotle states as a general rule that when we predicate a term of itself or give it a genus, we give its essence though it may not signify substance, but one of the other categories. Thus, for Aristotle, not only 'this is a man', but also 'white is a colour' and 'a foot is a length' are statements of essence, though only former signify a substance. On the other hand, when we use a term of one category to describe a term of another, e.g., 'the man is seated', we do not give the essence of the subject.

We know that to state the essence of anything is to define it. According to Joseph the definition of anything is the statement of its essence, what makes it that and not something

49. Topica, i.q. 103P 27-38.
20. 'The Development of Logic' W. Kneale & M. Kneale, p. 23.
21a. Ibid. p. 72
else. It is in virtue of being a threesided rectilinear figure that anything is a rectilinear triangle. He states that the definition is never of an individual but always of what is universal, i.e., predicable of individuals, whether it is their kind or some state or attribute of them or relation in which they enter into. For what is defined is thereby fixed in our thought as a determinate concept. But the individual is made individual he or it by an infinite number of attributes. He is the meeting place of various concepts. We can neither exhaust what is to be said of him, nor can we select what is essential to him. Moreover, even if we can, there is still a probability that a second person may answer to the description, because every concept is universal as applying to a number of individuals. So we can only define what is universal or a concept. But the concepts are the nature of things and, therefore, in defining concepts we can define things so far as they belong to a kind, but not as individuals.

Moreover, L.S. Stebbing states that Aristotle's notion of essence is difficult to understand. He never defines it clearly, but seems to take 'essence' as a technical term to be left undefined and by means of which he defines those predicates that are to be understood in contrast with it. Stebbing points out that we should not confuse 'the essence of A' in Aristotle's sense with what 'A essentially is'. The latter is what Aristotle calls a 'peculiarity' of A. According to Aristotle, a definition is a phrase signifying a things essence
and he distinguishes two elements in the definition, the genus and the differentia. Stabbing holds that the nature of this distinction can only be understood if we keep in mind that the subject defined, which is constantly called 'a thing' by Aristotle, is a species, i.e., 'things of certain sort or a kind'.

So we may say that in the above mentioned passage, quoted from 'Topica', Aristotle by 'a man' or 'a white colour' seems to mean any man or any white colour, not the individual man or individual white colour, for as has been said above, we can not determine the essence of an individual concrete thing. In our attempt to determine what is essential to it, we, in fact, find what is essential to its being of a certain kind. Thus in interpreting the passage from the 'Topica', when Kneale says that not only 'this is a man', but also 'white is a colour' is a statement of essence, we recognise a mistake. As the essence of an individual thing can not be determined the former one can not be a statement of essence, the word 'this' referring to an individual concrete thing.

Accordingly arises the question what is the ultimate subject of predication in Aristotelian logic? For Aristotle, the ultimate subject of predication is the highly actual concrete singular thing. It is the individual man, or the individual horse, or the individual tree. They are called 'primary substance'. It is characterized as absolutely basic and fundamental being among the subject which logic deals with and which receives the predication of all other perfections.
Secondary substances are 'man', 'animal', 'body' etc. taken universally. They are all predicated of a primary substance, i.e. of a concrete individual man like Socrates or Plato, or of an individual horse or tree. Accidental characteristics like 'white', 'large', 'running' and so on are predicated of substances and thereby ultimately of an individual substance. So it is the individual object which is the basic subject of predication.

But, as pointed out by H.W.B. Joseph, Aristotle's doctrine of predicables as a whole implies that the subject term is general. General concrete terms signify not individuals as such, but as of a kind. The theory of predicables is a classification of the relations between universals, predicated one of another. According to L.S. Stebbing, in 'Topica' Aristotle wanted to distinguish the various modes in which predicates may be related to the subject, this subject being a general term, e.g., 'Every just act', or a concept, say, 'justice'. So, for her, Aristotle's theory of predicables is a theory of the way in which predicates may be related to one another. "Thus the genus, the definition, the propria, the accidents are predicatable of the species which is itself a possible predicate, or universal, being predicatable of individuals".

22. Ibid, p. 107