CHAPTER IV

'VYAPTI' - THE GROUND OF INFERENCE (ANUMANA)

In Indian Logic the logical relation between 'hetu' and 'sādhyā' is found in the concept of 'vyāpti'.

Vyāpti means covering up. In one of its uses, vyāpti expresses a peculiar relation between the extension of one term and the extension of another term. When two terms are so related that the denotation of one is covered by the denotation of the other, the latter is called as 'vyāpaka' - that which covers or pervades, and the former is called 'vyāpya' that which is covered or pervaded. The relation of 'vyāpya' and 'vyāpaka' is called 'vyāpti' (pervasion). Since it is the 'vyāpya' which covers up or pervades the 'vyāpaka', it is said that there is 'vyāpti' of 'vyāpaka' on 'vyāpya'. The 'vyāpya' is the 'hetu' and the 'vyāpaka' is the 'sādhyā'. In its most general form the 'vyāpti' is stated in the following way: wherever there is 'hetu' there is 'sādhyā' and wherever there is absence of 'sādhyā', there is absence of 'hetu'. The above form of 'vyāpti' consists of two parts. - 'wherever there is 'hetu', there is 'sādhyā' and constitutes the first part. It is called 'anvaya'. 'Wherever there is not- 'S there is not - 'H forms the second part. It is called 'vyatireka'.

THE THREE QUESTIONS CONCERNED WITH 'VYĀPTI'

Since 'vyāpti' expresses a relation between 'vyāpya' and 'vyāpaka' it indicates what may be called the notion of implication and the concept of 'follows' from'. The statement of 'vyāpya' implies the statement of 'vyāpaka'. The assertion of 'vyāpaka' follows from the assertion of 'vyāpya'.

According to the Indian Logicians, inference which is based on
the above formal relations of 'implication' and 'follows from' is not merely a formal process. It gives true information. Therefore, in a particular case of inference the terms 'vyāpya' and 'vyāpaka' refer to some real things or facts. This has given rise to a very important problem in the Indian Logic. How can we be sure that the thing denoted by the 'vyāpya' term is so related with the thing denoted by the 'vyāpaka' term that the former cannot occur without the latter? Unless two things are so related that the existence of one necessarily depends upon the existence of the other, the term which denotes the former cannot be called the 'vyāpya' of the term which denotes the latter.

Some Indian Logicians hold that the fact that a thing, X, has never been observed in the absence of another thing, Y is the only proof of the non-occurrence of the former in the absence of the latter.

Dharmakīrti assails this view. He points out that mere non-observation of one thing in the absence of another thing does not prove that the former cannot occur without the latter. It is only when one thing is 'tied up' with another thing by its very nature (svabhāvapratibaddha = svabhāvena - pratibaddha) that the former cannot occur without the latter. He maintains that there are only two ways in which a thing can be tied up with another thing. (1) A thing is tied up (pratibaddha) with that from which it is produced (tadutpatti) (2) A thing is tied up with that which forms its essence, (tadatmya).

Being influenced by Dharmakīrti, Vācaspati Miśra also speaks of 'svabhāvapratibaddha' as the basis of the relation of 'vyāpya' and 'vyāpaka' between two terms. But he does not accept Dharmakīrti's view that the 'svabhāva-pratibandha' between two things is determined by 'tadutpatti' and by 'tadatmya'. He maintains that to say that a thing is naturally tied up with another thing means that the relation of the former with the latter is not conditional i.e. it is not determined by any adventitious condition.
When it is proved that there is no condition other than smoke which determines the dependence of smoke on fire, it is proved that the smoke is naturally tied up with fire. It is only by disproving the influence of any adventitious condition on the occurrence of smoke along with fire (upadhi vidhunana) that the natural dependence of smoke on fire can be proved.

Vācaspati Misra agrees with Dharmakīrti in maintaining that the logical relation of 'vyāpya' and 'vyāpyaka' depends on 'svabhāvikapratibandha' between the thing denoted by the 'vyāpya' term and the thing denoted by the 'vyāpyaka' term. But he does not agree with him regarding what determines the 'svabhāvi pratibandha'. According to Dharmakīrti the relation of 'being produced from' (tadutpatti) or the relation of the 'identity of absence' determines the natural dependence of one thing on another thing. But according to Vācaspati Misra, the natural dependence of one thing on another thing is determined by the absence of any adventitious condition (upādhi).

It is important to note that 'pratibandha' or 'svabhāvapratibandha' is the relation of material dependence. It is not a logical relation. It is the relation of material dependence of one thing on another thing. It is different from the relation of logical dependence. From the material point of view an effect is dependent on its cause. The former is tied up (pratibaddha) with the latter. From the logical point of view the cause depends (anubadha) on the effect. While 'pratibandha' is the relation of material dependence of one thing on another, (anubandha) is the logical relation of 'follows from'. To say that fire is 'anubaddha' on 'smoke' means that the cognition of the former follows from the cognition of the latter. As inference is not merely a formal process but is a source of true information the logical relation of 'sādhyā' with 'hetu' (anubandha) must be based on the material dependence of the thing denoted by 'hetu' term on the thing denoted by the 'sādhyā term'. (pratibandha).

There is one more important question which arises in this context. How
do we know that a thing is tied up with another thing? For the Buddhists this question means that how do we know that a thing is the effect of another thing or that the essence of one thing is identical with the essence of another thing. For the Naiyāyika the question is: how do we know that one thing is unconditionally dependent on another thing? This is the problem of induction. Thus there are three questions regarding the problem of 'vyāpti' (1) what is the form of 'vyāpti'? (2) What is its material basis? (3) How is that material basis determined? Here we shall study only the first two questions. The third question will be dealt with separately.

The Buddhist Logicians express the canon of inference by the term 'avīnabhava' which means that there cannot be 'hetu' without 'sadhya'. Unless it is known that 'hetu' cannot occur without 'sadhya', the former cannot lead to the inference of the latter.

