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## Ancient Indian Logic and Ontology. A Survey of Contemporary Studies

### The meaning and scope of Indian philosophy

"Indian philosophy denotes the philosophical speculations of all Indian thinkers, ancient or modern, Hindus or non-Hindus, theists or atheists. 'Indian philosophy' is supposed by some to be synonymous with 'Hindu philosophy.' This would be true only if the word 'Hindu' were taken in the geographical sense of 'Indian.' But if 'Hindu' means the followers of a particular religious faith known as Hinduism, the supposition would be wrong and misleading. Even in the ancient writings of the orthodox Hindu philosophers, like the *Sarva-darsana-sangraha* of Mādhâvacārya which tries to present in one place the views of all (sarva) schools of philosophy, we find in the list of philosophies (darsanas) the views of atheists and materialists like the Cārvākas, and unorthodox thinkers like the Bauddhas and the Jainas, along with those of the orthodox Hindu thinkers. Indian philosophy is marked, in this respect, by a striking breadth of outlook which only testifies of its unflinching devotion to the search for truth. Though there were many different schools and their views differed sometimes very widely, yet each school took care to learn the views of all the others and did not come to any conclusion before considering thoroughly what others had to say and how their points could be met. This spirit led to the formation of a method of philosophical discussion. A philosopher had first to state the views of his opponents before he formulated his own theory. This statement of the opponent's case came to be known as the prior view (purvapaksa). Then followed the refutation (khandana) of this view. Last of all came the statement and proof of the philosopher's own position, which, therefore, was known as the subsequent view (uttarapaksa) or the conclusion (siddhānta).

This catholic spirit of treating rival positions with consideration was more than rewarded by the thoroughness and perfection that each philosophical school attained. If we open a comprehensive work on the Vedānta, we will find in it the statement of the views of all other schools, Cārvāka, Bauddha, Jaina, Sāṅkhya, Yoga, Mīmāṃsā, Nyāya and Vaiśeṣika, discussed and weighed with all care; similarly any good work on the Bauddha or Jaina philosophy discusses the other views. Each system thus became, encyclopaedic in its grasp of ideas. Naturally we find that many of the problems of contemporary Western philosophy are discussed in Indian systems of philosophy. Besides, we find that indigenous scholars with a thorough training, exclusively in Indian philosophy, are able to deal even with abstruse problems of Western philosophy with surprising skill.

If the openness of mind - the willingness to listen to what others have to say has been one of the chief causes of the wealth and greatness of Indian philosophy in the past, it has a definite moral for the future. If Indian philosophy is once more to revive and continue its great career, it can do so only by taking into consideration the new ideas of life and reality which have been flowing into India from the West and the East, from the Aryan, the Semitic and the Mongolian sources." (pp. 4-6)

From: Satischandra Chatterjee and Dhirendramohan Datta, *An Introduction to Indian Philosophy*, Calcutta: University of Calcutta, 1954 (Fifth edition).

### The Schools of Indian philosophy

According to a traditional principle of classification, most likely adopted by orthodox Hindu thinkers, the schools or systems of Indian philosophy are divided into two broad classes, namely, orthodox (āstika) and heterodox (nāstika). To the first group belong the six chief philosophical systems (popularly known as sad-darsana), namely, Mīmāṃsā, Vedānta, Sāṅkhya, Yoga, Nyāya and

Vaisesika. These are regarded as orthodox (āstika), not because they believe in God, but because they accept the authority of the Vedas.(1) The Mimāṃsā and the Sāṅkhya do not believe in God as the creator of the world, yet they are called orthodox (āstika) because they believe in the authoritativeness of the Vedas.

The six systems mentioned here are not the only orthodox systems; they are the chief ones, and there are some other less important orthodox schools, such as the Grammarian school, the medical school, etc., also noticed by Mādhavācārya. Under the other class of heterodox systems, the chief three are the schools of the Materialists like the Cārvākas, the Bauddhas and the Jains. They are called heterodox (nāstika) because they do not believe in the authority of the Vedas."

### Notes

(1) In modern Indian languages. 'astika' and 'nāstika' generally mean 'theist' and 'atheist', respectively. But in Sanskrit philosophical literature, 'āstika' means 'one who believes in the authority of the Vedas' or 'one who believes in life after death. ('Nāstika' means the opposite of these.) The word is used here in the first sense. In the second sense, even the Jaina and Bauddha schools are 'āstika', as they believe in life after death. The six orthodox schools are 'āstika', and the Carvāka is 'nāstika' in both the senses." (pp. 6-7)"

From: Satischandra Chatterjee and Dhirendaramohan Datta, *An Introduction to Indian Philosophy*, Calcutta: University of Calcutta, 1954 (Fifth edition).

### The Nyāya-Vaiśeṣika School

"Historically the Nyāya and Vaisesika schools are different. They had separate origins and developed differently in the early phases of their existence and also had different spheres of interest and expertise. However, on account of their common philosophical standpoints and methodology a link seems to have existed between the two quite early in their history which during the course of their development brought them closer, resulting in their subsequent amalgamation into a single syncretic system.

Roughly speaking the history of the Nyāya-Vaisesika system extends over a period of twenty-four centuries, i.e. from about the fourth century BC, till modern times. Like Vedānta, it has been one of the living systems of philosophy. Redaction of the Nyāya doctrines in the form of sutras was done by Gautama around the fourth century BC. He was succeeded by an array of illustrious commentators and exponents like Vatsyayana (about AD 400), Uddyotakara (about AD 650), Vācaspati (about AD 840), Bhāsarvajna (about AD 860), Udayana (about AD 984), Jayanta (about the tenth century AD) and many others. The sutras of the Vaisesika school were formulated by Kanāda, about one century prior to Gautama, and he was followed by thinkers like Prasastapada (about the sixth century AD), Sridhaka (about AD 990 and Sarikara Misra (about the fifteenth century AD).

