THE DEFINITION OF *VYĀPTI* IN NAVYANYĀYA

—— its nature and construction with reference to Gaṅgeśa and Raghunātha Siromaṇi ——

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Ⅰ. Gaṅgeśa's Definition of *Vyāpti* :
Its Nature and Construction

Gaṅgeśa's conclusive definition of *vyāpti* runs as follows :

pratiyogy-asamānādhikaraṇa-yat-samānādhikaraṇâtyantâbhāva-pratiyogitâvacchedakâvacchin-nam yan na bhavati tena samam tasya sāmānādhikaraṇyam vyāptiḥ[1]

('Pervasion is the co-existence of a thing x with another thing y that is not what is determined by a delimitor of the counterpositiveness of an absence which shares some locus with the thing x and does not share it with its counterpositive').

A. The Meaning of 'Definition'

Before examining this definition, we had better, first, make clear the meaning of the 'definition', which is a rough rendering of the Sanskrit term lakṣaṇa.

Precisely speaking, a statement of definition (*lakṣaṇavākya*) in Indian, logic contains the term of *lakṣaṇa* (*lit.*, 'a characteristic attribute' or 'a defining character', i.e., '*definiens*') and the term *lakṣya* (lit., 'a thing which is characterized or defined', i.e., '*definiendum*'). In this definition of *vyāpti*, however, the definiendum (*lakṣya*) is not the *vyāpti* itself, but it is in fact the *vyāpya* (indicated by *x*). Let us discuss this point in some detail.

It is often pointed out by modern scholars that definitions in Indian logic are predominantly intensional or connotational in character[2]. It probably means that among the two aspects of the meaning of a word, viz., intension and extension[3], the first aspect alone is especially taken into account and described as a definition (i.e., *lakṣaṇa*) in Indian logic. According to Western terminology, the definition is more or less the difinition of a given word, and not that of an object to

which the word refers. However, Indian logicians would talk of the definition of an object or referent of the word. Thus, one should note that the *lakṣaṇa* is not considered as a property of the word (*pada*) but it is a property of the word-referent (*padārtha*). From this aspect alone Indian logicians try to offer the general definition of 'definition', which we will see hereafter.

It is also to be noted that when defining a given object (say, cow)[4] we must know to what the word "cow" is applied; moreover, when examining a given definition we must still know to what the same word is applied; it is only after the given definition is generally accepted that people can ascertain the object as such on the basis of that difinition. In other words, in order to define the given object, we ought to know the members of the class expressed by that word beforehand; otherwise, we may fail to cover all the objects to which the same word is applied. This means that all the members of the class of cow, in this case, must be known. In this respect, the 'definition' is none the less concerned with the extension (i.e., members of the class of an object) of a given word. However, the fact is that we know only a limited number of different individual cows; it would be practically impossible to list up all sorts of cows in the world. Consider another fact that we can apply a single word "cow" to all different individual cows whenever we see them even if they are not seen before. The Naiyāyikas explain this fact by saying that a word has its expressive power (*śakti*) to each individual object (i.e., its referent) which is qualified by the generic character or determining property of all the members of the class of the object.[5] That is, each individual cow can be expressed by a single word "cow" because each of them is possessed of its generic character *cowness*. For the Naiyāyikas, therefore, it will not be necessary to list up all sorts of cows in order to define the object, i.e., cow. Thus, whatever is possessed of the cowness can be settled as a *lakṣya*, and consequently its *lakṣaṇa* should be such a property which co-exists regularly with the cowness, i.e., a delimitor of the state of being the object of definition,[6] and with which the cowness regularly co-exists. The state of having a dew-lap etc. (*sāsnādimattva*), thus, can be said a proper *lakṣaṇa* of the cow because it is concomitant mutually with the cowness.

Naturally, an improper *lakṣaṇa* may be observed from the aspect of the irregularity of the co-existence of a given *lakṣaṇa* and the generic character or determining property of the object of definition. The Naiyāyikas classify the defects of *lakṣaṇa* into three types, viz., (i) the *ativyāpty* ('over-pervasion') which is found in a given *lakṣaṇa* as existing in some locus (i.e., *alakṣya*) where the determining property of the *lakṣya* does not exist; that is, the defect that a given definition is too broad, e.g., when the cow is defined by the state of having horns, (ii) the *avyāpti* ('non-pervasion') which is found in a given *lakṣaṇa* as not existing in some locus (i.e., *lakṣyâikadeśa*) where the determining property of the *lakṣya* exists; that is, the defect that a given definition is too narrow, e.g., when the cow is defined by the state of having a brown colour, and (iii) the *asaṁbhava* ('impossibility') which is found in a given *lakṣaṇa* as not at all existing in the locus

(*i.e.*, *lakṣyamātra*) where the determining property of the *lakṣya* exsits ; that is, the defect that a given definition is of no applicability at all, e.g., when the cow is defined by the state of having uncloven hooves. Thus, the proper *lakṣaṇa* is said to be free from these three defects.[7] It is nothing but a special or peculiar property of the object to be defined.[8]

Let us turn to the 'definition of *vyāpti*'. In general the *vyāpti* is a relation of a *vyāpya* (lit., a thing which is pervaded) to a *vyāpaka* (lit., 'a thing which pervades). This means that *vyāpti* should be a characteristic of *vyāpya*, and not of *vyāpaka*. Gaṅgeśa's definition of *vyāpti*, in fact, is a description of such a characteristic of *vyāpya*, which we will see later in detail. It follows that the *lakṣya* ('definiendum') of this definition is nothing but the *vyāpya* and not the *vyāpti*.[9] It can, thus, be concluded that by the expression 'definition of *vyāpti*' (*vyāpti-lakṣaṇa*) is really meant the nature (*svarūpa*) of *vyāpti*. The importance of this discrimination is apparent when testing the applicability of the definition of *vyāpti*. It should be noted that a probans (*hetu*) must be *vyāpya* in the case of valid inference and it cannot be so in the case of invalid inference. Thus, (i) a given definition will be too broad if it over-applies to some improper probans, (ii) it will be too narrow if it cannot apply to some proper probans, and (iii) it will be impossible if it cannot apply to any proper probans at all ; naturally, a given definition of *vyāpti* will be acceptable if and only if it can apply completely to all proper probans and nothing else.

Of course, such a definition will be purposeful if it functions as the means for testing the validity of a given probans, that is, as a differentiating factor of the valid inferences from the invalid inferences. However, from the standpoint of giving the definition, the general notion of *vyāpti* is required to be possessed beforehand ; similarly, unless one has already known all the cases of valid and invalid inferences, he cannot test the applicability of the definition which is offered. Our attention is directed to see how the definition which is offered by Gaṅgeśa is designed to fulfill that purpose. It is presupposed that we know the concept of *vyāpti* as the regularity of the co-existence of two entities. So, now, we have to examine Gaṅgeśa's own method of analysis of the general notion of *vyāpti*.

B.   The Nyāya Method of Structural Analysis of Cognition

It should be noted that the Nyāya method of logical analysis is concerned primarily with the clarification of relations between entities of which the words refer, rather than relations between words or propositions themselves. The Naiyāyikas, in principle, never deals with a mere word as having no reference to reality. Therefore, the logical words such as "and", "or", "if ... then" and "not" which are supposed to function as statement-connectives in Western logic are by themselves considered less significant in Nyāya.

According to Nyāya, however, any word has its *real* referent in some way or other, and it is supposed that people can make verbal expressions to such an extent that they cognize the word-referents through perception, inference or other means of cognition. For example, people can make a negative expression because they cognize an absence (*abhāva*) of what really exists. Like-wise, people can make an alternative expression which may involve the word "or" and the like be-cause they cognize an eitherness (*anyataratva*) of what actually exists. When the Naiyāyika says A or B, to him both A and B exist and also an abstruct property 'eitherness' exists really in one of the two which he cognizes. In such cases, the Naiyāyika deals only with relations between two real entities, and not with relations between tow words. To say that the word A is related to the word B means the referent of A is related to that of B, according to the Nyāya system.

In case that we know the *vyāpti*-relation and **express** it as, e.g., "wherever there is a smoke there is a fire," the Naiyāyikas would try to analyse the object of cognition from which such a cognition was generated and to describe it in most general terms. From the standpoint of such a thoroughgoing realism, the Naiyāyika regards the object of cognition exactly as the content of cognition[10] which must, of course, assume a linguistic form. The Navya-nyāya language, thus, is often referred to as a technical language.[11] This, of course, does not mean that Nyāya does not use the classical Sanskrit, but it means that Nyāya language is more like a chart or map of the content of cognitions than like a mere ordinary language for communication ; that is to say, it is a language of description and analysis technically called metalanguage, the purpose of which is to clarify and to display several relations between worldly reals as conceived in our cognition.

So far several attempts have been made by modern scholars to interpret Gaṅgeśa's definition of *vyāpti* (especially five provisional definitions in the *Vyāptipañcaka*) by applying the method of modern symbolic logic,[12] prompied by the fact that Gaṅgeśa's presentations are capable of formal analysis with a bit of modification. But, Prof. A. Uno remarks : "still there is some limitation which the criticism of one system by the other cannot transcend."[13] In fact, such a method is not necessarily helpful for ordinary readers who are not familiar with symbolic logic, and thus there cannot but remain the same apparent unintelligibility. The main difficulty of understanding them is that different scholars employ different symbolic notations. In addition, in that method one has to neglect more or less the process of the Nyāya's own method of logical analysis. To test the logical content of the Nyāya method is indeed a matter of the great importance. But, all the same, to know what and how exactly Nyāya said seems to be more important. From this observation, we attempt to represent the chart or map or picture of the Nyāya process of thinking so that we could explain most exactly what Nyāya has to say.

According to Nyāya, cognitions are divided into two types, viz., qualificative cognitions or de-terminate cognitions and unqualificative cognitions or indeterminate cognitions. The qualificative

cognition (*viśiṣṭajñāna*) contains, at least, three elements, viz., a qualifier (*viśeṣaṇa* or *prakāra*)[14], a qualificand (*viśeṣya*) and their connector (*sambandha*).

Suppose that one has obtained a cognition of a pot (*ghaṭajñāna*) through some means of cognition such as perceptin or inference, this can be, according to Nyāya, analysed as follows: First of all, had there been no pot (say, on the ground), he could not have got such a cognition. Therefore, the presence of an individual pot is, no doubt, one of the main causes for the same cognition. But, how was it possible for him to know and say the individual thing as pot? Unless there was something which determined to individual thing as pot, and unless such a determiner was also cognized as a qualifier of that object, he could not have cognized it as pot. The state of having a conch-shaped neck etc. (*kambu-grīvādimattva*), a favorite example of the Naiyāyikas', is a lakṣaṇa of the pot, and such a property does determine the exact object 'pot'. However, the essential determiner of the object which is simply cognized as 'pot' is usually termed by its generic character or abstract property *potness*. Thus, the presence of such a property in that individual object is another main cause for the said cognition.

Moreover, the potness is what exists in the individual pot by a fixed relation, i.e., inherence, since it inhers in all individual pots. The relation of inherence is a connector of the potness and each individual pot. If such a factor was not cognized, then the potness also could not have been known, and as a result, the individual object could not have been known either. Therefore, the relation of inherence is also the main cause for the present cognition.

In this way the cognition of a pot can be analysed as consisting of three main factors, i.e., the potness as a qualifier, the individual pot as a qualificand, and their connector inherence. Such a cognition in which a qualifier is also cognized (i.e., appears as a *prakāra*) is called a qualificative cognition.

