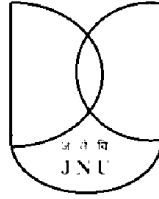


**THE ROLE OF ‘DOUBT’ (SAMŚAYA) IN ASCERTAINMENT
OF JUDGMENT IN NYĀYA VIEW OF INFERENCE
(ANUMĀNA)**

*Dissertation submitted to Jawaharlal Nehru University
in partial fulfilment of the requirements
for the award of the Degree of*

MASTER OF PHILOSOPHY

MANORANJAN PRASAD SING



**CENTRE FOR PHILOSOPHY
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI, 110067
INDIA**

JULY 2016



Centre for Philosophy
School of Social Sciences
Jawaharlal Nehru University
New Delhi- 110067, India

Dated: 21th July, 2016

CERTIFICATE

This dissertation titled "**The Role of 'Doubt' (*Samsāya*) in Ascertainment of Judgment in Nyāya View of Inference (*Anumāna*)**" submitted by **Mr. Manoranjan Prasad Sing**, Centre for Philosophy, School of Social Sciences, Jawaharlal Nehru University, New Delhi, for the award of the degree of **Master of Philosophy**, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institution.

This may be placed before the examiners for evaluation for the award of the degree of Master of Philosophy.

(DR. AJAY KR. VERMA)

SUPERVISOR

SUPERVISOR
Centre for Philosophy
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067

(DR. MANIDIPA SEN)

CHAIRPERSON

Chairperson
Centre for Philosophy
School of Social Sciences
Jawaharlal Nehru University
New Delhi - 110067, INDIA

DECLARATION

Dated: 21th July, 2016

This dissertation titled "**The Role of 'Doubt' (*Samsāya*) in Ascertainment of Judgment in Nyāya View of Inference (*Anumāna*)**" submitted by me for the award of the degree of **Master of Philosophy**, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institute.

Manoranjan Prasad Sing
(Manoranjan Prasad Sing)

M.Phil student

Centre for Philosophy

SSS-1

JNU

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Introduction

In everyday life, human beings could be seen as showing some desire for the needful action. Acquiring something or even moving one step forward could be similar to an act. In fact, acting towards something is the result of one's desire or what one intends to do. That is why desire or intention for an action is of prime importance for every human being. Moreover, by the change of time the meaning, value and dignity of life change. The motives and goals also do change from time to time. In the same way, the nature of knowledge changes in its development. But, this development is found in every discourse in demand of some particular action to arrive at a point of fixity. All the concerning facts look forward for some clarity in the changes of meaning, value or the reconstruction of a particular discourse and at every point there is a chance of acquiring some certainty, though the meaning of the truth or certainty is supposed to be ever-changing. Hence, in order to discover some certainty amidst this anomaly, a person could apply some hypothesis to enquire into a subject matter. At this, the person belongs to an imaginary state where the basis of inquiry is nothing but the conjunction of certain arguments, because this is the only way of doing an experiment about a fact, though one can argue that this is a wrong interpretation of a research or experiment by saying that experiment is not considered to be conducted in an imaginary state. Therefore, it can be said that if it doesn't consider itself to be in an imaginary state, then it could be considered as a result of inferential cognition based on certain hypothesis or argument. The only difference between an imaginary state and the inferential cognition is that the imaginary states are without argument; but inferential cognition is based on experience. The cognition which is based on inference involves a state of doubt. Nevertheless, the method of doubt in inference could also be applied to acquiring true cognition. In this work, we would see how doubt takes a major role to play in investigating a true cognition. With the help of critical analysis, we would try to make a research framework by which we can understand what role doubt does play in the process of inference. All of these concerning facts, issues and aims of the present work would be discussed in the next sections.

Objective and Approach

The proposed work is an attempt to investigate the issue of Doubt (*Samsāya*) in the process of inference with the special reference to Nyāya philosophy. It aims at building a concrete notion of doubt and by exploration it wants to show how it is intertwined with the issue of

clarity. In each and every search, we have to have some evidence or justification in order to establish a particular truth. The investigation of truth seeks to acquire knowledge. Irrespective of the subject matter, all inquiry involves a certain state of doubt to state the categorical judgment about the concerned fact. Therefore, the process of discovering a particular truth depends on a state of mind where doubt lingers. And doubt impels us to discover certain knowledge. Doubt, though not the original truth, helps the seeker to arrive at certain conclusion about the concerned subject. In inferring an object, our mind is in such a state that we are not sure about the identity of an object, e.g. 'Is this a post or a man?' This claim is a claim about a particular object and a justification is sought about its correct identification. The fact of certain knowledge involves certain justification, by which one can desire the true knowledge of that particular object. So, the process of inference involves the theory of doubt. If doubt plays a major role in having inferential knowledge, then the question becomes more significant, i.e. what is the role of doubt in the process of inference? Our investigation is concerned about the *Nyāya* theory of inference or *Nyāya* Logic. The question that certainly comes here is- what role does doubt play in *Nyāya* Logic (specially in the process of *Panchavayavi Nyāya*)?

These are some of the questions that this proposed dissertation is going to address. The claim of the present research is that for having an inferential knowledge we need to have a theory of doubt. The attempt to determine the actual nature of an object depends on the various sources of true knowledge. J. N. Mohanty wrote: "an inquiry must presuppose a prior state of doubt where we make an inference even when there is a prior certainty, there being however a special desire to infer."¹ Mohanty in his paper "*Nyāya* Theory of Doubt" explained that an inference is provided by a doubt about the presence of the *sādhyā* in the *pakṣa* (e.g. the fire on the hill). Most systems of Indian philosophy including *Nyāya* have accepted that doubt is to be considered as a species of knowledge. To quote Mohanty: "If I have a doubt of the form 'Is S p or not?' most Indian logicians would deem it as an instance of some kind of cognition though not a valid one about S."² Doubt therefore could be considered as a state of mind which is tantamount to having awareness about a particular object which is not yet formulated in the form of a categorical judgment. Therefore, one can't call the state of doubt as an episode of knowing per se. A state of doubt is characterized by certain cognition which suggests us a quality shared by more than one object. As a result, in a state of doubt we are

¹ Mohanty, "Nyāya Theory of Doubt" Vol.-III, The Visva-Bharati Journal of Philosophy, August, 1966, p.15.

² Ibid, p.15.

unsure about the factual nature of the object of awareness. But, it is important to note that J. N. Mohanty seemed to argue in favor of doubt as being a species of knowledge. He wrote: “The contention of the usage of the English word ‘Knowledge’ may be accounted for in two ways. Indian philosophers use the word in such a wide sense as to include even doubt and error.”³ He also wrote that the Sanskrit word ‘*jñāna*’ should not be rendered into English as ‘knowledge’. ‘*Jñāna*’ means any conscious state that is characterized by a reference to an object beyond it and surely doubt and error are states in which we are conscious of something. To be conscious of something amounts, according to Nyāya, to having a *jñāna* about the object.”⁴

In Nyāya philosophy, there are various classifications of *jñāna*. It is first divided into *anubhava*⁵ and *smṛti*⁶ (memory). *Anubhava* is again subdivided into *pramā* (true) and *apramā* (false). A true *jñāna* is one in which the object is known as it is. And a false one is one in which the object is known as what it is not (memory is also *apramā*, but not in the sense of what doubt or error is). A false *jñāna* is either doubt or error, though it is mentioned before that J. N. Mohanty did not accept ‘Knowledge’ and ‘*Jñāna*’ as synonymous, yet it seems that the term ‘Knowledge’ can be used in the sense of *pramā-jñāna*.

Moreover, as I have noted previously, doubt makes some major contributions to the process of inference which we arrive at a certain conclusion. Certainly, the question that arises here is: what is the nature of doubt? The *Siddhāntamuktāvalī* defined doubt as knowledge, i.e. ‘*ekadharmikaviruddhabhāvabhāvaprakāraṅgam*’⁷, which is “a knowledge which has a contradictory substitute (*prakāras*)”⁸. In the Nyāya literature, this is one of the ways by which doubt can be defined. Gautama (*Nyāya-Sūtra*-i.1.23) defined doubt as a conflicting judgment about the precise character of an object rising from the recognition of properties common to many, or of properties not common to any of the objects, from conflicting testimony and from irregularity of perception and non-perception.⁹ From this definition about doubt, it follows that there are various forms of doubt. According to *Nyāya-Sūtra*, doubt has five forms: 1) the ‘apprehension of common characteristics’, (2) the ‘apprehension of unique

³ Ibid. p.15.

⁴ Ibid. p.15.

⁵ *Smṛtibhinnam Jñāna*.

⁶ *Samaskaramatra Janyam Jñāna*.

⁷ Mohanty, “Nyāya Theory of Doubt”, Vol.-III, The Visva-Bharati Journal of Philosophy, August, 1966, p.16.

⁸ Translation regarding the *siddhāntamuktāvalī* definition of doubt.

⁹ *Samānanekadharma upapattivipratipattirupadhvanupalabdhyavasthātaśca viśeṣāpekṣavimarsāsamsāya*.

characteristic’, (3) ‘contradictory assertion about the same object’, (4) the ‘irregularity of apprehension’ and (5) the ‘irregularity of non-apprehension’.¹⁰ Though authorities such as Uddyotakāra, Sankara Misra, Phanibhūsana rejected Gautama’s five forms of doubt. Uddyotakara accepted the first three forms of doubt. Contrarily, Sankara Misra and Phanibhūsana accepted only one form of doubt. The claim that Uddyotakara made regarding the last two forms of doubt is that doubt cannot be due to the irregularity of apprehension and non-apprehension, because “irregularity as irregularity is subjected to regularity”¹¹ (Nyāya-Sūtra-ii.1.4). He wrote:

If irregularity is restricted by its intrinsic nature, then it amounts to regularity and as such it ceases to be irregularity. Therefore, it is illogical to claim that doubt is due to irregularity. On the other hand, if irregularity is not restricted by its intrinsic nature, then it ceases to be irregularity because of losing its intrinsic nature. Thus there can be no doubt, due to irregularity of apprehension or non-apprehension.¹²

The claim suggests that irregularity is itself contained in the regularity. An irregularity may be designated as such with reference to something else, but with reference to itself it is a settled fact. If the irregularity is not settled in itself, it is regular and can’t cause doubt. On the other hand, if the irregularity is not settled in itself, it is devoid of its own character and can’t cause doubt. Contrary to the above, Sankara Misra and Phanibhūsana accepted only one form of doubt that corresponds to the second form of doubt mentioned by Gautama. Phanibhūsana refuted Vātsyāyana’s concept regarding the first form of doubt where he said that in the case of such a doubt like ‘this is a pillar or a person’ the cause of doubt is merely common characteristic of the two. And for explaining this form of doubt he added an expression ‘desire of ascertaining the distinguishing characteristics’¹³. Later, the interpretation of Vācaspati Misra implies that the desire for ascertaining the distinguishing characteristics of each is the cause of doubt. “Phanibhūsana rejects this suggestion and argues that such a desire only follows doubt and never precedes it. That is why Vātsyāyana specifically explains *visēṣāpekṣa* as ‘the knowledge in the form: I apprehend the common characteristics of the two (e.g. the pillar and the person) but do not apprehend the

¹⁰Gautama’s *Nyāya-Sūtra*&Vātsyāyana’sBhasya, trans. by Gangopadhyaya and Chattopadhyaya, *Nyāya Philosophy*, Part-I, Indian Studies (Past &Present), Calcutta, 10th April, 1967, p. 92-96.

¹¹Gautama’s*Nyāya-Sūtra* with Vātsyāyana’s Commentary trans. by Gangopadhyaya and Chattopadhyaya, *Nyāya*, Indian Studies (Past & Present), Sambhunath Pāndit Street, Calcutta, 1982, p. 72.

¹²Ibid., p. 72.

¹³ Gautama’s *Nyāya-Sūtra*&Vātsyāyana’sBhasya, trans. by Gangopadhyaya and Chattopadhyaya, *Nyāya Philosophy*, Part-I, Indian Studies (Past &Present), Calcutta, 10th April, 1967, p. 92.

distinguishing characteristics of each'. The real point of Vātsyāyana is that in no case of doubt can there be the perception of specific characteristics, though in all cases of doubt there must be the remembrance thereof."¹⁴ That is why I would like to engage with this debate and will try to examine these forms of doubt that Gautama and others explained.

There are two grounds of inferential knowledge according to the Naiyaikas: logical ground and psychological ground. A logical ground, according to them, is nothing but the 'vyāpti' relation. For them, if one understands the *vyāpti* relation, then one knows the logical ground of having an inferential knowledge. The process of inference, according to the Naiyāyikas, involves the following sequence: *Pakṣa-dharmatā*, *Vyāpti*, and *Parāmarśajñāna*. I would look into these phases, and the role that doubt plays in these phases. In the process of inference, we assume a proposition to be established. And for proving that, we take some relevant statements by which the entire inference is possible. For example, i) The hill has fire (*pratijñā* or proposition which is to be established), ii) Because the hill has smoke (*hetū* or reason), iii) Wherever there is smoke, there is fire, as in the kitchen (for example, *udāharana*), iv) The hill has smoke which is associated with fire (*upanaya* or Application) and v) The hill has fire (*nigaman* or conclusion). One may raise a question as to where doubt comes into play in the above inference. The reply is as follows: one sees smoke on the hill, based on the smoke one immediately infers past experiences and recalls the association between smoke and fire. The person remembers such and such places where smoke was present in relation to fire and because of this the ascertainment of the smoke and fire relation could be produced. After that, the person arrives at a position where he tries to infer that the smoke that he has seen on the hill is associated with fire. In this state, the role of doubt is about the confirmation of the relation between hill and smoke in *pakṣatā* and the confirmation of the relation between smoke and fire in the place of *vyāpti*. Finally, it would play the role where we ascertain that the smoke is associated with fire in the further confirmation of *vyāpti* and *pakṣa-dharmatā* relation. Then we arrive at the final conclusion.

Annambhaṭṭa provided five parts of statement structure for inference. But, later commentators suggested that for having an inference we need to presume ten parts of statement structure. After having the five statements they gave statements that are as follows: vi) is this entire hill on the fire everywhere, or just in a particular part? (*jijñāsa*¹⁵), vii) which is thought to be

¹⁴Ibid., p.94.

¹⁵*Jijñāsa* is used in the sense of Inquiry.

smoke may be just dust, (*samsāya*¹⁶), viii) is there always smoke where there is fire? (*sakya-prāpti*¹⁷) as gas fire do not produce smoke, ix) to ascertain whether the object is something to be pursued, ignored or avoided (*prayojana*¹⁸), x) it is settled beyond any measure of doubt that whenever there is smoke there is fire (*samsāyavyudasa*¹⁹).²⁰ Although the claim that was made by those who thought that for having inferential knowledge we need to have ten parts of statement structure is not well-ascertained at all, because in the place of statement (vi) the claim they have made is about the distribution of fire. There is no way of having a demand about the distribution of fire after step-v, because in the place of *vyāpti* or step-iii Gautama already explained it when he said that *vyāpti* is of two types-*samavyāpti* and *visamavyāpti*. In step-vii, the claim is about the knowledge of smoke. Later commentators were of the opinion that what we have seen in step-ii as smoke is actually dust. But, regarding this statement we have to say that if what we have seen before is not smoke, then there is no need to infer the knowledge about the relation between smoke and fire in the later steps. The claim doesn't hold good. On the other hand, the steps-viii, ix and x, are already included in step-iii and iv. Therefore, there is no relevance in discussing those steps further. With these issues in mind, the discussion of present work is divided in three core chapters.

Firstly, I would discuss about the categories given by Gautama (*nyāya-sūtra*) which are the main subject matters of Nyāya philosophy. The discussion will demonstrate the cognition of sixteen categories given by Gautama. Further, I would show how the knowledge of truth seeks to acquire 'liberation'.

Secondly, the study will show the different facets of Nyāya inference. While discussing facets of inference I would take a special section to discuss the logical forms of inference. This section will highlight the logical form of inference and the statements of Nyāya syllogism given by Annambhaṭṭa. The study has an engagement with the discussion of the later commentators' view regarding the statements of inference. In this section, I would dwell upon the debate regarding the number of propositions required for the complete process of inference. The question comes to the fore mainly because there are Naiyāyikas following Gautama who maintained that for inference we need to have ten parts of statement structure

¹⁶ *Samsāya* is doubt concerned questioning the reason.

¹⁷ *Sakya-prāpti* is used to denote the sense of Capacity and to determine if the example warrants the conclusion.

¹⁸ *Prayojana* is used as purpose.

¹⁹ *Samsāyavyudasa* is removal of all doubt to make certain that the opposite of the proposition is not true.

²⁰ Ub. Ve. Sri Rama Ramanuja Achari, srimatham.com, Nyāya (Tarka Sāstra); The Hindu System of Logic and Debate, 2013, p.15-16.

(*pratijñā-hetū-udāharana-upanaya-nigaman-jijñāsa-saṃśaya-sakyaprāpti-prayojna-saṃśayavyudasa*).²¹ But on close examination of the reason adduced by these Naiyāyikas, we find that the ground of their questions does not hold good. That is why I would critically examine to state the debate regarding the exact number of statements or steps required for inference.

Thirdly, the study will discuss the nature of doubt and its various forms proposed by Gautama. On the other hand, it will also discuss the issue regarding Gautama's forms of doubt where authorities like Uddyotkara argued for the last two forms of doubt based on the irregularity of the apprehension and non-apprehension. The claim what he raised about these two forms of doubt is that, "if irregularity is restricted by its intrinsic nature, then it amounts to regularity and as such it ceases to be irregularity. Therefore, it is illogical to claim that doubt is due to irregularity."²² What he tried to suggest with this statement is that irregularity is assigned about a particular, but in reference to itself it is a settled fact and if it is settled in itself then it seems to be regular. If it is regular, then it can't cause doubt. On the other hand, he suggested that if the irregularity is not settled in itself, then it is devoid of its character and can't cause doubt. Therefore, there would be the chance of endless doubt owing to the continuity of its cause. Regarding the claim "irregularity as irregularity is subjected to regularity"²³ I would suggest that if irregularity is presented as regular, then we don't have any certain cognition about anything. That is why I would bring an example of 'mirage' and 'water in the tank' (where it exists) to show that the claim is not well-ascertained at all. In the case of mirage, we are in a state of mind where we can make a judgment about the existence of water in which it doesn't exist. This is not something that happens in a regular manner, because if it happens in a regular basis then there would be no right cognition of real water in its actual place, although sometimes we are mistaken about the knowledge of a particular, but that doesn't mean at all that the world is erroneous. Gautama answered those questions in his *Nyāya-sūtra* (ii.1.1. to ii.1.6.). On the other hand, I will take another section to reexamine about the Gautama's forms of doubt.

²¹ Mookerjee, *The Buddhist Doctrine of Flux: An Exposition of the philosophy of Critical Realism as Expounded by the School of Dignaga*, Motilal Banarsidass Publishers Private Limited, Delhi, 1975, p. 357.

²² Gautama's *Nyāya-Sūtra* with Vātsyāyana's Commentary trans. by Gangopadhyaya and Chattopadhyaya, *Nyāya*, Indian Studies (Past & Present), Sambhunath Pāndit Street, Calcutta, 1982, p. 72.

²³ Gautama's *Nyāya-Sūtra* with Vātsyāyana's Commentary trans. by Gangopadhyaya and Chattopadhyaya, *Nyāya*, Indian Studies (Past & Present), Sambhunath Pāndit Street, Calcutta, 1982, p. 72.

Lastly, I would deal with the issue of doubt in the process of inference to show how doubt lingers into the phases of inference. The process of inference, according to Naiyāyikas, is based upon the five parts of statements where the first statement is a fact to be established. By establishing the first proposition we need to have some universal statement which is established empirically through which the gap between the premise and conclusion can be bridged. Unless and until we are absolutely sure about the empirical evidence of these statements, it would remain as a hypothesis, though this hypothesis is based on the confirmation of true cognition about a particular subject. Therefore, doubt has this amorphous nature where we cannot equate it with the lack of knowledge, because doubt involves a positive desire to know the truth. That is why it could be a significant philosophical task to inquire into the role that doubt plays in the process of acquiring true cognition.

Subject-matter of Nyāya Systems: Sixteen Categories and their aims to Highest Good

2.1. Introduction

In this chapter, I intend to highlight the enquiry of true cognition in the field of Nyāya philosophy. The key feature of Nyāya philosophy is *niḥśreyasa* or liberation. With the primary concern of this system one may raise the question of how one can liberate oneself. Gautama, the founder of Nyāya philosophy in his *sūtra* provided a way of attaining liberation or *niḥśreyasa*. This chapter will look at how the categories given by Gautama lead to liberation or *niḥśreyasa*. It would take an exposition of the concept of the sixteen categories given by Gautama. He declared that the knowledge of categories leads to the ultimate good. Gautama tried to identify the reason behind birth, death and suffering. The goal of *nyaya* philosophy is to enable us to attain the highest goal of life which is liberation from suffering. According to *naiyāyika*, the world presents itself as a chain of consequences which needs to be broken in order to attain the liberation from suffering. This is the chain through which one has to pass through, i.e. Misapprehension (*Ajñāna*) to Imbalance (*Doṣa*) to Activity (*Karma*) to Rebirth (*Janma*) and finally to Suffering (*Duḥkha*). One can break the chain in the same sequence, though this is not the only concern of Nyāya philosophy.

Vātsāyana gave an introduction at the very beginning of the commentary regarding *Nyāya-sūtrato* define a successful activity, i.e.

Pramānato-artha-pratipattoh

*Pravṛitti-sāmartha-arthavat-pramānam.*²⁴

According to him, every successful activity is cognized by the ‘instrument of valid knowledge’ (*Pramāna*). Hence, the instrument of valid knowledge is invariably connected with the object which is cognized. There cannot be the cognition of object without the instrument of valid knowledge and without cognition of object there cannot be any successful activity. And with the help of instrument of valid knowledge, the knower decides to get an object or to avoid it. The effort of getting or avoiding a particular object depends on the

²⁴*Nyāya Darshan* (Gautama Sūtra) with Vātsāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, p. 1.

result, because it is up to the person to decide how much is necessary for him. The context of the desire of getting or avoiding a particular object is mentioned by Vātsyāyana as the only cause of human suffering, though for an existing human being it is necessary to be desirous about getting or avoiding a particular object. Therefore, getting an object is supposed to beget pleasure (*sukha*), but the final effect in the long run is suffering (*duḥkha*). But, without having a desire one cannot perform an activity. An activity is performed by a person only when he knows the nature of an object as it actually exists. For this reason every object is known through a valid source (*pramāna*); hence objects of *pramāna* are ‘innumerable’²⁵. We know that the way of acquiring knowledge of an object depends on various sources. That is why in Indian philosophy we see every system prescribing the different sources of valid knowledge. In the Nyāya system, *Naiyāikas* accepted four *pramānas* (i.e. *Pratyaksa*, *Anumāna*, *Upamāna*, and *Śabda*) through which one can get the true cognition of an object.

Since *pramāna* is invariably related to the object, *pramātr*, *prameya* and *pramiti* are also related in the same way with the object which is desirous for a person. Now, one can raise a question as to how these are related to one another. *Pramāna* is the valid source of knowledge. *Prāmātr* is cognized by the person who is guided by the desire to seek or ignore the object which leads to activity. Therefore, *pramāna* is the instrument through which the knower (*Prāmātr*) rightly knows the object. *Prameya* is the object to be known rightly. And *Pramiti* is the right knowledge of the object. With these four *tattvas*²⁶ one can arrive at one’s desire. If an object is known as positive, then it is mandatory for a person to know that object rightly without any contradiction. Then, it becomes *tattva* and the process is called *sat* or *bhāva*. Again, when a negative object is known as negative which is its actual nature, it too becomes *tattva* (the process is called *asat* or *abhāva*), owing to the fact that there is no contradiction in this case either. Thus, objects are classified under two heads, namely, positive (*bhāva*) and negative (*abhāva*). Positive objects are those which are determined by *pramāna* as existing and negative objects are those that are determined by *pramāna* as not existing. Therefore, “being determined by *pramāna* as existing constitutes the intrinsic nature of the positive object or its positivity. Being determined by *pramāna* as not existing constitutes the intrinsic nature of the negative object or its negativity.”²⁷

²⁵ The word ‘innumerable’ is used to define various *pramānas* by which one is capable of getting the valid cognition of an object.

²⁶ *Naiyāikas* used the term ‘*tattva*’ to define the actual nature of an object.

²⁷ Gautama’s *Nyāya-Sūtra* & Vātsyāyana Bhāṣya, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyaya Philosophy*, Part-I, p. 9.

