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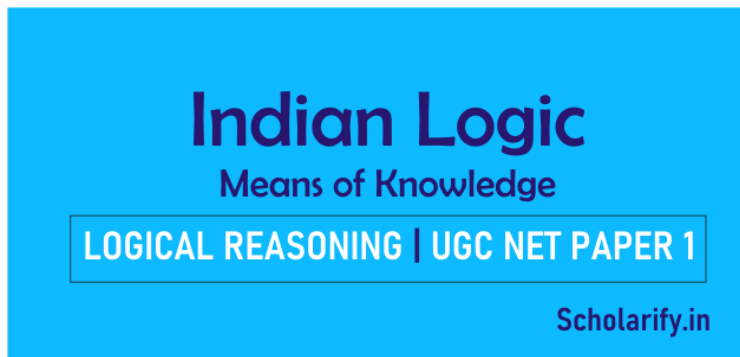
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Indian Logic: Means of Knowledge

Indian Logic

Indian Logic: Logic is the study of inference and argument. Logic has always fascinated humankind for its sheer scope of immense arguments and discussions. It is the scientific study of 'reasoning. Using the term "Scientific" does not mean anything related to the basic sciences. The usage of the term is primarily more as an adjective meant to qualify how the study is undertaken. Indian logic has been differently viewed in the different ages. Many academicians have discussed Indian logic as a system by dissociating 'Buddhist logic' from it. Indian logic must be studied as the form of correct arguments and inference patterns, which was developed in India from the methodology of philosophical debate.

Schools of Indian Logic

The development of Indian logic over the ages can be classified into the following categories:

- Ancient
- Medieval
- Modern

UNIT VI – Logical Reasoning *(Click below on the topic to read the study notes)*

- Understanding the structure of arguments: argument forms, the structure of categorical propositions, Mood and Figure, Formal and Informal fallacies, Uses of language, Connotations and denotations of terms, Classical square of opposition
- Evaluating and distinguishing deductive and inductive reasoning
- Analogies
- Venn diagram: Simple and multiple uses for establishing the validity of arguments.
- *Indian Logic: Means of knowledge (New Topic) (You are Reading This)*
- *Pramanas: Pratyaksha (Perception), Anumana (Inference), Upamana (Comparison), Shabda (Verbal testimony), Arthapatti (Implication) and Anupalabddhi (Non-apprehension) (New Topic)*
- *Structure and kinds of Anumana (inference), Vyapti (invariable relation), Hetvabhasas (fallacies of inference) (New Topic)*

Ancient Indian School (650 B.C. to 100 A.D)

Indian ancient school had a great impact on the development of Indian logic. Ancient school offers a fine treatment of soul distinguishing carefully between knowledge and work. The Upanishads are dealt with the soul and its destiny constituted a very important branch of study called *Aatmaa-vidyaa (*the science of soul), and *Adhyatma-vidyaa (the Divine Science).*

Aatmaa Vidya was at a later stage called **Ānvīkṣikī (**the science of inquiry). About 650 B.C. Ānvīkṣikī bifurcates into philosophy and Logic, named as *Darsana* and *Hetu-Vidya* or *Tark-Vidyaa,* respectively.

However, *tark-vidya* was not received with favor by the particular section of the *Brahmanas.* In *the Ramayana, Valmiki* discredits those who are indulged in the seriousness of the science of Logic. *Vyasa* in *Mahabharata,* says that who has the addiction to logic, will be turned into a jackal in his next birth. Several stories of inflicting of penalties on those given to the study of *Tark- Vidyā* are found in plenty in the *Skandapurāna* and other works.

Despite of it, *Ānvīsikī* was held in very high esteem due to the authority that it attaches to the *vedas*. Kings were trained in logic, and the entity of reasoning was acknowledged in the administration of justice.

Kautilya, in his *arthaśāstra* characterises *Ānvīshikī* (logic) as the lamp of all sciences. It seems that the unfavorable criticism to which *Ānvīsikī* had long been exposed, terminated practically in the first century A.D. under the name of *Nyāya- Sāstra*.

Between 1 A.D. and 100 A.D., there was the growth of the name *Nyāya* ('right' or 'justice'). *Nyaya-Sastra* is, therefore, the science of right judgment or valid reasoning. It is the science of inference for the sake of others. It is also the science of demonstration.

