

THEORY OF ANUMANA IN SAIVA-SIDDHANTHA.

S. Krishnarajah

Introduction.

In the Indian tradition, eristic discussions and disputes play an important role in philosophical pursuits. A system builder or a leader of a movement in Indian philosophy is obliged to argue constructively for a body of doctrines formulated to explain his philosophical position, and at the same time he has to criticize the rival schools of thoughts. In any case, the debates have to be conducted on the basis of certain rules and regulations.

The debaters are the champions of their respective schools of thought, and are always partisan. There are however, observers of the debates who would take interest in philosophical discourses, arrange the debates and watch the debates and disputes between two champions, so that a decision may be arrived at on the significance of a system of thought.

The exposition of the nature of these debates is denoted by the term "Katha". The term katha defines "vakya-prabandha". It is a treatise on a subject in which the entire subject matter is unified organically. It concerns itself with weighing the relative strength and weaknesses of the opposed system of thought, the champions of which enter the philosophical discourses as contestants. The view of the opponent is called purvapaksa and the one's own view is uttarapaksa or siddhanta.

Nyayasutra of Aksapada (about 150 A.D) classifies katha into three kinds, viz. vada, jalpa, and vitanda¹. A debate with a fellow scholar or a student in a congenial mood is vada. It is meant for philosophic discussions whose object is to seek the truth. Jalpa is held between two rival parties for the explicit purpose of dialectical victory. In vitanda, the debater rebuts the opponent's position without giving him a chance to attack the debater's position. It is characterized by the lack of proving the counter thesis. However the theory advocated by Saiva Siddhanin maintains only the first two types of katha, to wit, vada and jalpa. In Periyapuranam there are clues to vada and jalpa type of debates used by Thirujnanasampantha Nayanar against the Buddhist and Jaina scholars.

This paper is an attempt to present a systematic and integrative study of Saiva Siddhanta logical theory, which is an integral part of vada and jalpa. In order to articulate it and present its features, it is essential to take into account a number of well-known Saiva Siddhanta texts like Pauskaragama, Sivajnana Siddhiyar, Sivaneriprakasam and their commentaries, without neglecting the use of other Saiva Siddhanta texts

wherever necessary and desirable. Nonetheless, the commentaries of these works play an important role with regard to the theory of logic as the contours of the theory is explained with sufficient details. Their commentaries are not uniform in their interpretation of the texts and sometimes mislead the reader.

Anumana as a form of Vada.

Anumana means a method for deriving a knowledge from some prior knowledge. It is formulated in conjunction with two elements namely, vada (tarka) and pramana. It is evident from Yuktidipika-the earliest commentary on Samkhyakarika of Iswarakrishna, in which both these elements are referred to².

- a. Paramana component of anumana consists of inquisitiveness, doubt, purpose, conjecturing the (other) possible (alternative) and to throw aside the doubt.
- b. Logical component of anumana consists of pratijna, hetu, drstanta, upamana and nigamana.

Because of these constitutive elements, anumana is considered both an accredited source of knowledge and the method of reasoning. Inquiring into the source of knowledge belongs to the sphere of epistemology, and the discussion about methods of reasoning belongs to the field of logic. However, it should be noted that both these aspects are interconnected.

Anumana as a logical theory systematically formulated in Nyayasutra and subsequently developed and /or modified by later logicians of the various schools. Nyayasutra of Aksapada defines vada and jalpa in terms of their reasoning methods as follows³.

"Discussion (= vada) is the adoption of one of two opposing sides. What is adopted is analysed in the form of five members and defended with the aid of any means of right knowledge while its opposite is assailed by confutation, without deviation from the established tenets. "Wrangling (=jalpa), which aims at gaining victory, in the defence or attack on a proposition in the manner aforesaid (ie., anumana) by quibbles, futilities, and other processes which deserve rebuke".

It is clearly indicated in the above aphorisms that both vada and jalpa are similar types argumentations, discovering the truth is the prime motive in vada, whereas defeating the opponent is the sole aim in jalpa.

The model of reasoning in anumana is not purely deductive, but only a kind of deduction, where the conclusion is not entailed in the same sense of the Aristotelian model. In anumana, premises justify or support the conclusion whereas it is not so in the case of Aristotelian syllogism. The fundamental difference between the Aristotelian

sylogism and the Indian one is that the former is concerned with structural relations between the terms, while the latter concerns itself with the existential relation between the entities denoted by the terms employed. In addition to that, Indian logic, insists on an example for the purpose of keeping the logical relation consistent with reality. The only inference that leads to (true) knowledge of reality is called anumana. But the Aristotelian model does not bother about the truthfulness of a deductive conclusion and in accordance with this, a perfect structural relation between the terms yields a valid conclusion, in which the premises and the conclusion, may be false.

