

SOME PROBLEMS REGARDING THE IDENTITY STATEMENTS

The problem of identity statements is a very well-known problem in Philosophy. The aim of this article is to develop the Nyāya theory in this regard* and to show the similarity or dissimilarity in thought between the Nyāya philosophers and one of the most important Western philosophers, viz., Frege.

There are two types of identity statements - Non-informative and Informative. We can make the distinction clear with the following illustrations. When we say 'Rāma is Rāma' (Rāmaḥ Rāmaḥ), we are uttering a non-informative identity statement because here by analysis or by contemplation of the subject alone, we have an idea about the predicate. But when we say 'Rāma is the eldest son of Daśaratha' - ('Rāmaḥ Daśarathasya Jyeṣṭhaputraḥ') we would ponder upon its truth, unless we already know that Rāma is in fact the eldest son of Daśaratha, i.e., here, in this case, we cannot have any idea about the predicate, by mere analysis or contemplation of the subject. To put the matter in a different way - the first type of identity statements is devoid of any new information, whereas the second type supplies us with novel information. If the predicate indicates no new dimension of the subject, then the statement is non-informative and if the predicate tell something more than what is indicated by the subject then the statement is informative. The problem is - whether it is necessary to admit two types of identity statements.

For the Naiyāyikas, identity statements, like 'Rāma is the eldest son of Daśaratha' are admissible,

* Some discussion about this was initiated by Professor B.K. Matilal in paper entitled 'Awareness and Meaning in Navya Nyāya', presented at the International Conference of Philosophy, organised by Jadavpur University, Calcutta in 1983.

whereas expressions like 'Rāma is Rāma' lack cognitive value and are thus pseudo-statements, and hence, inadmissible. This view is not shared by all. Many philosophers admit the cognitive value of non-informative identity statements. For example, Frege has clearly admitted two types of identity statements - analytic and synthetic. We would come to his theory a little later.

The Nyāya view seems counter-intuitive on at least two counts :-

a) The syntactic structure of the expression 'Rāma is Rāma' (Rāmah Rāmah) is like that of other meaningful sentence** the expression is not gibberish like 'Rāma and is' (Rāmah Ca Bhū). Considering the Sanskrit language we may say that it also satisfies the grammatical rule that in an identity statement, the subject term (Uddeśyapada) and the predicate term (Vidheyapada) should have the same nominal ending.

b) It appears to express a necessary truth. No one can deny that Rāma, after all, is Rāma. 'Rāma is not Rāma' would be a flat contradiction. Thus it seems that 'Rāma is Rāma' is an expression that states an incontrovertible truth — thus it has cognitive value.

Why then should we regard 'Rāma is Rāma' as pseudo-sentence that can never generate any verbal cognition?

The Naiyāikas have their own arguments and to defend their case they employ a large number of technicalities. In order to understand the Nyāya standpoint we have to get acquainted with their view regarding the construction of a meaningful sentence, which yields verbal cognition. There are mainly four conditions for the understanding of a sentence - Ākāṁkṣā, Yogyatā, Sannidhi and Tātparya. A sentence

** I am using 'Sentence' and 'Statement' in the same sense.

is a combination of different words. These words signify certain referents. When some relation can be established between these objects i.e. referents, verbal cognition can be produced. Nyāya philosophers hold that this relation can be grasped if there is Āk-āmkṣā or expectancy.^{1a} The incapacity of a word to produce without another word, an apprehension of the relation between what is signified by these words is Ākāmṣā.^{1b} It is to be noted that the relation is not expressed by any term used in sentence. A combination of words like 'a cow, a horse, a car' is not meaningful because it is devoid of Ākāmṣā. Yogyatā is the absence of the incompatibility among what is signified by different words constituting the sentence.² Such incompatibility arises if we say - 'The gardener is watering with fire'. The utterance without delay of the words is called Sannidhi.³ We may also say that Sannidhi is the presentation without delay to the mind, of what is signified by the words of a sentence (which generally depends on the utterance without delay.) Suppose, we take the sentence 'Bring the cow'. If one utters 'Bring' at 6 AM, 'the' at 12 noon and 'cow' at 7 PM, no verbal cognition would be possible, because there is no Sannidhi. In case of verbal knowledge, we have to take into account the intention of the speaker, which is called Tātparya.⁴ If the intention is not realized, the hearer won't understand the speaker. Suppose one utters 'Bring Saindhava'. 'Saindhava' may mean salt or horse. If a person, while eating, asks for Saindhava, the hearer must understand salt by that. If the hearer understands 'horse' by 'Saindhava', he would have some cognition—but it would not amount to verbal cognition, because he lacks tātparyajñāna. Similarly a person, while going to join the war cannot mean salt by 'Saindhava' if he says 'Bring Saindhava'. So we have to understand the intention of the speaker. Generally context etc. help us to understand this intention.