The first regular work on the *Nyāya Sāstra* is the *Nyāya Sūtra* or "aphorism on true reasoning." The book is divided into five other books, each book containing two chapters called *āhnikas* (diurnal portion). It contains the references to the *Sānkhya, Vaiśesika, Yoga, Mimāṃsā, Vedānta* and Buddhist System of philosophy. The *Nyāya sūtra* consists of **sixteen categories**, which comprise all the topics of the course debate.

The categories are:

1. The right means of knowledge (*pramāna*)
2. The object of right knowledge (*prameya*)
3. Doubt (*samśya*)
4. Purpose (*prayojana*)
5. Example (*drastānta*)
6. Tenet (*sidhānta*)
7. Members (*avayava*)
8. Confutation (*tarka*)
9. Ascertainment (*nirnaya*)
10. Discussion (*vāda*)
11. Wrangling (*jalpa*)
12. Cavil (*vitaṇḍā*)
13. Fallacy(*hetrābhāsa*)
14. Quibble (*chhala*)
15. Analogue (*jāti*)
16. The point of defeat (*nigrahasthāna*)

Perception, inference, comparison, and a word or verbal testimony are the means of right knowledge. Soul, body, senses, intellect, mind, activity, fault, transmigration, fruit, pain, and emancipation are the objects of the right knowledge.

Medieval School of Indian Logic (100 A.D. to 1200 A.D.)

The unique features of medieval logic are the termination of the ancient school, the formation of school under the influence of Jain and Buddhist ideas of logic. The ancient logic dealt with sixteen categories comprising heterogeneous elements as a doctrine of salvation and the nature of soul etc. Inference, a kind of *pramāna*, which was briefly noticed in the ancient logic, receives full treatment in the medieval school. The number of technical terms were coined, and great subtleties were introduced in the definitions. The medieval logic thus formed, is called ***pramāna sāstra*** in Sanskrit, which means the science of the right knowledge.

According to the **Jains,** logic was called '*hetu*'. *Hetu* as similar with valid knowledge is stated to be of four kinds:

1. Knowledge derived from perception (*pratyaksa)*
2. Knowledge derived from inference (*anumana)*
3. Knowledge derived from comparison (*upamana)*
4. Knowledge derived from verbal testimony (*sabda)*

The main categories, in the course of study of logic according to the Jain school are:

* **Valid knowledge (*pramāna*):** This is the knowledge which ascertains the nature of what was uncertain to one's
* **Syllogism (*Vyāpti*):** This is the inseparable connection between two
* Reason (*hetu*): Reason is divided as (a) perceptible and (b) imperceptible.
* Example (*dṛṣṭānta*): For the sake of explaining matters to men of small intellect,the example becomes a part of inference.
* Inference (*anumāna*):
* Verbal testimony (*āgama*): This the knowledge of object derived from the words of reliable persons or scriptures in virtue of their natural fitness or
* Scope of valid knowledge (*viṣaya*)
* Fallacy (*ābhāsa*)

The following categories are considered by the Buddhist school of logic:
Valid knowledge: only two *pramānas*, perception and inference in opposition to the four *pramānas* of the *Nyāya-Sutra*,
Reason (*hetu*): Similar concept of '*hetu*' according to the ancient school.
Example (*dṛṣṭānta*): It is to pointing out the connection of the reason with the major terms, one should state examples.
Negation (*apoha*): An entity is defined as being the negation of its opposites.

Analogues (*Jāti*): The concept of analogues is almost similar to the concept of *"Jāti"* in the *Nyāya-Sutra*.

Since the Brāhmaṇas did not differ in respect to their social practices from the Jains, as they did from the Buddhist. So, the Brāhmaṇas attack on Jain Logic was not as violent as that on the Buddhist Logic. In fact, the logical theories of the Jains are in many cases similar to those of the *Brāhmanas*. The different categories of logic as described in the *Nyāya Sutra* are very much similar to the Jain school but differ significantly from the Buddhist school.

Modern School of Indian Logic

In the Deccan regions of India, the decline of Buddhism commence in the seventh century A.D. The Brāhmaṇas, borrowed the Budhist logic from the work of the mediaeval school, but for other matters they went back to the works of the ancient school.