This type of cognition is theoretically preceded by an unqualificative cognition which refers merely to something yet undetermined. The stage of such an unqualificative cognition is a logical postulation in the Nyāya epistemology.[15] Even at this stage of cognition, the fact that the individual pot possesses the potness does not change. We have seen that the qualificative cognition of an object requires the knowledge of a qualifier of that object. Now, if someone holds that the knowledge of the qualifier is also a qualificative cognition, that is, this knowledge should also require its qualifier, then there will arise the contingency of an endless regression. Of course, the potness may occupy the position of a qualificand when one has a cognition of the potness itself, and in that case the state of being the potness (*ghaṭatvatva*) will be its qualifier. But, in the case of the cognition of a pot, the potness is considered (i.e., postulated) to appear as a qualifier without being further qualified. If it is maintained that a qualificative cognition is also preceded by another qualificative cognition of the qualifier, then one must postulate an endless number of qual-

ificative cognitions, as a result of which the qualifier will never be known and, consequently, there will arise the contingency that one can never know the pot as pot. Therefore, the unqualificative cognition should necessarily be postulated as a preceding cognition of the qualificative cognition, which, thus, can alone be the exact object of analysis of the Naiyāyikas.

Our attempt is to represent diagrammatically the structure of the content of the qualificative cognition. The basic diagram may be composed of two boxes combined by a vertical line (Fig. 1).
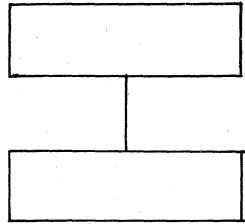

Figure 1

In this figure, three entities (*padārthāḥ* 'word-referent'), are represented by two boxes and one connecting line, all of which constitute the content of a qualificative cognition. The upper box indicates a property (*dharma*) which, if not presented otherwise, appears in a cognition as a quali-fier of the main object, and the lower box indicates that main ojbect which is a locus of that prop-erty and appears in the cognition as a qualificand. The vertical line indicates a connector by which a property exists in its locus.

We must repeatedly make sure that this figure does not represent any assertion or statement but it represents a structure of the content of cognition as analysed by Nyāya. No matter how the cognition is produced (say, by perception or inference or other means), the qualificative cognition would take such a fixed structure and must assume a linguistic form; that is, each element of it has its corresponding word, e.g., *ghaṭatva*, "potness", *samavāya* "inherence" and *ghaṭavyakti* "indi-vidual pot" in the case of the cognition of a pot, which can be shown as follows:
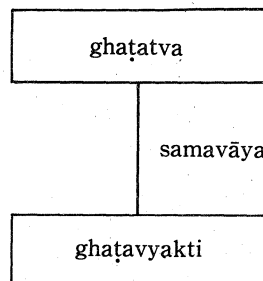

Figure 2

Any individual pot is cognized as that which possesses the potness as its qualifier (*viśeṣaṇa*) through the relation of inherence. Such a qualifying property as potness which differentiates all individual pots from things other than pots is often called *avacchedaka* (lit., 'delimitor') which, in such cases, we render as "essential determiner" or, simply, "determiner."

Suppose that the same pot is cognized as existing on some ground and the main focus or qualificand (*viśeṣya*) of the cognition is the ground, then in this case the pot functions as a qualifier which is a non-permanent distinguisher (*upalakṣaṇa*) of the object 'ground', for, the pot is not always a qualifier of the ground. And, in this case, the connector of the qualifier (pot) and the qualificand (ground) is a physical contact (*saṁyoga*). On the basis of such a cognition one may assert "There is a pot on the ground."

In the same manner, one may assert "There is a smoke on the mountain" on the basis of the cognition of a particular mountain as having a smoke through the relation of contact. The structure of such a cognition can be shown as follows:
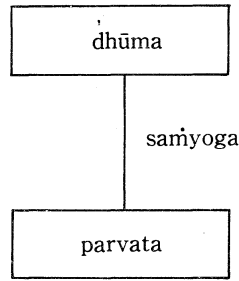

Figure 3

In this connection, three points should be noted. First, the mountain itself is cognized as such by virture of its essential determiner 'mountainness' (*parvatatva*). Secondly, since any mountain is not always cognized as having a smoke, this particular mountain cognized as having a smoke is determined by its particularity or individuality or this-ness (*tadvyaktitva*). Thirdly, the smoke itself is also cognized as such by virture of its essential determiner 'smokeness' (*dhūmatva*). Although this smoke as existing in the particular mountain is also a particular smoke (i.e., a mountain-smoke) and, therefore, it itself possesses its particularity (*tadvyaktitva*), still when this smoke is cognized as the smoke in general then its determiner or qualifier appeared in this cognition should be the smokeness only, and so such a determiner alone could be presented when we describe the content of this cognition.

It is also to be noted that if someone has asserted "There is a smoke on the mountain" on the basis of such a structure of the (*perceptual*) cognition as mentioned then the hearer will possess the verbal cognition whose structure must also be the same.

As in the case of such an affirmative expression, one can also make a negative expression, e.g., "The red-hot iron ball having an absence of smoke". In this cognition, the red-hot iron occupies the position of a qualificand and the absence of smoke is its qualifier. The red-hot iron ball itself, of course, is cognized as such by virture of its essential determiner the red-hot-iron-ball-ness (*ayogolakatva*). Since, however, the red-hot iron ball never possesses a smoke, the particularity of the object (red-hot iron ball) cannot be its essential determiner or qualifier in this cognition even if a single red-hot iron ball alone is actually observed.

Now, what could be the connector of the absence and the red-hot iron ball. According to the Nyāya ontology, the absence (of smoke) in the red-hot iron ball is as real and distinct entity as the red-hot iron ball. Therefore, the absence is said to *exist* in its locus. Such being the case, unless there is a connector or relation between the absence (i.e., a qualifier) and its locus ('red-hot iron ball', i.e., a qualificand), one cannot get the qualificative cognition.

The Naiyāyikas accept generally only two independent or distinct relations, namely, a physical contact (*saṁyoga*) and an inherence (*samavāya*). The physical contact cannot be a connector of the absence, because it is a relation existing between two substances only and though the red-hot iron ball is a substance the absence is not. Nor can inherence be the connector in this case, because it is a relation which exists in five pairs of entities only, viz., between the whole and its part, between quality and its possessor (i.e., substance), between action or motion and its possessor (i.e., substance), between universal (i.e., generic character) and individual things, and between atom-differentiator and eternal substance (i.e., atom or infisitesimal particle).[16] Then, what could really be the connector between the absence and its locus ?

The Naiyāyikas accept a relation called *svarūpa* (i.e., 'itself'), which is usually rendered by scholars as "self-linking connector."[17] Thus, when the absence is known as related to its locus, then the locus itself is accepted as a connector ; and, when the locus is known as related to the absence existing in it, then the absence itself is accepted as a connector. Such a *svarūpa*-relation is a purely logical postulation in the Nyāya system ; for, as we have remarked above, unless there is a connector between the qualifier and the qualificand, the qualificative cognition will be impossible.[18]

It should be noted that the *svarūpa*-relation is a connector by which an absence is expected to exist in its locus and, due to the case that either of the absence or its locus is by itself is taken as a connector, there can be two types of relations by which the absence is cognized or perceived. In other words, since the 'absence' is an object of perception according to Nyāya, there are two types of relation by which the absence is related to (i.e., connected with) the eyes : (i) When the main focus of the cognition is the red-hot iron ball and the absence is its qualifier, then the state of being the qualifier (*viśeṣaṇatā* 'qualifier-ness') itself is considered to be the relation by which the

absence is cognized.[19] (ii) When the main focus (i.e., qualificand) of the cognition is the absence and the red-hot iron ball appears as its qualifier, then the state of being the qualificand (*viśeṣyatā*, 'qualificand-ness') itself is considered to be the relation by which the absence is cognized.

Although in most cases the ontological scheme of property-locus relationship (*dharma-dharmi-saṃbandha* or *ādheya-ādhāra-bhāva*) corresponds to the epistemological sheme of qualifier-qualificand relationship (*viśeṣaṇa-viśeṣya-bhāva*) as in the case of (i) where an property (i.e., 'absence') which exists in the red-hot iron ball appears as a qualifier in the cognition whose main focus or qualificand (i.e., 'red-hot iron ball') is a locus of that property ; in some cases, however, the reversed relationship is observed as in the case of (ii) where the property (i.e., 'absence') which exists in the red-hot iron ball occupies the position of a qualificand of the cognition and the locus of the property appears as its qualifier.[20] In both the cases, however, the ontological fact does not change ; that is, the absence remains a property of its locus 'red-hot iron ball' and it exists there by the *svarūpa*-relation. The content of such a negative cognition can be shown as follows :
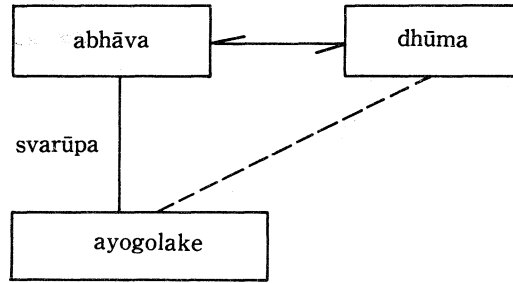

Figure 4

Absences are always absences of something ; that something is called absential counterpositive (*abhāvīya-pratiyogin*) or, simply, counterpositive (*pratiyogin*).[21] When the absence of smoke is cognized as a qualifier of the red-hot iron ball, the smoke will appear as a counterpositive of this absence in this cognition. The mark '⟵—⟶' is used here in order to indicate the relationship between the absence and its counterpositive. A dotted line, here, indicates a relation by which the smoke is not connected with the red-hot iron ball.

The content of this cognition in Fig. 4 can be further analysed as follows ; Frist, to say that the smoke appears in this cognition as a counterpositive of its absence existing in the red-hot iron ball means the smoke itself is cognized as being qualified by the counterpositiveness (*pratiyogitā* 'the state of being a counterpositive', i.e., 'the state of being an object of negation').

Secondly, although the smoke is presented here as a single entity (*padārtha* 'word-referent'),

one cannot presume that a particular smoke alone is negated in the red-hot iron ball, because whatever is called smoke does not exist there. In other words, the presence of smoke is not negated *as* its being a particular individual but *as* its being the smoke in general. To be more precise, what is cognized as its being a counterpositive is not the smoke which is determined by its particularity or this (-individual-smoke-)ness (*tadvyaktitva*) but the smoke which is determined by its essential determiner 'smokeness' (*dhūmatva*). In short, whatever is determined by the smokeness is cognized as an absential counterpositive in this case. Therefore, the smoke here is cognized as having a counterpositiveness to the extent that it is determined by the smokeness, not by its particularity. The Naiyāyikas would put it in the following words : The smokeness *delimits* a counterpositiveness existing in the smoke whose absence exists in the red-hot iron ball.

Thirdly, before negating the presence of smoke on the red-hot iron ball etc., we must know the presence of a smoke somewhere else. Unless the presence of a smoke is established somewhere else, one cannot negate its presence anywhere. The presence of a smoke is indeed established, e.g., in the kitchen etc. Thus, the smoke does possess a connection with the kitchen etc. and this connection is a physical contact. *Therefore*, its negation by such a relation is possible. Or, the presence of a smoke as the 'whole' (*avayavin*) is established in its part or parts (*avayava*, i.e., smoke-particle) by the relation of inherence. *Therefore*, its negation by such a relation is also possible. But, the smoke cannot be negated anywhere by the temporal relation (*kālikasambandha*), because it can be said to exist even in the red-hot iron ball by such a relation ; for, the smoke possesses a connection with the red-hot iron ball in the sense that both the entities exist at the same *time*. Thus, when we have a cognition of the absence of smoke in the red-hot iron ball, the smoke must be cognized as having a counterpositiveness to the extent that it is not connected by some particular relation with the red-hot iron ball and its presence by the same relation is established somewhere else. It is, however, just our intention or attitude which decides the possible relation by which the negatum (i.e., the counterpositive) is expected to exist somewhere else. Such a possible relation is, according to Nyāya, said to *delimit* the counterpositiveness of the negatum (here, smoke). Unless such a relation is explicitly presented, one may urge that the smoke could exist in the red-hot iron ball by the temporal relation.

