CHAPTER 5

SUBJECT - PREDICATE DISTINCTION:
AN EXPOSITION OF GEACH'S THEORY
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Geach holds the view that most of the logical theories of the subject-predicate distinction are full of confusions and inadequacies. He likes to establish his theory as devoid of some common and fundamental mistakes. He states that most of the logicians hardly notice the distinction between a sign and what it signifies and hence confuse the two in thought. They happen to face the dilemma whether 'logical subject' and 'predicate' mean things or their names.

According to Geach, the terms 'subject' and 'predicate' are always linguistic terms. For him, a man is never a logical subject of an assertion, but the name of a man, say, 'Peter' is as in 'Peter was an Apostle'. In the similar manner, not the property of being an Apostle is predicate, but its verbal expression is. He maintains, however, that in the above sentence the predicate 'was an Apostle' is predicated not of the name 'Peter', but of Peter himself, because it is Peter, not his name which is being said to have been an Apostle. To say that something is predicated of Peter does not amount to say that this predicate is of or applies to Peter. It only means that in some significant sentence, whether true or false, it is predicated of Peter. So,
according to Geach, a predicate is attached to a subject, is predicated of what the subject stands for and applies to or true of this if the sentence so formed is true. On Geach's view, subjects and predicates are always linguistic expressions, not something expressed by such expressions.

According to the very definition preferred by Geach, "A predicate is an expression that gives us an assertion about something if we attach it to another expression that stands for what we are making the assertion about. A subject of a sentence S is an expression standing for something that S is about, S itself being formed by attaching a predicate to that expression."

In the above definition, 'subject' is defined as 'subject' of a sentence, but 'predicate' is not defined as 'predicate in a sentence'. This divergence in definition is due to the respective nature of the terms defined. We may recognise the same predicate in 'Jim broke the bank at Monte Carlo' and in 'The man who broke the bank at Monte Carlo died in misery'. In the second sentence the predicate in question is attached not to the name of somebody whom the predicate applies to, but to the relative pronoun 'who'. It is still counted as a predicate, since a predicate is that which can be attached to a person's name to make an assertion about him. It is not necessary that a predicate should actually be so attached whenever it is used.

36. Reference And Generality, P.T. Geach, p-23.
Geach thinks that there may arise inconveniences about not having 'subject' and 'predicate' as correlatives. This inconvenience is supposed to be removed if we take the above explanation as an explanation of 'predicable' not of 'predicate'. Thus, according to Geach, in 'Jim broke the bank ......' and 'the man who broke the bank ........ dies in misery' we find two occurrences of the same predicable. But it is only in the first sentence, it is actually a predicate attached to Jim.

Geach points out that a further difficulty arises over the expression 'assertion about something'. It has been suggested here that 'p' is a predicate of S only if it is actually asserted that S is P. But we can find out after a second thought that 'p' may be predicated of S in an 'if' or a 'then' clause, or in a clause of disjunction where it is not affirmed that S is P. He holds that even in a sentence with an assertive force, this force is not obtained by any part of the sentence in isolation, whether the subject or the predicate, rather it attaches to the sentence as a whole. So, to avoid this difficulty, Geach chooses the term 'Proposition'. A proposition is something we propound and it may or may not be asserted. Thus Geach restates his former explanation as following: "A predicable is an expression that gives us a proposition about something if we attach it to another expression that stands for what we are forming the proposition about. The predicable then becomes a predicate, and the other expression becomes its subject; I call such a proposition a predication" 37.

37. Ibid, p. 25
Geach mentions that we cannot apply this definition of 'subject', if we think like Frege and Wittgenstein that a name is meaningful and stands for something only in the context of a sentence. On the contrary, Geach maintains that the application of a name is not dependent on the context of a proposition. We may use a name independently simply to name something. An act of naming is different from that of propounding a proposition. An act of naming may be said to be correct or incorrect, but we cannot legitimately call it true or false. A name expresses a complete thought. To say that a name has a sort of independent sense amounts to saying that it has got a sense of its own, apart from the verbal context expressed or understood. Geach offers some illustrations of the independent use of names, e.g. nouns in the vocative case used as greetings, labels stuck on things, ejaculations like 'Wolf!' and 'Fire!'. Those uses are not independent of the language system which the names belong to or of the physical context which makes their use appropriate. It is independent in the sense that it requires no immediate context of words. Geach holds that both proper names and common nouns admit of this independent use, though the use of the common noun is less determinate than that of the proper noun.

Geach exposes that an assertoric sentence with a demonstrative pronoun as its grammatical subject has the logical role not of an asserted proposition, but of a simple act of naming. Here the grammatical subject does not name something

38. CGL.A., p. 76, Tractatus-Logico-Philosophicm, (Referred to by Geach in "Subject and Predicate")
which an assertion is made of, rather it points at an object. There is a view much prevalent that demonstratives are a kind of name, in fact the only genuine proper names. Geach says that it is an illusion. The source of this illusion is perhaps that the reference of 'this' or 'that' is absolutely certain, because what we point to by those words must physically be present there. Geach tries to explain the matter with the help of a metaphor. He compares the respective roles of pronoun and noun in 'That is Gold' to those of the hands and the figures of a watch. The hands direct attention to the figures from which we are to read the time. But from this we can not say that the hands are superior sort of figures on the dial. So also we can not regard demonstratives as super names; in fact, they are not names at all as the hands of a watch are not figures. It is absurd to use a demonstrative by itself as a name in a simple act of naming.