The works so composed in the modern period were technically called "Prakaraṇas" or Manuals of logic. The manuals are remarkable for their accuracy and lucidity.

The main categories of the cause of logic as identified in the manuals are:
 A. Pramāṇa (valid knowledge): which can be classified into:

- Perception (pratyaksha)
- Inference (anumāna)
- Verbal Testimony (āgama)

B. Hetvābhasa (fallacy of reason): Which can be classified as-

- Unproved (asiddha)
- The contradictory (viruddha)
- The uncertain (anaikāntika)
- Non-tried or non-conclusion
- Mistimed or incompatible reason
- Non- erroneous contradiction

C. Example (udāharaṇa)
D. Verbal Testimony(āgama)
E. Emancipation (Mokṣha)

The modern school of Logic suggests that the soul is of two kinds, viz. the individual soul (aparaātma) and the supreme soul (para ātma). With the knowledge of the supreme soul, the individual soul attains final emancipation.

Conclusion

The *"tarka"* is an important component of Logic. But it does not provide any originality in information. It only proves what has already been known by regular syllogism. The sānkhya, Yoga and Vedānta believe in *buddhi* but the *Nyāya* and the *Vaiśesika* do not consider *Budhhi* as reason. It is only an adventitious consciousness that arises like a spark or light when mind (*manas)* comes into contact with the *aatman.*

We have tried to compile the effort to trace the history of development of logic in India. In India, Logic came under the scrutiny of intellectuals as early as 650 B.C. and surviving a span of more than 2600 years. The system of logic in India in the modern form is an assimilation of various schools of logic. The thoughts of the schools of Logic deeply influence the Indian society.

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Pramanas

Pramanas: Pramana (**"sources of knowledge" or "measure"**) is an epistemological term in Indian and Buddhist philosophies referring to the means by which a person obtains accurate and valid knowledge *(Prama, pramiti)* of the world. In obtaining *Prama*, or correct knowledge, Pramana forms one part of a *triputi (trio)*:

- **Pramata**, the subject (the knower)
- **Pramaṇa,** the means of obtaining the knowledge
- **Prameya,** the object (the knowable)

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The three-principal means of knowledge are:

- **Pratyaksa (Perception)**
- **Anumana (Inference), and**
- **Sabda (Word)**

The **Sabda (word)** is derived from the Veda, which is considered to be inherently valid. Some philosophers include the statements of reliable persons *(apta-vakya)* in the concept of Word *(sabda)*, and add two additional means of obtaining knowledge:

- **Upamana (Analogy):** enables one to hold on the meaning of a word by analogy, and
- **Arthapatti (postulation or Implication):** appeals to common sense according to circumstances.

The ancient and medieval Indian books identify six Pramanas, including **Anupalabdhi (non-perception, negative/cognitive proof)** as correct means of accurate knowledge and to truths.

The most widely accepted and discussed pramanas are:

- **Pratyakṣa (Perception)**
- **Anumāṇa (Inference)**
- **Śabda (word, testimony)**
- **Upamāṇa (Comparison, Analogy)**
- **Arthāpatti (Postulation, Presumption, derivation from circumstances)**
- **Anupalabdi (non-perception, cognitive proof using non-existence)**

Different Ancient Schools and Accepted Pramanas

Schools	Accepted Pramanas
Carvaka school	Pratyakṣa (perception)
Vaisheshika school	Pratyakṣa (perception)

Sankhya, Yoga, Vishishtadvaita Vedanta, and Dvaita Vedanta schools	Anumāṇa (inference) Pratyakṣa (Perception)
	Anumāṇa (Inference)
	Śabda (word, testimony) Pratyakṣa (perception)
Nyaya school	Anumāṇa (inference)
	Śabda (word, testimony)
	Upamāṇa (comparison, analogy) Pratyakṣa (perception)
	Anumāṇa (inference)
Prabhakara Mimamsa school	Śabda (word, testimony)
	Upamāṇa (comparison, analogy)
	Arthāpatti (postulation, presumption) Pratyakṣa (perception)
	Anumāṇa (inference)
	Śabda (word, testimony)
Advaita Vedanta and Bhatta Mimamsa schools	Upamāṇa (comparison, analogy)
	Arthāpatti (postulation, presumption)
	Anupalabdi (non-perception, cognitive proof using non-existence)

The *Advaita Vedanta* recognizes six pramanas, namely, Pratyaksa(perception), Anumana (inference), Sabda or Agama (verbal testimony), Upamana (comparison), Arthapatti (presumption) and Anupalabdhi or Abhava(nonapprehension).

