SYNOPSIS

THE DEVELOPMENT OF LOGICAL METHODS IN EARLY INDIA

'Early India' is being analysed in the term of its ideological contents which reflect a distinct image of past and its concerns. Romila Thapper records in her book, viz. 'Early India - From the origins to A.D 1300' that the term 'Early India' is a period about India's past which lies from the origin to A.D 1300. According to Romila Thapper "the vedic period begins from the midst of second millennium BC." Thapper uses many techniques like linguistic analysis of Vedic Sanskrit anthropological studies of Indian society, etc to draw the marking line of historical tradition. So this term is taken in the title of this thesis to denote its historical importance.

Vedas are considered as the earliest written documents of the cultural heritage of India. We can see many reflections of logical topics in Vedic literature. Brähma, as give
examples of the topics which deals with the subject of reasoning. Brhma, as records that the debate has its own stand and importance in vedic sacrifices and it is known as ‘Brahmodya’. It gives us a picture of the origin of debate as a logical subject.

To trace out the development of logical methods in its earlier stage the main sources like Vedas, Brhma, as, Upaniads, Itihisas are helpful. In Vedic period debates are conducted by learned men as the part of sacrifices. They were in the form of a dialogue between the participants and it is technically called ‘Vkokvyya’. Later the debates carried over from the sacrifices to the public assembly and it became an institution. The example of this development were mentioned in Upaniads and Itihisas. The next stage indicates that the growth of EnvekAike in the sense of logic and it includes the topic like science of reasoning. Again EnvekAike bifurcates into philosophy and logic. Here many names were used in its logical aspect namely Hetujsstra or Hetuvidy, Tarkavidy or Vidavidy etc. The second stage of development of EnvekAiki
can be seen in NýyasÉstra. Many works were composed by various teachers followed on this text. In this thesis I would like to draw the picture of the history of 'logical development' through ages with the help of available sources like texts of different schools of Indian languages. For this purpose the work is divided into four chapters.

The first chapter is Introduction. This chapter deals with the origin and development of logical methods as reflected in early literature like Vedas, Upaníṣads, Íthíṣís, Cannons of Jainism and Buddhism, Ayurveda etc. A rough sketch can be drawn about the significance of philosophical debate upto the pre-Gautama period. For e.g. in Vedas we can see many streams of thoughts such as Bahudevata vïda, Parameśvara vïda etc. The Nïsādiya sEkta of Ígveda clearly brings out the monism of the Ígveda. In the Upaníṣadic period numerous texts, were compiled by various teachers, namely Chïndogya, Bhïhadrânyaaka, Kena, Praçña etc. The main theme of these works were the development about the concept regarding with the metaphysical subject like Ítma
nihreyasa etc. The ĖnvēkĀiki vidyā is originated from these discussions. Debate became a part of human life during the age of UpaniĀads. In UpaniĀadic period 'sabha', and 'samiti' were the remarkable places where the philosophical discussions held. 'PariĀad' is meant for a group of advisors who were engaged in philosophical debates. The ChēndogyopaniĀad and the BāhadēranyakopaniĀad are considered probably Pre-Buddhist works. It can be belongs to the period about seventh or sixth century BC. In Chēndogya there lies the stream of debate between Āvapathi, the king of 'kekaya' and several Brēhmin scholars. In this UpaniĀad we can find a story of Uddhēlakēr̥uni, a Brēhmin of Kuru Pīnchēla, who tried to learn about nature and man with a rational mind. In Bāhadēranyakopanisad Yējuvalkēya debates with King Janaka, Gīrgī Vēcakkēni, ājkəlēya and Maitrēyi in the topics about the eternity of soul. In this UpaniĀad we can meet the philosopher king named Janaka, the good friend of Yējuvalkēya who chaired a member of philosophical meeting. More over the details
about the defeat of Yajñavalkya with many scholars in scientific subjects can be seen.

