

## Chapter – v

### SOME CRITICAL OBSERVATIONS :

#### Criticism of Jaina view of Tarka:-

An objection has been forwarded against the *Jaina* view . It is a universal rule that in cognition other than perceptual, the cognition of the relation between it and the object is a necessary precondition of the cognition of the object. Say for example in inference cognition of smoke is the ground of the cognition of fire ; only because it is preceded or accompanied by the cognition of the necessary relation between the probans and the probandum. i.e. smoke and fire. *Tarka* is regarded as the species of knowledge different and distinct from perceptual one, so it also must follow this rule. Hence the very possibility of *Tarka* presupposes the possibility of the cognition of the relation between *Tarka* on the one hand and universal concomitance on the other. What is the source of this cognition ? Certainly perception has no authority of being the source of this knowledge as the jurisdiction of it is limited only to present data and universal concomitance is ex-hypothesi thought to extend beyond all limitations of space and time .

The inference also cannot be the source of the said knowledge as the fallacy called infinite regress comes into being. It cannot be supposed again that a second *Tarka* helps in deriving the knowledge of the relation between the first reasoning and its object, namely, universal concomitance. The second reasoning will be in the

same position as the first. So both of them are the subject of the same limitation. Nor again can any other organ of knowledge serve that purpose, since being different from perceptual cognition, it too presupposes the knowledge in question.

But the *Jainas* rule out the objection mentioned above proving to be soundless in the following way. They maintain that the said universal rule of knowledge of the *Naiyāyikas* is nothing but a result of hasty generalisation. No authentic ground can be established due to which perceptual cognition be the subject for the reservation concerned. Both perceptual and nonperceptual knowledge belongs to the same category, namely, knowledge. So none of them should be related to its object. But it does not mean that *Tarka* presupposes the cognition of that relation as a necessary precondition. It directly delivers the knowledge of the universal and necessary concomitance by its inherent and necessary power. So the very question of arising the said problem is absurd. The *Jaina* view again becomes the subject of another stronger objection. *Tarka* can be considered to be the source of knowledge only if it can deliver the knowledge of an objectively existent fact. And as the object of *Tarka* is the universal concomitance, our question is whether that concomitance is an objectively existent fact or not. If the said concomitance be an objectively existent fact then the two terms between which this concomitance is supposed to be held must be either in an identical area of space, or in a determinate period of time, or in both. But if we ponder over the problem very sincerely then we find that neither of the alternatives is true. For, firstly, for example, smoke and fire

between which universal concomitance is supposed to be held are not found to be spatially co-present. Fire exists in a particular part of the hill but the volume of smoke wanders in the sky. The same is true in the case of rainfall and flood between which a universal concomitance is thought to be held. This is about the first alternative. Now let us turn to the second alternative. Temporal co-presence between rainfall and flood also cannot be seen as there is no flood when there is rainfall and vice versa. Similarly, the rise of the star namely ,Rittika is supposed to be the ground of inference of the rise of Rohini. But they are not seen to appear simultaneously.

But this objection too has been beautifully answered by the *Jainas*. They observe that the problem in question arises because of a prevented misconstruction of the data of experience and the failure to distinguish between essential characteristics and unessential accidents . The relation of necessary concomitance is held between two terms in their essential character. Two terms are found to be related with each other because of the fact that the essential nature of one necessarily involves or presupposes the essential nature of the other. The essential natures, for example, of smoke and fire are smokeness and fireness respectively upon which the relation of universal concomitance is based. And as space and time are not essential character of anything, they have nothing to do with the relation in question. So the objection dealt with is proved to be groundless. The relation under consideration is held between fire as such and smoke as such without reference to time and space which inspite of being the unavoidable setting are nothing but external

determinations. In one sense, the *Jaina* thinkers are correct in describing *Tarka* which is otherwise known as *ūha* as a separate *Pramāṇa*. If we deeply ponder over this we may find the following justification in calling it a *Pramāṇa*. The derivative meaning of the term *Pramāṇa* is the instrumental to *Pramā* or valid cognition ( *Pramā – Karaṇam pramāṇam* ). As per this etymological meaning *Tarka* may be taken as the instrumental to *Pramāṇa* because through the application of it our cognition becomes confirmed. The *Jainas* are correct in considering this aspect of cognition. Not only sense – organ etc. serve as a mediator or instrumental to *Pramā* but also many things that somehow assist in generating true cognition is also *Pramāṇa*. From this point of view the *Jaina* and some of *Dvaita Vedāntic* schools admit *Tarka* as a valid cognition or instrumental to a valid cognition ( *Pramāṇa* ).

From the above discussion one may presume that the *Naiyāyikas'* position is weak as *Tarka* is not alone a *pramāṇanugrāhaka* or instrumental to *Pramāṇa*, but a *Pramāṇa* itself. This type of *Pramāṇatva* is accepted in the western logic where it is called indirect proof or proof by *Reductio – ad – absurdum*, which is called by the *Naiyāyikas* as a *Vipaksa – vādhakatarka*. There are two types of knowledge the definite knowledge and knowledge in the form of doubt. The doubt of deviation may arise in some cases from the doubt of an extraneous adjunct and sometimes from the knowledge of the common attributes between *Hetu* and *Sādhyā* like the co-existence etc. alongwith the absence of the knowledge of the specific characteristic features of them. That is to say, the absence of the

specific characteristic features of them. In other words, the absence of the knowledge of specific characters as well as common attributes like co-existence etc. give rise to the doubt of deviation. Such doubt can be removed by *Tarka* in Indian Philosophy which is called *Reductio – ad-absurdum* in the west. The main function of it is to remove the opposite stand point ( *Vipakṣavādhaka Tarka* ). Sometimes the removal of doubt is caused by the absence of the collection of causes of doubt ( *svataḥsiddha* ). ( *Jñānam niścayah śāṅkā ca. Sā ca Kvacidupādhisandehāt. Kvacit Vipakṣavādhakatarkāt, Kvacit svataḥsiddha eva' Tattvacintāmani, Vyāptigrāhopāya chapter* ).

According to Mathurānath, the removal of doubt is caused by another cause except *Reductio – ad – absurdum*. If there is the non-existence of other causes except *Tarka*, the absence of the causes or the absence of the collection of the causes is the cause of the removal of doubt. “ *Svataḥsiddha eva iti=itarakāraṇaviraḥasthale tādrsākāraṇaviraḥaprayukta evetyarthah*”.- *Nīlākanthi Prakāśikā* on T.S. p.263, Chowkhamba ).

*Tarka* is the limit of doubt, as it can be removed by the application of it. Hence, *Tarka* along with the perception of the co-existence of *Hetu* and *Sādhya* and non-perception of the deviation ( *Vyabhicāra* ) of the same becomes the cause of ascertaining *Vyāpti*. *Tarka* is a kind of hypothetical argument. Both the parts of *Tarka* are full of unreal thought. If smoke, as for example, is endowed with the doubt of deviation of fire, it would not be caused by fire. If the first part

is true , the second one would also be true. But it is known through experience that the second part is not true in so far as we do not get any smoke which is not caused by fire. From the falsity of the second half the falsity of the first half ( i.e. smoke deviated from fire ) is determined . So the doubt of deviation of fire with smoke can be removed by applying *Tarka* . In our daily life we remove doubt in respect of some object after following the method of argumentation. From the knowledge of the consequence the idea of antecedent is revealed. We generally aware of the intricacies of the method. *Tarka* as being a kind of mental construction, is useful in removing the doubt and hence *Tarka* is otherwise known as *āpatti* i.e, introduction of the undesired ( *anista* ) through which the truth is ascertained . It is called indirect proof for the following reasons. If the negation of p is proved as absurd, it would automatically follow that p is true. It may be argued that if *Tarka* is the basis of *Infinite Regress* ( *anavasthā* ), how can it be removed ? In reply, it can be said that in all cases of inference doubt does not arise hence there is no necessity of *Tarka*. If there is no doubt due to contradiction ( *vyāghāta* ), inference can be done without *Tarka*. ( *Samkāyā avadhīstarkah, tannivartakatvāt. Nanu tarkepi vyāpti-mūlakatayā tarkāntarāpekṣāmanavasthām — .T.C. "Na yāvadāsamkāṁ tarkaṅusaraṇāt . Yatra ca vyāghātena sāmkaiva nāvatarati tatratarakaim vinaiva vyāptigrāhaḥ" – Ibid ).*

From the above discussion it is proved that *Tarka* is the promoter to the ascertainment of *Vyāpti*, which is the pillar of inference. Why is it not called *Pramāna* as per definition – *pramākarāṇam pramāṇam* ? . Though the *Jainas* and others have

accepted it as a separate *Pramāṇa*, the *Naiyāyikas* are reluctant in admitting due to the following reason. Both the parts of *Tarka* are imaginary in nature which has no correspondence to the nature .

Had smoke been deviated from fire, it would not been caused by fire' ( *dhūmo yadi vahni – vyābhičārī syāt tarhi vahnijanyo na syāt* ). In the practical world smoke is deviated from fire and it is also known through experience that smoke is caused by fire. In spite of this a deliberately false cognition which is called *Tarka* has no character of *tadvati tatprakāratva* i.e an object associated with its own feature ( *prakāra* ) . A jar can be known as true , if it is associated with jarness, otherwise it is false. In the case of *Tarka* there is no possibility of *tadvati tatprakārakājnāna*, because the sentence represents an utopian or absurd idea from which another consequence of the same type follows . Hence both of the parts are false. It is true that sometimes false cognition can provide a true cognition through various means. It can never be said that if the means is true, the cognition may also be true always . Means may generate right cognition . If it is true, the 'means' may be taken as '*karana*' and the result attained through it is the result which is a *karma* here. If this is accepted there would arise a fallacy called *Kartr-karana-virodha*. ( i.e. contradiction between agent and instrument ) . The instrument as being a *Karana* cannot be described as *Kartā* or agent. Though we come across many passages where such usages are not maintained e.g. *Sthālyā pacati* ( cooking with a pot ) should be written as *sthāli pacati*, the usage – '*Kāṣṭhena pacati*' should be used as *kaṣṭham pacati* . In this way, we may find expressions which are figurative ( *lākṣaṇika* ).

Another vital reason can be shown for which *Tarka* is not regarded as an independent instrument of knowledge by the *Nyāya* thinkers. We know that an argument is taken to be a valid inference if it fulfills some conditions prescribed. There are some prescribed conditions and two types of truths i.e. formal truth and material truth are among them. If the conclusion of any argument is deduced from its premise or premises by following the relevant rules then that argument can be taken to be formally true. And if the premise or premises and the conclusion of any argument correspond to the fact then that argument is said to be materially true.

Some arguments are there having both formal as well as material truth. No one questions the validity of these arguments. Sometimes we meet some arguments which have neither the formal truth nor even the material truth. So these arguments are admitted to be invalid by all. Again some arguments are found which have the formal truth only. And the validity of these arguments appears to be a controversial issue to the philosophers. The western philosophers are of the opinion that these arguments are also valid. But the Indian philosophers, on the other hand, maintain that these arguments are invalid.

*Tarka* or reasoning only satisfies the formal conditions of inference in as much as it is based upon the necessary connection between the opponent's position, which serves the purpose of the logical ground i.e premises and the absurd issue, which follows as a



necessary consequence. But *Tarka* cannot satisfy the material truth, for, the premise of it does not correspond to fact. Say in the case of the example cited water in fact allays thirst. So *Tarka* is an argument belonging to the third type just mentioned as it does not have any material truth and this is another important reason for which *Nyāya* thinkers do not accept *Tarka* as a valid inference and thereby as an independent instrument of knowledge.

