

Nyaya-Vaishesika -Epistemology

Introduction

The Vaishesika system is next to Sāhkhyā in origin and is of greater antiquity than the Nyāya. It may be prior to and is certainly not later than Buddhism and Jainism. The word is derived from 'Vishesa' which means particularity or distinguishing feature or distinction. The Vaishesika philosophy, therefore, is pluralistic realism which emphasizes that diversity is the soul of the universe. The category of Vishesa or particularity is dealt with at length in this system, and is regarded as the essence of things.

The founder of this system is Kanada who is also known as Kanabhuk, Ulūka, and Kāshyapa. This system is also called after him as Kanada or Aulūka darshana. He was called Kanada because he used to live as an ascetic on the grains picked up from the fields. Kana (in addition to meaning 'grain') also means a particle or a particular and the word Kanada suggests one who lives on the philosophy of particularity— vishesa. Prashastapāda has written his classical Padārthadharmasahgraha which is called a Bhāṣya or Commentary on the *Vaishesikasūtra* of Kanada, but is really a very valuable independent treatise. It has been commented upon by Udayana and Shridhara. The Vaishesika was, later on, fused together with the Nyāya which accepted the ontology of the former and developed it in the light of its epistemology. Thus Shivāditya, Laugākṣi Bhaskara, Vishvanātha and Annambhatta treat of the two systems together.

The sage Gotama is the founder of Nyāya School. He is also known as Gautama and as Aksapada. Nyāya means argumentation and suggests that the system is predominantly intellectual, analytic, logical and epistemological. It is also called *Tarkashāstra* or the science of reasoning; *Pramānashāstra* or the science of logic and epistemology; *Hetuvidyā* or the science of causes; *Vādavidyā* or the science of debate; and *Ānvīksikī* or the science of critical study.

Nyāya is a system of atomistic pluralism and logical realism. It is allied to the Vaishesika system which is regarded as '*Samānatantra*' or similar philosophy. Vaishesika

develops metaphysics and ontology; Nyāya develops logic and epistemology. Both agree in viewing the earthly life as full of suffering, as bondage of the soul and in regarding liberation which is absolute cessation of suffering as the supreme end of life. Both agree that bondage is due to ignorance of reality and that liberation is due to right knowledge of reality. Vaishesika takes up the exposition of reality and Nyāya takes up the exposition of right knowledge of reality. *Nyāya* mostly accepts the Vaishesika metaphysics. But there are some important points of difference between them which may be noted. Firstly, while the Vaishesika recognizes seven categories and classifies all reals under them, the Nyāya recognizes sixteen categories and includes all the seven categories of the Vaishesika in one of them called *Prameya* or the Knowable, the second in the sixteen. The first category is *Pramāna* or the valid means of knowledge. This clearly brings out the predominantly logical and epistemological character of the Nyāya system. Secondly, while the Vaishesika recognizes only two *Pramānas*—perception and inference and reduces comparison and verbal authority to inference, the Nyāya recognizes all the four as separate—perception, inference, comparison and verbal authority.

Perception

Knowledge (*jnāna*) or cognition (*buddhi*) is defined as apprehension (*upalabdhi*) or consciousness (*anubhava*). Nyāya, being realistic, believes that knowledge reveals both the subject and the object which are quite distinct from itself. All knowledge is a revelation or manifestation of objects (*arthaparakāśho buddhih*). Just as a lamp manifests physical things placed before it, so knowledge reveals all objects which come before it. Knowledge may be valid or invalid. Valid knowledge (*pramā*) is defined as the right apprehension of an object (*yathārthānu- bhavah*). It is the manifestation of an object as it is. Nyāya maintains the theory of correspondence. Knowledge, in order to be valid, must correspond to reality. Valid knowledge is produced by the four valid means of knowledge—perception, inference, comparison and testimony. Invalid knowledge includes memory (*smṛti*), doubt (*samshaya*), error (*viparyaya*) and hypothetical reasoning (*tarka*). Memory is not valid because it is not presentative cognition but a representative one. The object remembered is not directly presented to the soul, but only indirectly recalled. Doubt is uncertainty in

cognition. Error is misapprehension as it does not correspond to the real object. Hypothetical reasoning is no real knowledge. It is arguing like this—‘if there were no fire, there cannot be smoke’. When you see a rope as a rope you have right knowledge. If you are uncertain whether it is a rope or a snake, you have doubt. If you recall the rope you have seen, you have memory. If you mistake the rope for a snake, you have error.