Teachers in the Upaniṣadic period were very anxious and they inquired about many things. They wanted to bifurcate the relation between the 'cause' and 'causation'. The famous epic such as the Rāmāyaṇa and the Mahābhārata also discuss the materialistic views from different points of view. In Vālmeki Rāmāyaṇa we can see the beautiful reflections about the assemblies of ministers and learned people. In these assemblies many topics, like how to decide the value of political affairs were held. In the Ayodhyakī, a Jīmbīli asks reasonable and intelligent questions to king Rīma based on materialism. In the ājñāthiparva of Mahābhārata we can see the discussions between Yudhisṭhira and a Čīvijka. In the Vanaprava we can see Ātīvakra and āvetaketu who reached the court of King Janaka to participate in the discussion. In the sixth century BC. India has given birth to two ācāryas named Mahīvera and Gautama Buddha. In Jainism logical aspects were dealt in Bhagavisṭra and Sthīna’ga sūtra in its earlier
form. The teaching of Buddha were seems to be more rational and logical than Mahāmera. And in the Buddhist works of Brahmajāla sutta, Kathvattuprakaraṇa etc we can see the discussion about logical aspects of debate. In the Ayurveda treatise namely Caraka Samhitā composed in the first century A.D we can see a summary of the well knitted doctrine of ĪnvēkĀike. The origin of the deductive and inductive methods as well as experimental methods can be traced from the Caraka Samhitā. The logical forms of debate and the definition of logical categories were also found in the Caraka Samhitā.

The second chapter deals with the textual contents of the works of systematic logic belonging to Akāśa school, Jaina school and Buddhist school. This chapter starts with the discussion about the Nyāyasūtra of Gautama who is considered as the first writer of systematic works on Indian logic. This chapter also discusses the commentaries on Nyāyasūtra namely Vītsyāyana's Nyāyabhāṣya, Udyotakaraṇa's Nyāyavārtika, Viṣṇupati Miśra's Nyāyavārtikatātparyateka, Udayana's Nyāyavārtikatātparyateka- pariṣuddhi.
Jayanta Bhaṣja's *Nyāyamājari* etc. Again the contribution of Jainas and Buddhist logicians were also discussed briefly.

The third chapter signified as the amalgamation of Nyāya-Vaiṣesika theories. It analyses the composition of Prakaraṇa text and its modified nature of textual content.


The fourth chapter is conclusion. It evaluates the nature and form of logic how developed in India through ages and its later influence on other branches of learning also. Vṛṣyāyana modified the aphoristic style of Gautama's *Nyāyasūtra* through commenting on it. He has presented many old theories in his work. While describing 'god' Vṛṣyāyana shows a leniency towards the yoga system. There after Udyotakara was the first person who used the term 'Pramarśa' as a step to anumāna. He has adopted his own peculiar method of explaining this facts. His method of explanation is very lucid.
and some times very elaborate. Udyotakara for the first time recognise the six kinds of contact viz, Samyoga, Samyukta samavīya, Samyukta samaveta samavīya, samavīya and Viśeṣanvisesabhīva. Again Viścaspati the first writer who adopted the division of perception that is known as 'savikalpaka' and 'nirvikalpaka'. Again Udayanīcēpya has made a clarification to logic giving the interpretation of "Tarka" in a different way. And also he made an overview with regards to the five varied phase of "Tarka". After this we can see Jayantabhatta and his independent contributions, through the composing a text namely 'Nyāyamājari'. He was invincible in debate and well known as 'Vṛttikara'. The elegant flow of his style and criticism is seldom surpassed. It is very interesting that he rejects himself the claims of the originality of his attitude in that work. While discussing the verbal knowledge Jayanta reviews the two theories called 'abhihitavayavīda' and 'anvitabhidhīna vīda'. Jayanta explains these Memśmsaka theories and approves that
Nyāya doctrine achieves more clarity being a part of it. Jayanta opposes sphotavāda, the theory of phonetic explosion of grammarians.