Now, in any categorical sentence, there are two

parts — subject and predicate. Informally a subject is that about which something is said and a predicate is what is said about the subject. In Nyāya terminology, a subject term is called Uddeśyapada (Visesya-dyotakapada) and the predicate term is called Vidheyapada (Prakāradhyotakapada). This Uddeśyapada indicates a referent (Uddeśya), and Vidheyapada also signifies a referent (Vidheya). The second referent tells something about the first. Both the referents arise in our cognition as qualified by some property. For example, suppose, we have a sentence — 'Man is mortal' (Manuṣyah Maranasilah). Here the Uddeśyapada i.e. 'Manuṣya' indicates the class of Man, which is characterised by the class property Humanity i.e. Manuṣyatva. The term 'Maranasila' is Vidheyapada, which signifies the class of Mortal beings. This class is characterised by the class property Mortality or Maranasilatva. The property which limits Uddeśya is called Uddeśyātavacchedaka and the property that limits Vidheya is called Vidheyatāvacchedaka. According to the Nyāya philosophers, in case of a sentence generating verbal cognition these Uddeśyātāvacchedaka and Vidheyatāvacchedaka must be two different properties.⁵ Here 'avacchedaka' means limitor or some limiting property. It may be questioned as to why this concept of 'avacchedaka' is introduced at all in this context. This introduction is quite pertinent for a knowledge-situation, as conceived by the Nyāya philosophers. An object may figure in various ways in my knowledge-situation, i.e., its mode of presentation may differ in different contexts. Suppose we are trying to know something about Ākāśa. It may appear to me as the locus of sound or I may conceive it as a substance (Dravya) different from eight other substances (Aṣṭadravyaitara or Aṣṭadravyabhinnā) accepted in the Nyāya - Vaiśeṣika system. In the first case the property of being a locus of sound is the avacchedaka or limitor of Ākāśa, while in the second case the property of being a substance different from eight other substances

acts as the avacchedaka. It is very important how an object appears to the knower. According to the Nyāya philosophers, in a categorical sentence if the avacchedaka which limits Uddesya differs from the avacchedaka that limits Vidheya, the sentence is capable of generating verbal cognition. If I know twice the same object in the same way, nothing is added to my storehouse of knowledge. Hence Uddesya-tāvacchedaka and Vidhevatāvacchedaka must be different. If in a sentence like expression, these turn out to be identical, the expression becomes repetitive and thus would serve no purpose. Such expressions are, therefore, at best pseudo-sentences.

Now, if we accept this fifth condition, then it is obvious that the so-called non-informative identity statements are not to be treated at par with other statements. As has already been indicated, it is hard for the ordinary people to accept such a position, though the Nyāya philosophers claim that all of their views conform with common sense.

The Naiyāyikas try to defend their case strongly against the charges of the ordinary people as well as the opponent philosophers. Gadādhara, in his *Vyutpattivādaḥ*, has given a detailed exposition of this. He has taken as an example the following expression - 'Ghataḥ Ghataḥ - i.e., 'The pot is pot'. The attacks and the counter attacks centre around different analyses of this expression. Let us try to follow the line of argument, which is full of technicalities.