Knowledge is produced in the soul when it comes into contact with the not-soul. It is an adventitious property of the soul which is generated in it by the object. If the generating conditions are sound, knowledge is valid; if they are defective, knowledge is invalid. A man of sound vision sees a conch white, while a man suffering from jaundice sees it yellow. Correspondence with the object is the nature of truth. If knowledge corresponds to its object, it is valid; if it does not, it is invalid. Valid knowledge corresponds to its object (*yathārtha* and *avisamvādi*) and leads to successful activity (*pravṛttisāmarthya*). Invalid knowledge does not correspond to its object and leads to failure and disappointment (*pravṛttivisamvāda*). Fire must burn and cook and shed light. If it does not, it is no fire. Knowledge intrinsically is only a manifestation of objects. The question of its validity or invalidity is a subsequent question and depends upon its correspondence with its object. Truth and falsity are extrinsic characteristics of knowledge. They are apprehended by a subsequent knowledge. They arise and are apprehended only when knowledge has already arisen. They are neither intrinsic nor self-evident. Validity and invalidity of knowledge arise (*utpattau paratah prāmāṇyam*) after knowledge has arisen, and they are known (*jñaptau paratah prāmāṇyam*) after knowledge has arisen and they have also arisen. Correspondence is the content and successful activity is the test of truth. The Nyāya theory of knowledge, therefore, is realistic and pragmatic; realistic as regards the nature and pragmatic as regards the test of truth.

Perception, inference, comparison or analogy and verbal testimony are the four kinds of valid knowledge. Let us consider them one by one. Gotama defines perception as ‘non-erroneous cognition which is produced by the intercourse of the sense-organs with the objects, which is not associated with a name and which is well-defined. This definition of perception excludes divine and yogic perception which is not generated by the intercourse

of the sense-organs with the objects. Hence Vishvanātha has defined perception as ‘direct or immediate cognition which is not derived through the instrumentality of any other cognition. This definition includes ordinary as well as extra-ordinary perception and excludes inference, comparison and testimony. Perception is a kind of knowledge and is the attribute of the self. Ordinary perception presupposes the sense- organs, the objects, the *manas* and the self and their mutual contacts. The self comes into contact with the *manas*, the *manas* with the sense-organs and the sense-organs with the objects. The contact of the sense-organs with the objects is not possible unless the *manas* first comes into contact with the sense-organs, and the contact of the *manas* with the sense-organs is not possible unless the self comes into contact with the *manas*. Hence sense-object contact necessarily presupposes the *manas*-sense contact and the self-*manas* contact. The sense-organs are derived from the elements whose specific qualities of smell, taste, colour, touch and sound are manifested by them. Perception is a kind of knowledge and is the attribute of the self. Ordinary perception presupposes the sense-organs, the objects, the *manas* and the self and their mutual contacts. The self comes into contact with the *manas*, the *manas* with the sense-organs and the sense-organs with the objects. The contact of the sense-organs with the objects is not possible unless the *manas* first comes into contact with the sense-organs, and the contact of the *manas* with the sense-organs is not possible unless the self comes into contact with the *manas*. Hence sense- object contact necessarily presupposes the *manas*-sense contact and the self-*manas* contact. The sense-organs are derived from the elements whose specific qualities of smell, taste, colour, touch and sound are manifested by them. The *manas* is the mediator between the self and the sense-organs. The external object through the senses and the *manas* makes an impression on the self. The theory, therefore, is realistic.