### Criticism of Bauddha and Jaina view of Tarka :-

The *Jaina* and the *Buddhist* view of *Tarka* can be criticised from the very analysis of the definition of the same given by them. In defining *Tarka* they maintain – “ *Uplambha-anupalambha nimittam Vyāptijñānam Ūha*” . As far as this definition of *Ūha* or *Tarka* is concerned *Vyāptijñāna* and *Tarka* are one and the same , i.e. they are identical. When it is said – ‘ *Vyāptijñānamūhaḥ,*’ it suggests that *Vyāptijñāna* itself is *Ūha* known through their identical statement. From the identity of *Vyāptijñāna* and *Tarka* a number of problems crop up which can be shown as follows :-

It is a matter of common sense that there must be a difference between the cognition and the instrument of the same . This difference holds good as far as the *Nyāya* concept of *Tarka* is concerned. The *Naiyāyikas* maintain that *Tarka* is employed to ascertain the knowledge of *Vyāpti* which is the pillar of inference. So, one is the cognition and other is the instrument of that cognition. But the *Jaina* and the *Buddha* view of *Tarka* denies the difference in

question by identifying one with another and thereby contradicts the common-sense view accompanied by the *Nyāya* one. It is stated in *Nyāya* that *Tarka* is the means through which an inferential cognition is possible by way of removing the doubt of deviation. Hence, *Tarka* is to be taken as an instrument to the attainment of valid cognition. In this sense *Tarka* can be taken as an instrument of valid cognition ( *pramā-karaṇam* ) and hence one could give the *Tarka* a status of *Pramā*. But the *Buddhists* and *Jainas* do not accept any difference between *Pramā* and *Pramāṇa*.

The above problem again brings forth another problem in turn. The difference between *Karāṇa* and *Karma* is also an established truth. But if we agree with the aforesaid definition of *Tarka* as given by the *Jaina* and the *Buddha* then this well-accepted distinction also cannot be maintained. As per the *Jaina* and *Buddha* view, *Karāṇa* merges into *Karma* and vice versa. If it is said that the cognition of *Vyapti* is equivalent to *Tarka* then there would arise a defect called *Karāṇa-Karma-Virodha* i.e a defect centering the contradiction between *Karāṇa* and object ( *Karma* ). Each and every *Kārika* has been accepted by the *Grammarians* to fulfil a specific purpose. The linguistic formation is made as per rule of the *Kārika*. In this way a grammatically incomplete sentence comes into being. An entity which is an agent can never be object at the same time. If some one tries to do it, it will lead to the said defect.

To substantiate the view that there is no difference between cognition and the instrument of the same, and between *Karāṇa* and

*Karma* the *Buddhists* resort to their famous theory called *Kṣanabhaṅgavāda*. The *Buddhist* theory of momentariness states that each and every thing changes moment to moment. The difference under consideration becomes plausible if and only if we admit that a thing at least at two moments remains unchanged . At the first moment the instrument or *Karaṇa* takes place and at the next moment cognition or *Karma* takes its birth. Following the theory of momentariness we can maintain that at the first moment there is no cognition or *Karma* when there is the instrument or *Karaṇa*, and again at the second moment there is no instrument or *Karaṇa* when there is cognition or *Karma*. That is to say, they are not co-existent . But without being co-existent how one can be caused by another ? Due to this reason the *Buddhists* hold that the cognition and the instrument to it , and *Karaṇa* and *Karma* are identical . So, it is found that as long as the *Buddhist* view of momentariness is concerned the concept of *Tarka* as maintained by the *Bouddha* school somehow be accepted. But the *Jaina* view of the same cannot be justified due to the lack of any proper ground.

But if we ponder over the problem we can find out some limitations even in the *Buddhist* view . In maintaining the distinction between valid ( *avisamvādi* ) and invalid ( *visamvādi* ) cognition the *Buddhists* resort to the idea of successful inclination ( *pravṛtti – sāmārya* ) . Say for example , one perceives water at a long distance. Now if he has to justify the validity of his perceptual knowledge under discussion then he has to go to that place where he sees water and has to test it by drinking . If drinking is possible and

allays thirst then the knowledge in question is proved to be true, but if it is otherwise then the same be proved as invalid. But it seems to us that here they forget their theory of momentariness . If the theory of momentariness is true then the test of the validity of knowledge through *Pravritti-sāmarthya* cannot be possible . The cognition and the test of the same can not be possible at the same moment of time . Cognition comes into being at one moment and the test of it is carried at another moment . Being agree with momentariness we can say that both of the cognition and the test of it cannot be simultaneously existent. So, if the *Buddhist* theory of momentariness is true then they cannot hold the distinction between valid and invalid knowledge through *Artha-Kriyā- Kāritva*. And again if they are to maintain the latter, they have to deny the former ( the theory of momentariness) . They cannot maintain both of them as it would be self- contradictory. If the *Buddhists* maintain the distinction in question by rejecting their theory of momentariness, then they are pushed to go to the shade of the same umbrella of the *Naiyāyikas* that cognition and the instrument to the same are different. From this it also follows that the cognition of *Vyāpti* and *Tarka* , the instrument are not identical. This implies that the definition of *Tarka* of the *Buddhist* already mentioned cannot be accepted.

Though the *Buddhists* and the *Jainas* have not accepted the distinction between *pramā* and *pramāna*, the *Buddhists* view in this regard can some how be admitted, because they feel that an object is perceived for only one moment. Hence the object itself is *Svalaksana* ( self-illuminated ). A cognition originates at the same

moment when other factors like *prāmānya* etc. originate. Hence there is no meaning in distinguishing factor through which *prāmānya* can be distinguished from *pramāna*. An entity known after a moment is called *Sāmānyalaksana* which is generally taken as *anumāna*. The objects exist for a single moment is *śalakṣaṇa* but not *sāmānyalaksana*. Due to having such metaphysical presuppositions the philosophers change their views keeping these in mind. The *Buddhists* believe in the theories of *Kṣaṇabhangavāda*, no-soul etc. which actually preoccupied their mind when they suggest a definition. Why do the *Jaina* – philosophers accept the view? Because they do not possess exactly the same position of *Buddhists*. There is no point in believing *Kṣaṇabhangavāda*, no soul theory etc. Hence, *Buddhist's* logic cannot be applied here.

There is another paradox according to the *Buddhists*. Though to them each and every object is momentary which is the mark of being *sat* existent as per the famous dictum- '*Yat sat tat kṣaṇikam*', I do not think that this is logically a tenable position. A momentary entity is existent. Though this is a famous dictum, one can raise a question how the existence of an entity can be proved through momentariness? A moment is too minute that there is no way to test its existence. To know that something exists depends on its causal efficacy (*arthakriyākāritva*) which again creates a problem. It is also said that an entity is said to be existing if and only if it has got some causal efficacy (*arthakriyākāritvalakṣaṇam sat*). Is it possible to know the causal efficacy of an object in a single flush of moment? Obviously not. Because, if we want to test that our acquired

knowledge of water is real or not, we need a few moments to judge. When we come to conclusion that the acquired cognition is correct the object about which the judgement is passed is changed. Hence, it is not correct to say for the *Buddhists* that the cognition of *Vyāpti* attained through the method of agreement and difference is called *Vyāpti*.

### Criticism of Tarka in Vaisesika System:-

*Tarka* of *Vaiśeṣika* is generally classified into two kinds *vicārātmaka Tarka* and *samsāyātmaka Tarka*. *Samsāyātmaka Tarka*, I think, is highly defective and therefore, cannot be accepted. Both Śivāditya and Mādhva Samaswati observe that either *Tarka* is included by doubt or it itself is doubt. But actually this is not the case. The principal function of *Tarka* as admitted by the majority is to remove the doubt and thereby paves the way of the other means of knowledge. So, the very fact that *Tarka* is the remover of doubt, clearly implies that it is neither included by doubt nor it itself is doubt. If *Tarka* were identical with doubt or included by doubt then it could not eliminate doubt, for doubt itself cannot remove doubt, as darkness itself cannot eliminate darkness. Therefore, by identifying *Tarka* with doubt, both Śivāditya and Mādhva Samaswati have not done justice to the concept.

But *Vicārātmaka Tarka* is free from the defect mentioned above and much more superior to *samsāyātmaka Tarka*. The form of this type of *Tarka* is more or less similar to that of the *Tarka* of *Naiyāyikas*. *Vicārātmaka Tarka* resembles to that of the *Naiyāyikas*

not only in form but also in purpose. Sridhar Bhatta maintains that through the application of *Tarka* the doubt raised by the opponent is ruled out and thereby the knowledge in question is established indirectly. The *Naiyāyikas* also observe the same.

But the *vicārātmaka Tarka* also is not absolutely free from all sorts of defects and limitations. Śridhar Bhatta holds that *Tarka* is applied to remove doubt in the field of metaphysics. So, the use of the *vicārātmaka Tarka* is confined only to metaphysical world . But the application of *Tarka* in the physical world also should not be undermined in any way and that fact can easily be understood through our day to day experience. For example, if the inferential knowledge of fire in the hill through the perceptual knowledge of smoke in it becomes the subject of doubt then that doubt can be eliminated by the application of *Tarka*. This has been already discussed following the line of the *Naiyāyikas*. Here *Tarka* is used to remove doubt in the physical world. So, *Vicārātmaka Tarka* suffers from the fallacy of undercoverage.

A controversy is seen between *Naiyāyikas* and Śridhar Bhatta regarding the nature of *Tarka*. The *Naiyāyikas* are of the opinion that *Tarka* should be considered as a promoter to the *pramana* whereas, Sridhar Bhatta observes that *Tarka* as advocated by the *Vaiśeṣika* should be regarded as a *pramāṇa*, but not as a promoter to a *pramāṇa*. Furthermore, the *Naiyāyikas* opine that *Tarka* is an invalid knowledge but Sridhar Bhatta, on the other hand, maintains that *Tarka* of *Vaiśeṣika* is a valid knowledge.

Śrīdhara Bhaṭṭa, in order to establish his own view, says that *Tarka* performs some sort of activity. It serves some purpose. *Tarka* is adopted by one to establish his own view by rejecting its contrary view raised by his opponent. Unless and until the contrary view is ruled out as an impossibility the own view of the subject concerned cannot be established. So, the establishment of one's own view necessarily presupposes the proof of the absurdity of the contrary view. It is *Tarka* through which the contrary view is proved as absurd. So, the principal function of *Tarka* is to prove the opponent's view as an impossibility. Śrīdhara holds that if *Tarka* were invalid, as maintained by the *Naiyāyikas*, then it would not serve the purpose mentioned.

But the argument produced by Śrīdhara Bhaṭṭa, in support of his own view, is not sound at all. Performance of some activity or satisfaction of some purpose is not defining mark of a valid knowledge. If it were so, then dream, illusory perception and even hallucination would have been valid knowledge as some sort of function or purpose is satisfied by them also. In an illusory perception, for example, one perceives a snake in the place of a rope and crosses it by jumping. So, here, illusory perception makes one jumping and thereby performs some sorts of activity.

Hallucination also may serve some sorts of activity by making one frightened. Let us suppose, one is crossing a grave yard at night in a dim light of the moon. Suddenly, he perceives someone as



standing at some distance. But just after an interval, at the next moment he finds no one as standing there. Naturally, he gets nervous thinking it as a ghost. So, here, the activity of making one nervous is served by hallucination.

The same is true in the case of dream also. As far as the explanation of dream given particularly by Sigmund. Frued and his followers is concerned our mind consists of Id , ego and super – ego. Id has a lot of desires to satisfy. But ego and super – ego stand against the satisfaction of some of them thinking of the prohibition imposed by our society. In dream, these unsatisfied desires of Id, become satisfied. So, our dream serves the satisfaction of some desires of our mind. So, on the basis of the above discussion it can be maintained that if owing to the performance of some activity or satisfaction of some purpose *Tarka* is regarded as valid cognition then illusory perception, hallucination and dream too should be considered as valid one. But Śrīdhar himself does not accept the validity of the latters as cognition. So, how can the validity of *Tarka* as knowledge be maintained ?

*Tarka* conforms to the definition of invalid cognition given by the *Naiyāyikas*. The definition of invalid cognition ( *apramā* ) given in TS stands : “ Non – veridical *anubhava* is a cognition which has for its determinans ( *prakāra* ) something , when its determinandum ( *visēṣya* ) is characterised by the absence of that something.” Let us suppose, someone is going to infer the existence of fire in the hill on the perception of smoke in it. Here if one doubts

the existence of fire in the hill in spite of the perception of smoke in it, then the inferer concerned resorts to *Tarka* in the following way, to establish his own view proving his opponents' view as an impossibility. "If there were no fire, then, there would be no smoke". Here *Tarka* has for its determinans ( *prakāra* ), absence of smoke, but its determinandum ( *visésya* ) is actually characterised by the absence of the absence of smoke. That is why, the *Naiyāyikas* regard *Tarka* as an invalid cognition. And as far as our discussion is concerned the observation of the *Naiyāyikas* is correct.