The term 'vyāpti' expresses the quantitative version of the law of 'avīnabhava'. It has two aspects - 'anvaya' and 'vyatireka'. 'Anvaya' means that 'hetu' is present only where 'sadhya' is present. 'Vyatireka' means that 'hetu' must be absent where 'sadhya' is absent.

From the point of use there is no difference between 'anvaya' and 'vyatireka'. Both of them express the same law- the law of 'avīnabhava'. However, there is the maximum difference of form between them. Both these forms are important from the logical point of view. The 'vyatireka' form expresses that it is not the case that 'sadhya' is absent but 'hetu' is present. The 'anvaya' form expresses the mode of inference. It expresses that, the assertion of 'sadhya' follows from the assertion of 'hetu'.

'A-vinabhava' is the canon of inference. 'Vyatireka' is the expression
Thus the relation of 'vyatireka' is the basis of inference. Unless it is certain that 'hetu' is necessarily absent where 'sadhya' is absent, the cognition of 'hetu' cannot lead to the cognition of 'sadhya'. How can 'vyatireka' relation be established between 'hetu' and 'sadhya'?  

The Naiyayikas hold that it is established by non-observing H where S is not observed. Though the Mimamsakas do not recognise the 'vyatireka' form of vyapti, they also maintain that there cannot be any other proof of the non-occurrence of H in the absence of S but the uniform non-observation of H where S is not observed.

Dharmacarila refutes the above view. He contends that for inferring S from H, it is not sufficient to know that H is absent where S is absent. What is necessary for inferring S from H is the impossibility of the occurrence of H in the absence of S. Such a relation between H and S cannot be determined by non-observing H where S is not observed. We take out a small quantity of rice from the boiling pot in order to test whether the rice contained in the pot is cooked or not and find that not a single grain of rice in the sample quantity is left hard. Does it prove that there is left not a single grain of the rice hard in the pot?

Mere non-observation of one thing in the absence of another thing does not prove that the former cannot occur without the latter. It does not rule out the possibility of the occurrence of the former in the absence of the latter. The non-occurrence of H in the absence of S can be certain only when the former is tied up with the latter by its very nature. Unless it is proved that H depends on S by its very nature, mere non-observation of H where S is not observed does not prove that the former cannot occur.

H = the thing denoted by hetu term; S = the thing denoted by Sadhya term, s = the assertion of sadhya in the form of proposition e.g. the hill is fiery, h = the assertion of the reason in the form of proposition e.g. the hill is smoky.
in the absence of the latter, because even if \( H \) is never observed in the absence of \( S \), the possibility of the occurrence of \( H \) in the absence of \( S \) still remains. Therefore, if it is held the denial of \( S \) must lead to the denial of \( H \), it must also be accepted that \( H \) depends on \( S \) by its very nature. It is necessary to accept that the denial of \( s \) implies the denial of \( h \), otherwise \( s \) cannot be inferred from \( h \). Therefore, it must be accepted that \( H \) depends on \( S \) by its very nature.

A 'hetu' is so related with 'sādhya' that the former is sufficient by itself to lead to the inference of the 'sādhya'. Such a relation between them can be assured only when \( \neg s \) implies \( \neg h \). The relation of implication between \( h \) and \( s \) in a particular case of inference must be based on the relation of some kind of dependence of \( H \) on \( S \) (pratibandha).

The natural dependence of \( H \) on \( S \) is possible only in two ways:

1. When \( H \) is the product of \( S \) (tadutaṭṭha) or when \( S \) forms the essence of \( H \). The tree forms the very essence of 'simsapa'. Only a thing having branches etc. is called 'simsapa'. And any thing which has branches etc. is called a tree. Thus to be tree is the very essence of 'simsapa'. To deny that a thing is tree is to deny that it is a 'simsapa' because to be a tree is the essence (atma) of the 'simsapa'. How can a thing be possible without its essence? Thus, it is by virtue of its very essence that 'simsapa' is tied up with (pratibaddha) tree. Hence, a thing which is not tree cannot be 'simsapa'.

Similarly, the elimination of effect goes along with the elimination of cause. If on the elimination of \( X \), \( Y \) is not eliminated the latter cannot be regarded as the effect of the former. Thus the very essence of an effect (karyasvabhāva) depends on its cause. Thus a 'hetu' implies a 'sādhya' only when the former is the effect of the latter, or when the latter constitutes the very essence of the former. But in both the cases
it is because of its very essence that \( H \) is tied up with \( S \). And it is only because of the 'svabhāya pratibandha' in both the cases that the denial of \( H \) necessarily implies the denial of \( S \).

When a thing is not dependent on another thing by its very nature how can the denial of the latter imply the denial of the former? Can we regard the argument that a man does not possess a cow because he does not possess a horse or that a man must possess a horse because he possesses a cow as valid? Thus, a hetu leads to the inference of a 'sādhya' only because the former is tied up with the latter by its essence and the tie (pratibandha) is possible only either when the \( H \) is produced by \( S \) or when the \( S \) is identical with the essence of \( H \). Dharmakīrti declares that the law of 'avīnabhāva which is the canon of inference is determined only when the \( H \) is the effect of \( S \) or the when the essence of \( H \) is identical with that of \( S \). It cannot be determined merely by observing \( H \) where \( S \) is observed and non-observing \( H \) where \( S \) is not observed?

As 'avīnabhāva' is determined by 'svabhāya pratibandha'; it does not presuppose the concomitance of actual absence of \( S \) with the actual absence of \( S \). In some cases of inference, it may not be possible to point out to an actual instance of the non-existence of \( H \) and the non-existence of \( S \). But it does not preclude the statement of 'avīnabhāva' between \( H \) and \( S \). To state that the denial \( S \) implies the denial of \( H \) does not mean that there is the actual absence of \( H \) and \( S \) at certain places. For example, there is nothing for the Buddhists which is not transient or which is not a product. But it does not mean that we cannot say that the denial of \( a \) 'being transient' implies the denial of 'being a product'. To say \( \overline{a} \) not \( a \) implies not \( a \) does not mean that there is not \( a \) and not \( a \). It simply means that if \( S \) is non-existent, \( H \) must be non-existent. Thus, the law of 'avīnabhāva' which is the canon of
inference can be stated in 'anvaya' as well as in 'vyatireka' form in all the cases of valid inference. Dharmakirti, thus, rejects the Naiyayikas' notion of 'kevalavyatireki' 'Hetu' or 'kevalanvayi', A 'hetu' must have 'anvaya' as well as 'vyatireka' relation with the 'sādhyā'. The 'anvaya' 'vyāpti' means that h is affirmed when s is affirmed. 'Vyatireka vyāpti' means that h must be denied where s is denied. One necessarily implies the other. When only one form of 'vyāpti' is given, the other can be known by implication (arthāpattya).