Pratyakṣa (Perception)

The word 'pratyaksa' consists of two parts viz. "prati" meaning near or before or related to and "aksi" meaning eye. So, it means the process through which immediate knowledge of an object arises or it means the instrument by which the object is conceived.

Perception or pratyaksa is the most important and fundamental source of valid knowledge. It is accepted by all the philosophical schools both vedic and non vedic. It is first and foremost of all the sources of valid knowledge as it is the most powerful, most fundamental and root of all other sources. Perception gives a direct or immediate knowledge of reality of an object and therefore it is the root of all other pramanas. According to the Nyaya, perception is not the only source of our knowledge, but it is the basis of all other sources or means of knowledge. Hence, it has been said that all the other means of knowledge presupposes perception and must be based on knowledge derived from perception. Perception is the final test of all knowledge. Perceptual verification is thus the final test of all other knowledge and as such, perception is the chief of all the sources of human knowledge.

Types of Pratyaksha

Pratyaksha is broadly divided into two types:

Direct perception (Anubhava): In this type of perception, the knowledge of an object arises when it comes in contact with sense organs; **smell (nose), touch (skin), form (eyes), sound (ears) and taste (tongue).**

Remembered perception (smriti): The knowledge of an objects is based on the memory (smriti). Once we have seen a table, it is memorised and when the table again appear in front of you, you can easily recognised, what is this?

Alternatively, It can be divided into **indiscriminate perception** (nirvikalpa) where perception of the object is made without recognizing distinguishing features; and **discriminate perception (savikalpa)** where distinguishing features are observed.

Traditionally, there are four ways of obtaining pratyaksha. They are:

- Indriya pratyaksha (Sense perception)
- Manas pratyaksha (Mental perception)
- Svadana pratyaksha (Self-consciousness)

- Yoga pratyaksha (Super-normal intuition)

Anumāṇa (inference) Pramanas

Anumana literally means such knowledge that follows some other knowledge. **Anumāṇa (inference)** is the knowledge of an object due to a previous knowledge of some sign or mark. In Anumana Pramana, we arrive at the knowledge of an object through the medium of two acts of knowledge or propositions.

Inferential knowledge is produced not by direct apprehension but by means of some other knowledge. The "other" is interpreted in different ways as perceptive knowledge of probans. All systems of Indian philosophy agree in holding that anumana is a process of arriving at truth not by direct observation but by means of the knowledge of *vyapti* or a universal relation between two things.

There are definite steps to be followed in all inferential knowledge. The following steps are accepted for logical deduction of knowledge by the teachers of Advaita Vedanta :

1. **Perceptual evidence:** We see smoke on the hill
2. **Invariable concomitance:** Wherever there is smoke, there is fire, as seen in kitchen.
3. **Conclusion:** Therefore the hill has fire

Śabda (word, testimony) Pramanas

Sabda or Shabda or verbal testimony is also called **'apta-vakyas'** (statement of a trustworthy person, and *Agama (authentic word)*). A verbal statement can be uttered or written, is human's most potent instrument for transmitting knowledge.

A universal way of communication is either an oral or written message, and we learn mostly through words. We continuously get various information, direction, and knowledge through words. Since school days, we use words as a valid and effective means of bringing about awareness of things, ideas, or emotions. Books, magazines, newspapers, letters, conversations, chats, radio, TV, movies, songs, etc., all depend on words. We cannot do without verbal testimony.

A verbal statement conveying valid knowledge must have an authentic source and free from defects. Only a competent person possessed of knowledge can impart accurate knowledge. Such knowledge needs no verification unless, of course, there is doubt about its reliability. If

all that we know from verbal testimony were to await confirmation, then the bulk of human knowledge would have to be regarded as baseless.

The process of verbal knowledge (Sabda) can not be clubbed with inference. Sabda does not involve any knowledge of invariable concomitance, as is the case in inference.

