Language, Cognition, and Cosmic Order

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ABSTRACT

This is an interdisciplinary paper to demonstrate the role of Language in influencing the fundamental ideas of perception and philosophy of life. Language is considered the primary mode of communication for the exchange of ideas in the sustenance of any culture or civilization. Recent studies in neuroscience using brain imaging and other such direct empirical evidence build a case for a much larger role of language. The success of the Large Language Model, which is a type of artificial intelligence program in generating human-like text, is based on an underlying mathematical model for the physical structure of Languages. The Sanskrit language is one of the oldest known languages with the most precise and concise grammatical structure based on a holistic philosophy. *Pāṇini*, an ancient compiler of the rules of Sanskrit grammar, describes the role of mental intention in the formation of Sanskrit terms. This is supported by *Bhartṛhari*, another ancient author who describes the process of language from the moment of thought to comprehension in stages. Cognition of language is a multidimensional process deeply influencing the brain both quantitatively and qualitatively. We will use literature from both Sanskrit texts and Neuroscience studies to show the foundational role of language for any civilization in a much greater capacity than that of a means of communication. We will also experiment using EEG, an electroencephalogram, a test that measures and records the electrical activity of the brain, to record the influence of Language.

Keywords: Civilization, Cognition, Cosmic order, EEG, Sanskrit.