Analysis No. I

A charge may be put against the Nyāya Philosophers in this way. If 'The pot is blue' (Nilah Ghataḥ) is a sentence proper, then 'The pot is pot' (Ghataḥ Ghataḥ) is also a sentence in that sense, because these two combinations of words have the same syntactic structure. Considering the Sanskrit expressions, we may say that in both sentences, the

subject term and the predicate term have the same nominal ending. Moreover the Neo-Naiyāyikas have admitted sentences like 'The pot is a blue pot' (Ghatah Nilaghatah) on the ground that here something more is said in the predicate than in the subject. The objection runs that when we assert this sentence, we surely assert that 'The pot is pot' (Ghatah Ghatah). Unless 'The pot is pot', the pot cannot be a blue pot.

The Naiyāyikas very rightly point out that there is a difference between the status of the two sentences. This is clear from their structure and from the causes that produce them. Unless we recollect the referents of the words constituting the sentence, we cannot understand it. This differs in each pair of the two sentences we are concerned with. In the first case, when we consider the sentence 'The pot is blue', we surely have to recollect Blue qualified by Blueness. This is not a precondition for the sentence 'The pot is pot'. Similarly when we consider the sentence 'The pot is a blue pot', we have to accept as its precondition the recollection of Blue pot qualified by Blueness and Potness from the corresponding word. This is absent in case of 'The pot is pot'. Therefore, 'The pot is blue' or 'The pot is a blue pot' may be regarded as sentences generating verbal cognition, but 'The pot is pot' is not a sentence in the proper sense.⁶

Analysis No. 2

It may be said that it appeared to us that 'The pot is pot' is not a sentence proper, because we could not analyse it properly. Let us consider it from another point of view. It is a rule for the Nyāya philosophers that the cause and the effect must reside in the same locus. Suppose there is a piece of verbal cognition 'The pot is blue' (Nilah Ghatah). This cognition resides in self (Ātmā) by the relation of Samavāya, because cognition is a quality (Guṇa) of the self, and according to the Nyāya systems,

relation of Samavāya prevails between a substance (Dravya) and its quality (Guṇa). This verbal cognition is the effect, whereas the recollection of the referents of the words constituting the sentence acts as one of the causes. It, being a kind of cognition, resides in the self. Thus the cause and the effect reside in the same locus. This is one way of explaining the relation of causation.

There is an alternative explanation which invokes the concept of Visayatā. According to the Nyāya philosophers, the object of any cognition is related with that cognition by the relation of Visayitā and the cognition is related with its objects by the relation of Visayatā. In case of a qualified cognition (Visistabuddhi) there can be three types of Visayatā - one is related with the subject (Visesyatā), another is related with what is said about the subject (Prakāratā), and the third one is related with the relation between Visesya and Prakāra viz, Samsar-gatā. Now, let us take the example of 'The substance is a pot'-'(Ghataḥ Dravyam)'. Here substance (Dravya) is the subject (Visesya). Substancehood (Dravyatva) is the limiter of the subject (Visesyatāvacchedaka). The verbal cognition, which has pothood (Ghatatva) as the limiter of the Prakāra (Prakāratāvacchedaka) resides in substancehood (Dravyatva) by the relation of Visesyatāvacchedakatā or Dharmitāvacchedakatā. This cognition is the effect. One of its causes, viz, the recollection of substance, resides in substancehood by the relation of Prakāratā. In the recollection of substance, substance floats qualified by substancehood. So this piece of cognition has as its objects, the substance, substancehood and the relation between them. Hence, it resides in substancehood by the relation of Visayatā. Thus the cause and the effect reside in the same locus. In the same way, we can analyse the cognition - 'The pot is pot'. We can say that the verbal cognition which has pothood as its limiter of the Vidheya resides in pothood by the

relation of Dharmitāvacchedakatā. In the same pothood resides the cause of the verbal cognition, viz, the recollection of the pot, by the relation of Visayatā. Therefore, if we accept sentences like 'The substance is pot' ('Ghatah Dravyam') as generating verbal cognition, we have to accept that the expression 'The pot is pot' (Ghatah Ghatah) can also generate verbal cognition.⁷

The Nyāya philosophers reply that these two pieces of verbal cognition have fundamental difference in respect of their causes. Similar defence has already been mentioned, while we dealt with the Nyāya philosophers reply, to the first objection. In case of 'Ghatah Dravyam', for example, the recollection of Dravya from the corresponding term acts as one of the causes. But this is not required in case of 'Ghatah Ghatah'. Therefore 'Ghatah Dravyam' and 'Ghatah Ghatah' should not be explained in the same manner.

