CHAPTER 9

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The subject-Predicate distinction in Sanskrit Grammar and Nyaya:

I

Shaw's Analysis of Subject Predicate Distinction.

J.L. Shaw claims that the question "What are the subject and the predicate of a sentence is ambiguous. Hence the question should be more specific and it must be asked with reference to a particular language and a particular level. In other words, instead we must ask the question "What are the subject and the predicate of S in L at level X?". He also speaks of different levels of subject predicate distinction and these levels are related in different ways in different languages. In this paper he proposes first to discuss the grammatical, the category, and the mediating, criteria as suggested by Strawson.

There are various objections raised against Strawson's thesis. Shaw tries to turn our attention to the criticisms laid by Mei and Whorf. But before we explain Shaw's interpretation of Strawson's critics, we may mention here some other points of criticism of Strawson's theory.


75. As we have already discussed Strawson's theory in detail we omit here Shaw's summery of Strawson's theory.
To illucidate the subject - predicate distinction, we have seen, Strawson speaks of two criteria for an expression's being the predicate of a proposition. One is the grammatical criterion according to which a predicate is introduced by a part of the sentence which carries the assertive symbolism; and other is the categorial criterion according to which only universals or complexes containing universals, never particulars alone, can be predicated. Moreover, he introduces the pair of notions of 'completeness' and 'incompleteness' to explicate the distinction between subject and predicate and assumes that this third criterion would supply the rationale for traditional association of subject-predicate distinction with universal-particular distinction.

We can find out certain discrepancies in Strawson's theory. Firstly, he says that terms are introduced in the sentence by certain grammatical expressions. Terms, for him, are non-linguistic items. He makes a distinction in list III between the term referred to and the term predicated. The terms referred to or particulars are introduced by proper names, or demonstratives or definite descriptions. For example, in the remark 'Socrates is wise' or 'Raleigh smokes', 'Socrates' or 'Raleigh' serves to introduce the particular person Socrates or Raleigh. But he is not clear enough about by which expressions universals are introduced in a remark. According to him, universals are introduced in a remark either by an indicative form of a verb, or by an adjective preceded by an indicative form of the verb 'to be'; or by a noun after the indefinite article preceded by an indicative form of the verb 'to be'. We can quote from Strawson to supply evidence.
In *Individuals* (p. 146) he says: "Let us say that the expression 'Socrates' ('Raleigh') serves to introduce the particular person, Socrates (Raleigh), into the remark, and that the expression 'is wise' ('smokes') serves to introduce the quality, wisdom (the habit, smoking), into the remark." Again on page 149: "It is different with 'is wise'. This expression introduces being wise just as 'Socrates' introduces Socrates." Moreover Strawson says on p. 173: "Among characteristic linguistic forms of grammatically predicative expression are the following: an indicative form of a verb; an adjective preceded by an indicative form of the verb 'to be'; a noun preceded by the indefinite article preceded by an indicative form of the verb 'to be'. Thus we have 'Socrates smiles', 'Socrates is wise', 'Socrates is a philosopher'. In each of these examples a predicated universal is introduced by one of the characteristic linguistic forms". But afterwards, he sometimes speaks of universals being introduced by an adjective or substantival or by a description. For example, he says on p. 183: "Suppose there is an adjectival form of expression, 'Ø', for the universal in question. We are to look .......... in order for the universal term putatively introducible by 'Ø' to be introduced at all". And on p. 186, "Thus the universal term, wisdom, may be introduced, not by means of the adjective, 'wise' or the substantive, 'wisdom', but by such a description as 'the quality most frequently attributed to Socrates in philosophical examples'."

Secondly, while Strawson comes to consider his category criterion, he says that any term, particular or universal, must be capable of being assertively tied to some other term or terms so as
to yield a significant result, a proposition. He classifies this assertive tie into three sorts - characterizing tie, sortal tie, and attributive tie. They are all non-relational ties. We have already seen that anything which is introduced by an expression in a remark is a term. For example, in 'Socrates is wise', 'Socrates' introduces the particular term Socrates and 'is wise' the universal term, wisdom. When these two expressions are combined it results in an assertion. But by which expression the assertive ties are introduced into the remark? Perhaps Strawson here maintains against his own thesis that the universal wisdom is being introduced by the adjective 'wise' and 'Socrates' introduces the person, Socrates, and the verb 'is' refers to the characterizing tie between Socrates and wisdom. When Strawson discusses his grammatical criterion he divides an assertion into two parts - subject and predicate, namely, 'Socrates' and 'is wise'. But, while discussing his category criterion he divides it into three parts - 'Socrates', 'is', and 'wise', i.e. subject, predicate, and the copula.