Geach strongly opposes the view, held by the traditionalists, that a sentence can have only one subject-predicate analysis. He holds, on the contrary, that a proposition may admit of more than one subject-predicate analysis. The sentence 'Peter struck Malchus' may be a predication either about Peter or about Malchus. Accordingly either 'Peter' or 'Malchus' may be taken as the logical subject. We may alluded to Aristotle who held long ago that logical subject need not be in the nominative case. According to traditionalists, only 'Peter' can be treated as the subject in 'Peter struck Malchus', whereas some modern logicians would count it as a relational

39. 'Prior Analytics', p-36 (Referred to by Geach)
proposition, inadequate for subject-predicate analysis. For Geach both of them are mistaken in treating an analysis of a proposition as the only plausible analysis. In Geach's opinion a proposition can be analysed in a number of ways. Some people upholds that the subject of a proposition is determined by which expression the emphasis has been given on. For them 'Peter' is the subject of 'Peter struck Malchus' and 'Malchus' is the subject of 'Peter struck Malchus'. Geach replies to that for logic these two are not two different propositions as they have just the same logical context.

The object which a name refers to, may be called the bearer of the name in question. As regards the bearer of a name, there is no question of time involved. A name has its bearer and this is true without any temporal qualifications. Moreover when the bearer of a name ceases to exist, it does not entail that so and so ceases to be the bearer of the name. Otherwise, as Geach points out, the sentence, say, 'Ram is dead' can never possibly be true. If Ram is not dead, the statement would evidently be false. On the other hand, if the very person is dead the name 'Ram' would refer to nothing and so 'Ram is dead' would cease to be a proposition at all and again can not be true. Geach holds that it is sufficient for a name's having a bearer that it can be used to name that bearer in a simple act of naming.

According to Geach, after the removal of the proper name from a sentence the remainder of it signifies what is being propounded concerning the bearer of the name and so, on
our explanation, is the predicate attached to the name as the subject. In our previous example 'Peter struck Malchus', if 'Peter' is taken as the subject '.... struck Malchus' is the predicate and if 'Malchus' is taken as the subject 'Peter struck ...' is the predicate. And both the analyses are legitimate as we have seen earlier. The proposition may be said to be both about Peter and Malchus. What is propounded about Peter is that he struck Malchus and what is said about Malchus is that Peter struck him.

Geach says that the very same proposition may be obtained by attaching different predicates to the same subject. He takes for example the predicates '.... shaved Peter' and 'Peter shaved - '. These two predicates are quite distinct and when they are attached to the subject 'John' we get two different propositions. But when they are attached to the subject 'Peter' we obtain the very same proposition 'Peter shaved Peter'. Geach offers this simple example to render that the sense of a predicate can not be determined by subtracting the sense of the subject from that of the whole proposition. Rather '.... shaved Peter' and 'Peter shaved ....' represent two different modes of forming propositions and by this very difference they can be considered as distinct from one another even in 'Peter shaved Peter'.

Geach points out that in some instances we may recognise a common predicate in two propositions, although this predicate is not an identifiable expression occurring in both. For example, what is propounded of John in 'John shaved John'
is same as what is propounded of Peter in 'Peter shaved Peter'. So we may regard the two as containing a common predicate but it is in no means identifiable with the mere word 'shaved' which occurs in both. We may remove the second occurrence of the proper names in these propositions and put the reflexive pronoun 'himself' instead. Then we may treat '...... shaved himself' as a predicatable which can be attached even to some expressions which are not logical subjects as in 'No body who shaved himself is shaved by a barbar'. Since these propositions got common predicates they can be re-written thus that the common predicate takes the form of a explicit predicatable which can be extracted from each of them.

Geach's alleged definitions necessitate that a name can occur in a sentence only as a logical subject and also that it can not without a radical change in the sense appear as a logical predicate. So, for Geach, names and predicable are absolutely different. A name obtains a complete stand and can be used independently in a simple act of naming, while a predicatable is a potential predicate and devoid of a complete sense, as it does not signify what the predication is about. A predicate is the remaining part of a proposition when the subject is picked out and so a predicate contains an empty space which is to be filled up by a subject. Though a predicatable may occur in a proposition apart from being a predicate attached to a subject, its sense remains incomplete. A predicatable owes its sense only as contributing to the sense of a proposition.
According to Geach a predicatable applies to or is true of things, e.g. 'Peter struck - ' applies to Malchus. This relation of a predicate with the things which it applies to is to be distinguished from the very relation between a name and its bearer. The distinction is that a predicatable never names what it applies to and hence 'Peter struck - ' does not appear to be a name of Malchus, though it is true of Malchus.

