

## CHAPTER - 3

### Methods of *Reductio - ad - absurdum* and *Tarka*

'*Reductio - ad - absurdum*' is a mathematical concept, which has accepted as a philosophical method by the Indian and Western Philosophers. In the mathematical logic Copy has introduced this method, which is otherwise known as indirect proof. This indirect proof is nothing but the proof by *reductio - ad - absurdum*. It is said in the mathematical logic that the negation of the conclusion is deliberately taken and from this it is shown that, if it is taken for granted, it will lead to some contradiction or absurdity. Hence this assumed conclusion is abandoned and the original conclusion is established as true. "The method of indirect proof often called the method of proof by *reductio - ad - absurdum* is familiar to all who have studied elementary geometry. In deriving the theorems, Euclid often begins by assuming the opposite of what he wants to prove. If that assumption leads to a contradiction or reduces to an absurdity then the assumption must be false and so its negation – the theorem to be proved, must be true." - (Copy : *Symbolic logic* 5<sup>th</sup> edition). This method is also found in Indian logic where mainly the Naiyayikas (both earlier and latter) have adopted to prove certain conclusion. Though there was no interaction between two traditions, some striking resemblances are found between them. This method is described by the Naiyayikas as many ways like *Vipakṣavādhaka tarka*, *āhāryajñāna*, *aniṣṭaprasaṅga*, *aniṣṭa āpatti* etc. In the following pages we shall see the nature and logical flavour of this method as accepted in Indian Philosophical systems specially in *Nyāya*.

A problem may be raised how one can think of "knowledge produced through desire" (*icchājanyajñāna*). A solution to this problem may be offered in the following way. Let us look towards the exact nature of *āhāryajñāna*. The knowledge, which is produced out of one's own desire at the time when there is the contradictory knowledge, is called

*āhāryajñāna*. (*Virodhijñānakālīnecchāprayojyajñānatvam āhāryajñānatvam* or '*Vādhakālīnecchājanyam jñānam*')<sup>1</sup>. The word '*āhārya*' means 'artificial', which is found in the *Bhaṭṭikāvya* where the ladies are described as *āhāryaśobhārahitairamāyaiḥ*<sup>2</sup> (that is, free from artificial beauty). From this, it follows that the word *anāhārya* means 'natural' which is expressed by the term '*amāyaiḥ*'. When we talk of *āhārya*-knowledge, it has to be taken as an artificial knowledge on account of the fact that between two objects an object is *deliberately* thought as otherwise in spite of knowing the distinct character or real nature of these two objects. In these cases one's desire of thinking an object as otherwise acts as an instrument (*icchājanya*). It is to be borne in mind that the Navya Naiyāyikas have given much importance on *vivakṣā* (that is, will to say). Let us put forth some cases where we find a knowledge produced through the instrumentality of desire (*icchājanyajñāna*). One is allowed to say *sthālī pacati* (he cooks with clay-pot) with the nominative case ending to the pot instead of the correct expression '*sthālyā pacati*, with the instrumental case ending with the word *sthālī* if one so desires.

Apart from these there are a few cases where we find knowledge attained through the instrumentality of desire (*icchājanya*) as in the case of *pakṣatā*. If someone bears a strong desire to infer (*siṣādhayiṣā*), he can infer in spite of having *siddhi*. ('*siṣādhayiṣāsattve' numitirbhavatyeva*')<sup>3</sup>. It is permissible as the Naiyāyikas believe in the theory of *pramāṇasamplava* (that is, capability of applying various *pramāṇas*) to ascertain an object. According to this theory, 'fire' which is perceived can be inferred if someone so desires. That a cloth is completely different from a jar is completely known from the perception and hence there is not at all any necessity to infer a cloth as distinct from a jar. In spite of this one is found to infer : 'It (that is, a cloth) is endowed with the mutual absence of a jar, as it has got clothness' (*ghaṭānyonyābhāvavān paṭatvāt*). All these cases are supportable as an individual desires to do so and hence the role of *icchājanyatva* in the attainment of knowledge cannot be denied. But it should be clearly borne in mind that all *icchājanya* – inferences or knowledges – are not *āhārya*. The *icchājanya* – *jñāna* as found in the case of *rūpaka* and *tarka* are the instances of

*āhāryajñāna*. From the above-mentioned cases it is proved that desire may act as the instrument of knowledge, which is called *icchājanyaajñāna*.