According to Naiyayikas, anumana consists of "five limbs" known as pratijna, hetu, drstanta, upanaya and nigamana. This five limbs anumana theory of Nyaya logic was criticized by the Buddhist logicians like Dinnaga and Dharmakirti. Dinnaga reduced the five member argument into three, and argued either the first two or the last two parts were redundant. Both the Naiyayikas and Buddhist counts of the limbs of anumana are represented in the different texts of Saiva-Siddhantha. Pauskaragama explains anumana with five limbs⁴. Whereas in Sivajnana Siddhiyar, it was reduced to three⁵.

Classification of Anumana.

In the history of Indian logic, several attempts have been made to classify anumana. For instance, Vaishesika sutra, Nyayasutra, Matanga Paramesvaragama and Sivajnana Siddhiyar speaks of classifications. Vaishesikasutra of Kanada seems to uphold two-fold division of anumana, but this division is not clearly stated in the sutra. Probably it means directly perceived anumana and indirectly perceived anumana. Nyayasutra gives a threefold classification as purvavat, sesavat and samanyato drsta. No explanations are given for these classifications. Matanga Paramesvaragama divided anumana into four kinds; dharma - dharmi anumana, karana anumana, kariya anumana and agama anumana. Among these, the first three are similar to those in Nyayasutra. Here too as in Nyayasutra no explanations are given for the classifications. Only names are given without examples.

However, Vatsayana - a commentator of Nyayasutra, offers two sets of interpretations in his commentary for the three fold division of Nyayasutra, where the commentator of Matanga Paramesvaragama, who remained anonymous only illustrates the four-fold division with examples.

The interpretation of anumana according to Vatsayana as follows⁶.

- | | |
|-------------------|--|
| Interpretation I | (a) Purvavat: Inference from cause to effect. |
| | (b) Sesavat: Inference from effect to cause. |
| | (c) Samanyato drsta: Inference based on general observation. |
| Interpretation II | (a) Purvavat: Inferring the the present from previous knowledge. |

- (b) Sesavat: Inferring by elimination of alternatives.
- (c) Samanyato drsta: Inferring a property possessor from its property.

Since the terms purvavat, sesavat and samanyato drsta are themselves ambiguous, the above interpretations of Vatsayana is not satisfactory.

The fourfold classification of Matanga Parmesvaragama as follows⁷.

"Dharmena sadhyate dharmi kvacit karyena karanam
karanena kvacit karyam kvacit anayadara s anat"

- Dharma - dharmi Anumana: Inferring the earth from the existence of odour. (same as samayato drsta in the Vatsayana's second interpretation.)
- Karana Anumana: Inferring the rutting elephant from the apprehension of the fragrance of ichor. (same as sesavat in the first interpretation of Vatsayana)
- Kariya Anumana: Inferring rain from the appearance of dense clouds and occurrence of thunder. (same as purvavat in the first interpretation of Vatsayana).
- Agama Anumana: Inference based on scriptures.

The examples given by the commentator for the above first three types of anumana are confusing and do not lead to any substantial divisions. They simply show how one can proceed in cognitive process. One can either infer a property possessor from its property (dharma-dharmi or samanyato drsta), or an effect from its cause (karana anumana or purvavat) or a cause from its effect (kariya anumana or sesavat). One can hardly see any rationale behind this classification.

In Sivajnana Siddhiyar, Arulnandi Sivacaryar classifies anumana in a different manner, and his division seems to be more appropriate than the above mentioned classifications⁸. He refers to a threefold division of anumana as purva-k-katci anumana, karuthal anumana, and uraiyil anumana. The commentators of Sivajnana Siddhiyar interpreted this threefold division as prakhyasanumana, anumananumana and agamanumana corresponding with three pramanas i.e., prakhyaksa, anumana and agama pramanas. According to the commentators, an inference based on perception is called prakhyakshanumana. Anumananumana is an inference which proceeds from another inference, and agamanumana is based on agama vakya. These interpretations, however, seems to be not satisfactory in explaining the Siddhiyar prose.