The Naiyāyika maintains two stages in perception. The first is called indeterminate or *nirvikalpa* and the second, determinate or *savikalpa*. They are not two different kinds of perception, but only the earlier and the later stages in the same complex process of perception. These two stages are recognized by Gotama in his definition of perception quoted above. Perception is ‘unassociated with a name’ (*avyapadeshya*) which means

‘indeterminate’, and it is ‘well-defined’ (*vyavasayatmaka*) which means ‘determinate’. All perception is determinate, but it is necessarily preceded by an earlier stage when it is indeterminate. Nvâva recognizes the fundamental fact about knowledge which is said to be the distinct contribution of Kant to western philosophy that knowledge involves both sensation and conception. ‘Percepts without concepts are blind and concepts without percepts are empty.’ Perception is a complex process of experience involving both sensation and conception. All perception we have is determinate because it is perceptual knowledge or perceptual judgment. Sensation is the material and conception is the form of knowledge. Bare sensation or simple apprehension is *nirvikalpa* perception; perceptual judgment or relational apprehension is *savikalpa* perception. Nyâya avoids the fallacy of the psychical staircase theory that we have first sense-experience, then conception and then judgment. Perception is a complex presentative- representative process in which we cannot really separate direct awareness from relational judgment. Indeterminate perception forms the material out of which determinate perception is shaped, but they can be distinguished only in thought and not divided in reality. *Nirvikalpa* perception is the immediate apprehension, the bare awareness, the direct sense-experience which is undifferentiated and non-relational and is free from assimilation, discrimination, analysis and synthesis. The consciousness of the ‘that is not yet determined by the consciousness of the ‘what’. But as the ‘that cannot be really known as separated from the ‘what’, the ‘substance cannot be known apart from its ‘qualities’, we immediately come to *savikalpa* perception where the mere awareness of the ‘that’ and the ‘what’ and their ‘inherence’ as something undifferentiated, unrelated, dumb and inarticulate, is transformed into differentiated, relational, conceptual and articulate knowledge involving assimilation, discrimination, analysis and synthesis. For example, when we go, from broad daylight, into a dark cinema hall to see a matinée show, we first do not see the seats or the audience clearly, but have only a dim sensation of the objects present there which gradually reveal themselves to us ; the dim sense-experience of the objects in the hall is indeterminate perception while the clear perception of them is determinate perception. The mere apprehension of some object as something, as the ‘that’, is indeterminate perception, while the clear perception of it together with its attributes is determinate perception. We see in dusk a straight something

lying on the road and find out by going near it that it is a rope. We see a white moving object at a distance and when it comes near we see it is a white cow. The earlier stage is indeterminate and the later one determinate perception. We are in a hurry to go somewhere and want to finish our bath before starting. We do not know whether the water was cold and the bath refreshing, though we did feel the coolness of water and the refreshing character of bath. We feel water and we feel its coolness but we do not relate the two. Indeterminate perception presents the bare object without any characterization. In determinate perception we relate the substance with its attributes. The feeling of indeterminate perception is psychological, but its knowledge is logical. As bare awareness, as mere apprehension, we sense indeterminate perception, we feel it, but the moment we try to know it even as 'bare awareness*' it has passed into conception and has become determinate. Hence all our perception being a cognition is determinate and is a perceptual judgment. We can separate indeterminate from determinate perception only in thought and not in reality. Hence, though we feel indeterminate perception as a psychological state of sense-experience, its knowledge even as indeterminate perception is a result of logical deduction. We do feel it directly but only as an awareness, not as a cognition. Mere apprehension, being infra-relational, cannot be cognized. As cognition it is inferred afterwards when conception has transformed mere sensation into a perceptual judgment.

Vātsyāyana says that if an object is perceived with its name we have determinate perception; if it is perceived without its name, we have indeterminate perception. Jayanta Bhatta says that indeterminate perception apprehends substance, qualities and actions and universal as separate and indistinct something and is devoid of any association with a name, while determinate perception apprehends all these together with a name. Gangesha Upādhyāya defines indeterminate perception as the non-relational apprehension of an object devoid of all association of name, genus, differentia etc. Annam Bhatta defines it as the immediate apprehension of an object as well as of its qualities, but without the knowledge of the relation between them. The substance and the qualities, the 'that' and the 'what' are felt separately and it is not apprehended that those qualities inhere in that substance or that the 'what' characterizes the 'that'. Indeterminate perception is 'mere

acquaintance’ which William James calls ‘raw un-verbalized experience’, while determinate perception is relational apprehension.