Another problem may be raised how the concept of *āhāryajñāna* can be accommodated in *Nyāya* as the sentence conveying such cognition has no *yogyatā* or semantic competency. It may seem strange to us as to why such artificial nature of knowledge is at all essential in the context of *Nyāya*. Though there is no direct result of the deliberation of such artificial knowledge due to not having semantic competency (*yogyatā*), it plays a great role in pointing out the exact nature of an object *indirectly*.

The importance of accepting *āhāryajñāna* can be realized easily if we ponder over the importance of *tarka* as a philosophical method. *Tarka* is nothing but an *āhāryajñāna*, which is evidenced from the definition given in the *Nīlakanṭhaprakāśikā* on *Dīpikā* ‘*Āhāryavyāpyavattābhramajanya āhāryavyāpakavattābhramastarkaḥ*’<sup>4</sup> That is, *tarka* is an imposed (*āhārya*) erroneous cognition of the existence of a pervader (*vyāpaka*) which is produced by another imposed erroneous cognition of the existence of a *vyāpya*. If the knowledge in the form – ‘There is fire in the lake’ (*hrado vahnimān*) is produced out of one’s desire at the time where there is the awareness of the contradictory knowledge in the form – ‘there is the absence of fire in the lake’ (*hrado vahnyabhāvavān*), it is called *āhārya*. In this case erroneous cognition is deliberate which is not found in ordinary illusion.

The main purpose of accepting *āhāryajñāna* is to ascertain the true nature of an object (*viśayapariśodhaka*) and to remove the doubt of deviation (*vyabhicāraśamkānivartaka*). The *āhāryajñāna* existing in the former type – ‘If it has no fire, it has no smoke (*Yadyam vahnimān na syāt tadā dluīmavān na syāt*)’ ascertains the existence of fire in a particular locus. In the same way, the Navya Naiyāyikas have accepted another form of *tarka*, which is also *āhārya* in order to eliminate one’s doubt of deviation (*vyabhicāraśamkā*). If someone bears a doubt whether smoke and fire have an invariable relation or not, this doubt of deviation (*vyabhicāraśamkā*) can be dispelled by

demonstrating the *āhārya* knowledge in the form : ‘If smoke be deviated from fire, it will not be caused by fire’, (*dhūmo yadi vahnivyabhicārī syāt tarhivahnijanyo na syāt*). From this it is indirectly proved that as smoke is caused by fire, it will not be deviated from fire.<sup>5</sup>

By virtue of being *āhārya* both the parts – the ground (*āpādaka*) and consequent (*āpādya*) are imaginary or hypothetical. If the first part is true, the second part would become automatically true. But it is a well – known fact that the second part is not true in so far as we do not get any smoke, which is not caused by fire. So, the doubt as to the deviation of fire with smoke can be removed by applying the *tarka* in the form of *āhārya*. It, being a kind of mental construction, is useful for removing doubt and hence it becomes promoter to *pramāṇas*. This *āhārya* cognition is otherwise called *aniṣṭāpatti* or *aniṣṭāprasanga*, that is, introduction of the undersired through which the desired one is established. This imposition of the undersired is of two types :

rejection of the established fact and the acceptance of the non-established object (*Syādaniṣṭam dvividham smṛtam prāmāṇikaparityāgastathe-taraparigrahaḥ*). If there is an *āhāryajñāna* in the form – ‘water cannot quench thirst’, there would arise an objection – ‘If it is so, no thirsty people should drink water’. It is known from our experience that water is capable of quenching thirst, which is denied here and hence it comes under the first type of *aniṣṭa*.