"Inferring certain smell of a flower by the cognition on the basis of previous occasion" is the example given by Arulnandi for purva-k-katci anumana. Here the inference is directly perceived by the person concerned from the application of his previous knowledge. Previous knowledge is the necessary condition for purva-k-katci anumana. Karuthal anumana is explained with the example of "inferring the intelligence of a person from his speech. Here the inference, i.e., the intelligence of a person, is derived from one's own speech. It is an implicative mode of inference. Without going into needless details, we can argue both purva-k-katci anumana and karuthal anumana as applicative and implicative types of anumana respectively.

The third kind of anumana i.e., uraiyil anumana which is referred to in Matanga Paramesvaragama as agama anumana, is explained in Siddhiyar with the following examples. "On the basis of scripture, one can infer the reasons behind the pleasure and pain we experience in the present life are the result of our good and evil action of our previous life." Saiva Siddhantin accepts agama vakya as one among the three pramanas and its authorship is divine and hence there is no possibility of agama vakya being invalidated. And therefore the inference based on agama vakya is considered under a separate category by Arulnandi Sivacaryar.

There is yet another type of classification of anumana in Pauskaragama; the division is into drsta and adrsta. This division is based on the object of inference. In certain cases, the object of inference is perceptible (drsta) and in certain other cases it is not-perceptible (adrsta).

At this juncture, it may be interesting to note Umapathi Sivacaryar's treatment of the concepts of drsta and adrsta⁹. In his commentary on Pauskaragama, Umapathi Sivacaryar treats drsta as specifically seen (= visesato drsta) and adrsta as generally seen (= samanyato drsta). According to him, an inference based on directly seen relation, i.e., the cognition of smoke is visesato drsta. Samanyato drsta is based on generalized relation. The following example is given by Umapathi Sivacaryar for samanyato drsta. "Displacement of ordinary bodies is seen to be due to their movements therefore the celestial bodies such as the planets and the moon move because they are also seen to be displaced." It seems to be that the generic unity of perceived character and inferred character is the basis for samanyato drsta.

Epistemological Aspects of Anumana.

As said earlier, the twofold nature of anumana is based on its epistemological and logical aspects. As an epistemological category, anumana means an instrument (karana) for valid knowledge. The discussion of the means of cognition and its process is known as pramana vicara. As a logical category, anumana meant a mode of reasoning and it is known as Tarka Sastra. The distinction between epistemological and logical aspects of anumana or in other words between the pramana vicara and tarka sastra, has not been

always felt in the Indian philosophical tradition. In the history of Indian logic, Dinnaga was the first logician who observed this distinction between epistemological and logical aspects of anumana and named them svarthanumana and parathanumana respectively.

Dinnaga defines svarthanumana as the knowledge of a thing derived from the knowledge of the mark having three characteristics and parathanumana is defined by him as the statement in words which communicates to others what has been known through svarthanumana¹⁰. Following Dinnaga, Dharmakirti further developed this distinction. In Nyayabindu he defines svarthanumana as the cognition of the object to be inferred by reason with the mark possessing three characteristics, and parathanumana as the communication of this mark possessing three characteristics¹¹. Dharmakirti explains svarthaparartha anumana in another work of his namely Pramanaviniscaya in terms of its function. Svarthanumana makes known the object to be proved and the parathanumana makes known the correctness of the mark itself for the object to be proved. Svarthaparartha distinction is not found in Nyayasutra.

In the orthodox tradition, Prasastapada was the first to observe this distinction. However, he twisted Dinnaga's interpretation and defined svarthanumana as the inference for one's conviction and parathanumana as the demonstration by one with the help of five limbs syllogism of a thing that one is convinced others who are ignorant or have a doubtful or wrong knowledge of it¹². Following Prasastapada, Bhasarvajna (about 10th century A.D) explains svarthanumana as independent of an instruction by another person, and parathanumana as dependent on the instruction of another person with the five limbs syllogism¹³. Prasastapada was a Vaisheshika philosopher and Bhasarvajna belonged to the schools of Nyaya - Vaisheshika philosophy. Among the Saiva Siddhanta texts, Pauskaragama does not mention the distinction between svarthanumana and parathanumana. In Sivajnana Siddhiyar, it was referred to as tanpourt -t-anumana (=svarthanumana) and pirarporut-t-anumana (-parathanumana)¹⁴. Arulnandi Sivacaryar's definitions of svartha and parartha anumana are exactly the same as the definition given by Dinnaga and Dharmakirti. But, the commentators of Sivajnana Siddhiyar do not follow Arulnandi Sivacaryar's definitions. Their account seems to be based on the interpretations of Prasastapada and Bhasarvajna distinction of svarthanumana and parathanumana.