In this way, the counterpositiveness of the smoke is delimited by both its essential determiner 'smokeness' and the relation of contact or inherence by which the presence of the counterpositive 'smoke' is possible somewhere else. Now, the full content of the cognition of the red-hot iron ball having the absence of smoke can be shown as follows :
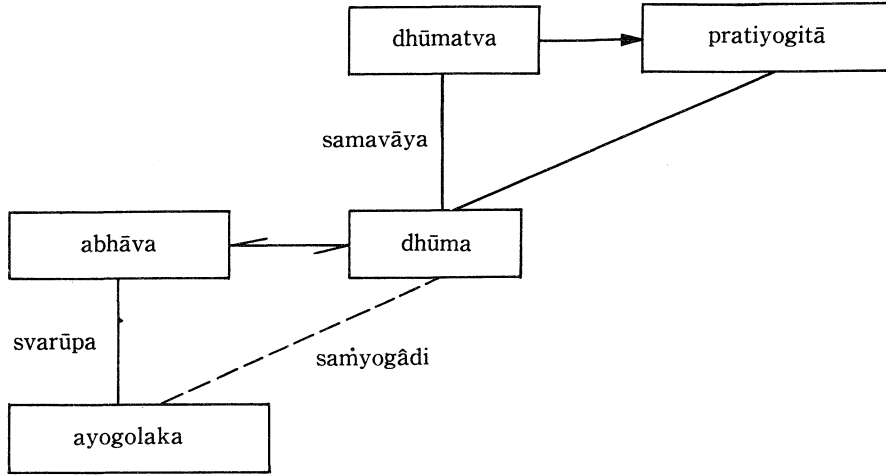
Figure 5

Here, the mark ' → ' is used in order to indicate a direction of 'delimitation' relationship that a property *dhūmatva* ('smokeness') delimits the *pratiyogitā* ('counterpositiveness') existing in the *dhūma* ('smoke'). It may be understood from this figure that the relation of contact etc. (*saṁyogâdi*) is a relation which delimits the same counterpositiveness.

C.   The Structure of Gaṅgeśa's Definition of *Vyāpti*

Let us, now, look into Gaṅgeśa's definition of *vyāpti*, which is presented in such a manner that a thing *x* co-exists with another thing *y* that is not what is determined by a delimitor of the counterpositiveness of an absolute absence which shares some locus with the thing *x* and does not share it with its counterpositive (see p. 1).

As we have seen, this definition should be understood as a description of what is analysed as our general notion of *vyāpti* in which the *vyāpya* (indicated by x) occupies the position of a main qualificand (i.e., a focus of the cognition) forwarded as a definiendum (*lakṣya*), and since any probans (*hetu*) must be *vyāpya* in the case of valid inference, this definition must have the applicability in all cases of proper probans, and thus, it cannot have the applicability in any case of improper probans.

The point of question in defining the concept of *vyāpti* is to give a framework of the general notion of *vyāpti* which can refer to all possible cases. Our task is to clarify and to represent Gaṅgeśa's way of it.

Suppose that we have a cognition of the co-existence of a smoke and a fire, say, on the mountain, the content of this particular cognition can easily be shown as follows:
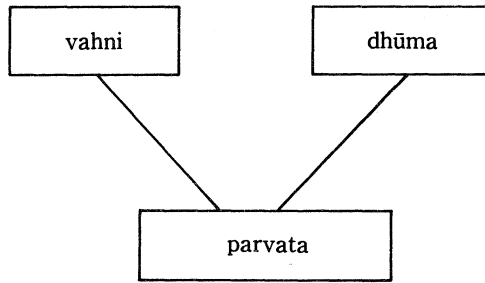
Figure 6

Although each element of this particular cognition is termed by particular entity, this structure does not change whenever one has a cognition of the co-existence of two entities. Now, when the smoke is taken as a probans with reference to the fire which is a probandum, any place where the smoke exists can be the field of inference. One can, thus, construct a valid inference in a most abbreviated form: *Vahnimān dhūmāt* ("It is in possession of a fire because of its possessing a smoke").

However, the co-existence of a smoke and a fire is different in each and every place. That is to say, once the field of inference is decided as, say, the mountain, and there exists a smoke there, then this smoke must be a particular smoke (i.e., a mountain-smoke) and, similarly, the fire whose presence is inferred there must also be a particular fire (i.e., a mountain-fire), and not any other fire such as a kitchen-fire, a yard-fire etc. For example, one cannot infer the presence of a kitchen-fire on the mountain. In fact, the fire whose presence is inferred is not such a fire as determined by its particularity, but it is the fire in general, that is, a fire determined by its essential determiner 'fireness' only. This point is clearly expounded by Raghunātha in his paraphrase of Gaṅgeśa's definition, which we will discuss later on.

According to Gaṅgeśa, the fire whose presence is inferred should *not* be that which is determined by a delimitor of the counterpositiveness of an absence existing in the locus of its probans (i.e., a smoke). Since the fire is determined by the fireness only, the potness etc. alone can be the delimitor of the counterpositiveness. Reflecting the fact that the smoke co-exists regularly with such a fire as determined by the fireness, one can never say that the smoke co-exists with an absence of fire; instead, one can say that the smoke co-exists with an absence of pot (on the mountain etc.). Such being the case, whatever is not determined by the potness which determines the pot and delimits the counterpositiveness of the absence of pot can be treated as that with which the smoke co-exists, and, in fact, the fire which is *not* determined by the potness is that with which the smoke co-exists. Thus, it follows that a probans x can be cognized and said to co-exist regularly with a probandum y if, and only if, the probandum y is not determined by some proper-

ty (say, z-ness) which determines the thing z and delimits the counterpositiveness existing in the thing z whose absence shares some locus with the probans x. Finally, the general scheme of Gaṅgeśa's definition of *vyāpti* can be shown as follows:
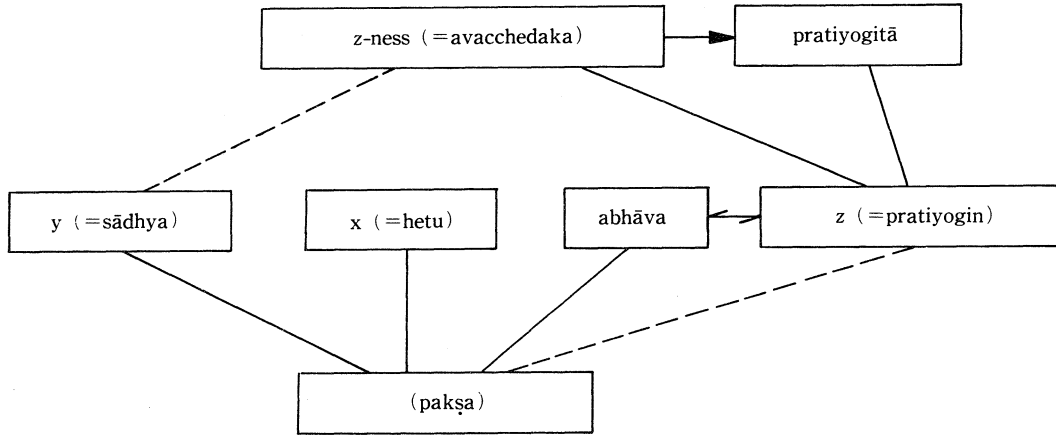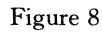

Figure 7

The applicability of this definition in the case of a valid inference *Vahnimān dhūmāt* may be examined in the following manner:

In this case: (1) The probandum is a fire. (2) The probans is a smoke. (3) Take some locus of this probans, e.g., the mountain. (4) There exists no absence of fire, but there exists an absence of pot on the mountain. This absence does share a locus (i.e., the mountain) with the probans, i.e., the smoke: *hetu-samānādhikaraṇa(-abhāva)*. (5) The counterpositive of this absence is the pot, and this absence does not share a locus with its counterpositive (pot): *pratiyogy-asamānādhikaraṇâbhāva*. (6) There exists a counterpositiveness in the pot: *(abhāva-)pratiyogitā*. (7) This counterpositiveness is delimited by the potness: *(pratiyogitā-)avacchedaka*. (8) What is determined by such a delimitor of the counterpositiveness is the pot only: *(pratiyogitâvacchedaka-)avacchinnam*. (9) It is not the fire which is determined by such delimitor: *yan na bhavati*. (10) The smoke does co-exist with such a fire: *tena samaṁ tasya sāmānādhikaraṇyam*. In this way, the definition does fit in to the present valid case where the smoke is a proper probans with reference to the fire. The entire process may be illustrated as follows:

Figure 8

Let us, now, take up an invalid inference, e.g., *dhūmavān vahneḥ* ("It is in possession of a smoke because of its possessing a fire"). In this case the absence of the probandum (smoke) itself can be taken as an absence which share a locus with the probans (fire). Since the smokeness which determines the smoke (i.e., probandum) will also be that which delimits the counterpositiveness of an absence sharing some locus with the probans, there can be no applicability of the definition of *vyāpti* in the case of such in invalid inference. Thus, it follows that a probans x cannot be cognized and said to co-exist with a prbandum y if a property (=y-ness) which determines the y is also that which delimits the counterpositiveness of an absence sharing some locus with the probans x. We will examine the same case as follows :

In the case of *dhūmavān vahneḥ* : (1) The probandum is a smoke. (2) The probans is a fire. (3) The red-hot iron ball can be taken as a locus of the probans. (4) There exists an absence of smoke in the red-hot iron ball. This absence shares a locus (i.e., the red-hot iron ball) with the probans : *hetu-samānādhikaraṇa(-abhāva)*. (5) The counterpositive of this absence is the smoke, and this absence does not share a locus with its counterpositive : *Pratiyogy-asamānādhikaraṇâbhâva*. (6) There exists a counterpositiveness in the smoke : *(abhāva-)pratiyogitā*. (7) This counterpositiveness is delimited by the smokeness : *pratiyogitâvacchedaka*. (8) What is determined by such a delimitor of the counterpositiveness is the smoke, which, however, is the probandum itself. Therefore, the definition does not fit in to the present invalid case. *Hence*, the definition has no defect of over-application in such a case where the fire is an inconsistent probans (*vyabhicāri-hetu*). The following figure may serve to illustrate the case.
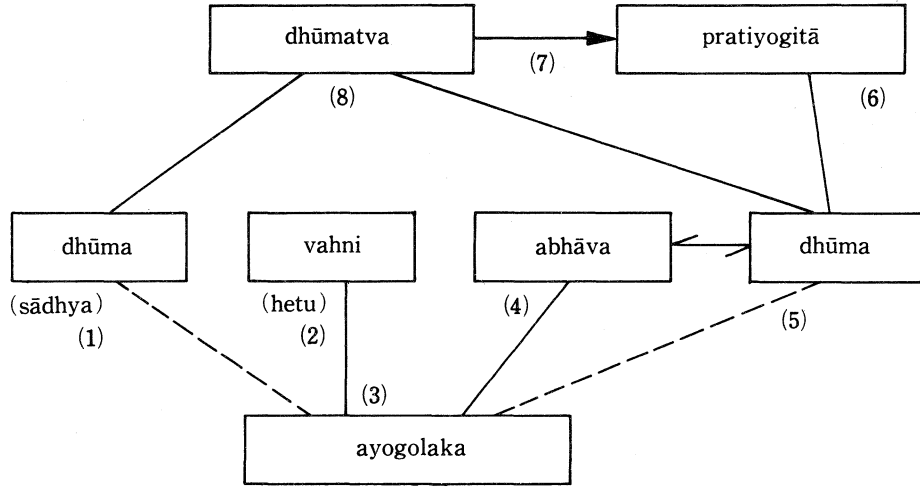
Figure 9

In this Fig. 9. is represented the general scheme of the cognition of the irregular co-existence between two entities (*vyabhicāra*). The fire is an inconsistent probans (*vyabhicāri-hetu*) with reference to the smoke because it exists in the red-hot iron ball etc. where the smoke does not exist. Thus, it cannot be a proper probans (*sak-hetu*) even though it co-exists in the kitchen etc. with the smoke. Since our purpose here is not to examine the validity of the given probans but to examine the applicability of the definition to the given probans, we have especially taken the red-hot iron ball (etc.) where the irregular co-existence is evidently observed.