In brief, we can put Dharmakirti's theory of the ground of inference in the form of the following points:

1. h must imply s (avinnabha = vyatireka)
2. s must follow from h (anvaya = anubhanda)
3. 'h implies s' implies 'not - s implies not - h'
   or
   'not - s implies not - h' implies 'h implies s' (arthāpatti)
4. The relation of implication between s and h is materially determined by the natural dependence of H on S (pratibandha)
5. 'Pratibandha' is possible when either H is the product of S (tadutpatti) or when S is identical with the essence of H.

FORMS OF 'VYĀPTI' ACCORDING TO THE NAIYAYIKAS

The Naiyayikas hold that 'vyāpti' is a general proposition which is established by induction. A general proposition which is not supported by an actual instance cannot be regarded as 'vyāpti'.

They hold that there are two kinds of 'vyāpti' - 'anvaya vyāpti' and 'vyatireka vyāpti'. The 'anvaya vyāpti' is independent of the 'vyatireka vyāpti'. 'Anvaya vyāpti' means invariable concomitance between H and S 'vyatirekavyāpti' means invariable concomitance between the absence of S
and absence of H. Both are established independently by means of observation. By observing smoke and fire together, it is established that where there is smoke, there is fire. By observing the absence of smoke wherever the absence of fire is observed, it is established that where there is absence of fire, there is absence of smoke.

When fire is to be inferred from smoke, the invariable concomitance between smoke (hetu) and fire (sādhyā) is called 'anvaya - vyāpti,' and the invariable concomitance between the absence of fire (absence of sādhyā) and absence of smoke (absence of hetu) is called 'vyatireka vyāpti.' Thus, vyāpti is the relation of invariable concomitance between two real things or between the real absence of two real things.

In some cases of inference, there is 'anvaya-vyāpti' as well as 'vyatireka vyāpti' between 'hetu' and 'sādhyā' e.g. in the case of inferring fire from smoke. In some cases there is only 'anvaya - vyāpti' between 'hetu' and 'sādhyā' e.g. in the case of inference that the jar is nameable because it is knowable. We cannot speak of 'vyāpti' between what is non-nameable and what is non-knowable as there is nothing which is not knowable. The inference based on 'anvaya-vyāpti' only, is known as 'kevala-anvayi' inference.

In some cases of inference, there can be only 'vyatireka vyāpti.' The earth is different from the other elements because it possesses odour. Here, we cannot say that whatever possesses odour is different from the elements other than the earth as there is no such element other than the earth which is - here, the subject (pakṣa). But we can say that whatever is non-earth is devoid of odour e.g. the water, the fire etc.

The inference based on 'vyatireka vyāpti' only is called 'kevala-vyatireki' inference.

The Advaita Vedantins and the Mimamsakas do not recognise
'vyatireka vyāpti!' It should be noted that according to all the realist logicians of India, 'vyāpti' is a generalisation based on experience. The Buddhists, on the other hand, maintain that 'vyāpti' is a purely logical concept. The Mimamsakas & the Advaijins who reject 'vyatireka vyāpti' think that a 'vyatireka-vyāpti' cannot be established by induction. They also think that a 'vyatireka - vyāpti' cannot be the basis of inference, as in every case of inference, it is the 'sadhyā' which is to be inferred from the 'hetu'. They, thus, accept only one kind of inference which they call as 'anvayi - inference'.

\[ \text{SAMAVYAPTI AND VISAMAVYAPTI} \]

The invariability of concomitance may be either reciprocal or non-reciprocal. In the former case the two terms are invariably concomitant of each other, in other words, when all H is all S, invariable concomitance between them is reciprocal. In Sanskrit, it is called 'samavyapti'. For example whatever is knowable is nameable. This proposition can be converted simply. Whatever is a nameable is knowable. When the invariable concomitance between two things is reciprocal either of them can serve as the reason for the inference of the other. But such instances are very rare. In most of the cases of inference, we find that the extension of S is more than the extension of H.

CRITICISM OF THE BUDDHISTS THEORY OF PRATIBANDHA BY THE NAIYAYIKAS

We have seen that the Buddhists hold that the law of 'avinābhava' depends on 'pratibandha'- natural tie between H and S. We have also seen that the Buddhists maintain that the 'pratibandha' is possible only when S forms the essence of H or when H is produced by S. The Naiyayikas criticise this view.
Jayanta points out that when \( S \) is identical with the essence of \( H \), there cannot be any difference between 'hetu' and 'sādhya'. If there is no difference between 'hetu' and 'sādhya', it is absurd to say that the former leads to the cognition of the latter. The same thing cannot be regarded as the instrument and that which is to be achieved through the instrument. The relation of means and the realizable goal presupposes a distinction between them. The cognition of 'hetu' leads to the cognition of 'sādhya'. First, we cognise a 'hetu' and the cognition of 'sādhya' follows from it. Does the cognition of 'hetu' reveal the 'sādhya' or not? If it does not, 'hetu' and 'sādhya' cannot be regarded as identical. As they are not identical, according to the Buddhists, the cognition of the former will never lead to the cognition of the latter. If it is maintained that the cognition of the former also reveals the latter, then the latter too is cognised by the perception of the former. What, then, is the use of inference?

It may be suggested that inference is required to remove certain misconceptions held by persons regarding the nature of 'sādhya'. Jayanta points out that if a thing is distinctly perceived by a person, there remains no possibility of his being doubtful regarding its nature or attributing any false characteristics to it. When we perceive an object distinctly possessing head, hands, legs etc., how can we think that the object is a bare trunk of a tree and not a man.