It is well-known that an object is necessary to be ascertained by a *pramāna*, otherwise it cannot be called as an object (*padārtha*). Here, Vātsyāyana raised a question regarding negative object. He pointed out that a negative object too is a type of object. Then, the question is how one can know the negative or *asat* by *aprāmana*.²⁸ He himself resolved the issue by asserting that similar *pramāna* which reveals the positive object reveals also the negative object. He produced an example to clarify the particular doubt regarding the negative objects. He wrote:

“After the escape of the thief a mere boy can, with a lamp, find out what is in the room as well as what is not there. What exists is seen, what exists not is not seen; thus the latter is known as not existent. Such awareness of the not existent is common to all. Being awareness, it necessarily points an object. The object pointed by it (i.e. by the awareness of the not existent) is the negative object. So, the awareness of something as not existent is the awareness of the negative object.”²⁹

Vātsyāyana classified objects under two heads, namely, the positive and the negative. But Gautama in his first *sūtra* regarding sixteen categories didn't mention about the negative object. That is why later commentators obliged themselves to offer some explanation for Gautama's silence over the negative objects. And there are two necessary explanations which could be offered. Firstly, the awareness of the negative object is presupposed by the reference to its positive counterpart and as such Gautama is primarily concerned with the latter.³⁰ Secondly, Gautama discussed only those objects the knowledge of which directly produces the *summam bonum* (*niḥśreyasa*),³¹ though there are many other objects, the knowledge of which doesn't lead to the *summam bonum*. That is why Gautama didn't mention those objects in his sutra. And also he refrained from mentioning the negative objects. However, later Phanibhūsana argued that Gautama implicitly mentioned the negative objects: “In the list of sixteen categories occurs *prameya* (object of knowledge), which includes *apavarga*. The meaning of *apavarga* is the absolute non-existence of suffering and as such is a negative object.”³² Therefore, in this way the claim regarding Gautama's silence about the negative object is resolved.

²⁸ Ibid.,

²⁹ Ibid.,

³⁰ Ibid.,

³¹ Ibid.,

³² Ibid.,

2.2. Gautama's first *sūtra* and its essence

Naiyāikas mentioned that *summam bonum* (liberation) can only be achieved through the true cognition of the sixteen categories. The categories that comprise the acquisition of true cognition are:

1. Instrument of valid knowledge (*Pramāna*),
2. Object of valid knowledge (*Prameya*),
3. Doubt (*Samśaya*),
4. Incentive (*Prayojana*),
5. Corroborative Instance (*Dr̥ṣṭānta*),
6. Proved Doctrine (*Siddhānta*),
7. Inference- components (*Avayava*),
8. Hypothetical Argument (*Tarka*),
9. Final Ascertainment (*Nirṇaya*),
10. Discussion for the final Ascertainment (*Vāda*),
11. Debating Maneuver (*Jalpa*),
12. Destructive Criticism (*Vitaṇḍā*),
13. Pseudo-probans (*Hetvābhāsa*),
14. Purposive Distortion of the opponent (*Chala*),
15. Futile Rejoinder based on mere Similarity or Dissimilarity (*Jāti*) and
16. Point of Defeat (*Nigrahasthāna*) leads to the attainment of the highest good (*Niḥśreyasa*).

Vātsyāyana took up the discussion by the clarification of the structure of the first *sūtra* given by Gautama. He argued that the *summum bonum* obtained by the true cognition of the (twelve) objects of knowledge, namely, *ātman*, *sarira*, *indriya* etc. This is explained in second *sūtra* given by Gautama. Vātsyāyana identified that one can acquire *summam bonum* by the true cognition of four human concerns or '*arthapāda*'³³. These are as follows:

“(i) Suffering (*heya*, lit., ‘which is to be avoided’) and its cause,

(ii) Right knowledge (*ātyantika-hāna*, lit., ‘the cause of the absolute cessation of suffering’),

(iii) The means of attaining that right knowledge (i.e. the present *sāstra*) and

³³ Literal translation of *arthapādais* is the basis of the human end.

(iv) Liberation (*adhigantavyo*, lit., ‘the ultimate goal’).³⁴

As stated above, Vātsyāyana’s commentary suggests that there are four concerns which underlie the ultimate goal or liberation (*summam bonum*). With this reason the question arises whether the categories given by Gautama are directly helpful to *summam bonum*, if so, then how that can be possible and how the right knowledge of *jalpa*, *vitandā* or *chala* is directly responsible for the *summam bonum*. In response to these questions, Vātsyāyana explained the exact meaning intended by Gautama, “Of these categories, the knowledge of what Gautama technically calls *prameya*³⁵ is directly conducive to the *summam bonum*. But Gautama restricts its use to only twelve such objects,³⁶ though he pointed out that the cognition of other categories too is helpful for the knowledge of the *prameya-s*, but these are indirect cause of liberation. However, since the *sūtra*(Gautama *sūtra* - i.1.1) itself doesn’t say that the true cognition of *prameya* is direct cause and other categories are indirect cause of liberation, the problem is how we can know that the meaning of what Vātsyāyana indicated is the meaning intended by Gautama. Vātsyāyana himself answered that it becomes clear if we look at the second *sūtra* given by Gautama which clarifies the confusion by showing how *prameya* actually leads to liberation.

2.3. The relevance of categories in Gautama *Nyāya-sūtra*

Since Vātsyāyana commentary suggests that the separately mentioned other categories (except *prameya*) also lead to the highest goal (*summam bonum*) of life, but these are indirect causes. Here, one can raise a question of why we should pay so much attention to other categories and why Gautama mentioned about those categories separately, if other categories (except *prameya*) are the indirect cause of liberation. One can also make a claim for separate mentioning of those categories by saying that it is useless to put those categories separately, if it doesn’t have definite cause. At some point, it seems that this claim holds well. In reply to these claim, Vātsyāyana proposed some valid reasons. According to him, for the sake of human being there are branches of studies and each has its special subject matter. And there is positive justification also for separate mentioning of doubt etc. in the *sūtra*. For the interest of human welfare, four branches of studies are offered in this particular category. These are, namely, *Veda (trayi)*, State-craft (*dandniti*), Agro-economy (*vārtā*), and Logic (*anviksiki*). Each of these branches has its unique subject matter (*prasthāna*). *Veda* persists to preserve

³⁴ Trans. by Chattopadhyaya & Gangopadhyaya, *Nyāya philosophy, Op. cit.*, p 10.

³⁵ *Prameya* literally means any object of right knowledge.

³⁶ Trans. by Chattopadhyaya & Gangopadhyaya, *Nyāya philosophy, Op. cit.*, p 11.

some ritual activities, like the ‘*Agnihotra* sacrifice’³⁷ etc. and State-crafts (*dandniti*) are the king, minister etc. Agro-economy (*varitā*) consists of a large farming implement. This implement uses one or more blades which are fixed to a frame, drawn over the soil to turn it over and naturally cut furrows in preparation for the planting of seeds. It also involves in some other activities related to the functioning of human needs. Logic (*anvikṣiki-vidyā*) also has its unique subject matter which includes the fourteen categories (doubt and others). “The specific mention of the topic coming under the subject matter of logic is necessary so that logic is not confused with some other branches of learning. Thus e.g. the real nature of *ātman* is discussed in Logic, but it really forms the unique subject matter of Upanisad (included in Veda).”³⁸ Therefore, without the separate mentioning of doubt etc. it would have been mere a study of the self (*Adhyātma-Vidyā*) like Upanisad.³⁹ Finally, it can be said that the separate mentioning of these shown categories has its unique subject matter. Now, we would see in the forthcoming discussions how these categories are necessary here.

2.4. Doubt (*saṃśaya*) as a Category

In pursuit of the nature of knowledge of an object one must have to know about the concerned facts of Nyāya. In Nyāya, there has no relevance for objects which are unknown, even no relevance for those that are known for sure. It has relevance only for those objects which evoke doubt. In his *Nyāyasūtra*(i.1.41.) Gautama wrote: “final ascertainment (*nirṇaya*) is the ascertainment of an object through (consideration of) thesis (*paksa*) and anti-thesis (*pratipaksa*) which result from doubt (*vimarśa*).”⁴⁰ Here the meaning of *vimarśa* is doubt which is considered as thesis and anti-thesis for the application of *nyāya*. And the ascertainment of acquiring an object means *nirṇaya* or right knowledge (*tattva-jñāna*). On the other hand, doubt is recognized as the experience of something which has a definite description, but the actual nature of that is not yet discovered in particular. To ascertain the true nature of an object, we need to examine the sources of the acquired knowledge. And the nature of an object is to be discovered by the *pramāna*-s through the re-examination of the object by claiming what we acquire earlier. The entire process is considered through the

³⁷ *Agnihotra* sacrifice is a fire ritual since ancient times. The practice of this ritual is to fight the negative energies and purify the atmosphere. Its central part consists of offering brown rice into the fire before the sunrise and after the sunset along with *Vedic* mantra. And some of the ritual uses say that it relates to the fire and the sun each other. They also mentioned that it preserves the sun overnight (these rituals are mentioned in *Samhitās* and *Brāhmanas*).

³⁸ Trans. by Chattopadhyaya & Gangopadhyaya, *Nyāya* philosophy, *Op. cit.*, p. 12.

³⁹ *Ibid.*

⁴⁰ *Ibid.*, p. 12.

application of doubt for acquiring true knowledge. That is why doubt is put into exercise in Nyāya Philosophy. The entire process of doubt and its application would be discussed in the third chapter. Now, in the next section the concept of incentive would be discussed.

2.5. Incentive (*prayojana*)

Incentive is a means through which one could decide how to attain a particular activity or to avoid it. Thus, incentive has a major role to play for the happening of an activity. Therefore, we could say that all living beings, their activities and all the branches of knowledge (*vidyā*) are to be penetrated by incentive. Traditionally four incentives are mentioned, namely, *dharma*, *artha*, *kāma*, and *mokṣa*. However, Uddyotakāra critically mentioned that the presence of incentives for every human being is the attainment of pleasure and the avoidance of pain, because this is the only cause of activities of the human beings.⁴¹ According to Vātsyāyana, incentives involve the undesirable objects also, i.e. the objects shunned. The nature of pain and its cause then can also be considered as undesirable object. Thus, it can urge the action which needs to be avoided. Here lies the need of the separate mentioning of incentive. Without the incentive of the removal of doubt there is no scope of *nyāya* (*anvikṣiki-vidyā*).⁴² Nyāya is also taken into employment only because of its basis or its own incentive (*prayojana*). If there has some definite cause of the employment of Nyaya, then the question is how it does stand in the consideration of a discussion and what it really means for *nyāya*.

The term ‘Nyāya’ is derived from the root \sqrt{Ni} which means to lead or to take away.⁴³ Thus, *nyāya* is the study which leads to the right knowledge. The word Nyāya also manifests as something right or justice. Therefore, one can say that *nyāya* is the science of being right or of true reasoning. According to Sinha and Vidyabhūšana, “Nyāya, the signifying logic is therefore etymologically identical with ‘*nigamana*’, the conclusion of a syllogism”⁴⁴. It is also called as ‘*Hetū-vidyā*’ or ‘*Hetū-sāstra*’, the science of cause. It is also known as ‘*Anvikṣikī*’⁴⁵, the science of inquiry or ‘*Pramana-sāstra*’, the science of correct knowledge. In other words, Vātsyāyana defined the nature of Nyāya in his *Bhāṣya*, i.e.

⁴¹ Ibid., p. 14.

⁴² Ibid.,

⁴³ Jha, *Nyāya philosophy, Epistemology and Education*, p. 70.

⁴⁴ Ibid., p. 71.

⁴⁵ *Anvikṣikī* was first known as *ānvikṣikī-vidyā* from (ancient time) the very beginning of *nyāya* philosophy. Its key aim is concerned about the correct thinking and the means of acquiring a true cognition of reality, though its subject matter consists of the development of logical thinking, true reasoning and also how to develop the power of criticism.

“Nyaya is the examination of an object with the help of the instrument of valid knowledge (*pramāna-s*). The inference which is not contradicted by the perception and scripture is called *anviksā*, that is the knowing over again (*anu*, literally ‘after’) of that which is already known (*iksitā*) by perception and scripture. *Anviksā*= *anu* (after) + *iksā* (knowledge). This branch of knowledge is called *ānviksiki* or *Nyāya-vidyā* or *Nyāya-sāstra*, because it is propagated for the discussion of that (i.e. *anviksā*). The perception which is contradicted by either perception or scripture is *pseudo-nyaya*.”⁴⁶

Thus, *nyāya*⁴⁷ is concerned with the correct thinking and its methodological task is to acquire valid knowledge through correct reasoning. That is why *nyāya* is also referred as *Tarkasāstra* or the science of reasoning. It is also used as synonymous with syllogism and therefore, refers to the science of inference.⁴⁸ Nyāya philosophy follows a logical pattern for having a true cognition which involves three stages which are- (i) *Uddeśya* (enunciation), (ii) *Lakṣaṇa* (definition), and (iii) *Pariksā* (examination). *Uddeśya* (enunciation) is presupposed to set up the desire for a particular which is cognized. At the stage of *lakṣaṇa* (definition), the knower tries to know whether it is necessary for him or not. *Pariksā* (examination) involves a critical examination, because at this stage one tries to prove the true nature of a particular. It is crucial because with the examination of these stages the knowledge of an object is proved which would be followed by others. Therefore, it could be said that these stages are provided by the true incentive. Gautama in his sutra (i.1.24) defined incentive: “it is the object pursuing (*adhikṛtya*) which one is led to activity.”⁴⁹ Vātsyāyana pointed out that by incentive one can understand an object for the attainment or avoidance through which one can decide whether he should acquire it or avoid it (e.g. the ascertainment ‘One can either get the chocolate or avoid it’ is the cause of some activity. Therefore, ascertaining an object is the cause of pursuing an object.). We have seen that acquiring an object depends on its ascertainment. That is why it is necessary to mention the ascertainment of a particular.

⁴⁶Gautama’s *Nyāya-Sūtra*&*Vātsyāyana Bhāṣya*, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyāya Philosophy*, Part-I, p 13.

⁴⁷ “*Pramānaih arthapariksanam nyāyah*” is Vātsyāyana’s definition of *nyāya* which suggests the five components (*avayava*) of such an inference. Some argue by saying that according to Vātsyāyana, Nyāya is the examination of objects through the help of instrument of valid knowledge, but when he refers *nyāya* with the five components of inference, an inference doesn’t refer actually the instrument of valid knowledge. In answer to this question, Vātsyāyana wrote that the four *pramāna-s* mentioned by Gautama underlie the different components like *pratijñā*, *hetū* etc. which are based on four *pramāna-s* (*pratyakṣa*, *anumāna* etc.). Thus, these are presupposed by the instrument of valid knowledge. (For more details, see trans. by Chattopadhyaya and Gangopadhyaya, *nyāya philosophy*, *Op. cit.*, p 14).

⁴⁸ Jha, *Nyāya philosophy, Epistemology and Education*, p. 71.

⁴⁹ Gautama *Nyāya-Sūtra* with Vātsyāyana’s Commentary trans. by Gangopadhyaya, M., & with an Introduction by Chattopadhyaya, D., *Nyāya*, p. 35.

2.6. Ways of arriving at the final ascertainment (*Nirnaya*)

This problem itself brings a discussion for the ascertainment of the true cognition. The process of acquiring knowledge depends upon the true observation, experience and verification method. For having a true cognition it is mandatory to have an examination to verify the experience of what the knower knows. Therefore, the method of verification does play a major role to investigate a true cognition. And an observation would be true if there is certain number of arguments which support that it is true. *Nyāya* philosophy also follows the similar method right from the beginning of the discussion on sixteen categories for the attainment of *summam bonum*(liberation). Here, we can find that the process of liberation is something which depends on the true cognition of categories given by Gautama. The discussion of the categories is determined by the process of verification. Final ascertainment can be employed only when the claim raised in *vāda*(discussion on the final ascertainment), *jalpa* (debating on maneuver), *vitandā* (destructive criticism) and *tarka* (hypothetical argument) is resolved. To resolve the issues raised in *vāda*, *jalpa*, *vitandā* and *tarka*, we need to produce some supporting instances by which one can understand the true nature of an object. That is why Gautama produced favorable occurrences in his *sūtra* as a category of acquiring true knowledge (e.g. *dr̥ṣṭānta*, *siddhānta*, *avayava*). Let's begin the process of the ascertainment of how it works for the true cognition.

In the process of acquiring knowledge, *dr̥ṣṭānta* is used as an instance for proving a particular claim. For example, if one has to acquire the existence of 'fire on the hill', then one should produce evidences by which the claim would succeed. To prove the claim we need to have an instance, i.e. 'in kitchen we have seen that there is smoke in relation with fire' and it proclaims that 'wherever there is smoke there is fire'. Without the existence of fire we can't imagine the existence of smoke, though fire can exist without smoke. Therefore, it is about the perception of an object which doesn't conflict with layman's approach as well as the expert's one, because the perception of that object would be similar to everybody. And the inclusion of *dr̥ṣṭānta* in the object of valid knowledge would be valid for the inference and verbal testimony. Without the existence of *dr̥ṣṭānta*, inference (*anumāna*) and verbal testimony (Śabda) cannot be established. It is also the basis of the application of *Nyāya*. "By (showing) the contradiction of the *dr̥ṣṭānta* the position of the opponent can be declared as

refuted. By the substantiation of the *dr̥ṣṭānta*, one's own position is well-established."⁵⁰ It is an indication that somebody who is skeptic and does admit a corroborative instance should surrender to the skepticism, because if the person doesn't admit it, then he cannot be silent to his opponent. Further, the mentioning of *dr̥ṣṭānta* in Gautama *sūtra* could be justified by saying that "*udāharana* is an instance which being similar to the subject (*sādhyā-dharmin*) possesses its characteristic or *tat-dharmabhāvin* (*Nyāya-sūtra* i.1.36)."⁵¹ Therefore, by the application of *dr̥ṣṭānta* the position which has clear perceptual evidence in reality could be established. However, it can also be acceptable by all that there are many scriptures in our culture which are justified, when it is based on the verbal testimony (Śabda). And with the justified truth based on the verbal testimony and other grounds we have to discuss its methodology in *siddhānta*.

Siddhānta means the truth of a particular scripture which is generally acceptable as true. For example, if we look into Nyāya philosophy then we can see that it is acceptable subject matter about the self which is a substance and consciousness is the external quality of self. Gautama emphasized how *siddhāntais* used to examine for the means of object in the form that 'exists'⁵². It is a dogma resting on the authority of a certain school, hypothesis, or implication. In *Nyāya-sūtra* Gautama defined that "*siddhānta* is of four kinds owing to the distinction between 'a dogma of all schools' (*sarva-tantra*), 'a dogma peculiar to some school' (*prati-tantra*), 'a hypothetical dogma' (*adhikarana*), and 'an implied dogma' (*abhyupagama*)."⁵³ *A dogma of all schools* is something which is not opposed to any school and is claimed by at least one school. For example, the existence of five elements or five objects of sense is accepted by all the schools. *A dogma peculiar to some school* is accepted by similar schools which agree in their ideological states but are rejected by the opposite school (e.g. 'a thing cannot come into existence out of nothing'⁵⁴). *A hypothetical dogma* is a *siddhānta* 'which, if acceptable, can lead to the acceptance of another *siddhānta*'⁵⁵ (e.g. 'there is an existing soul apart from the senses, because it can recognize one and the same object by

⁵⁰ Gautama *Nyāya-Sūtra* with Vatsyāyana's Commentary trans. by Gangopadhyaya, & with an Introduction by Chattopadhyaya, *Nyāya*, p. 5.

⁵¹ Ibid., p. 5-9.

⁵² The use of *siddhānta* in the evaluation process of *nihsreyas* tends to promote how the truth of a particular is cognized. For this reality one can have a true knowledge about a particular.

⁵³ Vidyabhusana, *A History of Indian Logic (Ancient, Mediaeval and Modern School)*, p. 59.

⁵⁴ With this example I have highlighted the peculiarity that in a statement like 'a thing cannot come into existence out of nothing' we can make a comment that both Samkhya notions of 'Satkaryavāda' and the Buddhist notion of 'Dependent origination' are quite similar, because both schools claimed that whatever exists there has a source of its origination.

⁵⁵ Vidyabhusana, *Op. cit.*, p. 60.

seeing and touching'⁵⁶). On the other hand, *an implied dogma* is a kind of *siddhānta* 'which is not explicitly declared as such, but follows from the examination of particulars concerning it, e.g. the discussion whether sound is eternal or non-eternal presupposes that it is a substance'⁵⁷. From these four kinds of *siddhānta*-s one can state that *siddhānta* is about the exemplification of a state by which one can acquire the true cognition of a particular and is able to make the distinction between two relatives. It is included in his *sūtra*, because without having the difference among the proved doctrines, *vāda*, *jalpa* and *vitandā* cannot be employed as categories. Here, we have discussed about the doctrines which are acceptable by different parties. By holding any position they have their own ideology for accepting a particular truth. That is why the upcoming discussion would be about the position accepted by their different sources of knowledge (perception, inference, comparison and verbal testimony respectively).

Avayava is used as the component of inference. The 'components of an inference'⁵⁸ are characterized as *pratijñā* (that which is to be established), *hetu* (reason), *udāharana* (an explanatory example), *upanaya* (an application of the example), and *nigamana* (a statement of the conclusion). "Each of the five propositions (namely *pratijñā*, etc.) with which the desired thesis is conclusively established (*siddhih parisamāpyate*) is called an inference-component (*avayava*) in relation to their totality."⁵⁹ The four *pramāna*-s are collectively present in these five components. The primary statement (*pratijñā*) of thesis is verbal testimony (*āgama*). The probans (*hetu*) is inference (*anumāna*). The exemplification (*udāharana*) is perception (*pratyaksa*). The application is comparison (*upamāna*). The demonstration of all the four components or propositions is used to derive the central thesis which is called as conclusion (*nigamana*).⁶⁰ On the other hand, the existence of the propositions in the establishment of the thesis (*nigamana*) also seeks to define the employment of the other categories (i.e. *vāda*, *jalpa*, *vitanda*) in the Gautama *Nyāya-sūtra*.

⁵⁶ With the acceptance of this example, one should have to agree the following statements which are- (1) That the senses are more than one, (2) that each of the senses has its particular object, (3) that soul derives its knowledge through the channels of the senses, (4) that a substance distinct from its qualities is the abode of them etc. The study has mentioned these relative statements to examine the hypothetical dogma and also tried to highlight how something is situated with their correspondence. (For more details see Vidyabhusana, *Op. cit.*, p. 60).

⁵⁷ Vidyabhusana, *Op. cit.*, p. 60.

⁵⁸ Nonetheless, there are people who used to say it as 'Members of a Syllogism'. For example, Vidyabhusana examinations of *avayava*. For more details see, Vidyabhusana, *Op. cit.*, p. 60.

⁵⁹ Gautama *Nyāya-Sūtra* with Vatsyāyana's Commentary, Trans. by Gangopadhyaya & with an Introduction by Chattopadhyaya, *Nyāya*, p. 5.

⁶⁰ *Ibid.*, p. 7.

And the ‘ascertainment of truth’⁶¹ also depends on these propositions. Though inference components are cognized as the specific forms of words and as such included in the object of valid knowledge, this is also a reason for separate mentioning of *avayava* (*Nyāya-sūtra*-i.1.1.) as a category. However, we know that the process of investigation does not only depend on certain sources of cognition, it could also be possible by the true reasoning and argumentation.

‘Hypothetical argument’⁶² (*Tarka*) is characterized as the process of ascertaining the real nature of a particular which is yet to be known and the actual nature is revealed through the process of reasoning by showing the absurdity of all the contrary characters. For example, the role that *tarka* plays for acquiring true knowledge when we say ‘the soul is eternal or non-eternal’. Here, *tarka* is employed by way of adducing some reason. Now, one can show a reason to support the statement that ‘soul is eternal’ by saying that “if the soul were non-eternal it would be impossible for it to enjoy the results of its own action, to undergo transmigration, and to attain final emancipation. But such a conclusion is absurd, because such possibilities are known to be belonged to the soul. Therefore, we must admit that the soul is eternal”⁶³. So, *tarka* is to facilitate the knowledge of truth, because it judges the plausibility of true knowledge. On the other hand, it also helps to establish one’s own thesis and refute the opponent in a debate with correct reasoning. With the correct reasoning one can establish a truth which would be acceptable by all. But, if an opponent still tries to establish his view, then it would be mere fact to give him a space to produce correct reasoning for the ascertainment of a particular truth.

‘Final ascertainment’ (*Nirṇaya*) is the final result of the instrument of valid knowledge and *vāda* ends with this. *Jalpa* and *vitanda* are intended to nurse it (*pālanārtha*).⁶⁴ Vidyabhusana wrote in his book *A History of Indian Logic (Ancient, Mediaeval and Modern School)* explaining the nature of *nirṇaya*:

“A person winks and doubts if certain statement advanced to him is supported by one of two parties, but opposed by the other party. His doubt is not removed until by the application of reason he can vindicate one of the parties. The process by which the

⁶¹ ‘Ascertainment of truth’ is categorized in the form of “*tattva*” according to Gangopadhyaya and Chattopadhyaya in the book *Nyāya*. For more details see, trans. Gangopadhyaya with an introduction by Chattopadhyaya, *Op. cit.*, p. 6.

⁶² *Tarka* can also be rendered as ‘reasoning’, ‘hypothetical reasoning’, ‘reductio ad absurdum’ etc.

⁶³ Vidyabhusana, *A History of Indian Logic (Ancient, Mediaeval and Modern School)*, p. 61.