A lot of work has been done in regard to the derivation of the meaning of a sentence, especially by the Mimamsakas. Only that combination of words is called a sentence when four factors are taken care. They are:

- Expectancy (Akanksha),
- Consistency (Yogyata),
- Contiguity (asatti), and
- Knowledge of the purport (tatparya-jnanam)

Upamāṇa (comparison, analogy) Pramanas

According to the Mimamsakas and Advaitins, Upamana is the process by which the knowledge of B's similarity to C is gained from the perception of C's similarity to B, which has been seen elsewhere.

The methodology of Upamana for getting knowledge is seen as distinct from mere inference, and is thus accepted as a valid mediate method of knowledge.

For example, a person who has seen his cow in a town goes to a forest and sees a wild cow (gavaya). The person sees the similarity "This wild cow is like my cow", and on this basis, he also concludes the opposite to be equally true, that "My cow is like this wild cow". Thus, by upamana he gains the knowledge of his cow's similarity to the wild cow from the perception of the wild cow's similarity to his cow.

Upamana is a distinct means of knowledge, and it can not be clubbed under **Anumāṇa (Inference)**. We cannot have a universal proposition that a thing is similar to whatever is identical to it. Such knowledge can not be gained without the observation of the two same things together.

Arthāpatti (postulation, presumption) Pramanas

Arthapatti means postulation, supposition, or presumption of a fact. *Arthapatti* is a distinct valid method of mediate knowledge. In fact, *Arthapatti* is a method of assumption of an

unknown fact to account for a known fact that is otherwise difficult. *Arthapatti* can either be from what is seen or from what is heard.

One of the classic examples of this method of knowledge is Shyam; a fat person says that he never eats during the day time, then we can easily postulate that he eats in the night. For the simple reason that without this assumption, his fatness and also his getting fatter cannot be explained.

Anupalabdi, Abhava (non-perception, cognitive proof using non-existence)

According to the Advaitins and the Mimasaka school of Kumarila Bhatt, *Anupalabdhi* is considered to be a separate independent Pramana. *Anupalabdhi* literally means non-apprehension. Its non-perception apprehends the non-existence of a thing.

By not seeing a jar in a place, one knows that it is not there. We use this method of knowledge also very often, and this is evident from statements like: 'There is no teacher in the classroom,' There is no sound here.'

It may seem paradoxical that non-apprehension of a thing is a means to the apprehension of its non-existence (Abhava). Both non-perception, as well as perception, serve as a means to get various knowledge. The knower is conscious of both. They lead to positive and negative experiences.

Direct or indirect knowledge can be the basis of the knowledge of the non-existence of a thing. It could either be based on our immediate non-perception of a thing or even based on inference or verbal testimony. In the former Pramanas, the knowledge is immediate, while in the latter case, which is applicable in super sensual objects, the knowledge of Abhava of a thing is mediate.

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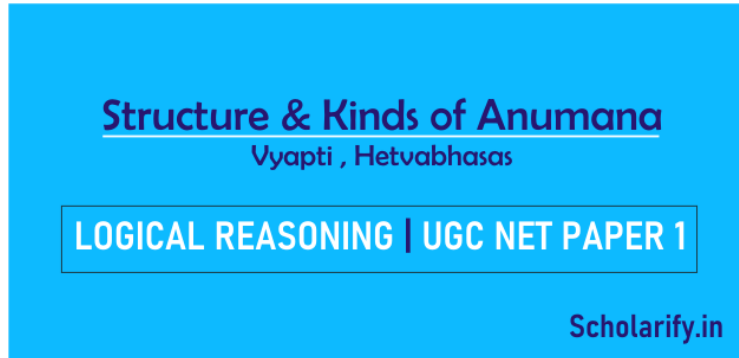UGC NET Study Materials for Paper 1 (Download PDF)
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Structure and Kinds of Anumana

The Sanskrit word *"Anumana"* is the combination of two words, *"Anu"* means 'after' and *"mana"* means measurement. The whole word literally means measuring after something. According to Indian Philosophy, Anumana is a knowledge that is obtained after proof. We know by now that knowledge derived through **"anumana"** is not direct since it makes use of previous knowledge obtained from other sources of knowledge like perception, testimony, etc., and enables one to explore further knowledge. Not all the major Indian philosophical systems accept all the pramanas.