Perception, again, may be ordinary (*laukika*) or extraordinary (*alau- kika*). When the sense-organs come into contact with the objects present to them in the usual way, we have *Laukika* perception. And if the contact of the sense-organs with the objects is in an unusual way, i.e., if the objects are not ordinarily present to the senses but are conveyed to them through an extraordinary medium, we have *Alaukika* perception. Ordinary perception is of two kinds—internal (*mānasa*) and external (*bāhya*). In internal perception, the mind (*manas*) which is the internal organ comes into contact with the psychological states and processes like cognition, affection, conation, desire, pain, pleasure, aversion etc. External perception takes place when the five external organs of sense come into contact with the external objects. It is of five kinds—visual, auditory, tactual, gustatory and olfactory, brought about by the sense- organs of sight, sound, touch, taste and smell respectively when they come into contact with the external objects. The external sense-organs are composed of material elements of earth, water, fire, air, and ether and therefore each senses the particular quality of its element. Thus the sense-organ of smell is composed of the atoms of earth and perceives smell which is the specific quality of earth and so on.

Extra-ordinary perception is of three kinds—*sāmānyalaksana*, *jñānalaksana* and *yogaja*. *Sāmānyalaksana* perception is the perception of the universals. According to Nyāya, the universal are a distinct class of reals. They inhere in the particulars which belong to different classes on account of the different universals inhering in them. An individual belongs to a particular class because the universal of that class inheres in it. Thus a cow becomes a cow because it has the universal cowness inhering in it. Ordinarily we perceive only the particulars and not the universals. We perceive particular cows but we do not perceive a ‘universal cow. Hence the Nyāya maintains that the universals are perceived extraordinarily. Whenever we perceive a particular cow we first perceive the ‘universal cowness’ inhering in it. The second kind of extraordinary perception is called *jñānalaksana* perception. It is the ‘complicated’ perception through association. Sometimes different sensations become associated and form one integrated perception. Here an object

is not directly presented to a sense-organ, but is revived in memory through the past cognition of it and is perceived through representation. For example, I look at a blooming rose from a distance and say 'I see a fragrant rose'. But how can fragrance be seen? It can only be smelt. Fragrance can be perceived by the sense-organ of smell and not by the sense-organ of vision which can perceive only colour. Here the visual perception of the rose revives in memory the idea of fragrance by association, which was perceived in the past through the nose. The perception of the fragrant rose through the eye, therefore, is called *jnānalaksana* perception or perception revived in memory through the cognition (*jnāna*) of the object in the past. Other examples of it are: 'the piece of sandalwood looks fragrant', 'ice looks cold', 'stone looks hard', 'tea looks hot', etc. etc. The theory of illusion accepted by Nyāya called '*Anyathākhyāti*' is based on this kind of perception. When we mistake a rope for a snake» the idea of snake perceived in the past is imported in memory through this extraordinary *jnānalaksana* perception and is confused with the object (i.e., rope) which is directly presented to the sense-organ. When shell is mistaken for silver the idea of silver perceived in the past in a shop (*āpanastha*) (or anywhere else) is revived in memory through *jnānalaksana* perception and is confused with the object (i.e., shell) which is directly presented to the sense-organ. The past impression represents the object to our mind. Error is due to a wrong synthesis of the presented and the represented objects. The represented object is confused with the presented one. The word '*anyathā*' means 'elsewise and 'elsewhere and both these senses are brought out in an erroneous perception. The presented object is perceived elsewise and the represented object exists elsewhere. The shell and the silver, the rope and the snake are both separately real; only their synthesis is unreal. The shell and the rope are directly presented as the 'this (when we say: 'this is silver or 'this is a snake), while the silver and the snake exist elsewhere and are revived in memory through *jnānalaksana* perception. The third kind of extraordinary perception is called *yogaja* perception. This is the intuitive and immediate perception of all objects, past, present and future, possessed by the Yogins through the power of meditation. It is like the *Kevalajnāna* of the Jainas, the Bodhi of the Buddhists, the Kaivalya of the Sārtkhyā- Yoga and the *Aparoksānubhūti* of the Vedāntins. It is intuitive, supra-sensuous and supra-relational.