The reason for the deviations of the commentaries from the original text could be attributed to the lapse of time. Sivajnana Siddhiyar was written in the 13th century whereas its commentaries were written after the 16th century. By the time the commentaries were written, the logical ideas of Nyaya-Vaisheshika had already been incorporated into the system of Saiva Siddhanta. This is evident from a statement of Sivajnana Munivar (18th century) who was one among the six commentators of Sivajnana Siddhiyar. He

says in his commentary in Sivajñana Botham that the logical ideas of Nyaya-Vaisesika is acceptable to Saiva-Siddhanta¹⁵.

As said earlier, within the domain of anumana, cognition is possible only through svarthanumana whereas parathanumana communicates to others what has been cognized through svarthanumana. Communication without cognition is meaningless and therefore, Indian logicians acknowledge the priority of svarthanumana over paraththnumana. Due to this primordial nature, svarthanumana becomes epistemic in its nature.

Cognition through anumana is based on the relation between the intended inferential object and the reason that supports the inference. Intended inferential object is known as sadhya and the reason that supports the inference is sadhana. The relation between sadhya and sadhana is called vyapti. The locus of the intended inferential object is paksa. So svarthanumana means nothing other then cognition of sadhya located in paksa with the help of sadhana through vyapti relation. It leads not only to the cognition of sadhya through sadhana but also it certifies and confirms a cognitive knowledge by means of citing positive and negative exmples. Citation of the positive example is known as sapaksa and the negative example is known as vepaksa.

Svarthanumana, says Arulnandi Sivacaryar, is the cognition of a thing derived from the knowledge of the mark (=sadhana) having three characteristics that occur in three places viz pakkam (=paksa) nikar pakkam (=sapaksa) and nikar - il -pakkam (=vipaksa)¹⁶. The locus of the sadhya indicated by the sadhana is pakkam. Nikar-pakkam certifies the relation (=vyapti) between the sadhya and sadhana by showing an instance in which the sadhya is found in concomitance with the sadhana and nikar-il-pakkam confirms this relation by showing a counter instance.

Logical aspects of Anumana.

Anumana was analysed in the last section from the epistemological point of view and it was said that the cognitive requirement of anumana is fulfilled by svarthanumana. When svarthanumana is verbalised it becomes parathanumana. Anumana in the strict sense of the term "Logic" means only the verbalised form of anumana. Hence this section is devoted to the analysis of the logical structure of anumana.

Two different sets of explanations are given for the logical structure of anumana in Saiva Siddhantha texts. According to Arulnandi Sivacaryar the logical structure of anumana consists of three steps, namely paksa, hetu and drstanta. On the other hand, Pauskaragama and the commentaries of Sivajñana Siddhiyar explain the logical structure of anumana through five steps, adding two steps namely upanayana and nigamana to the three steps formulated by Arulnandi Sivacaryar. The three step theory of anumana is being advocated by the Buddhist logicians whereas the five step theory is defended by the Naiyayikas.

Before proceeding further details about the structure of anumana, it may be pertinent to answer a question why Pauskaragama and the commentators of Sivajnana Siddhiyar accepts the five step theory of anumana and not three, while Arulnandi Sivacaryar says it is three. The possible answer to this question is that Arulnandi Sivacaryar understood anumana primarily as a method of cognition whereas the commentators characterize it mainly as a form of vada.

For Arulnandi Sivacaryar, the purpose of anumana is to cognize an object located in the paksa with the helps of a hetu. Here, paksa and hetu are the first two steps of anumana. Drstana, being the third step certifies and confirms the cognition identified in paksa as true knowledge. Since the commentators of Sivajnana Siddhiyar and Pauskaragama understood anumana from the viewpoint of vada, they considered it as a method to establish a thesis in a debating situation. The debater proposes his conviction in the form of a thesis called pratijna - the first step of anumana. The reason that supports the thesis is hetu-the second step. Drstanta, the third step justifies the thesis as trus knowledge. The fourth step upanaya correlates the reason to the situation in question. And nigamana being fifth step restates the thesis as a proved statement.

However, it should be noted here, that the above two views on anumana are not contradictory to each other. The difference is due to the emphasis on different aspects of anumana. Since Arulnandi Sivacaryar's stress is on the cognitive aspects, he defines it on the basis of its cognitive part. The commentators of Sivajnana Siddhiyar and Pauskaragama do accept this cognitive aspects of anumana but they stress the logical aspects of it. Hence upanaya and nigamana becomes the necessary steps in their interpretation of anumana.