The view of Sridhar Bhatta that *Tarka* is an independent *pramāna*, but is not a promoter to a *pramāna* as the *Naiyāyikas* hold, cannot be accepted. *Tarka* should not justifiably be considered as a *pramāna* for the following two reasons:-

First, a *pramāna* must have a direct bearing upon the ascertainment of truth. The main characteristic features of the object of knowledge are deliberated through *pramāna*. But *Tarka* has no any direct bearing, rather it has an indirect bearing upon the determination of truth. *Tarka* by pointing out some real grounds asserts one of the alternatives, but it does not point out this alternative definitely as having such and such characteristics. In other words, *Tarka* does not definitely assert a particular alternative, in the form, 'This object is of such nature'. So, the main characteristic features of the object are not deliberated through the method of *Tarka*. The real nature of an object be known only through the relevant cognitive instrument like perception, inference etc.

Second, *pramāṇa* is adopted to ascertain the knowledge of an object, whereas, *Tarka* is applied to eliminate doubt which acts as an impediment to the attainment of knowledge. *Pramāṇa* is applied independently to other *pramāṇas*. But the application of *Tarka* is not independent of other *pramāṇas*. Say for example, to know the colour of the flower in my garden I have to resort to perception. Here application of other *pramāṇas* before hand is not essential. That is to say, the application of a *pramāṇa* does not necessarily pre-suppose the application of other *pramāṇas*. The application of one *pramāṇa* may be preceded by that of another *pramāṇa*. Say for example, I can infer the existence of fire in the hill on the perception of smoke in it. But to be sure of it I may go to the hill and have a perception. Here inferential knowledge is confirmed by perceptual one. Prior application of one *pramāṇa* of the other is desirable but not essential. But *Tarka* is adopted only when some independent means of knowledge is applied before hand. In other words, the application of *Tarka* necessarily pre-supposes the application of other *pramāṇas*. If some means of knowledge is already applied but it cannot operate its proper function due to the imposition of doubt only then *Tarka* is resorted to in order to eliminate the doubt in question. These are the above two reasons because of which *Tarka* cannot be regarded as a means of knowledge.

But though *Tarka* does not directly issue any knowledge , it becomes an auxiliary factor in issuing it ; just by eliminating the doubt, the impediment on the way of the ascertainment of knowledge.

So, the *Naiyāyikas* are quite justified in their observation that *Tarka* is not a *pramāṇa* but a promoter to a *pramāṇa*.

Criticism of Tarka in Samkhya system:

A little consideration will reveal the fact that though *Tarka* has been admitted both by the *Śāṅkhya* and the *Nyāya* yet both of them cannot demand for the same credit. *Nyāya Tarka* is much more superior to and sophisticated than *Śāṅkhya*.

The application of *Tarka* in *Śāṅkhya* system is limited only to the vedic world. But they should keep in their mind that the vedic world is not the only world. Over and above we have another world of our day to day life the importance of which cannot be ignored in any way. And very often we are to confront with various types of burning controversy on different issues of our practical life, a great number of them can easily be solved taking recourse to *Tarka* which is beautifully shown by the *Naiyāyikas*. So, no doubt, the *Tarka* conceived by the *Śāṅkhya* is vitiated by the fallacy of one – sidedness.

Besides this , *Tarka* of *Nyāya* system is more sophisticated than that of *Śāṅkhya*. *Tarka* , particularly admitted by the *Navya Nyāya* is highly logical, consistent and coherent.

### Criticism of Tarka in Mimamsa system:

*Tarka* as forwarded and conceived by Kumāril Bhaṭṭa more or less becomes the subject of one and the same charges which have been raised just above against the concept of *Tarka* as accepted in *Sāṃkhya*. For this *Tarka* also is applicable only to the vedic world or the world of *dharma* and therefore vitiated by the fallacy of onesidedness. Moreover, the logical excellence of this *Tarka* cannot be compared with that of the *Tarka* of *Naiyāyikas*.

But these two charges can not justifiably be applied in the case of Nārāyana Bhaṭṭa. His *Tarka* overcomes the limitation which is found in the *Tarka* of Kumānila Bhaṭṭa. This *Tarka* can be applied not only in the field of *dharma* but also in the field of our day to day life. Besides, the very purpose for which *Tarka* is employed by Nārāyana, is more or less one and the same with the purpose due to which *Tarka* is accepted and applied by the *Naiyāyikas*. Nārāyana Bhaṭṭa like the *Naiyāyikas* describes *Tarka* as *anistāprasanga*, limit of the doubt etc. The *Tarka* conceived by Nārāyana Bhaṭṭa is also logical and consistent like that of *Naiyāyikas* to some extent.

### Criticism of the Advaita and Viśiṣṭādvaita view of Tarka :-

In dealing with the *Tarka* as conceived and discussed by *Advaita* and *Viśiṣṭādvaita Vedānta* in the previous chapter we have

seen that *Advaita Vedāntins* consider *Tarka* as a promoter to a *pramāṇa* of vedic testimony . Whereas, the *Vishishtādvaitins* regard *Tarka* as a separate and independent *pramāṇa*. So, the *Advaitins* agree with the *Naiyāyikas* as far as they maintain that *Tarka* plays the role of a promoter to a *pramāṇa*. But they disagree with the same as long as they hold that *Tarka* acts as a promoter to a *pramāṇa* only to the Vedic testimony. Here the *Advaitins* face one and the same objection which was raised earlier against the *Sāṃkhya* and Kumārila Bhatta that *Tarka* as conceived by them is vitiated by the fallacy of one sidedness as they hold that the use of *Tarka* is limited only to the Vedic world. We have already seen in the previous chapter particularly in dealing with the concept of *Tarka* of the older *Naiyāyikas* that *Tarka* is applied as a promoter not only to the Vedic testimony but to the other *pramāṇas* as well.

In criticising the *Viśiṣṭādvaita* view of *Tarka* it can be maintained that both the *Jaina* and *Viśiṣṭādvaita Vedānta* more or less become the subject of one and the same charge already mentioned in the criticism of *Jaina* view of *Tarka*, as both of them observe that *Tarka* should be considered as a separate and independent means of knowledge. We need not discuss the same thing to avoid repetitions.

#### Criticism of Tarka in Mādhva's school :-

As long as the observations of Jayatīrtha, as found in his works *Pramāṇapaddhati* and *Nyāyasudhā* and of his commentator, Janārdana Bhatta from the view point of *Mādhva's* school are

concerned it is seen that they vehemently criticise the status of *Tarka* as an auxiliary factor to the instrument of knowledge as given and stated by the *Naiyāyikas*. They hold that *Tarka* or reasoning should be considered as an independent and separate means of knowledge for it fulfils all the necessary as well as sufficient conditions for being so. So, as *Tarka* itself is an independent means of knowledge, it cannot justifiably be taken as an auxiliary factor to it as the *Naiyāyikas* hold. They maintain that the form of reasoning exactly tallies with that of inference. The ground of reasoning which is hypothetically assumed and the conclusion of it stands for the probans and the probandum of inference respectively. Besides, necessary concomitance is the foundation and nerve centre for both of the inference and reasoning. That is why, they regard reasoning as a species of inference. Being a species of inference *Tarka* like inference is a separate and independent instrument of knowledge, but is not a helping condition to it.

No doubt, the arguments produced by Jayatīrtha and Janardana Bhatta to substantiate their own view by negating the view of *Naiyāyikas* are apparently seemed to be excellent and sound. But I think that if we ponder over them then it can be understood that actually they are not as excellent and sound as they appear to be. Weakness and falsity of those arguments will reveal to us if they are considered in the light of the definition, characteristics and the test of a proper instrument of knowledge as suggested and stated by *Naiyāyikas*. One of the vital questions the theory of knowledge deals with is how the validity of *pramāna* be established? The *Niyāyikas*

say in reply that it is inference through which the validity of *pramāṇa* be established. The inference is as follows :-

Pramāṇam arthavat, Pravrttisāmarthyāt :-

That is, *pramāṇa* is invariably connected with the object it indicates, since it gives rise to successful activity. And by 'Pramāṇa which is invariably connected with the object it indicates' it means that an object as well as its nature as indicated by the *pramāṇa* are really so and never otherwise. A pseudo -*pramāṇa* or instrument of knowledge cannot be invariably related to the object it indicates. So, the object and its nature as indicated by a pseudo-*pramāṇa* is not really so. The validity of the instrument of knowledge is the inference of the invariable relationship between instrument and the object it indicates. The probans of this inference is *pravrttisāmarthya* which means the capability of producing successful activity. *Pramāṇa* produces successful activity for it is invariably related to the object it indicates, whereas, a pseudo-*pramāṇa* does not do so, as it is not invariably related to the object it indicates. Say for example, the pseudo perception of water in mirage cannot lead to the quenching of the thirst but a genuine perception of water leads to the same. Now if the validity of *Tarka* or reasoning as *pramāṇa* is tested in terms of the inference mentioned then it can easily be understood that *Tarka* cannot be regarded as *pramāṇa* proper. It is not *pramāṇa* for it is not invariably connected with the object it indicates. That is to say, object as well as its nature as indicated by *Tarka* are different from what they actually are. And owing to that reason *Tarka* cannot lead to a



successful activity. This can be illustrated by citing an example to get a clear conception that *Tarka* cannot properly be considered as *pramāṇa* since it does not fulfil all the necessary and sufficient conditions for being a *pramāṇa* as it is held by Jayatīrtha and Janārdana. "If there were smoke in the lake then there would be fire too" – is a form of *Tarka*. Here, the object indicated by *Tarka* is the presence of fire in the lake. But, in fact, there is no fire in the lake. So, *Tarka* is not invariably connected with the object it indicates and thereby it cannot lead to a successful activity. As far as our foregoing discussion is concerned it is evident that the necessary condition for being a *pramāṇa* is not satisfied by *Tarka* as long as it is not invariably connected with the object it indicates. That is why *Tarka* or reasoning cannot be properly taken as *pramāṇa*. So, the view of Jayatīrtha and Janārdana cannot be accepted.

Here a number of objections raised by the *Naiyāyikas* against the view of Jayatīrtha and the defences from the part of him be noted down and ultimately my personal reflection against these defences of Jayatīrtha be recorded.

First, to my mind, the view of Jayatīrtha and Janārdana that *Tarka* is a species of *anumāṇa* falls from its ground if it is considered from the point of view of the very meaning of the term '*anumāṇa*'. The term '*anumāṇa*' consists of two different terms '*anu*' and '*māṇa*'. '*Anu*' means latter and '*māṇa*' means knowledge. So, the etymological meaning of the whole term '*anumāṇa*' is the knowledge that follows some other knowledge. In other words, *anumāṇa* is a kind of

knowledge that comes depending upon some other knowledge. So, it is an indirect knowledge. But the knowledge depending upon which *anumāna*, the indirect knowledge comes into being, must be direct one. And being direct it necessarily be perceptual knowledge, since perceptual knowledge is the only direct knowledge as particularly the *Navya-Naiyāyikas* maintain. Let us explain this by citing an example. Let us suppose one perceives smoke arising from hill and infers that there is fire in it. Here the knowledge one ascertains through inference is the knowledge of the existence of fire in the hill. And this knowledge is based upon the perceptual knowledge of smoke in the hill accompanied by the knowledge of necessary concomitance between smoke and fire. If one does not perceive smoke in the hill and does not know that where there is smoke there necessarily be fire then the very question of one's inferring the existence of fire in the hill does not arise at all. So, the perceptual knowledge is a necessary pre-requirement for the inferential knowledge. Now keeping this in view, let us examine whether *Tarka* satisfies this necessary precondition for being an inference. In the case of *Tarka* also it is seen that the knowledge established through it necessarily follows some other knowledge i.e. the knowledge of the ground alongwith the knowledge of the necessary concomitance between the ground and the consequent. But it is worthy to note that the knowledge of the ground is not a perceptual one like that of inference. Rather it is just an assumption. So, *Tarka* cannot fulfil the said necessary pre-requirement of having the perceptual knowledge as its ground which is the case with inference. Moreover, unlike inference reasoning or *Tarka* negates its conclusion what is perceptual depending upon the

assumption in its ground. In inference, indirect knowledge is established on the ground of the direct knowledge. whereas , in *Tarka* direct knowledge is negated on the basis of indirect knowledge or assumption . Now let us explain this point with the help of an example. Let us suppose that A infers the existence of fire in the hill on the basis of his perceptual knowledge of smoke in it. Let us again suppose that 'B' inspite of entertaining 'A's perceptual knowledge of smoke in the hill. does not accept his inferential knowledge of fire in it ( hill). Now to stand his own view and to negate his opponent's i.e. 'B' s view 'A' resorts to *Tarka* in the following way :- 'If there were no fire in the hill, then there cannot be smoke in it.' Here this *Tarka* can be divided into two parts – ' If there were no fire in the hill' and 'then there can not be smoke in it.' The first part is called *āpādaka* or ground and the second part is known as *āpādya* or conclusion. Here in this *Tarka* , like in inference, conclusion or *āpādya*, i.e. the absence of smoke is deduced on the basis of the ground or *āpādaka*. i.e, the absence of fire accompanied by the knowledge of the necessary and universal concomitance between the ground ( *āpādaka*) and the conclusion ( *āpādya* ). But here the knowledge of the ground, i.e, the knowledge of the absence of fire is not perceptual like inference rather it is an assumption. In *Tarka* depending upon the assumption, i.e. the absence of fire in its ground the direct or perceptual knowledge of smoke in its conclusion is negated.