Structure of Anumana (Inference)

Although all the major schools accept *Anumana* as a valid source of knowledge, the understanding and the explanation of each school will have certain variations according to their understanding of knowledge. In Indian philosophy, the inference is used for oneself and inference for others. When inference is used for oneself the propositions are not well structured since its primary aim is the acquisition of personal knowledge without error. In contrast, inference for others has to be well structured because it is used to convince the other of the truth. We shall concentrate mainly on the understanding of *Nyaya School* because it is well known for its logic.

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They define the inference (Anumana) as "a process of reasoning in which we pass from the apprehension of some mark *(linga)* to that of something else under an invariable relation *(vyapti)* that exists between them."

Vyapti is essential in Indian philosophy for making a valid inference: however, it is good to know that different schools had different names for *vyapti*; For example, Vaisesikas called it *Prasiddhi* and Samkhya called it *pratibandha*.

Nyaya proposes a longer syllogism; it has five propositions. An argument, according to them, has

five parts: *Paksa or Pratinjna*, *hetu, drastanta, upanaya and nigamana*.

Here is a standard example to understand this;

1. **Paksa** (The Thesis / Pratijna – Proposition)	The hill has fire
2. **Hetu** (Reason or the ground)	Because it has smoke
3. **Drstanta** (the corroboration)	Wherever there is smoke there is

	fire, as in the kitchen
4. Upanaya (The application)	the hill is so
5. Nigamana (the conclusion)	Therefore, the hill has fire

In this process, we begin asserting something. We provide the reason / the ground for the assertion and make a universal proposition that shows the concomitant relationship between the two with an example then we apply the universal proposition to the present case and make a conclusion from the preceding propositions. This type of syllogism is said to have *anvaya vyapti* – since it denotes a positive concomitance – if there is smoke then there is fire.

We shall give a specimen from the western example:
1) Ram is mortal
2) Because he is a man
3) All men are mortal like my grandfather
4) Ram is also a man
5) Therefore, Ram is mortal.

The purpose of giving this example is also to show how Indian philosophy combined both induction and deduction together in the same syllogism. The first three propositions (1 – 3) form inductive syllogism, while the last three (3 – 5) form as a deduction. Proposition no. 3 is the conclusion for the induction and the major premise for the deduction.

When it denotes negative concomitance, it is said to have *vyatireka Vyapti*. An example of this is the opposite of what we have stated above. The hill has no smoke; because there is no fire; wherever there is no fire, there is no smoke as in the lake (because water and fire are opposed substances); there is no fire in the hill; therefore, the hill has no smoke.

Classification of Anumana

Anuman (Inference) here is classified based on the nature of *vyapti* between *hetu (smoke)* and *sadhya (fire).* Vyapti denotes a correlation between two facts of which one is pervaded and the other which pervades.

E.g. Smoke is pervaded by fire and fire pervades smoke. Vyapti is established based on its presence of both in all such events (wherever there is smoke there is fire) and the absence of both (wherever there is no fire there is no smoke).

The classification is based on the relationship (causal uniformity or non-causal uniformity) between the reason and what is inferred.

There are three types of Anumana (inference):

1. **Purvavat Anumana:** An inference in which we infer the unperceived effect from a perceived cause. E.g., we infer of future rain from the appearance of dark heavy clouds.

2. **Sesavat Anumana:** An inference in which we infer the unperceived cause from a perceived effect. E.g. we infer of the past rain from a swift muddy current of water in the river.

3. **Samanyatodrasta Anumana:** An inference in which we infer not based on causal relation but the experience of uniformity. E.g., on seeing the different positions of the moon at long intervals, we infer that it moves although we might not have perceived the motion.

Vyapti *(invariable relation)*

Most of the Indian thinkers, who regard inference to be a means of knowledge, unanimously accept the principle of invariable and the way of its ascertainment. *Kumārila* states, Vyāpti is not a simple assertive judgment but a necessary judgment. **Jaya Tirtha,** in his Nyāya Sudhā, defines "inference" as a flawless reasoning from a mark to a certain conclusion on the basis of an invariable relation that subsists between them. This invariable relation between the reason (Hetu) and the probandum (Sādhya) is the essential determinate of inference that distinguishes it from other forms of cognition, viz, perception, and testimony. Vyapti is an important factor in attaining inferential knowledge. There is a diversity of opinion among the scholars about Vyapti. The nature of an inference cannot be known without the knowledge of the nature of Vyapti or invariable concomitance.