Inference

The second kind of knowledge is *anumā* or inferential or relational and its means is called *anumāna* or inference. It is defined as that cognition which presupposes some other cognition. It is mediate and indirect and arises through a 'mark, the 'middle term (*linga or hetu*) which is invariably connected with the 'major term (*sādhyā*). It is knowledge (*māna*) which arises after (*anu*) other knowledge. Invariable concomitance (*vyāpti or avinābhāvaniyama*) is the nerve of inference. The presence of the middle term in the minor term is called *paksadharmatā*. The invariable association of the middle term with the major term is called *vyāpti*. The knowledge of *paksadharmata* as qualified by *vyāpti* is called *parāmarsha*. And inference is defined as knowledge arising through *parāmarsha*, i.e., the knowledge of the presence of the major in the minor through the middle which resides in the minor (*paksa- dharmatā*) and is invariably associated with the major (*vyāpti*). Like the Aristotelian syllogism, the Indian inference has three terms. The major, the minor and the middle are here called *sādhyā*, *paksa* and *linga* or *hetu* respectively. We know that smoke is invariably associated with fire (*vyāpti*) and if we see smoke in a hill we conclude that there must be fire in that hill. Hill is the minor term; fire is the major term; smoke is the middle term. From the presence of smoke in the hill as qualified by the knowledge that wherever there is smoke there is fire, we proceed to infer the presence of fire in the hill. This is inference. Indian logic does not separate Reduction from induction. Inference is a complex process involving both. Indian logic also rejects the verbalist view of logic. It studies thought as such and not the forms of thought alone. The formal and the material logic are blended here. Verbal form forms no integral part of the inference. This becomes clear from the division of inference into *svārtha* (for oneself) and *parārtha* (for others). In the former we do not require the formal statement of the different members of inference. It is a psychological process. The latter, the *parārtha* which is a syllogism, has to be presented in language and this has to be done only to convince others. There are five members in the Nyāya syllogism. The first is called *Pratijñā* or proposition. It is the logical statement which is to be proved. The second is *Hetu* or 'reason which states the reason for the establishment of the proposition. The third is called *Udāharana* which gives the universal

concomitance together with an example. The fourth is *Upanaya* or the application of the universal concomitance to the present case. And the fifth is *Nigamana* or conclusion drawn from the preceding propositions. These five propositions of the Indian syllogism are called 'members or *avayavas*. The following is a typical Nyāya syllogism:

- (1) This hill has fire (*pratijnā*).
- (2) Because it has smoke (*hetu*).
- (3) Whatever has smoke has fire, e.g., an oven (*udāharana*).
- (4) This hill has smoke which is invariably associated with fire (*upanaya*).
- (5) Therefore this hill has fire (*nigamana*).

If we compare it with the Aristotelian syllogism which has only three propositions, we will find that this Nyāya syllogism corresponds to the Barbara (AAA) mood of the First Figure which is the strongest mood of the strongest figure. Though the Nyāya syllogism has five and the Aristotelian has three propositions, the terms in both are only three—the *sādhya* or the major, the *paksa* or the minor and the *hetu* or the middle. Out of the five propositions, two appear redundant and we may easily leave out either the first two or the last two which are essentially the same. The first coincides with the fifth and the second with the fourth. If we omit the last two the first three propositions correspond with the conclusion, the minor premise and the major premise respectively. Or, if we omit the first two, the last three propositions correspond to the major premise, the minor premise and the conclusion of the Aristotelian syllogism. Hence if we leave out the first two members of the Nyāya syllogism which are contained in the last two, we find that it resembles the Aristotelian syllogism in the First Figure:

- (1) All things which have smoke have fire (Major premise).
- (2) This hill has smoke (Minor premise).
- (3) Therefore this hill has fire (Conclusion).

And the typical Aristotelian syllogism may be stated in the Nyāya form thus:

- (1) Socrates is mortal (*pratijnā*).