Another difference is that when a proposition is negated, the negation may be taken as going with the predicate, but not with the subject. Because predicatable always occur in contradictory pairs and if we attach such a pair to a common subject we get a contradictory pair of propositions. But we can never have a such a contradictory pair of names, so that by attaching them to the same predicate we may obtain a pair of contradictory propositions.

Geach offers a formal proof of the above thesis. The conjunction of a pair of predicatables when attached to a name \( x \) is parallel with conjunction of the proposition which we obtain by attaching each predicatable separately to \( x \). Now, let us suppose we have a pair of names \( x \) and \( y \) such that by attaching them to the same predicate we get a pair of contradictory propositions. Thus we have \( (P \& Q)_x \) as contradictory to \( (P \& Q)_y \). From this, in respect of the conjunction of predicatables, it follows:
"P_x & Q_x" is contradictory to "P_y & Q_y". Then on our supposition, "P_x" and "P_y" are contradictories, and so are "Q_x" and "Q_y". So we may infer "P_x & Q_x" is contradictory to "not (P_x) & not (Q_x)". And from this it is easily proved by way of the truth functional tautology:

\[ \neg (P \land q) \equiv (\neg P \land \neg q) \equiv (P \equiv q) \]

that for this name 'x' arbitrary predications 'P_x' and 'Q_x', assuming that they can be significantly formed into one proposition, must always have the same truth value - which is utterly absurd. Thus no names have their contradictories, but predicables have. So no name is a predicable.

Geach further points out that we may arrive at the same conclusion by considering acts of naming. If we are mistaken in an act of naming, it may subsequently be corrected. When some one says 'John', we may encorrect him by saying 'not John - Bill'. But 'not John' is not an act of naming. When a name is used more than one time, we may justifiably ask whether the same person is being named by the same name, but it is senseless to speak of same not-John. So the negation of an act of naming does not involve the use of a negated name as a name.

Another point of discrepency between names and predicables, as pointed out by Geach, is that the tenses are attached to predicables not to names. The tense of a predicating is determined by that of the predicate, but not of the subject. It may be said, not only of the proposition 'Peter struck Malchus', but also of the predicables 'Peter struck-'
and struck Malchus' that they are in the past tense. We have already seen that the reference of a name to its bearer admits of no temporal qualification, but the relation of a predicatable to what it is true of does. So names are tenseless, but predicables are not.

Thus Geach maintains that there is an absolute distinction between names and predicables. Traditional logic of terms fails to acknowledge this distinction. According to it any term is capable of appearing either as a subject or as a predicate without any change in sense. In Aristotelian logic 'term' applies both to names and predicables. So it faces the problem whether to admit negative term or not. It can not totally admit negative terms as names have no contradictories and similarly cannot totally reject it as predicables have contradictories.

Another crucial point that leads to various confusions is the role of copula in a proposition. It is a great muddle whether a proposition is to be analysed into subject and predicate, or into subject, predicate and copula. Aristotle at the beginning of 'Analytica Priora' has remarked that proposition is to be analysed into a pair of terms, with or without the verb 'to be'. Frege also maintains that the bare copula has no special content.

If we regard terms as names, it implies that a categorical statement is true if two names of the same thing are attached together in it. A categorical statement, infact, is true
if its predicate is a predicable which applies to the very
something which its subject is a name of. The two-name theory
of predication can be derived from this principle, if we treat
the relation 'being a predicable applying to' as identical
with the relation 'being a name of'. Hobbes, supporter of
the two-name theory of predication, says that copula is super-
fluous. But we may argue that it is necessary, because we can
not construct a proposition by putting the two names side by
side. Geach does not accept the two-name theory.

If we reject the two-name theory, but still regard
terms as names, the natural result is that copula should be
taken as expressing a relation between two names linked by it,
as it has already been said that the two names by themselves
can not form a proposition. According to the traditional
logic, the two terms, subject and predicate, can not complete
a predication, they are to be supplemented by a copula to
express a logical relation. Modern logicians think that copula
may express either the relation of class-membership, or of
class-inclusion. But, for Geach, it is quite wrong to hold
that 'is' signifies different relations in 'Socrates is an
animal' and in 'Everyman is an animal', the same unambiguous
expression 'is an animal' occurring in both. This view is
based on a wrong supposition that 'animal' stands for the class
of animals and 'everyman' stands for the class of man. It is
generally thought, that Frege propounded this distinction
between the two meanings of copula. But, in fact, Frege merely
indicated that if we paraphrase 'Every mammal is a vertebrate'
as 'The class of mammals is included in the class of vertebrate', the predicate will be not mere 'vertebrate', but is included in the class of vertebrates'. And here's included is not in the copula but the copula plus a bit of predicate 40.