Vyapti is the uniform, unconditioned, or natural relation between reason and predicate. The reason must be known to be invariably concomitant with the predicate in Vyapti. The universal relation of the reason with the predicate is the Logical ground of inference.

No inference (Anumana) is possible unless there is an **invariable concomitance (Vyapti)** between the mark and the character inferred Vyapti between the middle and major terms means generally a relation of Vyapti of co-existence (Sachacarya) between the two, e.g. wherever there is smoke, there is fire. Previous knowledge is the knowledge of the Linga or mark as having a universal relation with the Sadhya or major term and as being present in the Paksa or minor term.

Though there is a difference of opinion among the philosophers of different schools in respect of the definition, functions, and nature of Vyapti (i.e., invariable concomitance), all of them are of the view that inference is not possible without the proper knowledge of it and hence it has been considered as a special cause (karana) of inference by the Logicians.

Types of Vyapti

There are two kinds of Vyapti:

Anvayavyapti: It is invariable concomitance of the presence of the reason with the presence of the predicate.
Vyatirekavyapti: It is the invariable concomitance of the absence of the predicate with the absence of the reason.

Hetvabhasha *(fallacies of inference)*

Vedanta states in Indian logic, a fallacy is called hetvabhasa, which means the middle-term appears to be a reason but is not a valid reason. Vatsyayana points out that the fallacy of the Hetu are called hetvabhasa because these Hetus do not possess the characteristics of the Hetus proper, and yet they appear like the hetus because of their similarity to them.

Gangesa provides three general definitions of hetvabhasa. 1) There are hetvabhasa the object of that valid cognition which is opposite of the absence of the instruments of inference 2. Hetvabhasa is that object which if known prevents the knowledge of Linga from leading to an inference 3. Hetvabhasa is that characteristics which prevents known inference.

There are five kinds of Hetvabasha:

(i) Asiddha (unfounded or unknown reason): The reason which is not invariably concomitant with the probandum or that it does not exist in the subject, the reason is to be taken as the unknown reason.

This type of reason is of three forms:

(a) asrayasiddha: That reason whose subject is unknown, e.g., the sky lotus, is fragrant because it is a lotus, similar to one in the pond. Here, the subject – sky lotus, is a non-existing thing and so unknown.

(b) svarupasiddha: That reason whose form is not to exist in the subject. An example of svarupasiddha is "sound is transitory because it is visible like a pot." Here, visibility is the reason, but that is entirely unknown in sound as it is only audible.

(c) vyapyatvasiddha: that reason which has its invariable concomitance with the probandum unfounded.

(ii) Viruddha (contradictory reason): It is that which has invariable concomitance with the negation of the probandum. e.g. sound is eternal because, it is a product, like ether. The fact of being a product is actually concomitant with non-eternality, the opposite of the probandum here.

What is produced is always non-eternal and not-eternal. Therefore, the reason "being a product" becomes a contradictory one.

(iii) Anaikdntika (inconstant or straying reason): It is of two kinds, the common strayer and the peculiar strayer. That which is present in all the three paksa, sapaksa and vipaksa, is the common strayer; e.g. (in syllogism) sound is eternal because it is cognizable, the reason cognisability exists in all eternal and non-eternal things. That reason which is absent from both sapaksa and vipaksa but exists only in the paksa, becomes the peculiar strayer, as (in syllogism) "earth is eternal because it has smell" the reason smell does not exist in any sapaksa or vipaksa, but exists only in earth (paksa).

(iv) Prakaranasama (counterbalanced or opposing reason): It is that which is opposed by another reason which proves the existence of the opposite of the proposed probandum. For e.g., the sound is non-eternal as it is devoid of all qualities of eternal things. This is opposed by "sound is eternal because it is devoid of all qualities of eternal things." This is also called satpratipak§a one having an adversary.

(v) Kalatyayapadista (stultified or belated reason): It occurs when the opposite of the proposed probandum is known to exist in the subject by any other more trustworthy means of cognition. It is also called badhita.

For e.g., the syllogism, "fire is not hot, because it is a product like water'. Here, the probandum proposed to be proved by the reason "being a product" is "absent of heat." But, it is opposite "presence of heat" in the subject is already ascertained through perception, as heat is experienced through tactile perception.

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