Secondly, Jayatīrtha and Janārdana can be charged from the view point of another special characteristics of Indian Logic called *Pakṣadharmatā* i.e. the presence of probans in the subject. This

characteristic is not satisfied by *Tarka* as the ground of it which stands for the probans of inference is not present in the subject. In the example already cited the smoke is not present in the lake. So, *Tarka* cannot be considered as a case of *anumāna*. But here Jayatīrtha observes that this characteristic is not a necessary condition for an *anumāna*. He further maintains that what is necessary is the belief in the presence of probans in the subject. And this condition is fulfilled by *Tarka* as far as the opponent is concerned, since he believes in the presence of the ground in the subject. Say for example, the opponent believes in the presence of smoke in the lake. So, according to Jayatīrtha, all the necessary conditions of inference are fulfilled by *Tarka* and that is why it is a species of inference.

Thirdly, The *Naiyāyikas* observe that a charge of a fallacy of contradicted probans ( *bādha* ) be advanced against the inferential status of *Tarka* as maintained by Jayatīrtha as the probandum which is necessarily deduced in *Tarka*, does not actually belong to the subject. Say for example, in the case of *Tarka* " If there were smoke in the lake then there would be fire too" both the probans, namely, the presence of smoke and the probandum, namely, the presence of fire, do not exist in the subject, lake. The *Naiyāyikas* further hold that another objection called the fallacy of the admission of a contrary conclusion ( *apasiaddhānta* ) be raised against the view of Jayatīrtha, since, the arguer concerned infer an unreal probandum in opposition to his previous commitment regarding the absence of the probandum.

Jayatīrtha replies to the aforesaid objections by maintaining that the charges of contradiction be applied only in the case of inference where the person in question intends to establish the conclusion independently. But in the case of *Tarka* the arguer does not like to establish the conclusion independently, rather he seeks to establish the same on the ground of the admission of the opponent. The arguer, in *Tarka*, demonstrates only the logical connection between the ground and the consequent. In other words, the arguer likes to imply that the admission of the ground necessarily entails the admission of the consequent, but he does not like to imply that the ground and the consequent are actual historical truth. Thus Jayatīrtha shows that the charges of contradicted reason and contradiction of the accepted position do not hold good in the case of *Tarka*.

Fourthly, the *Naiyāyikas* argue that in the case of *Tarka* the necessary concomitance between the probans and the probandum is not real, since the probans, namely, the presence of smoke and the probandum, namely, the presence of fire do not co-present in the subject, lake. And this falsity of the necessary concomitance invalidates the claim of Jayatīrtha that *Tarka* is a case of inference. But Jayatīrtha, from the view point of *Mādhvās*, replies to the objection by saying that the said objection is nothing but a result of misconception of necessary concomitance. He observes with the *Mādhvas* and the *Jainas* that necessary concomitance between the probans and the probandum is not necessarily one of co-existence in the same substratum. Necessary and universal concomitance be established where the one term cannot be conceived to be possible

without the presence of the other. Spatio-temporal co-presence is not a necessary factor of universal concomitance. Besides this, the the *Mādhvas* and the *Jainas* hold that the objective concomitance between the ground and the consequent is not a necessary requirement in *Reductio-ad-absurdum* called *Tarka*.

Fifthly, another vital objection has been shown by the *Naiyāyikas* against the inferential status of *Tarka*. The conditions of inference proper and that of *Tarka* are basically different and this difference, in turn, brings a fundamental difference in the character of the result. Accredited inference entails categorical assertions and the probans of it is admitted to be materially true by both the parties, the opponent and the proponent, whereas, *Tarka* consists of a hypothetical minor premise and the probans affirmed of the subject is materially false. This difference gives birth to another material difference in the result. In the inference proper the result is a true conclusion, but in the case of *Tarka* the conclusion is a false issue. But, in response to this objection Jayatīrtha maintains that though the difference in conditions appears to be fundamental but actually this is not the case. The fundamental conditions of both of the categorical inference and the hypothetical inference called *Tarka* are one and the same. So, the aforesaid difference of conditions actually is nothing but a negligible one. And this negligible difference in conditions does not entail a fundamental difference in the character of the result.

But as far as my personal observation is concerned the aforesaid five defences of Jayatīrtha against the five objections mentioned above

are not actually sound and firm footed as they appear to be. One of the fundamental differences between the Western and the Indian logic lies in the fact that while the former aims at satisfying only the formal condition, the latter aims at satisfying both the formal and material ones. In so far as an inference follows all the rules prescribed for it, the inference is said to have fulfilled its formal condition, whereas, as long as the premise or premises and the conclusion correspond to the fact an inference is said to have satisfied its material condition. Now keeping this point in view it can be maintained that *Tarka* can not be regarded as a case of inference for even if it satisfies the formal condition, it can never meet the material one as neither the ground nor the consequent of it which are taken to stand for probans and probandum or conclusion of inference respectively correspond to the fact. In the case of the example mentioned above neither smoke nor even fire is seen to exist in the lake. Thus Jayatirtha's defences are proved to be groundless.

Even if *Tarka* is judged from the view point of the defining characteristics of knowledge as suggested and stated by the Western philosophers, *Tarka* cannot be taken as a case of knowledge in the true sense of the term. Even if we put aside the fourth condition of knowledge as suggested by E.L. Gettier knowledge be defined as justified true belief. As far as this definition is concerned the following three conditions are the necessary and sufficient conditions for knowledge :-

(1) Belief condition, (2) Truth condition and (3) Justification condition. More clearly to say, if one claims to know a proposition called *p*, then his claim be valid if and only if firstly he believes that *p* is true, secondly, *p* is really true and thirdly, he is justified in his belief that *p* is true. Now let us examine whether *Tarka* fulfils these three necessary and sufficient conditions of knowledge. The *Mādhvas* and the *Jainas* maintain that *Tarka* is a case of knowledge proper and it subsumed under inference. The ground and the consequent in *Tarka* stand for the probans and the probandum respectively in inference. Inference aims at providing the knowledge of the probandum on the basis of the knowledge of the probans accompanied by the knowledge of the necessary concomitance between the probans and the probandum. Likewise, *Tarka* demonstrates the knowledge of the consequent on the basis of the knowledge of the ground accompanied by the knowledge of the necessary concomitance between the ground and the consequent. Keeping this similarity in view Jayatīrtha also observe that *Tarka* is a case of knowledge and a sub-species of inference. But only keeping this aforesaid similarity in view it should not be justified to identify one with another. If we ponder over the problem we see that inference and *Tarka* differ, one from another, to a great extent. Inference satisfies all the necessary and sufficient conditions of knowledge mentioned, whereas *Tarka* does not fulfil the same. This can be illustrated clearly by citing a concrete example. Let us suppose, 'A' infers the existence of fire in the hill on the basis of his perception of smoke in it. Here in this inference first he believes in the existence of fire in the hill, secondly his belief is true since fire really exists in the hill and thirdly his belief is



justified by virtue of his perceptual ( perception of smoke) and rational ( necessary concomitance between smoke and fire) evidence. Inference is a case of knowledge proper, for it fulfils these three conditions. But *Tarka* does not meet these conditions. Let us suppose that 'B' also perceives smoke in the hill but yet he raises objection against the inference of the existence of fire in it. Now 'A' resorts to *Tarka* in order to negate the position of 'B' in the way : " If there were no fire then there cannot be smoke." Here in this *Tarka* absence of fire is the ground or probans and absence of smoke is the consequent or probandum. Let us suppose P stands for the consequent or probandum. Here, neither the opponent 'B' nor even the arguer 'A' believes in P. Secondly, P is not true , for actually hill is qualified not by the absence of smoke but by the presence of smoke. Thirdly, since none of 'A' and 'B' believes in P the very question of the justification of their belief is absolutely absurd . So, as far as *Tarka* is concerned, it is seen that the necessary and sufficient conditions of knowledge as prescribed and stated by the Western philosophers are not satisfied. Thus it is proved once again that *Tarka* is not a case of knowledge proper, and therefore, Jayatirtha's defences mentioned are in vain.

Jayatirtha maintains that inferences can be brought under two heads – categorical and hypothetical called *Tarka* . These two types of inference differ in their conditions. In the case of categorical inference all the factors of it must be accepted to be true by both of the parties , the opponent and the proponent . If difference of opinion is seen between the opponent and the proponent regarding the

validity either of the probans or of the necessary concomitance or the universal proposition or of both, then inference is brought to a standstill, and it can be set in motion only by keeping aside the differences. But this is not true in the case of *Tarka*. In this inference the apparatus be accepted to be true by the opponent and not by the arguer. The defect of categorical inference is not the defect of hypothetical inference called *Tarka*. Rather the defect of the categorical inference is the condition of *Tarka*. The falsity of the minor term and of the probans, for example, is the defect in categorical inference but these are not only not defects in *Tarka* but rather are the conditions of it. The arguer is quite conscious of the falsity of the probans, namely, the absence of fire, yet he assumes the probans, for bringing out the absurd consequent or probandum, namely, the absence of smoke. But as far as the observation of Jayatīrtha regarding the conditions of *Tarka* goes we fully agree with him. We also go hand in hand with Jayatīrtha in maintaining that the belief in the presence of the probans in the subject from the part of the opponent and disbelief of the same from the part of the proponent is the very condition of *Tarka*. If both of the opponent and the proponent would believe the same then the very question of the application of *Tarka* does not arise at all. We only disagree with Jayatīrtha when he maintains that *Tarka* is a case of knowledge proper and subsumed under inference. He holds the *Tarka* is a case of a special type of inference. But even if it is a special type of inference it is not a special type of knowledge of course. It may be a different species of the same genus called knowledge. But it is already shown that *Tarka* is not a case of knowledge. So, its being a subspecies of knowledge is

absurd. And since *Tarka* is not a subspecies of knowledge, it cannot also be subcategory of inference.

In the strongest and most important defence against the charge of material invalidity of *Tarka* as an inference, a vital defect in Indian logic, Jayatīrtha maintains that a misconception regarding the component parts of *Tarka* gives birth to this charge. Jayatīrtha observes that in fact *Tarka* has two conclusions side by side, of which one is false and the other is negative. The false conclusion remains in the explicit form but the negative conclusion lies in implicit form. So, two conclusions are implied by *Tarka* at the same time. But they are implied not in the same way. The false conclusion is implied directly but the negative conclusion, on the contrary, is implied indirectly. As the negative conclusion remains in the implicit form it is generally overlooked by us and we tentatively think that reasoning like categorical inference has only one conclusion. Thus we wrongly take only the one half which is, in fact, incomplete for the whole and complete. If we look into the full formed reasoning or *Tarka* then we can see that only the minor premise is materially false. But both the major premise and conclusion do correspond to the fact and therefore materially true. This can clearly be illustrated in the following way. "If there were no fire in the hill then there can not be smoke. But as a matter of fact there is smoke in the hill. So, there is also fire in it". For the sake of better understanding we can divide this full formed *Tarka* into two halves. "If there were no fire in the hill then there can not be smoke" and "As a matter of fact there is smoke in the hill. So, there is also fire in it". The first part of *Tarka* does not correspond to the fact

but the second part of it corresponds to the fact. So, *Tarka* does not satisfy the material condition of inference as long as the first half of it is concerned but it meets the same as far as the second half of it is concerned. So, if *Tarka* is seen in its full form then it would be evident that the aforesaid objection of material invalidity is fully out of place in the case of *Tarka*.