Ⅱ. Raghunātha's Exposition of Gaṅgeśa's Definition of *Vyāpti*

Gaṅgeśa's definition of *vyāpti* is construed by Raghunātha as follows:

*pratiyogy-asamānādhikaraṇa-yadrūpaviśiṣṭa-samānādhikaraṇātyantâbhāva-praviyogitânavac-
chedako yo dharmas taddharmâvacchinnena yena kena api samaṃ sāmānādhikaraṇyaṃ tadrū-
paviśiṣṭasya taddharmâvacchinna-yāvan-nirūpitā vyāptiḥ*[22]

'When a property (*y*-ness) is the non-delimitor of the counterpositiveness of an absolute abs-
ence which does not share a locus with its counterpositive and which shares some locus with
that which is qualified by a property (*x*-ness), then that which is qualified by the x-ness is to
possess the co-existence with anything which is qualified by the *y*-ness and (such a co-
existence relation) which is conditioned by all things determined by the *y*-ness is pervasion'.

Three noticeable points may be observed in this formulation. First, the word *yad* and *yasya*
in the original definition is reworded by *yadrūpaviśiṣṭa* and *tadrūpaviśiṣyasya* respectively; these
words denotes a probans (hetu) in inference.

Secondly, the expression '-*pratiyogitâvacchedakâvacchinnaṃ yau na bhavati tena samam*' in
the original is rephrased by '-*pratiyogitânavacchedako yo dharmas taddharmâvacchinnena yena
kena api samam*' here; while the word *yan* and *tena* in the original denotes a probandum (*sādhya*)
in inference, the same denotatum is expressed by '*taddharmâvacchinnena yena kenā*' in the latter.

Thirdly, the phrase '*tad-dharmâvacchinna-yāvannirūpitā*' is added by Raghunātha as a qual-
ification of *vyāpti*. Other phrases of Raghunātha's are the same as those of Gaṅgeśa's. As a
whole, the basic scheme of Gaṅgeśa's definition does not change in Raghunātha's formulation.
Our attention, thus, should be directed to see how Raghunātha elaborated Gaṅgeśa's definition.
Let us analyse the above three points one by one.

(i)

We have translated the word *yad* in Gaṅgeśa's definition as "a thing *x*," which denotes a
probans in the case of inference, e.g., a smoke in the case of *vahnimān dhūmāt*.

Suppose the case that we have a cognition of a smoke existing on some place such as the
mountain, this smoke must appear in our cognition either as a particular smoke (i.e., a mountain-
smoke) or as the smoke in general. No doubt, it cannot be denied that the smoke which exists on
some particular place should be cognized as a particular individual. This is, each and every smoke
does posssess its particularity (*tadvyaktitva*), as well as its essential determiner smokeness (*dhū-
matva*). Of course, if our intention is especially directed to the particularity of the object, i.e., the

smoke, then we may say "this smoke" (*tad-dhūma*). However, unless the determiner by which the object is cognized is specified whenever we analyse and present the content of cognition, one may urge : Do you mean to refer to a particular individual or an individual qualified by its generic character or something else ? In this regard, the word *yad* in Gaṅgeśa's definition is an ambiguous term. In order to clarify this point, Raghunātha replaced the same word *yad* by *yadrūpaviśiṣṭa* ('that which is qualified by a property, namely, an essential determiner *x*-ness').

(ii)

In the same manner, the word *tena* in the original is replaced by *taddharmâvacchinna* ('by that y which is determined (=qualified) by its essential determiner *y*-ness'). Thus, when the fire is taken as a probandum in the case of inference, the object 'fire' is to be understood as the fire in general, i.e., a fire which is qualified by the fireness, and not as a particular fire (i.e., a mountain-fire or a kitchen-fire etc.).

We have seen that Gaṅgeśa described the probandum, e.g., the fire whose presence is inferred, as that which is *not* what is determined by a delimitor of the counterpositiveness of an absence existing in some locus of its probans (e.g., the smoke). The same fact will be described by Raghunātha as follows : The fireness is the *non*-delimitor of the counterpositiveness of an absence existing in some locus of the probans (i.e., the smoke) which is qualified by the smokeness. The phrase "a property (*y*-ness) is the non-delimitor of the counterpositiveness" is construed as "a property (*y*-ness) is not a property (say, *z*-ness) which delimits the counterpositiveness."

Thus, according to Raghunātha, that which is qualified by its essential determiner *x*-ness can be cognized and said to co-exist regularly with that which is qualified by its essential determiner *y*-ness if, and only if, the *y*-ness is *not* that which delimits the counterpositiveness of an absence sharing some locus with that which is qualified by the *x*-ness. We may now represent Raghunātha's scheme of the general notion of *vyāpti* as follows :
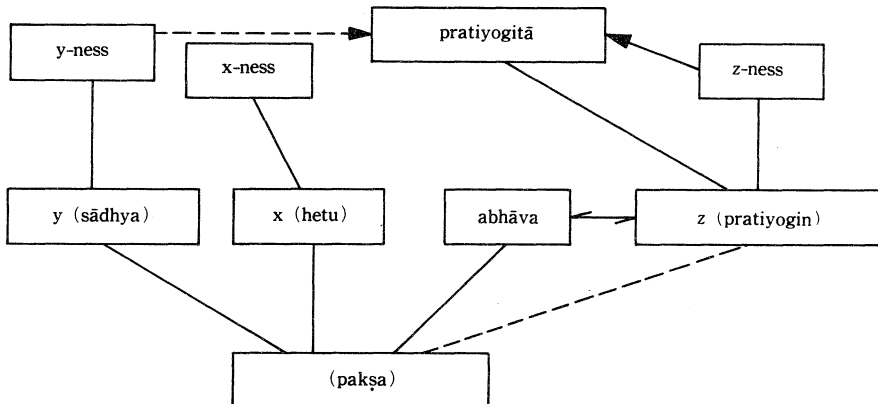

Figure 10

Here, the mark '----→' is used in order to indicate that the *y*-ness does *not delimit* the counterpositiveness : that is, the *y*-ness is the non-delimitor of the counterpositiveness which may be delimited by some other property *z*-ness existing in the individual *z* whose absence shared some locus with an individual x qualified by its essential determiner x-ness.

(iii)

That we have the notion of *vyāpti*, e.g., between the smoke and the fire, means that whenever we observe a smoke existing somewhere we cognize that the smoke possesses a fixed relation with reference to the fire which is qualified by the fireness.

Generally speaking, a relation requires two related things (i.e., relata). If it is the case that a relatum *b* is related to a relatum *a* by the relation *R*, then *a* can be said to *possess* the relation *R* with reference to *b*. In that case the *a* is called a base-relatum (*anuyogin*) of the relation R and the b is called a counter-relatum (*pratiyogin*) of the relation R. If two hands are related (i.e., connected) by the relation of physical contact, for instance, then any one of the relata (i.e., two hands) will be either a base-relatum or a counter-relatum of the same relation. In the case of the *vyāpti*-relation which has a fixed direction, however, the *vyāpya* alone can possess it with reference to the *vyāpaka*, which we have already seen. That is, the *vyāpti*-relation is a relation possessed by a base-relatum which is the *vyāpya* only. Now, if the counter-relatum *b* is not a particular individual but it is what is determined by its essential determiner, say, *b*-ness, then the base-relatum *a* must be possessed of such a relation (*R*) which is conditioned by all things determined by the *b*-ness. Thus, when the smoke is said to possess the *vyāpti*-relation with reference to the fire, then such a *vyāpti*-relation must be conditioned by all fires determined by the fireness, and not by a particular fire. Therefore, although some particular fire which exists in the red-hot iron ball is not that with which the smoke co-exists, such a fire is also included in the conditioners of the *vyāpti*-relation of the smoke with reference to the fire in general. This point on the nature of *vyāpti*-relation is made clear by Raghunātha in the expression : *tadrūpaviśiṣṭasya taddharmâvacchinna-yāvan-nirūpitā vyāptiḥ.*

Let us, now, discuss in this connection some other comments of Raghunātha relarding *vyāpti* as stated in his *Siddh. L.*

A. We have remarked earlier (in p. 10) that the absential counterpositiveness is to be delimited by both a property (which determines the object of negation) and a relation (by which the object of negation is expected to exist somewhere else). So far we have observed, however, that a delimiting property of the counterpositiveness (*pratiyogitâvacchedakadharma*) alone has been specifically presented in the original definition of *vyāpti* of Gaṅgeśa. We have seen that in the case of

'*vahnimān dhūmāt*' the smoke does possess the regular co-existence with the fire because the fire-ness which determines the fire as a probandum does *not* delimit the counterpositiveness of an absence (e.g., an absence of pot) existing in some locus (e.g., the mountain) where the smoke determined by the smokeness exists. So, in that case, if an absence of fire was taken as that which exists in the locus of the smoke, one could not have the notion of *vyāpti* in the smoke, which of course will be contradictory to the fact. Since the fire exists on the mountain (or the kitchen, i.e., the locus of the smoke) by the relation of physical contact, one cannot negate the presence of a fire by the same relation there; that is, one cannot take an absence of fire as that which exists in the locus of the smoke. But, even though the fire exists there by the relation of physical contact, one could take its absence there by some other relation such as inherence;[23] because, according to Nyāya, the fire as the 'whole' *inhers* in its parts (i.e., fire-particles) only, and never *inhers* in the mountain etc. Thus, if such a relation (i.e., inherence) was taken as the delimiting relation of the counterpositiveness (*pratiyogitâvacchedaka-sambandha*), one could take an absence of fire as that which exists in the locus of the smoke, as a result of which there would arise the contingency that one could not have the notion of *vyāpti* in this case. In order to avoid such a contingency, we must specify the delimiting relation, here, as contact. What could be the criterion for such specification?

Obviously, the relation of physical contact should be taken in this case because it is this relation by which the fire as a probandum exists on the locus of the smoke (i.e., the kitchen etc.) and, therefore, its presence cannot be denied by the same relation there.

Now, in the present case, the fire is presented as a probandum because its presence by the relation of contact is intended to infer; in other words, the state of being the object of inference (*sādhyatā* 'probandumness') is controlled or delimited by the relation of contact, as well as by the property fireness.

