INTRODUCTION
The present work (the thesis for the Ph.D. degree in Sanskrit of the University of Calcutta) is based on mainly an important topic connected with Inference as discussed in a very subtle way in the Nyāya Nyāya system of Logic. In connection with the establishment of the conclusion of the Neo-logicians, the theories of the old logicians, Vedantists, Jainas, Buddhists etc. have also been discussed and their views have also been briefly evaluated and critically adjudged at the same time. Without refuting the prima-facie arguments, the old logicians, the Neo-logicians and the philosophers of all other branches of Indian Philosophy do not arrive at their conclusion. Gaṅgāsa, the author of Tattvacintāmāni who is the main pioneer of the Neo-logicians, critically examines the views of the opponents or the prima-facie objectors at first and draws his own conclusion after refuting their views.
The Logicians in general accepted Perception (Pratyakṣa), Inference (anumāna), Comparison (upamāna) and Verbal testimony (Śabda) as the special sources of valid knowledge (Pramāṇas). This dissertation is the result of an intensive study on Inference, a particular special source of valid knowledge as accepted by the Logicians. Without the knowledge of the invariable concomitance (vyāpti), the inferential knowledge can not be attained. Those who accept inference as a special source of valid knowledge admit the importance of the invariable concomitance for attaining the inferential knowledge. Though much importance has been attached to the discussion of the means of attaining the knowledge of the invariable concomitance, yet various definitions of the invariable concomitance and a brief account of the nature of it (vyāpti) and the utility of inference in our day to day life have also been put forward.
The Neo-logicians have shown their logical excellence in respect of the clarification of the nature, function and the definition of the invariable concomitance in particular. So, the invariable concomitance or Vyāpti is one of the most important topics of the Navya Naya system of Logic. Some research work, of course, on this particular topic (i.e., on the nature and function of Vyāpti) has been done earlier by some scholar. Yet the nature of the invariable concomitance has also been discussed here. For, without knowing the nature of Vyāpti the means of attaining the knowledge of it can not properly be understood. That is to say, though the fundamental object of this research work is to discuss the means of attaining the valid knowledge of Vyāpti according to the Neo-logicians, yet the nature and function
of Vyāpti have been discussed as they are essential for knowing the means of ascertaining Vyāpti. This view has been supported in the Tattvacintāmaṇi also. Gangesa, the author of Tattvacintāmaṇi, at first establishes the validity of inference and at the end of the Chapter says that now the means of ascertaining Vyāpti is to be discussed ("Vyāptigrapahopāyaśca vakṣyate" - Tattvacintāmaṇi, Last line of the chapter - 'anumānaprāmāṇyaṃ'). But in the following chapter it has been found that five prima-facie definitions of Vyāpti instead of the means of ascertaining it have been discussed. Perhaps, Gangesa has this idea in his mind that, without the proper knowledge of the nature of Vyāpti, discussion on the means of ascertaining it will not be of much use. In the same way, it can be said that without giving a brief account of inference and its utility
in our everyday life, it would be improper to discuss on invariable concomitance.

In the first chapter, it has been discussed that, though Perception is the fundamental basis of all kinds of knowledge, Inference is by far the most important source of knowledge in our everyday life.

In the second chapter, it has been discussed that the knowledge of the invariable concomitance (i.e., Vyāpti) is by far the most important factor for attaining inferential knowledge. Some philosophers admit the knowledge of Vyāpti as a special cause (Karana) of inferential knowledge and some of them simply admit its causeness to the inferential knowledge. In order to discuss many theories in respect of the causeness or the special causeness of the knowledge of Vyāpti in an inferential
knowledge, sometimes the definitions of Inference in which it has been found that the philosophers have laid much importance on the knowledge of Vyāpti have been put forward. That the different philosophers of the different schools admit the causeness (Kāraṇatā) or the special causeness (Karaṇatā) of the knowledge of Vyāpti to the inferential knowledge has been clarified in some cases with the help of the definitions of inference offered by them. In the last part of this chapter, it has been discussed that all the philosophers of other schools like the Vedantists, Buddhists etc., also admit the knowledge of invariable concomitance as a cause or a special cause of inferential knowledge.

In the third chapter, the definitions of Vyāpti as offered by various systems of philosophy have been
discussed in short.