In this case, as a person is not identical with hands', head, legs etc., it may be conceivable that a person who perceives something possessing hand, head etc. may not be certain that the object is a man and may have to resort to inference in order to be certain that the object is a 'man'. But when 'treeness' and 'sīmśāpūṭva' are regarded identical, the perception of
an object as 'simsapa' leaves no room for imputing to it any other character than 'treeness'.

Moreover, when a person perceives something as 'tree' he may not be certain as to its being a 'simsapa'. But when a person clearly perceives an object as 'simsapa', it is very strange that he does not perceive it as tree and requires inference to know it to be so.

The Buddhists may point out that the Naiyāyika confuses 'pratibandha' with 'sambandha'. 'Pratibandha' is one way dependence, while a relation or 'sambandha' is reciprocal. When A necessarily depends upon B, it is known that A is 'tied up with (pratibandha) with B. If A depends upon B, it does not mean that B also depends upon A. B may be independent of A. So it is the 'simsapātva' which necessarily depends upon 'vrksatva' and not vice versa.

Jayanta accepts that this is correct. But he thinks that if the Buddhist accepts this kind of relation between 'hetu' and 'sādhya', he should not say that the relation between 'hetu' and 'sādhya' is based on the identity of the thing referred to by the former with the thing referred to by the latter. Then, the relation between the things referred to by 'hetu' and 'sādhya' respectively is nothing but that of invariable concomitance.

The relation of identity is reciprocal in nature. If A is identical with B, B should also be identical with A. If 'simsapātva' and 'vrksatva' are regarded identical, then neither of them should be present in the absence of the other. Just as 'simsapātva' cannot be separated from 'vrksatva', similarly 'vrksatva' also should not be separated from 'simsapātva'. Only then, the relation between them can be regarded as of the nature of identity. But we find 'vrksatva' in the 'khadira' etc., without perceiving 'simsapātva' there. How, then, can we regard them as identical? The Buddhist logicians accept that 'sādhya' (vrksatva) can be conceived without the 'hetu' (simsapātva) yet they hold that the thing taken as 'sādhya' is identical with the thing
taken as 'hetu'. This is nothing but deceiving others. Either the Buddhists should give up their notion that the thing denoted by 'sādhyā' and 'hetu' are identical or they should prove that 'śimśapātva' can be inferred from 'vrksatva' in the same way in which 'vrksatva' can be inferred from 'śimśapātva'. They cannot consistently maintain both the positions.

Vācaspati Misra clarifies the Buddhist position. The Buddhists hold that what we call 'śimśapa' and what we call 'vrksa' are ultimately one and the same thing. The term 'śimśapa' denotes a thing which is also denoted by the term 'vrksa'. Thus, denotatively, 'śimśapātva' is identical with 'vrksatva'. Though, ultimately the thing denoted by the term 'śimśapa' is not different from the thing denoted by the term 'vrksa', yet an imputed distinction is made between the concept of 'śimśapa' and the concept of 'vrksa'. Two different concepts may be superimposed upon the same thing. The 'vrksatva' and 'śimśapātva' are not identical as concepts but they are identical as both of them have identical point of reference. As the concept of 'vrksatva' is different from the concept of 'śimśapātva,' though their point of reference is the same, it is not justified to say that the relation of 'gamya' and 'gamaka' cannot be maintained between 'sādhyā' and 'hetu' which is based on the 'pratibandha' of identity.

The Naiyāyikas, being a realist, cannot accept that two different concepts refer to the same thing. For them, two different concepts mean two different real entities. Vācaspati argues that if two different concepts refer to an identical reality, then the reality will have no meaning. If the concepts were not real, they would not be concepts. Therefore, it is wrong to hold that two concepts can refer to one identical reality. Neither two concepts are identical, nor the reality referred to by them is identical.
Thus, the difference between 'simsapatva' and 'vrksatva' is real. It is not created by imagination. The Naiyayikas conclude that the Buddhist cannot account for the distinction of 'gamya' and 'gamaka' if 'vyapti' is based on 'tadatmyapratibandha'.

Vācaspati points out that the distinction between 'vrksatva' and 'simsapatva' is not just the creation of thought as supposed by the Buddhists. It is a real distinction. Two imaginary concepts which do not correspond to two different real entities can neither be called identical with, nor different from each other. If it is held that all concepts are just thought - constructs (kalpanika) and the relations of difference and identity between them are also determined without referring to any such relations in the reality, then the objective reality will lose its meaning and significance. As a concept is unreal, it cannot refer to reality. Therefore, it is wrong to hold that two concepts which are just thought - constructs refer to the same identical reality. So, they cannot be regarded identical with their reference to one identical reality. Nor can we regard them identical in relation to each other because if we hold so, then all such concepts and terms as substance, earthen, tree, 'simsapa' etc. would be synonyms.

The Buddhists may say that there is no difficulty if we accept them as synonyms. While imputing distinction among the concepts which, in fact, are not different, thought (kalpana) also realizes that they are in fact non-different in relation to one another. All these concepts are predicated of the subject. The predication of these concepts of the same subject cannot be explained if it is not accepted that thought realizes their identity while predicating them of the same subject. Thus, the identity of such concepts as 'vrksatva' and 'simsapatva' is established with reference to the reality of which they are predicated.

The Naiyāyikas point out that this is wrong because the predication of
different concepts of the same subject does not prove that the reality (bhava) denoted by them is identical. Different general names are used to the same object in view of the corresponding 'universals' (jatāyudh) which inhere therein. It cannot be argued that if the different universals inhere in the same substratum then they lose their individual identity as the same may equally apply regarding the different concepts predicated of the same subject.

Thus, the Naiyāyikas conclude that if two concepts are related as 'gamya' and 'gamaka', then the things referred to by them cannot be identical and if they are identical, the concepts cannot be related as 'gamya' and 'gamaka'.

In reply to the Naiyāyikas' argument that it looks ridiculous to say that a person knows by perception that a particular thing is 'simsapa' and needs inference to know that it is a tree, the Buddhists may explain their position in the following way.