⁶⁴ Gautama’s *Nyāya-Sūtra* & Vātsyāyana *Bhāṣya*, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyaya Philosophy*, Part-I, p. 24-25.

vindication is effected is called ascertainment. Ascertainment is not, however, in all cases preceded by doubt, for instance, in the case of perception things are ascertained directly. So also we ascertain things directly by the authority of scriptures. But in the case of investigation (inference), doubt must precede ascertainment.”⁶⁵

From this quote we can assert that *nirṇaya* is the determination of a question laid for the removal of doubt and there is also a space for the opposite sides which are willing to propose their own views. By listening all the sides it can acquire which position is reasonable and well-ascertained. Therefore, it is a process of acquiring the truth of knowledge by which one can be able to entertain his practical life. And it is separately mentioned as category in *nyāya-sūtra* because of its dealing with the practical life of people.⁶⁶

2.7. Discussion on *Vāda*, *Jalpa* and *Vitanda*

‘Discussion for the final ascertainment’ (*vāda*) is offered by more than one party where each party is trying to establish its own thesis. And their debate stops by the ascertainment of one of the positions contended. Therefore, the process of the discussion laid by *vāda* determines the truth which is to be established by the true debate and the position which deals with reasonable account.

Later, ‘the processes of debating maneuver’⁶⁷ (*jalpa*) is considered as acting in order to achieve a goal which is fixed into the subject matter by one. In this process, one has an intention to build his own thesis by rejecting his opponent. There is no intention to find out the real truth about a subject. Therefore, it is a process by which one considers that the truth is inherent only in his thesis, nowhere else. For example, in the case of judiciary process every lawyer has the tendency to establish his own argument and thereby, is supposed to be true and gains victory.

Vitandā (cavil⁶⁸) “is a kind of wrangling which consists of mere attack on the opposite side”⁶⁹. Therefore, it is a process where one has no endeavor to establish anything, being only critical at the argument of his opponent.

⁶⁵ Vidyabhusana, *A History of Indian Logic (Ancient, Mediaeval and Modern School)*, p. 61.

⁶⁶ Gautama *Nyāya-Sūtra* with Vatsyāyana’s Commentary, Trans. by Gangopadhyaya, M., with an Introduction by Chattopadhyaya, D., *Nyāya*, p. 7.

⁶⁷ Ibid., p. 7.

⁶⁸ Cavil is also rendered as ‘destructive criticism’.

⁶⁹ Vidyabhusana, S. C., *A History of Indian Logic (Ancient, Mediaeval and Modern School)*, Motilal Banarsidass Publishers Private Limited, Delhi, 1971 (First Published in 1920, Calcutta), p. 63.

2.8. Discussion on the fallacious *Hetū* (*Hetvābhāsa*)

Before discussing about *hetvābhāsa* it is necessary to raise a question on what correct reasoning or *sat hetūis*. Correct reasoning (*sat hetu*) is associated with the presence of *pakṣastya*, *sapakṣasatya*, *bipakṣāstya*, *asatpratipakṣatya* and *abādhitatya*. If in reasoning there is absence of any of these characteristics, then it would be called *hetvābhāsa*. *Hetvābhāsa* (fallacy) or invalid reasoning occurs only when certain conditions of reasoning are violated. It has mentioning in the *nyāya* philosophy that an inference (*anumāna*) becomes fallacious when certain material condition is violated.⁷⁰ According to Gautama, there are five fallacies of reason, namely, *savyabhicāra*, *viruddha*, *prakaransama* (*satpratipakṣa*), *sādhyasama* (*asiddha*) and *kālātita* (*bādhita*). If in reasoning there is the absence of *bipakṣāstya*, there would occur *vyabhicara dosa* and this fallacy is called *savyabhicāra*. If there is the absence of *sapakṣasatya*, there would occur *virodh dosa* and the fallacy is called *viruddha*. If in reasoning there is the absence of *pakṣastya*, there would occur *asiddhi dosa* and the fallacy is called *sādhyasama* (*asiddha*). On the other hand, if there is the absence of *asatpratipakṣatya*, there would occur *pratipakṣatya doṣa* and the fallacy is called *prakaransama* (*satpratipakṣa*). If there is the absence of *abādhitatya* characteristics in reasoning, there would occur *badha doṣa* and the fallacy is called *kālātita* (*bādhita*).

2.9. *Chala*, *Jāti*, and *Nigrahasthan*

Chala (purposive distortion of the opponent) is something where one tries to distort the answer which is intended to give some different answer. For example, when somebody says a word like ‘*navakambala*’, one can react in two ways: (1) he has new blanket or shawl, or (2) he has nine blankets. Therefore, when somebody reacts after hearing the word *navakambala* as ‘he has nine blankets’, it can be said that the person has used *chalato* answer the same, because the actual meaning of *navakambal* is associated with new blanket or shawl. In this process, *chala* is used to answer somebody’s question in an expected way or otherwise. However, one cannot deny that there is no space to reply differently. To look into the difference between the two, we have to go through the process of analogue (*jāti*), which we shall discuss in the next section.

⁷⁰ Jha, *Nyāya philosophy, Epistemology and Education*, p. 153.

*Jati*⁷¹ (analogue) is technical terminology in *nyāya* philosophy to deal with the similarity or dissimilarity with something. For example, if somebody says that sound is non-eternal because it is an effect like *ghata*, then one can also say that sound is eternal because it is immaterial as sky (*ākasa*). In this case, it would be an analogue or argument which does not function properly, because there is no universal relation between immaterial and eternal (e.g. happiness and suffering is immaterial but non-eternal). However, for avoiding some views it is necessary to produce certain reason which reflects the view that what is accepted has reasonable argument.

The literal meaning of *Nigrahasthan* (point of defeat) is about the reason of defeat in a debate. It can also happen for one's lack of understanding. That is why if somebody rejects the main reason about an argument and applies some fallacious argument then one has to accept his defeat. "It is also called clincher, an occasion for rebuking or a place for humiliation, when one misunderstands or does not understand at all."⁷² For example, if a person argues in a way which betrays his ignorance and yet continues in showing that he understands the matter, then there has no point to make counter argument. He is quiet, only to be argued against by him again and there is nothing left for his opponent who will eventually turn himself out from his company rebuking him as knave. Therefore, we can say that the opponent should quit the company of a person who argues in this way.

Now, one can ask a question of whether after having the true knowledge of these sixteen categories one can immediately get the *summum bonum*. Similar question could be raised by Uddyotkara in his book *Nyāyavārtika*. However, Gautama gave his answer related to liberation in negative perspective in his second *sūtra*. Now, we would discuss how he answered those questions in the next section.

2.10. Gautama's views regarding liberation in *Nyāya-sūtra* (i.1.2.)

Gautama gave the answer of whether one gets the liberation immediately after having the knowledge of sixteen categories in negative. He mentioned the way of acquiring *summum bonum* in his second *sūtra* as follows:

⁷¹ *Jāti* is also rendered as 'futile rejoinder based on mere similarity and dissimilarity' in the book *Nyāya*, trans. by Gautama Nyāya-Sūtra with Vatsyāyana's Commentary, Trans. by Gangopadhyaya, M., with an Introduction by Chattopadhyaya, D., *Nyāya*, p. 8.

⁷² Vidyabhusana, *A History of Indian Logic (Ancient, Mediaeval and Modern School)*, p. 66.

“*Duhkha-janma-pravritti-doṣa-mithyājñāna-namūttarottrapāyetadantarāpāyāvarga*
(*Nyāya-sūtra*,i.1.2.)”⁷³

The *sūtra* explains that “of suffering (*duhkha*), birth (*janma*), activity (*pravritti*), evil (*doṣa*), and false knowledge (*mithyājñāna*) - when each previous one mentioned in this series is removed in consequence of the removal of the one immediately following it, liberation is attained”⁷⁴. Gautama suggested that the removal of *mithyājñāna* leads to the removal of *doṣa*; the removal of *doṣa* leads to the removal of *pravritti*; the removal of *pravritti* leads to the removal of *janma* and the removal of *janma* leads to the removal of *duhkha*. And finally we get the result in *apavarga*. Here are the tables showing the suffering of life and the process of liberation.

<i>Duhkha</i> (result)	(cause) <i>janma</i>
<i>Janma</i> (result)	(cause) <i>pravritti</i>
<i>Pravritti</i> (result)	(cause) <i>doṣa</i>
<i>Doṣa</i> (result)	(cause) <i>mithyājñāna</i>

Knowledge of truth	Removes	<i>mithyājñāna</i> (false knowledge)
<i>mithyājñāna</i> (false knowledge)	Removes	<i>Doṣa</i> (evils)
<i>Dosa</i> (evils)	Removes	<i>Pravritti</i>
<i>Pravritti</i>	Removes	<i>Janma</i>
<i>Janma</i>	Removes	<i>Duhkha</i>

2.10.1 Table: The cause of life (left) and the process of liberation (right)

Gautama in his first *sūtra* discussed about the nature of sixteen categories and its aim for the attainment of liberation. With this very fact he mentioned the way of how one can achieve liberation. But, this can be valid only through the critical examination. According to him, the ultimate cause of life and suffering is *mithyājñāna*. He also pointed out that because of the false knowledge one gets into birth. The essence of *mithyājñāna* is about the kind of knowledge when one thinks that the soul is nothing but his body. These kinds of false

⁷³*Nyāya Darshan* (Gautama Sūtra) with Vātsāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, p. 63.

⁷⁴Gautama’s *Nyāya-Sūtra*& Vātsāyana *Bhāṣya*, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyaya Philosophy*, Part-I, p. 29.

knowledge cause the birth. According to Gautama, the removal of *mithyajñāna* leads to the removal of *dosa*, *pravritti*, *janma*, *duḥkha* and ultimately results in liberation. Suffering of life is only because of birth (*janma*). One gets into birth because of the merits and demerits of his past actions (*karma*) which lead to the motivation (*pravritti*) of life. The word *pravritti* is used here to mean virtue (*dharma*) and vice (*adharma*). The cause of this motivation is the kinds of evils (*doṣa*) which belong to everybody's life (i.e. *rāga* or attraction, *dveṣa* or repulsion, *lobha* or greed). The occurrences of attraction (*rāga*) are because of the favorable (*anukula*) and repulsion for the unfavorable (*devṣa*); all these are followed by the false knowledge. That is why one gets into different activities with their own motivations. We have seen that through evil (*doṣa*) one gets into motivation (*pravritti*) which results in the birth (*janma*), though there have such motivations which result in virtue, for example charity (*dana*), rescue (*paritrāna*), service to others (*paricarana*). There are also words which lead to virtue (truth or *satya*, benevolence or *hita*, attractiveness or *priya*, the recital of the *Veda* or *svādhyāya*) and minds (mercy or *dayā*, detachment or *asprhā*, and reverences or *sraddhā*). When false knowledge is eliminated by the knowledge of truth, evils are also removed because of the removal of false knowledge. For the removal of evils, motivation too is required to be removed. Because of the removal of the chain consequent motivation, birth comes to an end. With this cessation of birth, suffering also disappears. Thus, through this disappearance of suffering the final liberation or *niḥśreyasa* is attained.

According to Vātsyāyana, knowledge of truth is the very opposite of false knowledge and as such negates the latter.⁷⁵ But, one can say that false knowledge is also opposed to the knowledge of truth and it may also negate the knowledge of truth. In reply to this, Uddyotkara mentioned that though false knowledge is generated first, it is weaker than the knowledge of truth, because false knowledge has no basis in reality. By contrast, knowledge of truth has the basis of the reality of object as well as the instrument of valid knowledge (like scripture). Therefore, false knowledge cannot negate the knowledge of truth. Regarding false knowledge Gautama subsequently mentioned in *Nyāya sūtra* i.1.9 that the false knowledge of twelve *prameya*-s is the root cause of the worldly existence of individual selves. The true cognition of twelve *prameya*-s essentially leads to the attainment of liberation.

We have seen in this discussion that Gautama mentioned that sixteen categories aim to the liberation. Later on, he accepted the fact that it is not the case, that after having the true

⁷⁵ Ibid., p. 33.

knowledge of sixteen categories one cannot get liberation immediately, though it cannot say that for acquiring liberation there has no role of sixteen categories. As we have seen before, the knowledge of truth seeks to remove the false knowledge (*mithyajñāna*). That is why we need to have true knowledge of sixteen categories to remove the false knowledge of the reality of the object. And for the cessation of everything else one must have to remove false knowledge. The cessation of everything else is a kind of state where one gets the ultimate bliss (*sānta*). Through the true cognition of situated objects this reality moves towards the aim of bliss where all activities turn into an end. And there would be no possibility of rebirth. Therefore, 'knowledge of truth' is the only cause of the cessation of suffering and freedom from all consciousness of suffering.

Nyāya View of Inference (*Anumāna*): Definition and Classifications

3.1. Introduction

So far we have discussed in the first chapter about the subject matter of Nyāya philosophy of how the true knowledge of categories aimed at the liberation (*niḥśreyasa*) in details. But the mere mention of sixteen categories cannot result true knowledge. That is why critical examination is necessary for acquiring true knowledge. There are various ways of acquiring true knowledge in the Nyāya system. Gautamahad mentioned in his third *sūtra* (“*pratyakṣanumānopmānaśabdapramānāni*”⁷⁶-*sūtra*/i.1.3) about the sources of acquiring valid knowledge which are – *pratyakṣa* (perception), *anumāna* (inference), *upamāna* (comparison), *śabda* (verbal testimony). All these four kinds of *pramānana*-s lead to acquiring true knowledge.

Perception (*pratyakṣa*) is the function of each sense-organ in respect of its appropriate object and it is an immediate true cognition of validity due to some kinds of sense object contact. Perception involves four operative causes, namely objects, senses, mind and self. For example, for having a perceptual knowledge of an object one has to contact with the object, object to senses, sense to mind and mind to self; then we can get the true cognition about the particular. Gautama had identified that third *pramāna* is *upamāna* (comparison). According to him, “the comparison or analogy is the means of proving what is to be proved from a well-known similarity (e.g. the assertion of the cow as the *gavaya* i.e. the animal called *gavaya* is just like the cow.)”⁷⁷. According to Naiyāikas, *upamāna* is a method of obtaining knowledge from the previously well-known object to unknown object on the basis of its similarity to another object. Though, *upamāna* is not always due to the knowledge of similarity or dissimilarity between things. The common case in all the *upamāna* is the knowledge of the set of objects which refers the relation between a word and a certain class of objects. *Śabda* (verbal testimony) is the utmost means of acquiring cognition employed by *nyāya*. It underlies the importance of providing authenticity and authority to the knowledge of the words and sentences (*pada* and *vakya*) which constitute verbal testimony. *Śabda* signifies sound (*dhvani*) and stands for word (*pada*). It involves in the assertion of the trustworthy

⁷⁶ *Nyāya Darshan* (Gautama Sūtra) with Vātsāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, p. 81.

⁷⁷ Jha, *Nyāya philosophy, Epistemology and Education*, p. 156.

person. A reliable person is one who gets intimate knowledge of the subject on which the testimony is to be given. According to Gautama, “*śabda* is the *upadeśa* (instruction) of an *āpta* (reliable person)”⁷⁸. On the other hand, inference (*anumāna*) is also the source of valid knowledge employed by *nyāya*. Regarding *nyāya*, “inference (*anumāna*) is the after knowledge (*anu* = after, *māna* = knowledge) of an object as the probandum (*liṅgi*-artha) through a probans(*liṅga*) rightly ascertained (*mita*)”⁷⁹. In the next chapter I would discuss about the nature of inference, its classification and how inference (*anumāna*) seeks to acquire true knowledge.

3.2. Definition and Classification

There are various interpretations about the definition of inference (*anumāna*) in *nyāya* philosophy. Gautama, the founder of Nyāya philosophy had given a definition of inference as – “*atha tatpūrvakam tribidham anumāna pūrvavachheṣavat sāmānyatodṛṣṭanca*”⁸⁰ (*Nyāya-sūtra*, i.1.5.). According to him, “inference is preceded by it (*tat-pūrvaka*)”⁸¹ [i.e. by perception], and is of three kinds, namely *pūrvavat* (i.e. having the antecedent as the probans), *śeṣavat* (i.e. having the consequent as the probans) and *sāmānyatodṛṣṭa* (i.e. where the *vyāpti* is ascertained by a general observation)”⁸². Gautama held that *anumāna* is dependent on the perception, because the basis of having an inference about an object is reliable only when there is perceptual evidence. After seeing rising cloud in the sky we infer that it will rain. Here the possibility of rain depends on our previous experience as in most cases we see that it rains when there is cloud in the sky. Therefore, it can be said that inference is something which is preceded by perception. Inference also depends on perception for the knowledge of *vyāpti* or the universal relation between *hetū* and *sādhyā* of inference. The literal meaning of inference (*anumāna*) is a kind of knowledge which follows from some other knowledge. In other words, *anumāna* leads certain kinds of knowledge which possess

⁷⁸ Bijlawan, *Indian History of Knowledge*, p. 214.

⁷⁹ Gautama’s *Nyāya-Sūtra & Vātsyāyana Bhāṣya*, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyaya Philosophy*, p. 36.

⁸⁰ *Nyāya Darshan (Gautama Sūtra)* with Vātsāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, p. 150.

⁸¹ Later in *nyāyavārtika*, Uddyotkara had mentioned about the definition of inference (*anumāna*). He has given an explanation of the word ‘*tatpūrvaka*’ which uses the Gautama’s definition of *anumāna* (*nyāya-sūtra*, i.1.5) as the word ‘*tat*’ means *parāmarśa* or *lingya-parāmarśa*. The knowledge is only possible if we acquire the cognition of *pakṣadharmata* and *vyāpti*. Therefore, the cognition of inference involves a chain consequence which is *pakṣatā/pakṣa-dharmatā, vyāpti and parāmarśajñāna*. These will be discussed later in the logical forms of inference.

⁸² *Ibid.*, p. 61.

certain character as fire, which has a character called smoke because these two are connected with each other. In Nyāya philosophy there are various classifications of inference. Each classification of inference found in Nyāyaphilosophy has its certain grounds. Among those grounds, Gautama mentioned in his *sūtra*- i.1.5., about the classification which is based on ‘causation and mere co-existent’. On the basis of causation we acquire two kinds of inference which are called *aspūrvavat* and *śeṣavat*. *Sāmānyatoḍṛṣṭaanumāna* is based on mere co-existent. According to another classification of inference which is based on *vyāpti*, it is of three kinds which are *kevalānvayi*, *kevala-vyatireki*, *anvaya-vyatireki*. On the other hand, according to the classification of inference based on *sādhyā-siddhi* it is of two kinds that are *svārtha* and *parārth*. Now I would engage in the following section to dwell on the nature of different kinds of *anumāna*.

3.3. Nature of the *Pūrvavat*, *Śeṣavat* and *Sāmānyatoḍṛṣṭa Anumāna*

In the illustration of Gautama *sūtra* regarding the nature of inference (*anumāna*), Vātsyāyana arrived at to give a clear explanation of the above mentioned kinds of inference. He explained the nature of *pūrvatanumāna* as “*purva diti-yatra kāranena kāryamanūmiyate-yathā, meghonntya vavisyati bṛṣṭiriti*”⁸³. It means that when we assert something through its antecedent or its cause which we have experienced before, then the entire process of having knowledge about an effect through its antecedent cause is called *pūrvavat anumāna*. For example, when we see clouds rising we infer that there will be rain. In this inference we move from the knowledge of the antecedent to the knowledge of the effect. Therefore, we can say that in *pūrvavat anumāna* we acquire the knowledge of the unperceived effect from its perceived cause. Though Uddyotakāra criticized this view by offering that no sensible person could proceed to cognize the effect simply on the underlying support of the perception of a cause. On the other hand, Vātsyāyana offered another interpretation of *pūrvavat anumāna* by saying that “it is a kind of inference in which out of two things one that is not perceived is inferred from the perception of the other on the basis of a former perception of both the things together.”⁸⁴ For instance, when we see smoke on the hill we infer that there is fire. The cause of immediate inference of fire on the hill after the perception of smoke happens only because of our previous perceptual experience of the universal relation of the existence of smoke and fire. According to Jayanta Bhatta, “*pūrvavat* is the universal concomitance

⁸³ *Nyāya Darshan (Gautama Sūtra)* with Vātsyāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, p. 167.

⁸⁴ Jha, *Nyāya philosophy, Epistemology and Education*, p. 142.

between the reason and the consequence which is responsible for the establishment of one by another”.⁸⁵

Vātsyāyana explained the *śeṣavatanumāna* as “*śeṣavat tat-yatra kāryena kāranmanūmiyate, purvadvak-viparitmudkang nadya purnatvat shighratvanca drṣṭa svratasohanumiyate bhuta bṛṣṭiriti*”.⁸⁶ The word *śeṣa* means the residual or *pariśeṣa*. That means it is a kind of inference where we acquire the definite knowledge resting on the residual after the elimination of possible objects which could be certain. On the other hand, it also happens to those cases which seem to be irrelevant. For instance, by characterizing sound as existing (*sat*) and non-eternal (*anitya*), the common characteristics of substance (*dravya*), quality (*guna*), and action (*karma*) could be differentiated from universal (*sāmānya*), particularity (*viśeṣa*) and inherence (*samavāya*). When doubt arises about whether sound is substance, quality, or action, we eliminate the reason as follows. It is not substance because it has only a single substance (*ekadravyatya*)⁸⁷ as inherent cause. It is not action because it is the cause of the subsequent sound. It cannot be an action because one action cannot result in another similar action whereas a sound results in a series of similar successive sounds. Therefore, we could say that it is what the residual is and sound is proved to be a quality of *ākāśa*.⁸⁸ According to Vātsyāyana, *aśeṣavatanumāna* is that in which we infer the unperceived cause from a perceived effect, e.g., on perceiving the water of the river as different from what it was earlier and further perceiving the fullness of the river and the swiftness of the current, it is inferred that there was rain.

A *sāmānyatodrṣṭaanumāna* is something which depends neither on effect nor on cause. It is a kind of inference which depends on causal uniformity. In other words, in the case of *sāmānyatodrṣṭaanumāna* we infer one from other not because they are causally connected but because they are uniformly related to each other. The relation between the probans (*hetū*) and the probandum (*sādhyā*) being imperceptible, the probandum (*sādhyā*) is known from a probans (*hetū*) having the same nature with any other object; for example, ‘self from desire’

⁸⁵ Ibid.

⁸⁶ *Nyāya Darshan* (Gautama Sūtra) with Vātsyāyana Bhāṣya, Trans. by Mahāmahopādhyāya Phanibhūsana Tarkabagish, 1981.

⁸⁷ Here it is used in the sense that sound is not only the inherent relation of a substance and it is not also preceded by universals (*jati*) because sound can produce series of similar consecutive sounds. And if one action results another similar action then we could say that sound is not an action. This is something which produces and remains after the substance, quality and action. So we could say that sound is a qualitative substance.

⁸⁸ Gautama’s *Nyāya-Sūtra* & Vātsyāyana Bhāṣya, trans. by Chattopadhyaya, D., & Gangopadhyaya, M., *Nyaya Philosophy*, Part-I, p. 66.

where desire is the quality of the self and qualities reside in substance. Therefore, desire is an underlying layer of the self. On the other hand, through the *sāmānyatodṛṣṭānumāna* one can perceive the movement of a particular, the perception of an object at some place which was previously somewhere else is due to its movement, as of sun. Therefore, it can be inferred through the imperceptibility that the sun has movement. With this very example we can acquire the knowledge about an object through our ordinary perception. We know that the sun rises in the east and sets down in the west. Now it is quite natural for an ordinary man to think that the sun has a movement. In these cases, one can use the process of this particular kinds of inference for having a knowledge about an object. And one can apply the law of uniformity for acquiring the knowledge.

According to Navya-Naiyaikas, the relation of *vyāpti*⁸⁹ has its types. The concomitance relation between *hetū* and *sādhya* has varieties and because of having the types of *vyāpti*, there are types of inference. Uddyotakāra (navya-naiyaika) also suggested that there have three kinds of inference which are based on *vyāpti* (the concomitance relation between *hetū* and *sādhya*). These three forms of inference which are discussed in *nyāya-sūtra* (i.1.37) are as follows: *anvayi*, *vyatireki*, and *anvaya-vyatireki*. In the next section, I will discuss these forms of inference.

3.4. Discussions about *Kevalānvayi*, *Kevala-vyatireki*, *Anvaya-vyatireki* Inference (*anumāna*)

The word ‘*anvaya*’ is used here as ‘the agreement in presence’. That is why *kevalānvayanumāna* is something in which the relation of *vyāpti* is observed by the agreement of the presence of two things. It means having an inference of this kind, *hetū* and *sādhya* should agree in order to be present together in one place. There should not be any case in which one is present and the other is absent. For example, wherever there is smoke, there is fire, as in the kitchen. This is an example of agreement in presence. Now, it would be clarified very soon how this seems to be an agreement in presence by the elaboration. In this example we have seen that there has the existence of smoke and fire. We know that smoke can only be produced only if there is fire. There is no place of this reality where smoke can exist without fire. Here the existence of fire in the place of smoke is necessary and it is a kind of agreement by which two things can situate in same place. Therefore, it can be said that this is a kind of inference where the knowledge of *vyāpti* between *sādhya* and *hetu* appears only

⁸⁹ The concomitance relation between *hetu* and *sādhya* is called *vyāpti*.

through the method of agreement in presence since there is no negative instances of their agreement in absence. In our next discussion the subject matter of this engagement would be the agreement in absence.