If it is said that water causes burning, there would arise objection in the form – ‘If it is so, the drinking of water would cause a burning sensation. The burning sensation from water is not an established fact, which is admitted here and hence it belongs to the second type of *aniṣṭa*. We often take recourse to *āhāryajñāna* even in our day-to-day debate. If an opponent says to a Naiyāyika that self is non-eternal (*anitya*), he may first agree with what the opponent says in the following manner – ‘O.K., initially I agree with you that self is non-eternal’. This agreement for the time being is *āhārya* and the next step in the form – ‘If self were non-eternal in nature, there would not have been the

enjoyment of *karma*, rebirth or liberation due to the destruction of the self', is also *āhārya* which indirectly points to the eternality of self. In the same way, various expressions like 'If I were a bird, I would have flown from one place to another', 'If you were a firmament, I would have stretched my wings like a crane' (which reminds me of a Bengali song – *Tumi ākās̄ yadi hate āmi balākār mato pākhā meltām*) can be included under *āhāryajñāna*.

The accommodation of *āhāryajñāna* in Navya Nyāya is primarily to promote an indirect method through which truth is ascertained. In the indirect proof in symbolic logic the negation of the conclusion is deliberately taken which is also an *āhārya* and from this it is shown that, if this is taken as conclusion, it will lead to some contradiction or absurdity as said earlier. If the negation of P which is originally a conclusion is taken as a conclusion of *āhārya* – type and proved it as contradictory or absurd, it will automatically follow that the original conclusion, that is, P (*anāhārya*) is true. The method is also called the method of proof by *reductio ad absurdum*.<sup>6</sup>

In metaphorical expressions such *āhāryajñāna* bears a completely different import. *Rūpaka* remains in the representation of the subject of description, which is not concealed, as identified with another well-known standard (*rūpakam rūpitāropād viṣaye nirapahnave*.)<sup>7</sup> In the famous case of *rūpaka* – *mukhacandra* the *upameya* is 'face' which is identified with 'moon'. In this case, the distinction between these is not concealed in spite of having excessive similarity. Though the difference between them is not concealed yet there is the ascription of the identification between two objects (*atisāmyāt anapahnutabhedayoḥ upamānopameyayoḥ abhedāropah*). In spite of knowing the distinction between *upamāna* and *upameya*, there is the hypothetical ascription of identity deliberately, which is also an *āhārya*.<sup>8</sup>

From the above discussions, it is known to us that the accommodation of the *āhāryajñāna* presupposes some intention of an individual. In the case of metaphor, *āhāryatva* is taken recourse to in order to show the extreme similarities between two

objects. In the same way, *āhāryajñāna* is accepted by the logicians to ascertain the real nature of an object indirectly. Hence *āhāryajñāna* can be utilized as an accessory to a *pramāṇa* (*pramāṇāmugrāhakarūpeṇa*). Though semantic competency (*yogyatā*), the criterion of the meaningfulness of a sentence, is not found in the sentences conveying *āhāryajñāna*, meaning of such sentences is easily understood by others. Had these been not understood at all; the absence of *yogyatā* cannot also be known. Moreover, as there is semantic incompetency, a search for other indirect or secondary meaning is permissible. As there is the absence of *yogyatā* in the expressions like *mukhacandra* and 'If I were a bird, I would have flown', etc., a thorough search for indirect meaning like extreme similarity (*atisāmya*) between face and moon, the absurdity of describing a man as bird, etc. have to be ascertained. It is to be kept in mind that the semantic competency is essential only in the case of direct meaning (*śakyārtha*) but not in implicative or suggestive meaning (*lakṣyārtha* or *vyañgyārtha*). In fact, an implicative or suggestive meaning is looked for if there is the incompetency among the words (*mukhyārthatādhe*). Hence the semantic incompetency paves way to the indirect meaning as found in the expressions like 'I am building castles in the air', etc. Following the same line it can be said the *āhāryajñāna* can communicate something to us indirectly in spite of not having the said competency.