It can thus be concluded that the delimiting relation of the counterpositiveness should be taken by the same relation which delimits the probandumness.[24]

B.   Raghunātha construes the phrase *pratiyogy-asāmānādhikaraṇyam* in the original definition[25] as *pratiyogitâvacchedakâvacchinnâsāmānādhikaraṇyam.*[26]

First of all, we have to examine the necessity of this phrase *pratiyogy-asāmānādhikaraṇyam* which means "as absence which does not share a locus with its counterpositive."

In the case of *vahnimān dhūmāt*, the kitchen etc. will be the locus of the smoke, and since the fire does exist there by the relation of contact, one cannot take an absence of fire as that which exists there through the same relation. This is what we have seen above. Then, what is the necessity of specifying the 'absence' as the which does not share a locus with its counterposi-

tive.

This specification is necessary because it is possible for us to possess a cognition of the absence of fire on the slope (*nitamba*) of the mountain even if the fire exist on the top (*śikhara*) of the mountain. Although the exact places of the presence and the absence of fire are different, still the *same mountain* could be cognized, at the same time, as having both the presence of fire and the absence of fire. In this case, the presence of fire on the mountain (or the contact of a fire with the mountain) is said to be *delimited* by the top of the mountain; likewise, its absence (or an absence of the contact of a fire with the mountain) is said to be *delimited* by the slope of the mountain.[27] Such being the case, the absence of fire could also be taken as that which exists on the *mountain* etc. where the smoke exists, as a result of which there will, again, arise the contingency that one cannot get the notion of *vyāpti* in this case since the fireness which determines the fire as a probandum will also be the delimitor (i.e., delimiting property) of the counterpositiveness.

Therefore, the 'absence' which is specified as that which shares some locus with the probans (*hetu-samānādhikaraṇa*) should also be specified as that which does not share a locus with its counterpositive (*pratiyogy-asamānādhikaraṇa*). On account of this specification, one cannot take an absence of fire as such on the mountain even though it exists on the slope of the mountain.

It may be noted that such a specification is necessary because the fire is a thing of incomplete occurrence (*avyāpya-vṛtti-padārtha*). If a given probandum is that of complete occurrence (*vyāpyavṛtti-padārtha*) then this specification will be purposeless.

Nevertheless, it is not always necessary to be stated even in the case that a given probandum is of incomplete occurrence; e.g., in the case of inference *saṁyogâbhāvavān guṇatvāt* ("It is in possession of an absence of contact because of its possessing the qualityness"),[28] in which case though the probendum ('an absence of contact') is of incomplete occurrence the said specification will not be required since the absence of this probandum can never exists in the locus (i.e., 'a quality') where the probans ('qualityness') exists.[29] Therefore, we can conclude that the 'absence' in the definition of *vyāpti* is to be specified as stated by Gaṅgeśa to the extent that this specification is purposeful for avoiding the consingency of non-application of the definition in each case of valid inference.

One may urge that if, in this way, the element of the definition is purposeless in some cases then this definition of *vyāpti* cannot be accepted as general definition. To this, Raghunātha will reply: *Vyāpti* should be different in accordance with the difference of each probandum and each probans; hence, the application of the definition of it must be different in each case of inference.[30]

Now, this phrase *pratiyogy-asāmānādhikaraṇyam* is construed by Raghunātha as *pratiyogitâ-vacchedakâvacchinnâsāmānādhikaraṇyam* which refers to the state of an 'absence' which does not

share a locus with whatever is determined by a delimitor of the counterpositivenss (of that abs-ence). The point of question here seems to be that the word *pratiyogy* in the original definition should be understood as *pratiyogitâvacchedakâvacchinna* and it cannot be understood as *pra-tiyogitâśraya.* Raghunātha made such a paraphrase specifically taking into account of some par-ticular cases of inference, e.g., (i) *Ayaṁ guṇakaranyatvaviśiṣṭasattāvān jāteḥ*, (ii) *Bhūtatva-mūrtat-va-ubhayavān mūrtatvāt*, etc.[31] Let us analyse Raghunātha's mind closely considering these two cases.

(i) *Ayaṁ guṇakarmânyatvaviśiṣṭasattāvān jāteḥ*

('It is in possession of the highest universal qualified by the state of being other than qualify or action because of its possessing a generic character')

In this case the generic character (*jāti*) is stated as a probans. It is accepted by Nyāya to ex-ist in substance, quality or action ; hence, the substanceness existing in substances, the qualityness in qualities, or the actionness in actions will be the probans. The object of inference (i.e., prob-andum) is the highest universal qualified by the state of being other than quality or action (*guṇa-karmânyatva-viśiṣṭasattā*), which, in fact, means the highest universal (*sattā*) associated with the state of being other than quality or action (*guṇakarmânyatva*).[32] Since the highest universal (*sat-tā*) exists, according to Nyāya, in substace, quality and action, such a conjoint property which is usually termed simply as the qualified highest universal (*viśiṣṭasattā*) as opposed to the pure or unqualified highest universal (*śuddhasattā*, i.e., *sattā*) exists only in substance or substances. To illustrate :
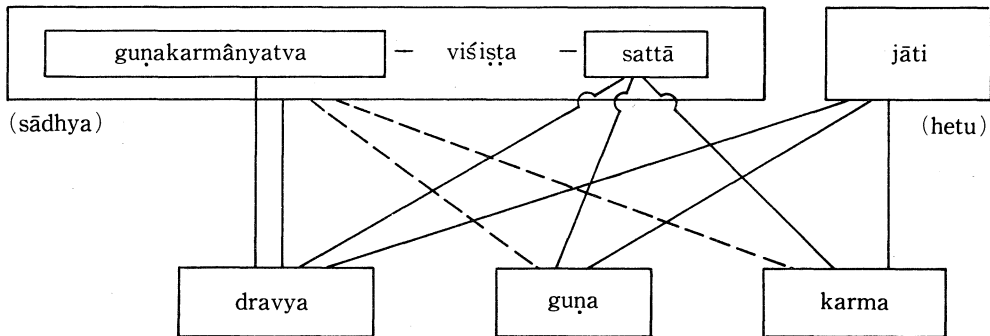

Figure 11

Obviously, this probans ('*jāti*') is an inconsistent probans (*vyabhicāri-hetu*) since it exists in quality and action where the probandum does not exist. Naturally, one cannot have a cognition of the regular co-existence of the generic character (i.e., probans) with reference to the qualified highest universal (i.e., probandum). Thus, the state of being the qualified highest universal (*viśiṣṭasattātva*) which determines this probandum *should* be (cognized as) a delimitor of the counterpositiveness of an absence existing in the locus of the probans, i.e., in the quality etc.

Let us take the quality (*guṇa*) as a locus of the probans, where the irregular co-existence is evidently observed. An absence of the qualified highest universal can easily be taken as that which shares a locus (i.e., *guṇa*) with that probans. Then, apparently the qualified highest universal will easily be settled as an absential counterpositive. Concerning this position, however, there seems to have been two different views among the Naiyāyikas.

One view which seems to be held by Sārvabhauma, a teacher of Raghunātha, is that a qualified entity should be different from a pure or unqualified entity,[33] according to which the qualified highest universal is different from the pure highest universal and so it can easily be settled as an absential counterpositive in this case. But, his disciple Raghunātha maintains another view that a qualified entity is not different from (i.e., is essentially identical with) a pure entity, according to which the qualified highest universal can be replaced by the unqualified highest universal and, such being the case, it should be replaced on the strength of the principle of simplicity. However, if, in this way, the unqualified highest universal becomes an absential counterpositive and, thus, the state of being the qualified highest universal (*viśiṣṭasattātva*) which should be a delimitor of the counterpositiveness cannot be taken as such, then there will arise the contingency of over-application of the definition of *vyāpti* in the present invalid case.

Raghunātha's view may require more explanation. When the presence of the qualified highest universal is negated, what appears in our cognition as an absential counterpositive is the highest universal which is qualified by the state of being other than quality or action. Precisely, in the case of the negation of the presence of the qualified highest universal, the highest universal alone occupies the position of a main focus or qualificand and the state of being other than quality or action will be its qualifier. Generally speaking, whenever we negate the presence of something somewhere, what is exactly negated is the presence of the qualificand and not that of its qualifier. For example, in the case of a negative cognition 'there is no pot on the ground', what is negated is the presence of the pot as a qualificand of the cognition of pot, and not that of its qualifier potness; that is to say, the absential counterpositiveness in this case exists in the qualificand 'pot' and not in its qualifier 'potness'. Thus, no matter how the object of negation is qualified, an absential counterpositiveness exists in the qualificand only. This rule can be applied in the present case also. That is, when the presence of the highest universal which is qualified by such-and-such

is negated, the absential counterpositiveness exists in the highest universal only.

Moreover, since the highest universal is a single entity, there can be an essential identification between the qualified highest universal and the unqualified highest universal.

Accordingly, if the word *pratiyogy* in the phrase *pratiyogy-asāmānādhikaraṇyam* is understood simply as *pratiyogitâśraya* ("substratum of an absential counterpositiveness") then the 'qualified' highest universal can never be an absential counterpositive (i.e., a substratum of the counterpositiveness) since the pure highest universal alone can be a substratum of the counterpositiveness. As a result of it, we cannot take the absence of the qualified highest universal as that which exists in the quality (or the action), because the pure highest universal which alone is a counterpositive of this absence exists there. Thus, we must take an absence of, say, pot etc. as such, in which case the potness etc. alone will be a delimitor of the counterpositiveness. Finally, since the state of being the qualified highest universal, a determiner of this probandum, cannot be a delimitor of the counterpositiveness, one cannot get rid of the contingency of over-application of the definition of *vyāpti* in the present invalid case.

This contingency can be avoided, according to Raghunātha, only if the word *pratiyogy* is understood as *pratiyogitâvacchedakâvacchinna*. Here, *avacchedaka* means "delimitor" and *avacchinna* "determined."

Thus, although an absential counterpositiveness exists only in the pure highest universal when the presence of the qualified highest universal is negated in the quality, the 'qualified' highest universal can become an absential counterpositive since it is determined by the state of being the qualified highest universal which is to delimit this absential counterpositiveness.

(ii) *Bhūtatva-Mūrtatva-ubhayavān mūrtatvāt*

('It is in possession of both the materiality and the elementality because of its possessing the materiality')

In this case the materiality (*mūrtatva*, i.e., the state of having a limited dimension and an action)[34] is stated as a probans, which, according to Nyāya, exists in the five kinds of substances, viz., earth, water, fire, air and mind or the internal organ. The probandum is both the materiality and the elementality. The elementality (*bhūtatva*) exists in five elemental substances, viz., earth, water, fire, air and *Ākāśa* or ether.[35] The probandum, thus, will exist in the four of both material and elemental substances, viz., earth, water, fire and air. To illustrate :
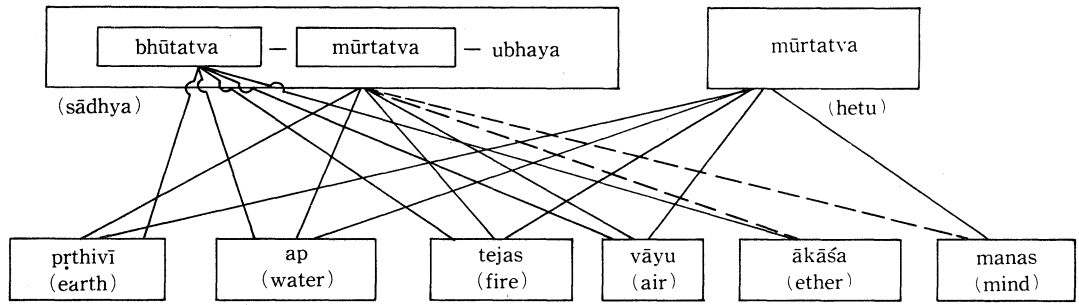
Figure 12

Obviously, the *mūrtatva* ('materiality') is an inconsistent probans (*vyabhicari-hetu*) because it exists in the *manas* where the probandum does not exist.