An additional argument has been given by the Nyāya Philosophers. - Suppose we have a piece of verbal cognition - 'The substance is a pot'. If we follow Analysis No.2 then we can say that this verbal cognition which has pothood (P^2) as the limitor of the prakāra resides in substancehood (P^1) by the relation of Visayatāvacchedakatā. One of the causes of any verbal cognition is that the property that limits the prakāra is different from the limitor of the Visesya. In other words, P^2 must be different from P^1 . If this condition is considered, then it is clear that 'The pot is pot' cannot generate verbal cognition, because here the limitor of the prakāra is not different from the limitor of Visesya i.e. P^2 and P^1 are identical⁸.

An objection against this additional argument can be raised - The sentence 'That is pot' (Sa ghatah) is admitted by the Nyāya philosophers, as generating verbal cognition. Suppose, here 'That'

signifies something possessing Jāti or Universal (Jātimān). Here it is obvious that the universal is pothood. Then, P^1 is pothood. P^2 also is pothood. So P^1 is not different from P^2 . Still the expression generates verbal cognition. How does 'That is pot' differs from 'The pot is pot'? The Nyāya philosophers would reply that when P^2 does not float in our cognition limited by any further property or P^2 does not float in our cognition limited by any other property, then and then only the former principle stands. Here P^1 is limited by Jātitva or Universal-hood. Therefore the formal rule is inapplicable here.⁹ Besides these few exceptions, we have to hold that in case of any sentence generating verbal cognition, the Visesyatāvacchedaka must be different from the Prakāratāvacchedaka.

We can explain the matter in a different way also. To understand this explanation, we have to have an idea about a more extensive effect (Vyāpaka Kārya) and a less extensive effect (Vyāpya Kārya). Wherever there is the less extensive effect, there is the more extensive effect, i.e., wherever there is Vyāpya Kārya, there is Vyāpaka Kārya. But the converse is not true. It is not the case that wherever there is Vyāpaka Kārya, there is Vyāpya Kārya. For example, wherever there is smoke, there is fire, but it is not the case that wherever there is fire, there is smoke. Here smoke is less extensive than fire, i.e., smoke is Vyāpya whereas fire is Vyāpaka. Now, the causes that generate a Vyāpaka Kārya are also operative in case of a Vyāpya Kārya. For example, if we think that the presence of oxygen is one of the causal factors for the production of fire, we should take this to be one of the conditions for the production of smoke. Unless there is fire, there is no smoke. And unless there is oxygen, there is no fire. Therefore, unless there is oxygen, there is no smoke. So, the causes required for the generation of a more extensive effect are also necessary for the

generation of a less extensive effect. Now, let us come back to our original problem of the identity statements. Suppose, we have a verbal cognition - 'The pot is blue'. Here potness is the *Visesyatāvacchedaka* and blueness is the *Prakāratāvacchedaka*. The cognition resides in potness by the relation of *Visesyatāvacchedakatā*. Potness is different from blueness, which is the *Prakāratāvacchedaka*. These objects, which are different from blueness may be innumerable. For example, - potness, pot, blue - all these are different from blueness. The cognitions which have potness, pot, blue etc., as their objects respectively, reside in their respective objects by the relation of *Visayatā*. In each case by the method of agreement and difference we find that the absence of blueness is acting as a cause. Now, wherever there is a cognition (C^1), which has blueness as its *Prakāratāvacchedaka* and which resides in potness by the relation of *Visesyatāvacchedakatā*, there is a cognition (C^2), which resides in some things different from blueness by the relation of *Visayatā*. But the converse is not true. So here C^2 is more extensive than C^1 . In case of C^2 we have the absence of blueness (*Prakāratāvacchedaka*) as a cause. So it would be operative in case of C^1 also and we have seen that as C^1 resides in potness, which is different from blueness, the absence of blueness acts as one of its causes.¹⁰¹ Again, the cognition - 'The earthen thing is a pot' - may be analysed as a cognition which has potness as the *Prakāratāvacchedaka* and which resides in earth-ness by the relation of *Visesyatāvacchedakatā*. Here, in this case, the absence of potness - i.e., *Prakāratāvacchedaka*, can act as a cause. But this would not be the case for 'The pot is pot'. Because there the absence of *Prakāratāvacchedaka* cannot be operative, since by analysis we find that such a cognition which has potness as its *Prakāratāvacchedaka* would have to reside in potness only by the relation of *Visesyatāvacchedakatā*. The absence of potness cannot function as a cause here and the