- (2) Because he is a man (hetu).
- (3) Whoever is a man is a mortal, e.g., Pythagoras (udāharana).
- (4) Socrates is a man who is invariably a mortal (*upanaya*).
- (5) Therefore Socrates is mortal (*nigamana*).

But there are certain real differences between the Nyāya and the Aristotelian syllogism apart from the nominal difference between the numbers of the propositions in each. The Aristotelian syllogism is only deductive and formal, while the Nyāya syllogism is deductive-inductive and formal-material. The Nyāya rightly regards deduction and induction as inseparably related, as two aspects of the same process—the truth now realized in western logic. Inference, according to Nyāya, is neither from the universal to the particular nor from the particular to the universal, but from the particular to the particular through the universal. The example is a special feature of the Nyāya syllogism and illustrates the truth that the universal major premise is the result of a real induction based on the law of causation and that induction and deduction cannot be really separated. Again, while in the Aristotelian syllogism the major and the minor terms stand apart in the premises though they are connected by the middle term with each other, in the Nyāya syllogism all the three terms stand synthesized in the Upanaya. Again, while the Aristotelian syllogism is verbalistic, the Nyāya recognizes the fact that verbal form is not the essence of inference and is required only to convince others. There are also certain fundamental differences between the two views and the view of Nyāya is accepted as better by the modern western logicians also. The view that *vyāpti*, the nerve of inference, was introduced by the Buddhist logician Dinnāga who was influenced by Greek thought is also wrong. *Vyāpti* was recognized much before Dinnāga, nor did he ‘borrow his doctrine from Greece. It is more reasonable to explain the similarities between the two as due to a parallel development of thought. Indian logic has been a natural growth.

There are five characteristics of the middle term:

- (1) It must be present in the minor term (*paksadharmatâ*); e.g., smoke must be present in the hill.

- (2) It must be present in all positive instances in which the major term is present; e.g., smoke must be present in the kitchen where fire exists (*sapakṣasattva*).
- (3) It must be absent in all negative instances in which the major term is absent; e.g., smoke must be absent in the lake in which fire does not exist (*vipakṣāsattva*).
- (4) It must be non-incompatible with the minor term; e.g., it must not prove the coolness of fire (*abādhita*).
- (5) It must be qualified by the absence of counteracting reasons which lead to a contradictory conclusion; e.g., 'the fact of being caused' should not be used to prove the 'eternality of sound' (*aviruddha*).

Inference is generally regarded as of two kinds—*Svārtha* and *Parārtha* which we have already discussed. Gotama speaks of three kinds of inference—*pūrvavat*, *shesavat* and *sāmānyatodrsta*. The first two are based on causation and the last one on mere coexistence. A cause is the invariable and unconditional antecedent of an effect and an effect is the invariable and unconditional consequent of a cause. When we infer the unperceived effect from a perceived cause we have *pūrvavat* inference, e.g., when we infer future rain from dark clouds in the sky. When we infer the unperceived cause from a perceived effect we have *shesavat* inference, e.g., when we infer past rain from the swift muddy flooded water of a river. When inference is based not on causation but on uniformity of co-existence, it is called *sāmānyatodrsta*, e.g., when we infer cloven hoofs of an animal by its horns. According to another interpretation, a *pūrvavat* inference is based on previous experience of universal concomitance between two things, a *shesavat* inference is *parishesa* or inference by elimination, and a *sāmānyatodrsta* is inference by analogy.

Another classification of inference gives us the *kevalānvayi*, *kevalavyatireki* and *anvayavyatireki* inferences. It is based on the nature of *vyāpti* and on the different methods of establishing it. The methods of induction by which universal causal relationship is established may be *anvaya*, *vyatireka* or both. The first corresponds to Mill's Method of Agreement, the second to his Method of Difference, and the third to his Joint Method of Agreement and Difference or the Method of Double Agreement. We have *kevalānvayi* inference when the middle term is always positively related to the major term. The terms

agree only in presence, there being no negative instance of their agreement in absence, e.g.,

All knowable objects are nameable;

The pot is a knowable object;

Therefore, The pot is nameable.