As stated above, the Nyāya and Vaisesika schools had more or less the same sort of philosophical orientation and presuppositions; however, their interests were most pronounced in the fields of epistemology and metaphysics respectively. They borrowed from and leaned upon each other so heavily that they could not afford to remain separate for long. Though the synthesis of the two schools began appearing in Udayana, it was Gangesa (about the twelfth century AD) who is to be given the credit of forging the unity of the two schools. He is regarded as the founder of the syncretic school known as the Navya-Nyāya (Neo-Nyāya) school." (p. 132)

From: Brian Carr and Indira Mahalingam (eds.), *Companion Encyclopedia of Asian Philosophy*, London: Routledge 1997, Chapter 7: "Nyāya-Vaiśeṣika" by S. R. Bhatt pp. 119-138.

### Indian Logic

"The term "Indian logic" may be used to refer to the system of logic (Nyāya) that forms one of the six principal schools of Hindu philosophy. In a wider sense it denotes Buddhist and Jaina logic as well. In a still wider sense it refers to any logical doctrine propounded by Indian scholars. In this article the term is used in the last sense, although Jaina logic is omitted and only some representative doctrines and techniques from other sources are discussed.

The history of Indian logic covers at least 23 centuries, and the number of works by Indian logicians, published and unpublished, is vast. Those available in Western languages or accessible in good editions constitute only a fraction of this material. Attention here is confined to material from some of the published Sanskrit texts. For the study of Buddhist logic translations into Tibetan or Chinese from Sanskrit originals, many of which are lost, must also be utilized.

This survey falls into five parts: (1) Grammar, which was well developed by the time of the Sanskrit grammar of Panini. Its sophisticated logical rules and techniques influenced almost all later scholarly developments in India. (2) Mimamsa, the most orthodox of the six philosophical schools of Hinduism. It dealt largely with problems of textual interpretation and faced a variety of logical problems in the course of its history. (3) Vaisesika and Old Nyāya. Vaisesika, which also embodied a system of natural philosophy, provided a list of categories that set the framework within which logicians of the Old Nyāya school developed their systematic analyses of perception and inference. (4) Buddhist logic, partly a reaction against the old Nyāya. Some branches of Buddhist logic laid a foundation for formal logic and began to exclude extraneous considerations of ontology, epistemology, and psychology. (5) New Nyāya, the final phase of Hindu logic, both challenged by Buddhist logic and substantially enriched by it. The New Nyāya began with the work of Gangesopadhyāya (thirteenth century A.D.) and continues to the present day.

Lack of space prevents discussion of the role of logic in the sciences and of the philosophical schools of the Vedānta, which dealt with logical topics, especially in the later developments within Advaita and Dvaita.

Since more attention will be paid to doctrines than to individual logicians and their works and dates, a chronological table may be helpful in providing a rough outline of their historical context. (In the table, names of writings are in italic.) The table makes it clear that some of the schools which developed simultaneously were in a position to influence each other." (pp. 529-521)

### Indian Logicians

From: Frits J. Staal, *Indian Logic* (Second section of: *Logic, History of*) in: Paul Edwards (ed.), *The Encyclopedia of Philosophy*, New York: Macmillan 1967, Vol. IV pp. 520-521.

## Indian Ontology

"All Indian philosophical traditions are deeply engaged with ontology, the study of being, since clarity about the nature of reality is at the heart of three intimately connected goals: knowledge, proper conduct and liberation from the continued suffering that is part of all human existence. The formulation of a list of ontological categories, a classification of reality by division into several fundamental objective kinds, however, is less widespread. There is little room for a doctrine of distinct, if related, ontological categories in a philosophical school that takes reality as one, even less if that one lies beyond description. If the phenomenal world is but illusory appearance, as, for example, in the Vedānta of Sankara, then a determination of kinds of entities does not recommend itself as a means to adequate analysis of the world. Even the Sankhya tradition's realism reduces the world to an evolution from two fundamental entities, spirit and matter. Categories make sense within the context of a pluralistic realism, an analysis of the world that finds it to be composed of a multiplicity of real entities. Such a view is found to some extent in Jaina philosophy, but is primarily defended and developed in the Nyāya-Vaiśeṣika school.

The Nyāya- Vaisesika categories are seven: substance, quality, motion, universal, particular, inherence and not-being. While all are understood as real entities and objects of knowledge, substance is most fundamental as each of the others in some way depends on substance. Substances are nine: earth, water, fire, air, ether, time, space, self and mind. The first four are atomic: they may combine to form macroscopic substance, such as a clay pot, but in incomposite form they are

indestructible atoms, as are the last two. Ether, time and space, likewise indestructible, are unitary and pervade all. In its irreducible parts, all substance is eternal; every composite whole is a destructible substance.

A relation of containment, called inherence, structures the categories. The qualities, actions and universals by which we might characterize a pot inhere in it. They are distinct entities from the pot, yet cannot exist apart from their underlying substrate. Composite substances like a pot are also contained in their parts by inherence, but the smallest parts, eternal substances, exist independently as receptacles that contain nothing. A whole, greater than the sum of its parts, is said to inhere in the parts while the parts are the inherence cause of the whole.

Eternal substance, the ultimate substrate of all, is a bare particular. An entity that is nothing but a receptacle for other entities, it furnishes criteria for separability and individuality, but cannot be defined in itself apart from others. This aspect of the concept of substance leads later Nyāya-Vaiśeṣika into extensive analysis of relations and negation." (pp. 118-119)

"From: David Ambuel, *Ontology in Indian Philosophy*, in: Edward Craig (ed.), *Routledge Encyclopedia of Philosophy*, London, New York: Routledge 1998.