This lack of consistency in Strawson's theory results in certain complexities. He tries to find out an affinity between the grammatical criterion and the category criterion for a predicate. But there is no such affinity as he claims, for in the two criteria the appropriate expressions for a predicate are different.

Strawson, as we have seen earlier, tries to explain the subject predicate distinction also through certain formal asymmetries between two sorts of expression. One of them consists in the fact that subject - terms, but not predicate-terms, are
admissible in places where variables of quantification are admissible, which he seems to borrow from Quine. But Quine explicitly stated that his account of the predicate is utterly different from the traditional and mediaval account of the predicate; as he says, "If the reader has not yet forgotten the mediaval sense of 'predicate' explained in Chapter 16, let him do so now" and in the Chapter 16 he says, "The word 'predicate' will receive a different and more important meaning in Chapter 26". In his account of predicate, which is an expression beginning with a circled numerical, he is least concerned with the traditional view of the predicate. He has used this phrase exclusively in a technical or artificial sense. We can quote from Quine: "We supplant the notion of term by that of predicate, conceiving predicates artificially in the image of sentences as follows: a predicate is like a sentence except that it contains the arbitrary sign '(1)', or '(1)', and '(2)', or '(1)', '(2)', and '(3)', etc., in some places appropriate to free variables". We wonder how Strawson failed to acknowledge this distinction and regarded Quine's view as explicating the rationale for the traditional view.

Now let us come back to the criticisms of Mei and Whorf, as we find in Shaw. According to Mei, the parallelism between subject-predicate distinction and universal-particular distinction, as proposed by Strawson, is valid for Indo-European languages only. It does not hold for the Chinese language. Mei's chief objection to Strawson is that he has exploited the following grammatical features of English:

76. "Methods of Logic", p. 245
77. Ibid, p. 89.
78. Ibid, p. 145.
Congruence requires the inflection of the verb in the predicate-expression. This particular kind of inflection ("is wise", "smokes") differs from all other types of modification appropriate to the use of the "morpheme" ("wis-", "smok-") in other parts of speech. 79

These features are absent in Chinese. Moreover, predicate-expressions in Chinese can not be regarded as incomplete or unsaturated in Strawson's sense and they do not demand completion into proposition. According to Mei, the word-order criterion which is a kind of syntactical criterion is applicable to Chinese. According to this criterion the anterior component of a sentence is the subject-expression and the posterior component of a sentence is the predicate-expression. Both in English and Chinese the subject is followed by the predicate in an assertive sentence.

But the question is how should we determine the first component of a sentence. We may regard 'Socrates is' as the first component of 'Socrates is wise'. According to Mei, the linguistic notion of Immediate Constituents (ICs) determines that 'Socrates' is the first component in the sentence in question. And this criterion is purely a syntactical one and is not at all parallel to the particular - universal distinction. According to Mei, Chinese predicate - expressions are as complete as subject-expressions and their respective mode of introducing terms are also parallel. Therefore, depending on this mode of introduction distinction between subject and predicate can not be drawn.

B. L. Whorf holds, on the basis of his analysis of some American-Indian languages, that the distinction between substantives and verbs or between complete and incomplete is not natural. It is peculiar to certain languages. According to him, in certain American-Indian languages, there are sentences which cannot be analysed into subject-predicate form. In these languages the simplest utterance is a sentence, and long sentences are complex sentences.

Robert Price in his paper "Descriptive Metaphysics, Chinese and Oxford Common Room" attempts to answer the objection of Mei. He says that the fact that Chinese grammar does not make the subject-predicate distinction as English makes it does not nullify the Aristotelian distinction between particular and universal. According to him the uses of English expressions serves as the standard model for all languages. He points out the distinction between expressions and the uses of expressions. It is thought that the subject-expression has the referring use. The function of referring to something is performed not by the expression, but by the use of an expression. For example, one and the same expression 'the man' is used to refer in 'the man is Sam' and is used to predicate in 'Sam is the man'. He accuses Mei of making a confusion between expressions and the uses of expressions.

80. "Language, Thought and Reality", p. 241ff (Referred to by Shaw)
81. pp. 106-110, Mind, 1964. (Referred to by Shaw)
But the question is whether there is any criterion to classify the uses of an expression. It cannot be done in terms of grammatical criterion. Because the grammatical criterion is concerned with the expressions, not with the uses of an expression. It cannot be also done by the category criterion which deals with the nature of the terms introduced into a proposition.