But as far as my observation is concerned, I think that Jayatirtha here commits a blunder of taking two different instruments of knowledge for one. Actually, the instance of the full formed *Tarka* already cited is nothing but the combination of two different means of knowledge, one invalid and another valid. Each and every half mentioned above makes a separate instrument of knowledge. The first part "if there were no fire in the hill then there cannot be smoke" is called *Tarka*. This is an instrument of invalid knowledge. And why this instrument is regarded as a means of invalid knowledge has already been dealt with in the first chapter. Now let us examine why the second half mentioned above is considered as a separate instrument of knowledge. The second half "As a matter of fact there is smoke in the hill. So, there is also fire in it", is an instrument of knowledge called inference. It is an inference for it satisfies all the necessary and sufficient conditions of an inference. In this example, hill, smoke and fire are the subject, the probans and the probandum respectively. Through this instrument the knowledge of the probandum, namely, the presence of fire is operated on the basis of the perceptual knowledge of the probans, namely, the presence of smoke coupled with the knowledge

between the probans and the probandum. And this knowledge of the probandum, that is the knowledge of the presence of fire in the hill is valid as per as the defining marks of valid cognition as suggested and stated by both of the Indian and the Western philosophers are concerned. Besides, the explanation given by Jayatīrtha itself substantiates my own position and falsifies the position of Jayatīrtha himself. Jayatīrtha holds that *Tarka* has two conclusions, one is false and the other is negative. But how can one and the same inference possess as the two conclusions at the same time? It is quite plausible to maintain that one argument possesses only one conclusion. So, the statement that *Tarka* in its full-form has two conclusions- implies clearly that it is nothing but the combination of the two different instruments of knowledge. Jayatīrtha himself fails to understand the actual implication of his own statement. And his defence mentioned above is the result of his misunderstanding just said. Thus it is shown that the full formed *Tarka* as stated by Jayatīrtha is nothing but a combination of the two separate instruments of knowledge, invalid and valid. So, *Tarka* as stated above never satisfies the material condition of inference as it is maintained by Jayatīrtha.

But two points are important to note here. First, the two instruments mentioned are closely connected and secondly, the term 'instrument' has been used in the two cases in two different senses. Let us first explain the second one. The term 'instrument' has been used in the case of inference in question in the sense of accredited means of valid knowledge, whereas, the same has been used in the

case of *Tarka* in the sense of an auxiliary factor to an accredited means of valid cognition. Now let us turn to the illustration of the first point. The aforesaid inference here does not and cannot operate its function due to some impediment, called doubt, imposed by the opponent. In this situation the arguer resorts to *Tarka* to eliminate the impediment. And how *Tarka* helps in eliminating the impediment and thereby become an auxiliary factor ( promoter) to an accredited organ of knowledge has already been discussed. So, we need not deal with the same to avoid repetition.

Tarka as elucidated in the Nyāyasudhā by Jayatīrtha:-

*Nyāyasudhā*, an authoritative standard work, is a commentary written by Jayatīrtha on Mādhavācārya's *bhāṣya* on the *Brahmasūtra*. In his comment on the *Brahmasūtra* iii, ii, i, Jayatīrtha has discussed in details on *Tarka* and has given the views of the writers of the *Nyāya* school beginning with the author of the *Nyāyasūtra* and coming down to Udayanācārya.<sup>1</sup> It should be noted that the observation by Jayatīrtha regarding the status of *Tarka* as recorded in the *Pramāṇapaddhati* has already been dealt with. But *Pramāṇapaddhati* is not a primary source. It is a secondary source based on *Nyāyasudhā*, the original source. The *Pramāṇapaddhati* is just a succinct summary of the *Nyāyasudhā*. So, to give a clear picture of the account of Jayatīrtha's observation on *Tarka*, it is highly essential to go to the primary source in the *Nyāyasudhā* even at the risk of some amount of reduplication.

Jayatīrtha holds that a debater whether in the role of a proponent or an opponent is primarily concerned with a two fold task of establishing his own position, and negating the thesis of the other party.<sup>2</sup> In the case of the former one, that is to establish one's own position, all the factors of syllogistic reasoning, namely the subject, the probans, necessary concomitance and the example cited by one must be acceptable to both the parties.<sup>3</sup> For example, in the syllogism "The hill is possessed of fire, because it is possessed of smoke. All that is possessed of smoke is possessed of fire, as for example, the kitchen." The hill as the subject, smoke as the probans, the universal proposition and the kitchen as the example, are accepted by both the parties.

The inference employed to accomplish the second objective, that is to refute the thesis of other party, may be of assuming two forms : (1) this is not possible, (2) the admission of it leads to an undesirable consequence. In the case of the first type of inference, all the factors of it ( inference) must be acceptable to both the parties, like the inference used to establish one's own position, as shown in the preceding paragraph .<sup>4</sup> A concrete example may be cited. Kumāriḷa Bhaṭṭa observes that word is a substance but the *Vaiśeṣika* holds that it is a quality. The *Vaiśeṣika* maintains that the observation of Kumāriḷa is unacceptable and in support the following syllogism is advanced : "Word is not substance, since it is perceptible by the organ of hearing. All that is so perceptible is not a substance, just as the universal is"<sup>5</sup>. In this inference the probans is accepted to be true by both the parties. The same is true in the case of the necessary

concomitance held between the probans and the probandum. If any difference of opinion is seen regarding the validity either of the probans or of the necessary concomitance or the universal proposition, or of both, then inference is brought to a standstill, and it can be set in motion only by pushing away the difference. Jayatīrtha holds that these two types of argument mentioned, where unanimous apparatus is essential, are categorical inference.

But the condition of the second type of inference, the admission of which leads to an undesirable consequence, is purely different from that of the former two already shown. In this inference the apparatus, namely, the probans and the universal proposition be accepted by the opponent and not by the proponent. This type of inference is called reasoning and assumes the form of a hypothetical proposition <sup>6</sup>. The example of this type of inference is the following : “ If the hill were devoid of fire, it would be devoid of smoke.” This argument consists of two parts. The first part states the ground or the probans and the second part states the consequence or the probandum. Here, in this argument ‘the absence of fire’ is the probans or the ground and ‘the absence of smoke’ is the probandum or the consequent. In this argument the probans i.e. absence of fire is accepted only by the opponent and it is assumed by the arguer. If it were not so, the hypothetical inference would not act as *reductio-ad-absurdum*. Another condition of this inference is that the universal concomitance between the ground and the consequent need not also be objectively true. What is necessary is that it is accepted to be true by the opponent. Jayatīrtha defines *Tarka* in the following way : The



type of inference, in which the major premise and the minor premise are necessarily accepted to be true by the opponent and only assumed by the arguer for bringing out an absurd consequence, which necessarily follows from the assumed ground, is called reasoning or *Tarka*.<sup>7</sup> According to Jayatīrtha, the defect of categorical inference is not the defect of hypothetical inference called *Tarka*. Rather the defect of the former is the condition of the latter. Say for example, the falsity of the subject or minor term and of the probans which are considered as a real defect in categorical inference, is not only not a defect in *Tarka* but rather is the condition of it. The arguer is quite conscious of the falsity of the probans, namely, the absence of fire. Yet he assumes the probans, for bringing out the absurd consequence or probandum, namely, the absence of smoke.

The *Mādhvas* and the *Jainas* beautifully meet another objection raised by the *Naiyāyikas* against their view that *Tarka* is an accredited type of inference. The *Naiyāyikas* argue that the necessary concomitance held between the probans and the probandum is not real, since the probans, namely, the absence of fire, and the probandum, namely, the absence of smoke, do not co-present in the subject i.e. in the hill. Thus, the falsity of the necessary concomitance invalidates the claim of the *Mādhvas* and the *Jainas* that *Tarka* is an inference. But in reply to this objection, the *Mādhvas* and the *Jainas* maintain that necessary concomitance between the probans and the probandum is not necessarily one of co-existence in the same substratum.

Necessary and universal concomitance can be established where the one term cannot be conceived to be possible without the presence of the other.<sup>8</sup> Spatial or temporal co-presence is not a necessary factor of universal concomitance. A concrete example may be cited. Perceiving the flood in the lower region of the river we infer a heavy rainfall in the upper region of it. No doubt, there is a necessary and universal concomitance between a heavy rainfall in the upper region and the occurrence of the flood in the lower region, but still, there is neither temporal nor spatial co-presence between them.<sup>9</sup> Besides this, the *Mādhvas* and *Jainas* argue that the objective concomitance between the ground or probans and the consequent or probandum is not a necessary requirement in *reductio-ad-absurdum* called *Tarka*.

One of the fundamental objections put forth by the *Naiyāyikas* against the claim of *Tarka* to the status of inference is that, the conditions of inference proper and that of *Tarka* are basically different which, in turn, brings a fundamental difference in the character of the result. Accredited inferences consist of categorical assertions and the probans is admitted to be materially true by both the parties, the opponent and the proponent, whereas, *Tarka* consists of a hypothetical minor premise and the probans affirmed of the subject is materially false. This is what is about the difference of the conditions of inference proper and that of *Tarka*. This difference gives birth to another material difference in the result. In inference, the result is a true conclusion, but in *Tarka*, the conclusion is a false issue. But

Jayatīrtha meets this objection by saying that this difference in conditions is not vital at all. He holds that the fundamental conditions of both of the categorical and hypothetical inference called *Tarka* are one and the same. So, the negligible difference of conditions does not entail a fundamental difference in the character of the result. To substantiate his own view a nice explanation has been given by Jayatīrtha. Jayatīrtha maintains that three types of inference have been accepted to be valid by the *Naiyāyikas*, namely, exclusively affirmative (*Kevalānvayi*), exclusively negative (*Kevalavyātirekī*) and affirmative cum negative (*anvayi-vyātirekī*). But the conditions of all the three types of inference are not one and the same. The conditions vary from inference to inference. Say for example, the following five characteristics are regarded as the essential conditions of the affirmative cum negative inference, viz., (1) Presence of the Probans in the subject (*Pakṣattva*), (2) Presence of the probans in the homologue, (*Sapakṣattva*), (3) Absence of the same in the heterologue (*Vipakṣattva*), (4) Immunity from opposition by a countermanding probans (*asatpratipakṣattva*), and (5) Immunity from contradiction (*abādhitva*). Exclusively affirmative inference is never seen to possess the heterologue, while, exclusively negative inference is not found to entail homologue. So, the third and the second characteristics are absent from the exclusively affirmative and exclusively negative inference respectively<sup>10</sup>. Here it can be maintained that as these two inferences do not possess all the five characteristics mentioned they are not inference proper<sup>11</sup>.

But to defend themselves the *Naiyāyikas* may argue that the said two lacking characteristics are not necessary conditions, they are nothing but contingent ones. Exclusively affirmative and exclusively negative inference do not differ from the affirmative cum negative one as far as the fundamental characteristics are concerned. The fundamental conditions consist of the minor premise and the major premise, in other words, the presence of the probans in the subject and the necessary concomitance of the probans with the probandum. The five characteristics listed above are only systematic of the necessary concomitance between the probans and the probandum. So, the lack of one or other characteristic does not disqualify a probans, provided its necessary concomitance with the probandum is certified.

But in answer to the defence of the *Naiyāyikas* Jayatīrtha maintains that the defence of the *Naiyāyikas* is no doubt excellent but unfortunately they have failed to gauge the relative value and cogency of the conditions asserted by them. Jayatīrtha observes that logical necessity is not a matter of empirical fact as long as the deduction of the conclusion is concerned, whereas, presence in the subject is only a matter of the empirical truth. So, the presence in the subject has nothing to do with the logical necessity which lies in the necessary concomitance of the probans with the probandum. The minor premise aims at establishing the actual incidence of the probandum in the conclusion on the basis of the incidence of the probans. The deduction of the probandum is made possible by the necessary concomitance but not by the minor premise. So, the

necessary concomitance alone is the sufficient guarantee and warranty of the validity of inference and the presence of the probans in the subject is nothing but an irrelevant accident as the presence in the homologue and the absence in the heterologue are. Jayatīrtha holds that this necessary concomitance, the only necessary condition of an accredited type of inference is equally operative in (1) *Tarka* or reasoning, (2) Categorical inference for disproof (*duṣaṅānumāna*) and (4) implication (*arthāpatti*). All these four types of arguments are nothing but inference as far as the observation of *Mādhvas* are concerned. The difference in details is only due to their variation as sub-species of the same genus, namely, inference.