The word ‘*vyatirek*’ is used to refer to the agreement in absence. In that sense, *kevala-vyatireki anumāna* is something in which the *hetū* is negatively related to the *sādhya*. Here the relation of *vyāpti* depends on the relation of the absence of the *sādhya* and *hetū*. Here, we cannot see any positive instances of argument in presence between the *hetū* and *sādhya*. Therefore, the condition of the existence in having the absence of *sādhya* and *hetū* together in one place depends on their co-existence. For example, where there is no fire, there is no smoke as well (as in lake). We can observe the existence of smoke and fire together in kitchen. In the same way, in lake we can’t perceive the existence of fire and smoke as well.

An inference is called *anvaya-vyatireki* when its *hetū* is both positively and negatively associated with the *sādhya*. Here the relation of *vyāpti* between *hetū* and *sādhya* is to be established through the joint method of agreement in presence and absence (*anvaya* and *vyatireki*). For example,

All cases of smoke are the result of fire.	}	(anvaya)
The hill is a case of smoke. The method of agreement in presence		
Therefore, the hill is a case of fire.		
No case of non-fire is the case of smoke.	}	(vyatireki)
The hill is a case of smoke. The method of agreement in absence		
Therefore, the hill is a case of fire.		

We have seen that there are various types of agreement between *sādhya* and *pakṣa*. These agreements constitute different kinds of inference. The basis of these three kinds is positive, negative or both positively and negatively associated. Thus the method of agreements having their constituencies helps to seek the cognition of the inference. Though there are also the logical forms of inference (*anumāna*). The basis of these forms is to be established by the *sādhya-siddhi*. Here the term *sādhya-siddhi* is used for the cognition which someone can desire to set up. Thus, inference has two forms, namely, *svārtha* and *parārthanumāna*. In

Indian logic *Naiyāikas* only speaks about these two forms of inference. That is why only these branches of inference can be found in the *nyāya*-logic.

3.5. The Logical Forms of Inference (*Anumāna*)

In the system of Indian philosophy, those who accept inference (*anumāna*) as the source of valid knowledge hold this forms of inferential reasoning. In inference we arrive at a certain conclusion along with some other supportive arguments which are justified as true. This form of inference involves some statements in respect to establishing a particular truth. This form of inference is emphasized by the author Annambhaṭṭa. Regarding this form of inference Annambhaṭṭa in his book *Tarkasāmagraha-Dīpīka* on *Tarkasāmagraha* mentioned about inference (*anumāna*) that “the common condition (*karaṇa*) of *anumiti* is *anumāna*. *Anumiti* is the cognition resulting from *parāmarśa*. *Parāmarśa* is the cognition of a subject (*pakṣa*) as having something [viz. a *hetu*] which is characterized by *vyāpti* [of the *probundum*]; e.g. the cognition like ‘the hill has smoke which is characterized by the *vyāpti* of fire. The cognition resulting from it like ‘the hill has fire’ is *anumiti* (in TS, 49).”⁹⁰ With this illustration of the notion of inference we obtain about the involvement of certain concepts. In the definition of inference we receive four concepts which are (a) the concept of *anumiti*, (b) the concept of *pakṣatā* (c) ‘the concept of *uttejaka* or stimulant’⁹¹ and (d) the concept of *parāmarśa*. Annambhaṭṭa began the examination of *anumiti* by suggesting an objection as to its being ‘too wide’ in character and then offering a solution thereof with the help of the concept of *pakṣatā*.⁹² But, in respect to analyzing these concepts I will depart by presenting with (d) the concept of *parāmarśa* in the beginning, because it would be profitable if the discussion starts by this order, then *anumiti*, *pakṣatā* and the rest. Another reason for starting with *parāmarśa* is that it has a major involvement in acquiring true cognition of inference.

(d) The concept of *parāmarśa*

According to TS definition of *anumiti* or inferential cognition, it is a cognition resulting from *parāmarśa*. That is why it is necessary to know what *parāmarśa* is. Usually the term *parāmarśa* is used for the cognition or knowledge. But here it is used in a technical sense

⁹⁰ *Tarkasāmagraha-Dīpīka* on *Tarkasāmagraha*, Trans. by Bhattacharya, p. 189.

⁹¹ Unlikely we haven’t seen this notion directly in the definition produced by Annambhaṭṭa in TS.49 though it has been inherently connected with the notion of *pakṣatā*. The connection of this notion is to be discovered in the analysis of *pakṣatā* for making the principles of having an inferential cognition.

⁹² Trans. by Bhattacharya, *Op. cit.*, p. 190.

and means some special kinds of cognition (not every kind of cognition). It needs an illustration to know the specialty of these kinds of cognition. When one sees smoke coming out from hill, he infers that there is fire in the hill. The inferential cognition of the Nyāya analysis results from the following facts: we see smoke coming out of the hill, then we remember the rule of “wherever there is smoke there is fire”. Then we also assure about the fact that the smoke we have seen comes under the rule (here the rule is “whenever there is smoke there is fire”). We can never have the inference in question unless we have three conditions of having an inference which are- the seeing, the remembrance and the assurance. It is to be noted that the remembrance follows the seeing and the assurance follows the remembrance. Since the assurance is the last to be appeared on the scene, it might be taken as the ‘special means’ or ‘*karaṇa*’. Now we have to look for in the aforesaid example where *parāmarśa* does come into the frame. In TS, “Annambhaṭṭa defines *parāmarśa* as the cognition of ‘*vyāptiviśiṣṭa-pakṣadharmatā*’”.⁹³ From the phrase of the definition we get two components- (i) *vyāptiviśiṣṭa* and (ii) *pakṣadharmatā*. The meaning of *vyāptiviśiṣṭais* is characterized by *vyāpti*. On the other hand, *pakṣadharmatā* is characterized as the fact of being which underlies *pakṣa*. With this explanation we could say that the TS definition of *parāmarśa* might be taken to mean the cognition of the *pakṣadharmatā* which is *vyāptiviśiṣṭa*. That means that “the cognition of the fact is that the subject (*pakṣa*) has its characterizer in the probans (*hetu*) as characterized by the rule of concomitance (*vyāpti*). In other words, *parāmarśa* might be taken to mean the cognition of the subject of an inference as having a mark which is characterized by the *vyāpti* of the probandum.”⁹⁴ Let us take an example, the cognition of having smoke (*hetu*) on the hill (*pakṣa*) under the reference of the uniform concomitance (*vyāpti*) of the fire (the *sādhya*) is *parāmarśa*. This is one analysis of the phrase ‘*vyāptiviśiṣṭa-pakṣadharmatā*’, though there has other analyses too.

Nīlakaṇṭha pointed out that if we would take the above analysis of the definition of *parāmarśa* true then it would make the definition of *anumiti* too narrow. From the TS definition of *anumiti* we know that *anumiti* is a cognition which results from *parāmarśa*. But if we take the above analysis of *parāmarśa*, then the definition of *anumiti* does not cover the instances of incorrect ‘*anumiti*’.⁹⁵ Thus it involves the vice of under-coverage (*avyāpti*). To understand this fact, it needs a clarification. In the given fact, first we have to assert the inference (*anumiti*) to be correct or incorrect. In the former case of inference, a probandum

⁹³ Ibid., p. 191.

⁹⁴ Ibid.

⁹⁵ Here incorrect *anumiti* is used in a sense in which the probans is *vyabhicāri*.

(*sādhya*) is asserted of a ‘subject’ (*pakṣa*), because the subject is characterized by a probans (*hetu*) which is actually characterized by the probandum (*sādhya*).⁹⁶ For example, when we acquire the cognition of fire (*sādhya*) on the hill (*pakṣa*), it is only because of the perception of smoke (*hetu*) at that place. But the existence of smoke (*hetu*) at the place is associated with the existence of fire (*sādhya*). Therefore, we could say that smoke (*hetu*) is characterized by the fire (*sādhya*). In the latter case, the probandum is asserted of a ‘subject’ because it is characterized by a probans which is not actually characterized by a probandum, but which is falsely taken to be so characterized.⁹⁷ However, in both the cases we get inferential cognition or *anumiti*. But the difference between two is that in the case of correct inference the conclusion is associated with *parāmarśa*, but in the latter case the conclusion cannot say that it results from such knowledge where *hetu* is not characterized by the probandum (*sādhya*). That is why the definition of inferential cognition (*anumiti*) which results from *parāmarśa* seems too narrow. Since it would cover all the cases of correct inference but not those which are incorrect so far (in other words, those which are based on *vyabhicāri hetu*). Therefore, if TS definition of *parāmarśa* is taken as above then TS definition of *anumiti* would be faulty one. Further, Nilakantha mentioned that Annambhatta was quite conscious of this difficulty and that is why in his ‘TSD’ he gave another interpretation of the definition of *parāmarśa* to clear the aforesaid undercoverage (*avyāpti*). The TSD definition of *parāmarśa* is that it is the cognition of *pakṣadharmatā* which has *vyāpti* as its object (*viśaya*), though there has an ambiguity in the *parāmarśa* definition mentioned in TSD. According to some Naiyāikas, *parāmarśa* is just a kind of *samuhalambana* cognition having *vyāpti* and *pakṣadharmatā* for its conjoined cognitum. The other explanation of *parāmarśa* is that it is the cognition of complex cognitum in which *vyāpti* is figured as the determinant (*prakāra*) and *pakṣadharmatā* as determinandum (*viśeṣya*). That is why in TSD Annambhatta changed the TS definition of *parāmarśa* (*vyāptiviśiṣṭa-pakṣadharmatā jñānam*) as *vyāptiviśayakam pakṣadharmatā jñānam*, though the definition of *parāmarśa* was evaluated again by Lakshmi Niṛsimha & Nīlakaṇṭha.

Lakshmi Niṛsimha in his *Bhāskarodayā* commentary wrote on the TS definition of *parāmarśa* as: “*Atra vaiśiṣṭyam prakāritā. Tathā ca: vyāptiviśiṣṭam vyāptiprakarakaṁ yat pakṣadharmatā jñānam tatjñyam jñānam ityarthah*”.⁹⁸ According to this *sloka*, the *vaiśiṣṭya* in question means that there have some modes of cognition which they named as *prakāritā*.

⁹⁶ Trans. by Bhattacharya, G., *Op. cit.*, p. 192.

⁹⁷ *Ibid.*

⁹⁸ *Ibid.*, p. 193.

To define *parāmarśa*, it is used as to cover the different kinds of cognition (including the kinds of cognition which do not cover the TS definition of *parāmarśa*). Therefore, regarding Lakshmi Nīrṣimha, *parāmarśa* is the knowledge which results from the cognition of the *pakṣadharmā* and has *vyāpti* for its *prakāra*. On the other hand, Nīlakaṇṭha had given the final elucidation of *vyāpti-prakaraka-pakṣasharmatā-jñānam*: “*vyāptavacchinna-prakāratanirupita-pakṣatā-vacchedakavacchinna-viśeṣyatāsāli nischayah parāmarśah*”.⁹⁹

(a) Definition of *Anumiti*

According to TS, inference is the cognition that results from *parāmarśa*. The nature of *parāmarśa* has been discussed and analyzed before. Now I would proceed to discuss on the nature of *anumiti* regarding TS&TSD. If we look at the definition of *anumiti* mentioned in TS as ‘the cognition that results from *parāmarśa*’, then the definition becomes too wide. In TSD it puts as ‘it would cover the case of a perception following a state of doubt (*samśayottara-pratyakṣa*)’.¹⁰⁰ To explain the fact, we have to take an example which is as follows: in seeing something from a distance one is not sure about the perception what he has just acquired. At this stage the person belongs to a state in which he has the cognition like, “this is a post or a human being”, though this stage of oscillation does not stay for a long time. The point of uncertainty disappears with our apprehension about the features of a human being and the physical background (viz. it disappears only because of the peculiar features of a human being or ‘*puruṣatvavyāpya-karādimān*’, as a person has arms, legs etc.). Thereafter, we come to have a realization that the thing in question is man to be sure (*puruṣaeva*). It is described in TSD as *samśayottara-pratyakṣa*. On the other hand, if we take it in technical sense then the analysis would be the cognition of a *pakṣa* characterized by something which has the *vyāpti* of *puruṣatva*. In other words, the final realization results from an apprehension which is technically known as *parāmarśa*. Here arises a question that if *anumiti* is defined as in TS and results from *paramārśa* then it is no more regarded as inferential cognition, because the realization which we have talked here is an instance of perceptual cognition (*pratyakṣa*), not of inference. Hence, there is an overcoverage (*ativyāpti*) of the TS definition of inference in relation to the kind of perception as *samśayottara-pratyakṣa*. This *ativyāpti* was suggested by Annambhaṭṭa himself in his TSD.

⁹⁹ Ibid.

¹⁰⁰ Ibid., p. 194.

As stated above, there is an overcoverage in TS definition of *anumiti* (it is a cognition which results from *parāmarśa*). Though there are Nyaiyāikas who used to argue that the TS definition of *anumiti* is not a faulty one. That is why they produced the following justification for the defense of TS definition of *anumiti*. According to them, this so-called perceptual cognition (*samśayottara-pratyakṣa*) is not really perceptual, it is inferential in character. Thus, the charge of overcoverage does not lie against the TS definition of *anumiti*, because the nature of overcoverage is that it only occurs where the definition covers something that is not definiendum (*lakṣya*). Hence, the present contention of so-called perceptual state is really a case of inference or *anumiti*. Therefore, the TS definition of *anumiti* is not a faulty one, but it is the coverage of a definiendum (*lakṣya*), though this defense was not accepted by Annambhaṭṭa. He produced the following reason for his denying of the defense of the TS definition of *anumiti*. According to him, “Whether a particular mental state is an instance of ‘perceptual cognition’ (*pratyakṣa*) or ‘inferential cognition’ (*anumiti*) is always to be decided by the internal perception of that state”.¹⁰¹ Here he turned up two questions to clarify the situations which are: ‘(i) In such cases what is the verdict of internal perception? (ii) Is the ‘realization’ felt to be an instance of immediate knowledge or of mediate knowledge?’¹⁰² According to TSD, it is surely felt to be a case of perception or direct cognition (*sāksātkāra*). Nilakantha added that it is not, again, felt to be any kind of mediate knowledge that *anumiti* is. In conclusion, the claim that the realization under reference is an instance of inference (*anumiti*) cannot be sustained. Therefore, the charge against TS definition of inference still cannot be set aside.

It might be recommended that since the realization moves forward by a cognitive state like a *parāmarśa*, it cannot be a case of perception. But there is no rule implied in the above contention. The internal perception of a cognitive state (*anuvyavasāya*) is admittedly a perception following a cognition. There are Naiyāikas who urge “the introspectional cognition likewise a perception ensuing upon a cognition. It cannot thus be rightly contended that the realization under discussion is a case of inference only because it ensues upon a cognitive state like *parāmarśa*”.¹⁰³ Therefore, the TS definition of inference is still open to the charge of overcoverage. In TSD, Annambhaṭṭa appeared to have admitted this but asserted that he intended by this TS definition to convey something more than what appears on the face of it. He tried to exemplify by saying that “when he speaks of an inferential

¹⁰¹ Ibid., p. 195.

¹⁰² Ibid.

¹⁰³ Ibid.

cognition as resulting from *parāmarśa* he means to say that it results from *parāmarśa* accompanied by *paksatā*”.¹⁰⁴ Therefore, the claim raised against the TS definition of *anumiti* comes under the charge of overcoverage with reference to ‘*samśayottara-pratyakṣa*’ and does not hold good. Thus, those who stated that it is not a state of inference but one of perception, seem to charge wrongly to the definition of inference. That is why it is said that though such a perceptual state is admitted to have resulted from *parāmarśa*, it is not due to *paramārśa* accompanied by *paksatā*. Hence, TSD definition is thus claimed to clear the charge of overcoverage against the TS definition of inferential cognition. Now, we would deal with why such perception is not admitted due to *paksatā* which will be evident from the analysis in the next section.

(b) The notion of *Pakṣatā*

As stated in the earlier section, it is claimed that *anumiti* results from *parāmarśa* itself, but it is accompanied by *paksatā*. The word ‘*paksatā*’ is derived from ‘*pakṣa*’ with ‘*ta*’ which represents the action of the suffix technically known as ‘*tal*’.¹⁰⁵ The literal meaning of *pakṣatā* is about the nature of a *pakṣa* which is later taken as a unit of inference. In this context, *pakṣa* is to be understood as the subject of something which is validly predicated. It is about something from which a *sādhyā* is to be correctly predicted. Now, the entity of which the *sādhyā* is to be predicated validly must be eligible for such predication. This eligibility depends on a cognitive situation or circumstance in which the subject of an inference is involved. It is this situation which is technically known as *paksatā*. That is why *paksatā* is one of the necessary conditions for the emergence of a correct inferential state. Thus, it is now necessary to ask what *paksatā* is. Before talking about the nature of *paksatā* we have to be sure what it is not. It is not just the “desire to predicate a probandum (*sādhyā*) of a *pakṣa*” (*siṣādhayiṣā* = *sādhyānumitīcchā*). It is also mentioned in TS that desire by itself is not the necessary condition for the emergence of an inference because we may have inference even without a desire. For instance, we may infer about an incident happening at one place after hearing a loud sound, even though we might have no previous desire to engage in such an inferential act. Therefore, we could say that the desire to predicate or *siṣādhayiṣā* is not the necessary condition for an inferential event (*anumiti*). On the other hand, sometimes it is suggested that an uncertainty (*sādhyasamśaya*) about whether a *sādhyā* belongs to a *pakṣa* is a necessary condition for the exposure of an inferential state (*anumiti*). This also cannot be

¹⁰⁴ Ibid.

¹⁰⁵ Ibid., p. 196.

accepted because it is said that inferential cognition can emerge even without an uncertainty, e.g. “when a person infers the presence of clouds in the sky after hearing a thunder-clap, the inference is forced upon him to be sure, and does not dawn on him after a state of doubt or uncertainty about the presence of clouds.”¹⁰⁶ In such cases of inference one does not have previous thought about the existence of *sādhya* or not the existence of *pakṣa*. However, it cannot be denied that a doubt does precede inferential cognition on certain occasion, what is to be denied here is that it is a universal or necessary condition for such cognition. Therefore, it is to be clearly said that neither ‘the desire to predicate’ (*siṣādhayiṣā*) nor an uncertainty (*sādhyaśamśaya*) is to be identified as actual condition of a correct inferential cognition.

Moreover, it is to be suggested that the ‘absence of certainty’ (*siddhyabhāva*) is qualified to determine the condition of having an inferential cognition. We know that *siddhi* is about the certainty of a state. And this certainty (*siddhi = niścaya*) is the counteractive to inferential thinking. Thus, ‘the absence of such certainty’ is to be regarded as the necessary condition for the emergence of the inference (viz. the absence of a counteractive is to be used to express the necessary condition for implementing inference). We may then be likely to state that the absence (*abhāva*) of certainty in question constitutes *pakṣatā* which is regarded as the necessary condition of inferential act. But, this would also be a mistake if one engages in an inferential act, even when there is the certainty in question and if it is provided only that one has a desire to engage in such an act. In other words, one might say that ‘the absence of such certainty’ is regarded as the necessary condition for the inferential cognition even in the absence of ‘the absence of such certainty’,¹⁰⁷ though in the presence of such certainty we may have an inferential cognition which we have just mentioned before. Thus, the certainty about a particular probandum (*sādhya*) exists in a particular *pakṣa* for the resistance of an inference which is qualified by the fact that there is no desire in one’s part to engage in having an inference. Similarly, as such the ‘certainty’ is cognized with the absence of such desire which is to be regarded a hindrance to inferential act, but not just such ‘certainty’ itself. Therefore, for having an inferential cognition, ‘the absence of such certainty’ accompanied by ‘the absence of such desire’ is to be regarded as a necessary condition. This is technically known as ‘*pakṣatā*’. That is why Annambhaṭṭain in his TSD defined *pakṣatā* as “the absence (*abhāva*) of ‘certainty (*siddhi*) that is accompanied by (*sahakṛta*) the absence (*viraha*) of the

¹⁰⁶ Ibid., p. 197.

¹⁰⁷ Ibid., p. 198.

desire to infer (*siṣādhayiṣā*)’ – (*siṣādhayiṣā-viraha-sahakṛta-siddhyabhāva*).”¹⁰⁸ Now, it needs an illustration to understand the TSD definition of *pakṣatā*.

Final ascertainment of <i>anumiti</i>	Presence of <i>siṣādhayiṣā</i>	Absence of <i>siṣādhayiṣā</i>	Presence of <i>Siddhi</i>	Absence of <i>Siddhi</i>
possible	✓	–	✓	–
possible	✓	–	–	✓
possible	–	✓	–	✓
Not possible	–	✓	✓	–

Table 3.5.1: Demonstration of the possibilities of *anumiti* (inferential cognition) in relation to *pakṣatā*

We have seen that Annambhaṭṭa mentioned about the definition of *pakṣatā* in his TSD as “the absence of certainty which is accompanied by the absence of the desire to infer”. Following the definition of *pakṣatā*, he defined that the absence is about the complex entity. This complex entity has two components: (i) the certainty and (ii) the absence of the desire to infer.¹⁰⁹ The absence of a complex is dependent on the absence of one or both of the components. In other words, this absence would depend either “(i) on the absence of certainty or (ii) on the absence of ‘the absence of the desire to infer’ or lastly (iii) on both of the absence of certainty and the absence of ‘the absence of the desire to infer’”.¹¹⁰ In any of these three conditions there would be the ‘absence of the complex’ that would provide a necessary condition for an inference. This necessary condition is known as *pakṣatā*.

As per the discussion considered with regards to TS&TSD, *anumāna* is divided in ‘four main branches’¹¹¹ what I have mentioned in the beginning of the discussion on ‘the logical forms of inference’ (*anumāna*). We have seen that there are difficulties to define the definition of *anumiti*. To define *anumiti* with regards to TS definition, there occurs overcoverage and to prevent the overcoverage from the TS definition, we take a support of

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ The branches are: a) the concept of *anumiti*, (b) the concept of *pakṣatā*, (c) ‘the concept of *uttejaka* or stimulant’ and (d) the concept of *parāmarśa*.

TSD definition of *anumiti* which includes a characterization of *pakṣatā*. That is why we have discussed about the nature and the definition of *pakṣatā* after defining *anumiti*. So, we have discussed (a) about *anumiti* and (b) *pakṣatā* for preventing the charge of overcoverage. Now, it is necessary to know how ‘the notion of *pakṣatā*’ does prevent the charge of overcoverage in the TS definition of inference.

In TS, Annambhaṭṭa defined inference as the cognition that results from *parāmarśa*. Further, in TSD he has given another definition for inferential cognition that it is “the cognition that results from *parāmarśa* accompanied by *pakṣatā*”.¹¹² The reason for departing from TS definition, if we would take TS definition of *anumiti*, would cover the case of a perception following a state of doubt (*samśayottara-pratyakṣa*). By this reason, this definition comes under the charge of overcoverage. Now, it is to be seen whether this claim can be validated. The perception in question is expressed in the form ‘that it is a man, to be sure’ and it is admittedly due to *parāmarśa*. Though we have seen that it is due to *parāmarśa* but it is not due to *parāmarśa* accompanied by *pakṣatā*.¹¹³ It is described before that the condition of *pakṣatā* would be satisfied only in ‘the absence of the certainty’ which is followed by ‘the absence of the desire to infer’. And next, it would emerge as the state of perception following a state of doubt. There is a pattern in the ‘absence of the certainty’ (*siddhyabhāva*) about whether ‘that is a man’ or something else, this certainty is a matter of fact which is followed by the presence of the desire for certainty. Therefore, this situation cannot be described as the absence of certainty that is accompanied by the absence of the desire for certainty. That is why the absence constitutes *pakṣatā* which is regarded as a necessary condition for inference. Thus, it can be said that the perception which helps to the ascertainment of an inference cannot be regarded as a perceptual state when it comes under a state of doubt, although such absence of certainty constitutes a state of doubt but it cannot be considered as a case of inference, because according to Annambhaṭṭa inference is always due to *parāmarśa* accompanied by *pakṣatā*.

(c) Analysis of *Pakṣatā*

The analysis of *pakṣatā* dealt in TSD as ‘the ‘desire to infer’ (*siṣādhayiṣā*) is to be regarded as a stimulant (*uttejaka*) of the effectuation of an inferential cognition.¹¹⁴ It is stimulant because even in the face of some factors which make some difficulties for having inference,

¹¹² Ibid., p. 198-199.

¹¹³ Ibid., p. 199.