We have *kevalavyatireki* inference when the middle term is the differentium of the minor term and is always negatively related to the major term. The terms agree only in absence, there being no positive instance of their agreement in presence, e.g.,

What is not different-from-other-elements has no smell;

The earth has smell;

The earth is different-from-other-elements.

We have *anvavyatireki* inference when the middle term is both positively and negatively related to the major term. The vyāpti between the middle and the major is in respect of both presence and absence. There is Double Agreement between the terms—they agree in presence in the positive instances and they also agree in absence in the negative instances; e.g.,

All things which have

smoke have fire; This hill

has smoke;

∴ This hill has fire; and

No non-fiery things have smoke;

This hill has smoke;

This hill is not non-fiery; i.e., This hill has fire.

In Indian logic a fallacy is called *hetvâbhasa*. It means that the middle term appears to be a reason but is not a valid reason. All fallacies are material fallacies. We have mentioned the five characteristics of a valid middle term. When these are violated, we have fallacies. Five kinds of fallacies are recognized:

(i) *Asiddha* or *Sādhyasama*: This is the fallacy of the unproved middle. The middle term must be present in the minor term (paksadharmatā). If it is not, it is unproved. It is of three

kinds—

(a) *äshrayäsiddha* : The minor term is the locus of the middle term. If the minor term is unreal, the middle term cannot be present in it; e.g., ‘the sky-lotus is fragrant, because it is a lotus, like the lotus of a lake’.

(b) *svarüpäsiddha* : Here the minor term is not unreal. But the middle term cannot by its very nature be present in the minor term; e.g., ‘sound is a quality, because it is visible’. Here visibility cannot belong to sound which is audible.

(c) *vyäpyatväsiddha* : Here vyâpti is conditional (*sopädhika*). We cannot say, e.g., ‘wherever there is fire there is smoke’. Fire smokes only when it is associated with wet fuel. A red-hot iron ball or clear fire does not smoke. Hence ‘association with wet fuel is a condition necessary to the aforesaid vyâpti. Being conditioned, the middle term becomes fallacious if we say: ‘The hill has smoke because it has fire’.

(2) *Savyabhichära or Anaikântika*: This is the fallacy of the irregular middle. It is of three kinds :

(a) *Sädharana*: Here the middle term is too wide. It is present in both the *sapaksa* (positive) and the *vipaksa* (negative) instances and violates the rule that the middle should not be present in the negative instances (*vipak- sästava*); e.g., ‘the hill has fire because it is knowable’. Here ‘knowable is present in fiery as well as non-fiery objects.

(è) *Asädhärana*: Here the middle term is too narrow. It is present only in the *paksa* and neither in the *sapaksa* nor in the *vipaksa*. It violates the rule that the middle term should be present in the *sapaksa* (*sapaksastava*); e.g., ‘sound is eternal, because it is audible. Here audibility belongs to sound only and is present nowhere else.

(c) *Anupasarhhäri* : Here the middle term is non-exclusive. The minor term is all-inclusive and leaves nothing by way of *sapaksa* or *vipaksa*; e.g., ‘all things are noneternal, because they are knowable.

(3) *Satpratipakça* : Here the middle term is contradicted by another middle term. The reason is counter-balanced by another reason. And both are of equal force; e.g., ‘sound is

eternal, because it is audible and 'sound is non- eternal, because it is produced. Here 'audible is counter-balanced by 'produced' and both are of equal force.

(4) *Bâdhita*: It is the non-inferentially contradicted middle. Here the middle term is contradicted by some other *pramāna* and not by inference. It cannot prove the major term which is disproved by another stronger source of valid knowledge; e.g., 'fire is cold, because it is a substance. Here the middle term 'substance becomes contradicted because its major term 'coldness is directly contradicted by perception.

(5) *Viruddha*: It is the contradictory middle. The middle term, instead of being pervaded by the presence of the major term, is pervaded by the absence of the major term. Instead of proving the existence of the major term in the minor term, it proves its non-existence therein; e.g., 'sound is eternal, because it is produced. Here 'produced, instead of proving the eternity of sound, proves its non-eternity. Here the middle term itself disproves the original proposition and proves its contradictory, while in the *savyabhichāra* the middle term only fails to prove the conclusion, and in the *satpratipaksa* the middle term is inferentially contradicted by another middle term both of which are of equal force, and in the *bâdhita* the middle term is non-inferentially contradicted and the major is disproved by a stronger *pramāna* other than inference.