According to Geach's explanation of 'predicable', the single predicable 'is an animal' occurs both in 'Socrates is an animal' and in 'Every man is an animal'. The grammatical copula is merely a part of the predicate. In 'is an animal' 'is' has no definite content. According to Geach, grammatical copula has significance in logic only when it is used to indicate tense. Generally, if a tensed proposition includes copula, the tense is indicated by the copula, only because the copula is grammatically a verb. But a tensed proposition need not always have a copula. Time-reference can be made otherwise. The role of time reference is utterly different from that of copula as linking two terms. In the traditional logic all propositions were transformed into the form where a predicable began with 'is' or 'are' prefixed to a noun or a noun-phrase. But this form has by itself many difficulties. So there is no need of transforming any proposition of the other form to this specific form.

Geach next points out a restriction imposed on the kind of general terms that can ever occur as names. When the same name is used in the two acts of naming, it may be asked whether the samething is named twice. It follows from this that a general term can occur as a name only if we may

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40. G. Frege, Philosophical Writings, ed. P.T. Geach and Max Black, p-90-91 (Referred to by Geach)
justifiably prefix the word 'the same' to it. All general
terms do not satisfy this condition and only of those which
do we can ask the question how many so-and-so's there are.
For example, though we use the phrase 'seven seas' we can not
determine how many seas there are. Because the term 'Sea'
does not determine any division of the water area in the world
into seas, whereas the term 'letter' in its typographical
sense determines a division of the printed matter into letters.
Both Frege and Aquinas acknowledged this ground of distinc-
tion between general terms. Frege said that only such concepts
as 'sharply delimited' what they applied to, can serve as units
for counting. For Frege, we should keep in mind, a concept is
what language represents by a general term. Frege remarked
that in some cases, e.g. 'red things', no finite number was
determined. We can not count red things in a room, not
because we can not make an end of counting them, but because
that we can not make a beginning. We can not ever know we have
already counted one, since 'the same red thing' supplied no
criterion of identity.

Geach tries to interpret the phrase 'criterion of
identity'. For him, it is senseless to judge whether two
things, namely x and y, are the same or whether x remains 'the
same', unless we add or understand some general term- 'the
same F'. According to Geach, a criterion of identity is that
in accordance with which we judge the identity of objects. It
should be kept in mind that it is unlikely that, for all
interpretations of 'F', 'the same F' will express a possible

way of judging identity. Aquinas refers to the grammatical fact that, in Latin, substantives have numbers on their own account, whereas adjectives have a number determined by the nouns they qualify. Geach follows him in distinguishing general terms as substantival and adjectival.

According to Geach countability is a sufficient condition for considering a term as substantival. A substantival term is that in accordance with which we can count things. Geach thinks that the reason behind this is that we can not logically count as unless we know whether the A we are now counting is the same A as we counted before. If we negate a substantival term we do not get a new one. If 'the same A' supplies an intelligible criterion of identity, 'the same non-A' never does so of itself. So, the fact that some general terms can both be predicated and be used as names in simple acts of naming does not go against our alleged distinction drawn between a predicatable and a name that the predicatable always but names never come in contradictory pairs. Because a general term can be used as a name only when it is substantival, and, if it is substantival, its negation is not a substantive. Thus here also we do not get the pair of contradictory names as parallel to the pair of contradictory predicables.

According to Geach, common nouns which are substantival can be used as names in act of naming. Some common nouns preceded by demonstratives can stand as logical subjects. It may be said pointing to some one, 'That man nearly got sent to

42. Aquinas, Summa theologica, Ia, q. 39, art. 3c; Iumart, 5, 5:5:um (referred to by Geach)
prison'. It can not be analysed into the conjunctive proposition 'that is a man and that nearly got sent to prison'. Rather it is an act of naming, 'That (is a) man' combined with a predication about the object physically present there which is named by the common noun 'man'. This account is applicable only to those cases where the use of 'that man' relates to a context in which the man is sensibly present. This account would not apply to the cases where the use of the demonstrative relates to a context of discourse about a man.

It is a part of the rationale of using an expression as a name in a proposition that the same expression can be used to name the same thing in a simple act of naming. So also it is a part of the rationale of names that they can be used to talk about the object which they stand for even when it is not present to the sense. As regards proper name, there is no problem. We can recognise that a proper name used in a simple act of naming the object stands for the same object in a proposition about it. But we can not do so in cases of common nouns except those which are preceded by demonstrative pronouns, relating to the context where the object indicated is sensibly present. So far, Geach says, we have not found any names other than proper names to be used as logical subjects of propositions regardless of whether the things named are present or absent. Proper names are only obvious examples of logical subjects. However some substantival general terms also admit of such use as logical subjects.
According to Geach, a proper name can never be used predicatively unless it ceases to be a proper name. For example, in 'He is a Napoleon' or 'Trieste is no Vienna,' the word refers to certain attribute of the object, designated by the name. Geach says that in the statement of identity the copula joining two proper names has a special role. It is a point of importance whether the statement like 'Tully is Cicero' is to be analysed as 'Tully is the same man as Cicero,' or rather as 'In history books the names 'Tully' and 'Cicero' are commonly used for the same man.' But in any case the copula has a significant role apart from its grammatical role which it has in 'Socrates is a man.' On this account also our previous distinction of names and predicable prevails, since the predicabile — is the same man as Cicero — is obviously different from the name 'Cicero'.