The classification of the uses of an expression presupposes the context of its utterance. The same sentence may admit different ways of analysis corresponding to the different contexts of its utterance. According to Shaw, this situation represents the topic-comment distinction. In the sentences like 'John is smoking', 'Glass is elastic', 'John' and 'Glass' are not necessarily subjects or used as referring expressions. If they are answers to the questions 'What is John doing ?', 'What is glass ?', 'John' and Glass are to be considered as topics. When the same sentences are answers to the questions, 'Who is smoking ?', 'What is elastic ?', smoking and elasticity are to be considered as topics. A topic is determined with reference to the question and in turn determines the use of an expression. Hence the topic of a sentence may vary with varying contexts. It also follows from the topic-comment distinction that there may be more than one subject in a sentence. For example, in the sentence 'John sends a letter to Mary' both 'John' and 'Mary' serve as subjects if it is an answer to the question 'Who sends a letter to whom ?' But, according to Shaw, the topical subject is not the only type of subject. The distinction between subject and predicate can be sustained in many other levels.
Shaw also proposes to discuss the distinction between four levels with reference to the syntax and semantics of Pāṇini. Kiparsky and Staal point out that the important contribution made by Pāṇini to syntax is his theory of Kāraka relations, Kāraka relation, as represented by Pāṇini, is the underlying relations of sentences. It also in some contexts explains the identity of meaning. Kiparsky and Staal uphold that Pāṇini's grammar provides a set of rules to convert semantic representations of sentences into phonetic representations through two intermediate levels which correspond to the levels of deep-structure and the levels of surface structure. Semantic representations lead to deep structure level, then the surface structure level and finally to phonological representations. (a) The concepts such as goal, agent, location characterises the level of semantic representations. (b) The Kāraka relation is found in deep structure level and it is characterised by relations such as underlying subject, underlying object. (c) The surface structure level is characterized by different cases, derivational affixes etc. And (d) the phonological representation is characterized by various case-endings expressing different cases or by various verbal affixes expressing different voices etc.

From the semantic representation of the sentence 'aksair the diāvyati' ('he plays with dice'), we come to know that dice stand to the action of playing in the instrumental relation. According

to Kiparsky and Staal the relation holds between categories which are not ontological. At the level of deep structure this semantic relation between dice and the action of playing is represented through various Kāraka relations. The most important of them representing the relation between dice and action of playing is called Karana Kāraka. And at the surface structure level this Karana relation may be expressed by different cases, the chief device being the instrumental case. Finally the instrumental case is represented by different case-endings at the phonological level. In our example, the instrumental case represented by the suffix-bhis. Then it is changed into-सिः by a rule, thus converting aksabhis into aksais. Again the phonological rule for conjoining the words converts 'aksais dīvyati' into 'aksair dīvyati'.

The various Kāraka relation may serve to represent the same semantic relation. In our example, the same semantic relation between dice and action of playing can be represented by Karman relation in the case of verb दीव-. Then we have to use a different case at the surface structure level and a different phonological expression at the phonological level. Then we will get 'aksān dīvyati' instead of 'aksair dīvyati'. As both the sentences ultimately express the same semantic relation, they are identical in meaning, though they differ at other levels.

As we find in Pāṇini, the relation between the semantic level and deep structure level is many-many. The same semantic relation may be expressed through different Kāraka relations in the
deep structure level. Again, in some other cases the different semantic relations may be represented by the same Karaka relation in the deep structure level. Likewise, the same Karaka relation may be represented by different cases and the same case may be expressed by variant case endings. Hence, for Panini, the semantic relations at the first level is represented in the second level by the Karaka relations in deep structure. At the third level these Karaka relations are represented by various cases which are, in turn, expressed by various case endings, affixes etc. at the fourth level, i.e. the phonological level.

This Paninian model can serve to explicate the subject-predicate distinction at different levels. The surface structure and the phonological level of Panini correspond to the surface level of the contemporary linguists in Western philosophy. At the surface structure level the distinction between subject and predicate can be maintained in terms of the cases or the case endings and other affixes. An expression marked by a first case ending may be considered as the surface subject. In the sentence 'rāmēh kumbhān karoti' 'Ram makes pot', 'rāmēh' which have the first case ending is the subject at surface structure level. In its passive form 'rāmena kumbhāh kriyante' 'pots are made by Rāma', 'kumbhāh', 'pots', which have the first case ending is the surface subject. But in the deep structure level the same karman relatio is expressed by 'kumbhan' in the first sentence and by the verbal suffix 'ante' in the latter sentence. If we assume kartr kāraka relation as the sign of deep subject, then in the above
sentences 'Rāma' is the subject at deep structure level. Again, in sentences like 'rāmeṇa karayati devadattah' 'Devadatta causes Rama to make', 'Devadattah' is the subject in the surface structure level, but both 'Rāma' and 'Devadattah' are subjects in the deep structure level, since both of them are related by Karpā kāraka relation. In the Chomskyan model following would be the underlying phrase-marker,

If the relation of subject is defined as \( \sqrt{\text{NP}, S} \) in the deep structure level, then 'Devadattah' would be the subject of \( S_0 \) and 'Rāma' of \( S_1 \) in the above example.