cognition cannot be generated at all.

A side issue :- Here arises a side issue. The Nyāya Philosophers are admitting that whenever we employ any word, we are aware of some property of the object referred to by the word. This is the ground for the application of a word. If it were not so, i.e., if the words could have denoted the objects as much without having reference to any of the properties, the question as to whether the statements like 'The pot is pot' or 'The pot is a pitcher' have different cognitive value, would not have arisen. If we consider the first one to be repetitive and redundant, we have to consider the second one in the same manner. The Nyāya philosophers think that to designate an object, we require the help of some properties. Even when we use a proper name or a singular term, a property of the object designated is associated with it. It would not be too much off the track, if we discuss in the Nyāya manner something about the statements involving singular terms. The general rule that the repetitive identity statements should be discarded, is followed here also. In Nyāya Vaiśeṣika system there are nine substances (Dravya) of which Ākāśa is one. 'Ākāśa' is a singular term, because there is only one ākāśa. Suppose we have a statement 'Ākāśa is the locus of sound' - If by the word 'Ākāśa' we mean nothing more than the locus of sound, then the former expression becomes repetitive and useless. But if by 'Ākāśa' we mean the substance different from eight other substances accepted in Nyāya - Vaiśeṣika philosophy, then the sentence becomes useful. Again suppose we have another sentence 'Ākāśa is a substance different from eight other substances'. This sentence would generate verbal cognition if in this case by 'Ākāśa' we mean something other than the substance different from eight other substances. Therefore, sometimes Ākāśa is designated by the property of being the locus of sound, and sometimes by the property of being a substance different from

eight other substances. It has no fixed property for its ground for application. It is held by some Nyāya philosophers that in case of a singular term, the object indicated is identified by property called Upalakṣanā. It is not to be considered as Pravṛttinimitta. In order to be a Pravṛttinimitta of a word, a property should be the Vācya (referent) of the said word. Not only that, it would reside in a Vācya and should feature as a Prakāra in the memory of the Vācya¹¹. Ākāśatva, perhaps, is not Pravṛttinimitta because it does not satisfy the definition of Pravṛttinimitta. Ākāśatva is not Vācya of the word 'Ākāśa'. It is not Vācya-tāvacchedaka also. Why should we not take Ākāśatva to be the Vācya-tāvacchedaka? It may be that because Ākāśatva is not any single character or property. That which is the Vācya-tāvacchedaka and the Pravṛttinimitta must be one and not many. Anyway when we use a general word we imply the referent by means of Pravṛttinimitta and when we use a singular term we refer to the object via Upalakṣanā. Raghunatha thinks that Ākāśatva can function as Pravṛttinimitta, because he does not accept the former definition of Pravṛttinimitta, which states that one of the conditions to be a Pravṛttinimitta is that the quality should be Vācya. Raghunatha thinks that even if a quality resides in a Vācya or becomes Prakāra in the memory of Vācya, it can be Pravṛttinimitta¹².

Pandit Visvabandhu Bhaṭṭacāryya has suggested in his paper 'Vyaktivācaka Śabda' (presented at a seminar of Jadavpur University Calcutta in 1979) that if 'Rama' is a proper name then Ramatva consists in Tadvyaktitva. We designate an individual who is qualified by some sort of individuality.