In the fourth chapter, some of the important definitions of Vyāpti have been criticised and evaluated. Gangesa has put forward many definitions of Vyāpti as prima facie definitions. Only a few of them have been critically evaluated. In criticising some definitions, an effort has been made to throw some light from our own viewpoint. As the criticism of some of the definitions is the product of an immatured brain and is advanced by one having limited knowledge in respect of it, it may not be accepted by the scholarly world. Though the criticism of some of them has been made from our own point of view, yet the arguments advanced in favour of it are not new at all. (1) We are, of course, aware that the criticism may

(1) "Kuto và nūtanam vastu
vaygmupreksitum kṣamā,
Vācovinyāśavaicitryamā-
tramatra vicāryatām."
Jayanta Bhaṭṭa, Introduction of Nyāyamaṇḍāri.
not be accepted on their face-value by the scholars in the field. It is hoped that such type of endeavour would be appreciated by the scholarly world.

In the fifth chapter, the means of ascertaining the invariable concomitance has been discussed. It is based on mainly 'Vyāptigraha-pāya' chapter of Tattvacintāmani by Gangesopādhyāya. At first, the view of the Prabhākara school of the Mīmāṃsakas has been refuted carefully by the arguments as advanced by Gangesā and then the view of the Neo-logicians regarding it has been put forward. Among the prima facie objectors of the Neo-logicians, Prabhākara, the celebrated Mīmāṃsā philosopher, is the forerunner and the strongest. So, an effort has been made to evaluate the view of the Prabhākara school of the Mīmāṃsakas. For the explanation of the original text of the Tattvacintāmani,
the commentary of Mathurānātha Tarkavāgīsa known as 'Rahasya', that of Jagadīśa Tarkālamkāra and of Gadādhar Bhaṭṭacārya have mostly been relied upon. The Bhāṣāpariccheda and the commentary named Siddhāntamuktāvalī along with several super commentaries known as Dinakari, Rāmarudrī, Kiranāvalī of Kṛṣṇabalavācārya etc. have also been consulted.

In the sixth chapter, the views of other systems of Philosophy regarding the means of ascertaining Vyāpti have been discussed in short.

In the seventh chapter, an effort has been made to evaluate the criticism of the source of knowledge of Vyāpti by other branches of philosophy. Here also, an effort has been made to offer some original viewpoint on which the opinion of the scholars in the field are invited.
in all humility.

In the eighth and the last chapter, the conclusion has been drawn.

All the theist schools of Indian Philosophy admit the validity of the Vedas and hence, their arguments can not be contradictory to the Vedas, rather they are in consonant with the vedic standpoint. All these systems admit the creation, maintenance and the dissolution of this universe. That the supreme goal of our life is the salvation (Mokṣa) is accepted by all the schools of Indian Philosophy with single exception of the Pūrva-mīmāṃsā. The Mīmāṃsakas are of the view that only the result arising from the sacrifices is the supreme goal of their life. Cārvākas also do not admit the nature of salvation as accepted by the logicians. According to them, the destruction of this
body i.e., death is the salvation. (1) All the systems of Indian Philosophy advise the means of attaining freedom from the sorrows and sufferings of life.

While other systems are speculative, Nyāya and Vaiśeṣika represent the analytic and strictly logical type of philosophy. Without making a logical enquiry the philosophers of the Nyāya and Vaiśeṣika schools do not arrive at their conclusion. According to them, all the objects of this world are subject to logical enquiry. The religion is also to be acquired through the light of argument. The same idea has been expressed in the Manusāṁhitā. According to Manu, a man who thinks over the implication of the words uttered by the sages and the advices regarding religion

---

(1) "DehaASYa naSana muktistu na jñānānuktirīṣyate."

Cārvāka philosophy, Sarvadārśāṃsāṃgraha.
through the arguments that are not contradictory to the Vedas understands what the religion is and nobody else. (1)

The charge against Indian Philosophy that it is based on religious authority and hence it is dogmatic and not critical is not at all applicable to the Nyaya and Vaśicēka system of Philosophy, as they apply the method of logical criticism to solve the problems of our life and reality.

What is described in the scriptures and what is attained through the sense organs must be critically examined through the light of argument.

Though the other systems of Indian Philosophy accept the ultimate authority of the Vedas, they also try their best to establish the Vedic theories. Only the

(1) "Arṣaṁ dharmopadeśāṁca
Vedasastrāvirochīnaṁ.
Yastarkeṇaṁusandhatte sa
dharmam veda netaraḥ." Manusaghitā.
approach is somewhat different. The Logicians proceed at first with the help of their independent logical argument and subsequently quote the Vedic texts which are also found to be supporting their theories whereas the approach of other theistic philosophers is different from that of the logicians. They first find out the Vedic theories and then try to establish them through the logical theories. The Logicians, at first, as for instance, establish the existence of God with the help of the several arguments and then they quote the Vedic text (1) with a view to supporting their conclusion arrived at by the logical thinking. That is why, it is known as Anvīkeśikī. That which is established with the help of the reasons is admitted by the Logicians. (Buddhyā Yadupapannam tat sarvam nyāyamataṁ).