¹¹⁴ Ibid.

its presence succeeds in stimulating the inferential act. The notion of ‘*uttejaka*’ is usually taken into employment in causal context. For example, fire is produced by fuel among other things but there is a gem called ‘*candrakānta*’ which could obstruct fuel in the process of producing fire. Here, the gem is the counteractive agent (*pratibandhaka*). On the other hand, there is a gem called ‘*sūryakānta*’ by which the fire gets rekindled. The second gem is cognized as the ‘*uttejaka*’ or the stimulant. Now, it has been mentioned earlier that inferential cognition follows from *parāmarśa*. If at the time of having *parāmarśa* we have also certainty (*siddhi*) about the proposition which would normally follows from that *parāmarśa*, then the latter does not produce the desired result. Again, if at that time one happens to have the desire to infer, then the *parāmarśa* regains its productivity and thereby the normal inference emerges. Here, the ‘desire to infer’ is described as *uttejaka*. Therefore, *uttejaka* is something which produces an effect even if there is the presence of such a counteractive agent (*uttejakatvam = pratibandhaka-samakālīna-kārya-janakatvam*).¹¹⁵ On the other hand, if the *uttejaka* is absent at certain point, there would enter a factor of counteractive complex (*uttejakatvam = pratibandhaka-koṭi-praviṣṭābhāva-pratīyogitvam*).¹¹⁶ Annambhaṭṭa described the respective causal condition for fire and inference in terms of their respective counteractives and the *uttejakas*. In the case of a fire, the causal condition is enhanced by the absence of ‘*candrakānta*’ which is followed by the absence of ‘*sūryakānta*’. However, in the case of inference the causal condition is represented by the absence of certainty (*siddhi*) which is followed by the absence of the desire to infer (*siṣādhayiṣā-viraha-sahakṛta-siddhyabhāva*).¹¹⁷

As stated earlier, we have discussed about four concepts to define the nature of inference which are as follows: (i) *anumiti*, (ii) *pakṣatā*, (iii) *uttejaka* or stimulant’ and (iv) *parāmarśa*. But, in the discussion of *parāmarśa* we have considered the TSD definition employed by Annambhaṭṭa. According to him, the definition of *parāmarśain* regards TSD as *vyāptiviśayakam pakṣasharmatā jñānam*. While defining the nature of the concept of *parāmarśa* we have discussed about the cognition of *pakṣasharmatā* and *vyāptiviśiṣṭa*. *Pakṣadharmatā* is characterized as the fact of being which underlies *pakṣa*. On the other hand, the meaning of *vyāptiviśiṣṭa* is that which is characterized by *vyāpti*. That is why it is necessary to discuss about the nature of *vyāpti* and how it has taken into employment to furnish the defining the nature of inference.

¹¹⁵ Ibid., p. 200.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

i. The notion of *Vyāpti*

It has been observed before that the cognition resulted from *parāmarśa* (‘*vyāptiviśayakam pakṣasharmatā jñānam*’) leads to inferential cognition. And we have also found that the definition is not correct to define inferential cognition. Later, Annambhaṭṭa gave another definition which is considered as the correct definition of inferential cognition, i.e., “the cognition that results from *parāmarśa* as accompanied by *pakṣatā*”.¹¹⁸ After observing the discussion of *parāmarśa* we have found there are some features (here feature means the existence of *pakṣadharmatā* and *vyāpti* to define *parāmarśa*) by which it is constituted. The earlier discussion defines the nature of *pakṣatā* and its relation to *parāmarśa* for having the inferential knowledge. But we haven’t seen any discussion about *vyāpti*. As such, so far as the discussion of *pakṣatā* is concerned, there is a role of *vyāpti* in having an inferential cognition in the same way. That is why we would extend this discussion to show how *vyāpti* does help to seek the ascertainment of an inferential judgment. Annambhaṭṭa in his TS defined the definition of *vyāpti* as: “where there is smoke there is fire”, such a rule (*niyama*)¹¹⁹ of concomitance (*sāhacarya*) is termed as *vyāpti*.¹²⁰ Here, the rule is used in the sense of ‘law of uniformity’ (*niyama*). On the other hand, ‘concomitance’ means having the existence of probans (*hetu*) and probandum (*sādhya*) at the same place in a ‘co-locative’¹²¹ manner. In TSD, “*vyāpti* is stated as a kind of co-location (of a probans) with a probandum that is not the negatum of an absolute absence which has co-location with the probans”.¹²² It needs an illustration to understand the nature of *vyāpti*. To explain the matter we have to clarify few things here. First, for having an inferential cognition we must have supportive entity through which the entire process will be fulfilled. On the other hand, for having an inference there should be a *pakṣa* where *sādhya* would be predicated and the predication of *sādhyā* would be done with the strength of *hetu* or *linga*. And an inference is to be regarded as true or correct

¹¹⁸ Ibid., p. 198-199.

¹¹⁹ Annambhaṭṭa described *niyama* to define *vyāpti* as ‘*hetū-sāmānādhikārya-atyantābhāva-apratiyogi-sādhyasāmānādhikāryam*’ in his TSD. For more details see, Bhattacharya, G., *Op. cit.*, p. 200-201.

¹²⁰ Ibid., p. 200.

¹²¹ The meaning of ‘co-locative’ is used here in the sense of the existence of at least two things in the same place.

¹²² Ibid., p. 201.

only when the *hetu* would be employed as valid (*sat hetu*) and the *hetu* is to be followed by ‘concomitance rule’. ‘Rule’ is considered here as uniformity of relation between probans (*hetu*) and probandum (*sādhya*). Now, let’s take an example for the demonstration of *vyāpti*. If a person sees that ‘there is smoke on the hill’ and if the person knows that ‘wherever there is smoke, there is fire’ as certain, then he will certainly arrive at a conclusion that ‘there is fire on the hill’. Here, there is concomitance relation between smoke and fire. There can be other interpretations too on this co-relation, for example, if a person infers that there is *hetu* on the *pakṣa* and he has the knowledge of ‘wherever there is *hetu*, there is *sādhya*’, then the person would come into realization about the inference that there is *sādhya*. Therefore, we can say that for having a correct or true inference there should be a rule of concomitance.

We have assured that there is co-relation for acquiring an inferential cognition. But now one can ask a question on the fact that the co-relation of smoke and fire can be applied in both ways, on how it can be applied in the case of the relation ‘wherever there is smoke, there is fire’ or *vice-versa*. The reply would be no, because we can assure that smoke necessitates the existence of fire. Without the existence of fire, smoke can’t exist. But if we set the example in reverse order then there would not be the existence of smoke in relation to fire. Now, let’s take the example in order to show how it is not possible if we set the example in reverse order. We cannot set the example in this order- “Wherever there is fire, there is smoke”, because wherever there is fire there cannot be smoke in relation to fire, because gas burner cannot produce smoke, but there is the existence of fire. Therefore, in the reverse order we cannot claim that there is correlation between fire and smoke (in other words, in the opposite sequence we cannot establish the concomitance relation between *hetu* and *sādhya*). Here, probans is considered as invalid (*asat hetu*).

However, we have seen in TSD explanation of *vyāpti* that there is a probandum which is not the negatum of absolute absence (*atyantābhāva*), because it has a concomitance relation with probans. But there are other absences too, which are analyzed in *Nyāya* philosophy. Now, the question would be more significant as to why *atyantābhāva* should be only considered in this category. The varieties of absence dealt in *Nyāya* philosophy are as follows: prior absence (*prāghbhāva*), destructional absence (*dhvaṃsābhāva*), and reciprocal absence (*anyonyābhāva*). Now, I would present the reason why this absence cannot be considered to define *vyāpti*. First, prior absence or destructional absence acts in accordance with the particular cause alone, therefore this absence occurs at a position by itself. For example, if we say that the prior absence or destructional absence is P, then the cause for occurring the absence is P itself.

But in the question of ‘*vyāpti*’ we can find that there is a common place where probans and probandum is situated. In this discussion the probans is smoke and probandum is fire. We know that smoke can be found in the place of e.g. a kitchen, a chimney, a yard or something like that. Thus, we can confidently say, places like these are not the constituent where a prior or a destructional absence can be upheld. Therefore, they cannot be regarded as the common locus of the probans and an absence negetum of which qualifies the probandum of the inference.¹²³ And the question of a prior or a destructional absence cannot go into defining *vyāpti*. On the other hand, reciprocal absence (*anyonyābhāva*) is used ‘in a sense none other than difference’.¹²⁴ Therefore, it is an absence of a particular which is associated in accordance with everything other than the same particular. Now if we consider defining *vyāpti* then reciprocal absence would suggest that the locus of probans would be everything other than itself. Thus, probandum cannot be considered the negetum of an absence which has a colocation with probans in order to reciprocal absence. Therefore, we can say that whatever the other absence is cognized here cannot be considered to define *vyāpti*. That is why in terms of defining the concomitance rule of *vyāpti*, absolute absence should be considered. Therefore, we could say that *vyāpti* is the universal concomitance between *hetu* and *sādhya*. *Vyāpti* is of two kinds, namely, *samavyāpti* and *visamavyāpti*. *Samavyāpti* is a relation between the concomitance of two terms of equal extension which enables us to infer either of them from the other, e.g., whatever is nameable is knowable or *vice-versa*. On the other hand, *visamavyāpti* is a relation of non-equipollent concomitance between two terms; from one we may infer the other, but not the *vice-versa*.

ii. The concept of *Pakṣadharmatā*

As we know that the inference is defined as a ‘cognition which results from *parāmarśa*’. Later, it describes ‘the cognition of *pakṣa* as having something which is characterized by *vyāpti* (*vyāptiviśiṣṭa-pakṣadharmatā*)’.¹²⁵ The notion of *vyāpti* has been discussed in the earlier section. Now, we would take the discussion about the nature of *pakṣadharmatā* under the consideration of having an inferential cognition. As inference is defined, there is a probandum which is stated in a *pakṣa* with the strength of probans. For example, fire is announced to be present at a place (e.g. a kitchen, a chimney etc.) because of the perception of smoke in that place. But the perception of smoke helps to seek a correct inferential

¹²³ Ibid., p. 204.

¹²⁴ Ibid., p. 204.

¹²⁵ Ibid., p. 204.

knowledge about fire only when the smoke in question is known consistently to be associated with fire. Therefore, we can say that it is not the existence of smoke by itself at a certain place but of smoke which is consistently present with the association of fire. This is the determining condition of an inference. The English term ‘association’ is regarded as Sanskrit term ‘*vyāpti*’. We know that smoke is to be present at a place if there is the existence of fire. Here, smoke is interpreted as *vyāpya* because it is regularly associated with and characterized by the rule of concomitance. We infer about something in a particular place which is known as *pakṣa* in our discussion (e.g. when we infer ‘fire on the hill’, ‘hill’ is considered as *pakṣa*). On the other hand, we acquire the cognition of smoke in the *pakṣa* which is termed as ‘*vyāpya*’. It is regarded as a feature of hill (*pakṣa*). That is why Annambhaṭṭa in his TS described ‘*pakṣadharmatā* as the presence of the *vyāpya* in the hill etc’.¹²⁶

So far we have discussed about the constituencies of the inference how it is discussed in Nyāya philosophy. We have seen there are characteristics for defining the nature of inference. For the analysis of inference we acquire the cognition of *parāmarśa*, *pakṣatā*, *vyāpti* and *pakṣadharmatā* and their role for the constituting inference. Thus, in the next section I would expand the discussion to deal with the classification of inference based on *sādhyā-siddhi*. As I have mentioned in the introductory part of the discussion about the “logical forms of inference”, that it is to be classified into two categories (*svārtha* which is for oneself, and *parārtha* for others) which would be the main concern in the next section.

3.5.1. *Svārthanumāna*

The term ‘*svārtha*’ means an individual himself or ‘one’s own self’. The cognition of ‘*svārthanumāna*’ then implies to describe the true cognition of an individual’s own self. To explain the nature of these types of cognition I would take an example mentioned in Annambhaṭṭa’s TS. According to him, it is a cognition ‘for one’s own self’ where a person can acquire the knowledge of the co-location ‘wherever there is smoke, there is fire’ with the help of ‘abundant experience’ (*bhūyodarśana*). After that, if the person visits to a hill and he has a doubt about the existence of fire after seeing smoke coming out from the hill, then the person remembers his previous experience about the co-location that ‘wherever there is the existence of smoke, there is fire’ (e.g. as the person has seen previously in a kitchen, chimney etc.), then the person arrive at the knowledge that ‘this smoke is the smoke which is associated with the fire’ (knowledge of *lingaparāmarśa*). With this association the person

¹²⁶ Ibid., p. 205.

moves to the knowledge that ‘the hill is fiery’. This cognition of an individual is considered as *svārthanumāna*.

Annambhaṭṭa in his TSD advanced an objection saying that there cannot be the knowledge of *vyāpti* with the help of ‘abundant experience’ (*bhūyodarśana*) in the place of having the cognition of *svārthanumāna*. He showed an example to clarify this situation. According to him, there cannot be the collocation between ‘earthiness’ (*parthivatva*) and “liability to be scratched over with iron” (*lohā-lekhyatva*) with the help of abundant experience (*bhūyodarśana*). Then how can it be the cause of the ascertainment of *vyāpti*? Annambhaṭṭa himself answered this question saying that the knowledge of the association between two things could be possible only when it is to be accompanied by the absence of the recognition of any exception or peculiarity (*vyabhicāra*) which leads one to have the knowledge of ‘*vyāpti*’ or regular concomitance. It is mentioned in TSD as ‘*vyabhicāra-jñāna-viraha-sahakṛta-sahacāra-jñānasya = vyāpti-grāhakatvāt*’.¹²⁷ The recognition of exception (*vyabhicāra*) is of two kinds: certain cognition and suspicion (*śamkā*). The absence about the recognition of exception is brought up sometimes by ‘*tarka*’ or indirect argument and sometimes it is conveyed just as self-evident (*svataḥ-siddha*). It is to be noted that for the ascertainment of the concomitance we have to remove the suspicion and the counteractive agent. To remove these suspicion Annambhaṭṭa applied indirect argument. According to him, if we deny the co-relation between smoke and fire then we also deny the law of causality. Without having the co-relation between smoke and fire, we cannot say there is the existence of smoke. Thus, for the existence of the effect ‘smoke’ there should be the existence of ‘fire’. This concomitance relation between smoke and fire is accepted by all. We know that for the existence of an effect it has to be related with a cause. Without the existence of a cause there cannot be an effect. In the same way it happens in the relation between smoke and fire. If at a place ‘there is smoke but there is not fire’ then we would have to say that there is no accepted relation of cause and effect (in TSD, this is considered as ‘*kārya-kāraṇa-bhāva-bhangya-anistaprasangya*’) and it would not be considered as a reasonable argument against the concomitance of smoke and fire. This unreasonable argument would be removed by the ‘*tarka*’ or indirect argument. It is also mentioned in TSD that for ascertaining *vyāpti* suspicion can appear without any reason, which according to Annambhaṭṭa is known as ‘the suspicion which has no grounds’. Now, one can ask a question that if this is to be so, then how we could remove this suspicion. According to Annambhaṭṭa, we don’t need to remove this

¹²⁷ Ibid., p. 205.

suspicion because these will be removed by itself. Though according to him, this suspicion does not create any difficulty for the ascertainment of *vyāpti*.

Annambhaṭṭa in his TSD also asked a question regarding the ascertainment of *vyāpti* that it is not possible for a person to see all the instances of smoke and fire. Thus, here the question would be more significant that if a person is not able to perceive all the instances of smoke and fire then how it can be possible to establish the concomitance relation between smoke and fire. In reply, Annambhaṭṭa mentioned that “it is possible for a person to have the cognition of all instances of ‘fire’ and of ‘smoke’ through the operative relation (*pratyāsatti*) constituted by the common features (*sāmānya*) ‘fireness’ and ‘smokeness’”.¹²⁸ In this way, a person is able to acquire the cognition of the co-relation between smoke and fire.

As the discussion continues to define the nature of *svārthanumāna*, we acquire that it is a cognition of an individual and for having the cognition he himself is the cause of that cognition. And we have seen that for having this type of cognition we need to have the following steps. After seeing ‘smoke coming out from the hill’ a person remembers his previous experience that ‘in kitchen we have seen that there is the existence of smoke in relation with fire’. And he acquires the knowledge about ‘wherever there is smoke, there is fire’ (remembrance of *vyāpti*). After the knowledge of *vyāpti*, the person comes to know that this smoke is associated with the fire (knowledge of *lingaparāmarśa*). Finally, the person acquires the knowledge about the fact ‘this hill is fiery’. As we know that the classification of inference based on *sādhya-siddhi* has two kinds. We have already discussed about the nature and definition of *svārthanumāna*. Now we would expand the discussion of inference to analyze the nature of *parārthānumāna*.

3.5.2. *Parārthānumāna*

We know that from the beginning of Nyāya philosophy it is considered as ‘*anvīksikīvidyā*’. The meaning of ‘*anvīksikī*’ is ‘the science of inquiry’ or ‘the science of correct knowledge’. There are philosophers who used to say that Nyāya is about the inferential reasoning by which we could demonstrate our logical investigation for ascertaining correct knowledge. With this sense only *parārthānumāna* could be considered in this category because the actual demonstration of inferential cognition is found in this inference. We would now see how this inference takes place to have a correct knowledge. In TSD, it is mentioned that

¹²⁸ Ibid., p. 206.

parāarthānumāna is ‘the inference for others’.¹²⁹ When a person gets the knowledge that ‘from ‘smoke’ one infers the knowledge of ‘fire’ then the person can employ five statements to show how one acquires the knowledge of fire from the smoke. This entire process of having the knowledge of others is known as *parāarthānumāna*. To define *parāarthānumāna*, Annambhaṭṭa wrote, “*yattu-svayam-dhumādgnimanumāya-parapratipattayartham-pancāvayavabākyam-prayujyate-tat-parāarthānumānam*”.¹³⁰ It means getting the cognition about a fact that if a person wants to share his knowledge to others, he has to demonstrate his cognition with the help of five parts of statements (*pratijñā, hetu, udāharaṇa, upanaya, nigamana*) which are considered in the case of *parāarthānumānam*. Now, one can ask a question as to why we need to presume five parts of arguments for providing a cognition to others. In reply, we have to say that to understand a fact by one’s own self there is no need to provide these statements (five parts of statements) which we can consider in the case of the ‘knowledge of others’. Because having the knowledge about a fact depending upon one’s own self of how he could get the cognition about something, it is up to the person himself. But to demonstrate the knowledge about something one must have to provide at least some reason of why the person is proposing the fact that may be x, y, z...etc. To explain, we would have to take an assertion, for example, X is to be found in Z, because Y is there, and it is accepted that wherever there is Y, there is the presence of X, then we could say Y is a fact which is to be present only when there is X (in other words, this Y is a fact which is associated with X for its existence). Therefore, we could say that X is a fact which is to be found in Z. The example conveys the meaning that an assertion can only be true if and only if there is reasonable explanation for proving something to be true or false. In other words, the example clarifies the situation that a demonstration depends on some reason, clear instances and its application from which one could consider a particular fact to be true. On the other hand, to demonstrate something one has to be clear about what it is. Without having the clear knowledge about something one cannot present his knowledge to somebody. Thus, we can say that ‘knowledge of one’s own self’ plays a vital role ‘for the knowledge of others’. That is why in *Nyāya* philosophy it is mentioned that *svārthanumāna* (for one’s own self) always precedes to *parāarthānumāna* (knowledge for others) and it depends upon the former case of inference. As it has been mentioned before that for the knowledge of others we need to presume five parts of statements, these five statements together are known as ‘*Nyāya*’. It is also known as *Nyāya* syllogism because it also maintains the same procedure to arrive at a

¹²⁹ Ibid., p. 217.

¹³⁰ *Tarkasamgraha* written by Annambhaṭṭa, trans. by Goswami, p. 395.

certain conclusion from the supportive proposition. Gautama in his *Nyāya-sūtra* (sutra-1.1.32) mentioned about these five parts of statements as ‘*pratijñāhetudāharanopnayanigamananyavayavā*’.¹³¹ According to him, these statements are as follows: *Pratijñā*, *Hetu*, *Udāharāṇa*, *Upanaya*, *Nigamana*. In the next section, we would discuss about the nature of these statements to look into the nature of statements and how it helps to derive true cognition ‘of others’.

The demonstration of the statements constitutes *parārthānumāna*:

- (i) The first statement of the Nyāya syllogism is called ‘*pratijñā*’. It is used in the sense that something is to be established. It is an assertion about an unperceived particular fact followed by some perceived reason, though an assertion might be an instance of affirmative or negative. Thus, *pratijñā* is a predication of a particular fact which is to be affirmative or negative. For instance, ‘the hill is fiery’, or ‘sound is non-eternal’. The statement includes a place (*pakṣa*) where something is to be predicated (*sādhyā*). Therefore, *pratijñā* is about a ground where we have a doubt about a particular whether it exists or does not exist. In other words, it is a ground where there is lack of certainty about a fact. One can also say that it is about an occurrence which needs to be clarified. This clarification would happen with the supportive statements or propositions by which a valid inference could be possible.
- (ii) The second statement of Nyāya syllogism is called ‘*hetu*’ or the reason. The statement consists of an observation through which we could say that something is predicated in the subject (*pakṣa*). That is why in *Nyāya* philosophy *hetu* is considered as *liṅga* (used in the sense of reason, e.g. X is such a case because Y is there). We can now say that it is an assertion of the reason (*hetu*) through which we come to know that the *pakṣa* is related to *sādhyā* or not. Now, the structural background we have is that *pratijñā* is a statement where there is the involvement of two things (one is subject or a place known as *pakṣa*, and another is a particular which is to be proved and called *sādhyā*). On the other hand, *hetu* or the reason is a statement of the involvement of one particular only. Thus, it can be pointed out that the statement which we have mentioned in the *pratijñā*, ‘the hill is fiery’

¹³¹ *Tarkasamgraha* with *Dīpīka* written by Annambhaṭṭa, trans. by Gopa, p. 102.

exists because ‘there is smoke’ (*hetu*). Now, the statement of ‘the reason’ is to be verified by the next statement.

- (iii) The third statement of Nyāya syllogism is called ‘*udāharana*’. It is an assertion of a universal relation between *hetu* and *sādhya*. As we know, the universal concomitance between *hetu* and *sādhya* is known as *vyāpti*. In this statement we would provide an instance because of the previous statement, where it is considered that the claim which we have made in the first statement of the syllogism is such a case because of having the reason. For instance, the hill is fiery, because there is the presence of smoke. Now, in this statement we would determine the cognition that the hill could be fiery if and only if there is the presence of smoke (though smoke is not the necessary condition for being fiery). But, here we can infer the existence of fire on the hill because we have seen ‘smoke coming out from the hill’. And we know from our previous experience that without having the existence of fire, smoke cannot exist (e.g. we cannot see the existence of fire in ‘lake’). Our previous experience about the presence of smoke in the kitchen implies that there is fire. Thus, this statement is the exemplification of an assertion which could make a universal relationship between *hetu* and *sādhya*.
- (iv) The fourth statement of Nyāya syllogism is called *upanaya*. In this statement we are assured about the cognition of ‘the reason’ (*hetu*) that is present in a subject or at a place (*pakṣa*). This statement also confirms that for being the existence of *sādhya* in *pakṣa*, the reason (*hetu*) should be taken as valid. Thus this statement is the application of the fact which has taken in second and third components of the Nyāya syllogism. Therefore, we could say that this statement is the combination of the ideas which we have observed in the previous statements. For example, in the first statement we have seen an assertion ‘the hill has fire’, the reason of this assertion is found in second statement ‘because there is smoke’. Further, we have mentioned about an instance to prove why this is such a case, as ‘wherever there is smoke, there is fire’ (e.g. as in the kitchen). After having the knowledge about the universal concomitance between the two terms (*hetu* and *sādhya*), we could produce the fourth statement to confirm that the previous statements are well undertaken. The fourth statement we take is ‘the hill has smoke which is associated with fire’.

- (v) The fifth or last statement of Nyāya syllogism is called *nigamana* or the conclusion. All the four statements are brought together to establish the claim what we have made in first statement or first proposition (e.g. ‘therefore the hill is fiery’). Thus, to demonstrate the truth of the first proposition we have taken the aforesaid steps. Therefore, this proposition is to state that the claim what we have made in the first proposition is either established or not established. Now one may raise a question to say about the fifth statement that it is a repetition of the first proposition, nothing more than that. This question would be false if it is considered as the repetition of the first statement, because first statement has been taken as an assertion or a mere hypothesis. But the last proposition is a proved doctrine, which is established followed by four statement what we have discussed earlier. Now, if we set up the whole process of the Nyāya syllogism, it will look as follows:

Pratijñā- The hill is fiery.

Hetu-Because there is smoke.

Udāharana-Wherever there is smoke there is fire (e.g. as in the kitchen).

Upanaya-The hill has smoke which is associated with fire.

Nigamana-Therefore, the hill is fiery.

We have seen in the demonstration of Nyāya syllogism how one could be able to acquire true inferential cognition. With these distinguished features the cognition of others can be possible. Here comes a question on having the inferential cognition in this category: which step would be the main reason of inference? According to Mimāṃsaka School, the ‘special condition’ (*karāṇa*)¹³² of an inferential cognition would be the remembrance of *vyāpti* (the above example *udāharana* is regarded as *vyāpti*) and the knowledge of *pakṣadharmatā* (the above example *hetu* is regarded as *pakṣadharmatā*). Annambhaṭṭa rejected this view by saying that we cannot consider that *vyāpti* & *pakṣadharmatā* is the ‘special condition’ for having an inferential cognition, there is no need to have a cognition of the fourth statement. In reply, Annambhaṭṭa produced the reason that if we would take *vyāpti* & *pakṣadharmata* as the special condition (*karāṇa*) in the reason of an inferential cognition then there would occur a fallacy called *gauravadoṣa*. According to him, the need of the fourth proposition is that it is a confirmation of second and third statement by application. If we do not consider the fourth statement as the part of Nyāya syllogism, then there would be different cause of a same fact

¹³² A special condition is a condition which functions by an intermediary. For more details about *karāṇa*, see *Tarkasamāgraha-Dīpikā* on *Tarkasamāgraha*, Trans. by Bhattacharya, p. 221.

at different place. By this way, Annambhaṭṭa settled this objection regarding the special condition of inferential cognition.