The writers belongs to Jaina and Buddhist school occasionally handled the principles of pure logic in expounding their dogmas of their religion and metaphysics. The Jaina logician Siddhasena Divkara and the Buddhist logician Diṇīga were the first writers to introduce the logical theories by differentiating the principles of logic form those of religion and metaphysics. They laid the true foundation of logic what is termed the 'Mediaeval school of Indian Logic' by Dr. S.C Vidyabhusana. These schools concern itself with one category, viz., pramāṇa which is treated in such a way and it is equally applied to the religious system of the Jainas and Buddhists with defending the news of Brāhmans. Inference, a kind of Pramāṇa, which was briefly noticed in the logical works belongs to the school of Akāśapāda Gautama. But it receives a full treatment in the works of mediaeval school belonging Jainas and Buddhist. So the logic belonged to these two
schools is called in Sanskrit as ‘pramāṇa śāstra’, the science of right knowledge. The composition of prakaraṇa works were introduced in Indian logic by these two great schools through the composition of works such as ‘Nyāyavatāra’ of Siddhasena Divakara, Samantabhadra’s Aptamāṇya, Mañjuśrīnandī’s Parīkṣamukha śāstra etc. Similarly ‘Nyāya Praveśa’ of Dignāga, ‘Hetubindu’, and ‘Vadanyāya’ of Dharmakirti etc were the examples of Prakaraṇa works in the long history of the growth of Indian logical works.

The development of Indian logic can be seen in the antagonism between the Naiyāyikas and Buddhist logicians and their attacks and counter attacks. This created a new textual form of their works in these school. For the development of Jaina and Buddhist this subject matter school developed the category of Pramāṇa extensively. They treated Pramāṇa as the important ‘padartha’, as two means of valid knowledge viz., Pratyākṣa and Anumāna. Dr. S.C Vidyabhusana observes his works namely ‘A history of Indian logic’ that the Buddhist system of thought absorbed later in the works belongs to Akāśapāda.
Gautama and the school of NavyaNyāya as a result of the combination of Brāhmaṇic thoughts on Nyāya and the Buddhist science of Pramāṇa. Moreover he states that Jainas did not show their disrespect towards the logical doctrines belongs to the school of Akāśapīḍa Gautama. Infact the logical theories of the Jainas have some similarity to those of Aksapīḍa darśana. The Jaina logicians quoted the Brāhmaṇic logicians generally in academic spirit. So they did not receive any severe attack from these logicians. In this context Naiyāyikas belonging to the main stream i.e. Akāśapīḍadarśana and VaiṣeŚākṣas recognized the necessity of the amalgamation of their thoughts based on their categories and pramāṇa of both the schools. Bhāṣarvajña belongs to the 10th century A.D took the first step to make some modification on this views through his work. He discussed three kinds of the means of valid knowledge excluding Upamāṇa an independent source of valid knowledge. He gives the positive view of salvation. He says that salvation was described as the attainment of eternal pleasure. The VaiśeŚāka and Nyāya philosophies
of the ancient and mediaeval period were supplemented each other to protect their views
of subject and style. Finally the Vaiṣeṣika and Nyāya darśanas actually amalgamated.

The seven categories including abhīva of Vaiṣeṣika were admitted in the treaties of
Nyāya. The Nyāya category Pramāṇa reached in its developed form in that period. As the
best example of the absorption of Nyāya-Vaiṣeṣika categories can be seen in Varadarja’s

Trikārakā. The Trikāraka of Keśava Miśra also represents an attempt to present a
new vision by unifying the concepts of Nyāya and Vaiṣeṣika in some aspects.

Vallabha’s Nyayalīkāvata deals with pramāṇa as included in the category of guna.

āadvadharā’s Nyayasidhāntadepa deals with the categories of Vaiṣeṣika and Nyāya in a
promiscuous way. In prakārā works we can see some important topic or sub-topics of
the two system were selected and elucidated in an abstruse and recondite style. In these
works they tried to avoid the controversial topics of the Nyāya and Vaiṣeṣika darśanas.
The development of the Nyāya in ancient India changed its attitude on metaphysical ontological and epistemological issues. With regards to their logical techniques, they discovered a new path in the development of Nyāya. Naiyayikas accepted a new methodology in its logical development. They accepted a new technique to define the term through logical methods. This new system began to develop as a sprout after Udayanācārya and reached its flowering state at the time of Gangeśopādyya, the illustrious author of Tattvacintāmani.