Now the question is whether the semantic level can be distinct from the deep structure level. If the deep structure is considered as purely syntactical we can distinguish between deep structure level and semantic level. But if the categories of deep structure are semantical, or there is no clear cut distinction between the syntax and semantic we would not be able to draw the distinction between the deep structure level and the semantical level.
Shaw speaks also of other two levels, namely, ontological and epistemic levels for subject predicate distinction. In Pānini’s model some semantic terms are interpreted with reference to the intention of the speaker. The deep subject is characterised by the semantic representation of the kārman relation which is found in the deep structure level. Kārtṛ relation is semantically represented as the independent agent. For example in the sentence ‘sincerity frightens the boy’, ‘Sincerity’ is in Kārtṛ Kāraka relation. So it is the subject at the deep structure level, but it is not necessarily an ontological subject. Because, if in an ontological system only concrete objects are to be regarded as agents, sincerity fails to be an agent. So it can not be an ontological subject. Kiparsky and Steal also hold the same opinion that semantic level, characterised by Kāraka relations, may not have any ontological significance. 83

Hence if the ontological level and the semantic level are distinct, the subjects at the two levels also may be distinct. If Nyāya Vaiśeṣika categories are accepted as ontological categories dravya or substance can be regarded as the ontological subject and other categories as predicated of dravya. Again, if we follow the Bradleyan type of ontology the ontological subject will be the substance which has existence. According to Bradley, in the sentence ‘the table is brown’ the whole sentence is the ideal content ‘table being brown’ which is being predicated of the Reality, the ultimate subject of predication. On the other hand, according to

83. Ibid. p. 109
Nyāya - Vaiśeṣika system a dravya or substance, say, a table in this case, would be the ontological subject.

The epistemic level is different from the linguistic level on the one hand and the ontological or the semantic level on the other.

According to Nyāya⁶⁴ and many other schools of Indian Philosophy the 'Sabdabodha' or 'understanding of the meaning' of a sentence is a qualificative cognition and it involves the qualificand-qualifier relation. Let us take for example the sentence (1) 'raktam puṣpam', 'a flower is red'. In the cognitive level the meaning of this sentence may be represented in two different ways:

(2) Q (Q Flower - Flowerness) Q (Red-Redness)

(3) Q (Flower-individual (Flowerness and red colour)), where 'Q' stands for the qualificand-qualifier relation. Let us consider another sentence (4) 'puṣpa raktam', 'red colour (occurs) in a flower'. The cognitive content of this sentence may be represented as (5) Q (Red colour - occurrence-in-a flower), where Red colour is the qualificand and occurrence-in-a flower is the qualifier.

It may be claimed that (1) and (4) are related transformationally and since transformations do not change the meaning, (1) and (4) are identical in meaning. But they involve different cognitive contents i.e. they have different 'Sābdabodhas' or 'understanding of the meaning'. It is found that (1) is ambiguous,

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⁶⁴. B.K. Matilal, "Indian Theorists on the Nature of the Sentence (Vakya)", 'Foundations of language', 377-393 (Referred to by Shaw)
since it expresses two different cognitive contents. If the truth condition of a sentence is accepted as its meaning, then (1) and ( ) are said to have the same meaning. To account for their difference we have to assume a different level, i.e. the level of understanding or the cognitive level.

According to the Nyāya system even the word 'flower' expresses a cognitive content which can be represented thus - 6) Q (Flower individual-Flowerness). According to this view there can be one word sentences also if a qualificative cognition is to be always expressed by a sentence.

There is a difference in opinion among different systems of Indian Philosophy concerning the nature of the chief qualificand of the cognitive content of a sentence. According to Nyāya the chief qualificand is represented by the first case termination, and according to grammarians philosophers by the finite verb or the verbal root. Again Bhaṭṭa Mīmāṃsakas differ from both of them in this respect. Let us consider the following sentences.

(7) 'devadattah pacati', 'Devadatta is cooking'
According to Pāṇiniyas, who are grammarians philosophers, the cognitive content of (7) is expressed by (8) 'an action, located in Devadatta, which is currently going on and leads to the softening (of food)'.
According to the Bhaṭṭa Mīmāṃsakas the cognitive content of (7) is expressed by (9) 'an act of bringing about a result, which is located in Devadatta and leads to softening'.
According to the Nāyāyikas, it should be represented by (10) 'Devadatta is qualified by a conscious effort which leads to cooking'.