On the other hand, there is some controversy in Nyāya thinkers themselves regarding the special condition of inferential cognition. According to some Naiyāikas, they considered *vyāpti* as the special condition and others *parāmarśa* as the special condition. This acceptance is actually based on the definition of ‘special condition’ (*karaṇa*) taken by Old-Naiyāikas and Navya-Naiyāikas. The definition of special condition given by Old-Naiyāikas is ‘*falāyogavyavachhinyamkāranamkaraṇa*’.¹³³ Regarding the definition advanced by Old-Naiyāikas, *parāmarśa* is regarded as the special condition of inferential cognition. Because according to them, the preceding condition of a fact is to be regarded as the special condition. And as we have seen that in the syllogism *parāmarśa* is the preceding condition of the established doctrine. On the other hand, the definition of special condition advanced by Navya-Naiyāika is ‘*byapāravatkāranamkaraṇa*’. With this definition, for having an inferential cognition *vyāpti* is the special condition. According to them, *vyāpti* would be the special condition of inferential cognition and *parāmarśa* is to be considered as an intermediary (*vyāpāra*). Annambhaṭṭa also accepted Navya-Naiyāikas’ view regarding the special condition of inferential cognition.

As per the continued discussion we have seen that for having inferential cognition (for others) we need to presume five parts of statements. But there are some later commentators who stated that for having an inferential cognition we need to have ten-part statements (after five statements they have added five more which are *jijñāsa-saṁśaya-sakya-prāpti-prayojna-saṁśayavyudasa*). That is why it is more significant task to have an engagement on the debate on how many statements are required for having an inferential cognition.

3.6. The debate regarding the statements of Inference

Akṣapada considered five parts of statements or propositions to have an inferential cognition which is known as Nyāya syllogism. The statements are- *Pratijñā*, *Hetu*, *Udāharāṇa*, *Upanaya* and *Nigamana*. While discussing about these statements we have found that each statement of them has its constructional difference, but they are connected to each other. For producing a particular inferential cognition we need to have the presence of these statements. From the assertion to the implied conclusion, it does follow an authority of causal connection

¹³³ Ibid., p. 104.

to produce a consequent fact from the antecedent cause. Therefore, the entire procedure of arriving at a consequent fact depending upon antecedent causes possesses a nature of true cognition. Though it is mentioned that there has divergence regarding the view about the number of statements having an inferential cognition. Vātsyāyana referred later commentators view in regards to the components for having an inferential cognition which refers that for having an inference it is not sufficient to have only five components. They suggested ten-parts of statements or propositions to have an inference. According to them after the cognition of five propositions we need to have five more components which are as follows: (vi) *jijñāsa*, (vii) *samsāya*, (viii) *sakyaaprāpti*, (ix) *prayojna*, and (x) *samsāyavyudasa*, although there are also divergences in different Indian schools regarding the views on the components of an inference. Vedāntist accepted only three statements for an inference. According to them for having an inferential cognition we need to have either first three statements (*Pratijñā*, *Hetu*, *Udāharaṇa*) or the last three (*Udāharaṇa*, *Upanaya*, *Nigamana*) statements what are included as parts of Nyāya syllogism. Vedantist rejected the knowledge of the fourth statement (*Upanaya* or the knowledge of *lingaparāmarśa*) of the Nyāya syllogism by claiming that we do not acquire any kind of new knowledge in this statement, it is only a mere repetition of the third statement (remembrance of *vyāpti*). And we know that the claim doesn't hold good at all. Naiyāikas rejected their view saying that it is necessary for an inference to have the cognition of the fourth statements because if we do not admit this statement then there would occur a fallacy called *gauravadoṣa*. When we have talked about the special condition of inferential cognition, it has mentioned that if we do not admit the fourth statement then there would be different causes of the same fact at different place. As a result, there would occur that fallacy. That is why to prevent this fallacy we need to have the cognition of fourth statement for having an inferential cognition. On the other hand, Jain's and Buddhist's have accepted only two propositions (*pakṣadharmatā* and *vyāpti*) for the cognition of an inference. Now, we need to look to those who insisted that for having an inferential cognition we need to have ten parts of statements and two parts of statement regarding Buddhist's view and by looking whether their claim is either well-asserted or not, we can represent Nyāya syllogism in a category of true inferential judgment. I would take here the later commentators' view about ten parts of statements in order to present a valid inferential cognition to look into whether this view is considerable. Let's take an example of Nyāya syllogism first, and then we will depart to the discussion of the ten part statement. The constitutional structure of Nyāya syllogism followed by five statements is as follows:

- (i) There is fire on the hill (the statement to be proved; *pratijñā*),
- (ii) Because there is smoke (the statement which underlies the reason for having the assertion asserted in the first statement; *Hetu*),
- (iii) Wherever there is smoke there is fire, as in the kitchen or bonfire (the statement confirms the universal relationship between the reason for which the assertion is to be taken as such and asserted fact which is supported by the well-established example; *Udahāraṇa*),
- (iv) The hill has smoke which is associated with fire (the statement states that the universal relation stated in the previous statement is also applied in the present context or the assertion what we have taken to be proved; *Upanaya*),
- (v) The hill has fire (this statement considers the fact that it is drawn from the preceding four statements of the Nyāya syllogism; *Nigamana*).

Now, Let us see the other statements which later commentators stated:

- (vi) “Inquiry (*jijñāsā*)- the investigation of the proposition, e.g. is all of this hill on fire everywhere or in a particular part only?
- (vii) Doubt (*saṃśaya*)- questioning the reason, e.g. that which is thought to be smoke may just be dust.
- (viii) Capacity (*śakya-prāpti*)- to determine if the example warrants the conclusion, e.g. is there always smoke when there is fire? Because fires don’t produce smoke.
- (ix) Purpose (*prayojana*)- to ascertain if the object is something to be pursued, avoided, or ignored.
- (x) Removal of all doubts (*saṃśaya-vyudāsa*)- to make certain of the fact that the opposite of the proposition is not true, e.g. it is settled beyond any measure of doubt that whenever there is smoke there is fire.”¹³⁴

Now, it needs an examination to show that whether the above statements stated by the later commentator are necessary for the logical necessitation of inferential cognition or the Nyāya syllogism. Regarding this fact, one should ask first the question: is there any reason to ask a question about the distribution of fire after the statement (v) which is a preceding fact followed by four previous statements? The reply would be ‘no’, because the claim which is supposed to be established is not the demand of the distribution of fire everywhere; it is only

¹³⁴ Ub. Ve. Sri Rama Ramanuja Achari, srimatham.com, Nyāya (*Tarka Śāstra*): The Hindu System of Logic and Debate, p. 15-16.

about the existence of fire on the hill. Thus, it could be said that there is a difference between their understandings about the claim what is to be established and what they have taken as such. Though the difference doesn't matter, one can claim that we need to have a cognition about the statement (vi) after the ascertainment of the statement (v). Because the claim of the distribution of fire has been already made explicit in the statement (iii), the statement presupposes the universal relation between smoke and fire. For proving the statement we have already the examples of kitchen, chimney, bonfire etc., in which we have found the universal relation between smoke and fire. The statement (iii) confirms the relationship between reason by which an assertion is to be taken as such and the asserted fact which has been supported by a well-established example. And the basis of a claim of (*jijñāsā* or Inquiry) is possible only when we acquire some cognition about an unascertained fact, but here the knowledge of the relation of smoke and fire is already proved. Therefore, the claim (*jijñāsā* or Inquiry) does not hold good at all.

On the other hand, when we take an assertion to be proved, then the claim of an uncertainty may remain until and unless it is proved by preceding fact (in other words, when the nature of an assertion is in question then the claim of doubt could be considered). But we cannot have a doubt about an assertion which is already a proved fact. That is why we cannot consider doubt about smoke which is already proved, when we have asserted the relation between smoke and fire in third statement of Nyāya syllogism. According to Nyaya, doubt can stand before the third statement (i.e. in first and second statement) but it can no longer exist when we have the knowledge of *vyāpti* [the universal concomitance relation between smoke (*hetu*) and fire (*sadhya*)]. The claim which they have raised in the statement (vii) on doubt or *samśaya* is that the smoke which we have perceived coming out from the hill, is not smoke but just dust. In reply, we have to say that for a person (except one visually challenged) it is very easy task to differentiate between smoke and dust, because the characteristics of smoke is 'smokiness' and the characteristics of dust 'dustiness'. We can identify the particular through its characteristics. In the same way we can identify smoke by the universality of smokiness. The same process could be applied to identify dust as well. And the claim no longer exists that it is not smoke. Therefore, we could say that their claim cannot hold well regarding the existence of smoke, that it is a mere perception of dust only.

The third claim they made in the statement (viii) is the repetition of the third statement of Nyāya syllogism. Because the claim they made is- 'is there always smoke when there is fire?' When we have dealt with the *vyāpti* relation between smoke and fire, we have already

mentioned that *vyāpti* is of two kinds, namely, *samavyāpti* and *visamavyāpti*. *Samavyāpti* is a relation between the universal concomitances of equal extension of two terms, e.g. whatever is nameable is knowable and the example underlines the relation of two terms which can be substitute to each other, because it is true fact that whatever we consider as known is identified by a name. In the same way whatever has a name is a knowable fact. That is why we consider it in the list of *samavyāpti*. On the other hand, *visamavyāpti* is a kind of relation where there is no equal extension of two terms, by which one cannot be able to infer one to another, e.g. we can say that wherever there is smoke there is the presence of fire, but we can also say that wherever there is fire there is smoke (as gas fire, electric heater etc.). Thus, we can now say that the claim what they have made in the statement (viii) is the mere repetition of third statement of Nyāya logic. Therefore, the claim doesn't hold longer.

The fourth claim about the components of Nyāya syllogism raised by the later commentators is Purpose (*prayojana*) stated in the statement (ix). They have made a claim saying that after the statement (viii) we need to depart to the statement (ix) the purpose of which is to show that the ascertainment of a particular could be pursued, ignored or avoided. Now, it needs a clear examination to show that whether the statement could be considered as the Nyāya syllogism. The reply would be definitely 'no', we don't need to consider this statement for the Nyāya syllogism because the consideration of the fact of whether it is to be pursued, ignored or avoided is already mentioned in Nyāya syllogism figured by five statements, while we have taken an assertion about something which is to be proved. Now, the nature of the assertion can be either positive or negative. And with this statement the entire logic of Nyāya continues. The claim of pursuing or avoiding something is already in the first statement (*pratijñā*) through which Nyāya syllogism starts. Therefore, the claim of later commentators regarding the statement (ix) on Purpose, *prayojana* is not considerable for Nyāya syllogism.

The last claim of later commentators regarding the statement of Nyāya syllogism is about the "removal of all doubt" (*saṁśaya-vyudāsa*). Here, their claim presupposes that for the ascertainment of something it is necessary to be false in its opposite proposition or statement. That means that for having a true cognition about a particular we need to have the false knowledge about the proposition which is the opposite of the considered particular. But if we look at the propositions of Nyāya syllogism then we could see that there is no place of having a doubt about the assertion when we have the knowledge of *vyāpti*. We can have a doubt about a fact before the knowledge of the universal concomitance relation between *hetu* and *sādhyā*. But, there cannot be doubt about a fact after the third statement. Therefore, the claim

regarding the removal of all doubts cannot be considered as the statement of Nyāya syllogism.

The above examination confirms that there cannot be more than five statements to have an inferential cognition. Therefore, to have an inferential cognition it is sufficient to have the knowledge of five statements followed by Nyāya. Though there are some the Buddhists philosophers like Dharmakīrti and Sāntarakṣita who stated that for having an inferential knowledge we don't need five statements, only two statements are enough to state inferential cognition. They have provided an analysis which showed that in the statement which Nyaya syllogism provided there are some statements which are unnecessary. Though there are conflicts between Buddhists and Naiyāikas about the numbers of statements required for the inferential cognition. I will not enter into the debate because of the scope and limitation of the present study.

As stated earlier, for having an inferential cognition we need to have the knowledge of five parts of statements. Though there are commentators who tried to show that for the cognition of inference we need to have the cognition of ten part statements. But the later commentators' claim didn't stay longer in a position to determine the validity of an inferential cognition. And it is rejected by the method of evaluation of how it seems unnecessary for the inference. The entire process of the enquiry belongs to a categorical judgment where we can try to clear the confusion of a particular state. That is why it is to be noted that there is a role of doubt in the statements for having an inferential cognition. Thus, in the next chapter the engagement of the discussion would be the intrinsic value of doubt in the inferential statements and the nature of doubt itself on the other hand.

Doubt in Nyāya System of Logic

4.1. Introduction

In the very general sense ‘having doubt’ about something is lack of certainty, where one is not able to acquire the true cognition of a particular. If we have a doubt about P, this means that the real nature of that particular is yet to be discovered. Now, one might ask a question whether ‘doubting’ and ‘questioning’ are the same or not. The reply would be ‘no’, because there is crucial difference between ‘doubting something’ and ‘asking questions’. Doubt is a state of mind where we have default disregarding mind setting of a concerned particular which we achieve in order to establish a fact. On the other hand, questioning is something where we have skeptical mindset in a way of how a ‘null hypothesis’¹³⁵ is supposed to look like (e.g. after listening about a particular fact, we used to react that what you have said just now is it really true. Here, the statement underlies the inquiry about the truth of a particular fact.). Therefore, we could say that the difference between doubting and questioning is that in the process of ‘doubting’ a person have a mindset which is purely motivated by one’s own interest, whereas in the process of ‘questioning’ it is the root of starting a query to build particular judgment. In other words, asking question is a way to find the answer about a fact, though sometimes it is used in the sense of making someone feel humbling. The tactic of asking question to somebody is that the person doesn’t know everything about the fact at all. It is also a strategy of an admitted fact that the person who is asking question wants to know more about the fact or it might be true that he needs some clarification about that. In the same way, doubt expresses the uncertainty or disbelief about a fact. Unlikely, the very nature of doubt is that the unsatisfied doubter already tries to find out the answer of a particular question. For instance, if I doubt that ‘there exists a Supreme Being’, then my doubt is to be changed to answer definitely about certain fundamental questions regarding the existent of Supreme Being. But is it a true fact regarding its existent that those fundamental questions could never be undoubtedly answered. Still I have doubt about it, and the question is still knocking at the door of truth for the definite existent of Supreme Being, though there has difference between ‘questioning’ and ‘doubting’ but they are not mutually exclusive because

¹³⁵ It is a statistical test where one is used to observe the difference between two verified samples for their experimental error. Here, it is used in the sense of the judgment of the real nature of a particular which needs a clarification regarding its characteristics.

both process does involve to find out the real nature of a fact. The only difference between the two is that there has different mind setting in the way of searching truth. In spite of the fact, sometimes people are also misled to define the nature of doubt as error. That is why it is very significant task to give a clarification about the nature of doubt and error/illusion.

DOUBT	QUESTION
<p>Doubt arises only when a person has two alternative views about the same fact (affirmative or negative)</p>	<p>When we ask questions like, 'who', 'why' or 'where'; these are the starting points of a query.</p>
<p>The positive aspect of doubt is that a doubter has the true knowledge about the particular of what he is doubting, but the knowledge comes into the doubt only because of some unhealthy conditions. For example, if in the very beginning of evening time a person walks on the way and something appears in the faraway distance and he does not get the knowledge of what it is exactly, that is when we come across to infer in a way that it might be either a post or a man. Here, the positive aspect is that the person has definite knowledge of the two particulars.</p>	<p>The tactic of asking question is that one hasn't any kind of knowledge about the fact and he needs clarification to know the particular.</p>
<p>The negative aspect of it is that the doubter knows that the knowledge of one instance</p>	<p>Questioning involves the category of knowing, where we have no previous knowledge about the affirmative or</p>

would be definitely false.	negative knowledge about the acquiring fact.
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Table 4.1.1: The enumeration of the mind-set in the state of Doubting and Questioning

4.2. Doubt vs. Error/Illusion

As stated earlier, doubt is the disagreement about the nature of particular fact. When a person used to say that “I have doubt about it”, it means that the person does not agree with the nature of something, only because he has some knowledge about it. That is why if somebody used to say about the nature of the same particular as otherwise, then one has doubt about the real nature of that particular. But the specialty about doubt is that it seeks to arrive at a true cognition about the concerned particular. On the other hand, illusion or error is the distortion of an object. In other words, it is misrepresentation of an object and completely reverse to the valid cognition of an object. For instance, in ‘the apprehension of snake in a rope’ the knowledge of snake in a rope is completely invalid to acquire true cognition about what the person intends to acquire. Therefore, error or illusion is the representation of a particular which does not belong to it the way it has to acquire. Hence, the difference between doubt and illusion is that doubt helps to arrive at a certain conclusion of a particular object, but illusion cannot be able to help acquiring any kind of true cognition of a fact. On the other hand, doubt is the positive method of acquiring true cognition of something, whereas illusion gives us completely false knowledge about something. Philosophers gave many theories in respect to analyzing the nature of doubt and error. But, here I would only reflect on the *Nyāya* theory of doubt, its different forms and would look on how it helps to arrive at true cognition.

4.3. Nyāya Theory of Doubt (*Samśaya*)

Gautama, the founder of Nyaya Philosophy mentioned the definition of doubt (*samśaya*) in his *nyāya-sūtra* (i.1.23) that it is the contradictory cognition about the same objects which is determined by the recognition of distinct characteristics of each of these, i.e. the object has common features, unique characteristics, conflicting judgments about the same object, irregularity of the apprehension, irregularity of the non-apprehension (*Samānanekadharmāpapattivipratipattirupadhvanupalabdhyavasthātasca viśeṣāpekṣavim*

ars'asams'aya- the original *sloka* regarding doubt is stated in *Nyāya-sūtra* – i.1.23).¹³⁶ In this sutra, the word *sams'aya* is used to define the word *vimarśa*, the meaning of which is the conflicting judgment or the contradictory assertions of a same object. On the other hand, the word *viśesāpekṣa* in *sūtra* is used to define object having the distinct features by which one gets into doubt about a particular. The other words of the *sūtra* are used to define the forms of doubt, each having their unique characteristics. Vātsyāyana illustrated the Gautama's definition of doubt as *anavadhāraṇajñāna* (the cognition in which we haven't clear knowledge of a particular). On the other hand, he had mentioned that it is indecisive knowledge so far as the analysis of the alternatives (*koṭi*) of a same particular to fix its appropriate nature is concerned, though it is not indecisive in a way of how we indicate something as 'that' (*idam*). Therefore, it is determined as the knowledge of decisive one rather than indecisive. Śaṅkara Miśra in his commentary (*Vaiśeṣika-sūtra*ii.2.15) also explained the nature of doubt through the etymological analysis of the word *vimarśa*, where the meaning of 'vi' is contradiction and 'marśa' means knowledge. Thus, the literal meaning of *vimarśa* is contradictory knowledge (here, the contradictory knowledge presupposes the conflicting judgments about the same object).

There are other philosophers (*Navya-naiyāikas*) who stated the nature of doubt by the argument that in the case of doubt one of the alternatives would be necessarily negative (*abhāva-koṭi*) and the other positive (*bhāva-koṭi*). Now, it needs an illustration to understand the concerned nature of doubt. Let's take an example, one may have doubt whether something is a pillar or anything else. Here, according to *Navya-naiyāikas* there are two alternatives regarding the doubt one is having about the same particular. These are- 1) This is a pillar and 2) This is not a pillar. Without having these two alternatives (positive and negative) there would be no doubt about the concerned object, although regarding older *naiyāikas* there are cases of doubt where two of the alternatives are positive (e.g. in the case of doubt, like 'Is this a pillar or a person?', the alternatives of doubt according to older *Naiyāikas* would be- 1) This is a pillar and 2) This is a person, where both of these alternatives are positive). On the other hand, according to *Navya-naiyāikas*, in the case of same doubt 'Is this a pillar or a person?', there would be two positive and two negative alternatives. These are- 1) This is a pillar, 2) This is not a pillar, 3) This is a person, 4) This is

¹³⁶ (*Nyāya-sutra*, i.1.23), illustrated in Gautama's *Nyāya-Sūtra*&VātsyāyanaBhāṣya, trans. by Chattopadhyaya, &Gangopadhyaya, *Nyaya Philosophy*, Part-I, p. 92.

not a person.¹³⁷ On the other hand, Phaṇibhūṣaṇa mentioned that there could be more than two positive alternatives of a doubt. To show the fact, he cited the example of doubt which is illustrated regarding the King Duṣyanta in *Abhijñāna-śakuntala*, where the king has a doubt as ‘Is this a dream or a magical creation or a phantom of imagination’ (*svapna nu maya nu matibhramo nu*)?¹³⁸ Therefore, the forming nature of doubt according to *nayva-naiyāikas* is that doubt occurs only when there are positive and negative alternatives. Every alternative of doubt has unique characteristics. Thus we have to say that for the uniqueness of the alternatives of an object having different characteristics we acquire different forms of doubt. These forms would be analyzed in the upcoming section.

4.3.1. Forms of Doubt

In the very beginning of the definition of doubt we have seen that from the different features of an object we acquire different forms of doubt which are mentioned in *Nyāya-sūtra* (i.1.23). According to this *sūtra*, we obtain five forms of doubt which are as follows:

- (i) The apprehension of common characteristics
- (ii) The apprehension of unique characteristics
- (iii) Contradictory assertion about the same object
- (iv) The irregularity of the apprehension
- (v) The irregularity of the non-apprehension

Vātsyāyana illustrated these forms to give a clear understanding about the cognition of doubt, though in contemporary time there are philosophers who raised few questions against the forms of doubt saying that for having a clear understanding of doubt we need to have the knowledge of either first forms of doubt or first three forms of doubt in the above mentioned five forms. That is why to understand the knowledge of the forms of doubt I would give an illustration about the Gautama’s forms of doubt with reference to Vātsyāyana’s elucidation in the first position. Secondly, I would show what are the questions raised by contemporary philosophers against Gautama’s forms of doubt. In third position I would critically examine whether the forms of doubt given by Gautama is necessary for the complete understanding of doubt.

¹³⁷ Ibid., p. 93.

¹³⁸ Ibid.

4.3.1.1. The apprehension of common characteristics

Vātsyāyana gave an interpretation of this form of doubt that it is the conflicting knowledge (*vimarśa*) about the same object where we need to have the cognition of ‘common characteristics’ (*samāna-dharma*) depending upon the remembrance of the special characteristics of each (*viśeṣāpekṣa*). When somebody perceives the common characteristics of similar looking two objects (in accordance with height and breadth) then the person tries to remember the distinguishing marks of these two objects to differentiate one from the other, but if the person fails to identify their distinguishing marks then one comes into the state of mind where doubt is implied. Therefore, it is a state of mind where we are incapable of acquiring the definite knowledge of a particular. The reason behind the incapability is our sense perception, because when this state occurs our senses are not working in a way it works to get a definite knowledge about an object. We can say that the objects P and Q have some common characteristics for which these two objects look very similar, though they have some qualities of their distinguishing mark, but in insufficient light they look very identical. Now, if a person perceives these two objects in the same insufficient condition then he would obviously make mistake to cognize these two objects as same. Let’s take another example to clarify how this particular form of doubt arises. At the very early evening when there is insufficient light, visual sense of a person comes in contact with either a person or a similar looking pillar standing at a distance. Now, if somebody asks about the reason of the perception of whether it is a pillar or a person then we have to say that the person fails to perceive the distinguishing marks of these two objects. Therefore, the person appears with the cognition of ‘Is this a pillar or a person?’. Thus, we could say that these states of doubt occur for the perception of common characteristics which depends upon the special characteristics of each.

4.3.1.2. The apprehension of unique characteristics

The second form of doubt mentioned in *Nyāya-sūtra* is the ‘apprehension of the unique characteristics’ which occurs by the similar and the dissimilar nature of the object. Here, the word ‘unique’ stands for the knowledge of both similar and dissimilar by which one can differentiate an object from another. To illustrate the nature of this form of doubt Vātsyāyana gave an example which is explained in this way. Earth has its unique characteristic called smell. With this characteristic one can differentiate it from water, fire etc. (other substances or similar objects) and dissimilar objects (quality and action). He further analyzed this form

of doubt that it is the special mark of sound which is produced by disjunction (e.g. when bamboo is split into two parts, a sound is produced) and one can have a doubt whether sound is an action or quality or substance. It occurs only because of the unique characteristics of the objects having their quality of being similar or dissimilar. Now, one can ask a question as to how the sound is produced by the disjunction. Here, ‘disjunction’ (*vibhāgajātva*) is unique characteristic of sound. Sound is produced when somebody splits a bamboo or tears a piece of cloth. “The ‘inherent cause’ (*samavāyi-kāraṇa*) of producing sound is empty space whereas disjunction of the two parts of the bamboo along with the empty space of the two parts of the bamboo is the ‘non-inherent cause’ (*a-samavāyi-kāraṇa*) of the sound.”¹³⁹ On the other hand, the person who splits bamboo into two parts is the ‘efficient cause’ (*nimitta-kāraṇa*) of producing the sound. Thus, disjunction is regarded as non-inherent cause and is the unique characteristics of having the knowledge of sound. In other words, by the cognition of disjunction we know the source of producing sound and have the cognition that doubt arises in the form of whether sound is a substance or a quality or an action. While discussing the *śeṣavat* inference, Gautama (in his *Nyāya-sūtra*- i.1.5.) mentioned the presence of doubt in the ascertainment of the nature of sound of whether it is a quality or an action or a substance. That is why in the further analysis the unique characteristics (disjunction) of doubt is revealed as the quality of *ākāṣa*,¹⁴⁰ though there are some objections regarding this form of doubt which I would discuss in the critical examination section.