Now let us turn to consider the structure of anumana. Pauskaragama illustrates the anumana with traditionally given stock example as follows¹⁷.

- | | |
|------------------|--|
| Pratijna/Paksa : | This hill is fiery |
| (step I) : | (Statement of the thesis/what is to be proved) |
| Hetu : | because it is smoky |
| (step II) : | (Statement of the reason) |
| Drstanta : | Whatever is smoky is fiery as in a kitchen Wherever there is no fire, there is also no smoke as in a lake. |
| (step III) : | (Exemplification/Citation of an example to illustrate the logical relation between paksa and hetu.) |
| Upanaya : | This hill is smoky |
| (step IV) : | (Application of the rule to the present case) |
| Nigamana : | Therefore this hill is fiery |
| (step V) : | (Conclusion) |

The nucleus of anumana is formed by the terms paksa, sadhya and hetu on which an inferential cognition is made possible through their interconnections. The interconnection between these terms is known as vyapti. In view of making an inquiry on the structure of anumana, let us first consider the nature of each steps one by one.

Pratijna and paksa are the two terms used by the Indian logicians to refer the first step of anumana. In his commentary on Sivajnana Siddhiyar, Sivagrayogin says that the terms pratijna and paksa denote one and the same¹⁸. However, the meanings of these two terms differ from one other. If anyone who refers to the first step of anumana by the term pratijna, he means a thesis in the context vada, in which pratijna informs the other party, what is ought to be established. Instead of pratijna, if the term paksa is used, then we must understand that he is referring not to the thesis, but to the locus of inference. According to Arulnandi Sivacaryar, the first step of anumana is paksa whereas Pauskaragama refers to this as pratijna.

Pratijna, being the first step of anumana, consists of paksa and sadhya. Paksa is the possessor of the inferable property (=dharmin), and sadhya is the inferable property (=dharma). Pratijna relates paksa and sadhya in the first step of anumana. The relationship between paksa and sadhya is known as dharma dharmi relation. Since paksa is the locus of inference in which sadhya is supposed to reside and sadhya is the inferable property which is intended to be established as occurring in the paksa. Then relationship between sadhya and paksa becomes dharma-dharmi relation, i.e., the relationship between the property possessor and its property.

Hetu, the second limb of anumana, has a dual role to play in the system of anumana. On the one hand, it being the perceived character, helps to formulate the anumana. Perceived character of the hetu in the paksa is known as paksadharmatva. On the other hand, hetu proves the existence of sadhya by having an invariable relationship with sadhya. This invariable concomitance is called vyapti principle. The hill is perceived to have smoke (paksadharmatva) which makes it possible for us to predict the existence of another character (through vyapti principle), that is the existence of fire on the hill. Here both paksadharmatva and vyapti function as the operative conditions of anumana. Paksadharmatva governs hetu's relationship with the paksa whereas vyapti regulates its relationship with sadhya.

Drstanta, being the third a step of anumana consists of two universal statements in the form of affirmative and negative types together with the citation of supportive examples. The affirmative statement certifies the vyapti relation between the hetu and the sadhya, whereas the negative statement confirms this vyapti relationship between them. Co-presence of hetu and sadhya is the characteristic feature of the affirmative statement, and co-absence of both hetu and sadhya is the characteristic feature of the nega-

tive statement. Since these universal statements do not have any existential import. Indian logicians cited the instances such as kitchen, lake etc, together with those universal statements in order to keep the inferable consistent with reality. The locus of the affirmative example is called sapaksa and the negative example is named vipaksa. In the system of anumana drstanta plays an implicative role without which no conclusion can be drawn.

Upanaya and nigamana are the last two limbs of anumana seem to be counted as the essential components in anumana only in a situation where it is used as a debating technique. Even though the Saiva Siddhantin excluding Arulnandi Sivacaryar, consider anumana as a pramana, they stress on the communicative aspects of anumana in the context of vada (tarka). To them therefore, upanaya and nigamana become essential for an anumana theory.

The use of the fourth, i.e., upanaya is to subsume the evidence (hetu) under the intended inferable on the basis of established drstanta. In other words, hetu is asserted in the upanaya. It is not merely a repetition of the second limb, rather a re-affirmation of the subject to be proved in a debating situation. The purpose of this limb is to establish the identity of the hetu mentioned in the second step in which the relationship between the indicator and the inferable is certified and confirmed universally. Thus the upanaya is considered as a synthesis of the hetu and drstanta in anumana by means of subsumption.