In southern India Navya Nyāya has got importance as a later step which starts from the first half of 17th century. Even Dāksīṇāyikas were the scholars of this system they did not show their interest in composing manuals on this style. Tarkasamgraha of Annambhatta and Manika, a of an anonymous writer were considered as the first treatise on Navya Nyāya topics. Annambhatta, a native of Andhra, incorporated the Vaiṣeṣika categories with pramāṇas of Naiyāyikas in a successful way. This text has got very much
popularity among the students of Navya Nyāya in southern India. This text became popular as a primer to Tīrthaṇḍastra.

Prof. Ananta Narayana āstri clearly observes that Tīrthaṇḍastra is a combination of the padarthas belonging to Vaiṣeṣika and Pramāṇa of Naiyayikas. Manika is a text which deals with the summarized form of Tattvacintamani and this text is translated by Dr. E.R. Srikrishna ārma with the forward of H.H Rajarsi Rājavarma and published from Adayar Library and Research Centre in 1960. Navya Nyāya topics gives out the details of several topics like Avacchedaka, Avacchinna, Līghava, Avacchedaka Sambandha, Pratiyogita, Nirupita etc. In the Navya Nyāya writings definition occupies an important place. Viṣṇyana the earliest commentator of Nyāyasūtra state that the ṣṭra is constituted of three components namely enumeration (uddeṣṣa) definition (lakāṇa) and examination (parīkṣa) while defining the nature of lakāṇa the definition and examination of the purpose of the each term should be noted. Each and every term has a
definite stand or a concept and it should precisely define before dealing that concept. If
the definition is found to be faulty while thinking about its 'Dalaprayojana', it should be
remodeled till it becomes perfect or flowless. For e.g., the definition of pramāṇa bring
out the theory of Anyatkhyati veda Arambhavida etc. Thus a new methodology is
adopted by Gangeśopādhyāya the father of Navya Nyāya, the great teacher. Following
these Bhāsaparicheda of Viswanatha Paścinana which consists of 168 verses
accompanied with his own commentary called Nyāyasidhāntamuktavali. It has gained
very much popularity in that age.

Thus Nyāya and Vaiṣeṣika were amalgamated together. Vaiṣeṣika have
emphasized on the inductive side of reasoning with its realistic and pluralistic out look
on substances. Nyāya theories gave importance to deductive side of reasoning on valid
knowledge.
Prof. E.R. Sreekrishna Sharma opines that although Nyāya system was known as Pramīṣṭra or the branch of learning dealing with the means of valid knowledge the earlier works did not lay stress on the pramīṣṭras, but treated them as a one of several
topics or one among the sixteen padarthas. Efforts of amalgamation of once independent systems of Nyāya and Vaiśeṣika have resulted in losing their individual characteristics and it became difficult to say whether some of the Nyāya works were pramīṣṭras or Prameya ājñātras. Gangeṣa started to redeem the ambiguity by laying stress on the treatment of the pramīṣṭras. Gangeṣa tried to define some term with more
accuracy. He used new expression to measure subtle thoughts. Every thoughts and expressions was subjected to careful examination. When a new topic was introduced the prosperity of doing so, its relation to the topic which previously dealt and its position in the text is carefully examined. This made the language of texts belong to Navya Nyāya system terns and it contents serious. Thus the status of Nyāya as a pramīṣṭra was
re-established by Gangeṣopādhyāya and it underwent a considerable revolution at the hands of Raghunātha áiromani.

The concept of pramāṇa is relative. There can be no pramāṇa with prameya, the object known. So a pramāṇa āstra cannot stand without dealing the prameya. Here Naiyāyikas accepted the concept and the division of prameyas of Vaiśeékās with some alternations. Thus the vision of Vītsyāyana, the celebrated commentator of Nyāyaśāstra, reached its fully prosperous state through this revolution. His approach to Nyāya is "the science of examination of object through the means of valid knowledge" and it reached in its meaningful state. Moreover he states that inference is the most significant in logical theories and the five membered syllogism are unavoidable in that process. Thus this chapter helps us to get a clear picture of the development of logic of Nyāya in early Indian through the hands of various celebrated writers upto the beginning of 14th C. AD.