Can we speak of *āhāryajñāna* existing in the pure music or *rāgas*, pure dance or abstract paintings that are new worlds created through imagination? In response to this, the following suggestion can be made. Though *āhāryajñāna* is a product of imagination, all imagination cannot be taken as *āhāryajñāna*. The imaginary ideas as found in the fanciful stories or fairy tales, etc., are not *āhārya*. Some imagination is created out of one's own will (*icchāprayojya*) at the time when one is conscious of the contradictory knowledge (*virodhijñānakālīna*). In spite of being conscious of the fact that fire cannot stay in the lake, we imagine that the lake has fire out of our strong will. It is a case of *āhārya* as already mentioned. In the case of pure music, dance and abstract paintings, we are not aware of the contradictory knowledge (*virodhijñāna*) through which the imaginary states are sublated (*bādhita*). Though these are the cases of imagination

having the characteristic of *icchāprayojyatva*, or *icchājanyatva*, they are not *āhāryajñāna* due to the lack of the other characteristic, that is, *virodhijñānakālīnatva* or *vādhakālīnatva*. In the case of *āhāryajñāna* both the characteristics should be taken as adjuncts of imaginations. An imaginary cognition associated with *icchāprayojyatva* or *icchājanyatva* and *virodhijñānakālīnatva* is called *āhārya*. Due to the absence of the second characteristic the charge of *avyāpti* of the definition of *āhāryajñāna* to the pure music, etc., does not stand on logic.

I propose to consider some problems relating to the concept of *Tarka*. As a mode of apogogic proof the concept has been ubiquitous in diverse philosophical persuasions in India. However I shall have my considerations focused on Vātsayanas's view on the matter. I will be defending in position of. I shall consider in the context the formulations of the later thinkers of the Nyāya School.

Let me begin by quoting Gautama's definition of *Tarka* in translation. *Tarka* is a kind of knowledge or deliberation, which is applied for the purpose of determining the right knowledge of an object whose nature is known roughly, but not specifically after pointing out some causes in favour of it. (“*Avijñātetattve'rthe kāraṇopapattiḥ tattvajñānārthamuhastarkah*”).<sup>9</sup>

*Tarka* is intended to reveal the right knowledge of an object. It cannot be employed for revealing an object, which is unknown. That's why, the term '*avijñāta*' is not introduced in the definition. The '*tattva*' as conjoined with *avijñāta* points to the fact that the object which, though vaguely known, is not known as it really is (*tattva*) may be known through *Tarka*. In order to indicate that in case the *tattva* of an object is hitherto unknown or which is not known as such could be known though *Tarka*, the term '*artha*' is inserted in the definition. This deliberation must be supported with the justification or ground in favour of a particular conclusion (*kāraṇopapattiḥ*).

In respect of an object not known properly an inquiry arises in the cogniser. He may laterly became confused in seeing the existence of two contrary characteristics in the same object of inquiry. But finally he removes his doubt by ascertaining one of the characteristics of the object on the strength of some proofs favouring one of the alternatives. In other words, the individual knower has to get proof in favour of a particular alternative, which eliminates the other.<sup>10</sup>

Let us try to understand the process of reasoning following Vātsyāyana with the help of an example. A person desirous to know the real nature of the self or the knower may be in doubt expressible in the form 'Whether it possesses the properties of something which is produced or those of something which is not produced'. How to eliminate one of the alternatives ? In order to show the method Vātsyāyana indicates that the potential cogniser proceeds to eliminate one alternative by applying some arguments of the following form. He thinks that, if the self possesses the properties of something not produced, which is otherwise called eternal, it can enjoy the result of *karma* performed in the previous birth. In Nyāya it is held that among suffering, birth, inclination, evil and false knowledge each of the succeeding one causes the preceding one and the cessation of the succeeding one leads to the cessation of the preceding one, and this indeed is the state of liberation. Accordingly, the knower would have got into both transmigratory as well as liberated states.<sup>11</sup> If the self, on the other hand, is taken as possessing the properties of the produced, it will not have these. For, the knower after being produced becomes associated with the body, the senseorgans, happiness, and miseries etc. on account of which he does not have any scope for enjoying the result of *karma* done by him, as he is non-eternal in nature. The knower, of course, does not exist before his coming into being. The knower who did not pre-exist or who is completely annihilated at death is not capable of enjoying the fruits of his *karma*. As the knower is non-eternal, like other non-eternal objects, he has no existence before his coming into being and then he is completely annihilated at the destruction of his body. If this be the case, the relation of a knower with more than one body and the absolute cessation of



body i.e., absolute cessation of birth would be impossible, leading to the impossibility of liberated and transmigratory states.