Nigamana is the last step of anumana on which the proposed thesis in the first limb, i.e., pratijna is restated as a proved statement. In the first step the thesis is proposed by the debater as a hypothesis whereas in nigamana, it is stated as an established truth beyond doubt through the inferential processes.

Hetu-centricity of Anumana.

The kind of knowledge we have with the help of anumana is basically hetu-centric and becomes available to us only through its relations with paksa and sadhya. The relation of hetu with paksa is regulated by the characteristic feature of paksadharmatva and the relation of hetu with sadhya is regulated by vyapti principle. Since paksadharmatva and vyapti are the regulative conditions of anumana, we will start our discussion by elucidating these two concepts.

The strength of anumana is dependent on the hetu's relation with paksa and sadhya. In anumana, hetu which is connected with paksa through paksadharmatva is required to be shown related through vyapti. To connect hetu with paksa we have to accept paksadharmatva and to connect hetu with sadhya the rule of vyapti has to be followed. Hence paksadharmatva and vyapti go together as the regulative conditions of anumana. While discussing the nature of the first step of anumana, it was pointed out that the

paksa is called dharmin and sadhya is the dharma of it. Hetu is the other dharma of the paksa. Dharma-dharmin relationship between hetu and paksa is monodirectional, in the direction from hetu to paksa and not vice-versa. In the process of anumana, we infer sadhya dharma on the basis of given hetu dharma. Hetu dharma by being a characteristic feature of paksa leads to this inference. It marks off hetu's monodirectional relationship with paksa from its relationship with sadhya. Paksadharmatva refers thus to monodirectional relationship of hetu with paksas.

Buddhist logicians are the first, who realised the role and function of the paksadharmatva. Naiyayikas, seems to be inclined to accept paksadharmatva only posterior to Dinnaga and Dharmakirti. Among the Saiva Siddhantha texts, only Pauskaragama refers to this concept and defines it as the characteristic feature of the paksa¹⁹.

Now let us turn to explain the nature and functions of vyapti. Vyapti means the denotation of a term. In Indian logic it is used to refer to a denotative relation between hetu and sadhya. For example, in the case of smoke and fire, it means the denotation of fire (sadhya) is greater than the denotation of smoke (hetu). The lesser denotation is called vyapya and the greater denotation is called vyapaka. Inferring fire from smoke means inferring vyapaka from vyapya. Vyapaka is the inferential knowledge and hence it is called sadhya. Vyapya is the cause for that inferential knowledge and hence it is called hetu. Vyapya-vyapaka relation is regulated by the principle of vyapti and in anumana it aims at establishing a concomitant relationship between hetu and sadhya. Vyapti corresponding to the epistemological and logical aspects of anumana regulates the inference in a twofold way, viz., cognitively and methodologically. Cognitively it ensures the cognition and methodologically it ensures a knowledge claim becomes available to us through argumentation. Vyapti, says Mangala Chinchore, "On the one hand regulates certain aspect of our cognition viz indirect cognition and on the other hand, it also regulates the structural format of anumana within the framework of which indirect knowledge claims could be formulated or advanced"²⁰.

Almost all the schools of Indian logic accept vyapti as a regulative condition of anumana without which hetu and sadhya cannot be related. However there are differences of opinion regarding the nature of vyapti. Nyaya logicians interpreted vyapti in terms of invariable relation (niyata sambandha) whereas the Buddhist logicians considered it as an inseparable relation (avinabhava niyama). In contrast to Nyaya and Buddhist interpretation of vyapti, Saiva Siddhantin understood it as a rule of concomitance (sahacarya niyama) between the hetu and sadhya.

The interpretation of vyapti as invariable relation by Naiyayikas is derived from sense experience in which they argue that, if the observation of co-presence and co-absence between two things together with the non-observation of any contradictory instance is perceived, then we must accept that there must be an invariable relation be-

tween those two objects. For example we always observe that whenever there is smoke, fire is also present and also that whenever fire is absent smoke also is absent. We never observe a case in which there may be smoke without fire. Buddhist logicians reject this Nyaya view of vyapti and argue for an interpretation of vyapti in terms of logical necessity. In their opinion vyapti cannot be established either by observation or by non-observation.

The mere observation of some positive instance of a relation e.g., between smoke and fire, is not enough to prove that smoke and fire are invariably connected because what is observed, proves only that they have been connected together in the past, but this does not guarantee universal and necessary connection between these two. Similarly the mere non-observation of fire and smoke together with the limited number of negative instance too cannot ensure logically that there will be no instance of the presence of smoke in the absence of fire in future. Therefore, vyapti cannot be proved either by perception or by non-perception but only by the logical inclusion of hetu by sadhya, i.e., avinabhava niyama.