4.3.1.3. Contradictory assertion about the same object

The third form of doubt suggested in Gautama commentary is the ‘contradictory assertion about the same object’. To define this particular forms Gautama mentioned a particular word in his *sūtra* which is *vipratipatti*. As we know, while defining the word *vimarśa*, ‘*vi*’ stands for ‘contradiction’. In the same way, in *vipratipatti* it is also used to mean ‘contradiction’ and rest of the portion is used as ‘assertion’ or ‘statement’. Thus, this form of particular doubt arises when we have two contradictory assertions about the same object. Let’s take an example to clarify the nature of this form of doubt which is directed by contradictory assertion. For instance, if there is two assertions like (i) ‘self exist’ and (ii) ‘self doesn’t exist’, after listening these assertions questions may arise on what somebody would think about the existence of ‘self’ or what the reaction of a third person would be regarding the existent of self. In reply, we have to assert that the person would not be in a state to judge this

¹³⁹ Ibid., p. 95.

¹⁴⁰ The method of ascertainment is *pariśeṣa* (residual) while residual stand for the *śeṣavat* inference.

fact. The person would be in doubt to take any of the positions. But, the fact of not taking a side is that the person knows that there is the coexistence of being existing and not being existing in the same locus. In such a state one is not able to ascertain the truth of a particular object because of having some doubt in this form.

4.3.1.4. The irregularity of the apprehension

The fourth form of doubt regarding *Nyāya-sūtra* is due to ‘the irregularity of the apprehension’. In the sutra, the word ‘*upalabdhi-avyavastha*’ stands for this particular form of doubt, while the literal meaning of ‘*upalabdhi*’ is the apprehension or the cognition of something. On the other hand, *avyavasthā* stands to mean a kind of situation where our mind is not capable to avoid the false instances. That is why one gets into the state of mind where this irregularity of apprehension may occur. To clarify this, let’s take a real example. The knowledge of ‘water in tank’ is the real perception of water where it really exists. On the other hand, one can also perceive water in mirage where it doesn’t actually exist. Thus, with the perception of both of the instances one has doubt of whether the object we have perceived is really existent or non-existent.

4.3.1.5. The irregularity of the non-apprehension

The fifth or the last form of doubt according to Gautama is due to ‘the irregularity of the non-apprehension’. As we have mentioned in the previous forms of doubt that it occurs for the wrong perception of an object at a place but this particular form of doubt occurs by lack of ability to perceive an object. For instance, the real existent of the root-peg (*kilaka*) and water is not perceived.¹⁴¹ In the same way, the objects which is destroyed is not perceived and the object which does not come with the contact of our senses is also not perceived. Therefore, one can have doubt about the non-apprehension of the object in the form of whether these objects are existing or not existing.

Regarding the forms of doubt which Gautama proposed to define the nature of doubt, there are some of the contemporary philosophers who raised few objections stating that to define the nature of doubt we don’t need to have the cognition of all of these forms. Therefore, they proposed their own views to state the nature of doubt. That is why in the next section, I would engage to show the objection raised against Gautama’s forms of doubt by other contemporary philosophers. Among them, Uddyotakāra stated only first three forms of doubt to state the

¹⁴¹ Trans. by Chattopadhyaya, &Gangopadhyaya, *Op. cit.*, p. 96.

nature of doubt. On the other hand, Kaṇāda stated only one form of doubt which is the apprehension of common characteristics and Phanibhūṣaṇa supported him. Now, let us engage to look into the debate.

4.4. Objections raised against Gautama's views on different forms of doubt

A few objections which are raised against first two forms of doubt are as follows:

- (i) The first objection against the forms of doubt (mentioned in *Nyāya-sūtra*-ii.1.1.) is that doubt cannot be due to the common or unique characteristics of an object. To explain it, they mentioned that “doubt arises from the ascertainment of the common characteristics rather than the mere (presence of) the common characteristics.”¹⁴²
- (ii) They also mentioned that there would be no scope of doubt when we have knowledge of an object, how it has been characterized and when we could know about the characteristics of a particular object.
- (iii) It is also mentioned that there can be no doubt if we know the particular nature of two different beings. To illustrate this objection, they mentioned that “there can never be any doubt about the quality of touch from the knowledge of the quality of colour, because the two objects are completely different from each other.”¹⁴³
- (iv) In the case of these forms of doubt we cannot have the resemblance between cause (ascertainment of the knowledge of the object) and effect (fact of the appearance of the two objects as same).
- (v) Last objection is that “doubt cannot be due to the ascertainment of the characteristics of either two objects because in that case there will be the ascertainment of either (of the object).”¹⁴⁴

Objections raised against last three forms of doubt are as follows:

- (i) The first objection as mentioned in *Nyāya-sūtra* (ii. 1.2.) is that “doubt cannot be due to the ascertainment of the ‘contradictory assertion about the same object (*vipratipatti*)’ and the irregularity of the apprehension and non-apprehension

¹⁴² Gautama Nyāya-Sutra with Vatsyayana Commentary Trans. by Gangopadhyaya, with an Introduction by Chattopadhyaya, Nyāya, p. 70.

¹⁴³ Ibid.

¹⁴⁴ Ibid., p. 70-71.

(*upalabdhi-anupalabdhi-avyavashtā*).¹⁴⁵ This objection is further illustrated by Vatsyāyana. They declared that doubt cannot be due to any of the mere assertion (contradictory, irregularity of the apprehension and non-apprehension). Now, one can ask a question on how then doubt arises here. According to them, it is not necessary for a person to have doubt when there is two contradictory assertions. In other words, if there are claims of two parties like, ‘the self exists’ and ‘the self doesn’t exist’, then it is not necessary for a third person or listener to have doubt about the existence of the self. Likewise, “there cannot be any doubt after having separate knowledge, that there is irregularity of the apprehension and again that there is the irregularity of the non-apprehension”.¹⁴⁶

- (ii) On the other hand, it is said that there cannot be any doubt between two contradictory assertions, because in that case these assertions are actually well-established conclusion. If the assertions are well-established conclusion, then we have to say that doubt is due to the well-ascertained conclusion. Therefore, doubt cannot be due to the ‘contradictory assertion’ (Gautama in his *Nyāya-sūtra*-ii.1.3. mentioned about this objection).
- (iii) Another objection which is raised against the fourth and fifth forms of doubt is that “doubt is not due to irregularity of the apprehension and non-apprehension.”¹⁴⁷ The claim is raised by Uddyotkara (it is mentioned in *Nyāya-sūtra*-ii.1.4.) where he wrote:

If irregularity is restricted by its intrinsic nature, then it amounts to regularity and as such it ceases to be irregularity. Therefore, it is illogical to claim that doubt is due to irregularity. On the other hand, if irregularity is not restricted by its intrinsic nature, then it ceases to be irregularity because of losing its intrinsic nature. Thus there can be no doubt, due to irregularity of apprehension or non-apprehension.¹⁴⁸

The claim suggests that irregularity is itself contained in the regularity. An irregularity may be designated as such with reference to something else, but with reference to itself it is a settled fact. If the irregularity is not settled in itself, it is regular and can’t cause doubt. On the other hand, if the irregularity is not settled in itself, it is devoid of its own character and can’t cause doubt.

¹⁴⁵ Ibid., p. 71.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid., p. 72.

On the other hand, regarding the first form of doubt (doubt is due to the common characteristics) it is also mentioned that in the form of first form of doubt “there results the absurdity of perceptual doubt (*atyanta-samśaya*), because of the ever presence of the common characteristics.”¹⁴⁹ In the next section I would deal with Gautama’s reply to the questions raised by different contemporary comentators.

4.5. Gautama’s reply to the questions raised by different comentators

As we have seen before, there are objections which are raised against the forms of doubt given by Gautama. That is why it is very necessary to give significant responses to the objections. The objections are illustrated step by step in *Nyāya-sūtra* (ii. 1.1.-5.) The objections are further illustrated by Vātsyāyana in his *Bhāṣya*. After that, in reply to the objections Gautama tried to give satisfactory answers through his *Nyāya-sūtra*(ii.1.6. & ii.1.7.) in the following way:

Answers to the claim raised against the first two forms of Doubt:

- (i) Regarding the claim against the first two forms of doubt, Gautama mentioned whether the doubt is about common characteristics or the unique characteristics, but it cannot go into the absurdity of ‘perceptual doubt’, because it is connected with ‘the dependence on the remembrance of the unique characteristics of each.’¹⁵⁰ For further clarification Vātsyāyana gave its illustration. According to him, “there is no absurdity of either doubt being never produced or doubt never coming to an end.”¹⁵¹ He gave the reason for saying the previous statement that it is not the case that doubt is about the merely common characteristics, but it is implied by the word *viśeṣāpekṣa* where the meaning of the word *viśeṣāpekṣa* is to urge or the longing (*ākāṅkṣā*) or the inclination for the perception of ‘special distinguishing mark’ (*viśeṣa*) and doubt is possible only when we are not able to perceive the ‘special distinguishing mark’. Though, on the other hand Vātsyāyana stated that the Gautama’s *sūtra* does not mean *samāna-dharma-apekṣa*, as it ‘depends on the desire for the perception of common charateristics.’¹⁵² Thus, we can say that when we have no intention to perceive the distinguishing mark of an object, then only

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Ibid., p. 73.

we have doubt about a particular. Therefore, we can claim that doubt is due to the apprehension of the common characteristics.

- (ii) On the other hand, in *Nyāya-sūtra* ‘the apprehension of the common characteristics’ is implied by the word *samāna-dharma-upapatti*. This *samāna-dharma-upapatti* does not concern about anything other than the cognition of the characteristics which is common to the objects, although the word *upapatti* in the *sūtra* means ‘mere presence’. That is why people get into the situation that this particular form of doubt only concerns about the mere presence of the common characteristics, where it is also connected with its distinguishing mark. Vātsyāyana, on the other hand, argued in favor of the form of ‘common characteristics’ saying that we apprehend about common characteristics only when we have intention to have clear perceptual knowledge. Therefore, he finally speaks that if we have no clear perceptual knowledge of common characteristics or the characteristics unknown to us, then it only amounts to non-existent.
- (iii) Again, to clarify the nature of the first form of doubt, Vātsyāyana wrote that when we identify something or an object (*viṣaya*) we talk about ‘the knowledge of the object’ (*viṣayi-pratyaya*).¹⁵³ He gave this clarification for the understanding of the of doubt associated with the common characteristics, where according to his previous explanation ‘common characteristics’ actually means ‘the knowledge of common characteristics’. For instance, “in ordinary use of the statement ‘fire is inferred from smoke’, it originally means that ‘fire is inferred from the perception of smoke’, because fire is inferred only when we have the perception of smoke. However, in the statement itself the word ‘perceived’ does not occur.”¹⁵⁴ The intention behind the clarification is to give the definite understanding of the knowledge of the first form, while in the first form the expression of ‘common characteristics’ is associated with ‘the precise knowledge of the common characteristics’.¹⁵⁵
- (iv) Another claim stated against the first form of doubt is that “doubt is impossible as the characteristics (*dharma*) as well as the ‘object characterised’ (*dharmīn*) are already known when we have knowledge in the form, ‘I apprehend the common

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid., p. 74.

characteristics of these two objects.”¹⁵⁶ In reply, Gautama stated that the knowledge they talked about is the knowledge of object which we have previously perceived. To illustrate this, we have to say that when we perceive the common characteristics of the two objects which we have previously perceived, we do not perceive their special distinguishing mark when we are in the state of doubt, because if we are able to perceive the distinguishing mark of the two objects at the moment of doubt, then there will be no point of having doubt when we perceive the common characteristics of these two objects. That is why the claim doesn't hold good that doubt arises merely from the common characteristics. On the other hand, doubt causes endless doubt or one doubt can produce another doubt if doubt arises from the common characteristics. The claim is very illogical, because when we have doubt about something, that doesn't mean that my doubt about a particular can create another doubt, because if that happens in regular manner then we cannot have certain knowledge after having a doubt.

- (v) Moreover, the claim that ‘we cannot have the resemblance between cause (ascertainment of the knowledge of the object) and effect (fact of the appearance of two objects as same)’ also does not hold well at all, because whenever doubt arises due to the common characteristics of two objects with the remembrance of unique characteristics, there one conceives the presence of the resemblance between cause and effect. Without the resemblance relation one cannot have doubt. When we perceive the common characteristics of two objects and get into the state of mind where doubt arises, doubt arises only because we are unable to perceive the distinguishing mark of these two objects. Therefore, in this case the cause of doubt is to be ‘unable to perceive the distinguishing mark of these two objects’ and that is why doubt arises.

By considering these above statements the claim raised against first two forms of doubt is refuted. Now, I will examine the last three forms of doubt to show how Gautama answered the claim which is made against the last three forms of doubt:

- (i) The claim raised in *Nyāya-sūtra* (ii.1.2.) is that “doubt cannot be due to the contradictory assertion about the same object (*vipratipatti*) as well as ‘the irregularity of the apprehension and non-apprehension’ (*avyavasthā*, i.e.

¹⁵⁶ Ibid.

upalabdhi-anupalabdhiavyavasthā).¹⁵⁷ In response to this claim, we have to say that after listening two contradictory assertions about the same object one can realize that he is not in the state of mind to find any distinguishing mark of this two assertions. Therefore, the person is not in the state of mind where he can assert either of the alternatives and is unable to decide in favor of either. Thus, “such state of mind which results from the contradictory assertion about the same object cannot be removed merely by comprehending that the two contestants maintain two contradictory theses.”¹⁵⁸ Consequently it happens in the case of doubt which results from the irregularity of the apprehension and non-apprehension. That is why it is mentioned that this cognition of doubt cannot be removed by any kind of third party, it can only be possible by the cognition of special distinguishing mark.¹⁵⁹

- (ii) On the other hand, in response, claim is raised in the third form of doubt that ‘these are well-ascertained conclusions; there cannot be any doubt about these two theses’. The reason of this doubt is the ascertainment of the meaning of the word *vipratipatti* associated with ‘the remembrance of the special distinguishing mark’ and it cannot be negated by merely any verbal substitute.¹⁶⁰ To explain this, they mentioned that the main cause of producing this particular doubt is the ‘distinguishing mark’. Their claim about the reason of negating its causal efficacy is not a well-ascertained claim and seems very ignorant. Because if we consider their claim that these are well-ascertained conclusion about the same object, even then doubt can arise there. The reason is that they have their special distinguishing mark and only because of this (the distinguishing mark) the two different parties make their own view points about the same objects. And it could obviously be asserted that after listening two parties one could have doubt for the contradictory apprehension about the same object.
- (iii) Again, Uddyotkara’s claim raised against the form of doubt is due to irregularity of the apprehension and non-apprehension, because irregularity as irregularity is subject to regularity.¹⁶¹ In reply to this claim, Gautama answered to the claim in his *Nyāya-sūtra* (ii.1.4.) that a word can be substituted by another word even it is

¹⁵⁷ Ibid., p. 75.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ Ibid., p. 76.

different from it, but if it happens then it cannot produce a definite result which one intends by the former words, since by this it cannot reject the causal efficacy (here the efficacy is about irregularity) of intended fact and assumed irregularity itself. Now, Let us see the substitution: “it is regularity and cannot be irregularity because as irregularity it is subject to regularity.”¹⁶² Therefore, it could be concluded that this substitution cannot negate the form of doubt which is about the irregularity of the apprehension and non-apprehension by the remembrance of the special distinguishing mark. Thus, “the claim that irregularity as irregularity subject to regularity does not surrender its intrinsic nature (i.e. it remains irregularity and is not really transformed into regularity)”¹⁶³. So, irregularity is to be admitted by the remembrance of the special distinguishing mark about the desired object.

Finally, it is settled that whatever the form of doubt is stated by Gautama is the well-ascertained form. Most importantly the key of the defense of Gautama’s form of doubt is the ‘remembrance of the special distinguishing mark’. With this very fact of its distinguishing mark all of the forms of doubt pass the claims raised by different commentators.

4.6. Re-examination of the Gautama’s views regarding different forms of Doubt

First of all, it is to be cleared that this study is in favor of the first three forms given by Gautama for the clear understanding of doubt. For this reason, I am taking Uddyotkara’s side to examine doubt. Though, I do not admit Uddyotkara claim against the fourth and fifth forms of doubt. Supporting his side is only about he has admitted first three forms of doubt given by Gautama. To reject Gautama’s fourth and fifth forms of doubt I will provide some reasons. Here, I will first provide the reason of supporting three forms of doubt given by Gautama and then I will arrived at the position to state that why the fourth and fifth forms are not considerable.

- (i) First and foremost reason of supporting the first three forms of doubt given by Gautama is that these are well-ascertained forms. But, in the case of fourth and fifth forms I would say that these are inherently included in the third form of doubt (contradictory assertion about the same objects).

¹⁶² Ibid.

¹⁶³ Ibid.

- (ii) The special distinguishing mark which I have seen in the first form of doubt is that “this particular form of doubt only arises when we are not in opposition to differentiate their special characteristics” and we fall into doubt of whether this is P or Q, although the condition of the occurrence is that our senses are not in the state of acquiring P as P.
- (iii) On the other hand, the second form of doubt (apprehension of the unique characteristics) occurs when we have different probable consequents of a same fact and we get into the state of mind of which belongs into the category of a particular fact (i.e. whether sound is a substance or a quality or an action). After a close examination of the producing effect, we confirm that sound is the quality of *ākasa*.
- (iv) The third form of doubt (contradictory assertion of the same object) states that there can be two opinions about a same fact or there can be two contradictory assertions of a same object and it is a genuine form of doubt, because when we have two views regarding a same fact then, there has possibility of doubt to the debater itself for its own stand, though in *Nyāya-sūtra* Gautama only stated the third person’s doubt about the two contradictory assertions of a same object.
- (v) The reason of not supporting the fourth and fifth forms of doubt is that it concerns about the existence and non-existence of an object. Which seems to be very similar to the third forms of doubt (contradictory assertion about the same object) endorse by Gautama. For instance, when we perceive water in mirage, we can have no real perception of the existence of water in mirage, because we know that water do not exists in mirage, it exist in somewhere else, like, tank etc. That is why one could have doubt of whether what we perceive really exists or does not exist. According to Gautama, this is considered as the fourth for of doubt – ‘the irregularity of the apprehension’. The fifth form of doubt is about the cognition of something which we cannot perceive through our senses. For instance, the real existent of the root, the peg (*kilaka*) and water are not perceived.¹⁶⁴ On the other hand, the object which is destroyed is not perceived and the object which does not come with the contact of our senses is also not perceived. Therefore, one can have doubt about the object in the form of whether these objects are existing or not existing. Which is according to Gautama is fifth form of doubt (the irregularity of

¹⁶⁴ Trans. by Chattopadhyaya, & Gangopadhyaya, *Op. cit.*, p. 96.

the non-apprehension). Thus, the basis of the fourth and fifth form of doubt endorse by Gautama is as follows: (i) whatever we perceive through our senses is existent or non-existent and (ii) whatever we can't perceive through our senses is existent or non-existent. From the instance of 'water in mirage'- water does not exist in mirage and 'water in tank', where water actually exists'. With these instances we have doubt in the form-'whatever we perceive through our senses is existent or non-existent' which is a contradictory claim. In the same way, we would see in 'the irregularity of the non-apprehension'¹⁶⁵ that we do not have the perception of the root, the peg (*kilaka*), that is why we have doubt in the form 'whatever we can't perceive through our senses is existent or non-existent'. It is also a contradictory claim. Thus, these two assertions contain contradictory claim and therefore, it is inherently presented to the third form of doubt which is the 'contradictory assertion about the same object'.

From the above examination about the forms of doubt we can conclude by saying that for the clear understanding of doubt we need to have the knowledge of the first three forms of doubt given by Gautama. Fourth and fifth forms of doubt are inherently included in third form of doubt which is 'contradictory assertion about the same object'.

We know that doubt has different forms and it occurs in the different states of mind. It is not the state where we have definite knowledge of a particular object. It is not the state where we can assure of a fact that it is X, Y and Z, but it is the state from where we can start searching the true cognition of a particular. Therefore, doubt is the method of searching truth. That is why for acquiring the true knowledge about a particular, doubt plays a major role to investigate the real nature of an object. In the process of inferential knowledge also doubt plays a major role. In the next section I would show how doubt plays a significant role in the process of acquiring inferential knowledge.

4.7. Application and the importance of role of Doubt in Nyāya Syllogism

We know that *Nyāya* syllogism constitutes of the five statements which are-*pratijñā*, *hetu*, *udāharaṇa*, *upanaya*, *nigamana*. These statements have their constituent difference, but they are equally connected to each other. For the final ascertainment of inferential cognition (*anumitijñāna*) it is necessary to have relation among them. In the process of inference we

¹⁶⁵The fifth form of doubt endorse by Gautama.

can cognize about a particular object depending upon some statement which seeks to have the true cognition about it. If we closely look at the statements required for having inferential cognition, we can find that there is a role of doubt in the statements of inference. This examination is a task of an understanding that doubt can seek true cognition about a particular search, though doubt itself is not a state of mind where we can assure about the true cognition of an object, but it is a precondition for inferential cognition. To show the role played by doubt in inference, I would produce an example of Nyāya syllogism first, then I would show the divergence of doubt in this process. The example which constitutes Nyāya syllogism is as follows:

- (xi) There is fire on the hill (the statement which is to be proved; *pratijñā*),
- (xii) Because there is smoke (the statement which underlies the reason; *hetu*),
- (xiii) Wherever there is smoke there is fire, as in the kitchen or bonfire (the statement confirms the universal relationship between the reason for which the assertion is to be taken as such and the asserted fact which is supported by the well-established example; *Udahāraṇa*),
- (xiv) The hill has smoke associated with fire (the statement states that the universal relation which is stated in the previous statement is also applied in the present context, and where we examine the reason which is taken for granted to prove that the desired assertion is well-ascertained; *upanaya*),
- (xv) The hill has fire (this statement is considered to be the fact that it is drawn from the preceding four statements; *Nigamana*).

This is a well-established example of *Nyāya* syllogism. Now, the question is very significant, i.e. where does doubt exist in these statements and plays a role to have inferential cognition. Let us examine the above statements in order:

The first statement of inference (*pratijñā*) is an assertion which we intend to prove or which is to be proved. Here one can ask a question, i.e. where does doubt belong in this statement? In reply, we have to ask a question: what does an inference mean or why do we need to have an inference? The fact of an inference is that we are not sure about the truth of an object. That is why we take for granted something like ‘suppose A is the case’. Therefore, we can say that the fact of an assertion is the first step of searching truth about a fact, though the state itself comes into the consideration of a state of mind where doubt lingers. But why? It happens only because the asserted fact can be either. Now if we take an assertion like ‘the hill has fire’

or 'there is fire on the hill', then our assertion might be false, because it is all about the possibility of an object as such. Now, if somebody claims that an assertion is the true cognition about a fact, then we have to say that when we have the definite knowledge of an object, then there is no need to infer about the truth of that particular, because it is already an established fact. Hence, the first statement of the inference comes in the state of mind where doubt comes into action.

The second statement is the reason (*hetu*) for having an assertion of why we think that 'A is such a case'. In other words, the statement produces the reason of the fact of why we have taken an assertion as such. In this statement we examine the previous statement that the assertion of what we have made previously is only because of the fact that we have a perceptual experience for which it exists. Now, if we take the previous statement 'the hill has fire or there is fire on the hill', then the reason of inferring it is that as such we have a perceptual experience of the 'smoke coming out from the hill'. This statement also can't prove the first statement which is to be proved, because, a reason would be valid only when we can produce an instance or example regarding the reason. That is why even we produce a reason in support of an assertion, still we cannot have true cognition of an object or the cognition of an assertion which we intend to prove. Thus, doubt is still in the frame of having inferential cognition. Here, the role which doubt plays in is when somebody says that P is true (first assertion which is to be proved), because S is there (the reason). Now, what is lacking here is that it requires an example to show that if S is there then P would be in such a state. Therefore, now we need to produce an example to state that 'if S is there then P would be such a state'.