Suppose, an unintelligent man resides in a country where 'simsapa' trees grow in abundance. Pointing towards a high 'simsapa' tree, an elderly man tells him that it is a tree. Now, as the person is not very intelligent, he may think that the object is called tree due to its height and may not realize that the small 'simsapa' are also called tree. In order to tell him the proper use of the term 'tree' the elderly person tells him that whatever is called 'simsapa' is also called 'tree'. Later on, when this unintelligent man perceives a small 'simsapa' realizes that it is tree by means of inference. He learns the general proposition that whatever is called 'simsapa' is also called 'tree'. The application of this general proposition to a particular 'simsapa' is inference.

The Naiyāyikas point out that either the word 'tree' is the (sādhya) which is known by means of the cognition of 'simsapa' or the 'sādhya' is the
capability of an object to be called as tree. In the former case, the 'sadhya'
and 'hetu' are not identical as the term 'tree' and the term 'simsapa' are not
identical. In the latter case, as the capability of an object to be called
'tree' is identical with its being 'simsapa', they cannot be regarded to be
related as the in 'gamaka' and 'gamya'.

The Buddhists hold that the 'pratibandha' of identity holds with regard
to a real thing but the logical relation of 'gamya' and 'gamaka' holds with
regard to the logical terms which are thought - constructs.

The Naiyayikas fail to understand this position. Jayanta, therefore,
remarks that the Buddhists simply deceive others when they say that the field
of 'pratibandha' is different from the field of logical relation of 'gamya' and
'gamaka'.

A Jar is non-eternal.
Because it is produced by voluntary action.
Whatever is produced by voluntary action is non-eternal.

This is also regarded by the Buddhist logicians as an argument based
on the 'tadatmyapratibandha'. 'Being produced by voluntary action' is
considered by the Buddhists as identical with 'being non-eternal'.

Jayanta criticises it. He points out that lightning is non-eternal,
though it is not produced by the voluntary action. Now the property of
being non-eternal of lightning cannot be the same as the property of being
non-eternal of a jar, as while the latter is produced by voluntary action,
the former is not. Thus, 'being produced by voluntary action' cannot be regarded
identical with 'being non-eternal' as such. And unless, there is the uniformity
of the relation of identity between 'being produced by voluntary action' and
'being non-eternal' we cannot infer that a thing is qualified by the latter
property because it is qualified by the former property. Identity means non-
difference. If 'being produced by voluntary action' is identical with 'being
non-eternal' then the latter should also be identical with the former. But
it is not so as shown above.

In the case of causal relation, it is logically possible to hold that an effect is necessarily accompanied by its cause, though a cause may not be invariably accompanied by its effect owing to certain negative conditions. Thus, it is not illogical to hold that smoke is invariably accompanied by fire, though fire is not invariably accompanied by smoke. But if two terms refer to an identical thing, how, then, can it be conceived that the thing is called by one term and not by the other. The Buddhists should either give up the relation of identity as the basis of logical relation of 'gamya' and 'gamaka' or be prepared to hold that 'śimśapāṭva' can be inferred from 'vrksatva' and that 'being produced by voluntary action' can be inferred from 'being non-eternal'. There is no third alternative. This is a real dilemma which the Buddhists cannot escape from.

"Word is non-eternal because it is a product." This is also regarded by the Buddhists as an example of the inference based on 'tadatmya -pratibandha'.

Jayanta points out that this inference cannot be explained on the basis of the relation of identity. In order to determine whether the terms 'non-eternal' and 'product' refer to an identical thing or not, it is necessary to determine what they actually mean. The term 'non-eternal' means 'a thing qualified by 'destruction' and the term 'product' means a thing qualified by 'production'. A thing which is produced is destroyed, but production and destruction, birth and death, are not identical. Thus, how can we say that 'product' is identical with 'non-eternal'.

The Buddhists refute the Naiyāyikas interpretation of these terms and show their identity of reference in the following way:

The term non-eternal (anitya) does not mean 'being qualified by destruction' as supposed by the Naiyāyikas. If this were its meaning, it would produce the thought of 'being destructible' in our mind and not that of 'being
non-eternal. But it does not produce this thought. Moreover, thought of 'destructible thing' is self-contradictory. Just as we have the thought of a hill qualified by fire, similarly we cannot have the thought of a thing, e.g. 'word, qualified by destruction.' How can a thing be known as qualified by its own absence? A thing and its absence are never cognised simultaneously. The term 'non-eternal' denotes some positive entity. It does not denote the absence of an entity. How can a term denote presence and absence of the same thing? The presence and absence of the same thing are contradictory. Therefore, they cannot be denoted simultaneously by one word. Thus, the term 'non-eternal' does not mean a thing qualified by its destruction.

The Buddhists hold that the term 'non-eternal' means the reality (sattā) cut off from its both ends—beginning and end. The term 'product' also means 'reality', as according to the Buddhists, a link in the causal chain is called a reality. Therefore, there is no difficulty in holding that 'being non-eternal' is inferred from 'being product' on the basis of identity between them as both the terms mean identical thing viz. reality, moment.

Jayanta thinks that the above explanation of the meaning of the terms 'non-eternal' and 'product' given by the Buddhists is not correct. It is a farfetched explanation. 'Non-eternal' is the 'sādhyā' 'product' is the 'hetu'. To be 'non-eternal' is proved by 'being a product.' If the above argument means that 'reality' is proved by 'reality' then instead of saying that a word is non-eternal because it is a product, people should say that a word is possessed of reality because it is possessed of reality. But no body is so foolish that he would argue like this.

The Buddhists point out that their explanation of the above argument is not so absurd as presented by the Naiyāyikas. Though they maintain that in this argument the 'hetu' and the 'sādhyā' mean 'reality', yet they think
that there is some difference between the 'reality' as conceived to be 'hetu' and 'reality' as conceived to be 'sādhyā'. The 'reality' as conceived to be cut off its both ends is the 'sādhyā' and as conceived something arising from a cause is the 'hetu'.