The purpose served by the inference varies from case to case. The purpose for the satisfaction of which categorical inference is employed is not one and the same with the purpose for meeting which hypothetical inference called *Tarka* is applied. The arguer resorts to a categorical inference with a view to establishing the necessary incidence of the probandum in the subject. But one adopts *Tarka* to demonstrate the undersirable consequence or absurdity of the opponent's position. The demonstration of the incidence of the probandum in the subject is inspired by the practical consideration and so, the incidence of the probans in the subject is to be shown as a matter of practical necessity, but not as a matter of logical necessity. So, the material truth of the minor premise, in other words, the incidence of the probans in the subject is taken as a material condition for categorical inference in general as far as the practical interest of the arguer is concerned. But the material truth of the minor

premise has no bearing upon the satisfaction of interest of the arguer adopting *Tarka*. Consequently, the objection of the absence of the minor term, namely, the probans in the subject by the *Naiyāyikas* against the status of *Tarka* as a subspecies of inference does not hold good<sup>13</sup>.

The *Naiyāyikas* also produce two vital objections, in addition to the earlier one, against the status of *Tarka* as inference. The first one is that if *Tarka* is given a status of inference then it would be the subject of a fallacy of contradicted probans, since, the probandum, which is necessarily deduced in *Tarka*, does not actually belong to the subject. Say for example, in the case of *Tarka*, "If the hill be devoid of fire, it would be devoid of smoke," both the probans, namely, absence of fire and the probandum, namely, absence of smoke do not exist in the subject, namely hill. The second objection is that the inference of an unreal probandum in opposition to one's previous commitment regarding the absence of the probandum, what is technically called the admission of a contrary conclusion (*apasiddhānta*) and the perpetration of this defect deprives the arguer of victory in a debate.

In response to the objections mentioned above, Jayatīrtha argues that the charges of contradiction do not hold good in the case of *Tarka*, since the arguer does not intend to establish the conclusion independently, rather he likes to establish the same on the ground of the admission of the opponent. When the opponent denies the presence of fire in spite of the presence of smoke in the hill, then the

arguer intends to show that the denial of fire entails the denial of smoke in the hill as a matter of logical necessity. Jayatīrtha maintains that the fact of the minor premise given in a hypothetical form, namely, "If the hill be devoid of fire, it will be devoid of smoke" clearly implies that the arguer's intention is not to establish the absence of smoke in the hill independently. The case exactly the same with the hypothetical proposition "If you swallow poison, you will die". This hypothetical proposition only implies the necessary connection between two events namely, swallowing of the poison and death, but not the actual historical truth of events. Likewise *Tarka* aims at demonstrating only the logical connection between the ground and the consequent. And the implication of it is that the admission of the ground makes the admission of the consequent inevitable and not that the ground and the consequent are actual historical truth. Thus it is shown that the charges of contradicted reason (*bādha*) and of contradiction of the accepted position (*apasiddhānta*) are out of place in *Tarka*.<sup>14</sup>

Another charge has been advanced by the *Naiyāyikas* against the status of *Tarka* as inference. The *Mādhvas* have broadly classified inferences into two kinds, namely (1) one for proof of one's own position and (ii) another for refutation of the position of the opponent. *Tarka*, the *Mādhvas* hold, belongs to the second class of inference. But, the *Naiyāyikas* maintain that the *Mādhva's* observation is not correct as *Tarka* cannot even be considered as an inference for refutation. Inference for refutation is valid only if it serves

to generate the valid cognition of a real defect, but *Tarka* seeks to establish a cognition of an apparent defect but not a real one.<sup>15</sup>

*Mādhvas* meet this objection by maintaining that *Tarka* is in the same position as casuistry (*Chala*) and sophism (*Jāti*).<sup>16</sup> In the case of casuistry and sophism the logical apparatus, namely, the probans and the probandum are admitted to be true by the opponent alone. So, the objection that the logical apparatus must be objectively valid and the same must be accepted by both the parties, namely the opponent and the proponent levelled against *Tarka* should be raised against casuistry and sophism also. And owing to this charge casuistry and sophism can never be proved to be forms of sophistry, which they actually are. But it is to be noted that though *Tarka* is a case of inference like sophism, yet there is a difference between them. The latter is vitiated by self-contradiction whereas, the former culminates in a conclusion, which is contradicted by an accredited organ of knowledge. But actually, this difference is not fundamental, rather it is apparent, since the admission of a proposition contradicted by the testimony of an accredited organ ultimately amounts to self-contradiction. To make an assertion opposed by the testimony of all accredited organs is to make an assertion subversive of a truth accepted universally and so by the assertor himself also. So, both sophism and *Tarka* are seen to serve the same purpose, that is to say, both of them end in convicting the opponent of self-contradiction. Thus, it is proved once again that the status of both sophism and *Tarka* is one and the same. So, if sophism is regarded as inference, *Tarka* must be considered as inference also.



Tarka as elucidated in the Tarkatāndava by Vyāsatīrtha :-

In the beginning it is important to mention that the part of the *Tarkatāndava* written by Vyāsatīrtha which deals with inference is yet to be published. But fortunately, Prof. Sitansusekhar Bagchi, author of *Inductive Reasoning* got the chance to go through that unpublished part in a manuscript copy which was available in the possession of the Prof. S.N.Dasgupta.

Vyāsatīrtha has been greatly influenced by Jayatīrtha. Vyāsatīrtha endorses the conclusion of Jayatīrtha and follows up the argument produced by him. Naturally, one may think that it is nothing but a waste of time to reproduce what has already been produced. But actually the treatment of Vyāsatīrtha, in spite of being directed by the thought of Jayatīrtha, abounds in original reflection not only in manner but also matter.

*Tarka*, Vyāsatīrtha observes, is a case of inference. He tries to establish his own position by negating the view of the *Naiyāyikas* through different arguments. The *Naiyāyikas* hold that *Tarka* is a case of conscious ascription (*āropo*). But to substantiate his own position Vyāsatīrtha first of all seeks to show that the observation of *Tarka* as conscious ascription by the *Naiyāyikas* is not tenable. Vyāsatīrtha maintains that *Tarka* is not a case of ascription as far as the finding registered by reasoning is concerned. He says that the finding of

*Tarka* is of a categorical nature and gives an altogether new orientation to the conception of the nature of *Tarka* and its result. Vyāsatīrtha observes that an important difference is there between ascription and *Tarka*. In the case of ascription knowledge is operated by the help of the visual organ or the mind as aided by it, whereas, in the case of *Tarka* knowledge is necessitated by the knowledge of the necessary concomitance alone. Owing to this difference, a case of wilful ascription cannot be regarded as a case of *Tarka*. As *Tarka* is exclusively based upon the necessary concomitance between the ground and the consequent namely the probans and the probandum as the case is exactly on a par with inference, the inferential nature of reasoning cannot be denied.<sup>17</sup>

Thus Vyāsatīrtha shows that *Tarka* cannot justifiably be regarded as a case of ascription and defines it in the light of categorical knowledge as follows : “ *Tarka* is the valid cognition of the negation of the probans or ground as the determinant concomitant of the negation of the probandum or the consequent as admitted by the opponent.” Vyāsatīrtha observes that the same can be defined as a valid cognition of the unavoidable admissibility of the negation of the probans entailed by the admission of the negation of the probandum<sup>18</sup>. The denial of fire in a smoking hill is tantamount to the admission of the negation of smoke. The negation of fire necessarily entails the negation of smoke and *Tarka* only brings home the knowledge of this truth. Thus the careful analysis of the definition of *Tarka* as given by Vyāsatīrtha clearly implies that *Tarka* is a genuine case of an organ of knowledge.

Here the two vital objections , namely, the objection of the false minor premise and the false conclusion from the part of the *Naiyāyikas* may be advanced against the view of Vyāsatīrtha. In our preceding discussion it is shown that the same objections are leveled against the view of Jayatīrtha. It is also maintained side by side how Jayatīrtha beautifully meets these objections by saying that those allegations hold good only in the case of categorical inference but not in the case of hypothetical inference. Tarka , Jayatīrtha observes, belongs to the class of hypothetical inference. So, the objections in question are out of place in the case of *Tarka*.

But it is important as well as interesting to note that Vyāsatīrtha replies to the objections mentioned above without taking cover under the privilege of hypothetical inference. Vyāsatīrtha opines that though *Tarka* appears to be a case of hypothetical inference but actually this is not the case. *Tarka*, in fact, is nothing but a categorical inference.

Vyāsatīrtha maintains that the objections of false minor premise and false conclusion are nothing but pseudo ones. Vyāsatīrtha believes that neither the minor premise nor even the conclusion of *Tarka* is false. So he thinks that the objections are false creation of the *Naiyāyikas*, arising from their misconceptions of the nature of *Tarka*. *Tarka* is adopted when there is doubt. Now, the doubt that a smoking hill may be destitute of fire may be generated only in either of the following ways : First, negation of smoke may not be the determinant (*Vyāpaka*) of the negation of fire. Secondly , though one

may be the necessary concomitant of the other and negation of smoke be the determinant of the negation of fire, negation of smoke may yet be possible in the subject <sup>19</sup>. Here the first case of doubt is dismissed by the hypothetical proposition "If it be devoid of fire, it must be devoid of smoke", which implies that negation of fire is a determinate of the negation of smoke. The hypothetical form does not mean that the proposition does not assert a categorical truth. Vyāsatīrtha maintains that, in fact, necessary concomitance between two sets of facts is usually asserted in a hypothetical form. The following hypothetical propositions, for example, "If the Gayal be similar to the cow, the cow also must be similar to the gayal", "If there be smoke there must be fire", "If a person alive is not at home, he must be present outside" assert a necessary and universal truth as the former one does. In these hypothetical propositions the second clause entails the conclusion which necessarily follows from the first one as the premise. Thus it is seen that hypothetical form is the usual medium through which a necessary relation between the antecedent and the consequent clauses is expressed <sup>20</sup>. The second case of doubt is dismissed by showing the inadmissibility of the negation of smoke in the subject, which is directly perceived to be issuing smoke.

It is important to note that a vital difference is seen between the observations of the *Naiyāyikas* and Vyāsatīrtha regarding both of the nature and composition of *Tarka*. The *Naiyāyika* observes that in the *Tarka* "If the hill be devoid of fire, it will be devoid of smoke",

'negation of fire' is the probans and 'negation of smoke' is the probandum.

*Tarka* consists only of one statement having two clauses of which one clause entails the probans and the other contains the probandum. But Vyāsatīrtha, on the other hand, maintains that *Tarka* is composed not only of one statement but two statements, one of them is in the explicit and the other in the implicit form. It can be said that the *Naiyāyikas* wrongly consider *Tarka* consisting only of one statement since the other statement is in the implicit or the hidden form. The whole proposition in the explicit form is the statement of the probans, in which the negation of smoke is shown to be the determinant concomitant of the negation of fire. The statement in the implicit form is that the negation of the negation of smoke is the determinate concomitant of the negation of the negation of fire, which entails the probandum. The cognition of the aforesaid probandum is attained through the instrument of the cognition of the aforesaid probans. Both these cognitions are true, since the negation of the determinant is the determinate concomitant of the negation of the determinate. To clear our idea a concrete example may be cited : Smoke is the determinate concomitant (*Vyāpya*) of fire and fire is the determinant concomitant (*Vyāpaka*) of smoke, but the negation of fire is the determinate concomitant of the negation of smoke. The determinant concomitant can be inferred through the determinate concomitant and not the other way round, since the determinate cannot exist independently of the determinant but the determinant can exist without depending upon the determinate. So, smoke is the

determinate of fire, for it cannot exist independently of the latter. But fire can exist independently of smoke, so the negation of smoke does not entail the negation of fire. But smoke is never possible in the absence of fire, so the negation of fire necessarily entails the negation of smoke. Thus it is seen that relative position of two terms qua determinant and determinate is reversed in the case of their negatives. If the positive term is determinant then the negative of the same becomes determinate. The digression is made to dismiss the doubt that there may be smoke without fire by showing that fire is the determinant concomitant of smoke and negatively by showing that the negation of fire necessarily implies the negation of smoke, the latter being the determinant concomitant of the former. Similarly, the negation of smoke is the determinate concomitant of the negation of the negation of fire.