Geach says, following Aquinas, that a noun is used materially if it stands for an object, but it is used formally when it is used as a predicate to express a property. According to Geach, a noun whether a proper name or not, is used materially when the purpose of the use is to name some object in a certain sequence. Since a proper name always designates a definite and particular being, it is always used materially, never formally. But a definite description is capable of appearing in a sentence either materially or formally. It suits in either of the role, a name or a predicate. For instance in 'the Pope is an Italian', 'the Pope' has been used materially as standing for a single individual, whereas in 'Pius XII is the Pope', the same term has been used formally. Similarly,
an indefinite description like 'a dog' can also be used in both ways. In 'Tom is not a dog' 'a dog' is used formally indicating the class of dogs, while in 'Tom was chased by a dog', it seems to stand for an individual dog, so is used materially.

Geach points out that in existential sentences, say, 'A dragon exists' the grammatical subject is used formally and its sense is predicative, for we can rewrite the sentence as 'Something is dragon'. Same is the case with definite descriptions. In the sentence 'The king of England exists', the definite description serves to express a property of being the king of England. So its use, in this sentence, is formal, not material, since it is not used to refer to the particular person. He further maintains that the position of the grammatical subject occupied by a noun used formally is not peculiar to existential sentences only. For instance in the sentence 'The Earth's satellite is one', the grammatical subject is not a noun used materially. It can not be called an assertion about the Moon, since 'the Moon is one' has no sense. The sentence can be split thus 'Some thing is a satellite of the Earth and is such that nothing else is a satellite of the Earth'.

Geach compares between material and formal uses of a noun and holds that the formal use of a noun is a predicate and the material use of it forms the corresponding descriptive name. A descriptive name denotes an object if and only if it corresponds to a predicate that applies to the object. For Geach, a descriptive name is absolutely different from a
predicate. In language we have certain devices by which we can get descriptive names out of respective predicates which are not nouns. We can do it by prefixing such words as 'he who', 'that which' etc. to the predicate. For example, we can have the descriptive name 'thing that Peter struck' which stands for Malchus's ear out of the predicate 'Peter struck - '. If such an expression is attached to a predicate which is itself a noun or noun-phrase, we seem to get a superfluous expression, because the complex name 'thing that is cat' reduces to simple 'cat'. But, for Geach, in fact such terms are not superfluous. The complex name involves as its part a noun or a noun-phrase used formally and as a whole is synonymous with the same noun used materially. Thus added words help to reflect a part of the logical structure otherwise what we have to understand from the context.

Geach speaks of two types of predicates - 'first-order' predicates and 'second-order' predicates. According to him a predicate is a first-order predicate when it can be attached to a name of an object and the outcome is a significant assertion. A first-order predicate is singular, if it does not provide us any information unless it is attached to a subject that is an unshared name, i.e. a proper name or a definite description used materially. For example, the predicate ' - is wise', if we attach it to a subject having multiple reference, viz. 'snub-nosed philosophers' the resulting statement is neither true nor false as it lacks definite truth condition. There may exist more than one snub-nosed
philosophers and thus we can not determine whom the assertion is made about. So 'Snub-nosed philosopher is wise' is not a sentence at all. Geach states that all predicates discussed so far, are singular first-order predicates. Therefore, it is doubtful whether there is any non-singular first-order predicate. If all first-order predicates are singular, we can get no sentence by attaching a predicate to the expression in question. Such a name can be used only formally not materially. So 'snub-nosed philosopher', though it can be taken for naming something, can never be a logical subject.

Geach points out certain prima facie difficulties about this concept of singular predicate. Grammar suggests that our so called singular predicates can be truely or falsely attached to a subject which is not an unshared name. For instance, as in 'Peter struck Malchus' 'Malchus' can be taken as the logical subject, likewise in 'Peter struck someone 'someone' can be regarded as the logical subject which is not an unshared name. So here 'Peter struck -' is not a singular predicate according to the concept suggested here. But if 'some man' does not stand for Malchus, nor for any definite man, for in, say, 'Peter struck some one' we are not making assertion about any definite man that Peter struck him. Even 'some man' does not stand for the class of all men. We may perhaps say that here 'man' signifies the property of being man², rather it means that the noun 'man' is used here predicatively and does not stand for an object struck by Peter.
It means that 'Something was a man and was struck by Peter'. Here we find that the predicate 'was struck by Peter' is not attached to man as a logical subject but is added with 'was a man' to constitute a compound predicate.

In 'Every man is wise', if 'every man' is treated as the logical subject we face, another difficulty that then by conjoining the contradictory of the predicate to this subject we should have contradictory assertion; but 'Everyman is not wise' is not the contradictory of 'Every man is wise', rather the two are contraries. It also affirms the view that 'is wise' is a singular predicate and should necessarily be attached to something as a logical subject which is an unshared name.