Jayanta points out that the above method of explaining distinction between 'reality' as 'hetu' and 'reality' as 'sādhyā' is not logically sound. We cannot 'cognise' reality which is cut off both from its beginning and its end. A thing and its destruction are not synchronous. Therefore, how can they be regarded as the 'qualified' and the 'qualification'? Thus, there is no basis of calling a 'reality' cut off from everything else by its origin as well as by its destruction.

The Buddhists argue that a reality can be thought as cut off from everything else by means of the 'idea' of its destruction. To call a thing qualified by its destruction, it is not necessary to perceive it along with its destruction. It is owing to the idea of a quality, that a thing is cognised as qualified by the quality. We have the idea of destruction of a thing, though the thing and its destruction are perceived separately. Even when a thing and its 'quality' are synchronous, the cognition of the thing qualified by that 'quality' depends upon the idea of that 'quality'. Similarly a thing can be thought of as qualified by its end which is yet to take place on the basis of the idea of that end.

Jayanta points out that if this is the contention of the Buddhists, then they should accept that the statement 'word is non-eternal' means that 'word is destructible'. It is unnecessary to bring the concept of reality here to explain the meaning of these terms.

The Buddhists argument that to call 'word' destructible would amount to apply a positive and a negative term to the same thing shows their ignorance of the metaphysical theory of the 'realists'. For the realists,
the absence of a thing is a positive entity and the use of a term to denote it is determined by the positive nature of 'absence' - अभावे (अभावत्व), in the same way in which the use of a term for a substance is determined by the properties of that substance. Thus, the term 'word' and the 'destruction of word' refer to two positive facts which we conceive as related to be the 'qualified' and 'the qualification'.  

The Buddhists think that the above explanation given by the Naiyayikas is not free from difficulties. A valid inference is based on the law of uniformity of relation between the 'hetu' and the 'sādhya'. But it cannot be shown that there is such a uniform relation between 'production' and 'destruction'. 'Production' of one thing is different from the 'production' of another thing. Similarly 'destruction' of one thing is different from the 'destruction' of another thing. As the 'production' and 'destruction' of one thing, they are not identical with the 'production' and 'destruction' of another thing, by observing the relation between the 'production' and 'destruction' of a few things, we cannot frame the law that 'whatever is produced is destroyed'. It cannot be maintained that there is one universal 'production' and one universal 'destruction'. Were it so, the production of one thing should have been accompanied by the production of all things, and similarly, the destruction of one thing should be accompanied by the destruction of all things. Thus, in the absence of a universal production and a universal (समान्य) 'destruction', there cannot be any law of the relationship between 'production' and 'destruction'. Hence by observing the former as a quality of a thing, the latter cannot be inferred as its another quality.  

To this Jayanta offers the following reply. Whatever has been expressed above by the Buddhists is false. We observe similarity between the property of one thing and the property of another thing, though these things are numerically different from each other. The cognition of the
similarity between the property of one thing and the property of another thing serves as logical basis for inferring one from the other. If the 'destruction of one thing' were identical with that thing, there would have been no similarity between the 'destruction' of one thing and the 'destruction' of another thing. But in reality, the 'destruction of a thing e.g. jar is not identical with the thing. It is also not accepted that there is only one 'universal destruction'. Therefore, there cannot be the destruction of all the things, when one thing is destroyed.

A property of one thing may not be identical with the property of another thing. But there may be similarity between them. Though the 'destruction of one thing is not identical with the 'destruction' of another thing, there is similarity between them. This similarity between the property of one thing and the property of another thing is the ground of establishing a law of uniform concomitance with regard to them. It is not accepted by the Naiyāyikas that the truth of an inferential cognition depends only on the cognition of the relation between two universals taken as 'hetu' and 'sādhya'. An inference which is based on a law derived from the similarity of instances also yields correct information. The author of NS., therefore, mentioned 'similarity' as the ground of inference and not the relation between two 'universals'.

Jayanta, thus, concludes that the reason put forward as in the argument that 'the word is non-eternal because it is produced' cannot be regarded as 'svabhāvahetu'. We infer that the word is qualified by 'destruction' from 'the word is qualified by production'. 'Destruction of a thing is not identical with its production.'

The reason for this debate between the Naiyāyikas and the Buddhists is based upon their different theories of meaning. The Naiyāyikas hold that all predicate terms refer to the aspects of the thing denoted by the subject term. But the Buddhists hold that the external thing is a unique
particular (svalaksana) which is unnameable. While for the Naiyāyikas, the difference between two terms presupposes the difference between the things which they denote, according to the Buddhists, this difference between the meaning of terms is only conceptual.

For the Buddhists an object of knowledge which is expressed by a term is a logical construction. The tools of inference - the logical terms and the logical relations are also thought - constructs. The 'hetu' and the 'sādhyā' are not real things. They are simply thought - constructs. They are simply the logical terms. So is the relation that holds between the 'hetu' and the 'sādhyā' a thought construction. Though the process of inference is purely logical it successfully leads the cogniser to a point of efficient activity. In that sense, it is a source of knowledge (a prāmāṇa). But how does inference lead to the point of efficient activity, if it is not based on a real relation?

The Buddhists reply that just as in the case of perception, there is difference between the object of perceptual judgment and the external thing, similarly in the case of inference, there is difference between the ontological relation between things and our interpretation of such relation. The terms 'tādatmya' and 'tadutpatti' express ontological relations. The terms 'svabhava' and 'kārya' express our interpretations of such relations.