Anyway, in order to identify an object by a word we take help of some property and this is important for our present purpose. When in a categorical sentence, the property qualifying the Viśeṣya and the property qualifying the Prakāra

become the same, the sentence becomes non-informative and thus useless.

Analysis of Frege's theory : In 'On Sense and Reference' Frege has also discussed something about the informative and non-informative identity statements. He deals with the sentences involving singular terms.¹³

Let us deal with it in some details. Suppose there are two sentences-

- (i) The Morning Star is the Morning Star.
- (ii) The Morning Star is the Evening Star.

Both in (i) and (ii) terms are co-referential. They actually refer to the planet Venus. And if we take as a criterion that an identity statement is true if its terms are co-referential, then there should not be any difference between (i) and (ii). But we definitely feel that there is a difference between these two. Not only do we feel, they, in fact, do not say the same thing at all. The first one is a tautology, while the second one is contingent, because it reveals an empirical discovery of Astronomy. According to Frege, the difference cannot be explained in terms of reference, but in terms of the mode of presentation or sense. The Nyāya philosophers differ from Frege regarding the status of the non-informative identity statements, but it is very interesting to note that Frege's analysis of the identity statements closely resembles Nyāya analysis. Let us take the example of an informative identity statement. Both Frege and the Nyāya philosophers would admit the cognitive value of such a statement. The sentence 'Hesperus is Phosphorus' is true because the object presented as Hesperus is the same with the object presented as Phosphorus. In Nyāya terminology the *Uddeśyatāvacchedaka* and the *Vidheyatāvacchedaka* qualify the same object and thus the sentence becomes true. This mode of presentation is what is called sense by Frege. Frege thinks that in order to

identify an object by names, we have to take help of this sense. Similarly the Nyāya philosophers also think that any referring expression must be applied by means of Prayṛttinimitta or Upalakṣaṇā or simply via some property. There is a similarity in thought in case of the application of proper names or singular terms. While dealing with Ākāśatva, some Nyaya Philosophers say that it may differ from person to person and from sentence to sentence. Similarly according to Frege, it is extremely difficult to find a universal sense for an ordinary proper name in ordinary language. In a footnote in 'On Sense and Reference', Frege comments - "In the case of an actual proper name such as 'Aristotle' opinions as to the sense may differ. It might, for instance, be taken to be the following : the pupil of Plato and teacher of Alexander the Great. Anybody who does this will attach another sense to the sentence 'Aristotle was born in Stagira' than will a man who takes as the sense of the name : the teacher of Alexander the Great who was born in Stagira. So long as the reference remains the same, such variations of sense may be tolerated, although they are to be avoided in the theoretical structure of a demonstrative science and ought not to occur in a perfect language.¹⁴

It is very astonishing that the Nyāya philosophers and Frege have the same kind of analysis and explanation, but they differ regarding the status of non-informative identity statements. The difference perhaps is very obvious. Sometimes it seems doubtful whether the Fregean analysis and the analysis given by the Nyāya philosophers can be compared so easily. The language used by Frege has some stipulations of its own. Similarly the Sanskrit language used by the Nyāya philosophers has its own stipulations. Perhaps a problem related to any verbal cognition cannot be tackled without reference to the language used. The Nyāya philosophers would never agree that the relation can be expressed by any word whereas Frege's

writings suggest that relations can be expressed via language. If there is a sentence 'The Morning Star is the Morning Star' we would not hesitate to accept the 'is' as the 'is' of the relation of identity.

But apart from the linguistic considerations, if we come back to the philosophical side — is it very easy to decide who is the winner? Even after being acquainted with so many arguments of the Nyāya philosophers we would favour Frege's attitude in this regard. We may not get any extra information from the non-informative identity statements, but that does not mean that these sentences have no cognitive value. It goes against our commonsense to accept such a position and we should say that contrary to their pronouncement the Nyāya philosophers differ from common sense at least in some cases.