The determiner of the probandum (i.e., the delimitor of the probandumness) is the bothness (*ubhayatva*), namely the state of being both the materiality and the elementality (*bhūtatva-mūrtatva-ubhayatva*). This *should* be a delimitor of the counterpositiveness of an absence existing in some locus of the probans, i.e., in the *manas*. In other words, we must get an absence of the *bhūtatva-mūrtatva-ubhaya* as that which exists in the *manas*, a locus of the probans.

Indeed, such an absence could be obtained there if the exact object of negation (namely, *pratiyogin*) was *both* the materiality and the elementality. However, in this case also we come across two different views. For, the *bhūtatva-mūrtatva-ubhaya* ('both the materiality and the elementality') can be analysed as *bhūtatva-viśiṣṭa-mūrtatva* ('the materiality qualified by, i.e., associated with, the elementality'), and thus there stands a view that the main focus or qualificand of this negative cognition should be the materiality only, because the absential counterpositiveness exists only in the qualificand, that is, the materiality.

According to someone (perphaps, Sārvabhauma), a qualified entity is different from an unqualified entity,[36] and thus the qualified materiality cannot be replaced by the unqualified materiality since they are two different and independent entities; hence, the counterpositive of an absence of the qualified materiality can easily be sattled, that is, the qualified materiality.

But, Raghunātha objects this view. He maintains that a qualified entity is essentially identical with a pure or unqualified entity. Thus, no matter how the qualification is plused, the materiality is to be cognized as the materiality. Since the qualificand of this cognition is the materiality only, the substratum of the absential counterpositiveness must also be the materiality only. Therefore, if the word *pratiyogy* in the phrase *pratiyogy-asāmānādhikaraṇyam* is understood as a substratum of the counterpositiveness (*pratiyogitâśraya*), then the pure materiality alone will be the counterpositive of an absence of the qualified materiality; but, in fact, the materiality exists in the *manas*

also, hence, after all such an absence can never be taken as existing in the *manas*, a locus of the probans. This, however, evidently leads to an unfavourable result. The word *pratiyogy*, thus, should be understood as that which is determined by a delimitor of the counterpositiveness (*pratiyogitâvacchedakâvacchinna*) then alone the qualified materiality (both the materiality and the elementality) can be an absential counterpositive in the present case.

C.   The First Rephrased Definition of *Vyāpti*:

We have noted (in A.) that the delimiting relation of the counterpositiveness should be specified by the same relation which delimits the probandumness. Thus, in the case of inference *vahnimān dhūmāt*, though an absence of fire can be taken by the relation of inherence in some locus of the probans, e.g., in the kitchen, such an absence cannot be accepted in this case because the fire does exist there by the ralation of contact which delimits the probandumness of the fire as a probandum. In this case, therefore, an absence of pot etc. alone can be taken by the same relation 'contact', and as a result the definition of *vyāpti* does fit in to this case. This is what we have observed.

Let us analyse in this connection that how such a negation (i.e., a negation of the presence of pot by the relation of contact) is possible.

First, whenever we negate something (here, pot) somewhere (here, in the kitchen), we must know the presence of a pot somewhere else; for, unless its presence is exemplified or established (*prasiddha*) somewhere else, its negation will become impossible. This is a rule of negation generally accepted by Indian philosophers. Thus, one can negate the presence of horns *in* a rabbit, but one cannot negate the horns *of* a rabbit anywhere because the rabbit's horns are not established anywhere.

Secondly, when some locus (here, the kitchen) is said to possess an absence of something (here, pot) by the relation of contact, it must have the possibility of possessing some positive entity by the same relation. To negate the presence of a pot by contact in the kitchen means, actually speaking, to nagate the kitchen's possibility of possessing the pot by the same relation; if the kitchen had no posibility of possessing anything by the relation of contact, then we could not have negated 'its possibility', namely, the presence of a pot by that relation.

Under this background, we will see a definite difficulty in the original definition of *vyāpti* regarding some particular cases of inference, if we maintain the position that the delimiting relation of the counterpositiveness should be the same relation as delimiting the probandumness. An example is :

jātimān meyatvāt ('It is in possession of a generic character because of its possessing the

knowability').[37]

In this case of inference its probans is the knowability (*meyatva*, lit., "measurability"), which exists in all knowable things, i.e., in all word-referents (viz., substance quality, action, universal, atom-differentiator, inherence and absence).[38] Its probandum is the generic character (*jāti* or universal, i.e., the substanceness, the qualityness, or the actionness), which exists in the first three categorical entities, viz., substance, quality or action. It can be noted that the generic character exists in its locus by the relation of inherence whereas each knowability exists in its locus by *svarūpa*-relation since the knowability is not a generic character. Obviously, the knowability is an inconsistent probans with reference to the generic character. Thus, the state of being the generic character (*jāti-tva*) which determines the generic character as a probandum *should be* a delimitor of the counterpositiveness of an absence existing in some locus of the probans. In other words, we must get an absence of the generic character in some locus of the probans, of course, by the relation of inherence which delimits the probandumness in this case.

Since the generic character exists by inherence in the first three categorical entities, its absence cannot be taken by the same relation there. Thus, one of the last four categorical entities should be taken as a locus of that absence. Take the universal for instance. There does exist a knowability, i.e., the probans, there by *svarūpa*-relation.

However, the universal can never possess anything by inherence; that is to say, it has no possibility of possessing anything by that relation.[39] In other words, we cannot negate the presence of anything (here, the generic character) by the relation of inherence in the universal etc., and so we cannot take its absence by the same relation there. Accordingly, the state of being the generic character (*jātitva*) which determines the generic character as a probandum *cannot be* a delimitor of the counterpositiveness of an absence existing in some locus of the probans. This is an unfavourable result in the present invalid case. Taking such a particular case into account, one may conclude that the original definition should involve some defect.

Considering such particular cases, Raghunātha rephrases Gaṅgeśa's definition of *vyāpti*. He says: *sādhyatâvacchedake-sambandhasāmānya   nirukta-pratiyogi-pratiyogikatva-hetv-adhikaraṇī bhūta-yatkiñcid-vyakty-anuyogikatva-sāmānya-ubhayâbhāvasya vivakṣitatvāt*[40]
'(The definition does not involve any defect,) because what is intended (in this definition) is that the two-fold absence, i.e., the absence of each one of the pairs which are both the state of being the relation whose counter-relatum is a counterpositive (determined by a delimitor of the absential counterpositiveness) and the state of being the relation whose base-relatum is some locus of probans, are (to be cognized) in all the relation which delimits the probandumness'.

It can be noted that Raghunātha does not change Gaṅgeśas's scheme of the general notion of

vyāpti but he just rephrases Gaṅgeśa's description of the same in order to avoid the difficulty mentioned above.

In the case of inference *jātimān meyatvāt*, the relation which delimits the probandumness, namely, the relation by which the generic character as a probandum is expected to eixst in the field of inference, is inherence. Since this probandum exists by inherecne in the substance (or the quality or the action), we have to take the universal etc. as a locus of the knowability (probans) in order to show the inconsistency of this probans. Then, we should get an absence of the generic character through the same relation 'inherence' there so that we could get the state of being the generic character (*jātitva*) as a delimitor of the absential counterpositiveness. But, such an absence will be impossible to be obtained there because the universal (etc.) has no possibility of possessing anything by that relation. Nevertheless, we *must* get the said absence. How is it possible at all ? This is the question which we observed.

Now, in this case the generic character which should become an absential counterpositive (*abhāvīya-pratiyogin*) can be a counter-relatum (*sambandhīya-pratiyogin*) of inherence since it exists by inherence in the substance etc. Naturally, the substance (etc.) will be termed as a base-relatum (*sambandhīya-anuyogin*) of the same relation. However, the universal (etc.) which is taken as a locus of the probans cannot be a base-relatum of the same relation 'inherence' whose counter-relatum is the generic character. In other words, the relation of inherence which delimits the probandumness in this case possesses the state of being the relation whose counter-relatum is the generic character, and it possesses the state of being the relation whose base-relatum is the substance whereas it does not possess the state of being the relation whose base-relatum is the universal. That is to say, this relation possesses a two-fold absence (*ubhayâbhāva*), i.e., an absence of one of the pair of its states, namely, both the state of being the relation whose base-relatum is the universal and the state of being the relation whose counter-relatum is the universal.

According to Raghunātha, if the delimiting relation of the probandumness possesses such a two-fold absence then that property which can be taken as its counter-relatum can be accepted as an absential counterpositive, i.e., a counterpositive of an absence existing in the locus of probans. In the present case, therefore, the generic character can be accepted as an absential counterpositive. Accordingly, the state of being the generic character can become a delimitor of the absential counterpositiveness.

How could the said difficulty be removed at all ? It may be explained as follows : Although the presence of the generic character cannot be negated by inherence in the universal because of the reason stated above, still its absence can be established there in such a way that the universal is different from the loci where the generic character exists by inherence.

This situation is stated by Raghunātha in such a manner that the relation of inherence has a

two-fold absence ; that is to say, whereas the generic character can be its counter-relatum, the universal cannot be its base-relatum.

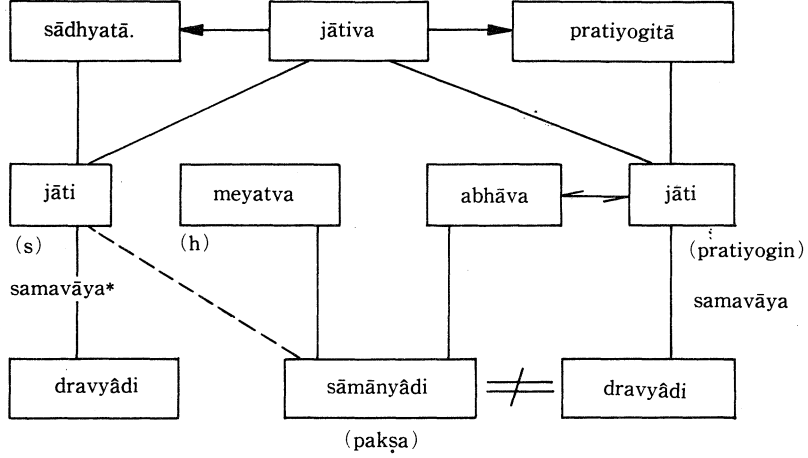The following figure may serve to illustrate the case.
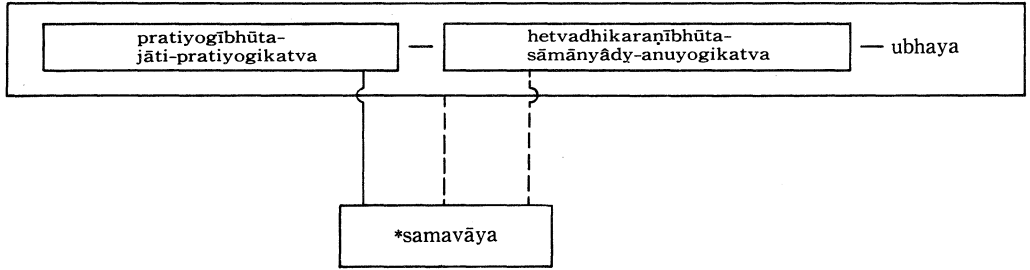

Figure 13

Figure 13a

Let us examine Raghunātha's rephrased definition of *vyāpti* by taking some other cases. For, it must have the applicability not only in such particular cases as mentioned above but also in all possible cases. We will, however, take up only two cases, i.e., (i) *vahnimān dhūmāt* and (iii) *dhūmavān vahneḥ*.