Geach urges that there is a certain difficulty in analysing 'Tom was chased by a dog' in 'something was a dog and chased Tom'. In this analysis 'dog' is used formally or predicatively whereas in 'Tom was chased by a dog' it stands for an object. The sentence 'Tom was chased by a dog' means 'Tom was chased by some dog'. Even if 'dog' is here a name the singular predicate attached to it is not the 'Tom was chased by' but 'Tom was chased by some'. We have already seen that 'Some dog' is not a complex name, but we can take 'Tom was chased by some' as a complex predicate. We can get the contradictory assertion by attaching its contradictory 'Tom was chased by no' to the noun 'dog'. Geach thinks that if 'dog' is used as a name in an assertion it stands for any dog.
So it seems paradoxical that 'Tom was chased by some dog' is an assertion about every dog. Geach does not offer any solution of this paradox.

Subsequently a question may arise what is the subject of the compound predicate 'was a dog and chased Tom' in this analysis. Geach thinks that it has no logical subject, since the grammatical subject 'Something' does not name an object which the predicate applies to. So also in the existential sentence 'There is a dragon', there is no logical subject, because 'There' does not name an object which is being asserted as a dragon.

So, according to Geach, the expression like 'there is', 'something', 'every thing', 'nothing' lack complete sense, but their incompleteness is different from that of first-order predicates; 'Peter struck', '- is wise' etc. The sense of a first-order predicate is complemented by attaching it to a name, but the sense of the expressions in question can be completed only by attaching them to a first-order predicate, e.g. 'Peter struck nothing', 'Some thing is white'. Geach calls them, borrowing from Frege, the second-order predicates. In the assertion 'There is a dragon' or 'A dragon exists' we do not predicate of an object denoted by 'dragon' that it exists or is alive; rather we assert that the property signified by 'a dragon' has the property of being exemplified which is expressed by the second-order predicate 'there is - ' or ' - exists'. So also 'everything' and 'nothing' being second-order predicates when attached to a first-order predicate
like '--- is wise', assert that the property expressed by '--- is wise' either belong to every object or to no object.

Frege has pointed out that our ordinary language raises great difficulties. When we say 'the property of being a man is exemplified', it may lead to suppose that 'is exemplified' expresses a further property of the property of being a man and so it is also a second-order predicate. But this is a mistake, because we can not attach it to a first-order predicate like a genuine second-order predicate, 'Peter struck something' 'is a plausible sentence, but 'Peter struck/ (is) exemplified' is not. Though it appears to be paradoxical, Geach thinks that 'the property of being a man' does not stand for the property of being a man. The adjective 'human' serves this purpose and is predicatable of everyman, but 'the property of being a man' is not. It is absurd to say 'Socrates is the property of being a man', but we can say 'Socrates is human'. Geach holds that 'the property of being ... is exemplified' as a whole stands for a property of the property of being a man and is a second-order predicate. It can be supplemented by inserting a first-order predicate, say, man used formally. But Geach states that 'the property of being ... is exemplified' only means that 'Something is ----'. So the distinction between a first-order predicate and a second-order predicate can not be precisely explained through the distinction between properties of objects and properties of the properties of objects.
Thus grammar, Geach thinks, misleads us. In the sentence where a second-order predicate is attached to a first-order predicate, only the part of the former is taken as the grammatical subject. For example, in the sentence 'Wisdom is rare', the adjective 'rare' is mere a part of the second-order predicate 'that anybody is rare' which is to be completed by filling the empty space by a first-order predicate 'has wisdom'. We have already seen that some grammatical subjects are, in fact, logical predicatives, e.g. 'lion' in 'lion exists', 'God' in 'God is three'. Here the grammatical predicates 'exists', 'is three' are second-order predicates as attached to first-order predicates. In Grammar, the status of 'God is existent' is same with 'God is wise', but the former does not refer to the divine attribute as the latter does. In the former we simply assert the exemplification of the nature expressed by the predicate 'is god', viz. 'Something is God'. So '... is existent' is not a first-order predicate as '.... is wise' is, but a second-order predicate.

Ramsey in his 'The Foundation of Mathematics', as we have seen in the previous Chapter, totally rejects the subject-predicate distinction. In 'Socrates is wise', 'Socrates' may as well be taken as a (second-order) predicate as applying to the property expressed by 'is wise'. 'Socrates' may thus be taken to express the property of being a property of Socrates. In that case 'Socrates' can be said to be predicatively attached to 'is wise' and also that 'is wise' to 'Socrates'. But Geach thinks that it destroys our fundamental distinction between

names and predicates. Ramsey's view is based on a mistaken inference. As the sense of the predicate 'is wise' in 'Socrates is wise' may be complemented either by the name 'Socrates' or the second-order predicate 'Socrates-', therefore, the name and the second-order predicate are identical in sense. The second-order predicate 'Socrates-' is same in sense with the predicate: 'It is a property of Socrates that he ...' which certainly differ from the name 'Socrates'.