(1) "Dyāvābhūmi janayan deva eko viśvasya kartā bhuvanasya goptā." etc.
Regarding the hairsplitting analysis and excellence of Navya Nyāya, the opinion of Late Dr. Sātkari Mukherjee may justly be quoted here. "The merits of Navya Nyāya speculations pre-eminently lie in their method of analysis of concepts and their formulation in exact terminology. The analysis is carried to its utmost limit, and the dissection of the implications has necessitated the creation of a terminology which is extremely difficult and not infrequently bewildering. Language has been stretched to its utmost capacity, and even an ordinary concept, analysed in all its implications and expressed with meticulous precision, has required a ponderous sentence. The unusual sound of the sesquipedalian phrases, in which the Naiyāyikas literally revel, frightens away the neophyte from the study of Navya Nyāya texts. I do not think
translation into another language will remove the
difficulties, as they are not purely linguistic, but
logical in character. To master the terminology is a hard
task. But once the intricacies of the terminology are
mastered, the reward will be an intellectual satisfaction
and a habit of close thinking, so essential for the
successful comprehension of any problem, theoretical or
practical........ The translation of works of Nyāya
literature into a foreign language is almost an impossible
task, and if possible at all, will require Herculean labour.
The subtle nuances of the terminology expressions refuse
to be rendered into another language. (1)

Similar ideas have been expressed by Daniel Henry
Holmes Ingalls in his "Materials for the Study of Nyāya

(1) Introduction of Bhāṣāpariccheda (Śvāmī Mādhavānanda
Edi.) written by Dr. Satkari Mukherjee. Page no.
XIV-XV and XXIII.
Nyāya Logic." There Prof. Ingalls said, "The study of Navya Nyāya needs no apology to an Indianist. A great part of Indian Philosophy since the thirteenth century is unintelligible without it. But more than this, I believe there is much in Navya Nyāya that will also prove of interest to the general student of philosophy and logic."(1)

It has been tried with utmost care to express the Navya Nyāya terminology accurately though it is a very difficult task. The technique of expression and the technical terms as offered by the Anglo-Sanskrit scholars like Prof. H. H. Ingalls, Prof. Potter, Dr. D. C. Guha, Dr. B. K. Motilel, Dr. Rādhākrṣṇan, Dr. S. N. Dasgupta, Prof. S. C. Vidyābhūṣana, Prof. E. R. Śrīkṛṣṇa Sarma

(Professor, Sri Veṅkaṭeśvara University, Tirupati) etc.

(1) Introduction of the "Materials for the study of Navya Nyāya Logic" by H. H. Ingalls.
have been generally followed. In some cases, the new terms have also been coined. In most of the cases, the Sanskrit terms have been put under bracket for easy understanding. These quotations of the Sanskrit terms may, of course, be ignored if it is so desired.

I am grateful to Dr. Dinesh Chandra Guha, M.A., D. Litt. etc, the Supervisor of my research work, who has given valuable suggestions from time to time in going ahead with this arduous task and with whom I had to read frequently many important treatises and higher dissertations on Navya Nyāya and other relevant treatises of Indian Philosophy in course of preparing my thesis. I take this opportunity to express my respect and gratitude to Pañḍit Dīnānāth Tripāṭhī, Naṇaṭīrtha, Lecturer in Sanskrit, Calcutta University, with whom I have been reading the
Navya Nyāya treatises for some years past and to Paṇḍit Shyamapada Tarkatīrtha, Lecturer in Philosophy, Calcutta University, with whom also I have been reading some books of Navya Nyāya for some years. I am also grateful to Paṇḍit Biswabandhu Nyāyācārya, Reader in Philosophy, Jadavpur University, Calcutta, with whom I have discussed some of the problems treated here and received much light and guidance.

I am grateful to Sanskrit Śāhitya Pariṣat authority in general and Paṇḍit Madhusūdan Vedāntaśāstra, the Librarian of Sanskrit Śāhitya Pariṣat Library, in particular for providing me some valuable books and also to Swāmī Apūrvānandaji Mahārāj, President, Kāmakṛṣṇa Math and Mission, Varānasī for providing valuable books from the Āshrama Library. Dr. Mrinal Kanti Ganguli, Lecturer in
Sanskrit, Calcutta University had supplied me some valuable journals and articles written by him for which I am grateful to him.

I am tempted to express my gratitude to the Governing Body, Mahishadal Raj College, in general and Principal, B. B. Sen in particular for providing various facilities and granting me a study leave with a view to giving a final touch to the thesis under the guidance of Dr. D. C. Guha who is at present staying in his Varanasi residence.