*Tarka* is seen to meet all the necessary conditions for being an inference, namely, (i) it consists of the two propositions, probans and probandum, (ii) both of the propositions are true and (iii) there is a necessary concomitance between the probans and the probandum. This can be illustrated by citing an examples in the way: "If A were devoid of fire, it would be devoid of smoke", this proposition shows that the negation of fire is the determinate concomitant of the negation of smoke and so the former necessarily entails the latter. It is a true assertion and serves as the probans of the assertion, "The negation of negation of smoke is the determinate concomitant of the negation of negation of fire," which is to be regarded as the probandum by virtue of fact that it necessarily follows from the

previous assertion. The first proposition is true , because it states a necessary univesal truth and the second is also true, as it also states the same which follows from the former. These two are universal propositions asserting the necessay universal concomitance between two terms. The former assertion namely the hill is not devoid of smoke is based upon an objective fact and the latter one, namely, it can not be devoid of fire follows from the former as a matter of necessity. Thus Vyāsatīrtha beautifully shows that the probans, the probandum and the necessary concomitance, all the three lying in *Tarka* are true . So, the objections of false probans and probandum raised by the *Naiyāyikas* against the inferential status of *Tarka* are themselves false and groundless. And this falsity of these charges implies that *Tarka* is nothing but an inference.

The *Naiyāyikas*' objection to the validity of *Tarka* is nothing but a result of their misconception that 'negation of fire' is made the probans and the negation of smoke is made the probandum in *Tarka*. Jayatīrtha inspite of being agree with the *Naiyāyikas* in this respect, beautifully shows that the allegations of false probans and probandum brought by the *Naiyāyikas* against the inferential nature of *Tarka* is unjustified. Jayatīrtha observes that these charges bear significance as far as the categorical inference is concerned, where the probans is asserted as objective facts. But those charges do not hold good in the case of *Tarka* since here the false probans and probandum are only assumed for argument's sake and not independently stated as objective facts. Such false assumptions are

not any defect of *Tarka* but are the necessary precondition of *Tarka* as *reductio – ad – absurdum*.

Criticism of *Tarka* as elucidated in the *Tarkatāndava* by *Vyāsatīrtha* :-

*Vyāsatīrtha* has been gratefully influenced by *Jayatīrtha* regarding the concept of *Tarka*. *Vyāsatīrtha* endorses the conclusion of *Jayatīrtha* and follows up the argument produced by him. So, the concept of *Tarka* of both of them is the subject more or less of the same type of charges. We have already dealt with the charges leveled against the views of *Jayatīrtha*. So, we need not discuss the same to avoid repetition. In addition to the earlier ones some new charges can be brought against *Vyāsatīrtha* in respect to his concept to *Tarka* as an accredited organ of knowledge called inference.

The *Naiyāyikas* maintain that *Tarka* is a case of ascription (*aropa*). But *Vyāsatīrtha* observes that actually *Tarka* can not be regarded as a case of ascription because of two reasons. First, the finding registered by *Tarka* is of a categorical nature and secondly in the case of ascription knowledge is operated by the help of the visual organ or the mind as aided by it, but in the case of *Tarka* knowledge is necessitated by the knowledge of the necessary concomitance alone. But I think that the position of the *Naiyāyikas* can be substantiated by proving both of the reasons of *Vyāsatīrtha* as invalid. Let us first consider the second one. In the case of *Tarka* knowledge actually is operated by the help of both of the visual organ and the



knowledge of the necessary concomitance, but not by the knowledge of the necessary concomitance alone as it is maintained by Vyāsatīrtha . The Sanskrit term '*āropa*' means a false assumption or a false ascription entertained for a while, knowing full well that what is assumed is false. Let us suppose for instance, the object standing in front of one is known to be a tree and not a human being. Let us suppose again that the person still deliberately insists on regarding it as a human being. This is a case of ascription or *āropa*. Now , in defining *Tarka* the *Naiyāyikas* maintain that *Tarka* is a false assumption of something through the false assumption of another thing where the latter is invariably concomitant with the former. For instance, it is the false assumption of something , namely, 'B' on the basis of the false assumption of some other thing called 'A' where 'A' is invariably concomitant with 'B'. So, the very analysis of the definition of *Tarka* just given clearly implies that in the case of *Tarka* there are two ascriptions, one is the ascription of the ground and the other is the ascription of the consequent, and the ground is invariably concomitant with the consequent. When in order to show the absurdity of the opponent's view the arguer resorts to *Tarka* in the form – "If there were no fire, then there could be no smoke" then, no doubt, the arguer concerned is fully aware of the presence of both of the fire and smoke. In spite of being well conscious of the presence of both of the fire and smoke the arguer insists the absence of them only with the intention to demonstrate the absurdity of the opponent's position. In the case of the *aropa* already cited the knowledge of the tree is operated by the help of the visual organ, likewise in the case of *Tarka* the knowledge of the presence of smoke is operated by the

visual organ. Besides, in the case of *Tarka* the ground is invariably concomitant with the consequent, that is why the assumption of the latter is based upon the assumption of the former. Thus it is shown that in *Tarka* knowledge is operated both by the visual organ or the mind as aided by it and the necessary concomitance.

Now let us deal with the first reason noted above. Vyāsatīrtha observes that *Tarka* is not a case of assumption because its finding is of a categorical nature. Two important objections, namely, the objection of the false minor premise and the false conclusion have been leveled against the inferential status of *Tarka*. Both Jayatīrtha and Vyāsatīrtha have tried their best to meet these objections but from the different view points. Jayatīrtha is of the opinion that these charges hold good only in the case of categorical inference. But *Tarka* is a hypothetical inference. So, the objections of the false minor premise and the false conclusion are out of place in the case of *Tarka*. But Vyāsatīrtha replies to the aforesaid objections without taking cover under the privilege of hypothetical inference. He says that *Tarka*, infact, is a categorical inference. The objections can be met quite legitimately in spite of maintaining *Tarka* as a case of categorical inference. Vyāsatīrtha observes that neither the minor premise nor the conclusion of *Tarka* is false, so, the objections are false creation of the *Naiyāyikas* arising from their misconception of the nature and component parts of *Tarka*. According to the *Naiyāyikas*, *Tarka* consists only of one statement having two clauses of which one clause entails the probans and the other contains the probandum. Say for example, in the *Tarka* " If the hill be devoid of

fire, it will be devoid of smoke", 'the negation of fire' is the probans and 'the negation of smoke' is the probandum. But Vyāsatīrtha, on the contrary, holds that *Tarka* actually consists of two statements, one of them remains in the explicit and other in the implicit form. The whole proposition in the explicit form is the statement of the probans, in which the negation of smoke is shown to the determinant of the negation of fire. The statement in the implicit form is that the negation of the negation of smoke is the determinate concomitant of the negation of the negation of fire which entails the probandum. The cognition of the aforesaid probandum is ascertained through the instrument of the aforesaid probans. Both these cognitions are true, since the negation of the determinant is the determinate concomitant of the negation of the determinate. This can be illustrated with the help of a concrete example, smoke is the determinate concomitant of fire and fire is the determinant concomitant of smoke, but the negation of fire is the determinate concomitant of the negation of smoke. The determinant concomitant can be inferred through the determinate concomitant but not vice versa, since the determinate, so, fire be inferred on the basis of smoke. And again negation of fire is the determinate concomitant of the negation of smoke, so the latter can be inferred on the ground of the former. *Tarka* is adopted, says Vyāsatīrtha, to dismiss the doubt that there may be smoke without fire. And this doubt be eliminated by showing that fire is the determinant concomitant of smoke and negatively by showing that the negation of fire necessarily implies the negation of smoke, the latter being the determinant concomitant of the former. The same can

be shown by maintaining that the negation of the negation of smoke is the determinate concomitant of the negation of the negation of fire.

Now Vyāsatīrtha shows that both of the minor premise and the conclusion are true. *Tarka*, he thinks, consists of the two statements. "If the hill be devoid of fire. It would be devoid of smoke" and "The negation of the negation of smoke is the determinate concomitant of the negation of the negation of fire". The former statement stands for the probans and the latter one stands for the probandum, since the latter necessarily follows from the former. The first proposition is true for it shows that the negation of fire is the determinate concomitant of the negation of smoke, which is a necessary universal truth. The second proposition is also true because it also states a necessary universal truth which follows from the former. Both of the propositions are universal which assert the necessary universal concomitance between two terms. The former assertion, namely, the hill is not devoid of smoke is based upon an objective fact and the latter one, namely, it can not be devoid of fire, follows from the former as a matter of necessity. Thus it is shown that both the minor premise and the conclusion of *Tarka* are true. So, the charges of the false minor premise and the conclusion against the inferential status of *Tarka* do not hold good.

But..., here the same can consistently be said against Vyāsatīrtha which was maintained earlier against Jayatīrtha that the two statements as the component parts of *Tarka* as it is stated by Vyāsatīrtha actually stand for two separate instruments, one for *Tarka*

and the other for inference. We need not go in details as it is already elaborately discussed earlier. We should just show how the second statement of *Tarka* maintained by Vyāsatīrtha itself can be turned into an inference. Keeping the fact in mind that double negation means affirmation we can say that the second statement of *Tarka* mentioned above " The negation of the negation of smoke is the determinate concomitant of the negation of the negation of fire," can be transformed into " The presence of smoke is the determinate concomitant of the presence of fire". The second statement obviously is a case of inference where the existence of fire is inferred on the basis of the existence of smoke. Here in this inference smoke is the probans and fire is the probandum, since, the former is necessarily concomitant with the latter.

Besides, the observation of Vyāsatīrtha that the finding of *Tarka* is of a categorical nature is not tenable. Vyāsatīrtha maintains that *Tarka* operates a knowledge of a necessary universal concomitance between two terms. Say for example, in the case of the instance already cited *Tarka* demonstrates the knowledge of the necessary universal concomitance between the smoke and fire . But actually this is not the case. *Tarka*, actually, brings forth the assumption of the consequent on the basis of its ground coupled with the knowledge of the necessary concomitance of the ground with the consequent.

In the aforesaid example, *Tarka* establishes the assumption of the absence of smoke on the basis of assumption of the absence of

fire coupled with the knowledge of the necessary universal concomitance of the latter with the former.

So, *Tarka* aims at demonstrating not the knowledge of the necessary universal concomitance between two terms as it is stated by Vyāsatīrtha, rather it seeks to demonstrate the enforced admission of the consequent on the basis of the assumption of the ground accompanied by the knowledge of the necessary universal concomitance of the ground with the consequent. So, the knowledge of the necessary universal concomitance is not the end but the means to satisfy the end in the case of *Tarka*. Thus it is proved once again that *Tarka* is not a case of categorical inference but a case of ascription or *āropo*.

The definition of *Tarka* given by Vyāsatīrtha itself proves that *Tarka* is not a case of an inference whether categorical or hypothetical. Vyāsatīrtha defines *Tarka* as follows " *Tarka* is the valid cognition of the negation of the probans or ground as the determinant concomitant of the negation of the probandum or consequent as admitted by the opponent." So, as far as this definition is concerned the aim of *Tarka* is to demonstrate the knowledge of the negation of the probans, but we know very well that an inference seeks to establish the knowledge of the probandum but not the knowledge of the negation of the probans. So *Tarka* is not a case of inference.

Vyāsatīrtha argues that even if we agree with the explanation of the probans and the probandum of *Tarka* as stated by the *Naiyāyikas* yet the charges of the falsity of the minor premise and the conclusion can be proved to be invalid. The *Naiyāyikas* maintain that in the *Tarka* "If the hill were devoid of fire, it would be devoid of smoke," 'the negation of fire' stands for the probans and 'the negation of smoke' stands for the probandum, which do not actually belong to the subject i.e. the hill. So the minor premise and the conclusion are false. But Vyāsatīrtha holds that even if the explanation of the probans and the probandum just given by the *Naiyāyikas* are taken for granted yet it can quite consistently be maintained that both the minor premise and the conclusion are true.