According to the pāṇiniyas the chief qualificand of (7) is the act of cooking, according to the Bhāṭṭa Mīmāṃsakas it is the act of bringing something into being, and according to Nāyāyikas it is Devadatta.

If it is supposed that (8), (9) and (10) possess different meanings then meaning can not be equated with the truth condition since they are made true by the same fact. Besides, it can not be also said that they are transformationally related, as transformations do not change the meaning of an expression. Hence we would require different underlying phrase-markers for them to account for their difference in meaning.

The question arises whether the term 'Śīḍabodha' corresponds to the word 'meaning' or 'sense'. Both Matilal 85 and Cardona 86 maintain that the notion of 'Śīḍabodha' corresponds to the notion of meaning or sense of a sentence. But in some modern philosophical writings a difference is made between the notion

85. Ibid (Referred to by Shaw)

of meaning or sense with the notion of reference, as we find an important distinction in Frege's writing between Sinn and Bedeutung. Then it is difficult to find out the correspondence between 'Śabda-bodh' and 'meaning'. For in that case the same sentence, say (7), will have three different meanings represented by (8), (9) and (10), and we can hardly find any unambiguous sentence.

To solve this puzzle we can assume a separate level, i.e. 'the epistemic level' or 'the level of cognitive content'. It can be maintained that the meaning of the sentence (7) is not changed by the paraphrases (8), (9) and (10). They express only different cognitive contents at the epistemic level. Their truth conditions are also the same. Hence they have the same meaning, if meaning is taken to be same as truth conditions. Even if meaning is not equated with truth condition, we can account for their identity in meaning deriving them from the same base phrase marker by applying transformation rule.

Since epistemic level is different from other levels we can distinguish between subject and predicate at this level too. If the chief qualificand is taken to be the subject at the epistemic level we can have different subjects at this level corresponding to the same sentence. If (7) serves to express the cognitive contents of (8), (9) and (10), then we have different subjects at the epistemic level, though 'Devadatta' is the subject at the level of surface or deep structure. In many ontological systems also Devadatta would be the ontological subject of (7).

87. We have already discussed this thesis in detail in the previous chapter.
Finally Shaw proceeds to account for the logical subject and predicate of a sentence and tries to show the distinction between logical level and deep structure level.

The simple sentences of ordinary language are represented in logic by the form 'Fx', 'Gxy', 'Hxyz', etc. or by the logical notations involving quantifiers and variables. Strawson, as we have seen in the earlier chapter, distinguishes between subject terms and predicate terms through certain formal asymmetries. So we should not discuss it here in detail. Shaw urges that there is no one logical analysis or system. In Russellian logic descriptions are, but logically proper names are not, eliminable in favour of variables of quantification. But, for Quine, any singular terms whatever should be eliminated and expressed in terms of variables and quantification. Strawson borrows this thesis of Quine to formulate his fourth formal distinction between subject and predicate term.

The upholders of each logical system claim certain advantages over other. But each system is useful for certain logical purposes, not for certain other purposes. Hence the subject-predicate distinction at the logical level can be drawn in different ways depending on the logical system we follow.

Shaw tries to explain the distinction between the logical level and the deep structure level of a language through their respective functions. The deep structure of a sentence is expressed by the underlying phrase markers which are transformed into derived
phrase markers through certain rules. In any deep structure analysis, the aim is to reveal the underlying structure and to derive the surface structure of a sentence from the underlying phrase-markers through transformational rules. But these two major functions may not be present in a logical analysis. Quine says that the logical analysis does not reveal the underlying structure of a sentence. If we follow Quine's logical analysis of eliminating all singular terms we can not derive the sentences of ordinary language which contain singular terms. In some cases the logical structure of a sentence may resemble the underlying structure of a sentence in ordinary language, but it is not a general practice. As the aim of the deep structure level is so much different from that of logical analysis, the two levels can not be identified. The two are to be dealt with differently.

From the above discussion it follows that according to Shaw the subject-predicate distinction can be drawn in different levels differently. Though, as a matter of fact, in most cases the subject-predicate distinction at a particular level parallels the subject-predicate distinction at some other level, yet we should be aware of the different levels of subject-predicate distinction and should not confuse one with the other.
In dealing with the Navya-Nyāya theory we have to distinguish between ontological relations and epistemic relations. We have also to distinguish between two types of epistemic relations. So we have three different topics to discuss:

1. Ontological relations between reals.
2. Epistemic relations between mode of cognition and object of cognition.
3. Epistemic relations between that about which we know and that which we know about it.