In other words, the non-eternal knower cannot be associated with more than one body for enjoying the remaining result of *karma* and he would not be free from being birth forever. If the knower were eternal, he would be associated with many bodies and would be able to enjoy the result of *karma*. For that matter he might be liberated after certain period. Hence, if the knower in the sense of self is taken as possessing effectual properties, he would never enjoy the result of *karma* and liberation. This alternative i.e., the self as possessing the causally brought about properties cannot be taken as granted due to the absence of the proper ground mentioned above. This type of argumentation or this method of elimination is called *Tarka*.<sup>12</sup>

Vātsāyana describes the method as a promoting to the ascertainment of right knowledge, but it is not right knowledge itself. Because, *Tarka*, after pointing out some grounds, asserts one of the alternatives, but it does not point out this alternative definitely as having such and such characteristics. In other words, though accessory to the attainment of right knowledge, it does not definitely assert a particular alternative in the form : 'This object is of such nature'. The main characteristic features of the object are not deliberated through this method and hence it is not right knowledge itself.<sup>13</sup>

It is accessory to the right knowledge because, it, after pointing out some grounds in favour of the ascertainment of the right knowledge of an object i.e. correct alternative, becomes promoter to the *Pramāṇas*. As *Pramāṇa* is associated with *Tarka*, its power is enhanced and thus the enhanced power becomes helpful for the revelation of the right knowledge (*tattva*).<sup>14</sup> In the context 'tattva' means 'thatness' i.e., to know an object as it really is. In other words, the positivity of the positive and the negativity of the negative entity may be described as *tattva* i.e. the absolute sameness.<sup>15</sup> This real nature of an entity is revealed through *Pramāṇa* associated with *Tarka*, the promoter.

From the Vātsāyana's analysis it is found that *Tarka* is generally adopted by an individual who inquires into the nature of an object not known properly and who is in a confusion there being two contrary properties in an object (arising out of not having proper knowledge of the object). At this point Vātsāyana suggests that inquiry comes first and there arises confusion about the nature of the objects. The confusion as to its nature prompts an individual to employ *Tarka* so that the confusion may be removed by way of having *tattvajñāna*. A problem may arise in this regard. It is not always true that confusion follows from the inquiry into right knowledge. But sometimes inquiry into right knowledge follows as well from confusion. Inquiry about an object follows if the object is confusedly apprehended or if there be any necessity to know it. Vācaspati Mishra in his *Tātparyatīkā* and *Bhāmātī* on *Adhyāśabhāṣya* of Samkara has remarked that inquiry into an object is permissible if there is *sandigdhatva* (confusion) regarding the nature of an object and *saprayojanatva* (having the need) for knowing it. In other words, here the properties like '*asandigdhatva*' and '*saprayojanatva*' leave no room for inquiry (*jijñāsyatva*). The properties are called *vyāpakas* while *jijñāsyatva* is called *vyāpya* on account of the fact that the relation between them can be described as '*Vyāpya-Vyāpakabhāva*'. For where there is *sandigdhatva* and *saprayojanatva*, there is *jijñāsyatva*. If a jar is seen in broad daylight and if our senseorgans and mind are connected, further inquiry about the object is not permissible because it is *asandigdha* i.e. not subject to confusion. If somebody asks 'How many teeth a crow possesses', (*kākasya kati dantāḥ*) there should be no need for further inquiry as the case is one of '*saprayojanatva*'. Hence, any type of inquiry presupposes confusion regarding the nature of an object, apart from the need of knowing it.<sup>16</sup>

In connection with the explanation of *Tarka* in the *Nyāyasūtra* Vātsāyana appears to give priority to inquiry, which precedes confusion.