Though there is difference between a thing - in - itself (svavastu) and the object of perceptual judgment, yet the latter is not possible unless the thing-in-itself is given as a sense-datum. Though the object of perceptual judgement is not an external reality, yet it leads to a successful activity because it is elicited by the external thing. The object of inference like the object of perceptual judgment is also a mere thought - form. Just as in the case of perceptual judgment, there is an external thing at its basis, similarly, there is a real thing at the base of an inferential judgment.
However, perceptual judgment is different from the inferential judgment in this that while in the case of the former, the external thing is given in the form of sense-datum which elicits the thought-form directly, in the case of the latter the external thing of which a concept is predicated in inference is not given directly in the form of sense-datum. However, in both the cases the concept which is predicated of the reality is elicited by the reality. In the case of perception, the reality given as sense-datum directly elicits the thought-form which is predicated of it. In the case of inference, the reality elicits indirectly i.e. or medially the thought-form predicated of it. A thing which is not given as sense-datum can elicit its thought-form through another thing which is given directly. In the case of perceptual judgment, a thought-form is predicated of the thing given as sense-datum directly i.e. without the mediation of another thought-form. But in the case of inference a concept, a thought form is predicated of the thing which is not given as sense-datum mediately i.e. through the mediation of another concept. The concept which leads to the predication of another concept is called as the sign (līṅga or gamaka). The concept which is predicated of the reality through another concept is known as 'gamyā' or 'līṅgin'. The concept predicated of the reality 'gamyā' and the concept which leads to it (gamaka) are never identical. The concept which leads to another concept (gamakas) is directly elicited by the sense-datum. The concept which is led up to (gamyā) is not directly elicited by the sense-datum.

The concept which is directly elicited by a thing given as sense-datum can lead up to another concept when either the thing given as sense-datum is identical with the thing of which the latter concept is predicated or the thing given as sense-datum is produced by the thing of which the concept is predicated.

The thing which elicits the concept of 'simsapa' is identical with
the thing of which the concept of 'tree' is predicated. The thing which
directly elicits the concept of 'simsapa' may also directly elicit the concept
of 'tree'. Thus the thing which is the basis of the perceptual judgment
that 'this is simasa' may also be the basis of the perceptual judgment that
this is tree. Though the thing which is called 'simsapa' is also called 'tree'
there is difference between the concept of 'simsapa' and the concept of 'tree'.
Therefore, it is possible that a person immediately judges with regard to a
particular thing that it is a 'simsapa' and infers that it is a tree. The
judgment that 'this is simasa' is not identical with the judgment that
'this is tree', though the subject of the judgments denoted by 'this' is
identical. The latter judgment follows from the form.

The Naiyayika points out that the Buddhists hold that the judgment
'this is tree' follows from the judgment 'this is simasa' because the thing
denoted by 'this' 'simsapa' is identical with the thing denoted by 'this' 'tree'.
Then, why does the judgment 'this is simasa' not follow from the judgment
'this is tree'?

The Buddhists reply that they do not hold that two terms which are
predicated of the same thing are identical. The Naiyayikas confuses the
identity of a subject with the identity of its predicate.

CRITICISM OF TADUTPATI PRATIBANDHA

The Naiyayikas criticise the Buddhist concept of 'vyapti' based on
'tadutpati - pratibandha'.

1. According to the Buddhists a 'moment' 'kṣaṇa' is real. But it is
beyond the grasp of 'thought'. The object which is cognised is the mental
grouping of different moments which arise in close succession. But in reality,
there is no chain of moments, as all moments are disconnected from one other.
But human thought fails to grasp the difference between one moment and the
other, and thus an idea of a compact series is produced. Jayanta asks:
when the Buddhists talk of causal relation as the basis of 'vyāpti' does he mean causal relation between two moments or between two series of moments? The first alternative is not tenable. Firstly, there cannot be causal relation between two moments. A moment cannot produce anything. In order to produce an effect, a thing must have duration at least of three moments. Secondly, even if it is presumed that a 'moment' causes another 'moment' it is impossible to cognize the causal relation between them as they are too subtle to be grasped by thought.

2. The second alternative also is not acceptable as a series of moments' is not a real thing. An unreal thing cannot be the cause of anything.

3. If smoke is regarded as the sign of fire because the former is the effect of the latter, then such qualities of smoke as being bitter and blackish and having upward movement should also be regarded as constituting the mark for inferring fire. Being inseparable properties of smoke they should also be regarded as caused by fire. It cannot be accepted that certain properties of smoke are the effect of fire and certain other properties of smoke are not the effect of fire, as no property of smoke can be separated from it.

If smoke along with all its properties be regarded as an effect of fire, then these properties by themselves should be regarded as the marks for inferring fire. But they cannot be regarded so as there is no invariable concomitance between these properties and fire.

Thus, there is no other alternative except to hold that smoke as smoke is the mark of fire because it is invariably accompanied by fire. If this is accepted, then there is no sense in regarding causality as the basis of inference. Then the relation of invariable concomitance between the thing denoted by 'hetu' and the thing denoted by 'sadhya' should be accepted as the ground of inference and not causality or identity.
The Buddhist would reply that such properties of smoke as earthiness, substanceness etc., are not the effect of fire as they are found even in the absence of fire. Whatever occurs in the absence of a thing cannot be regarded as its cause. Thus, as earthiness etc. are not the effects of fire, they cannot be the reason for the inference of fire.

The Buddhists may point out that the causal relation has been accepted as the basis of inference even by the ancient authors of the Vaiśeṣika and the Nyāya. Kanada clearly mentions causal relation as the ground of inference. Gatrtram also mentions some illustrations of inference based on causal relation. He mentions that from a flooded river the rains in the upper regions of the river can be inferred.

This is not accepted by the later writers of Nyāya and Vaiśeṣika. They maintain that Vyapti or Vidhi as it is called by Prasāstapāda is the relation of invariable concomitance between two phenomena and this relation is known by means of observation in agreement and in difference. Prasāstapāda says that the causation and other kinds of relation which have been enumerated in the V.S. as the basis of inference are simply a few illustrations of the relation of invariable concomitance established by induction.

Similarly Jayanta says that in the case of inferring heavy rains in the upper region of a river from its being in spate the relation of causation is not regarded as the logical ground. Rather it is the relation of invariable concomitance which is the basis of inference.