1) Ontological Relations:

According to Navya-Nyāya, relations are ontologically real even though they do not belong always to a separate category. Navya-Nyāya differentiates between seven categories (Padarthas), the most important of which are: 1) Substance, 2) Quality, 3) Movement, 4) Universals, 5) Inherence, 6) Negative objects. Any one of these can function as a relation, only inherence belonging to a separate category. This peculiarity of Navya-Nyāya often causes confusions of different types. To guard against this we have to understand clearly the Navya-Nyāya concept of relation.

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cf: S. Bhattacharyya: Modes of cognition
Lectures delivered in North Bengal University, 1977, (mimeographed)
That there are reals is proved only in one way according to Navya-Nyāya i.e. by knowing them. If we know that something exists then our knowledge is the proof of its existence. So the proof that relations exist is that we know them. Here Navya-Nyāya makes a distinction between the different ways in which a relation can be known. As there are no ontological reals which have to be of a special character to function as relations, the same reals which function as relations in one context can be known as terms of further relations in a different context. The same relation can be a term also. To know a real as a relation and not as a term is to know it in a special way. Whenever we are knowing a relational complex of the form $a \mathcal{R} b$ the knowledge relates itself to the three elements of the complex $a$, $b$, $\mathcal{R}$, in different ways. Thus one's knowledge is related to three different elements in the relational whole in three different ways. In the objective complex $a$ is the first term of the relation $\mathcal{R}$ and $b$ is its second term. In the knowledge of this relational complex $a$ is known in one way, $b$ in another, and $\mathcal{R}$ in a still different way. These three different ways correspond to three different relations which the state of knowledge has to these three different elements. Thus to know a relation as a relation is to know it as relating its two terms. But the $\mathcal{R}$ can also be known as a term and we can further enquire, and know, how this $\mathcal{R}$ as a term is related to $a$ or to $b$. But now $\mathcal{R}$ is known in a different way, i.e. either as the first or the second term of a different relation which is known in the characteristic manner in which relations as relations are known. The so-called infinite regress in relation is not really an infinite regress, for, where for
example $a$ is related to $b$ by $R$, $R$ is the relation between $a$ and $b$. But if we ask now what is the relation between $R$ and $a$ we are talking of an entirely different ontological situation which is neither necessary nor sufficient to know that $aRb$. The reason for this can be explained in the following way.

The fact that $a$ is related to $b$ by $R$ may be symbolically expressed by "$aRb". Now the fact that $R$ itself is related to $a$ by the relation $S_1$ and to $b$ by the relation $S_2$ may be expressed by "$RS_1a$" and "$RS_2b". Now this means we have $aRS_1R$. Now from $aRS_1R$ and $RS_2b$ we have by composition $a(S_2/S_1)$ $b$ from where $R$ has completely dropped out. This shows that even if we understand or know how $a$ is related to $R$ and $R$ is related to $b$ we do not understand how $R$ relates $a$ to $b$. Thus, according to Navya-Nyāya, the fact that $a$ is related to $b$ by $R$ is altogether a different fact from the two facts $a$ is related to $R$ by $S_1$ and $R$ is related to $b$ by $S_2$. And these different facts neither ontologically nor epistemologically presuppose one another.

The Navya-Nyāya theory that any real belonging to any category can relate two reals under special conditions can be explained as follows. It is usually thought that a relation $R$ in order to relate its terms must somehow be flexible so that it may tie or bind its terms together. The use of the word 'tie' suggests that relations are like threads which are used to tie hard things into a bundle. Yet this image of the tie is misleading if it is used to represent the nature of all relations. For example, two pieces of wood may be tied together by a piece of thread which is more flexible than the two pieces of wood. But we may as well acr
them together by means of screws which are harder than the pieces of wood. Thus instead of saying that relations tie their terms together we might as well say that they screw them together.

It may be argued here that the terms and the relations which relate them can not be equally "hard", either the relations are to be more flexible than their terms or the terms are to be softer than the relations. But this again will be misleading, for relations and their terms could be things of the same type as the first and the third links of a chain are linked by the second link. The first, second and the third links of a chain are of the same "hardness". Thus we could say that relations link their terms together, or dock their terms together. Thus we have different types of relations representing flexible things like thread, and hard things like screws, nails, and links, and semi-liquids like paste and so on and so forth. Whether we shall use a flexible real or an adhesive real or a screwing real to relate two terms will depend generally upon the nature of the terms themselves.