The problem may be solved in the following manner. Vātsāyana's position may be justified if we ponder over the theory. Though in most cases inquiry arises out of one's confusion, it cannot be denied that sometimes curiosity or inquiry may arise in one's mind spontaneously. Now curiosity may lead one into confusion as to the nature of the

object to be known. That is, a man who aspires to know would endeavour to know the nature of an object. If the object apparently possesses two contrary features, he will be in confusion. This confusion prompts to apply the method of *Tarka*. At this point confusion again gives rise to a second order of inquiry in that form : 'This object is of this type or that type'. This sort of inquiry prompts the knower to resort to one more *Tarka*. Hence, Vātsyāyana need not be taken as contradicting the view of Vācaspati Miśra. What Vātsyāyana has been trying to point out is that there are two types of inquiry of which the second order one is the reason for the application of *Tarka*. If someone begins the process of knowing with confusion and then inquiry is of first order, Vātsyāyana makes the remark intentionally in order to include both first order and second order levels of inquiry as providing the reason for employing *Tarka*. This may again be substantiated by the fact that we may sometimes have the superficial knowledge of an object. But if the specific knowledge of the object is to be acquired, another type of inquiry becomes necessary, which may be designated as a second order inquiry. Any type of inquiry either of first order or of second order is the reason for application of the method of *Tarka*. Hence, Vacaspati's view that confusion gives rise to inquiry is not rejected by Vātsyāyana. Cognitive inquiry sometimes assumes the first order or sometime the second order form or status. Both of them are preceded by earlier state of confusion.

In connection with the explanation of the Vātsyāyana's view on *Tarka*, it would not be uncalled for if Vacaspati Misra's and Nāvyā Naiyāyikas views are put forward for a better appreciation of the Vātsyāyana's statement regarding *Tarka*. Vacaspati says that one cannot know an object through *Pramāṇa* if there arises any doubt. *Pramāṇa* cannot be applied as long as the doubt of illusion is not dispelled through *Tarka* in the form of *aniṣṭāpatti* (imposition of the undesired). After the removal of doubt, *Pramāṇa* can reveal the object and hence *Tarka* is called as an accessory to *Pramāṇa*.

It has been stated in the *Bhāṣya* that *Tarka* is to be applied when object is confusedly apprehended as having the existence of two contrary characteristic features. Ultimately this doubt is removed through *Tarka*, which eliminates the other possibilities.

If such be the case, another problem may be raised. So far as the elimination of doubt through *Tarka* is concerned, we are adopting *Tarka* in each and every case of knowledge. We are going on eliminating one object from another following this process of elimination. When the knowledge of a cow is attained, the cow is eliminated, though unconsciously, from the 'non-cow'. We are unconsciously following the methodology of the *Tarka* in the form : "If this cow were horse etc., it would not have possessed such characteristics existing in a cow'. From this *aniṣṭāpatti* we draw our conclusion in the form : 'As this cow does not possess the characteristic features of a horse etc. this animal is cow'. In this way, each and every piece of knowledge is the outcome of *Tarka* though we are not always aware of the technicalities of the method. That is the reason why the Buddhists have laid greater emphasis on the concept of *apoha*. It may be recalled that Rāmanuja has explained the term '*apohana*' found in the *śloka* of the *Bhagavadgītā*.<sup>17</sup> as *Ūha* or *Tarka*. Venkaṭanātha in his *Nyāyapariśuddhi* has admitted the above-mentioned meaning of the term *Tarka* and has referred to Rāmanuja's view.<sup>18</sup> From considerations as above it follows that *Tarka* has a wider perspective. It may be said to have a use in each and every case of knowledge, not alone the object in confusion. Why had Vātsyāyana laid so much of emphasis on the fact that *Tarka* is to be applied whenever an object is in some confusion (*avijñātatattva*)? From the foregoing analysis it is found that we are ever applying *Tarka* even when the object is known. In other words, it automatically comes to our mind that the known object i.e. 'jar' is different from 'non-jar'. That 'jar' is different 'non-jar' is known on the strength of the knowledge of the characteristic features of a jar as well as 'non-jar'. So Vātsyāyana's concept of *Tarka* surely have been much more wider. That *Tarka* is needed for revelation of the object about which we have no specific knowledge is to be taken as a restricted function of *Tarka*, as suggested by Vātsyāyana. That would be too inadequate.