Conclusion : We can suggest an alternative explanation to justify the position taken by the Nyāya philosophers. Suppose there is an expression 'Ghataḥ Ghataḥ'. It means that 'The pot is identical with itself' (Ghataḥ Svātādātmyavān). The Nyāya philosophers would agree that in this sentence if identity or Tādātmya features in the Prakāra, then the sentence would become meaningful because the Vidheyatāvacchedaka would convey something more than the Uddeśyatāvacchedaka i.e., they would not be identical. It is to be noted that here identity acts as the relation also. Now if we take the expression 'Ghataḥ Ghataḥ' as such, i.e., if the Uddeśyatāvacchedaka as well as the Vidheyatāvacchedaka are Ghatatva and identity or Tādātmya acts only as the relation, the expression would be useless. Now, let us accept it as a dictum that whenever we would find expression like 'Ghataḥ Ghataḥ' we would include identity or Tādātmya in Prakāra. Thus the expression

would generate verbal cognition and we would have sigh of relief as it goes hand in hand with our common-sense.

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NOTES

- 1a. Śābdabodhecaikapadārthe aparapadārthasya saṁsargaḥ samsargamaryādayā bhāsate. - page 2, Gadadhara Bhattacaryya, Vyutpattivādah (Bharatiya Vidya Prakasana, Varanasi, First Published in 1973).
- 2b. Padasya Padāntaravyatirekaprayuktānvayanauv-bhāvakatvamākāṁkṣā - page 486, Annambhatta, Tarkasamgraha (Bengali explanation of Tarkasamgraha and its Dīpikā by Sri Narayan Chandra Goswami).
2. Arthābadho Yogyatā - Ibid, page 486.
3. Padānāmvilambenoccārṇaṁ Sannidhiḥ - Ibid, page 486.
4. Tātpratīticchayā uccaritatvarupa Tātparyajñā-neca vākyārthajñāne hetuḥ - Ibid, page 441.
5. Abhedānvayabodhaśca virupopasthitayoreveti vyutpatti - page 99, Gadadhara Bhattacaryya, Vyutpattivādah (Bharatiya Vidya Prakasana, Varansasi, First Published in 1973).

6. Tarhi Ghatādyamśe Viśeṣaṇatāvachchedakavidhayā Nīlādibhānaniyāmaka Nīlādyupasthītātātparyajñānaviśeṣādighatitaiva Sāmagrī Ghatatvāvacchinnaviśeṣyākanīlaghatatvāvacchinnaprakārakabhedānvayabodhaprayojikā vācyā tadabhāvādeva ghato ghatā ityādiṣu na tāḍṛśāsābdabodhapattiriti kecit, - Ibid, page 98.
7. Atha dravyatvātau dharmitāvachchedakatāsambanadhena prasiddhasya śuddhaghatatvādyavacchinna prakāraḥ 'bhedānvayabodhasya ghatatyādvāpattisambhavāt - Ibid, page 99.
8. Tarhi Taddharmāvacchinnabhedasambandhāvachhinna prakāratānirupitaviśeṣyatāvachchedakatāsaṃbandhena śābdabodham prati taddharmabhedasyāpi hetutāyah svīkaranīyatāya no ghato ghata ityadisthale śābdabodhapattih - Ibid, page 112.
9. viśeṣyatvaprakāratvayoravachchedakatve niravacchinna tvena viśeṣanīye - Ibid, page 112.
10. Vastutastu taddharmānyavṛttivisayatāsambandhena jñānam prati taddharmabhedatvena hetutā lāghavāt - Ibid, page 119.
11. Vācyatve sati vācyavṛttitve sati vācyopasthitiprakāratvaṃ Gadadhara Bhattacaryya, Saktivadah (Benaras, 1929), page 41.
12. 'Ataeva Didhitikṛta guṇatīppanyāṃ Rūpagranthe 'Atredam tattvāmi' tyādinagotvādināśābdāśrayaviśeṣaṃ vyutpadaya Prakāśasthapravṛttinimitta-

laksanā vācyatvaviśeṣaṇasyopadānaṃ dūṣitameva

- Ibid, page 59.

13. "On Sense and Reference' in Translations from the Philosophical Writings of Gottlob Frege - Translated by Max Black and P.T. Geach (Basil Blackwell, Oxford, 2nd Edition, 1959).
14. Ibid, page 58.