Then we come to the most difficult aspect of the Nyaya-Nyaya theory of relations namely the concept of a self-linking relation. We have used the term "self-linking" deliberately instead of the more general "self-relating". The peculiarity of this relation is that in some special cases instead of three entological reals a, R, b, we have only two elements, say, a and b of which one functions both as a term and also as a relation. How this is possible in very special cases may be explained by the metaphor of a chain in which any two successive links are related where we do
not have any ontological real functioning as the relation between them. According to Navya-Nyāya in such a case we must not say that two links are linked together without a relation, but that either of the links functions here in two ways, both as a term and also as a relation.

Frege's metaphor of reals with gaps to be filled up by terms corresponding to incomplete functional expressions also may help in understanding the Navya-Nyāya position. Concepts which according to Frege are referents of predicate expressions are unsaturated containing gaps to be filled up by objects. The metaphor here is that of a hard thing with holes in which the objects of the right size and shape fit. Thus in a square we can not fit a round peg. But when a peg of the right size and shape is fitted into a hole nothing more is needed to fix the peg in the hole. So according to Navya-Nyāya we have here a case of self-linking relation.

But according to Navya-Nyāya it would be a mistake to think that all relations are of this type, that all relational wholes can be conceived as two links of a chain or of a square peg in a square hole. Very often we need screws, adhesives, and other extra bonding elements to bind two things together. So according to Nyāya, relations differ ontologically and the only common factor present in all relations is that they relate their terms.

There is still one more important point about the Navya Nyāya theory of relations. According to नयया-न्याया between any two reals belonging to whatever category there are almost infinitely
many relations. It is not merely that all reals are related to one another by some relations or the other, but also that any two reals are related to each other by many different relations. This is the ontological situation.

2) In any act of cognition of a relational complex we know only one relation holding between the two reals which are its terms. The difference between the mode of cognition and the object cognised is dependent upon the relation cognised. Whenever we know a relation as a relation we know its two terms. The first term of the relation cognised is the qualificandum and the second term of the relation cognised is the qualifier and the relation itself is the relation of qualification. The qualifier i.e., the second term of the relation cognised is, according to Viśvanātha, the same as the mode of cognition of the qualificandum. What is a qualificandum in a knowledge may, as it very often does, become the qualifier in a different act of cognition, and the qualifier of the first cognition becomes the qualificandum of the second cognition. That is, the difference between the qualifier and the qualificandum of a cognition corresponds to the first term and the second term of the relation cognised.

We must note here the difference between the traditional Western concepts of subject and predicate and Navya-Nyāya concepts of qualificandum and qualifier. According to traditional Western logic a subject-predicate proposition is different from a relational proposition. According to Navya-Nyāya, however, all cognitions which can be expressed in language have a relational structure.

There is no non-relational mode of knowing which can be expressed in language. The Navya-Nyāya distinction between the qualificandum and qualifier of cognition is thus relative to the cognition only in the sense that from infinitely many actual relations holding between two reals the cognition selects only one relation which then determines its qualificandum and qualifier. The cognition does not introduce anything new in the objective situation, it merely selects one from many different objective situations. There is nothing peculiar in thus selecting one relation from among many. The same thing happens in the case of the selection of attributes, for example, when we perceive a thing say, as red. We could have perceived the shape of the thing instead of the colour or vice-versa. The fact that every knowledge is selective explains why we select a particular relation between two reals.

3) In every cognition which can be expressed in language we cognise an ontologically real relational complex. But in every cognition of this type we do not have the awareness of the distinction between that about which we know and that which we know about it. According to Navya-Nyāya philosophers in perceptual knowledge we do not have this distinction at all, even though we necessarily know a relational complex. In visual perception, for example, our attention is drawn to objects which have special objective features like brightness of colour, highness or smallness of shape. At this stage of cognition we do not set out to know something about something.

According to Navya-Nyāya philosophers in every inferential knowledge, and understanding the meanings of sentences, there is
always an awareness of knowing something about something. Thus in the conclusion of an inference, say, that the hill is fiery, fire is known to be present in the hill and it is the hill about which we know. The hill is qualificandum of this cognition and fire is the qualifier (the contact between the hill and the fire being the relation of qualification), yet the qualificandum is not the same as that about which we know even in inference. For in the conclusion instead of knowing that the hill is fiery we could have known 'the fire is on the hill' where the qualificandum and the qualifier of the first inference are transposed, whereas that about which we know remains the same even in this case.