In response to the above-mentioned problem one solution may be offered to strengthen Vātsyāyana's position. It is true that we go on eliminating when we attain knowledge of an object. Though it is done spontaneously, it would be too much to give justification

for knowledge of an object, which is not at all in confusion. If it were not in confusion, what is the use of providing *Tarka* (in a demonstrative way) for the justification of its knowledge ? To provide justification or proof for the object which is already established gives rise to a logical defect called *Siddhasādhana*. Though this method of elimination is adopted unconsciously, the intellectual demonstration of the method gives rise to the defect mentioned above, as this attitude is nothing but an effort to prove the object already established. Keeping this in view Vātsyāyana has emphasized that *Tarka* is to be applied in an object which is not specifically known. This view of Vātsyāyana is strengthened when he says that argument is to be put forward in the case when the object is neither ascertained nor unknown (completely) but in confusion.<sup>19</sup> This theory is applicable in any type of argumentation, not only of *Tarka*.

The form of *Vyāpti* is : where there is deviation of fire, there is the negation of being a product of fire (*yatra yatra vahnivyabhicāritvam tatra tatra vahnijanyatvābhāvah*). In this form of *Vyāpti* the first part is *Vyāpya* (pervaded) and the second one *Vyāpaka* (pervader). In the same way, it can be said that the *Āpādaka*-part is the pervader and *Āpādya*-part is pervaded. So invariable concomitance or *Vyāpti* is included in *Tarka*. In order to remove doubt about the existence of *Vyāpti* determined by *āpādya* and existing in *āpādaka* in the form : “whether *āpādaka* is pervaded by *āpādya* or not” (*Āpādaka āpādyaavyāpyo na vā*) in this *Vyāpti*, the necessity of applying another *Tarka* will arise. In this *Tarka* there is another *Vyāpti*. In order to remove the doubt of the above-mentioned form existing in this *Vyāpti* also, another *Tarka* will have to be resorted to and in this way the defect called ‘Infinite Regress’ (*anavasthā*) would crop up.<sup>20</sup>

The above-mentioned view is not tenable. For the doubt of deviation does not arise in *Vyāpti* of a *Tarka*, for it would involve contradiction (*vyāghāta*) in respect of one’s own activity and hence, the necessity of 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. A man is not permitted to bear any doubt about *Vyāpti* between smoke

and fire, as he seeks fire in his practical life to get smoke without any hesitation. If he has 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. In this way, it can be said that a man takes food to satisfy his hunger and takes recourse to words to make others understand his desire etc. So, one's own activities indicate the absence of doubt in them. Moreover, if we go on doubting, our doubting would be subject of doubt. So, each and every case is not the subject of doubt.<sup>21</sup>

It is found that *Tarka* is to be applied when there is doubt of deviation, but not in all cases of inferences. In some cases inference is possible without any *Tarka*. The baby is found to move on to suck mother's breast without turning to other objects. The reason behind this inclination of a newborn baby is the knowledge of its conduciveness to the desired object (*iṣṭasādhanatājñāna*). The reason behind its absence of inclination to other objects is the knowledge of their conduciveness in gaining objects that are not desired (*aniṣṭasādhanatājñāna*). How does a baby come to know of the conduciveness to the desired object? As the baby has got no scope for experiencing conduciveness to the desired object in this life, it is assumed that in the previous birth he had acquired the knowledge of *Vyāpti* in the form: "Where there is the means for the maintenance of my life, there is the means of attaining my desired object" (*yatra yatra majjīvanarakṣopāyatvam tatra tatra madīṣṭa-sādhanatvam*). The impression of the knowledge of *Vyāpti*, which was experienced in the previous birth, remains in the soul of a newborn baby. After the awakening of the impression i.e. *samskāra*, the baby attains the knowledge of *Vyāpti* which gives rise to the inference.<sup>22</sup> In this inference there is no scope for applying *Tarka* (*Reductio-ad-absurdum*), as he bears no doubt about the efficacy of sucking mother's breast and hence, there would not arise the defect of *Anavasthā* (*Infinite Regress*).<sup>23</sup>

It has been shown that as the child has got the knowledge of *Vyāpti* without the help of any *Tarka*, it (*Tarka*) cannot be the cause of ascertaining *Vyāpti*. As the knowledge of *Vyāpti* is possible without taking recourse to *Tarka*, there is the violation of the rule 'the

method of agreement in absence.' Here, the effect i.e. the ascertainment of *Vyāpti* is present while the proposed cause (i.e. *Tarka*), is absent. So, *Tarka* cannot be the cause of ascertaining *Vyāpti*,<sup>24</sup> but it may help in removing the doubt of deviation existing in an inference.