Vyāsatīrtha says that the *Naiyāyikas* admit two kinds of relation, one is actual by which the actual incidence of the one term in the other is determined and the other is one through which we understand that one term is related to another term, though there is no factual incidence of one in the other. Conjunction, inherence and according to some, identity belong to the former kind of relation. But the relation between a subject and an object or between cognition and its content belongs to the latter kind of relation. Here though one cannot factually be related to another yet they are related somehow. The logical requirements for the validity of an inference that there must be true minor premise and a true conclusion, in other words that the probans and the probandum must stand in relation to the subject, are satisfied irrespectively by both the two kinds of relation. Keeping this in view if *Tarka* is judged then it can be seen that both the minor

premise and the conclusion of it are true. Both the probans , namely, the negation of fire and the probandum, viz, the negation of smoke do stand in a relation to the subject, namely, the hill. Negation of fire is asserted to be true of the hill by the opponent and this means that negation of fire stands in the relation of being admitted to be present in the hill. Probandum, on the other hand, is asserted by the arguer as the necessary consequent of the assertion of the negation of fire by the opponent . Thus, the negation of the probandum stands to the hill in the relation of being one to be necessarily admitted by the opponent. Thus Vyāsatīrtha shows that both the minor premise and the conclusion of *Tarka* are true. So, the aforesaid objections are groundless.

Vyāsatīrtha replies to the objections of the false minor premise and the false conclusion following the above mentioned two kinds of relation as admitted by the *Naiyāyikas*. As instance of the second kind of relation he says of the relation between the subject and the object of knowledge, between the knowledge and the content of it, and then the relation in question be considered to belong to the second kind of relation . But I think that Vyāsatīrtha commits a blunder by taking the relation in question belonging to the second kind of relation already mentioned. The relation in question is neither the relation between the subject of knowledge and the object of knowledge, nor even the relation between the knowledge and the content of it, but, it is the relation between the object of knowledge and the locus of it. So. this relation does not belong to the second kind. And that this relation does not belong to the second kind is



understood if we consider the following concrete example. Let us suppose, I pass a statement " There is a table in my room". Here my statement 'there is actually a table in my room' be true not because I assert it but because it corresponds to the fact. So, assertion has nothing to do with the truth or falsity of any statement as it is maintained by Vyāsatīrtha. And as a matter of fact, the object of knowledge, namely, the table is there in the locus, namely, the room in a relation of the first type. The same can truly be said in the case of the relation between the probans, absence of fire and the subject or locus, the hill, and between the probandum, absence of smoke and the hill. The minor premise and the conclusion of *Tarka* be true not by virtue of the assertion of the opponent or the proponent but by virtue of the correspondence of them to the fact. But in fact, in the subject, the hill, there is neither the absence of fire nor the absence of smoke. So the question of the correspondence of the statements, namely, the probans and the conclusion to the fact, namely, the absence of fire and the absence of smoke is quite absurd. And as the probans and the probandum do not correspond to the fact they can not be true. So, the defence of Vyāsatīrtha against the charges of the false minor premise and the conclusion is invalid.

Criticism of the Nyāya – view and the answers to those criticisms:-

It is wellknown to us that inferential knowledge plays a vital role in the seven other schools of Indian philosophy in general and in the

*Nyāya* school in particular. But the knowledge of *Vyāpti* is the nerve – centre for the possibility of the inferential knowledge. So, the question is – how the knowledge of *Vyāpti* can be ascertained ? In respect of the means of ascertaining *Vyāpti*, there is a diversity of opinion among the scholars.

The *Navya-Naiyāyikas* think that the knowledge of co-existence between *hetu* and *sādhya* accompanied by the knowledge of the absence of deviation of the same is the cause of ascertaining *Vyāpti*. The knowledge of the co-existence between *hetu* and *sādhya* can easily be derived. But it is very difficult to get the knowledge of the absence of deviation. At best we can say that as far as our experience is concerned there is no deviation. But how can we give the guarantee in the case of the future which is yet to come in our experience ? So, this knowledge remains open to the doubt of deviation. And this doubt, the *Navya-Naiyāyikas* think, can be removed by the application of *Tarka*.

My concentration, in this context, is to show that the argument in terms of which the *Navya-Naiyāyikas* think that through the application of *Tarka* the doubt of deviation can be ruled out may be criticised by those who will consider this from the Western viewpoint. But inspite of this criticism the *Nyāya* view can be substantiated from the Indian viewpoint.

The *Naiyāyikas* formulated the definition of *Tarka* in the following way :-

“*Āhārya-Vyāpyavattā — bhrama — janyaḥ āhāryavapakavattā-bhramastarkaḥ*” That is *Tarka* is an imposed (*āhārya*) illusory knowledge of the existence of the pervader (*Vyāpaka*) which is caused by another imposed illusory knowledge of the existence of the pervaded (*Vyāpya*). Now what is to be understood by ‘imposed knowledge’ (*āhārya jñāna*)? In reply it is said that knowledge which is produced out of one’s desire at the time when there is the existence of the contrary knowledge is known as imposed knowledge. Say for example, if the knowledge in the form ‘There is fire in the lake’ is produced out of one’s desire at the time when there is contrary knowledge in the form – ‘There is the absence of fire in the lake’ it is called an imposed knowledge.

The *Navya Naiyāyikas* are of the opinion that *Tarka* is of two types : *Viśayapariśodhakaḥ* and *Vyābhicārasaṅkānivartakaḥ*. The first one determines the definite valid knowledge and the second one removes the doubt of deviation . The form of the second type of *Tarka* is as follows : “ If smoke be deviated from fire, it would not be caused by fire”. The first part of this form of *Tarka* is known as *Āpādaka* and the second part is *Āpādya* or consequence. In *Āpādaka*, there is invariable concomitance determined by *Āpādya*.

So, in the form of *Tarka* there is *Vyāpti* also. The form of this *Vyāpti* is : where there is deviation of fire, there is the negation of being a product of fire. In this form of *Vyāpti* the first part is *Vyāpya* (pervaded) and the second one is *Vyāpaka* (pervader). In the same

way, it can be said that the *Āpādaka* – part is the pervader and *Āpādya* – part is pervaded.

On the basis of the foregoing discussion, it is found that invariable concomitance or *Vyāpti* is included in *Tarka* also. And the doubt of deviation is still there in this *Vyāpti* in the same way in which it is in the case of *Vyāpti* of inference. So our question is : How this doubt of deviation in *Vyāpti* of *Tarka* can be removed ? In reply it can be said that to remove this doubt of deviation another *Tarka* is to be adopted. And this second type of *Tarka* also is not free from the doubt of deviation. So again our question is -how the doubt of deviation of this second *Tarka* can be ruled out ? In reply it can again be said that for that purpose another *Tarka* is to be resorted to, and in this way the fallacy called infinite regress comes into being.

But according to the *Navya – Naiyāyikas*, the above mentioned problem can be solved in the following way : Here I quote Dr. Raghunath Ghosh from his book enlisted in bibliography. "The doubt of deviation does not arise at all in *Vyāpti* of *Tarka*, for it would involve contradiction in respect of one's own activity. Hence the necessity of applying another *Tarka* does not arise at all. One can doubt so long as there does not arise any contradiction in respect of one's own practical activity. An individual is not allowed to bear any doubt about *Vyāpti* between smoke and fire as he seeks fire in his practical life to get smoke. If he had a slightest doubt regarding *Vyāpti* between smoke and fire, he would not seek fire for having smoke. If there is any doubt it will contradict his own activity. Hence one's own

activity clearly indicates the absence of doubt in them.” Thus the *Navya – Naiyāyikas* maintain that in fact *Tarka* does not become the subject of the doubt of deviation. And this view, they have tried to establish by showing a contradiction of practical activity.

But as far as my observation is concerned one may raise an objection particularly from western viewpoint by saying that the contradiction concerned, actually cannot be the limit of the doubt of deviation. Contradiction may be of two types – logical and empirical. Logical contradiction is a contradiction to the very process of our thinking which obviously is not the case with the empirical contradiction. Empirical contradiction is the contradiction only to our experience. To think  $A$  and  $\sim A$  to be true at the same time gives rise to a logical contradiction. If we think that  $A$  is true then we cannot think that  $\sim A$  is true also, because both of them cannot be true at the same time. And this contradiction is the contradiction of the very process of our thinking. This contradiction, no doubt, is the limit of our doubt. If  $A$  is true then there is no room for doubt that  $\sim A$  is not true. But empirical contradiction is quite different from the logical one. We are habituated in seeing only black crows in our day to day experience. Here to think of a white crow gives rise to a contradiction as we have not seen such crows in our experience. This contradiction is called an empirical contradiction. And this contradiction, I think, cannot be the limit of doubt in the strict sense. For we may easily think the existence of both of the black and white crows side by side without being self – contradicted in our thinking. This empirical contradiction may be the limit of doubt only for the time

being. Say for example, as far as my experience was concerned even a few years ago, then the thinking of white crow was a matter of contradiction for me. And then that contradiction was the limit of the doubt of the existence of white crows. But as soon as I came to know that there is black crow in Singhal that contradiction fails to be the limit of the doubt said.

The contradiction of the practical activity as understood by the *Naiyāyikas* is obviously an emperical contradiction . To think the absence of fire and the presence of smoke in one place and at the same time is not a logical contradiction. To think the absence of fire and the presence of fire at the same time in the same locus is a logical contradiction. Similarly thinking of the presence of smoke and the absence of smoke at the same time in the same place is a logical contradiction. So, we may think the absence of fire and the presence of smoke at the same time in the same place without being logically self-contradicted. The relation of *Vyāpti* to establish which *Tarka* is resorted to, is a logical relation. And that logical relation can be established only through logical contradiction but not through emperical one.

Doubt is something which comes from the faculty of our thinking. Unless and until the door of that faculty is shut up doubt may come out from that faculty. And it is only the logical contradiction by which the door of the said faculty can be made shut up and thereby the possibility of the emergence of doubt be ruled out. But as the contradiction of practical activity mentioned by the *Navya* –

*Naiyāyikas* is not logical, the said purpose for which it has been employed cannot be served.

But the above objection can be answered in the following way. The Indian thinkers, however, did not take the term logic in the rigid sense. It is a kind of reasoning by which a person is inclined to some activity. When we feel hungry, we ask for food. Can it be said as illogical? Certainly not. Had there been no logic, we would not have asked for the same. Here the satisfaction of hunger is the logic behind the asking of food. Each and every human activity presupposes some logic behind. Otherwise, it would have been taken as irrational. If we take logic in this liberal sense, the above – mentioned problem, I think, will not arise at all. Our Indian thinkers have used the term 'logic' in this sense and hence, they are very much consistent in their position.

One may raise another objection against the *Navya – Naiyāyikas* from the western viewpoint. The *Navya Naiyāyikas* are trying to eliminate doubt by *Tarka* taking the theory of causality as granted. They formulate the argument in this way " If smoke be deviated from fire, it would not be caused by fire. Our experience shows that smoke is caused by fire so it cannot be deviated from fire ". So, the theory of causality has already been taken to be necessarily true by them. But whether this theory of causality itself is necessary or not is a matter of controversy. So, this theory itself is not free from doubt. And the theory which itself is a subject of doubt has nothing to do with removing the doubt.

But I think that the *Navya – Naiyāyikas* will be able to maintain their position by giving a proper answer to the objection mentioned. The necessity of causality is the subject of doubt to the western philosophy but this is not the case with the Indian philosophy. So, the objection raised above cannot hold good. Because, in Indian tradition the nature of invariability between cause and effect is accepted. According to the Indians, there is no doubt as to the fact that an effect follows from the cause. The complication arising from necessary and sufficient conditions does not occur in Indian minds.

It may be argued that the *Tarka* has got a tremendous importance as a methodology of Indian philosophy. Various methods have been adopted by the Indian thinkers to arrive at the truth, and *Tarka* is one of them. It is an indirect proof to come to a particular conclusion. That is why, *Tarka* serves the purpose of such indirect proof which counters the opponent's standpoint. It is a great philosophical enterprise to refute the view of the opponents. The method of refutation may be of two types : directly to say that he is telling nonsense and indirectly to prove that his standpoint is non – acceptable. If someone raises a question whether self exists or not and if I personally disagree with him. Thus disagreement may be expressed in two ways : first, initially to say his position is meaningless and secondly the man who disagrees may for the time being admit the opponent's position and may say - 'Let us suppose your standpoint is true'. Though initially there is an agreement, ultimately the opponent's position is falsified by way of showing some



inconsistencies or contradiction or absurdity in his standpoint . In this way an individual can prove his standpoint justified. This method is always adopted by an individual when an individual wants to conclude some. It can also be described as implication, which indicates that if something occurs it is from something else. Hence methodologically it is very much valuable.