The former expression can never be used to name a man. Moreover, the second-order predicate 'Socrates (is) ... ' has a contradictory 'Socrates(is) not ...' and if they are attached to the same first-order predicate, we will have a pair of contradictory assertions. But there is no such contradictory of the name 'Socrates'. So, Geach claims, there is an obvious distinction between the name 'Socrates' and the predicate 'Socrates (is) ...', consequently between names and predicates.

It has been aforesaid that the first-order predicates are attached to names and second-order predicates are attached to them in turn. Geach points out that the term 'attached' is used only by analogy. It is used in two different, though related, senses. The sense of the first-order predicate is obtained by attaching it to a name but it does not itself complete the sense of the name. A name has an independent sense and can never be used predicatively. In 'something is a dragon' the second-order predicate 'Something .....' is attached to the first-order predicate '.... is a dragon' to have
its sense completed. But here the sense of '.... is a dragon' is not complete by itself like a name and requires to be completed. So in such a sentence where a second-order predicate is attached to a first-order predicate, they serve to complete one another's sense.

Geach thinks that the distinctions, above mentioned, are important to construct a symbolic calculus of propositions. In ordinary symbolic method 'everything...', 'something...' and 'nothing...' are translated by means of variables and quantifiers. In this method the empty place of a predicate is filled up by a variable and the outcome is a matrix. Thus 'Peter gave ... a penny' transforms to be the matrix, by inserting the variable x in its blank, i.e. 'Peter gave x a penny'. The second-order predicates like 'everything...', 'Something...' are turned into quantifiers viz., 'for every x', 'for some x' and quantifiers also contain variables. The fact that a second-order predicate is attached to a first-order predicate is revealed by the insertion of the same variable in the quantifier and the matrix. Hence the variable of the matrix is thus bound by the quantifier. For example, 'Something is man' is transformed into 'for some x, x is a man' and 'Nothing is a dragon' into 'for all x, x is not a dragon'. Geach points out that the letter 'x' itself does contribute nothing to the sense of 'for some x' or of 'x is a man'. It merely indicates that the senses of both the quantifier and the matrix are incomplete and their empty places are to be filled up. And the fact that the same variable is repeated in the quantifier
and the matrix indicates that they are complementary to one another's sense.

According to class theory, the predicates are names of classes. According to this theory 'Socrates is wise' signifies 'Socrates belongs to class of wise beings' and 'is' expresses the relation of class membership or the possession of a property. Thus the sentence in question may be transcribed into 'Socrates ∈ wise' and the connective ' ∈ ' is a binary predicate which formulates statements when put between two names. According to Geach, the symbolism 'x ∈ y' is a wrong interpretation of copula and should be rejected. On his view, we would better write 'y (x)' and keep in mind that a predicate letter like 'y' should always be followed by a pair of brackets indicating the empty space for a variable or a name.

Geach also tries to consider the problem whether a common noun like 'man' is used materially or formally, i.e. as a name or as a predicate in a sentence, viz. 'Peter struck a man'. We said previously that 'man' must stand for any man. But how can 'peter struck a man' be regarded as an assertion about any man? Geach tries to explain this with reference to certain view of Aquinas. Aquinas maintains that the subject and the predicate do not stand for two different objects, which are somehow juxtaposed in an assertion. On the other hand, for him, a predication is true if the reference of the subject and the predicate is identical. Thus the predication 'Socrates is white' is true, if the two names
'Socrates' and 'thing that has whiteness' hold an identity of reference. Geach points out that Aquinas speaks of reference of a descriptive name, not of a predicate. Aquinas explicitly denies that predicate like 'white' stands for an object. According to him, if predicate 'white' is truly attached to the subject, the corresponding descriptive name must have the same reference as the subject.

This is evident when the subject is a proper name and the predicate attached is a singular predicate. The sentence 'Socrates is white' is true if and only if 'thing that is white' refers to the object which 'Socrates' stands for. But in a combination where a singular predicate is attached to a name like 'man' which is not unique and unshared, how can we get the identity of reference which is admissible for a combination being true. As the reference of 'man' is uncertain, this condition becomes paralysed. It may be said that as 'Man is white' lacks definite truth-condition, it is incomplete in sense. Geach says that to achieve the complete sense we have to add a word expressing the kind of identity of reference which Aquinas calls the ordo of predicate to subject 45, e.g. 'Some man is white', 'every man is white', 'only man is white'.

According to Aquinas the predicate 'white' can not be attached to the subject 'man' unless we use also words like 'some', 'every', 'only', which represent: ordo of the predicate

44. Ia Q. 85 art. 5 ad 3 sum; Q 39 art. 5 ad. 5um (Referred to by Geach)
45. Ia Q. 31 art. 3 (Referred to by Geach)
to the subject. Geach echos his view in saying that as 'white' is a singular predicate it can not be attached to a subject like 'man' and what is attached to 'man' in 'Some man is white' is the complex predicate 'Some .. is white'. In Grammar 'Some man', 'everyman', 'only man' are treated as complex names which the predicate 'white' can be attached to. But, in fact, 'Some', 'every', 'only' are not the part of the subject, rather the words which link the adjective 'white' to the subject. Geach prefers to call those phrases by the name 'applicative' (Operator).