In this way the Indian as well as Western Logicians apply the method of *Reductio-ad-absurdum* or *tarka* to determine the real cause on real nature of an object, which originally belongs to geometry.

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- 2 *Bhaṭṭikāvya* 2/14
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- 4 *Nīlakaṇṭhaprakāśikā* on Dīpikā on Tarkasamgraha, p.376, edited by Satkari Sharma Bangiya,  
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- 7 *Sāhityadarpaṇa*, Chapter X, edited by Haridās Siddhāntavagīśa, p. 630. 1875 (B.S.).
- 8 *Kusumapratimā* on *Sāhityadarpaṇa*, Chapter X, edited by Haridās Siddhāntavagīśa, 1875 (B.S),  
p. 621.
- 9 *Nyāyasūtra* 1. 1. 40.
- 10 *Vātsyāyanabhāṣya* on 1. 1. 40.
- 11 *Ibid.*
- 12 *Ibid.*
- 13 *Ibid.*
- 14 *Ibid.*
- 15 *Vātsyāyanabhāṣya* 1.1.1.
- 16 *Bhāmatī* on *Adhyāśabhāṣya*.
- 17 *Śrīmadbhagavadgītā* 15/16.
- 18 Phanibhuṣan Tarkavagīśa : *Nyāyadarśana* Vol. 1, P. 353 W.B.B.B.
- 19 *Nyāyabhāṣya* on 1.1.1.



- 20 “Nanu tarko’pyavinābhāvamapekṣya pravartate, tato’navasthayā bhavitavyam,”  
*Nyāyakusumāñjali*, Chowkhamba, p. 345, Henceforth, N.K. “ Śamkāyā avadhīstarkāḥ,  
tannivartakatvāt, Nanu tarko’pi vyāptimūlakatayā tarkāntarāpekṣāyāmanavasthā...”  
Prakāśa Commentary on *Nyāyakusumāñjali*, Chowkhamba, p. 342 Henceforth Prakāśa on N.K.  
Tarkasya vyāptigrahāmūlakatvenānavastheti cet.”  
*Tattvacintāmani* (vyāpīgrahopāya ch) henceforth : T.C.
- 21 “Tarkamūlavvyāpatu svakriyāvvyāghātena, vyabhicāraśamkaiva nodeṭīti na tatra  
tarkāpakṣetyarthāḥ.” – *Prakāśa* on N.K., p. 342.
- 22 “Yadī hyanvayavyatirekāvadhīrtakāraṇabhāvam kāraṇam vinā kāryotpattim śamkyeta, tadā  
niyamena dhūmārtham vahneṣṭrīptyarthamannasya parapatipattiyartham śabdasyopādānam na  
kuryāt, tairvināpi teṣām sambhāvāt. Yasmāt tadupādānameva tādrśasāmkāpratibandhakam.”  
*Prakāśa* on N.K., p. 342  
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Theory of Truth”.  
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- 23 Evam Śarītrasya caitanye bālakasya stanyapāne pravṛttirṇa syāt, iṣṭasādhanatājñānasya  
taddhetuvāt, tadānīmīṣṭasādhanatāsmārakābhāvāt. Manmate tu  
janmāntarānubhūteṣṭasādhanatvasya tadānīm smaraṇādevapravṛtīḥ, - *Siddhāntamuktāvalī* on  
Verse No. 48.
- 24 “Jātamātrasya pravṛttinivṛttihetuvānumitījanakavyāptījñānam tarkam vinaiva...”- T.C.  
(Vyāptigrahopāya Chapter).