Comparison

The third kind of valid cognition is *Upamiti* and its means is called *Upamāna*. It is knowledge derived from comparison and roughly corresponds to analogy. It has been defined as the knowledge of the relation between a word and its denotation. It is produced by the knowledge of resemblance or similarity. For example, a man who has never seen a *gavaya* or a wild cow and does not know what it is, is told by a person that a wild cow is an animal like a cow, subsequently comes across a wild cow in a forest and recognizes it as the wild cow, then his knowledge is due to *upamāna*. He has heard the word 'gavaya and has been told that it is like a cow and now he himself sees the object denoted by the word 'gavaya and recognizes it to be so. Hence *upamāna* is just the knowledge of the relation between a name and the object denoted by that name. It is produced by the

knowledge of similarity because a man recognizes a wild cow as a *gavaya* when he perceives its similarity to the cow and remembers the description that ‘a *gavaya* is an animal like a cow.

The Buddhists reduce *Upamāna* to perception and testimony. The Sāṅkhya and the Vaiśeṣika reduce it to inference. The Jainas reduce it to recognition or *pratyabhijñā*. The Mīmāṃsakas recognize it as a separate source of knowledge, but their account of it is different from that of Nyāya, which will be considered in the chapter on *Mīmāṃsā*.

Verbal Testimony

The fourth kind of valid knowledge is *Shabda* or *Agama* or authoritative verbal testimony. Its means is also called *Shabda*. It is defined as the statement of a trustworthy person (*āptavākya*) and consists in understanding its meaning. A sentence is defined as a collection of words and a word is defined as that which is potent to convey its meaning. The power in a word to convey its meaning comes, according to ancient Nyāya, from God, and according to later Nyāya, from long established convention. Testimony is always personal. It is based on the words of a trustworthy person, human or divine. Testimony is of two kinds— *Vaidika* and secular (*laukika*). The *Vaidika* testimony is perfect and infallible because the Vedas are spoken by God; secular testimony, being the words of human beings who are liable to error, is not infallible. Only the words of trustworthy persons who always speak the truth are valid; others are not. A word is a potent symbol which signifies an object and a sentence is a collection of words. But a sentence in order to be intelligible must conform to certain conditions. These conditions are four—*ākāṅkṣā*, *yogyatā*, *sannidhi* and *tātparya*. The first is mutual implication or expectancy. The words of a sentence are interrelated and stand in need of one another in order to express a complete sense. A mere aggregate of unrelated words will not make a logical sentence. It will be sheer nonsense, e.g., ‘cow horse man elephant. The second condition is that the words should possess fitness to convey the sense and should not contradict the meaning. ‘Water the plants with fire is a contradictory sentence. The third condition is the close proximity of the words to one another. The words must be spoken in quick succession without long

intervals. If the words 'bring, 'a, and 'cow are uttered at long intervals they would not make a logical sentence. The fourth condition is the intention of the speaker if the words are ambiguous. For example, the word '*saindhava*' means 'salt as well as a 'horse. Now, if a man who is taking his food asks another to bring '*saindhava*, the latter should not bring a horse.

The Nyāya admits only these four *pramānas*. *Arthāpatti* or implication is reduced to inference. For example, when we say: 'Fat Devadatta does not eat during day', the implication is that he must be eating during night otherwise how can he be fat? Mimāṃsā grants the status of an independent *pramāna* to implication. But Nyāya reduces it to inference thus:

All fat persons who do not eat during day,
eat during night; Devadatta is a fat person
who does not eat during day; Devadatta is
a fat person who eats during night.

Abhāva or non-existence which also is regarded as a separate *pramāna* by Bhāṭṭa Mimāṃsā is reduced here either to perception or to inference. *Abhāva* is non-existence of a thing and the same sense-organ which perceives a thing, perceives its non-existence also. If the thing is imperceptible and can only be inferred, then, its non-existence too may be equally inferred.