We understand the meaning of a sentence by understanding successively the meanings of the words constituting the sentence. According to Nyāya-Nyāya the meaning of the first word is that about which we know and the meaning of the succeeding word is that which we know about it. These sentences are of course declarative sentences - sentences in the indicative mood. By changing the word order in the sentence we change that about which we want to know and what is known about it. This is the reason why inversion, i.e. the change of normal word order in a sentence produces literary effect, emphasis etc. Thus the sentence "the hill is fiery" produces a cognition which is different from that produced by "Fiery is the hill". The difference is not in the truth conditions of the two sentences, but in the change of that about which we know and that which we know about it.

This shows that Shaw's suggestion that the subject-predicate distinction is represented differently at different levels is not
acceptable to Navya-Nyāya philosophers. For, according to them, in perceptual knowledge of a complex whole there is only the distinction between the qualificandum and the qualifier corresponding to the first and second term of the relation known, but there is no awareness of that about which we know and what we know about it. But in the case of inference, and, understanding the meaning of a sentence, we have both these distinctions and they are independent of each other. The qualifier and the qualificandum may remain unchanged, while that about which we know and what we know about it are interchanged. Both these distinctions are epistemological being relative to a particular cognition.

We shall conclude by noting a difference of the Nyāya theory from Bradley's theory. According to Bradley every judgement is relational in the sense that the ideal content is a relational complex. Nyāya philosophers agree with Bradley on this point. But Navya-Nyāya philosophers distinguish the qualificandum-qualifier relation from the subject-predicate relation defined as the relation between that about which we know and what we know about it. The qualificandum, according to Nyāya, is not necessarily that about which we know (the subject), and the qualifier is not necessarily that what we know about it (the predicate). While in every cognition which can be expressed in language there must be a qualificandum, a qualifier, and a qualification relation, there need not be any awareness of knowing something about something:

According to Nyāya the distinction between the qualificandum and the qualifier is relative to the relation of qualification. The sentence "This is a cow" does not express a cognition
unambiguously. It may express the cognition of the complex
tobject this (qualificandum), the universal cowness and the rela-
tion of inherence (the qualification). But the same sentence may
express the cognition of the relation of identity between this
object and the particular cow. Here though the qualificandum
remains the same, the qualifier is changed because the qualifica-
tion relation is changed. If inherence is the qualification
relation its two terms are (i) this object and (ii) the universal
cowness, whereas if it is an identity relation its two terms are:
(i) this object and (ii) the particular cow. Thus to determine
that the qualifier and qualificandum of what is cognised we have
to take into account the nature of the relation cognised.

This relativity of the qualifier and the qualificandum
pair may be extended to the Western analysis of the sentences into
subjects and predicates. There seem to be two different motiva-
tion for analysing a sentence into its subject and predicate. One
motivation is to make explicit the distinction between the two
different acts or roles of expressions in a sentence. From this
point of view, the subject and the predicate of a sentence must be
fixed independently of any context into which the sentence may
enter. All sentences are to be analysed into their subjects and
predicates, the difference between which is independent of any
context in which they may enter. But there is a second purpose in
analysing a sentence into subject and predicate, namely to deter-
mine the major and the middle and the minor term of the syllogism.
But it may so happen that the sentence which may be analysed into
a subject and a predicate to yield the terms of a syllogistic
reasoning, may not be so analyzed if the same sentence occurs as the premise of a non-syllogistic inference. This point may be classified by the following examples:

Example 1. Brutus killed Caesar
Brutus was an honourable man
An honourable man killed Caesar

Here the first premise 'Brutus killed Caesar' may be analyzed into a subject (Brutus) and a predicate (killer of Caesar) to determine the validity of the inference.

Example 2. Brutus killed Caesar
Ceasar was an ambitious man
Brutus killed an ambitious man

Here analyzing the first premise into a subject and a predicate in the traditional way will not help us in determining the validity of the inference. For, in the first premise we have the two terms 'Brutus' and 'the killer of Caesar', whereas we have in the second premise the two terms, 'Ceasar' and 'an ambitious man'. Thus we fail to get the necessary middle term, which is not surprising because the inference is not syllogistic. To determine the validity of this inference we have to analyze the first premise into the three parts, namely the killing relation and its two terms. Thus this analysis will be a relational analysis and not a subject predicate analysis.

These examples make it clear that one and the same sentence may be analyzed differently in different contexts to determine the
validity of the inference. Thus there are no sentences all tokens of which are to be analysed into subject and predicate. The analysis of a sentence into its subject and its predicate must therefore be of a particular token of that sentence but not of its type. *

* For a detailed treatment of this point, see, S. Bhattacharyya, 'Subject and Predicate' Presidential Address to The Logic & Scientific Method Section of The Indian Philosophical Congress, 1969.