The logical necessity involved in vyapti is well accounted by the Buddhist logicians, who argue that the vyapti is based on a theory of inclusion. If two things are known to be related by way of one includes the other or if one of them is an essential nature of the other, the relation between them cannot be invariable connection but a logical necessity.

However the Nyaya and Buddhist interpretations do not reveal the characteristic feature of vyapti. Naiyayikas interpreted vyapti on the basis of empirical observation whereas the Buddhist interpreted it in its logical basis. When comparing these two views with that of Saiva Siddhantha interpretation, the latter seem to be in a better position in which the interpretation of vyapti is viewed from the logical and the empirical sides. As said earlier, anumana is not merely a logical method of inference, but also a pramana for true knowledge. Hence the interpretation of vyapti needs to be viewed in both empirical and logical sides. Sahacarya means occurring of two things (hetu and sadhya) simultaneous or in succession. The knowledge of these two things arise from the repeated observation. Niyama means rule. When the observed relation between two things is abstracted and elevated into a higher status, it becomes a rule. So vyapti according to Saiva Siddhantin means an abstracted and elevated rule of concomitant relation between two things. Sahacarya niyama is empirical because it is derived from experience. It is logical in the sense that it guarantees the concomitant relation between hetu and sadhya context freely and invariably.

The interpretation, vyapti as saha-carya niyama is given in Pauskaragama²¹. However it should be noted here, that there are other interpretations also found in the later

development of Saiva Siddhantha though. Sivajna Yogin in his commetary on Sivajnana Siddhiyar interpreted vyapti as avinabhava relation between hetu and sadhya similar to the Buddhist understanding of vyapti²². In this opinion if hetu is given, sadhya cannot fail to be given and if sadhya is absent hetu too must be absent. Thus the relationship between hetu and sadhya becomes reciprocal. Sankara Pandithar gives another interpretation of vyapti. He says that, the natural relation between the vyapya-vyapaka is vyapti²³. The saying of Sankara Pandithar, however, does not mean that vyapti is the generative of vyapya-vyapaka relation. This amount to say only that it regulates the vyapya- vyapaka kind of relation.

As said before paksa, hetu and sadhya are the basic units of anumana in which hetu plays a central role and accordingly it is related to paksa through paksadharmatva and sadhya through vyapti. This mode of relating hetu with paksa and sadhya exhibit the hetu-centricity nature of anumana. Hetu-centricity is further evident from the processes of both the formulation and the proof of anumana. On the one hand, hetu by indicating the existence of sadhya, leads to the formulation of an anumana. In this what matters is that hetu is epistemologically and logically prior to sadhya. On ther hand, hetu by having the vyapya-vyapaka relation with sadhya prove its existence.

Validity of Anumana.

Validity is a crucial point in anumana, determined by the position of hetu and sadhya in paksa, sapaksa and vipaksa. Paksa is the locus of the inferable in which hetu must be obtainable, i.e., paksa-sattva. Sapaksa is the locus of the affirmative example and the obtainability of hetu and sadhya in sapaksa is called sapaksa-sattva. Vipaksa is the locus of the negative example in which both hetu and sadhya should not be obtainable, i.e., vipaksa-vyavrtti. Paksa-sattva, sapaksa-sattva and vipaksa-vyavrtti are the three conditions for any valid argument²⁴.

In the history of Indian logic, Dinnaga is the first logician who mentions these triple conditions for the validity of an argument in relation to hetu. Following Dinnaga, Nyaya logicians developed this idea and added two more conditions along with that of Dinnaga.

According to Dinnaga a valid argument must have the hetu in the following manner.

- a. Hetu must occur in paksa.
 - b. Hetu must occur in sapaksa.
 - c. Hetu must be excluded from vipaksa.
- Nyaya logicians while accepting the above three, include two more conditions and counted altogether five conditions for the validity of anumana.
- d. The occurrence of hetu in paksa must not be sublated.
 - e. There must not be a counter hetu that proves contradictory to the given sadhya.

Among these conditions for the validity of anumana, the first condition denotes the obtainability of hetu in paksa. It assures the existence of sadhya in the given paksa i.e., paksa-sattva, which is different from paksadharmatva. Violation of this condition leads to an argument defective. Paksa-sattva should not be confused with paksadharmatva. They are often confused with each other. Paksadharmatva, being a regulative condition opens out the possibility of hetu being related to paksa. Anumana cannot be formulated without the fulfilment of this condition. Paksa-sattva on the other hand, determines the validity of anumana. Non fulfilment of this validity condition makes an argument unsound.

