Dedicated to Commemorate the 75th Years of India's Independence.
Editorial for a special issue on Indian logic

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Abstract:
This special issue on Indian Logic consists of nine research papers dealing with different aspects of Indian Logic by nine distinguished authors. It is divided into three sections such as, Nyàya Logic, Buddhist Logic and Jaina Logic. The papers deal with the issue of inference and allied concepts from both historical and conceptual considerations. Indian Logic logic followed linguistic model and thereby in India it gives the foundation of epistemology and the development of philosophy of language.
Keywords: Nyàya Logic, Buddhist Logic, Jaina Logic.

Bertrand Russell named his book *History of Western Philosophy* and by this he indirectly admits that there are philosophies originated and developed in non-Western culture. Though even in 1971 Anthony Flew made an exclusively 'sweeping remark' as "…philosophy, as the word is understood here, is concerned first, last and all the time with arguments. It is, incidentally, because most of what is labelled *Eastern Philosophy* is not so concerned – rather than any reason of European parochialism – that this book draws no materials from any source east of Suez" [1]. B. K. Matilal 's comment on Flew is relevant here. He said, "One is bound to be shocked to read such a gratuitous remark from Mr Flew at a time when philological and Indological researches have made considerable progress and some reasonably good books are available in Western languages" [2]. Similarly, when we talk about 'LOGIC' we wrongly mean Logic developed *only* in Western cultural sphere. It is now an admitted fact that there is Logic in non-Western cultural sphere and Logic plays a dominant role in the development of India's culture. Indian Logic has some distinctive characters that distinguish it from the Western model of Logic. J. M. Bocheński [3] is right when he says that in two cultural spheres logic has been developed rigorously – Western cultural sphere where logic followed mathematical model and Indian cultural sphere where logic followed linguistic model and thereby in India it gives the foundation of epistemology and the development of philosophy of language. It is indeed true that classical Indian philosophers were not interested in pure deductive systems or formal language. On the other hand, they were interested in "discovering the epistemic and empirical basis of logic, by their study of the theory of knowledge and the theory of evidence called *pramàõaàstra* (which was more akin to the inductive method based on observation and intuition of supporting example)" [4]. Kamaleswar Bhattacharya observed, "Unlike the Western, the Indian new logic did not construct an 'artificial language',

consisting in a system of symbols, but formulated its definitions and solved various logical problems with different combinations of concepts in natural language" [5].

When we deal with Indian logicians' account of inference we do not see a clear distinction between deductive and inductive inference. In Western logic deductive inference deals with the conditions that enable us to arrive at a conclusion from a premise or a set of premises and in inductive logic we try to arrive at a general proposition on the basis of some instances. In deductive inference we look for formal validity only but in inductive inference our concern is material truth. B. N. Seal, in his *The Positive Sciences of the ancient Hindus,* says that in the Indian account of inference we find an attempt to combine features of both formal and material truth. "*Anumàna* (inference) is the process of ascertaining, not by perception or direct observation, but through the instrumentality or medium of a mark, that a thing possesses ascertain character. Inference is, therefore, based on the establishment of an invariable concomitance (*vyàpti*) between the mark and the character inferred. The Hindu Inference (*anumàõa*) is, therefore, neither merely formal nor merely material, but a combined Formal-Material Deductive-Inductive process. It is neither the Aristotelian Syllogism (Formal Deductive process), nor Mill's Induction (Material Inductive process), but the real Inference which must combine formal validity with material truth, inductive generalization with deductive particularisation… " [6]. There are similarities between the Nyàya syllogism and the Aristotelian syllogism. But there are striking dissimilarities between the two. Instead of formulating inference as a 'clear-cut-form' of deduction (without caring for material truth), as is usually seen in the Aristotelian syllogism, in the Nyàya theory of inference both induction and deduction are synthesised – inductive and deductive reasoning are inseparably blended; they are treated as the two sides of the same coin, two aspects of the same process. Inference, for the Nyàya, is 'neither from a universal to the purely particular nor from the particular to the universal, but from the particular to the particular through the universal.' The major premise which contains universal relation between major term and middle term in Aristotelian syllogism is simply assumed and not a result of induction from the known example. But the explanatory example (*udàharaõa*) in Nyàya syllogism is gained through induction of the known examples. Again, Aristotle did not construct syllogism in the form of inference, rather he formulated syllogism in the form of implication containing – "If … then" relation. In contrast, the Nyàya formulates a theory of inference which may roughly be sketched in the form "This … Therefore". Furthermore, in the Aristotelian syllogism the minor term and the major term are disconnected with each other directly in the premises, although they are indirectly connected by the middle term. In the Nyàya syllogism we have seen that all the three terms 'stand synthesised' in the *upanaya* (the application of the rule to the present instance). The Nyàya syllogism is a development upon pre-Aristolean works of Indian heritage through a process of 'elimination and critical modification of some elaborate model/s' of Indian texts [7].

It is interesting to see how some modern thinkers on Logic are expressing a different opinion from Euro-centrism and, like Russell, are openly recognising the value and importance of non-Western Logic in general and Indian Logic in particular. Andrew Schumann is one of such western thinkers who edited a collection of research papers in the book titled *Logic in Religious Discourse* in 2010 (Ontos verlag) where he included three papers by three distinguished authors on Indian Logic. This year the Editorial Board of the journal *Studia Humana* has decided to publish a special issue on Indian Logic. The following pages contain aspects of Indian Logic consisting of Nyàya, Buddhist and Jaina Logic. The Nyàya view of inference as a causal means of knowledge differs from the Buddhist view of inference on the ground that the former is *vyàpti-centric* (i. e. law of universal concomitance between prabans/reason and prabandun is called *vyàpti*) whereas the latter is *hetu- centric* (reason-centric).

Since all the papers have abstracts and key words the editor of this special issue does feel it necessary make any specific remark for the guidance of the readers except about some general features. Some of the papers are devoted to the historical development of Logic in any specific school of Indian Philosophy, while others are critical and comparative studies with the similar Western approaches. Some of the papers are textual expositions of the epistemological issues

relating to logic and language. We have every hope that this special issue on Indian Logic will be appreciated by the scholars. The Guest Editor of this Special Issue is thankful to the individual authors for their valuable contributions and cooperation. He is also thankful to Professor Andrew Schumann, the chief Editor of the journal.

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