According to Geach, the applicatives 'some' or 'a', 'an' express a kind of partial identity of reference. Thus the truth-condition for 'Some man is white' is that 'man' and 'thing that is white' will both be names of some object. They may be called indefinite applicatives. On the other hand, 'every' and 'any' suggest a kind of total identity of reference. The truth-condition for 'every man is white' is that 'man' stands only for those things which the name 'thing that is white' stands for. They, so, are general applicatives. 'Only' signifies the converse kind of total identity of reference. The truth-condition for 'Only man is white' is that the name 'thing that is white' does not stand for anything which 'man' does not stand for. According to Geach, in 'Only S is P', 'S' may be a proper name. The predicate 'Only is P' is a first-order predicate as it can be attached to a name of an object. But the sense of the name attached need not have an unique reference. Therefore, it is not a singular predicate.
We can regard it as a non-singular first-order predicate and 'man' in 'Only man is white' can be regarded as a name.

Thus Geach concludes that such nouns as 'cat' and 'man' may be genuine logical subjects and in this role they are used as names of individuals not of classes. For example, 'a man is white' is true if something is denoted by 'man' and also by 'white object'. Here 'man' happens to stand for an individual man.

From the above discussion we find that, for Geach, the distinction between subject and predicate is a distinction between linguistic terms, not between corresponding objects. It is evident from his definition of subject and predicate. A subject of a proposition is an expression which stands for something which the proposition is about. And a predicatable is an expression which gives us a proposition when attached to another expression which names the thing which the proposition is about. On Geach's view predicatable is a potential predicate.

According to Geach, a name can occur in a sentence only as a subject and can never as a predicate without a radical change in the sense though can be a part of it. He holds that names and predicatables are fundamentally different. A name has a sort of independent sense apart from the verbal context in which it is used. It can be used in isolation. But the sense of a predicatable is incomplete. A predicate is the remaining part of a proposition when the subject is picked out.
So it includes an empty space which is to be filled up by a proper subject. A predicatable applies to things but it never names what it applies to. Another point of asymmetry is that a proposition may be negated by negating its predicative but not the subject. Because predicables always occur in contradictory pairs, but names do not. Again tenses are attached to predicables, not to names. The tense of a predication is determined by that of the predicate, but not of the subject. So the two sorts of expressions are basically different and he holds that the traditional logicians fail to recognize this distinction between names and predicables. According to Geach, proper names are genuine paradigms for logical subjects. Some substantival general terms can be also used as logical subjects. Geach distinguishes between the material use and the formal use of a noun. A proper name is always used materially as it always stands for an object. General names and definite descriptions can be used either materially or formally. So they can appear either in the role of logical subjects or of logical predicates.

Geach admits of compound predicates. In analysing a sentence like 'Peter struck Malchus' he differs both from the traditionalists who held that a sentence can have only one subject-predicate analysis and the subject of a sentence should always be in the nominative case and from some modern logicians, who regard the sentence in question as a relational proposition and claim that it is not of the subject-predicate form. According to him the given sentence can be analysed either in
the name 'Peter' and the predicate ... struck Malchus' or in 'Malchus' and 'Peter struck ...'. Both the analyses are equally legitimate.

As regards the role of copula in a proposition Geach accepts neither the two-name theory of Hobbes according to which the copula is superfluous in a predication; nor the view that the copula expresses a relation between two terms linked by it in a proposition and it signifies different relations in different predications. According to Geach, the grammatical copula is merely a part of the predicate and has significance in logic only when is used to indicate tense.

Geach, we have seen, makes an important distinction between predicates. He distinguishes predicates into two classes first-order predicates and second-order predicates and the former again in singular and non-singular. A first-order predicate is that which is always attached to a name and a singular first-order predicate is that which is attached to a unshared name. The examples of singular first-order predicates are 'is wise', '... is honest' etc. and when they are attached to the name 'Socrates' the resulting propositions are predications. As the instance of non-singular first-order predicate Geach mentions 'Only ... is white'. The empty place of it can be filled up by a name of an object which need not have an unique reference as in 'Only man is white'. Geach defines second-order predicates as that which are attached not to names but to first-order predicates. In the sentences 'Something is
white', 'There is a dragon', 'Nothing is wise', 'Everything is wise', the grammatical subjects do not name any object which the predicate applies to. So they can not be regarded as logical subjects. According to Geach the expressions like 'Something', 'there is' 'nothing', 'everything' lacks complete sense and this sense can be complemented only by attaching them to a first-order predicate. They are called second-order predicates. The sense of a first-order predicate is completed attaching it to a name, but it itself contributes nothing to the completeness of the name. But a second-order predicate and a first-order predicate are complementary to one another's sense. It is also indicated by modern symbolism in which 'Something is wise' is transcribed into 'for some \( x \), \( x \) is wise' where the same variable occurs in the quantifier and the matrix.