(i) *Vahnimān dhūmāt*:

In this case of inference, (1) its probandum is the fire, which is determined by the fireness. (2) Its probans is the smoke, which is determined by the smokeness. This is a proper probans since the fire exists by contact (*saṃyoga*) in every locus of it. (3) Thus, the delimiting relation of

the probandumness, i.e., the relation by which the probandum is expected to exist in the field of inference, is contact. (4) In such a valid case, the fireness which determines the fire as a probandum should not be (cognized as) a delimitor of the counterpositiveness of an absence existing in the locus of the smoke which is a probans. In other words, we should not get an absence of fire in any locus of the smoke; instead, we should get an absence of pot (etc.) in some locus of the smoke so that we could get the potness (etc.) alone as a delimitor of the counterpositiveness. (5) As a matter of fact, we cannot get such an absence of fire in any locus of the smoke and we can get such an absence of pot in some locus of the smoke, e.g., in the kitchen etc. So, in the present case there will arise no difficulty. But, we have to see how Raghunātha's rephrased definition operates in this case. (6) The relation of contact which delimits the probandumness possesses the state of being the relation whose base-relatum is the kitchen, in which case the counter-relatum will be the fire and cannot be the pot. (7) It can, thus, be said that the same relation possesses *both* the state of being the relation whose base-relatum is the kitchen (i.e., a locus of the smoke) *and* the state of being the relation whose counter-relatum is the fire. In other words, the same relation does not possess a two-fold absence, i.e., an absence of one of the pair, namely, both the said attributes. Therefore, the fire which is taken as a counter-relatum cannot be an absential counterpositive. This is an expected result. (8) Further, the same relation does possess a two-fold absence, i.e., an absence of one of the pair, namely, *both* the state of being the relation whose base-relatum is the kitchen *and* the state of being the relation whose counter-relatum is the pot. Therefore, the pot which is taken as counter-relatum can be an absential counterpositive. This also is an expected result. In this way, Raghunātha's rephrased definition does fit in to the present valid case.

It should be noted in this connection that the two-fold absence (*ubhayâbhāva*) can be established only when there exists an absence of one of the pair of entities (or attributes), and so if there exists a pair of entities (or attributes) then the two-fold absence cannot be established there. Considering such a technical sense of this term of *ubhavâbhāva* in Navya-nyāya, it would be meaningless to say that there stands a two-fold absence when there exists none on the pair.[41]

(ii) *Dhūmavān vahneḥ* :

In this case of inference, (1) its probandum is the smoke, which is determined by the smokeness. (2) Its probans is the fire, which is determined by the fireness. This is an inconsistent probans because it exists by contact on the red-hot iron ball but the smoke does not. (3) The delimiting relation of the probandumness is contact. (4) In such an invalid case, the smokeness which determines the smoke as a probandum should be (cognized as) a delimitor of the counterpositiveness of an absence existing in the red-hot iron ball (etc.), a locus of the fire. In other words, we should get an absence of smoke by contact in the red-hot iron ball. Certainly, we can get such an abs-

ence in this case. But, we have to examine whether the relation of contact possesses a two-fold absence or not. (5) This relation which delimits the probandumness does possess the state of being the relation whose base-relatum is the red-hot iron ball, in which case the counter-relatum will be the fire and cannot be the smoke. (6) Thus, this relation possesses a two-fold absence, i.e., an absence of one of the pair, namely, *both* the state of being the relation whose base-relatum is the red-hot iron ball (i.e., a locus of the fire which is a probans) *and* the state of being the relation whose counter-relatum is the smoke.[42] Therefore, the smoke which is taken as a counter-relatum here can be accepted as an absential counterpositive. This, of course, is an expected result. In this way, the rephrased definition does possess the applicability in the present case also.

D. The Second Rephrased Definition of Vyāpti :

We have observed that the said rephrased definition is purposeful especially for some particular cases when no absence can be obtained in the locus of probans by the relation which delimits the probandumness since the locus of probans has no possibility of possessing anything by that relation.

We have noted earlier that when negating the presence of something by any relation in a certain locus we must know its presence somewhere else; that is, its presence must be established somewhere else. Now, consider the case :

Ghaṭavān mahākālatvāt

('It is in possession of a pot because of its possessing the state of being the universal time').

In this case of inference, its probans is the state of being the universal time (mahākālatva). Naturally, its locus is the universal time, which will be the field of inference. The universal time is one and unlimited entity (akhaṇḍa) which is a locus of everything of the universe,[43] whereas there can be many particular times or moments (*khaṇḍakāla*) which are limited by individual things or events. To say that everything exists in the universal time means, according to Nyāya, everything is related to each other or to the universal time itself by the temporal relation (*kālika-sambandha*). A pot is taken as a probandum in this case. It does exist in the universal time. Thus, we must have a cognition of *vyāpti* in the probans (*mahākālatva*) since it is a proper probans with reference to the pot (or, in fact, to everything).

Consequently, the potness which determines the pot as a probandum in this case should *not* be (cognized as) a elimitor of the counterpositiveness of an absence existing in some locus of the probans (*mahākālatva*). However, the locus of the probans is a single entity 'universal time', and everything exists there by the temporal relation which is a relation delimiting the probandumness

in this case. What absence could we get there by such a relation al all ?

Regarding this question, there is a way by which one can recourse to the said rephrased definition of *vyāpti*. Let us explain it first. When we say that everything exists in the universal time, we are talking of transitory objects which are produced in some particular time and exist only for some limited period. Whatever is produced exists definitely in the universal time by the temporal relation. Thus, its absence, e.g., an absence of cloth, can never be taken as that which exists there. Although a cloth existing in a particular time can be negated in another time and so, in this sense, one can say that an absence of cloth exists in the universal time since the universal time is a locus of everything of the universe (i.e., it is a locus of both the presence of cloth and the absence of cloth), still such an absence cannot be taken because the 'absence' in the definition of *vyāpti* should be such an absence as not sharing a locus with its counterpositive. Therefore, no product can never be an absential counterpositive in this case.

Naturally, one may resort to non-products, e.g., ether (*ākāśa or gagana*) etc. The universal time itself is, of course, a non-product.

There is a view generally accepted by the Naiyāyikas that the ether etc. are entities of non-occurrence (*avṛtti-padārthāḥ*).[44] They can be the loci of products but they cannot be properties of any locus, as opposed to pot, cloth etc. which are entities of occurrence (*vṛtti-padārthāḥ*). If this view is maintained then, apparently, the ether etc. can neither be absential counterpositives; for, unless their occurrence or presence in some locus is established, their negation will be impossible.

However, the problem here seems to be the same one as pointed out previously. Thus, Raghunātha's rephrased definition may be useful in this case also. The temporal relation which delimits the probandumness does possess the state of being the relation whose base-relatum is the universal time (i.e., a locus of the probans), in which case the ether (etc., i.e., non-products) cannot be its counter-relatum. In this way, a two-fold absence, i.e., an absence of one of the pair, namely, *both* the state of being the relation whose base-relatum is the universal time *and* the state of being the relation whose counter-relatum is the ether, is established in the temporal relation. Accordingly, the ether which is taken as a counter-relatum of that relation can be accepted as an absential counterpositive. Finally, the etherness (*ākāśatva or gaganatva*) can be accepted as a delimitor of the absential counterpositiveness existing in the ether which is a non-product, and the potness which determines the pot (as a probandum), i.e., a product, cannot. This is to say that the definition of *vyāpti* fits in to the present valid case.

But, a group of the Naiyāyikas holds that the ether etc. also do *exist* in the universal time by the temporal relation. If this view is maintained then the problem will remain unsettled. For, the ether etc., as well as products, can never become absential counterpositives. Even if the said rephrased definition is adopted, there will arise the contingency of non-application in this case be-

cause the two-fold absence cannot be established in the temporal relation since this relation is to possess *both* the state of being the relation whose base-relatum is the universal time *and* the state of being the relation whose counter-relatum is the ether etc., as well as pot etc.

Considering such a view, Raghunātha, again, rephrases Gaṅgeśa's definition of *vyāpti* in order to remove the said difficulty. He says:

> *svarūpasambandhena gaganāder vṛttimattve tu nirukta-pratiyogy-anadhikarana-hetuman-niṣṭhâbhāva-pratiyogitā-sāmānye yat-sambandhâvacchinnatva-yad-dharmâvacchinnatva-ubhayâbhāvas tena sambandhena tad-dharmâvacchinnasya vyāpakatvaṁ bodhyam*[45]

'If the ether etc. are also accepted as having occurrence by the *svarūpa*-relation (here, temporal relation), then the state of being a pervader *y* can be understood as being determined by a property (*y*-ness) through a relation *r* in condition that a two-fold absence, i.e., an absence of one of the pair of both, the state of being delimited by the relation *r* and the state of being delimited by the property *y*-ness, belongs to all the counterpositiveness of absence which share some locus with a probans *x* and do not share a locus with their counterpositives'.

Although Raghunātha seems to describe here the nature of *vyāpakatva* ('pervaderness') and not *vyāpti* ('pervasion'), still it is all the same in the framework of the definition of *vyāpti*. He just changes the angle of describing the content of the general notion of *vyāpti*. One should, thus, note that the entire scheme of Gaṅgeśa's definition does not change even in this formulation. However, Raghunātha's new contrivance here may be observed on the point that instead of specifying the delimiting relation of the counterpositiveness by the relation which delimits the probandumness he introduces a two-fold absence (*ubhayâbhāva*) of a pair of delimiting factors (property and relation) of all the 'absential counterpositiveness' in the original definition.

If it is accepted that everything (including all products and all non-products) exists by the temporal relation in the universal time, then none of their presence can be negated by the same relation in the universal time. Since, however, we must get some absence which exists in the universal time without sharing a locus with its counterpositive, the specification of the delimiting relation of the counterpositiveness by the relation which delimits the probandumness should be given up in order to get the required absence.[46]

Now, although the presence of a pot which is a probandum cannot be negated by the temporal relation in the universal time (and this is why the *mahākālatva* is a proper probans with reference to the pot), it can be negated by some other relation, say, by inherence, because by this relation the pot as the 'whole' exists in its parts (i.e., pot-halves) only. Thus, if the relation of inherence is taken as a delimiting relation of the counterpositiveness, then we can get an absence of

pot in the universal time, and the pot can become an absential counterpositive. In this case the absential counterpositiveness of the pot is delimited by the potness which is a delimiting property of the probandumness, as well as by the relation of inherence which is *not* a delimiting relation of the probandumness. It can, thus, be said that even if a property which delimits the probandumness is the same property which delimits the counterpositiveness, the probandum can be a *vyāpaka* of a given probans if a relation which delimits the probandumness is different from that which delimits the counterpositiveness of an absence existing in some locus of the probans.

This will be generalized as follows: If the absential counterpositiveness possesses a two-fold absence (*ubhayâbhāva*), i.e., an absence of one of the pair of both, the state of being delimited by a property (*y*-ness which delimits the probandumness) *and* the state of being delimited by a relation (*r* which delimits the probandumness), then the probandum (whose probandumness is delimited by *both* the property *y*-ness and the relation *r*) can be treated as a pervader (*vyāpaka*) of a given probans *x*. This is what is stated by Raghunātha.