The Naiyāyikas contend that the Buddhist classification of necessary relations under 'identity' and 'causation' is not exhaustive. All the valid inferences regarding the events or facts in nature are not based upon causal relation between the thing denoted by 'hetu' and the thing denoted by 'sādhya'. They hold that there are innumerable instances of invariable concomitance which serve as the basis of inference. For example, the rising of the stars is
inferred from seeing the sunset; tide in the sea is inferred from seeing the full moon; the dry beds of the rivers are inferred from seeing the star Agasta; the impending rain is inferred from seeing the ants carrying their eggs. From the flavour of some stuff, its colour also can be inferred. It is from induction that we know that a particular kind of flavour is associated with a particular kind of colour without discovering any causal relation between them. A colour and a flavour co-exist in a particular stuff. There cannot be causal relation between two co-existing things. Causation is the uniformity of succession. But besides the uniformity of succession we find uniformity of co-existence also and it can also serve as the ground of inference. The uniformity of succession or uniformity of co-existence can be determined by means of induction only.

THE NYAYA CONCEPT OF SMB

The Naiyayikas hold that the universal relation of one thing with another thing which serves as the basis of inferring one from the other can be nothing but the relation of invariable concomitance between them. What we perceive are facts, phenomena or events. Different phenomena are observed as co-existing, or occurring in a regular sequence. Regarding these facts or events of nature, what is to be known is the relation of invariable concomitance of one with the other. It is the discovery of this law of invariable concomitance which serve as the basis of deductive inference (anumāna). How do we know that such a relation subsists between two phenomena is a different question.

Mere concomitance of one thing with the other cannot be the logical basis of inference; If in certain instances A occurs along with B, and in others it also occurs without B, then the knowledge of A cannot be the valid
reason for inferring B. A can be the reason for the inference of B when the latter invariably accompanies the former. Therefore, invariable concomitance (niyata sahacarya or sahacaraniyama) is the basis of inference. This law of invariable concomitance is not determined by causal relation only. It may be causal relation. It may also be the relation of co-existence or co-inherence.

Now, when one phenomenon is the cause of the other, it is not the relation of causation which determines the invariable concomitance between them. The relation of invariable concomitance is more fundamental than the relation of causation. The Naiyayikas think that it is not correct to say that A invariably occurs with B because the former is the effect of the latter. Rather, A may be regarded as the effect of B because the former is invariably followed by the latter. Moreover, there may be the invariability of co-existence or co-occurrence which may not be causal at all, such as the invariable co-existence of a colour along with flavour. It is clear that the Nyāya-vaiśeṣikas look at the problem of universal proposition from empiricist's point of view. For an empiricist causation is nothing more than invariable concomitance. The relation of invariable concomitance cannot be reduced to or identified with causation. There may be invariable concomitance which may not be causal, in nature. When Prasastapāda and Jayanta urge that Kanāda did not intend to give an exhaustive list of the relations while mentioning the five relations as the basis of inference, they are emphasising this point that there may be innumerable other forms of invariable concomitance which may not be subsumed under any of these five relations. Therefore, they say that Kanāda mentions these five relations as illustrations of the relation of invariable concomitance.

Vacaspati points out that from the point of logic there should be no interest in knowing what exactly is the relation between H and S. The logical interest lies in knowing that H is invariably concomitant with S. We
can be sure that a thing is invariably concomitant with another thing when it is known that the former occurs along with the latter by virtue of its very nature.

Vacaspati and Udayana hold that a natural relation is unconditional. When one thing is accompanied by another thing by its very nature and not due to some adventitious condition, the relation of the former to the latter is unconditional and hence, natural. But when a thing is accompanied by another thing by virtue of some adventitious condition and not by virtue of its own nature, the relation of the former to the latter is conditional. The invariability of the concomitance of a thing with another depends upon its being 'unconditional'.

A condition (upādhi) has been defined by different authors, in different ways. According to one of the definition of 'Upādhi' given by Udayana, a condition (upādhi) is that which pervades 'sādhyā' but does not pervade 'hetu'. Vardhamāna explains that the term 'sādhyā', and 'hetu' used in this definition actually means things to be used as 'sādhyā' and 'hetu'. For example, when smoke is inferred from fire wet fuel will be regarded as a condition because it pervades smoke (H) but does not pervade fire (S). Sometimes it is held that a condition is that which has the relation of reciprocal pervasion with S but does not pervade H. In that sense the conjunction of the wet fuel with fire will be regarded as a condition and not the wet-fuel.

If a vyapti concomitance is determined by some condition, it cannot be invariable. Therefore, in order to ascertain that a concomitance of one thing with another thing is invariable, it is necessary to establish that it is unconditional.

While according to the Buddhists vyapti - invariable concomitance depends upon causal relation or that of identity between the things taken as sādhyā and 'hetu', according to the Naiyāyikas it depends upon the unconditional or natural
relation between them. Thus, unconditional relation (anupādhika sambandha)
is not vyapti. The former is the basis (bijam) of the latter. The latter is
a logical relation which holds between 'hetu' and 'śādhyā'. The former is
the material relation which holds between a thing which may be taken as 'hetu'
and a thing which may be taken as 'śādhyā'.

Though according to the realistic logic of the Nyāya 'hetu' and the
thing taken as 'hetu' are not different basically different, yet even the Naiyāyikas
do not completely rule out the difference between them. There is a difference
between a thing viewed in the framework of Logic and the same thing viewed
as outside the framework of logic. Though 'smoke' as 'hetu' is not different
in its nature as smoke from the physical thing smoke. But to speak of smoke
as 'hetu' is not the same as to speak of smoke as a physical thing - a thing
occurring in its physical circumstances. Thus, when the Naiyāyikas say that
smoke is unconditionally accompanied by fire they are referring to
the relation between smoke and fire which are viewed as events occurring in
nature. When they say that smoke is pervaded by fire, they refer to smoke
and fire as logical terms - i.e. the thing 'smoke' and the thing 'fire'
viewed as 'hetu' and 'śādhyā'.

The Nyāya theory of unconditional relation is broader than the
Buddhist concept of 'tadatmya' and 'tadutpatti'. The Naiyāyikas accept
Dharmakīrti's theory of (svabhāvika-pratibandha) but they explain it as
unconditional relation. The Nyāya theory of 'unconditional relation seems to
be the developed form of Buddhist theory of 'pratibandha'.

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