It is the statement (third statement of Nyāya syllogism) where we produce the example to show the reason that the previous statement is a well-ascertained hypothesis. Now, if we look at the previous two statements then we have to accept that doubt is present there. Therefore, the question becomes more significant, i.e. is there any doubt in the third statement of Nyāya syllogism? In reply, we have to say that before the ascertainment of *vyāpti*, doubt can be present, but whenever we have the knowledge of the universal relation between *hetū* and *sādhya* there would be no more doubt in this statement. The reason is that in this statement we produce an instance which is universally related in any condition. And we acquire about this universal relation through our perceptual experience. Let us take an example to clarify about this particular universal relation. If we look at the previous statement, then we have- (1) The hill has fire or there is fire on the hill, (2) Because there is smoke or smoke is coming out

from the hill. Among them statement (1) is the assertion which we have to prove and statement (2) is the reason for which we have taken the previous assertion. Now, to prove the validity of the reason that it takes for an assertion, it is necessary to have perceptual evidence. That is why we take an example in the form of the third statement that ‘whenever there is smoke there is fire; as in the kitchen, bonfire or chimney’. This is the example where we acquire the universal relation between *hetū* and *sādhya*, though to establish this relation we need to have few steps which are: *anvaya*, *vyatireka*, *vyabhicāragraha*, *upādhiniras*, *tarka* and *sāmānyalaksanapratyakṣa*. Now, one can ask a question here, i.e. how do these steps help to acquire the universal concomitance relation between *hetū* and *sādhya* (which is called *asvyāpti*)? In these steps we examine the universal relation between *hetū* and *sādhya*. That is why while examining the relation between the two we can have doubt about the relation (the universal relation between *hetū* and *sādhya*), but after the examination of these steps we cannot have any further doubt about the relation between the two. Therefore, let us know how these steps work to examine the concomitance relation between *hetū* and *sādhya*:

- (a) The relation (*anvaya*) where we can assure of the existence of something which depends on another particular object. For instance, if we say ‘wherever there is smoke there is fire’, the regularity of the presence of smoke in relation with fire would be considered as *anvaya*.
- (b) The term ‘*vyatireki*’ is used to mean the absence of something depending upon another. As we have seen in *anvaya* relation that something exists only when there is existence of another. Similarly in the case of *vyatireki* we can find that the absence of a particular also creates the absence of another object. For instance, ‘the absence of fire creates the absence of smoke’. We have never seen any case where there is the existence of fire without smoke. This regularity about the absence is known as *vyatireki*.
- (c) We have seen the co-location of a particular to another particular in the relation of *anvaya* and *vyatireki*. The relation is about to examine the conditions of the existence of a particular depending upon some other particular object’s existence and absence. But in the examination of *vyabhicāragraha* we acquire to have the cognition of opposite instances in both of the presence and absence of a particular. That is why *vyabhicāragraha* creates problem in the ascertainment of *vyāpti*. It has facets like (i) the nature which includes the assurance or just the possibility of assurance (*vyabhicāragrahaniścaya*) and (ii) the nature which is about a mere suspicion

(*Vyabhicāragrahasāṅkā*). The former is considered as producing positive instances with perceptual experience. That is why in the first case, we remove our doubt from concerned subject through the perceptual evidence. On the other hand, in second case *Vyabhicāragraha*, one gets into doubt only for the sake of doubting. At this stage one cannot have the true knowledge of the relation between the two particulars. According to *Nyāyaikas*, the absence of the knowledge of *Vyabhicāragraha* and the knowledge of the universal co-relation (*sāhacaryasāmbandhajñāna*) lead to the ascertainment of *vyāpti*. And the co-location between *hetū* and *sādhya* in the kitchen is the cause of *vyāpti* relation. That is why on the other hand, to establish the universal concomitance relation, as Annambhaṭṭa suggested, one has to have the knowledge of *bhūyodarśana* or abundant observation. According to him, the term *bhūyodarśana* may mean in three ways:

- (i) “*bhūyasāmdarśanānāmsamāhāraḥ*”¹⁶⁶
- (ii) ‘*bhūyasāmsādhyahetūnāmdarśanam*’¹⁶⁷ or
- (iii) *bhūyasāmadhikaraṇesudarśanam*¹⁶⁸”¹⁶⁹

In TS it is explained that if we have the knowledge of the large number of the association of probans and probandum, but at the same time we have the observation of one instance of *Vyabhicāra* knowledge, then there cannot be the possibility of the ascertainment of *vyāpti*. For example, we have the observation of ‘wherever there is smoke there is fire’ in kitchen, chimney, bonfire etc., but at one place we have the knowledge of ‘electric heater’ where there is fire but there is no smoke (in other words, where we have not the knowledge of fire and smoke in co-location). Only because of the opposite instance (*Vyabhicārajñāna*) we cannot have the knowledge of the ascertainment ‘wherever there is fire there is smoke’. That is why Annambhaṭṭa in his TSD explained the meaning of *bhūyodarśana* as “*Vyabhicārajñānasahakṛtasahacārajñāna*”. Again he mentioned that it is possible to have the ascertainment of *vyāpti* through the knowledge of co-relation between probans and probandum, if there is the absence of the knowledge of *Vyabhicāra*. If there is the existence of the knowledge of *Vyabhicāra*, we cannot have the ascertainment of *vyāpti* as we acquire the knowledge of proban and proban in several

¹⁶⁶ The very first sense of the meaning of *bhūyodarśana* is the observation of the large association between a probans and a probandum.

¹⁶⁷ The knowledge of the co-location between proban and probandum is acquired again and again.

¹⁶⁸ The knowledge of the co-location between proban and probandum is at different places.

¹⁶⁹ *Tarkasaṅgraha-Dīpikā on Tarkasaṅgraha*, edited and translated by Bhattacharya, p. 209.

time or different places. That is why it is further mentioned that it is not at all enough for the ascertainment of *vyāpti* by *bhūyodarśana* only.

(d) To ascertain *vyāpti* we would also have to go through the process of the removal of ‘condition’ or *upādhiniras*. It is considered as a kind of faulty probans which is subjected by a condition. While determine the meaning of *upādhi*, Annambhatta proceeded the definition by saying “*sādhyavyāpakatvesatisādhanāvyāpakatvam*”¹⁷⁰. An upadhi is to be the *vyāpaka* of probandum and *avyāpaka* of probans.¹⁷¹ To explain this, we have to say that what would be present continuously with probandum is known as *sādhyavyāpaka*. On the other hand, while there is no presence of something even after presenting the *sādhana* (*hetū*), then it would be known as *sādhnavyāpak*. For instance, ‘wherever there is smoke there is fire’, where the cause of producing smoke is “something which is wetted” (here wetted is *upādhi*). Therefore, it is to be noted that wherever there is smoke there is the connection of something wetted (like wetted wood). But, when there is the presence of fire, we cannot say that there is the connection of “wetted something” because we have seen at the burning iron rod that there is fire but there is no connection of the fact that it is to be ‘wetted’.¹⁷² Here, there is no distribution (*vyāpaka*) of probans. In that way, the connection of something to be ‘wetted’ would be *vyāpaka* of probandum and *avyāpaka* of probans which establish the *upādhi*. That is why the distribution of fieriness comes under the fallacy of *vyāpatasiddhi*. But then, it is a question of how ascertainment of *vyāpti* can be possible here. To remove doubt from the ascertainment of *vyāpti*, we have to take again the help of *tarka* (hypothetical argument) which I will discuss in the next.

(e) *Tarka*¹⁷³ (hypothetical argument) is also a way to ascertain *vyāpti*. When we are not able to establish *vyāpti* with the help of *bhūyodarśana*, then we will have to take the help of hypothetical argument for the ascertainment of *vyāpti*. If we are not able to remove *Vyabhicārajñāna* after observing the co-relation of probans and probandum then we need to proceed with *tarka*. We know that ‘where there is smoke there is fire’ and if ‘there is the absence of fire then there is also the absence of smoke’. But if somebody claims that ‘there is the existence of smoke without the presence of fire’,

¹⁷⁰Ibid., p. 257.

¹⁷¹Ibid., p. 258.

¹⁷²Annambhatta *Tarkasamagraha* with *Dīpikā*, trans. by Gopa, P. 122.

¹⁷³*Vyāpāropenavyāpakāroptarka*, for more details see Bakchi, *Bharatiya Darsana*, p. 152.

then we cannot say the statement ‘wherever there is smoke there is fire’. Therefore, in that case there we cannot infer fire from smoke. For this assurance of the possibility of *Vyabhicārajñāna*, we will have to produce the argument against it. They used to proceed by saying that if we do not accept the co-relation between probans and probandum, then we will also have to deny the law of causality. The law of causality says that if there is the presence of effect, then there must be a cause of this producing effect. For instance, ‘fire is the cause of smoke’, where smoke is effect and fire is cause. Now, if somebody claims that ‘smoke can be present without fire’, then we must have to say that smoke is produced from some other causes rather than the existence of fire. But, it is not really the case that smoke can be present without fire. Therefore, we have to say that smoke is the cause of fire. With this law of causality, we are able to establish the relation ‘wherever there is smoke there is fire’. And if there is the existence of smoke, but there is no fire, then it will break the law of causality. By this way one can be able to remove the *Vyabhicārajñāna* from a concerned subject. In that way one can establish the ascertainment of the *vyāpti* relation, though Annambhaṭṭa made a doubt here by saying that we can have the perceptual knowledge of the co-relation between smoke and fire, but the question is how we can ascertain the knowledge of smoke with the relation of all fire. Therefore, we are still in doubt about the ascertainment of *vyāpti* relation. To remove the doubt from the ascertainment of *vyāpti* relation, Annambhaṭṭa suggested the further steps of examination which is called *sāmānyalakṣaṇapratyakṣa*.

- (f) The step is to be taken to establish the relation of all the instances of smoke and fire through the operative relation (*pratyāsatti*) which is constituted by the common features (*sāmānya*) of fieriness and smokiness.¹⁷⁴ According to Naiyāikas, this statement ‘wherever there is smoke there is fire’ is the instance of universal proposition. Now, it becomes a significant question of how one would be able to acquire the knowledge of all the instances of smoke and fire. According to Annambhaṭṭa, the knowledge of the relation of all the instances of smoke and fire would be possible through the extraordinary perception. It will not be possible through the ordinary perception, because we cannot have the knowledge of all the instances of smoke and fire through our sense perception. But, when we have the knowledge of one instance of smoke and fire at same time, we acquire the knowledge

¹⁷⁴*Tarkasaṅgraha-Dīpīka on Tarkasaṅgraha*, edited and translated By Bhattacharya, p. 216.

of smokiness and fieriness. With this smokiness and fieriness we can have the knowledge of all the instances of smoke and fire. Therefore, the claim will no longer stand that we cannot have the knowledge of all instances of smoke and fire. From *sāmānyalakṣaṇapratyakṣa* we can finally ascertain the concomitance relation between *hetū* and *sādhya*.

As stated earlier, one can ascertain the co-location of probans and probandum through the given six steps by the Nyaiyāikas. We have seen that one can establish the *vāypti* relation through the removal of doubt by following the steps which have been mentioned above. While ascertaining the *vyāpti* relation the process includes the examination where we can make the assertion that the reason for which the third steps arise is well-ascertained hypothesis. And from the example we have established the universal concomitance relation between *hetū* and *sādhya*.

After ascertaining *vyāpti* we take a further step to show what we have ascertained as reason and the example why we would ascertain a reason, both have their application to have an inferential cognition. That is why the fourth statement is the combination of second and third statements (*hetū* and *udāharana*). We acquire the fourth statement as “the hill has smoke which is associated with fire”. The statement is the confirmation of what we have taken as reason and the example which follows the reason is the well-established hypothesis. After the confirmation of the fourth step we finally ascertain that ‘the hill has fire’. Now, if we take the entire process of inference in a chart it will look like the following:

The statements of <i>Nyāya</i> Syllogism	Presence of Doubt (<i>saṁśaya</i>)	Absence of Doubt (<i>saṁśaya</i>)	Final ascertainment
There is fire on the hill	✓	-	In progress
Because there is smoke	✓	-	In progress
Wherever there is smoke there is fire, as in the kitchen or bonfire	Doubt is present in the process of the examination of the <i>vyāpti</i> ascertainment until and unless we have the knowledge of <i>sāmānyalakṣaṇapratyakṣa</i> (the examination follows these steps- <i>anvaya</i> , <i>vyatireka</i> , <i>vyabhicaragraha</i> , <i>upādhiniras</i> , <i>tarka</i> and <i>sāmānyalakṣaṇapratyakṣa</i>).	After the knowledge of <i>sāmānyalakṣaṇapratyakṣa</i> we acquire the universal concomitance relation and there is no longer doubt to be present. That is why, whenever we have the definite knowledge about the concomitance relation between <i>hetū</i> and <i>sādhya</i> , doubt will automatically be removed	In progress
The hill has smoke which is associated with fire	-	✓	In Progress
Therefore, the hill has fire	-	✓	Ascertained

Table 4.7.1: Demonstration of the process of final ascertainment for inferential cognition (*anumiti*)

The above figure shows that to have an inferential cognition we have to pursue through the above mentioned statements. It has been also mentioned in the above statements that there is role of doubt in the statements which is required for the cognition of inference. From the very

beginning, we take an assertion for having an inferential cognition which we have to prove, though the statement which we take as an assertion of inference is the possible fact of something. The reason of the possibility is to produce in the second statement. We have to take a reason for an assertion because we can have an assertion only when we have a reason in support of the assertion, though the reason itself cannot establish the fact which we have intended to infer. That is why we take another statement where we have said that the reason produced for inferring the fact needs perceptual evidence. Only because of that, we can ascertain the relation of *vyāpti*. After ascertaining the concomitance relation between *hetū* and *sādhya*, we further take another step where we re-examine both of the relation of *vyapti* and the reason to establish the fact that ‘the hill has fire which is associated with fire’. After this particular statement we have the final cognition of inference. Now, if we take the sequence of the *Nyāya* inference then we can have the following steps: *pakṣadharmatājñāna*, *vyāptijñāna* and *parāmarśajñāna*, where the second statement is the knowledge of *pakṣadharmatā*, third statement is the knowledge of *vyāptijñāna* and fourth statement is the cognition of *parāmarśajñāna*. That is why after the assertion we have the knowledge of *pakṣadharmatā*, then we have the remembrance of *vyāpti* and we have the cognition of application or *parāmarśa*. After the cognition of *parāmarśa* we have the knowledge of inferential cognition (*anumiti*). And the cause (*karana*) of inferential cognition leads to the knowledge of inference (*anumāna*).

CHAPTER FIVE

Conclusion

The forgoing pages seek to provide an analysis of doubt in the process of ascertaining true cognition of a particular object. It might be the case that doubt itself is not the original truth but it is a tool of seeking the true nature of an object. That is why I have taken the concept of doubt as the prime concern of my present research work. As a part of that task I focus upon a few other related aspects as well. For example while examining the utility of the method of doubt for the inferential cognition requires one to have an in-depth examination of the different steps involved in the process of inference. It stands to reason that in order to ascertain the knowledge of inference, one invariably goes through a state of mind where doubt lingers until a final conclusion is arrived at. While discussing the task, it becomes incumbent us to dwell upon some other related issue as well which includes e.g., classification of inference, most importantly the logical forms of inference, the debate regarding the statement of Nyāya syllogism, doubt and its different forms, debate on the forms of doubt and the application of doubt in Nyāya syllogism. As a part of this effort I arrived at some of the following possible conclusion:

- (a) The constitutional structure of Nyāya syllogism bears five parts of statements. But, later commentators suggested that for having an inferential cognition we need to take into account of five additional statements (*jijñāsa-saṃśaya-sakyaprāpti-prayojana-saṃśayavyudasa*¹⁷⁵). That is the reason why I have taken to examine how many statements are required for stating inferential cognition. My research finding in this context is that to state an inferential cognition we don't need to have the cognition of additional steps given by the later commentators. It is sufficient to state an inferential cognition with the statements - *pratijñā* (the statement which is to be proved), *hetu* (the statement which underlies the reason of having the assertion), *udāharana* (example; the statement confirm the universal concomitance relationship between *hetu* and *sādhya*), *upanaya* (the application), *nigamana* (the statement considered the fact that it is drawn by the preceding four statement). This structure is endorsed by Annambhaṭṭa¹⁷⁶.

¹⁷⁵ Mookerjee, *The Buddhist Philosophy of Universal flux, An Exposition of the Philosophy of Critical Realism as Expounded by the School of Dignāga*, p 357.

¹⁷⁶ *Tarkasamagraha-Dīpīka* on *Tarkasamagraha*, translated and edited by Bhattacharya, pp. 217-221.

- (b) As we have seen in our discussion, that Gautama classifies doubt into five forms. But these forms are not accepted by all Naiyāyikas. That is why Uddyotakāra, Kaṇāda, Phaṇibhūṣana rejected Gautama's concept of the five-fold form of doubt. Though a defense of the theory of the five forms of doubt is already given by Gautama, yet there is scope of asking whether the last two forms of doubt given by Gautama are relevant. Because it seems to me that these two forms of doubt are inherently included in the third form of doubt. I have further stated that to have a cognition of doubt we need to have only three forms of doubt.
- (c) The study also seeks to analyze the role played by doubt in the process of inferential cognition. While presenting this discussion we have drawn a conclusion that doubt has its amorphous nature in first three statements [(i), (ii) & (iii)]¹⁷⁷ of Nyāya syllogism.

As the debate and discussion proceed, we have taken different stances to acquire true knowledge of the objects existing in the world. This work also covers an understanding regarding the method of acquiring 'liberation' proposed by Gautama in his *Nyāya-sūtra*. Pursuing true knowledge has its own intrinsic value apart from its soteriological significance. It is important to note that the true knowledge of an object is the only way of acquiring 'liberation'. Liberation can be the fundamental aim of the Nyāya system, but it can only be gained through the knowledge of truth. Therefore, it is necessary to mention how we can have true cognition of an object. It is in this context that I discuss importance of *pramānas* in the Nyāya system.

We already know that Nyāya philosophy accepts four sources of valid knowledge. Among them inference (*anumāna*) is of special interest from the point of view of my present study. In the process of examining inference, first we have dealt with the nature and definition of inference and its different classifications. After that, the study has taken the logical forms of inference for its special examination. This further calls for an in-depth examination of various statements that together create an epistemological ground for a decisive conclusion to be arrived at. Here, I will also try to discuss the later commentators' views regarding the number of statements required for the inferential cognition. While presenting the logical form of inference Annambhaṭṭa stated five statements (*pratijñā, hetū, udāharana, upanaya, nigamana*) which are necessary for having an inferential cognition (*anumiti*). But, later

¹⁷⁷ (i) There is fire on the hill, (ii) Because there is smoke, & (iii) wherever there is smoke, there is fire (as in the kitchen).

commentators suggested that for having an inferential cognition we need to have five more statements (*jijñāsa-saṁśaya-sakyaprāpti-prayojna-saṁśayavyudasa*). That is why I have made an attempt to assess how many statements are necessary for having inferential cognition (*anumiti*).

While examining the statements given by later commentators we have seen that the statements are either repetitious or not contributing significance to the conclusion. To state the reason, I have tried to explore few arguments against later commentators' views. Regarding the statement (*jijñāsa*)¹⁷⁸, the argument I have provided is that after the ascertainment of *vyāpti* one cannot have doubt about the relation between probans and probandum, because they have raised the claim of whether it is possible to have the cognition of all instances of smoke and fire. In response to this question we have to say that in the process of ascertaining *vyāpti*, we have already confirmed that when we speak about *sāmānyalakṣaṇapratyakṣa*, the relation of all the instances of smoke and fire is established. We can have the knowledge of all the instances of smoke and fire relation if we have the knowledge of *sāmānyalakṣaṇapratyakṣa*. Such an argument helps us to reject the first claim raised by later commentators. Again, the claim of *saṁśaya*¹⁷⁹ made by the commentators is not well-ascertained hypothesis. Following their claim, what we have perceived as reason is not reason but something else. Regarding this claim, we have arrived at the argument that we cannot have doubt about the reason after the statement (v)¹⁸⁰ of Nyāya syllogism, because we know that doubt can be there in Nyāya syllogism before the ascertainment of *vyāpti* (in other words, it can be present in the third statement until we haven't the knowledge *sāmānyalakṣaṇapratyakṣa*). After ascertaining the universal concomitance of *hetū* and *sādhyā* we cannot have doubt in the statement of Nyāya syllogism. Therefore, after the statement (v) of Nyāya syllogism the claim of doubt doesn't hold good at all. Similarly, the claim made in the statement (viii)¹⁸¹ is about the distribution of smoke and fire. The same statement is repetition of statement (iii)¹⁸² in the Nyāya syllogism. Because when we talk about the third statement or the *vyāpti* relation, we also talk about the division of *vyāpti* where we have seen *vyāpti* is of two types- *samavyāpti* and *visamavyāpti*. *Samavyāpti* is a relation between the concomitances of two terms of equal extension which enables us to infer either of them from the other, e.g., whatever is nameable is knowable or vice-versa.

¹⁷⁸ Is fire everywhere, or just in a particular part of hill?

¹⁷⁹ 'Which is thought to be smoke may just be dust'.

¹⁸⁰ Therefore, the hill has fire (final conclusion of the Nyāya syllogism).

¹⁸¹ Is there always smoke when there is fire? Because gas fires don't produce smoke.

¹⁸² Wherever there is smoke there is fire, as in the kitchen or bonfire.

Visamavyāpti is a relation of non-equipollent concomitance between two terms; from one we may infer the other, but not *vice-versa* (for example – wherever there is smoke there is fire, but, we cannot say it *vice-versa* because we know that gas fire produces fire but there is the absence of the existence of smoke). Therefore, the claim ‘Is there always smoke when there is fire?’ Because instances of fire propelled by gaseous fire would not result in smoke. Therefore, it would be considered as the example of *visamavyāpti*. Thus, the claim of statement (viii) too is rendered untenable. Likewise, the claim of later commentators raised in (ix)¹⁸³ and (x)¹⁸⁴ regarding the statements of syllogism also do not hold good if the previous statements seem wrong, because the statements are followed by each other. Therefore, the statements given by later commentators are not well-established hypothesis. Finally, it is confirmed that to have an inferential cognition five statements is convincing enough which are endorsed by Annambhaṭṭa.

The study also takes into account the nature of doubt, its different forms given by Gautama in his *Nyāya-sūtra*. The demonstration underlies that doubt is the contradictory cognition about the same objects which is determined by the recognition of distinct characteristics of each of these, i.e. the object having common features, unique characteristics, conflicting judgments about the same object, irregularity of the apprehension, irregularity of the non-apprehension.¹⁸⁵ From this definition of doubt we acquire the five forms of doubt, though there are some *Naiyāyikas* who stated that to have the cognition of doubt we don’t need to have five forms given by Gautama. Among them, Uddyotakāra stated first three forms of doubt to state the nature of doubt. On the other hand, Kaṇāda stated only one form of doubt which is the apprehension of common characteristics and Phaṇibhūṣaṇa supported him. The questions that they raised against the forms of doubt are taken into consideration for its comprehensive answer. Gautama in his *Nyāya-sūtra* (ii.1.1. to ii.1.6.) provided the answers to the objections raised against the forms of doubt made by the aforementioned philosophers.

Though the objection raised against the forms of doubt is answered by Gautama, but there is still a scope to ask a question on how many forms of doubt are required to state the nature of doubt. That is why I have taken another section for re-examining the forms of doubt given by Gautama. While presenting the particular discussion I have supported Uddyotakāra’s view regarding the forms of doubt, because he has accepted first three forms of doubt endorsed by

¹⁸³To ascertain if the object is something to be pursued, avoided, or ignored.

¹⁸⁴To make certain of the fact that the opposite of the proposition is not true.

¹⁸⁵Gautama’s *Nyāya-Sūtra* & *Vātsyāyana Bhāṣya*, trans. by Chattopadhyaya, & Gangopadhyaya, *Nyaya Philosophy*, Part-I, p. 92.

Gautama. According to him, to state the nature of doubt we need to have only the cognition of first three forms of doubt. However, the objections made by Uddyotakāra are already answered by Gautama. But, still one can raise an objection regarding the fourth and fifth forms that these forms are unnecessary. I have already provided the reason of rejecting the fourth and fifth forms of doubt in the re-examination section, that these two forms are inherently present in the third form of doubt (contradictory assertion about the same object) given by Gautama. Therefore, I've arrived at a conclusion that to state the nature of doubt we need to have only the first three forms given by Gautama.

Finally, I examine the application of doubt in inference which is one of the major concerns of this present study. The study highlights the understanding of doubt or the impact of how doubt seeks to arrive at the true cognition of a particular. While demonstrating the nature of doubt in inference we have seen that in the statement of Nyāya syllogism, doubt plays its role in the first three statements. In the very first statement of Nyāya syllogism, doubt is present only because in this statement we take an assertion of something which we intend to establish. It is about the assumption of a particular where we are not sure about the nature of the concerned object. Thus, in this statement doubt is presented to affirm the nature of an object. The second statement is the reason of concerned fact which we have taken as the assumption or assertion of an inference, though it needs a clarification to justify why we consider something for the reason of aforesaid assertion or assumption. That is why the second statement also comes under the consideration of doubt. In other words, every assertion has its basic ground of why we have taken an assertion about an object as such. That is why it is necessary to provide the reason of having an assertion about an object. The reason would be only valid for the assertion if and only if we can produce an instance in support of the particular reason. That is why we take the third statement to produce an example in support of the reason, which according to Naiyāyikas is called *vyāpti*. Now, while presenting the nature of *vyāpti*, it is considered certain steps to ascertain the concomitance relation between *hetū* and *sādhya*. And in the steps of acquiring *vyāpti* relation doubt does not cease to exist, until we acquire the knowledge of *sāmānyalakṣaṇapratyakṣa*. Before the knowledge of *sāmānyalakṣaṇapratyakṣa* one can have doubt in the steps of *anvaya*, *vyatireka*, *vyabhicaragraha*, *upādhaniras* and *tarka* in acquiring the universal concomitance relation, but we cannot have doubt after having the knowledge of *sāmānyalakṣaṇapratyakṣa* in this statement. Therefore, we can assert that doubt can be present in the statement of *Nyāya* syllogism until the third statement. However, it must be accepted that in the third statement

doubt can be present only before the cognition of *sāmānyalakṣaṇapratyakṣa*. In conclusion, we may suggest that doubt has its significant role to play in the process of the knowledge of inference.

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