According to this formulation, even if an absence can be taken in any locus of a given probans by the same relation which delimits the probandumness, there will arise no contingency of non-applicability of the definition of *vyāpti* in the case of valid inference *ghaṭavān mahākālatvāt* etc., because any relation by which an absence is possible can be taken as a delimiting relation of the absential counterpositiveness. In such a case, however, the delimiting property of the probandumness should be a property which delimits the counterpositiveness. It is worthy to note that if, on the other hand, the delimiting relation of the counterpositiveness can be taken by the same relation as delimiting the probandumness then the delimiting property of the probandumness cannot be a property which delimits the counterpositiveness.

Thus, in the case of *vahnimān dhūmāt*, an absence of fire itself can be taken by inherence in the locus of the smoke. And yet there will arise no contingency of non-applicability of the definition of *vyāpti* since the absential counterpositiveness of the fire does possess a two-fold absence, i.e., an absence of one of the pair of both, the state of being delimited by the fireness (which delimits the probandumness) *and* the state of being delimited by contact (which delimits the probandumness).

Consequently, if an absence which is to exist in some locus of the probans (=smoke) is taken by the same relation as delimiting probandumness (here, contact) then the fireness which delimits the probandumness cannot be a delimitor of the absential counterpositiveness; instead, the potness etc. alone can be accepted as such, because the counterpositiveness of the pot etc. alone possesses the said two-fold absence. Here, one can realize the reason why it was stated earlier that the delimiting relation of the counterpositiveness must be specified by the relation which delimits the probandumness. This specification is, now, declared as unobligatory and it is presented by Raghu-

nātha in the present rephrase definition of *vyāpti*.

(Abbreviations)

BI   Bibliotheca Indica.

Kāri.   *Kārikāvalī* or *Bhāṣāpariccchedaka* of Viśvanātha Nyāyapañcānana. Edited, with Viśvanātha's *Nyāyasiddhāntamuktāvalī*, Dinakara's *Dinakarī* and Rāmarudra's Rāmarudrī, by Ātmarānaśarma. Second ed. Bombay : Nirnaya Sagar Press, 1927.

Materials.   *Materials for the Study of Navya-nyāya Logic* by D. H. H. Ingalls. Harvard Oriental Series 40. Cambridge, Mass. : Harvard University Press, 1951.

Negation   *The Navyanyāya Doctrine of Negation* by B. K. Matilal. Harvard Oriental Series 46. Cambridge, Mass. : Harvard University, 1968.

Nyāya. B.   *Nyāyabodhinī* of Vardhamāna. See *Tarka S.*

Prakāśa.   See TCDP.

Siddh. L.   *Siddhāntalakṣaṇa* of Raghunātha Śiromaṇi. See *TCDP.*

Tarka. D.   *Tarkasaṃgrahadīpikā* of Annambhaṭṭa. See *Tarka. S.*

Tarka. S.   *Tarkasaṃgraha* of Annambhaṭṭa. Edited, with Annambhaṭṭa's *Tarkadīpikā* and Vardhamāna's *Nyāyabodhinī*, by Y. V. Athalye and M. R. Bodas. Second edition (Third Impression). Poona : Bhardarkar Oriental Institute, 1974.

TC.   *Tattvacintāmaṇi* of Gaṅgeśa Upādhyāya. Edited Mathurānātha's Rahasya, by Pandit Kamakhyanatha Tarkavagisha. BI 98. 4 parts. Calcutta : Asiatic Society of Bengal, 1884—1901.

TCDP.   *Prakāśa or Tattvacintāmaṇi-dīdhiti-prakāśa* of Bhavānanda Siddhāntavāgīśa. Edited, with Gaṅgeśa's *Tattvacintāmaṇi* and Raghunātha's Dīdhiti, by G. C. Tarkadarśanadīrtha. BI 194. Calcutta, 1910—12.

(1)   *TC* (BI No. 98), Vol. II, p. 100 ; (*TCDP*, BI No. 194), p. 309.

(2)   See B. K. Matilal, "The International Character of *Lakṣaṇa* and *Saṃkara* in Navya-nyāya," *Indo-Iranian Journal* 8 (1965). Compare J. F. Stall, "The Theory of Definition in Indian Logic," *JAOS* 81 (1964).

(3)   Cf. Wesley C. Salmon, *Logic*, Foundations of Philosophy Series, p. 123.

(4)   Which in Western terminology will be put as defining the word "cow".

(5)   *Tarka D.*, p. 50 : *jātiviśiṣṭavyaktāv eva śaktikalpanāt.*

(6)   *Ibid.*, p. 4 : *lakṣyatâvacchedakasamaniyatatvam.*

(7)   *Tarka D.*, p. 4 : *etaddūṣaṇatryarahito lakṣaṇam.*

(8)   *Loc. cit.* : *sa eva asādhāraṇadharma ity ucyate.*

(9)   *Prakāśa* on *Siddh. L.* (*TCDP*, BI No. 198), p. 320 : *tadrūpaviśiṣṭe ityādinā lakṣya-nirdeśaḥ.*

(10) The term *viṣaya* is used in Nyāya as meaning both the object of cognition and the content of cognition. The cognition (*jñāna*) is thus called *viṣayin* ('container') also.

(11) Cf. K. H. Potter, *The Padārthatattvanirūpaṇam of Raghunātha Śiromaṇi* (Cambridge, Mass., 1957), p. 17.

(12) S. Sen, *A Study on Mathurnātha's Tattvacintāmaṇirahasya.* D. H. H. Ingalls, *Materials for the Study of Navyanyāya Logic.* J. F. Stall, "Correlation between Language and Logic in Indian Thought," *Bulletin of the School of Oriental and African Studies* 23 (1960). C. Geokoop, *The Logic of Invariable Concomitance in the Tattvacintāmaṇi.*

(13) "The Concept of *Vyāpti* in the Nyāya School," *Acta Asiatica* 3, (1962), p. 17.

(14) *Viśeṣaṇa* is the general term for a qualifier or determiner of the object of cognition, while *prakāra* is the term used in place of *viśeṣaṇa* when the 'qualifier' is especially teken as an element of the cognition.

(15) *Tarka D.*, p. 60.

(16) *Tarka S.*, p. 61.

(17) See K. H. Potter, *Encyclopedia of Indian Philosophies*, Vol. II, Nyāya-Vaiśeṣika (Delhi, 1977), p. 50. Ingalls renders it as "Peculiar relation" (*Materials*, p. 41).

(18) See Gaṅgeśa's *Abhāvavāda* (Matilal's *Negation*, p. 188 and pp. 141—42). As a matter of fact, in the Nyāya system all sorts of relations other than *saṃyoga, samavāya* and indirect relations (*paramparāsaṃbandhāḥ*) are regarded as kinds of *svarūpa*-relation, e.g., *kāryatā, kāraṇtā, viṣayatā viṣayitā, viśeṣaṇatā, viśeṣyatā, pratiyogitā*, etc.

(19) This is nothing but to say that the absence (of smoke) is cognized *as* a qualifier of the red-hot iron ball with which the eye is connected (*cakṣuḥ-saṃyukta-ayogolaka-viśeṣaṇatā*), which is a *paramparāsaṃbandha.*

(20) Sometimes both the qualifier and the qualificand exist in one and the same locus, in the case of which they are related by *sāmānādhikaraṇya* in the ontological scheme.

(21) The term *pratiyogin* is also used inthe sense of 'counter-relatum' of a relation (*saṃbandhīya-pratiyogin*) among the Navyanaiyāyikas. See p. 69.

(22) *Siddh. L. (TCDP*, BI No. 194), p. 309.

(23) Maheśa Chandra, *Navyanyāyabhāṣāpradīpa : Brief Notes on the Modern Nyāya System of Philosophy and its Technical Terms.* (Calcutta : Sanskrit College, 1973), p. 29 : *ekatra ekena saṃbandhena vartamānasya api saṃbandhāntareṇa abhāvo vartate.*

(24) *Siddh. L. (TCDP*, BI No. 194), pp. 337—39 : *sādhyasya ca yādṛśaḥ saṃbandhaḥ praviṣṭas tatsaṃbandhāvacchinnāyāś ca pratiyogitāyā anavacchedakatvaṃ bodhyam . . . (yad vā) sādhyatāvacchedakasaṃbandhena pratiyogy-asaṃbandhitvaṃ vaktavyam.*

(25) "*pratiyogy-asamānādhikaraṇa*"

(26) *Siddh. L.*, p. 321.

(27) See Matilal's *Negation*, p. 72.

(28) *Prakāśa* on *Siddh. L. (TCDP*, BI No. 194), pp. 320—21.

(29) This is true according to the view that the absence of absence of x is x.

(30) *Siddh. L.*, p. 319 : *pratiyogimator api kāla-deśa-yor deśa-kāla-bhedāvacchedena tadabhāvaḥ, tathā ca tat-tat-sādhyakāvyāti-vāranāya tat, na upādeyañ ca sarvathā eva vyāpyavṛtti-sādhyake, sādhya-sādhana-bhedena vyāpter bhedāt.*

(31) *Siddh. L.*, p. 321.

(32) Here, the qualifier (*viśeṣaṇa*) is related to the qualificand (*viśeṣya*) by the relation of *sāmānādhikar-aṇya*.

(33) *Prakāśa* on *Siddh. L.*, p. 322 : *viśiṣṭasya sārvabhauma-mate 'tiriktatvāt.*

(34) See *Tarka D.*, p. 11 : *mūrtatvaṁ paricchinnaparimāṇāṇavattvaṁ kriyāttvaṁ vā*; *Nyāya B.*, p. 11 : *mūrtatvaṁ ca kriyāśrayatvam. pṛthivy-ap-tejo-vāyu-manāṁsi mūrtāni.*

(35) See *Nyāya B.*, p. 11 : *pṛthivy-ap-tejo-vāyv-ākāśa-pañcakaṁ bhūta-padavācyam.*

(36) *viśistañ ca kevalād anyad iti* (*Siddh. L.*, p. 321).

(37) *Siddh. L.*, p. 352 : *samavāyena jāteh sādhyatve meyatvâdau ativyāptiḥ.*

(38) See *Tarka S.*, p. 2 : *dravya-guṇa-karma-sāmānya-viśesa-samavāyâbhāvāḥ sapta padārthāḥ.*

(39) For the possible relata of the relation of inherence see p. 8.

(40) *Siddh. L.*, p. 353.

(41) From a logical point of view, the *ubhayâbhāva*, if regarded as 'absence of the conjoint', could be applied to three cases, i.e., '—p q', 'p —q', '—p —q' as pointed out by Ingalls (*Materials*, p. 64). But, it does not seem that S. Sen misunderstands this concept (in his *A Study*, p. 26), because the last case '—p —q' is specifically termed as *anyatarâbhāva* in Navya-nyāya.

(42) Of course, the smoke can be a counter-relatum of the relation of contact, in which case, however, the red-hot iron ball cannot be a base-relatum. Thus, in this case also, the two-fold absence does establish in the relation contact. Consequently, the smoke which is taken as a counter-relatum of that relation 'contact' can be accepted as an absential counterpositive.

(43) *Kāri.* 45, p. 45 : *Kālo jagatām āśrayo matah.*

(44) Maheśa Chandra, *ibid.*, p. 2 : *ākāśâdikan tu na kutra api vartata iti ākāśaṁ na kasya api dharmah ata eva ākāśam 'avṛttipadārtha' ity ucyate.*

(45) *Siddh. L.*, p. 357.

(46) Cf. p. 62