The second and third conditions ensure the validity of anumana through direct and indirect ways, The occurrence of hetu in sapaksa, i.e., sapaksa sattva certifies the inferable as a valid conclusion. Sapaksa means a side similar to the paksa. The obtainability of hetu in the similar side certifies the validity of anumana. Vipaksa-vyavrtti is the third condition which means impossibility of the obtainability of hetu dissimilar to the given paksa. It ensure elimination of all possible doubts in the given hetu and thereby confirms the validity of the conclusion.

The fourth condition stresses that the conclusion of an inference should not be falsified by another stronger proof. The last condition refers to the absence of any counterbalancing reason that opposes the given hetu. Both these last two conditions are, however, not directly concerned with the validity of an argument itself. It seems to be, that they are more relevant in the context of vada, in which they guide the debaters in proposing a valid argument. Since Saiva-Siddhantin consider anumana as pramana and as a method for debate, they too accept all these five conditions for the validity of anumana which are basically hetu centric. Violation of these hetu-centric condition leads to an argument unsound.

Concluding Remarks.

In the preceding paragraphs different aspects of anumana is analysed from the point of view of Saiva Siddhantha. During the course of this analysis, it was brought out that Saiva-Siddhantin understood anumana as a pramana and as a form of vada corresponding to its epistemological and logical aspects. Both these views are well accounted in Saivajna Siddhiyar and Pauskaragama respectively. While explaining both cognitive and logical aspects, it was also shown how hetu-centricity of anumana is at stake.

In this paper, however I have not looked into the problem of unsound or defective argument which I hope to treat elsewhere, for the reason that it strictly should not form part of an anumana theory.

References

1. Nyaya sutra (ed.Gangnatha Jha,1939), Oriental Book Agency, Poona, p 79.
2. Yuktidipika, vol I (ed.Shivakumar and Bhargava, 1990), Eastern Book Linkers, Delhi, p.181-182.
3. Nyaya sutra (ed.Vidyabbusana S.C,1930), Sacred Books of the Hindus,Vol.III, p19-20.
4. Pauskaragama, Jnanaprakasar commentary (ed.Shanmugasundra Mudaliar, 1890), Madras, p.698.
5. Meykanda Sastra, (ed. Ratnasapathy,1988) University of Madras, p.106.
6. Nyayaasutra (ed. Gangnatha Jha), op.cit, p.25-27.
7. Sataratnasangraha of Umapati Sivacaryar (ed.Thirugnanasambandan,1973), University of Madras, p.8-9.
8. Meykanda sastra,op.cit., p.107.
9. Pauskara Samkita-Jnanapada, Umapati Sivacaryar commentary (ed.Ampalava Navalar, 1912), p.542.
10. Vidyabbusana S.C (1920) History of India Logic, reprinted by Motial Banarsidas, Delhi.p.280-282.
11. Dharmakirti, Nyaya Bindu (ed.Shastris C.S.,1927), Kasi Sanakrit series, p 29&61.
12. Prasastapada, Padartha - Dharma-Sangraha (ed.Dviuedin V.P.,1971), p.231.
13. Narayanan T.K (1992) Nyaya sutra of Bhasarvajan, Mittal Publications, Delhi, p.36.
14. Meykanda Sastra, op.cit., p. 106.
15. Sivajnana Munivar, Sivajnana Padiyam, South India Saiva Siddhanta works publishing society, 1952, p.57
16. Meykanda Sastra, op.cit.p.106.
17. Pauskaragama, Jannaprakasar commentary, p.699-700.
18. Sivajnana Siddhiyar, Sivagra Yogin commentary, Aruvururai, Vol. I, p.193.
19. Pauskaragama, Jannaprakasar commentary, p.704.
20. Mangala R Chinchere (1989), Dharmakirti's Theory of Hetu-centricity of Anumana, Motilal Banarsidas, Delhi, p.99.
21. Pauskaragama, Jnanaprakasar commentary, p.698.
22. Sivajnana Siddhiyar, Sivajnana Yogin commentary, Aruvururai, Vol.I, p.179.
23. Sankara Pandithar, Saiva Prakasanam, South Indian Saiva Siddhanta works publishing society (1952),Madras, p.20.
24. Ibid.,p.20.